Colorado State University System Board of Governors Meeting Agenda December 8-9, 2016

#### **BOARD OF GOVERNORS**

**December 8-9, 2016** Colorado State University System 475 17th Street, 7th Floor **Denver, CO 80202** 

### WEDNESDAY, DECEMBER 7, 2016

Holiday Party, Union Station

5:00 - 7:00 p.m.

### THURSDAY, DECEMBER 8, 2016

Board of Governors Breakfast, CSU Denver Center, 475 17th Street, 7th Floor

8:30 a.m. – 9:00 a.m.

### **COMMENCE BOARD MEETING - CALL TO ORDER**

Swearing in of new CSU-Global Faculty Rep - Tony Vrba

9:00 a.m.- 9:00 a.m.

9:00 a.m. – 4:20 p.m.

### 1. PUBLIC COMMENT

9:00 a.m. – 9:15 a.m.

### 2. COLORADO STATE UNIVERSITY REPORTS

9:15 a.m. – 10:05 a.m.

- Student Report Presented by Daniela Pineda Soraca
- Faculty Report Presented by Paul Doherty
- President's Report Presented by Tony Frank

### 3. ACADEMIC AND STUDENT AFFAIRS COMMITTEE (1 hour)

10:05 a.m. – 11:05 a.m.

Jane Robbe Rhodes, Chair

- New Graduate Certificates CSU
- New Master of Science in Data Analysis CSU-Global
- Faculty Manual Update CSU-Global
- Sabbatical Requests for 2017-18 CSU, CSU-Pueblo
- Program Review Summary CSU, CSU-Pueblo
- Academic Calendar AY 2017-2018 and AY 2018-19 CSU-Pueblo
- Campus Reports
  - o Enrollment/Student Success Report
  - o Academic Freedom in the Classroom

### 4. CSU-PUEBLO REPORTS

11:05 a.m. – 11:35 a.m.

- Student Report Presented by Antonio Huerta
- Faculty Report Presented by David Volk
- President's report Presented by Lesley Di Mare

### LUNCH, CSU Denver Center, 2nd Floor Atrium

11:35 a.m. – 12:45 p.m.

#### 5. REAL ESTATE/FACILITIES COMMITTEE

Scott Johnson, Chair

• Public Private Partnerships Discussion

Executive Session

Open Session

• Sale of .7 Acres at Foothills Campus

1:00 p.m. – 1:45 p.m.

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**6. EVALUATION COMMITTEE** – (Executive Session) Rico Munn, Chair

1:45 p.m. – 2:45 p.m.

BREAK

7. EXECUTIVE SESSION

3:00 p.m. - 3:30 p.m.

8. CSU-GLOBAL REPORTS

3:30 p.m. - 4:00 p.m.

- Student Report CSU Presented by Andrea Buchmeier
- Faculty Report Presented by Tony Vrba
- President's Report Presented by Becky Takeda-Tinker

9. CHANCELLOR'S REPORT

4:00 p.m. – 4:20 p.m.

**BOARD DINNER** – Panzanos, 909 17<sup>th</sup> Street (social)

5:30 p.m.

FRIDAY, DECEMBER 9, 2016

Board of Governors Breakfast: CSU Denver Center, 475 17th Street, 7th floor

8:30 a.m. – 9:00 a.m.

RECONVENE BOARD MEETING

9:00 a.m. – 11:40 a.m.

10. BOARD CHAIR'S AGENDA

9:00 a.m. – 9:15 a.m.

11. NATIONAL WESTERN UPDATE

9:15 a.m. – 9:30 a.m.

9:30 a.m. - 11:20 a.m.

12. AUDIT AND FINANCE COMMITTEE

Nancy Tuor, Chair

Audit Items (20 min)

- Status of FY 2016-2017 Audit Plan
- Review of Audit Reports Issued
- Past Due Audit Recommendations

Finance Items

- Introduction of Margaret Henry, CSU System Treasurer
- Discussion of CSU System Debt Policy Review
- Update on Series 2016 A&B Bond Issuance
- Debt Capacity Analysis
- FY18 Governor's Budget Request
- Campus Budget Updates
- FY17 1<sup>st</sup> Quarter Financial Statements
- Reserves Report
- CSURF Capital Lease Renewal

### 13. SYSTEM STRATEGIC MAPPING

11:20 a.m. – 11:50 a.m.

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### 14. APPROVAL OF CONSENT AGENDA

11:50 a.m. – 11:55 a.m.

A. Colorado State University System

Minutes of the October 6-7, 2016 Committee and Board meeting

B. Colorado State University

New Graduate Certificate - Performance Management

New Graduate Certificate - Organizational Development

C. Colorado State University-Pueblo

Academic Calendar AY 2017-2018 and AY 2018-19

D. Colorado State University Global Campus

Faculty Manual Updates

New Master of Science in Data Analytics

### **15. BOARD MEETING EVALUATION** (5 min.)

11:55 a.m. – 12:00 p.m.

ADJOURNMENT 12:00 p.m.

**Next Board of Governors Board Meeting:** February 1-3, 2017 CSU-Pueblo

### **APPENDICES**

*I.*Construction Reports

**II.**Higher Ed Readings

III. Correspondence

## Section 1

## Public Comment

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## Section 2

## Colorado State University Reports

- Colorado State University Student Representative's Report
- Colorado State University Faculty Representative's Report
- Colorado State University President's Report



### President Daniela Pineda Soracá Student Representative-CSU Fort Collins Campus

#### Academics

- Post-Election Classroom Environments
  - o It is necessary for our campus leadership to stress the importance of diverse opinions, especially when discussions of controversial topics are a part of enriching the academic experience. Students that fall in **various** places of the political spectrum have faced unpleasant classroom experiences from their instructors and classmates. We must encourage civil discourse, and constructive conversation as a learning tool to help students grow in their understanding.
- Working to digitalize our current ASCSU Test Bank working with Faculty Leadership
  - Ideally we are desiring to work with TILT & Casa to enhance Exam Study Tools for all students

#### **Diversity and Inclusion**

- Discrimination in the Workplace Forum
  - We had professionals from CSU's Human Resources Department and Office of Equal Opportunity, and the City of Fort Collins' Social Sustainability Department as Panel Members on November 15<sup>th</sup>,2016
- ASCSU is sponsoring Nobel Peace Laureate Leymah Gbowee along with various campus partners to visit campus next semester

### Environmental

- Alternative Transportation
  - o ASCSU successfully passed legislation to fund 8 new Bike Share Stations through our Discretionary Senate Budget
  - o Stations to be installed in Early 2017
  - o Collaboration with Housing & Dining Services

### Health

- Expanding Access to Feminine Products on Campus
  - o There is an existing committee addressing this topic
- Campus + Community Health Symposium and Fair
  - Preliminary planning for this Event
  - Date: Spring 2017 prior to the opening of the new Health Center

#### Outreach

- I wrote a letter as the ASCSU President for the College of Business' 75<sup>th</sup> Anniversary
- Reaching New Audiences as a Student Government: Updates
  - o CSU Online Students-Hiring of a new Videographer to film ASCSU Business and for marketing purposes
  - o Semester at Sea + Study Abroad Students-Appointment of an ASCSU Ambassador for the Spring 2017 Voyage to give a voice to these students

- o Leadership Exchange Program with Autonomous University of Baja California-7

  <u>Set</u> for February 2017-Working with CSU Faculty and Administrative

  Professionals to create this opportunity
- o Meeting with the Graduate Student Council

### State and Local Policy

- Hosted an Election Watch Party with 100+ Students in attendance
- Due to the new State Ballot Measures passing we are taking extreme caution with the Student Fee Review process
- Local Affairs
  - o U+2 Occupancy Ordinance Economic Study: First Meeting between all stakeholders will occur on November 28<sup>th</sup>, 2016
  - o Holding an ASCSU/Fort Collins City Council Mixer on November 28<sup>th</sup>,2016

### **Traditions and Programs**

- Prepping for Finals Week 2017 Programming
- Continuously working with Campus Activities to Work on Programming Planning for the Fall of 2017-Specifically Game Day Student Programming

### **University Affairs**

- Game-Day Operations/Student Programming
  - o Re-Park Program Update: ASCSU successfully passed legislation that called for the exemption of certain parking lots from the Re Park Program, the consideration of compensating the residents who have to participate in the program, and that asks Administrators to update ASCSU in the 2017 Football Season on the program's successes, weaknesses and room to improve
- Working with student leaders and the Division of Student Affairs to discuss the framing of the "BARE Run" and proactive measures to take for the Spring of 2017

### Report by the Faculty Representative from CSU – Fort Collins to the Board of Governors

### December 8-9, 2016, Denver, CO.

Below I provide a summary of the October 2 and November 1, 2016 Faculty Council meetings (full meeting minutes are posted on the CSU Faculty Council web site).

Respectfully submitted by Dr. Paul Doherty, CSU Faculty Representative to the Board of Governors.

#### Faculty Council meeting - October 2, 2016

- 1) Announcements
  - a. Campus Climate Survey will be sent out on October 11.
- 2) Reports
  - a. Provost Miranda
    - i. Miranda reported on the Diversity Symposium and gave an update on Semester at Sea.
    - Discussions are underway to develop joint programs within the CSU System, among CSU, CSU-Pueblo, and CSU Global. Potential programs include Ag Business, Construction Management, Ethnic Studies, and Wildlife Biology.
    - iii. Miranda gave a presentation on enrollment numbers, projected enrollment numbers, and student success gaps.
  - b. Chair Stromberger
    - i. Committee Updates
      - 1. Committee on Non-Tenure Track Faculty Meeting with stakeholders to seek support for their Central Tenets. Will begin drafting Manual language to codify processes for hiring, career promotions, and shared governance.
      - 2. Committee on Teaching and Learning (CoTL) Finalizing its recommendations to Faculty Council for the student course survey redesign. CoTL Members and Executive Committee met with Dr. Philip Stark, Professor of Statistics at UC Berkeley, to discuss his research on student course surveys.
      - 3. University Curriculum Committee examining current All University Course Curriculum courses to identify those with learning objectives related to diversity, race, ethnicity and gender. Discussions will begin soon with VP for Undergraduate Affairs Kelly Long on longer-term goals of integrating diversity content throughout the curriculum.
    - ii. Employee Council and Other Updates
      - 1. Parking Martin Carcasson, Director of the Center for Public Deliberation, will host the forums this month to discuss parking.
      - 2. Bullying Policy Guidelines have been drafted by the Committee on the Status of Women Faculty, to improve the bullying policy. These are being reviewed by the leadership of the three employee councils, the Univ. Grievance Officer, the Ombuds, Human Resources, Dan Bush and Bob Schur. The guidelines describe how bullying complaints should be made, steps that supervisors should take to informally look into complaints of bullying, and clear procedures for supervisors to follow when conducting a formal investigation.
      - 3. Rebecca Martin, National Association of System Heads, visited CSU last week to discuss our leadership in student success initiatives. During the President's Cabinet meeting last Tuesday, Martin led a discussion on expanding student success initiatives and integrating High Impact Practices into the curriculum to eliminate gaps in student retention and graduation rates. Martin praised CSU we are seen as the national leader in student success because we have institutionalized many best practices for student success. If anyone can eliminate gaps, it is CSU.
- 3) Action items
  - a. Graduate student representatives were elected to Faculty Council standing committees
  - b. The proposed revision to the Graduate and Professional Bulletin, Evaluation of Graduate Students, was approved. It clarifies that graduate students are student employees, not employees

- c. The proposed revision to the Graduate and Professional Bulletin, CSU Student Conduct Code, was approved. It references the student conduct code in the Bulletin section of the Catalog, to make graduate students aware that the code applies to them as well.
- d. A new institute, the Earth System Modeling and Education Institute, was approved.

#### 4) Discussion

a. Jenny Morse, chair of Committee on Non-Tenure Track Faculty (CoNTTF), led a discussion of CoNTTF's Central Tenets related to hiring practices, promotion pathways for non-tenure track faculty, and participation in shared governance.

### Faculty Council meeting - November 1, 2016

- 1) Reports
  - a. Provost Rick Miranda
    - i. College of Business completed their on-site accreditation visit.
    - ii. Search process is underway for a dean for the School of Public Health
    - iii. CSU might conduct a pilot study on the Well Being Standards for building designs.
    - iv. Additional funds (>\$1M) has been sent to the colleges as part of the 2-3-6 tuition sharing program to address needs of enrollment growth.
    - v. Budget review teams have been assembled and proposals delivered to them. Recommendations from the review committees will be forthcoming in January.
  - b. Chair Mary Stromberger
    - i. Committee updates
      - 1. Manual revisions related to nondiscrimination language in Appendix I. and revisions to Section E.9 Faculty Productivity will be forthcoming.
      - 2. Committee on Teaching and Learning has finalized their recommendations on student course surveys. Manual changes to I.8 and E.12.1 regarding course surveys will be forthcoming as well.
      - Committee on Faculty Governance is reviewing proposals about non-tenure track faculty representation on committees on Strategic and Financial Planning as well as Teaching and Learning. This committee is also preparing a proposal to update the Manual with respect to election procedures (e.g., electronic voting and procedures within departments).
      - 4. Committee on Scholarship, Research, and Graduate Education is drafting a proposal to allow Professional Doctorates.
    - ii. Stromberger participated in a panel on a lottocratic approach to select faculty for service committees.
    - iii. The Office of Training and Organizational Development has developed a supervisor training program that will launch soon.
    - iv. The Re-Envision CSU initiative is still progressing.
    - v. A committee delivered a report to President Frank on establishing a living wage of \$30k at CSU. The plan would address 405 employees, address some salary compression issues and would cost ~\$2.9 million (or \$723k/year for 4 years).
    - vi. Concerns over the recent bullying policy were expressed and the Committee on Responsibilities and Standing of Academic Faculty will review.
  - c. Changes to Health Care (Diana Prieto and Teri Suhr)
    - i. Health insurance costs will increase by 11% due to increased claims last year.
      - 1. CSU will increase its cost share by 2% and employee increases will be 7-9% depending on the plan.
  - d. Research Success Initiatives (Vice President for Research Alan Rudolph)
    - i. Gave a presentation on investements in research over 5-10 years to establish new facilities and research opportunities and invest in team science.

#### 2) Actions

a. Revisions to the Graduate and Professional Bulletin were passes to update admission requirements and procedures to align with practices in the new SLATE system.

## COLORADO STATE UNIVERSITY PRESIDENT'S REPORT

Board of Governors of the Colorado State University System Dec 9, 2016

### I. TEACHING AND LEARNING: ASSURE EXCELLENCE IN ACADEMIC PROGRAMS

### A. Record gift to propel College of Engineering to new heights

Colorado State University announced Nov. 15 that it received a \$53.3 million gift, the largest in the University's history, from business icon and alumnus, Walter Scott, Jr., of Omaha, Neb. The commitment will provide wide-reaching support for student scholarships, faculty excellence and research. In recognition of this monumental gift, the College of Engineering will be renamed the Walter Scott, Jr. College of Engineering, becoming the only named college of engineering in Colorado. It is the second of CSU's eight colleges to be named for a prominent alumnus. Scott's passion for investing in young people shines through with this exceptionally generous gift. By significantly expanding a previous gift that established the Walter Scott, Jr. Scholarship Program, it will provide renewable merit scholarships for up to 80 undergraduates and fellowships for up to 30 graduate students. The gift also is designed to attract world-class faculty through the creation of four Presidential Chairs in water, health, energy, and environment – the College's four "areas of excellence" - and will provide the infrastructure and labs to drive teaching and research excellence. Scott's gift affords discretionary funds to be invested in strategic initiatives and creation of leadership programs supporting innovation and excellence across the college. Scott graduated in 1953 from CSU with a bachelor's degree in civil engineering, embarking on a long career with Peter Kiewit Sons', Inc. With his late wife, Suzanne, he provided a leadership gift for the Suzanne and Walter Scott, Jr. Bioengineering Building, completed in 2015. The University will celebrate this latest gift with Scott at a campus event in April.

### B. Colorado State University climbs in Military Times "Best for Vets" rankings

CSU's commitment to serve military veterans and provide them with opportunities to transition from military service to higher education and sustainable careers is strong. Most recently, the University was recognized by Military Times as the No. 4 public university in the nation and the only Colorado school ranked in the top 50 for providing excellent support to veterans. This latest ranking reflects how CSU has positioned itself as a national leader in best practices and positive outcomes for veterans in higher education. [Assistant Chief of Staff and Director of Veteran Initiatives Maggie Walsh and Director of Adult Learner and Veteran Services Marc Barker will update the Board of Governors on current programming, unique aspects of the CSU-veteran experience, and our plans to keep the program on an upward trajectory.]

### C. CSU ranked No. 4 in "green colleges" guide

Colorado State is ranked fourth in the nation among environmentally responsible colleges, according to *The Princeton Review* rankings released in October. The education services company surveyed hundreds of four-year colleges concerning their commitment to the environment and sustainability and chose 361 to include in its annual guide to green colleges. CSU was lauded for its sustainability committee; sustainability-focused degrees; publicly available greenhouse gas inventory plan; on-campus sustainability officer; and local or organic food offered on campus. CSU also was recognized for its bike- and car-share programs, and for offering free transit passes and free campus shuttles for employees and students.

### D. CSU Veterans Symposium focused on path from education to career

The University's second Veterans Symposium helped veterans and employers connect on how to successfully bridge the gap between service and employment. The two-day symposium, held Oct. 24-25 at the Lory Student Center, was open to veterans, employers, CSU and community members, and educators. With the theme "Transitioning from Higher Education to Career," the symposium featured keynote speakers, breakout sessions, and opportunities for veterans to network with potential employers. Breakout sessions included information about negotiating a salary, applying skills learned in the military on the job, and social media best practices. Employer sessions included information about how to retain veteran employees, best practices for service animals in the workplace, and other pertinent topics.

### E. Weather radar expert knighted by government of Finland

Colorado State University Professor V. "Chandra" Chandrasekar has been awarded the Insignia of Knight, First Class, of the Order of the White Rose of Finland for contributing to technical expertise through research collaborations with the Finnish Meteorological Institute, University of Helsinki, and industry. Kirsti Kauppi, Ambassador of Finland to the United States, presented the insignia to Chandra on behalf of the Finnish government during a Sept. 29 ceremony at the Embassy of Finland in Washington, D.C. A professor of electrical and computer engineering, a fellow of CIRA (Cooperative Institute for Research in the Atmosphere), and a University Distinguished Professor, Chandra is a leading expert in weather radar science and technology and radar signal processing.

### F. CSU student's brews win 2 medals in U.S. Beer Open Championship

Two beers brewed by a Colorado State University senior in the Fermentation Science and Technology Program won medals in the U.S. Beer Open Championship's first-ever collegiate competition. James Macdonald, the senior teacher's assistant for the program, brewed three beers last spring for the U.S. Beer Open College Beer Championship, which was open to colleges around the country that have beer-brewing courses. Two of the three won bronze medals in the competition.

### G. University climbs in international ranking

In 2016, Colorado State moved up four spots in the National Taiwan University ranking, which assesses academic performance of universities worldwide based on their production and impact of scientific papers.

### H. Adult education grad program ranked in 10 best

The website EarlyChildhoodEducationDegrees recently ranked CSU's online Master's in Adult Education as one of the 10 best programs of its kind in the country in terms of affordability, flexibility, and academic prestige.

### II. TEACHING AND LEARNING: INTEGRATE ACADEMIC AND CO-CURRICULAR EXPERIENCES

### A. CSU's Agricultural Sciences students host Agricultural Adventure Day

The Colorado State Agricultural Research Development and Education Center (ARDEC) hosted 72 classrooms of third-graders throughout the Poudre School District for a two-day event – Sept. 28-29 – to showcase a variety of different aspects of agriculture. PSD third-graders experienced hands-on agriculture at various stations, with lessons and presentations led by CSU College of Agricultural Sciences students. For additional insight into the experience, view: <a href="https://vimeo.com/186339680">https://vimeo.com/186339680</a>

## III. RESEARCH AND DISCOVERY: FOSTER EXCELLENCE IN RESEARCH, SCHOLARSHIP, AND CREATIVE ARTISTRY/FOCUS IN AREAS OF INSTITUTIONAL STRENGTH AND SOCIETAL NEED

### A. Colorado State study finds troubling new evidence of teens' lack of physical activity

A Colorado State University researcher has uncovered definitive evidence about adolescents' lack of physical activity, and the results are not good. Instead of relying on surveys and self-reporting, as many past studies have done, Assistant Professor Kaigang Li of CSU's Department of Health and Exercise Science used physical activity trackers called accelerometers to objectively measure the duration and intensity of exercise that a sample of 16- to 19-year-olds were getting daily. The Centers for Disease Control and Prevention recommend a minimum of 60 minutes of moderate-to-vigorous physical activity a day for children and adolescents to maintain general health. Previous research has shown that only .04 percent of 9 year olds don't get that amount of exercise daily, a figure that jumps to 70 percent for 15 year olds. Li found that, on average, his sample of kids in their late teens were exercising even less: 91 percent were not getting at least an hour of that type of physical activity each day. A paper on Li's study, "Changes in Moderate-to-Vigorous Physical Activity Among Older Adolescents," will be published in the October issue of *Pediatrics* and was released online Sept. 26.

### B. CSU study to help assess health risks from oil and gas operations

Jeffrey Collett, professor and head of CSU's Department of Atmospheric Science, was the principal investigator for a three-year, CSU-led study funded by the state of Colorado to assess air pollutant emissions from northern Front Range oil and gas operations. Data from the North Front Range Oil and Gas Air Pollutant Emission and Dispersion Study – and a similar Garfield County study completed in June 2016 – will be used in a state health-risk assessment, to be completed by summer 2018.

### IV. RESEARCH AND DISCOVERY: IMPROVE DISCOVERY CAPABILITIES

### A. One Health Institute opens its doors at Colorado State University

The One Health Institute, an initiative first launched by the Office of the Vice President for Research in 2013 opened its doors for an official campus welcome and open house Nov. 3. The initiative honors the One Health global philosophy that health for people, animals, and environment is deeply connected and inseparable. The movement emerged after an unprecedented global response to avian influenza in 2005. The One Health initiative has supported various activities across campus since that time, including seven pilot projects and research. The initiative has grown into an Institute, supported in design and funding by all eight colleges. It will serve as a catalyst for research collaboration and impactful work across disciplines, professions, and sectors.

### B. CSU, CU land \$1.2 million for study about environmental impacts on children

Colorado State University and the University of Colorado Anschutz Medical Campus in September received \$1.2 million to participate in a National Institutes of Health initiative called Environmental Influences on Child Health Outcomes (ECHO). The award is part of a planned seven-year grant with an estimated total value of \$15 million for the Colorado participation. The funding was awarded to the Colorado School of Public Health, a partnership among CSU, CU, and the University of Northern Colorado. The ECHO program will investigate how exposure to a range of environmental factors in early development – from conception through early childhood – influences the health of children and adolescents. It is part of a \$150 million NIH effort announced Sept. 21. The Colorado study will leverage an existing and ongoing prebirth cohort in Colorado, Healthy Start, which is currently following 1,410 mother-child pairs. Sheryl Magzamen, an assistant professor of epidemiology in the Colorado School of Public Health and CSU's Department of Environmental and Radiological Health Sciences, is CSU's principal investigator on the study. She will lead the measurement and evaluation of Healthy Start participants' exposure to indoor and outdoor pollutants.

### C. CSU innovation efforts honored by APLU

Colorado State in November won a top national Innovation and Economic Prosperity University award for its impact on economic development by the Association of Public Land-Grant Universities at its annual meeting in Austin, Texas. CSU received the honor in the "Place" category. The Place award recognizes Colorado State for excelling in community, social and

cultural development work. Three cases studies helped to tell CSU's story: the School of Global Environmental Sustainability, cookstove manufacturer – and CSU spinoff – Envirofit, and the Powerhouse Energy Campus – home to CSU's Energy Institute. In July, Colorado State was one of six public universities nationwide named in APLU's fourth annual class of Innovation and Economic Prosperity Universities, and is the only university named in Colorado. In all, there are 54 IEP universities nationwide.

### D. CSU Ventures celebrates 10-year anniversary

Since its creation 10 years ago, CSU Ventures, the university's tech transfer division, has racked up many milestones. In that time, the organization has been able to file 1,381 patent applications; sign 369 license agreements; establish 1,064 inventions; and launch 49 startup companies. CSU Ventures has also tallied almost \$19 million in licensing income over the last decade. The numbers highlight the rise in engagement: CSU inventor participation increased 113 percent when compared with the previous 10 years.

### V. SERVICE AND OUTREACH: PREPARE AND EMPOWER LEARNERS OUTSIDE THE CAMPUS ENVIRONMENT

### A. New Clinical Nutrition Service helps veterinarians, pets, and their owners

The Colorado State University James L. Voss Veterinary Teaching Hospital announced in September its newly established Clinical Nutrition Service. This new resource for pet owners and veterinarians provides nutritional solutions for animals with unique nutritional needs. Unreliable information may lead to confusion among pet owners regarding the most appropriate nutritional solutions for their pets. The new Clinical Nutrition Service provides consultations in person and remotely through primary care veterinarians. The service offers home-cooked diet formulations for healthy pets and for veterinary patients with specific nutritional needs, evaluation of current diet, recommendations for commercial diets, healthy weight management, and formulations of critical care diets.

### VII. RESOURCES AND SUPPORT: EXPAND FUNDRAISING

### A. Major Gift Report

	October	2016	<b>FY17 (July -</b>	October	)FY16 (July -	October)
	Amount	Count	Amount	Count	Amount	Count
Contributions	\$2,853,53	44,773	\$34,291,434	12,561	\$23,412,098	12,144
Irrevocable Planned Gifts	-	-	\$2,500,000	2	\$162,019	1
<b>Revocable Gifts and Conditional Pledges</b>	\$4,200,00	08	\$12,570,915	26	\$7,862,800	35
<b>Payments to Commitments Prior to Perio</b>	d(\$536,494	715	(\$3,942,177)	1,030	(\$3,412,678)	771
Total Philanthropic Support	\$6,517,04	14,313	\$45,420,172	12,000	\$28,024,239	11,702
Private Research	\$716,599	17	\$10,231,226	77	\$13,648,247	93
Net Private Support	\$7,233,64	04,329	\$55,651,398	12,069	\$41,672,486	11,784

### Major Gifts - Not Previously Reported

\$4,075,000 in pledges to support the CSU Stadium, Athletics

\$1,550,000 revocable commitment designated as \$750,000 to support the *College of Natural Sciences Strategic Initiative*, College of Natural Sciences; \$750,000 to support the *Engineering Faculty Achievement Award Endowment*, College of Engineering; \$25,000 to support the *College of Natural Sciences Aspen Scholarship Endowment*, College of Natural Sciences; and \$25,000 to support the *Engineering College Scholars Endowment*, College of Engineering

\$1,250,000 revocable commitment designated as \$625,000 to support the *Kari's Fund Endowment*, College of Veterinary Medicine & Biomedical Sciences; \$312,500 to support *One Cure*, College of Veterinary Medicine & Biomedical Sciences; and \$312,500 to support *Equine Orthopaedic Research*, College of Veterinary Medicine & Biomedical Sciences

\$1,000,000 planned gift to support the *Dr. Delbert A. Osguthorpe Family Fund*, College of Veterinary Medicine & Biomedical Sciences

\$1,000,000 revocable commitment to support the *High Flight*, Other Areas

\$1,000,000 revocable commitment to support the *Temple Grandin Equine Center*, College of Agricultural Sciences

\$1,000,000 revocable commitment split evenly to support the CVMBS Scholarship Endowment, College of Veterinary Medicine & Biomedical Sciences; to support the Engineering College Scholars Endowment, College of Engineering; to support the College of Business Endowed Scholarship, College of Business; and to support the Liberal Arts Scholarship Endowment, College of Liberal Arts

\$610,000 gift to support the *Veterinary Teaching Hospital*, College of Veterinary Medicine & Biomedical Sciences

\$600,000 revocable commitment to support the *College of Business Endowed Scholarship*, College of Business

\$451,350 in gifts designated as \$246,350 to support the *Water Education and Research*, Other Areas; and \$205,000 to support the *Center for New Energy Economy-Program*, Research & Interdisciplinary Programs

\$403,434 gift to support *Human Development and Family Studies - Community Outreach*, College of Health and Human Sciences

\$400,000 gift to support the *Center for New Energy Economy-Program*, Research & Interdisciplinary Programs

\$389,975 in pledges to support *Football Premium Seating*, Athletics

\$389,885 in pledges to support the Football Premium Seating, Athletics

\$300,000 revocable commitment to support the *Warner College of Natural Resources Enrichment*, Warner College of Natural Resources

\$296,609 pledge to support Football Premium Seating, Athletics

\$224,474 pledge to support Football Premium Seating, Athletics

\$211,447 gift to support the Reisher Scholars, Student Affairs

\$200,000 gift to support CVMBS-Research Sponsored, College of Veterinary Medicine & Biomedical Sciences

\$200,000 revocable commitment to support *Food Science and Human Nutrition*, College of Health and Human Sciences

\$192,365 pledge to support Football Premium Seating, Athletics

\$105,267 pledge to support the Football Premium Seating, Athletics

\$105,000 gift to support the *Center for New Energy Economy*, Research & Interdisciplinary Programs

\$100,000 gift to support the *Center for New Energy Economy*, Research & Interdisciplinary Programs

\$100,000 gift to support CVMBS Greatest Need, College of Veterinary Medicine & Biomedical Sciences

\$100,000 pledge to support the Gary and Kay Smith Global Food Innovation Center, College of Agricultural Sciences

\$100,000 revocable commitment to support *Music, Theatre and Dance Enrichment*, College of Liberal Arts

### B. CSU annual giving defies trends

A recent report from EAB reveals that annual giving nationwide has declined every year for the past decade (35% overall), whereas Colorado State's annual giving has increased steadily over the past five years (50% overall) – putting CSU in the top 1 percent for annual giving over that 5-year period.

### C. CSU ranks among top research institutions in receipt of Keck funding

Colorado State is among the most competitive research universities in the country when it comes to receiving research funding grants from the W.M. Keck Foundation. Between 2007-2016, Colorado State ranked 4<sup>th</sup> in grants earned, behind only University of California-Berkeley, Stanford, and UCLA. The Keck Foundation, established in 1954, is one of the nation's largest philanthropic organizations supporting scientific, engineering, and medical research in the U.S.

### VIII. RESOURCES AND SUPPORT: NURTURING HUMAN CAPITAL

### A. Dr. Wayne Jensen named head of CSU Department of Clinical Sciences

Dr. Wayne Jensen on Oct. 1 officially started as head of the Colorado State University Department of Clinical Sciences. He has fulfilled the role on an interim basis for one year, first joining CSU as associate department head in 2013. He formerly was chief scientific officer for Morris Animal Foundation, the world's largest animal-health research foundation. Jensen, a veterinarian with a master of business administration and a doctorate in pathology, has a remarkably varied and accomplished professional background. He began as a bench researcher, seeking to better understand how the immune system activates to fight disease. He later led research and development for a company providing veterinary diagnostics and specialty treatments, managed multimillion-dollar research projects, and co-founded a nationally recognized veterinary hospital in Northern Colorado.

### IX. RESOURCES AND SUPPORT: INCREASING AWARENESS

### A. Cans Around the Oval collects 160 tons of food for Larimer County

In 2016, Cans Around the Oval collected 41,670 pounds of nonperishable items and \$57,714 in cash donations, for a total impact equivalent to 330,244 pounds of food to feed hungry families in Larimer County. That's more than 160 tons of sharing to mark the 30th anniversary of the largest one-day food drive for the Food Bank for Larimer County held Oct. 12. The College of Business was the repeat top food gatherer for the 10th year in a row, followed by the Office of the Vice President for Research, and the Administration Building.

### B. Eight years of collaborative energy research nets Colorado \$194M

Between 2008 and 2015, the Colorado Energy Research Collaboratory's state investment of almost \$8 million was leveraged to attract more than \$95 million in externally sponsored research, with an associated impact on the local economy of \$194 million, a new analysis shows. The "Collaboratory," comprising Colorado State University, Colorado School of Mines, University of Colorado Boulder, and the National Renewable Energy Laboratory, was founded a decade ago as a clean energy research partnership focused on leveraging science and engineering capabilities at each member institution. Together with public agencies, private enterprises and nonprofit organizations, members work toward renewable energy solutions and technologies; support economic growth for renewable industries; and train and educate the next generation of energy

researchers and workers. The Collaboratory in November released an eight-year analysis, spanning 2008-2015, of the state of Colorado's return on investment for this uniquely productive, multilayered partnership.

### C. Animal cancer research documentary airs on Rocky Mountain PBS

"The Answer to Cancer May Be Walking Right Beside Us," a new documentary produced by Colorado State University and Rocky Mountain PBS, aired Sept. 29. The documentary featured Dr. Stephen Withrow, veterinary oncologist and founding director of CSU's world-renowned Flint Animal Cancer Center. His working relationship with Dr. Ross Wilkins, who treats human patients, is highlighted in the documentary. Together, Withrow and Wilkins pioneered a limb-sparing technique allowing people with bone cancer to avoid amputation; the approach was first developed at CSU for veterinary patients, and it has benefitted countless children, who are most often stricken with osteosarcoma. The two Colorado-based researchers join medical and veterinary scientists from across the country – and from some of the leading cancer centers around the world – in describing in the documentary how human and animal doctors can work together to beat cancer.

### D. Odell's brews Stalwart Golden Ale to celebrate CSU College of Business' 50th

To commemorate the 50th anniversary of Colorado State University's College of Business, during Homecoming festivities, Odell Brewing Company debuted Stalwart Golden Ale: a Colorado golden ale to celebrate a golden anniversary. The hops for Stalwart Golden Ale were grown in CSU's state-of-the-art Horticulture Center.

### CSU's Multi-Purpose Stadium Report – December 2016

### **Construction Budget and Schedule**

Budget		
	Stadium	Academic &
		Alumni
Fixed Limit of Construction	\$172,701,598	\$14,125,790
Construction Management General Contractor		
Guaranteed Maximum Price (CMGC GMP)		
Other Hard Costs (miscellaneous construction, furniture,	\$22,372,951	\$2,228,932
fixtures, equipment, technology, testing, inspections,		
utilities)		
Design and Professional Services	\$17,730,775	\$1,693,439
Owner Contingency	\$7,533,821	\$451,839
Total Stadium Budget	\$220,339,145	\$18,500,000
	0 1	
Contingency Status*	Original	Remaining
<ul> <li>Project Owner Contingency</li> </ul>	\$8,462,045	\$7,985,660
CMGC Bidding Contingency (in CMGC GMP)	\$1,118,380	\$96,970
CMGC Construction Contingency (in CMGC	\$5,591,902	\$2,076,500
GMP)		
,		

<sup>\*</sup>Cost evaluation of project alternated and presented risk ongoing will not exceed remaining budgets.

### **Project** is currently within budget

### ScheduleJune 2017 (stadium), July (A/A)

- Seating benches and metal railing installation ongoing.
- Permanent Power within stadium complete.
- Precast Stadia complete.
- Interior wall installation in progress. CMU walls substantially complete. Drywall, tape, finish and paint being installed on all levels.
- Extensive Mechanical, Plumbing, Fire Protection and Electrical rough-in installed. Work is ongoing and will continue through project completion.
- Stadium tower dry-in scheduled for November 2016. Full enclosure anticipated in February 2017.
- Field Installation to begin December 2016 with anticipated completion in May 2017

Project is currently on schedule

### **CSU Multi-Purpose Stadium on Main Campus**

### **Less Than One Year to Go: Milestones**

**December 2016:** Academic & Alumni Dry in; Level 500- Club Level; Level 600- Suite

Level; Level 700- Indoor Club; Field Installation (*December 2016 - May 2017*); Install Signage & Graphics (*December 2016 - February 2017*)

**January 2017:** Site work (*January 2017 - May 2017*), Kitchen Equipment Installation

(January 2017 - April 2017)

**February 2017:** Enclosure Completion; Functional MEP Systems Testing (*February 2017* 

- May 2017); Punchlist Kick-off- (February 2017)

March 2017: Install Athletic & Training Equipment (March 2017 – April 2017)

**April 2017: Big Flush** (*April 4, 2017*); Fire Alarm & Life Safety Testing

May 2017: Punch list certification for Substantial Completion;

June 2017: Opening of Meridian Ave; Date of Substantial Completion: Stadium

(*June 9, 2017*); Furniture and Equipment Installation (*June - July 2017*) Administrative Closeout and Punch List completion for Stadium Final Acceptance (*June 12, 2017- August 3, 2017*); Move-in: All departments

(*June – August, 2017*)

**July 2017:** Date of Substantial Completion: Alumni Center, CASA, Classrooms

**August 2017:** Final Acceptance Stadium (August 10, 2017)

**September 2017:** Soft Opening Event (*Pending September 2, 2017*)

First Home Football Game (September 9, 2017)

### **Stadium Advisory Group (SAG)**

Colorado State University and the City of Fort Collins formed a Stadium Advisory Group (SAG), per the terms of the IGA. The jointly appointed members are:

- Danielle Clark, Executive Director of Communications, PSD
- Gary Buffington, Larimer County Natural Resources Department Director
- Bob Herrfeldt, Director, The Ranch Events Complex
- Steve Taylor, Owner, Hot Corner Concepts
- Per Hogestad, City of FOCO Landmark Preservation Comm. Member and Ret. CSU Architect
- Colin Gerety, Owner, Momo Lolo Coffee House
- Mitch Majeski, Pastor, Summitview Community Church
- Ben Manvel, Former City Councilmember and Retired CSU Professor
- · Carol Reed, Sheely Neighborhood Resident

SAG has now completed 12 meetings since October 2015. The most recent meeting was held November 14, 2016. The meeting began with Doug Wilson with ICON and Fred Haberecht with CSU Facilities providing an update on the stadium and other construction projects on campus. Athletics Director Joe Parker and Gary Ozzello, CSU Director of Community Outreach and Engagement, then facilitated a discussion with SAG members on designing and managing a grant application process for allocation of the Good Neighbor Fund.

Under the terms of the Intergovernmental Agreement (IGA) between CSU and the City of Fort Collins, the purpose of Good Neighbor Fund is to support efforts to lessen undesirable or unanticipated effects on neighborhoods from an on-campus stadium. CSU has committed up to \$37,500 annually to the Good Neighbor Fund to be allocated and disbursed at CSU's discretion based on recommendations made by the SAG.

At their October and November meetings, SAG discussed establishing core values to guide the grant submission and selection process. For example, SAG discussed these possible core values:

1) Community Character – a commitment to uphold and enhance the unique identities of the neighborhoods and larger Fort Collins communities; 2) Goodwill – a commitment to promote relationships of trust between adjacent neighborhoods and the CSU community; 3) Responsible Citizenship – a commitment to positively shape and improve neighborhoods for the benefit of all residents; 4) Impact – a commitment to offset or mitigate any identified or potential negative impacts to neighborhoods from an on-campus stadium, and to enhance, strengthen and protect the beauty, serenity, and security of neighborhoods directly impacted by the stadium; and 5) Leveraging – a commitment to multiply the impact of the grant by leveraging financial support of other sources or through collaboration and partnerships, when possible.

SAG also discussed the proposed timeline for accepting and making recommendations to the CSU Vice President of Operations for prioritizing and allocation of the fund:

- July 1 November 1, make application available to public
- November 1-30, SAG hears applicant presentations and reviews grant applications
- December SAG presents it recommendations to CSU and City
- January Final approval/rejection of grant applications
- January March Design and funding request/approval

• March – June 30 – Implementation (unless already completed in prior months)

SAG will meet again in January 2017, but will continue (via email) to finalize grant criteria, core values and an application/selection process, and develop a plan for community outreach for soliciting grant submissions. Additionally, SAG members will attend internal/external open houses tentatively planned for January/February to be hosted by CSU and the City to inform the campus and Fort Collins communities about the final framework for game day operations. At those open houses, SAG members will discuss the Good Neighbor Fund, the IGA and their work-to-date on behalf of neighborhoods adjacent to CSU.

### **Game Day Experience Committee**

The university formed a Game Day Experience (GDE) committee operating under Vice President Blanche Hughes. The jointly appointed co-chairs are: Blanche Hughes, Vice President for Student Affairs, Tom Milligan, Vice President for External Relations, and Joe Parker, Athletic Director. Approximately 20 other committee members represent a broad cross-section of university stakeholders including ASCSU, University Advancement, Parking and Transportation Services, the Faculty, AP and State Classified Employee councils, Athletics, CSU PD, Facilities, CSU Health Network and Housing and Dining.

The Game Day Experience Committee continues to meet regularly to address the following topics in preparation for the opening of the on-campus stadium in August 2017:

- Game Day Operations Framework (Parking/Transportation)
- Law Enforcement CSUPD, Landmark Yellow Jackets
- Tailgating Programming and Marketing
- Logistics for Spirit/Support Groups
- Communications Update Open Forums with Community and Campus Partners

The Game Day Operations Framework was presented in multiple open forum meetings with community and campus constituents soliciting feedback and suggestions. This feedback was incorporated this summer into more detailed executable plans (e.g., specific parking numbers per lot, final traffic patterns, tailgating policies, location of bike carrels, etc.) and has been presented at additional public forums during Fall 2016 (including a presentation to student government, the Deans, Cabinet, and the University Physical Development Committee).

The Committee was asked by Dr. Frank to select a number of universities with on-campus stadiums to get more detail about their operations and what we can learn from them. A number of areas on campus (Alumni, External Relations, Student Affairs, Campus Police, Off-Campus Programs, Athletics, Student Government, New student orientation programs) contacted their colleagues to get more information focused on tailgating (students, alumni, and guests), alcohol policies, reparking policies, facilities, safety, and impact on campus (residence halls, recreation, conferences, etc.). The co-chairs are scheduled to meet in December to review the results of the survey and share this with the larger committee. This information will assist in finalizing Game Day events and procedures to be presented for approval to the Executive Stadium Committee and Dr. Frank by Feb. 1.

### IGA (Intergovernmental Agreement) with City of Fort Collins

Twenty-six projects were identified in the original IGA. Since April 2015, fifteen have been built and or are nearing completion, five are ready for construction or actively under construction, and six are in the design stage.

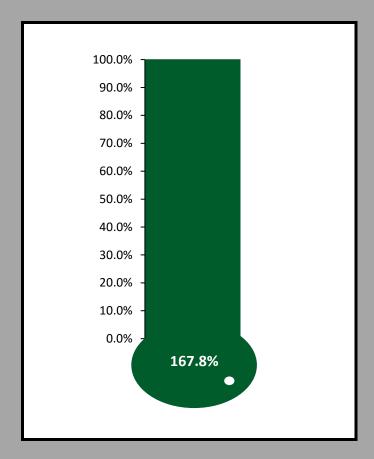
The projects not currently complete are scheduled to be delivered late summer or early Fall 2017, pending funding allocations and desire to move forward with the Lake and Center Avenue Traffic Management Improvements.

The Shields and Elizabeth Underpass is moving forward. Property acquisitions and entitlements are in place and the Design-Build team has mobilized to the project site and began construction activities the last week of November. Concurrently, they will continue to advance the design and engineering work, ultimately aiming to deliver the project in Fall 2017. Neighborhood outreach meetings will continue to occur to with the City of Fort Collins and the immediate community affected by the construction of this improvement.

### **Hughes Stadium**

ICON Venue Group, working on behalf of the University, has acquired and reviewed all existing information and documentation relating to the Hughes Stadium property. ICON has also commissioned and completed due diligence reports to evaluate the title, survey, geotechnical and environmental conditions associated with the property. Currently, ICON is working with Cameron Gloss, Ft. Collins City Planner, to coordinate communications with the Neighborhood Organizations proximate to the Hughes Stadium property. Tim Romani with ICON is in direct contact with the leaders of the respective Neighborhood Organizations and working with the City on a mailing to adjacent property owners. Neighborhood meetings will be organized and conducted by ICON and the City starting in January. Also in January, ICON will be assimilating all of the property information, due diligence reports and neighborhood input to prepare the RFP document to review with the University for release to potential developers in early March. Proposals will be received and reviewed in late April. Candidates will be shortlisted and interviewed in May with a final ranking to be prepared in June.

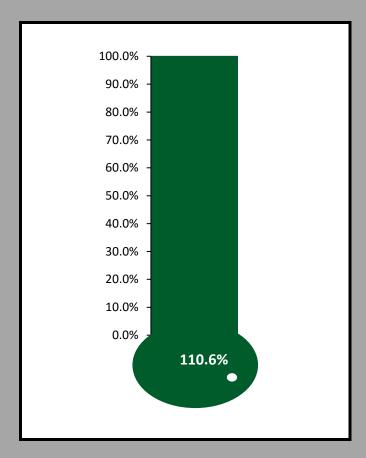
## Stadium: Naming Rights + Sponsorships toward Pro Forma



	FY18 \$	Pro Forma	% Met
Naming Rights	1,060,167	500,000	212.0%
Sponsorships	2,700,000	1,741,162	155.1%
	3,760,167	2,241,162	167.8%

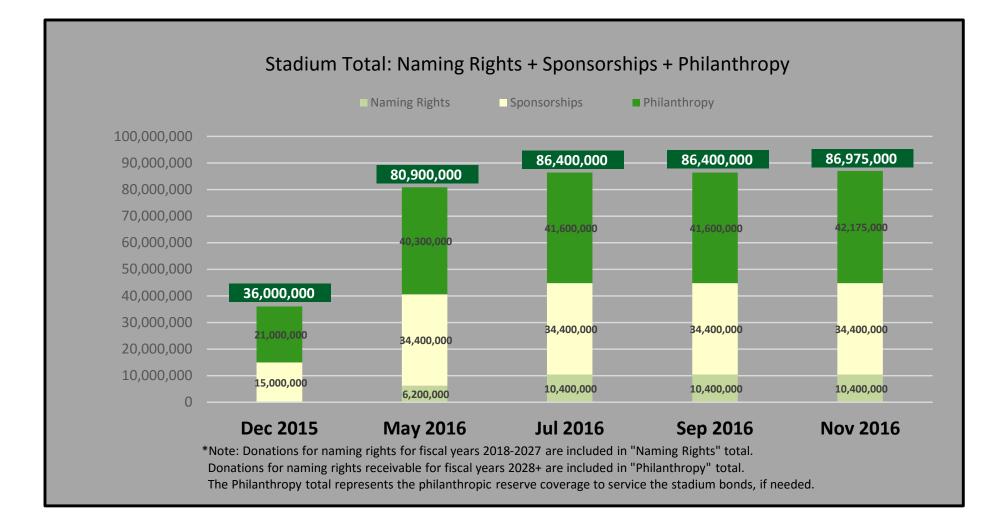
\*The sponsorship pro forma amount used on this chart is the net amount of sponsorship revenue less sponsorship expense from the 2012 CSL study. Earlier versions of this chart used the 2012 CSL study gross revenue number for the sponsorship pro forma amount. The CSL study pro forma also included a sponsorship expense line equal to approximately 50% of gross revenue that accurately reflected the revenue share contract then in place with Nelligan Sports. CSU's recent contract extension with Learfield moved the sponsorship model from a revenue share model to a guaranteed rights fee model. As a result, the full guaranteed rights payment is comparable to the CSL net number now set forth on this chart as the sponsorship pro forma amount.

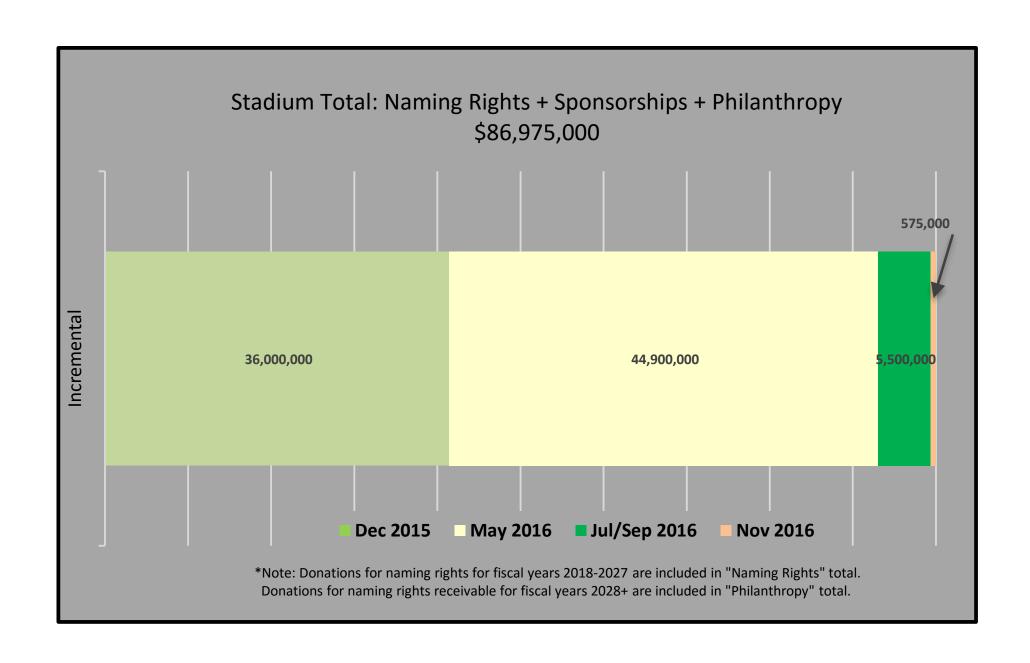
## Stadium: Naming Rights + Sponsorships toward CSL High



	FY18 \$	CSL High	% Met
Naming Rights	1,060,167	750,000	141.4%
Sponsorships	2,700,000	2,650,000	101.9%
	3,760,167	3,400,000	110.6%

<sup>\*</sup>The sponsorship CSL High amount used on this chart is the net amount of sponsorship revenue less sponsorship expense from the 2012 CSL study. Earlier versions of this chart used the 2012 CSL study gross revenue number for the sponsorship CSL High amount. The CSL study pro forma also included a sponsorship expense line equal to approximately 50% of gross revenue that accurately reflected the revenue share contract then in place with Nelligan Sports. CSU's recent contract extension with Learfield moved the sponsorship model from a revenue share model to a guaranteed rights fee model. As a result, the full guaranteed rights payment is comparable to the CSL High net number now set forth on this chart as the sponsorship CSL High amount.





### **STADIUM PREMIUM SEATING**



Revenues FY 16 Hughes FY 17 Hughes FY 18 FY 19  Premium Seat Donations Priority Seat Donations Tickets and Parking Advertising/Sponsorship Naming Rights Miscellaneous Revenue  Total Revenue  Expenses  Salaries and Benefits Supplies General Operating Services Professional Services Professional Services	FY 20
Premium Seat Donations Priority Seat Donations Tickets and Parking Advertising/Sponsorship Naming Rights Miscellaneous Revenue Total Revenue  Expenses Salaries and Benefits Supplies General Operating Services Professional Services	
Tickets and Parking Advertising/Sponsorship Naming Rights Miscellaneous Revenue Total Revenue  Expenses Salaries and Benefits Supplies General Operating Services Professional Services	
Advertising/Sponsorship Naming Rights Miscellaneous Revenue  Total Revenue  Expenses Salaries and Benefits Supplies General Operating Services Professional Services	
Naming Rights Miscellaneous Revenue Total Revenue  Expenses Salaries and Benefits Supplies General Operating Services Professional Services	
Naming Rights Miscellaneous Revenue Total Revenue  Expenses Salaries and Benefits Supplies General Operating Services Professional Services	
Miscellaneous Revenue  Total Revenue  Expenses  Salaries and Benefits  Supplies  General Operating Services  Professional Services	
Total Revenue  Expenses  Salaries and Benefits  Supplies  General Operating Services  Professional Services	
Salaries and Benefits  Supplies  General Operating Services  Professional Services	
Supplies General Operating Services Professional Services	
General Operating Services Professional Services	
Professional Services	
Repairs & Maintenance	
Utilities	
Game-Day Expenses	
Total Expenses   Net Income	
CSL Feasability Study Low Case 2012	
Revenues         FY 16 Hughes         FY 17 Hughes         FY 18         FY 19	FY 20
Premium Seat Donations	
Priority Seat Donations Priority Seat Donations	
Tickets and Parking	
Advertising/Sponsorship	
Naming Rights	
Miscellaneous Revenue	
Total Revenue Total Revenue	
Expenses	
Salaries and Benefits	
Supplies Control Operating Services	
General Operating Services	
Professional Services	
Repairs & Maintenance	
Utilities	
Game-Day Expenses	
Total Expenses	
Net Income	
Projected Pro Forma Net Income Variance	
Versus CSL Feasability Low Case (Line 18-Line	
36) Positive (Negative)	
Projected Bond Debt Service Coverage	
Net Income from Line 18	
Contribution to Athletics from CSL Model	
Bond Payments	
Surplus(Shortfall)	
Stadium Donations from CSUF as needed	
Net Set Set Set Set Set Set Set Set Set S	
General Fund Allocation	
Dhilanthyonia Coverage	
Philanthropic Coverage	
Beginning Reserve Balance	
New Funds Raised	

**Income Statement Pro Forma as of November** 

# Colorado State University is home to **2.000 student-veterans**,

benefit-using family members, and active duty military



among public universities in *Military Times* annual "Best for Vets: Colleges 2017" rankings

Student-veteran and GI Bill enrollment at CSU is up nearly

12% over last year.



Our University administration includes retired members of the military committed to making CSU an outstanding campus for support, education, and opportunity.

In the past five years, CSU students have voted to increase their student fees



157%

for the Office of Adult Learner and Veteran Services and other veteran-support services.



In 2016, CSU contributed

\$1 million toward the Yellow Ribbon Program, an average of

\$5,780 per student for the 173 eligible students. Currently, **New Start** – a program offered through the University's renowned occupational therapy department –

### **Serves 117 veterans**

and, since it was created in 2008, more than 200 veterans have received help through this unique, life-changing program.

Although government financial aid to military veterans covers the lion's share of the cost of higher education,

### The Dave and Gail Liniger Student-Veteran Scholarship program

has helped close the gap between the GI Bill and the real cost of attending school for 300 students.

CSU's average six-year graduation rate for student-veterans

64.5%

According to the U.S.
Department of Education,
the most recent average
military-specific graduation
rate among four-year schools.

56%



honored during commencement ceremonies and wear stoles signifying their service.

On average, CSU student-veterans graduate in

### three years.

Within six months of graduation,

### 80% of CSU veterans

secure their first-destination plans (including employment and graduate school).

Their average starting full-time salary is

\$48,000.

### 125 student-veterans

are serving in the National Guard or Reserve.

An equal-access, equal-opportunity University

### CSU is Serving Those Who Have Served



- Military service is one of the tenets of the Land-Grant Mission
- CSU Division of Student Affairs recognized unique needs of veterans using Post 9-11 GI Bill benefits
- One of 20 institutions of higher education to receive 2009 ACE/Walmart Success for Veterans Grant for \$100,000; allowed us to fold programming for student-veterans into our existing adult learner center creating Adult Learner and Veteran Services Office
- Veteran Success Team created by President's Chief of Staff Mark Gill, in consultation with VPs of Student Affairs and Enrollment and Access divisions
- In October, placed No. 4 in the nation among public universities in *Military Times* annual "Best for Vets: Colleges 2017" rankings.

### A Snapshot of Student-Veterans at CSU

- 2,000 student-veterans, benefit-using family members, and active duty military
- · Average graduation 3 years
- · 44% are married; 31% have children
- 77% are using veteran benefits for school
- Approximately half deployed to combat zones
- Health and Human Sciences
   Natural Sciences
   Liberal Arts and Business



### A Snapshot of Student-Veterans at CSU

- A quarter of students anticipate or are not sure they will be deployed again
- Graduation rate is 64.6%; national average for student-veterans is 56%
- Based on CSU Final Destination Survey and Report in 2014, 93% of graduating undergraduate studentveterans had accepted employment (75%) or planned to continue their educations (18%) upon graduation – 9% increase over previous year

### How Veteran Services Sets CSU Apart

### **Financial Commitments**

- · Yellow Ribbon
- · Continued Student Fee Funding support

### **Partnerships**

- Military Family Research Institute and Women's Veteran Initiative – Purdue University
- Peer Advisors for Veteran Education
   (PAVE) University of Michigan
- Student Veterans of America National advocacy and leadership development
- · NAVPA Best practices and advocacy
- CSU-Pueblo and CSU-Global Best practices and benefit processing
- SALUTE
- CSU ALVS model does not isolate student-veterans



### Donor Support for CSU Veteran Programs

### **Anschutz Foundation**

- · Veteran Learning Community
- · Spousal scholarships
- · Internship program
- · New Start replication

### **Dave and Gail Liniger**

- Liniger Honor, Service & Commitment Scholarship
- \$2,500 per semester for combat veterans

### **Dennis Repp**

- New Start for Student-Veterans
- Matched Anschutz funding for program replication at other Colorado universities



### What's Ahead for Veteran Services at CSU

- Maintaining current programming through scholarships, partnerships, and advocacy
- Increase community partnerships (local and regional internships, mentor programs, employer networking sessions)
- Focus on transition from higher education to sustainable career
- Increase enrollment goal 3,000 in 2020
- · New facility
- Increase campus interaction with CSU employee veterans for support, mentoring, recognition; internship opportunities, part-time campus employment
- · Advocate nationally for student-veterans.



Meeting Date: December 8-9, 2016

Report Item

#### MATTERS FOR ACTION:

#### CSU: Delegable Personnel Actions

No action required. Report only.

#### **EXPLANATION:**

Presented by Tony Frank, President

At its August 3, 2012 meeting, the Board approved a resolution to expand the delegated and redelegable authority to the institutional Presidents to include approval, in accordance with Board-approved institutional policies: 1) sabbatical leaves and revisions to them; 2) emeritus faculty appointments; and 3) all requests for Leave without Pay, with periodic reports to the Board.

NAME	DEPARTMENT	FROM	TO
Alberts, Eli N	History	8/16/16	1/1/17
Antonelli, Lara	Health Network Medical	11/21/16	11/23/16
Antonelli, Lara	Health Network Medical	8/1/16	8/19/16
Borthwick, Laurie A	Health Network Medical	11/21/16	11/22/16
Bowden, Helen F	Health Network Counseling	8/4/16	8/13/16
Casterella, Jeffrey R	Accounting	9/26/16	unknown
Crooks, J Clifton	ERHS	9/8/16	9/23/16
Dallas, Tiffany H	Admissions	8/1/16	8/9/16
DeRosby, Stephanie F	Health Network Counseling	9/7/16	9/23/16
Elffner, Terri R	Health Network Medical	11/2/16	11/30/16
Elffner, Terri R	Health Network Medical	10/4/16	11/1/16
Elffner, Terri R	Health Network Medical	9/2/16	10/1/16
Flanagan, Laura M	COB Academic Support	11/1/16	11/21/16
Gerlitzki, Elizabeth A	Health Network Medical	11/21/16	11/23/16
Guerriero, Aaric M	GLBTQQA Resource Center	10/17/16	10/24/16
Guerriero, Aaric M	GLBTQQA Resource Center	9/12/16	9/13/16
Harris, James R	Office of Financial Aid	11/1/16	11/9/16
Harris, James R	Office of Financial Aid	10/10/16	11/1/16
Harris, James R	Office of Financial Aid	8/18/16	10/10/16

NAME	DEPARTMENT	FROM	TO
Held, Marie L	CEMML	10/14/16	10/25/16
Held, Marie L	CEMML	9/19/16	9/13/16
Held, Marie L	CEMML	8/17/16	8/19/16
Hoenig, Mark	Health Network Medical	11/1/16	12/1/16
Hoenig, Mark	Health Network Medical	10/3/16	10/29/16
Hoenig, Mark	Health Network Medical	9/2/16	10/1/16
Johnson, Jim E	CEMML	8/26/16	8/28/16
Johnson, Patrick C	Health Network Medical	9/9/16	9/10/16
Jorgensen, Sarah E	Health Network Medical	11/21/16	11/24/16
Khalehpari, Yotam	Residential Dining	10/3/16	10/12/16
Laxague, Jennifer RB	Health Network Counseling	10/27/16	10/29/16
Mack, Virginia C	Health Network Medical	9/21/16	9/22/16
Matthews, Jon S	Health Network Medical	11/2/16	12/1/16
Matthews, Jon S	Health Network Medical	10/5/16	10/27/16
Matthews, Jon S	Health Network Medical	9/7/16	9/29/16
Medina, Tiffany A	Health Network Counseling	11/1/16	11/30/16
Medina, Tiffany A	Health Network Counseling	10/3/16	11/1/16
Medina, Tiffany A	Health Network Counseling	9/20/16	10/1/16
Mellon, April	Health Network Medical	11/1/16	11/30/16
Mellon, April	Health Network Medical	10/3/16	11/1/16
Mellon, April	Health Network Medical	8/1/16	9/1/16
Morrow, Alyssa C	Biology	10/17/16	10/24/16
Morrow, Alyssa C	Biology	8/18/16	10/17/16
Moshier, Yaping L	Biomedical Sciences	10/24/16	12/3/16
Orswell, Forrest M	Student Legal Services	10/28/16	11/5/16
Ross, Abigail L	Health Network Medical	11/23/16	11/24/16
Ross, Abigail L	Health Network Medical	9/23/16	9/24/16
Samelson, Allison A	Continuing Ed - Admin	9/20/16	9/24/16
Vesty, Jill C	Health Network Medical	11/21/16	11/24/16
Watson, Sara M	Biomedical Sciences	10/4/16	11/6/16
Weston, Spencer	CSFS	10/24/16	11/14/16
Whitesell, Julie C	Health Network Medical	11/21/16	11/24/16
Wolfelt, Susan J	Health Network Medical	10/6/16	10/8/16
Wolfelt, Susan J	Health Network Medical	9/26/16	9/28/16
Woster, Cassandra R	CEMML	8/25/16	10/21/16
Wright, Brie M	IDRC	10/13/16	unknown
Yergler, Laura	Front Range Region	10/21/16	10/25/16
Zhu, Liye	Atmospheric Science	10/17/16	11/7/16

## Section 3

## Academic and Student Affairs Committee

#### BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM ACADEMIC AND STUDENT AFFAIRS COMMITTEE MEETING AGENDA December 8, 2016

**Committee Chair:** Jane Robbe Rhodes **Committee Vice Chair:** Mark Gustafson

Assigned Staff: Dr. Rick Miranda, Chief Academic Officer

#### I. New Degree Programs

Colorado State University

• Graduate Certificates

Colorado State University-Global Campus

• Master of Science in Data Analysis

Colorado State University-Pueblo

none

#### II. Miscellaneous Items

Colorado State University

- Sabbatical Requests for 2017-2018
- Program Review Summary

Colorado State University-Global Campus

• Faculty Manual Update

Colorado State University-Pueblo

- Sabbatical Requests for 2017-2018
- Program Review Summary
- Academic Calendar AY2017-2018 and AY2018-2019

#### III. Campus Reports

- Enrollment/Student Success Report
- Academic Freedom Report

Board of Governors of the Colorado State University System Meeting Date: December 9, 2016

Consent Item

#### MATTERS FOR ACTION:

**Graduate Certificates** 

#### RECOMMENDED ACTION:

MOVED, that the Board of Governors approve the Graduate Certificates.

#### **EXPLANATION:**

Presented by Rick Miranda, Provost and Executive Vice President

In order to qualify for Title IV funding, graduate certificates awarded by Colorado State University must demonstrate approval by the Board of Governors, the Colorado Department of Higher Education and the Higher Learning Commission. The certificates listed here for which we are seeking approval have received approval from the University Curriculum Committee and the Faculty Council.

Board of Governors of the Colorado State University System Meeting Date: December 9, 2016

Consent Item

### **Graduate Certificates:**

**College of Natural Sciences** 

Performance Management – 9 credits Organizational Development – 9 credits

#### NEW PROGRAM PROPOSAL

Date Submitted: 04/25/16 10:36 am

## VIEWING: PFMF: GRADUATE CERTIFICATE IN PERFORMANCE MANAGEMENT

Effective Catalog

2017-2018

Program available to

Fall 2017

students

Natural Sciences

College

Department/Unit

1876 - Psychology

Academic Level

Graduate

Program Type

Certificate

Explain Other Program Type

Degree Type

Major

PEME

Program Code
Program Title

Graduate Certificate in Performance Management

Program Description

Advance your career as a human resources specialist, training professional, or researcher with this three-course, 9 credit certificate program. The curriculum covers the core competencies needed to practice as an industrial/organizational psychologist or human resources professional, including:

- An overview of job analysis, employee selection, and performance appraisal
- Methods for job analysis, competency modeling, and developing performance management systems
- Strategies for designing and evaluating organizational training programs

The Performance Management Certificate provides an introduction to the concepts and practices related to systems and technologies that help manage the performance of individuals in organizations. It is designed for professionals involved with recruitment, selection, placement, training, and performance management of employees and staff in organizations.

#### Program Catalog Copy

The Performance Management Certificate provides an introduction to the concepts and practices related to systems and technologies that help manage the performance of individuals in organizations. It is designed for professionals involved with recruitment, selection, placement, training, and performance management of employees and staff in organizations.

## Part of state-wide agreement

Offered as

Online Degree Completion

Offered by

Main Campus

Justification for Request A certificate of completion had been offered through CSU Online since about 2010. The required courses are also part of Psychology's Master's in Applied Industrial/Organizational Psychology(MAIOP) program. The certificate program connects to, and supports, the MAIOP program in two ways.

First, it serves as a "feeder" program to the full MAIOP program. Students who think they \*may\* be interested in a masters can complete the certificate and then, if they decide to apply to (and are accepted into) MAIOP, their credits can be applied to their masters degree.

Second, many individuals with work experience seek deeper knowledge and skill development in content narrower than MAIOP as a whole. The certificate coursework meets their educational needs. Often times, such students might excel in \*these\* courses would struggle in other MAIOP coursework.

#### Program Level Learning Objectives

- 1) Understand and be able to state how individual attributes affect performance in the workplace.
- 2) Explain theory on how adults learn and develop new skills.
- Conduct empirically-based diagnostic activities to create performance measurement systems and training programs.
- 4) Design and implement empirically-based interventions to manage performance or train employees relevant to job-related knowledge and skills.
- 5) Conduct empirically-based evaluation activities to determine the effectiveness of performance measurement systems and training programs.

Purpose and Objectives of the Certificate

The purpose of this certificate is to provide human resource and organizational development professionals with specialized knowledge and skills in systems and technologies that help manage the performance of individuals in organizations.

Target Audiences and Documented Demand Individuals who currently have their undergraduate degree and possibly who have prior research experience or work in human resources and who would like to obtain specialized training in understanding and managing the performance of individuals in organizations. Additionally, the program targets individuals who may want to eventually apply to the online MAIOP program.

Courses are offered such that the certificate may be completed in how many terms? 3

Admissions Criteria

Bachelor's degree in psychology or business, or advisor approval.

Exclusions

None.

Inclusions

Students in MAIOP may request conferral of the certificate as the required coursework for this certificate also meets program requirements.

#### **EFFECTIVE FALL 2017**

Additional coursework may be required due to prerequisites.

Course List

Code PSY 647

Applied Industrial Psychology

Title

PSY 667

Competency Modeling and Criterion Development

3

Credits

PSY 668
Program Total Credits

Workforce Training and Development

3

\*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.

Major Completion

Мар

Additional Information

CIP Code

422813 - Applied Psychology.

#### NEW PROGRAM PROPOSAL

Date Submitted: 04/25/16 10:22 am

## VIEWING: OGDF: GRADUATE CERTIFICATE IN ORGANIZATIONAL **DEVELOPMENT**

Effective Catalog

2017-2018

Program available to students

Fall 2017

College

Natural Sciences

Department/Unit

1876 - Psychology

Academic Level

Graduate

Program Type

Certificate

Explain Other Program Type

Degree Type

Major

Program Code

OGDF

Program Title

Graduate Certificate in Organizational Development

#### Program Description

Advance your career as a management consultant, human resources specialist, or training professional with this three-course, 9 credit certificate program. The curriculum covers the core competencies needed to practice as an industrial/organizational psychologist or human resources professional, including an overview of:

- Theories of organizational attitudes, group behavior, and individual motivation
- Methods for diagnosing needs, facilitating change, and evaluating organizational effectiveness
- Strategies for conducting succession planning and developing leaders

The Organizational Development Certificate provides an introduction to the concepts and practices related to systems and technologies that facilitate organizational change and enhance organizational effectiveness. It is designed for professionals involved with recruitment, selection, placement, training, and performance management of employees and staff in organizations.

#### Program Catalog Copy

The Organizational Development Certificate provides an introduction to the concepts and practices related to systems and technologies that facilitate organizational change and enhance organizational effectiveness. It is designed for professionals involved with recruitment, selection, placement, training, and performance management of employees and staff in organizations.

#### Part of state-wide agreement

Offered as

Online/DCE

Offered by

Main Campus

### Justification for

Advance your career as a management consultant, human resources specialist, or training professional with this three-course certificate program. The curriculum covers the core competencies needed to practice as an industrial/organizational psychologist or human resources professional, including an overview of

- Theories of organizational attitudes, group behavior, and individual motivation
- Methods for diagnosing needs, facilitating change, and evaluating organizational effectiveness
- Strategies for conducting succession planning and developing leaders

The Organizational Development Certificate provides an introduction to the concepts and practices related to systems and technologies that facilitate organizational change and enhance organizational effectiveness. It is designed for professionals involved with recruitment, selection, placement, training, and performance management of employees and staff in organizations.

#### Program Level Learning Objectives

- 1) Understand and define core theories that explain human behavior in the workplace and facilitate or resist channe in organizations
- 2) Define what it means to be an employer of choice and recommend multiple strategies to increase the attractiveness of an organization to individuals inside and outside the organization
- 3) Develop and refine problem-solving and consulting skills to facilitate change and development in
- 4) Conduct empirically-based diagnostic activities necessary to plan organizational change and development
- 5) Design empirically-based evaluation interventions to affect change in organizations.
- 3) Conduct empirically-based evaluation activities necessary to determine the effectiveness of organizational change and development interventions

Purpose and Objectives of the Certificate

The purpose of this certificate is to provide human resource and organizational development professionals with specialized knowledge and skills in understanding and facilitating change in organizations.

Target Audiences and Documented Demand

Individuals who currently have their undergraduate degree and possibly who have prior research experience or work in human resources and who would like to obtain specialized training in understanding and facilitating change in organizations. Additionally, the program targets individuals who may want to eventually apply to the

Courses are offered such that the certificate may be completed in how many terms?

online MAIOP program.

Admissions Criteria

Bachelor's degree in psychology or business, or advisor approval.

Exclusions

None

Inclusions

Students in MAIOP may request conferral of the certificate as the required coursework for this certificate also meets program requirements.

#### Additional coursework may be required due to prerequisites.

Course List

Code	Title	C	redits
PSY 648	Applied Organizational Psychology	3	
PSY 661	Applied Organizational Development	3	
PSY 666	Succession Planning and Leadership Development	3	
Program Total Credi	ts	9	

\*This certificate may have courses in common with other graduate certificates. A student may earn more than one certificate, but a given course may be counted only in one certificate.

Major Completion

Additional Information

CIP Code

521003 - Organizational Behavior Studies.

Board of Governors of the Colorado State University System December 9, 2016 Consent Item

#### Matters for Action

Master of Science in Data Analytics.

#### Recommended Action

Moved that the Board of Governors approve the request from Colorado State University-Global Campus to approve the Master of Science in Data Analytics.

#### Explanation

Presented by Dr. Jon Bellum, Provost and Executive Vice President

Colorado State University-Global Campus (CSU-Global) is proposing a Master of Science in Data Analytics (MSDA) program. The MSDA graduate degree is a 36 credit hour program designed to prepare students to be organizational leaders through the use of business intelligence and data analytics. Students will learn to improve decision making and business processes in core business functions such as accounting, finance, logistics, management, and strategy through the application of business intelligence solutions and data analytics principles. Technical topics include data warehouse, data mining and visualization, business analytics, predictive analytics, and enterprise performance management. The program prepares students for careers such as business/systems analysts, business intelligence developers/analysts, ETL developers, data analysts, data architects, and data scientists.



**Program Title: Master of Science in Data Analytics** 

Type: Graduate

Credits: 36 credit hours (24 credit hour major core and 12 credit hour specialization)

STEM: Yes (NSF)

Recommended CIP Code: 52.1201

#### **Overview of Program:**

Colorado State University-Global Campus (CSU-Global) is proposing a Master of Science in Data Analytics (MSDA) program. The MSDA graduate degree is a 36 credit hour program designed to prepare students to be organizational leaders through the use of business intelligence and data analytics. Students will learn to improve decision making and business processes in core business functions such as accounting, finance, logistics, management, and strategy through the application of business intelligence solutions and data analytics principles. Technical topics include data warehouse, data mining and visualization, business analytics, predictive analytics, and enterprise performance management. The program prepares students for careers such as business/systems analysts, business intelligence developers/analysts, ETL developers, data analysts, data architects, and data scientists.

Students will complete a 24 credit hour major core and will be required to select from an existing CSU-Global 12 credit hour graduate specialization.

Overall growth for this field is considered faster than average by the U.S. Bureau of Labor Statistics. CSU-Global is prepared to meet this demand with a master's degree program comprised of 24 credit hours of data analytics coursework. The degree will have an option for a 12 credit hour specialization to expand a student's knowledge in relevant areas like Applied Business Management, Cybersecurity, Finance, Healthcare Administration, Information Technology, Organizational learning and performance, Project Management, Strategic Innovation and Change Management, and etc.

The name of the program, MSDA, is consistent with those offered by many other institutions, such as Master of Data Analytics at Deakin University, Master of Information System Management in Business Intelligence and Data Analytics at Carnegie Mellon University, Master of Science in Data Analytics at City University of New York, Master of Science in Business Analytics at University of Texas at Dallas, and Master of Science in Analytics at Georgia Tech.

The MSDA program is different from the undergraduate MIS and Business Analytics program currently offered at CSU-Global. Not only is the MSDA a graduate-level program, but also its coverage focuses

more on the three elements of data analytics (descriptive, predictive, and prescriptive analytics) and the implementation of business intelligence solutions. Students graduate from this program will be highly marketable as they will acquire the essential skills to solve business problems with data analytics principles.

#### **Mission Appropriateness:**

The CSU-Global Campus mission is to advance student success in a global society, invest in human capital, expand the state economy, and enhance the quality of life for citizens in the state of Colorado and beyond by providing access to dynamic degree programs characterized by academic excellence, innovative delivery technologies, and strong stakeholder engagement. In addition, CSU-Global's three-year strategic plan between 2017 and 2020 is to innovate in stakeholder engagement, integrate evidence-based practices, and commit to knowledge-sharing for the global good. CSU-Global's ability to provide a MSDA program will allow it to continue its affordable cost, accessibility, and high quality market positioning and benefit adult students in Colorado and beyond by offering innovative programs. The online program format allows students the flexibility to manage their personal and professional commitments while earning a quality degree. As a public online university, CSU-Global provides adult learners with the ideal alternative to current institutions offering data analytics programs.

#### **Evidence of Need:**

Industry demand for the MSDA degree program has been evaluated through CSU-Global's contracted market research and through industry career growth projections. Demand projections and market research for positions aligned with this field are listed below:

- Recent studies estimate that by 2018, between 290,000 and 340,000 jobs in data analytics will be created in the US alone (Job Trends in indeed.com).
- A study by McKinsey Global Institute (McKinsey, 2011) revealed that by 2018 the U.S. will face a potential shortage of 140,000 to 190,000 business analytics professionals. The study also highlights a need for another 1.5 million executives, managers and analysts who understand how to exploit "big data" and utilize it in making good decisions.
- The Bureau of Labor Statistic (BLS) projects that operations research analyst occupations will grow over 30 percent between 2014 and 2024. As data collection methods advance, the BLS predicts that companies will begin to employ more analysts to translate data into valuable business information.

#### **Evidence of Student Demand:**

Student demand for the MSDA degree is demonstrated through the number of master students currently enrolled in the Business Intelligence (BI) Specialization at CSU-Global. This program enrolled 68 students in the term of Fall 2015 A and 118 in Fall 2016 A, indicating a 74% increase in 12 months. It is anticipated that the MSDA program will provide students in the BI specialization as well as those in the undergraduate MIS and business analytics program an excellent opportunity to pursue an advanced degree in the data analytics field at CSU-Global.

#### **CSU System Positioning:**

Within the CSU System, no master level programs currently exist oriented toward data analytics. CSU in Fort Collins offers a Master of Science in Statistics which is the only program closely related to data science in the CSU System. Additionally, the MSDA program at CSU-Global Campus will address an area currently being fulfilled by out-of-state or proprietary online institutions at a substantially higher cost.

#### **CSU-Global's Graduate Admissions Requirements:**

Students who are interested in earning their master's degrees at CSU Global should already have earned a bachelor's degree from a regionally accredited institution with a preferred grade point average of 3.00. If students had a grade point average below 3.00 when earning his(her) bachelor's degree, they are still encouraged to apply. They will just be asked to submit a statement of purpose that outlines other indicators of exceptional motivation including, GRE or GMAT scores, solid upper-division performance, relevant professional experience or outstanding professional achievement. They may also apply for non-degree seeking status, but students in this status are not eligible for federal financial aid.

#### **Program Specific Admission Requirements:**

In addition to the institutional graduate admission standards, students seeking admission to the MSDA program must have an undergraduate degree with a major or concentration in MIS, IT, computer science, statistics, economics, or other quantitative fields, and demonstrate that they have taken at least introductory courses in the following four areas: computer programming, system analysis and design, database management, and statistics.

Students who do not meet the above conditions may be admitted provisionally to the program so long as they complete the prerequisite CSU-Global coursework to build up their background knowledge as follows:

Computer programming: ITS320,

System analysis and design: MIS350,

• Database management: MIS407, and

Statistics: MIS445.

To gain full admission to the MSDA program, provisionally admitted students must complete the required coursework within 12 months of starting, and maintain a 3.0 grade point average without receiving a grade lower than a C in any coursework. The prerequisite coursework is designed to prepare students to successfully complete the MSDA program.

#### Faculty Resources – Current and Required:

CSU-Global Campus currently has 8 program-specific MIS and business analytics faculty members under contract who have terminal degrees and relevant industry experience. Additionally, CSU-Global employs 8 qualified graduate faculty in the master program of Information Technology Management who can deliver required courses. Faculty members have been identified for curriculum development and course instruction for the MSDA program (see Appendix A for a sample faculty roster)

CSU-Global promotes professional development and support for all faculty members. The university provides a faculty recruitment and development model which includes nationwide searches, as needed, for qualified faculty followed by a three-week online instructor training course, mentoring support, program coordinator guidance and management, and ongoing professional development to ensure faculty growth and quality.

#### **Library Resources:**

The Colorado State University-Global Campus Library provides a comprehensive offering of online resources and support for all CSU-Global academic programs. The online library is open 24/7 to accommodate the scheduling needs of students and faculty members. Current library resources and

#### services include:

- Online journal article databases in various subject areas
- CSU System joint resources
- eBook databases
- Governmentinformation
- General reference material, such as online dictionaries, encyclopedias, almanacs, etc.
- Article reserve for additional required readings
- Interlibrary loan for articles CSU-Global does not own
- Library tutorials and videos
- Tools for effective writing, online learning, and time management
- Virtual reference service 24/7
- Print book catalogs
- APA resources for undergraduates, graduates, and capstone projectneeds
- Library houses capstone projects by invitation
- Library training sessions (Customized library sessions, individual sessions, and opensessions)

Additionally, the CSU-Global library provides access to electronic databases specific to the MSDA degree program. Due to the depth of current CSU-Global library resources, there are no new required resources for the MSDA program.

#### Facilities, Equipment, and Technology – Current and Required:

As a fully online university, CSU-Global utilizes Schoology for its electronic learning environment. Schoology includes threaded discussion forums, announcements, and other tools for integrated asynchronous communication. CSU-Global also contracts with collaborate software for synchronous communication enhancement tools. This software provides students and instructors with real-time interaction options that can be recorded and replayed to enhance interaction and student learning.

Through the Schoology interface and the university's Student Portal, CSU-Global provides access to 24/7 live tutoring and technical support, library database and academic resources, career information and services, and student feedback and surveys. To monitor student learning, CSU-Global Campus uses two cycles of assessment software to store data. Rubrics are incorporated in each online classroom to measure and assess student performance in discussion board activities, mastery exercises, critical thinking assignments, and portfolio projects. The assessment process and faculty dialog are maintained in TaskStream, a web-based assessment tool designed to manage quality improvement processes.

Based on the scalability of the CSU-Global Campus infrastructure, additional resources are not required for the MSDA program.

#### **Curriculum and Program Outcomes:**

Students completing the MSDA from CSU-Global will learn to:

- Analyze ethics situations of business analytics and propose appropriate actions
- Develop knowledge to extract, transform, integrate, load, and access large data sets
- Design and deploy business intelligence solutions for business forecasting and analysis
- Apply principles of descriptive, predictive, and prescriptive analytics to diagnose and address business challenges
- Articulate analytical conclusions and recommendations in written and visual formats

Master of Science in Data Analytics major coursework listed in order of completion (8 three-credit courses):

- 1. MDA500 Foundations of Data Analytics (new): This course introduces students to the methodologies, techniques and tools most commonly used in data analytics. These foundational methods are from the fields of statistics, operations research and information systems. Topics include techniques and tools for visualization, inference, forecasting, optimization, simulation, data mining etc. The emphasis is on exposing the student to the techniques and software tools that are used in the industry and will be used in the rest of the program. Recommended Prior Course: None
- 2. MDA40 Introduction to Business Intelligence: This course provides an overview of business intelligence and establishes the foundation for collecting data in cross functional areas including accounting, sales, production, customer data, and other elements. Students learn how data based decision making assists in achieving or maintaining competitive advantages for an organization. Recommended Prior Course: None
- 3. MDA541 Data Warehousing in Enterprise Environments: This course provides an overview of data warehouses and how information is captured, analyzed, and translated in an enterprise for strategic decision making. Students learn to use tools such as dashboards and table reporting to combine and compare information from disparate systems in order to meet strategic operational objectives.
- 4. MDA510 Data Mining and Visualization (new): This course will provide the basic framework for conducting various data and text mining methodologies, including logistic regression analyses, classical discriminant analyses, association rule, decision tree, support vector machine, neural networks, variable reduction, cluster analyses, text analytics, and web mining. In addition, this course teaches the essential and practical skills in visualization, including computer graphics, visual data representation, physical and human vision models, numerical representation of knowledge and concepts, pattern analysis, and computational methods. Students will learn to use various software tools during the class. Recommended Prior Course: DAT500
- 5. MDA530 Predictive Analytics (new): This course covers the fundamental predictive analytics and data mining approaches applied in business. It introduces basic concepts and techniques to discover patterns in data, identify variables with the most predictive power and develop predictive models. Topics covered in this course include multivariate data analysis, logistic regression, factor analysis, data mining, discriminant analysis, cluster analysis, decision tress and neural networks. Best practices on the selection of methods and tools to build predictive models will also be covered. Recommended Prior Course: DAT510
- 6. MDA542 Business Analytics: This course provides an overview of the tools and techniques for analyzing business data in order to develop comprehensive and functional solutions. Topics include forecasting, simulation, and data modeling for complex problem analysis in medium to large organizations. Recommended Prior Course: DAT530
- 7. **MDA543 Enterprise Performance Management:** This course provides an in-depth understanding of how business intelligence aligns with the realization of organizational strategy. Topics include key performance indicators, organizational goals, and the role of effective management in meeting enterprise objectives. *Recommended Prior Course: None*
- 8. MDA581 Capstone Business Intelligence and Data Analytics (new): This capstone course provides students with the opportunity to demonstrate competency on the key domains of business intelligence and data analytics. Students will develop a comprehensive project that integrates content learned throughout the duration of the program including web analytics, social media analytics, Big Data analytics, and healthcare analytics. Prerequisite: Successful completion of all major and specialization coursework

#### MDA500 Foundations of Data Analytics (new)

#### Course Description:

This course introduces students to the methodologies, techniques and tools most commonly used in data analytics. These foundational methods are from the fields of statistics, operations research and information systems. Topics include techniques and tools for visualization, inference, forecasting, optimization, simulation, data mining etc. The emphasis is on exposing the student to the techniques and software tools that are used in the industry and will be used in the entire program. *Recommended Prior Course: None* 

#### Course Learning Outcomes:

- 1. Understand and apply various analytics techniques and tools for business decision making.
- 2. Identify appropriate methods and tools for descriptive, predictive and prescriptive analytics.
- 3. Formulate and solve analytical models, and explain the results.
- 4. Implement data analytics software tools and languages used in industry

#### **MDA540 Introduction to Business Intelligence**

#### Course Description:

This course provides students with an overview of Business Intelligence (BI) for an enterprise, establishing the foundation for using data in cross-functional key areas, such as accounting, sales, production, customer data, and other elements, to assist with generating actionable intelligence data for decision making in order to achieve or maintain competitive advantage in the workplace and evaluate how well corporate key performance indicators are being met. *Recommended Prior Course: None* 

#### Course Learning Outcomes:

- 1. Gain an overview of business intelligence and uses of BI in organizations to meet strategic objectives.
- 2. Analyze business data and recommend techniques to transform data into a form used by organizations to gain business advantage.
- 3. Demonstrate the ability to provide data analysis and find applicable business intelligence solutions.

#### **MDA541 Data Warehousing in Enterprise Environments**

#### Course Description:

This course provides students with an overview of data warehouses in an enterprise and how data is captured, analyzed, and translated into information to assist executives with streamlined information from disparate systems for effective decision making based on data for strategic and operational objectives. *Recommended Prior Course: None* 

#### Course Learning Outcomes:

- Formulate strategic and effective management decisions that demonstrate a high level of knowledge of strategic planning, competitive intelligence, and ethical standards in a culturally diverse global marketplace.
- 2. Demonstrate written communication skills to express ideals, research findings, data analysis, and recommendations effectively and persuasively with all organizational stakeholders using a variety of communications skills and tools.
- 3. Develop comprehensive and cutting edge solutions to business problems by researching, analyzing, synthesizing and evaluating information using qualitative and quantitative analytical reasoning.

- 4. Direct the effective use of technology in an organization to achieve superior organizational and individual performance, competitive advantage, and operational effectiveness within the global marketplace.
- 5. Apply proven management theories and practices to resolve a wide range of organizational issues.
- 6. Advance and foster a culture of innovation that uses new approaches, theoretical frameworks, and technologies to drive the economic performance of organizations.

#### MDA510 Data Mining and Visualization (new)

#### Course Description:

This course will provide the basic framework for conducting various data and text mining methodologies, including logistic regression analyses, classical discriminant analyses, association rule, decision tree, support vector machine, neural networks, variable reduction, cluster analyses, text analytics, and web mining. In addition, this course teaches the essential and practical skills in visualization, including computer graphics, visual data representation, physical and human vision models, numerical representation of knowledge and concepts, pattern analysis, and computational methods. Students will learn to use various software tools during the class. *Recommended Prior Course: MDA500* 

#### Course Learning Outcomes:

- 1. Understand the key techniques and theory used in visualization.
- 2. Explore different common data domains and related analysis tasks.
- 3. Gain practical experience through implementing, building, and evaluating visualization systems.
- 4. Understand differences between descriptive and predictive data mining methods.
- 5. Gain practical experience with common mining software tools.
- 6. Apply data and text mining methods to solve practical business problems.

#### MDA530 Predictive Analytics (new)

#### Course Description:

This course covers the fundamental predictive analytics approaches applied in business. It introduces basic concepts and techniques to discover patterns in data, identify variables with the most predictive power and develop predictive models. Topics covered in this course include multivariate data analysis, logistic regression, factor analysis, data mining, discriminant analysis, cluster analysis, decision tress and neural networks. Best practices on the selection of methods and tools to build predictive models will also be covered. *Recommended Prior Course: MDA510* 

#### Course Learning Outcomes:

- 1. Apply data mining to discover patterns in data.
- 2. Identify the variables with the most predictive power.
- 3. Create predictive models using statistical and data mining techniques.
- 4. Evaluate and interpret predictive models to support fact based decision making.

#### **MDA542 Business Analytics**

#### Course Description:

This course provides an overview of the tools and techniques for analyzing business data in order to develop comprehensive and functional solutions. Topics include forecasting, simulation, and data modeling for complex problem analysis in medium to large organizations. *Recommended Prior Course: MDA530* 

#### Course Learning Outcomes:

- 1. Develop an understanding of the necessary cultural, management, personnel qualifications, statistical tools, and data processing capabilities an organization must attain to create successful decisions using business analytics.
- 2. Analyze case studies of successful and unsuccessful use of business analytics for decision making.
- 3. Evaluate the qualities of a successful business analytics leaders, managers, and team members.

#### **MDA543 Enterprise Performance Management**

#### Course Description:

This course provides an in-depth understanding of how business intelligence aligns with the realization of organizational strategy. Topics include key performance indicators, organizational goals, and the role of effective management in meeting enterprise objectives.

#### Course Learning Outcomes:

- 1. Demonstrate functional knowledge of how Enterprise Performance Management (EPM) can help solve business problems within an enterprise.
- 2. Demonstrate the ability to follow an EPM process that ensures an enterprise is more highly functional.
- 3. Demonstrate a functional knowledge of how an EPM turns data into useable information.
- 4. Evaluate and analyze approaches to understanding by addressing four fundamental business questions as they relate to concepts such as "big data" and predictive analytics.
- 5. Analyze a business issue or circumstance and recommend a solution based on EPM best practices to bring accountability and focus to an organization.
- 6. Recommend approaches for aligning EPM to strategy in support of an enterprise's strategic objectives.
- 7. Develop an EPM roadmap and prioritize initiatives on that roadmap.

#### MDA581 Capstone - Business Intelligence and Data Analytics (new)

Course Description: This capstone course provides students with the opportunity to demonstrate competency on the key domains of business intelligence and data analytics. Students will learn to integrate contents learned throughout the entire program and develop a comprehensive project in a specific domain of analytics such as web analytics, social media analytics, Big Data analytics, and healthcare analytics.

#### Course Learning Outcomes:

- 1. Use advanced data processing tools to access, prepare and transform the appropriate data sets required for the specific analytics project
- 2. Select and use the appropriate analytics techniques and apply advanced analytical tools to solve business problems
- 3. Manage data analytics projects to ensure delivery of a successful data analytics initiative throughout its life cycle
- 4. Communicate and present complex analytics results to business clients, using clear and practical business language that can be understood by a non-technical audience

Appendix A: Sample Faculty Roster for M. S. in Data Analytics

Faculty Member	Credentials	Teaching Experience	Professional Experience	Program Courses for Instruction	CSU-Global Course Load
Justin Zhang Program Coordinator	PhD in Management Science and Information Systems from Penn State University  MS in Economics from Shanghai University of Finance and Economics	Dr. Zhang has been working with CSU-Global since spring 2012. He has been teaching at the college level for about ten years in both on-ground and online formats.	Dr. Zhang has worked in both academia and in the consulting sector. Prior to his academic career, he was a technology analyst and consultant in a Hi-Tech park.	Data Analytics, Data Mining and Visualization, Business Intelligence, Business Analytics, Enterprise Performance Management	MIS300: Information Systems Design and Management ITS460: Information Security Legal and Ethical Issues, ISM510: Information Technology in the Global Enterprises
Charles Lively	PhD in Computer Engineering Texas A&M  MS in Computer Engineering Texas A&M	Dr. Lively is new to CSU-Global Campus and was recruited to teach and to operate as the program coordinator for the program.	Dr. Lively has worked in both academia and in the technology sector. He is currently a technical advisor for a technology startup in data science.	Programming and database	CSC320:Programming I, CSC372 Programming II, CSC400 Data Structures and Algorithms, ITS407:Database Concepts, ITS410: Database Management
Annie Shebanow	PhD in Computer Science from Colorado Technical University	Dr. Shebanow has been working with CSU-Global since 2015. She has taught undergraduate analytics courses at various institutions.	Dr. Shabanow has been an independent consultant for many years and worked with clients such as Apple, IBM, and etc.	Data Analytics, Data Mining and Visualization, Predictive Analytics, Business Analytics	MIS445: Statistics and SPSS, MIS450: Data Mining, MIS440: Cloud Computing and Big Data
Mazen Alkhatib	PhD in Computer Engineering from the University of Louisiana at Lafayette  MS in Computer Engineering from Iowa State University	Dr. Alkhatib has been working with CSU-Global since the Fall of 2012. He has instructed at the collegiate level for about 10 years in both on ground and online formats including a tenured position at the University of South Alabama.	In addition to Dr. Alkhatib's academic credentials, he has also had the opportunity to work as a Senior Lab Engineer for the United Arab University.	Business Intelligence, Data Warehousing, Data Mining and Visualization, Enterprise Performance Management	ITS315:Introduction to Networks, ITS325:Technlogy, Ethics, and Global Community, ITS410:Database Management, ITS440:Cloud Computing and Big Data

Murthy V. Rallapalli	PhD in Systems and Enterprise from Stevens Institute of Technology MS in Networking from Regis University	Dr. Rallapalli joined CSU-Global in 2015 to teach various courses in cyber-security. He is also an associate faculty at Stevens Institute Technology to teach courses in data analysis and visualization.	Dr. Rallapalli was a senior Executive Enterprise Architect with over 20+ years of experience with IBM in designing, selling and delivering IT technologies, strategies and transformation solutions. based Cloud solutions.	Business Intelligence, Data Mining and Visualization, Data Warehousing, Business Analytics	ITS350: Information Systems and Security, ISM530: Enterprise Cyber Security, ISM529: Emerging Cyber Security Technology, Threats, and Defense
Chris den Heijer	Doctorate in Computer Science from Colorado Technical University  Masters of Science in Management from Colorado Technical University  MBA from the University of LaVerne	Dr. denHeijer has been an instructor with CSU-Global since Winter of 2013. He has both taught and developed courses in the collegiate level since 2008.	Over the past 15 years, Dr. denHeijer has created his professional presence working in Information Technology at Boeing and then with Pratt & Whitney Rocketdyne as the Computer Security Officer.	Business Intelligence, Data Warehousing, Data Mining and Visualization, Enterprise Performance Management	ITS315:Introduction to Networks, ITS450:Data Mining, MIS300:Information Systems Design and Management
Ying Liu	PhD Computer Science from Georgia Institute of Technology  MS in Computer Science, MBA, and MS in Bioinformatics from Georgia Institute of Technology	Dr. Liu joined CSU-Global in Spring of 2013. He has developed his collegiate career beginning in 2005 from the University of Texas-Dallas and is currently an Assistant Professor at St. John's University working with both graduate and undergraduate students. Not only has Dr. Liu had the opportunity to instruct in these areas but has also developed programs for various universities.	Dr. Liu's career has been primarily focused within academia. He has worked to develop the Bioinformatics Program at the University of Texas – Dallas and has also been an author of an array of Bioinformatics and Computer Science publications.	Data Analytics, Data Mining and Visualization, Business Analytics, Predictive Analytics, Business Intelligence, Data Warehousing	HCI310:Principles of Health Information Management, HCM570:Healthcare Information Systems, ITS440:Cloud Computing and Big Data

Biswajt Panja	PhD in Computer	Dr. Panja joined CSU-Global in	Professionally, Dr. Panja has	Business Intelligence,	ITS320:Basic
	Science from the	the Spring of 2013 with the	developed his career serving as	Data Warehousing,	Programming,
	University of	introduction of our Systems	an IT consultant. His clients	Data Mining and	ITS407:Database
	Missouri-Rolla	Security Program. He comes	include, Texas Comptroller and	Visualization,	Concepts, ITS460:
		to us with 12 years of	Boeing. On an International	Enterprise Performance	Information Security,
	MS in Computer	academic teaching and course	level, Biswajit has been invited	Management	Legal and Ethical Issues
	Science from Grand	development experience. His	to speak at the IEEE		
	Valley State University	expertise lie in the area	International Conference on		
		Information Security and	Sensor Networks, and at the		
		Networks	HP Research Labs in India.		

Board of Governors of the Colorado State University System December 9, 2016 Consent Item

#### Matters for Action

Updates to the CSU-Global Faculty Handbook

#### Recommended Action

Moved that the Board of Governors approve the edits to the CSU-Global Faculty Handbook

#### Explanation

Presented by Dr. Jon Bellum, Provost and Executive Vice President

#### Changes to Faculty Handbook - December 2016

- Delete Faculty Support phone number and replace with faculty support email
- Updated fact sheet with current numbers
- Deleted references to office of Student Success updated and replaced with Student Affairs
- Deleted references to Manager of Faculty Recruiting updated and replaced with Faculty Recruitment and Development Coordinator
- Deleted references to ADP and changed to Ultipro
- Changed references to Faculty Scheduling Coordinator to Faculty Operations Specialist
- Added Student Disability Services
- Added the following statement to faculty responsibilities: Faculty members acknowledge that student feedback about faculty performance will be solicited and faculty members have the obligation and responsibility to respect that process. Faculty members must not attempt to single out or directly respond to students who provide feedback and comments, whether the student feedback and comments are submitted by name or anonymously.
- Directed faculty members to contact Course Support or their respective Program Coordinators for more information about course development and materials (instead of to the Curriculum and Assessment Handbook).
- Added section about faculty awards: At the discretion of the leadership of CSU-Global, faculty recognition awards may been conferred at the end of each academic year.
- Added to all courses are predicted courses: and faculty are not guaranteed a particular course or section
- Added graduate expectations: Faculty teaching graduate level courses are expected to adhere to the additional graduate level expectations.
- Added: Report any issues or errors found via the Course Support button on the Faculty Portal homepage under "Quick Links." Errors will be reviewed and corrected before courses open for students.
- Changed final grading to reflect gradebook change to cumulative points: Accumulated points determine the student's final letter grade and must be calculated based on the grading scale in the course syllabus. Faculty will use the drop down menu in the Overall column and select the grade equivalent for the points received.

#### Added step 5 to faculty grievance process:

- 5. The Faculty Affairs Committee will review and respond in writing to the grievance appeal within 10 business days. A copy of the written response will also be sent to the Provost.
- 6. If the issue remains unresolved, the Provost will review and respond in writing to the grievance appeal within 5 business days. A copy of the written response will also be sent to the President.

#### Additional expectations for faculty teaching graduate courses:

- Include a video introduction that includes (1) the course and (2) the faculty member describing academic and professional background and highlight areas of research/expertise/experience
- Encourage early interaction, interest, and engagement in the course by providing students with the opportunity for a live session (the polling feature may be used). If students are interested, schedule a live session, record, and post the link
- Faculty member provides additional outside materials, videos or resources to encourage deeper understanding of the material.
- Provide at least two video updates <u>within a course</u> (5-10 minutes) that include content or information tied to the course outcomes not already addressed in weekly materials
- Invite students to schedule an individual live session or phone call with the instructor to discuss course content, or personal career/professional goals.
- Responses should extend critical thought on content and weekly objectives, suggest additional resources, include a follow up question, and/or move the student to a deeper understanding and ability to apply knowledge gained. Attempt to continue conversation beyond the first question and answer.
- Encourage continued interaction, interest, and engagement in the course by providing students with the opportunity for a live session (the polling feature may be used). If students are interested, schedule a live session, record, and post the link
- Provide substantive feedback to students including areas of strength and areas of growth. Grading rubrics and criteria are clearly incorporated into feedback.
- Tie discussion content to real world situations.
- Encourage students to use Academic Peer Reviewed journals to support ideas in discussions to further critical thinking and industry relevance.
- Instructors provide content specific feedback (including additional points of view, questions, examples, or other resources) supporting additional learning as well as guidance on proper APA format and style.
- Balance APA comments with content and concept specific comments within the assignments.
- Require Academic peer reviewed journal and industry journals when consistent with the assignment instructions.
- Encourage the use of highly credible resources in all assignments.

Board of Governors of the Colorado State University System
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Report Item

#### REPORT ITEM:

Report: Sabbatical Requests Approved for AY 2017-2018

#### **EXPLANATION:**

Presented by Rick Miranda, Provost and Executive Vice President

The purpose of sabbatical leave is to enhance the faculty member's professional growth, enhance the institution's reputation and the students' educational experience at the institution, and increase the overall level of knowledge in the faculty member's area of expertise.

The recommendations for sabbatical leave have been reviewed at the Department, College, and University levels and have received approval at each level. In every case, the proposal has been evaluated and judged appropriate with strict adherence to CCHE guidelines. As delegated by the Board of Governors, Dr. Tony Frank, President, has approved all of these sabbatical leaves.

#### Colorado State University Sabbatical Leave Requests for AY 2017-2018

Requests were received for 45Sabbatical Leaves to be taken during the academic year 2017-2018.

<u>The College of Agricultural Sciences</u> had one request for a full year sabbatical. This will take place in part on campus and in part off campus.

<u>The College of Business</u> had one request for a full year sabbatical. This sabbatical will be conducted off campus.

<u>The College of Engineering</u> had four requests. One of these is for the fall semester only, one is for the spring semester only and two are for the full year. All four sabbaticals will be conducted off campus.

<u>The College of Health and Human Sciences</u> had three requests. One of these is for the fall semester only, one is for the spring semester only, and one is for the full academic year. All three will take place in part on campus and in part off campus.

<u>The College of Liberal Arts</u> had eighteen requests. Nine of these are for the fall semester only, four are for spring semester only, and five are for the full academic year. Two of these will take place on campus, eight will take place off campus, and eight will have time spent both on and off campus.

<u>The College of Natural Sciences</u> had nine requests. Three of these are for the full academic year, four are for fall semester only, and two are for spring semester only. Seven of these will take place off campus and two will take place in part on campus and in part off campus.

<u>Warner College of Natural Resources</u> had six requests. Five of these are for the full academic year and one is for fall semester only. Three of these will be spent off campus and three will have time spent both on and off campus.

<u>The College of Veterinary Medicine and Biomedical Sciences</u> had two requests. Both of these requests are for the fall semester and will be spent off campus.

<u>The University Libraries</u> had one request for the fall semester and will be spent both on and off campus.

### Sabbatical Leave Requests by College and Year

	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018
CAS	2	5	4	7	4	2	1
CHHS	2	4	0	0	3	0	3
COB	2	4	3	5	11	6	1
COE	2	4	3	5	10	4	4
CLA	18	23	34	36	16	10	18
CNS	6	8	16	8	15	12	9
CVMBS	0	0	3	1	1	1	2
WCNR	5	5	4	5	3	9	6
Libraries	1	2	0	0	0	0	1
Total	38	55	67	67	63	44	45

The following sabbatical requests have been approved for the 2017-2018 Academic Year:

Name	<u>Department</u>	Proposed Leave Dates					
College of Agricultural Sciences							
Thilmany, Dawn	Agricultural and Resource Economics	AY 2017-2018					
College of Business							
Krause, Daniel	Management	AY 2017-2018					
College of Engineering							
Birner, Thomas	Atmospheric Science	AY 2017-2018					
Chen, Thomas	Electrical and Computer Engineering	Fall 2017					
James, Susan	Mechanical Engineering	Spring 2018					
Reardon, Kenneth	Chemical and Biological Engineering	AY 2017-2018					
College of Health and Hun	nan Sciences						
Biringen, Zeynep	Human Development and Family Studies	AY 2017-2018					
Reiser, Raoul	Health and Exercise Science	Fall 2017					
Yan, Ruoh-Nan	Design and Merchandising	Spring 2018					
College of Liberal Arts							
Blake-Oliver, Tiffany	Music, Theatre, and Dance	Spring 2018					
Brinks, Ellen	English	Spring 2018					
Carcasson, Martin	Communication Studies	Fall 2017					
Carlyon, Jonathan	Languages, Literatures, and Cultures	Fall 2017					
Cespedes, Karina	Ethnic Studies	AY 2017-2018					
Chang, Chung-Fu	Music, Theatre, and Dance	Fall 2017					

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<u>Name</u>	<u>Department</u>	Proposed Leave Dates
Chung, Hye Seung	Communication Studies	Fall 2017
Coke, Pamela	English	Fall 2017
Jacobi, Bonnie	Music, Theatre, and Dance	Fall 2017
Kasser, Jeffrey	Philosophy	AY 2017-2018
Lehene, Marius	Art and Art History	Spring 2018
Lindsay, James	History	Fall 2017
Martey, Rosa	Journalism and Media Communication	AY 2017-2018
Pickering, Kathleen	Anthropology	Fall 2017
Shulman, Steven	Economics	Spring 2018
Stanley, Michelle	Music, Theatre, and Dance	Fall 2017
Sunseri, Thaddeus	History	AY 2017-2018
Weiler, Stephan	Economics	AY 2017-2018
College of Natural Sciences	1	
Angeloni, Lisa	Biology	Spring 2018
Betten, Anton	Mathematics	Fall 2017
Chen, Eugene	Chemistry	Spring 2018
Cleveland, Jeanette	Psychology	AY 2017-2018
Levinger, Nancy	Chemistry	AY 2017-2018
McConnell, Ross	Computer Science	AY 2017-2018
Rappe, Anthony	Chemistry	Fall 2017
Wang, Haonan	Statistics	Fall 2017

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Name	Department	Proposed Leave Dates

Yao, Tingting Biochemistry and Molecular Biology Fall 2017

### Warner College of Natural Resources

Crooks, Kevin Fish, Wildlife, and Conservation Biology Fall 2017

Harry, Dennis Geosciences AY 2017-2018

Johnson, Brett Fish, Wildlife, and Conservation Biology AY 2017-2018

Laituri, Melinda Ecosystem Science and Sustainability AY 2017-2018

Sanford, William Geosciences AY 2017-2018

Schultz, Courtney Forest and Rangeland Stewardship AY 2017-2018

#### **College of Veterinary Medicine and Biomedical Sciences**

Gilkey, David Environmental and Radiological Fall 2017

**Health Sciences** 

Goodrich, Laurie Clinical Sciences Fall 2017

#### **University Libraries**

Level, Allison Fall 2017

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#### MATTERS FOR ACTION:

Report Item: Program Review Summary

#### **EXPLANATION:**

Presented by Rick Miranda, Provost and Executive Vice President

Colorado State University, per the *Academic Faculty and Administrative Professional Manual* (section C.2.4.2.2.d) and in accordance with expectations set forth by the Higher Learning Commission (our regional accreditor), conducts periodic quality reviews of our academic degree/certificate programs. The purpose of the academic program reviews is twofold: 1) to assess the quality of the degree/certificate program and 2) to assess the operation efficiency and effectiveness of the program in order to maintain and improve productivity.

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#### **Preface**

Colorado State University believes strongly in assessing and continuously improving the quality of our degree/certificates programs. This belief is demonstrated in the *Academic Faculty and Administrative Professional Manual* (section C.2.4.2.2.d) which requires period review of our academic programs. It is also reflected back to us from the Higher Learning Commission, our regional accrediting body, in their emphasis on the use of student learning assessment results.

In 2015-16, sixty-eight degree/certificate programs in the following fifteen departments were reviewed. Additionally, ten non-degree programs in the School of Education were reviewed.

#### College of Engineering (9 UG and 13 G degrees/certificate)

**Atmospheric Sciences** 

Chemical and Biological Engineering

Civil and Environmental Engineering

College-Wide Interdepartmental

**Electrical and Computer Engineering** 

Mechanical Engineering

## College of Health and Human Sciences (9 UG and 17 G degrees/certificates; 10 non-degree programs)

Construction Management

Education

Food Science and Human Nutrition

Health and Exercise Science

Human Development and Family Studies

Occupational Therapy

Social Work

#### College of Natural Sciences (3 UG and 6 G degrees/certificates)

Computer Science

Statistics

#### Warner College of Natural Resources (4 UG and 5 G degrees/certificates)

Forestry and Rangeland Stewardship

#### Special Academic Units (2 G degrees/certificates)

Biomedical Engineering

#### **Academic Quality**

All of the degree programs reviewed in this cycle provided evidence in the review process that they offer high quality educational opportunities for students. Further, each program had thoughtful ideas of how to use their assessment results to inform their continuous improvement.

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Many of the programs also maintain specialized accreditation through disciplinary accrediting bodies (displayed in Table 1).

Table 1.

Programmatic Accrediting Agency	Program
Accreditation Board for Engineering	
and Technology	Chemical and Biological Engineering - BS
Accreditation Board for Engineering	
and Technology	Civil Engineering - BS
Accreditation Board for Engineering	
and Technology	Computer Engineering - BS
American Council for Construction	
Education	Construction Management - BS
Council for the Accreditation of	
Counseling and Related Education	Education and H Studies, Counseling and Career
Programs	Development Specialization - MEd
Accreditation Board for Engineering	
and Technology	Electrical Engineering - BS
Accreditation Board for Engineering	
and Technology	Engineering Science - BS
Accreditation Board for Engineering	
and Technology	Environmental Engineering - BS
Accreditation Council for Education in	
Nutrition and Dietetics	Food Science and Human Nutrition, Dietetics - BS
Accreditation Council for Education in	
Nutrition and Dietetics	Food Science and Human Nutrition, MS / CP
	Forest Biology, Forest Fire Science, and Forest
Society of American Foresters	Management - BS
American Association of Marriage and	Human Development and Family Studies,
Family Therapy	Marriage and Family Therapy Specialization - MS
Accreditation Board for Engineering	
and Technology	Mechanical Engineering - BS
Accreditation Council for Occupational	
Therapy Education	Occupational Therapy - MOT
Council on Social Work Education	Social Work – BSW
Council on Social Work Education	Social Work - MSW
Teacher Education Accreditation	
Council	Teacher Education and Principal Preparation

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#### **Review Process**

The program review process requires broad faculty involvement in an introspective and authentic appraisal of departmental efficiency and effectiveness as well as program relevance, student learning, and outcomes after graduation. That appraisal leads to the development of quality initiatives to be implemented prior to the next review cycle. The process is documented in a self-study that is submitted to a small team of reviewers from outside the department but internal to CSU. The team is comprised of administrators and faculty on campus and is intended to provide each department with objective feedback on their current state and future goals. The focus of the review is, foremost, quality improvement.

#### **Quality Initiative Awards**

Beginning in spring 2012, the Provost initiated an awards program to recognize and incentivize continuous improvement by providing one-time funds to support quality initiatives that emerge from the process. In this review cycle, departments submitted two-page proposals that were reviewed by the Office of the Provost. The Provost awarded \$104,920 in FY16 as displayed in Table 2.

Table 2.

	Award	
Department	Amount	Quality Initiative
Computer and Electrical	\$15,000	Infuse intensive writing as a High Impact Practice into
Engineering		selected CEE courses
	\$15,000	Add active learning and flipped classroom components
Mechanical Engineering		some of the large enrollment MECH courses
Health and Exercise	\$15,000	Initiate efforts to increase diversity in the composition
Science		of faculty and undergraduates
School of Social Work	\$15,000	Re-conceptualize the MSW curriculum
Construction	\$14,920	Create the Institute to Promote Women in Construction
Management		Management
	\$15,000	Create degree concentrations within the existing
Human Development and		Human Development and Family Studies
Family Studies		undergraduate degree
Forestry and Rangeland	\$15,000	Enhance the High Impact Practices within the graduate
Stewardship		programs

The Executive Summaries of the 2015-16 program review process are attached.

## **Atmospheric Science**

The primary mission of the Department of Atmospheric Science is to provide quality graduate education; to conduct groundbreaking research in the atmospheric sciences; and to provide service to Colorado, the nation, and the world. Central to the mission are the discovery of new knowledge; the preparation of future leaders in atmospheric science; the development of new observational, modeling and analysis techniques; and activities to aid the transfer of new knowledge and techniques to practical applications.

The department offers two graduate degrees

Atmospheric Science – M.S. (Plan A, Plan B) Atmospheric Science – Ph.D.

#### Students:

Although very selective, the program is the largest graduate program in Atmospheric Science in the United States, with an average enrollment of 89 graduate students and 16 faculty. The focus on graduate education, to the exclusion of an undergraduate degree, allows for intensive and productive research experiences for faculty and students. The department ranks at the top of doctoral programs in Oceanic and Atmospheric Science according to the National Research Council and awards an average of 14 M.S. and 10 Ph.D. degrees each year.

The department recruits exceptional graduate students. Admission is offered each year to approximately 20-25 students from a pool of more than 150; two-thirds of offers are accepted. Nearly 100% of students are supported with a Graduate Research Assistantship (GRA) or by a fellowship. Students are frequently supported by nationally competitive fellowships from the National Science Foundation, the American Meteorological Society (AMS), NASA, USEPA, Department of Defense, and other organizations. In the most recent year of the reporting period, for example, entering students received 5 of the 9 national graduate science fellowships offered by the AMS.

Graduate students are essentially apprentice researchers and are treated as professional researchers involved in projects with national and international profiles. Multi-layer mentoring by faculty, professional scientific staff, and other graduate students occurs daily and includes a rich experience of professional development in addition to rigorous academic work. Most faculty research groups meet at least once a week, sometimes in collaboration with other faculty groups. Most dissertations will result in several publications in the refereed literature.

During the reporting period, 14% of graduate students were from historically underrepresented groups in science (African American, Latino/Latina, Native American, and Pacific Islanders). Atmospheric Science (and geosciences in general) has among the least ethnic diversity all of academia. Since 2006, the department pursued a concerted strategy to improve the diversity of the graduate student body. This effort included major funding from the National Science Foundation through the Center for Multiscale Modeling of Atmospheric Processes (CMMAP), but also involved every faculty member, as well as the Department Graduate Student Counselor. Partnerships with successful national diversity programs helped to build long-term collaborative relationships with faculty at minority-serving undergraduate institutions, and develop a powerful residential summer research internship program. Using NSF funds, a series of

studies led by colleagues in CSU's Psychology and Human Development and Family Studies departments were also supported to provide insights into the reasons for historical lack of diversity in the field. Over the past decade, this effort has resulted in a tripling of the enrollment of graduate students from historically underrepresented groups. The department now has about twice the percentage of these students as peer departments nationwide. These achievements have large disciplinary impact because the department is the largest graduate program in Atmospheric Science in the US and many graduates pursue faculty positions in Atmospheric Science Departments around the US and the world. The results are the subject of a scholarly article accepted for publication in the *Bulletin of the American Meteorological Society*.

During the reporting period, 55% of graduate students were male and 45% female, which is much closer to parity than the previous reporting period. Through CMMAP, faculty conducted scholarly research on the persistent lack of ethnic and gender diversity in Atmospheric Science and were published in peer-reviewed journals. Beginning in 2014, Assistant Professor Emily Fischer began a \$1.7 million program sponsored by the National Science Foundation to help close the gender gap in geosciences.

The program review process served as the impetus to create and begin monitoring the attainment of program level student learning outcomes. The entire faculty engaged in a retreat to define and operationalize those outcomes. Data will be collected annually to assess student learning in both degree programs. As needed, assistance will be provided by The Institute for Learning and Teaching.

Nearly half (45%) of CSU Atmospheric Science alumni who responded to a survey are employed in academic institutions: 24% in tenure-track faculty positions (Ph.D. graduates) and 21% in non-tenure track research positions. About 27% are employed in government research laboratories or operational agencies (e.g., NCAR, National Weather Service). Only 11% of graduates are employed in private companies in our field. About 17% report that they have left the field.

The vast majority of alumni survey respondents (82%) either agree or strongly agree that they established strong and lasting professional relationships at CSU that have benefited them throughout their subsequent careers. An even larger percentage (88%) feel that their research experience at CSU prepared them for a career in Atmospheric or Ocean Science.

#### **Research and Scholarly Accomplishments:**

One faculty is a member of the National Academy of Science and another is a member of the National Academy of Engineering. Three are currently University Distinguished Professors. Faculty received 44 awards during the reporting period, including Fellowships in major professional societies and some of the very highest awards in the American Meteorological Society and the American Geophysical Union.

On the average, faculty published 35 papers in refereed journals during the reporting period (even though several were only hired a couple of years ago). Faculty brought an average of \$15.5 million per year in extramural contracts and grants to fund their research during the reporting period. About 55% of this funding is from the National Science Foundation, and 28% is from NASA. There is also a lot of research in the Department funded by NOAA. Faculty collectively obtained an average of 94 individual contacts and grants each year during the reporting period.

#### **Engagement and Outreach:**

There are two primary engagement and outreach efforts; the Community Collaborative Rain and Hail Study and the Center for Multiscale Modeling of Atmospheric Processes.

The Community Collaborative Rain and Hail Study (CoCoRaHS) is a unique, non-profit, community-based network of volunteers of all ages and backgrounds working together to measure and map precipitation (rain, hail and snow). By using low-cost measurement tools, stressing training and education, and utilizing an interactive Web-site, the aim is to provide the highest quality data for natural resource, education and research applications. CoCoRaHS has over 20,000 daily weather observers in all fifty states plus Canada, and has emerged as one of the largest volunteer observing networks in the world. The National Oceanic and Atmospheric Administration (NOAA) and the National Science Foundation (NSF) are major sponsors of CoCoRaHS. CoCoRaHS conducts training for all volunteers, hosts regular webinars, and hosts summer meetings and teacher training.

Since 2006, the Center for Multiscale Modeling of Atmospheric Processes (CMMAP) has sponsored a fertile collaboration among researchers in many fields, graduate and undergraduate students, K-12 teachers, science outreach professionals, and evaluators. This collaboration included groundbreaking work in climate modeling, ecology, political science, sociology, psychology, and English. At the undergraduate level, more than 80 faculty were engaged in 26 Departments at CSU who now teach one another's content in dozens of classes. Hundreds of CSU English Composition students learned about climate change while developing basic writing skills. Working closely with public schools, curriculum enhancement kits were developed and tested for teaching standards-aligned climate science in K-12 classrooms, which built a successful series of Professional Development workshops for teachers at three different grade levels. Through collaboration with the Little Shop of Physics, over 500,000 students participated in these programs in public schools and millions of individuals around the world used the web-based tools. Since 2014, the department has sponsored a series of Teen Science Cafes for middle and high school students in Fort Collins. The success of this collaborative program is apparent in traditional metrics and assessments of content knowledge. Equally important, the sustained interaction with education professionals had a substantial impact on the climate scientists, faculty and graduate students involved in the program. Due to reaching the maximum 10-yr NSF funding limit, this Center will be dissolved in June 2016. Some functions will continue through a new institute, ESMEI.

#### **Planning for Quality Improvement:**

This field is in an exciting period of growth and discovery that includes major strides in weather forecasting, remote sensing, climate modeling, and atmospheric chemistry as well as fantastic opportunities for collaboration with researchers in human health, ecology, hydrology, and human dimensions. The future of the science is very optimistic. Strategic opportunities for improvement are as follows:

- 1) Currently, searches for two new faculty are in process, one in mesoscale and cloud processes, and one in land-atmosphere interactions. These new additions to faculty will likely spark yet more collaborations and bring new intellectual vibrancy. Work will continue on a hire in atmospheric radiation during the next reporting period as well.
- 2) A thorough review of the M.S. curriculum and considerations to rebalance the research and teaching components of the program has begun to improve timely graduation.
- 3) As the Federal Government continues to struggle with very tight budgets, faculty and research scientists will be challenged to maintain the very high level of extramural research funding that

has supported the Department for over 50 years. In addition to losing several very large research programs to retirements and attrition of faculty over the reporting period, the Center for Multiscale Modeling of Atmospheric Processes (CMMAP, \$4 million per year) will sunset in June 2016. These developments will substantially impact the ability of Department faculty to support the large number of graduate students and research staff unless alternative funding sources are identified.

4) The Department will continue to compile evidence (measured directly and indirectly) of student learning as defined by the agreed upon student learning outcomes, and to respond to these data.

## **Chemical and Biological Engineering**

The mission of the department is to educate future leaders in chemical and biological engineering to effectively combine their broad knowledge of mathematics, physics, chemistry and biology with their engineering analysis and design skills for the creative solution of problems in chemical and biological technology and for the sustainable synthesis of innovative processes and products.

Over the past eight years the department has coalesced around a vision for its future, going through a significant evolutionary process, both in terms of the research areas of the faculty hires and changes to the undergraduate program. In response to assessment of where the discipline is headed, the Department of Chemical Engineering, embraced biology as yet another foundational science, along with the traditional subjects of chemistry, physics, and mathematics. The Department took the initiative to not only change the department name and to add some bioscience content to the curriculum, it also changed the degree name to the B.S. in Chemical and Biological engineering to better reflect the learning outcomes students master in the program. The new degree positively impacted student recruitment, enrollment and national ranking.

The undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET), as are all CSU undergraduate engineering degree programs. ABET accreditation provides evidence that undergraduate students are meeting nationally recognized learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are met.

The department offers the following degree programs:

Chemical and Biological Engineering – B.S. Chemical Engineering – M.S. Chemical Engineering – M.E. Chemical Engineering – Ph.D.

### Students:

The change to the undergraduate program has definitely impacted student recruitment. In the academic year 2006–07, there were 104 full time students in the entire undergraduate program, and by 2010–11 that number had grown to 270. Since then, the number of chemical and biological engineering majors has remained stable, but the start of the biomedical engineering degree program in 2010 resulted in monotonic growth of the number of chemical and biological engineering students who are working toward a second degree in biomedical engineering (BME). That population has grown from essentially zero in 2010 to 146 in fall 2015, which brings the current population of CBE and CBE/BME students to over 420, and a student to faculty ratio of 35:1.

To date, this growth has most significantly impacted the size of the lower division CBE classes, but the program has reached a critical point where further growth may be not sustainable because of two course sequences in the students' senior year. One sequence is the unit operations laboratory and the other is capstone design. Both of those sequences have reached capacity based on current practices, and the department will need to consider options such as course redesign to provide the necessary instructional experience to maintain ABET accreditation.

Following the first graduating class, the department was successful in obtaining full ABET accreditation for the new undergraduate degree. That accreditation, current through 2020, provides evidence that students are meeting nationally agreed upon learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are also met.

There is a need for high quality PhD students. At this point, that need cannot be met solely through domestic students. A pipeline of international students, mostly likely from Asia, is required.

## **Research and Scholarly Accomplishments:**

Over the past eleven years the department has hired 9 new junior faculty members. Their research areas have broadly been distributed between materials science (3) and systems and synthetic biology (6). Within materials science the department has focused exclusively on soft materials—polymers, macromolecules, biomaterials—because this area has been, and continues to be at the forefront of the discipline. The more mature areas of ceramics and metallurgy no longer offer researchers the same opportunities for discovery. The department placed greater emphasis on systems and synthetic biology to position itself at the leading edge of a dynamic, exponentially growing interdisciplinary field. The ability to design and manipulate cellular machinery is significantly impacting a diverse array of applications, including health, sustainable energy, ecology, and the environment.

There are plans to add 1 more synthetic biology and 2 more materials science faculty members to the department. The hires will be included in these two areas to continue building on our research strengths for two reasons. First, it is desirable to add complementary strengths to build upon the near-critical mass currently faced. Second, the department has always been well aligned with the college's strategic plans, with faculty fully supporting the creation of new degree programs in materials science and engineering; therefore, significant contribution to the success of those degrees is essential. In terms of synthetic biology, the faculty research portfolio would benefit from the addition of one more laboratory practitioner to create a good balance with the computational biology currently underway in the department.

Grant activity is an important metric, of course, and correlates with the extent to which faculty are resourcing their research activities. From 2006–07 to 2010–11, research expenditures in CBE grew monotonically, from a little over \$0.5M to \$2.8M. This significant increase was due, in part, to the hiring of new faculty and growth in personnel, but it was also due to ARRA, which brought additional resources through federal funding agencies as well as direct earmarks. During that period the department was also home to a large NSF PhD training grant. The precipitous drop in expenditures over the last four years reflects the phase-out of that funding to CBE Pls, but does not show expenditures by CBE faculty as co-Pls on grants outside the department. Almost all CBE faculty members carry out collaborative research with investigators outside the department, often as co-Pls. Proposal submissions led by CBE faculty have risen sharply over the past two years, and the department is projected to increase its expenditures over the 2014–15 figure.

In terms of research accomplishments as measured by peer reviewed publications, going back six years and considering faculty who had been in academia for four or more years at that time, the average publication rate for the period 2010 to 2015 is 3.9 peer reviewed articles per year. Half of the faculty members in the department are within seven years of their initial appointments. As is widely known, the federal funding landscape is inhospitable, and our department faculty compete in NIH, NSF, DOE, and EPA programs where single digit success rates are the norm. Hiring faculty at the leading edge of their

disciplines who work in 'fundable' research areas has been strategically planned. Nevertheless, perseverance is required.

#### **Engagement and outreach:**

Department faculty members have a strong record of service to the profession, as evidenced by review of journal manuscripts and grant applications, assignment to journal editorial boards, and membership in professional societies. In 2014, the faculty published 49 referred journal articles, 69 manuscripts, and served on 19 review panels/editorial boards.

Faculty members are very active on a number of standing committees across campus. This service includes the department's obligation to provide representation on Faculty Council, as well as voluntary service on Faculty Council committees such as the University Curriculum Committee and the Committee on Strategic and Financial Planning. Additionally, through 2014 eight of twelve CBE faculty members served voluntarily on committees in other departments (chemistry) and interdisciplinary academic programs (SBME, MCIN, CMB, SAMD, SoGES). Four different CBE faculty members serve as faculty advisors to the student chapters of the American Institute of Chemical Engineers, the Biomedical Engineering Society, Society for Advancement of Chicanos and Native Americans in Science, and the International Society of Pharmaceutical Engineers.

Faculty members also take on administrative and leadership responsibilities outside the department that provide service to the university. Examples of these positions include site director of C2B2, director of the Sustainable Biofuels Research Center, associate director of the Energy Institute, and director of the Rocky Mountain Magnetic Resonance center. Three of the four research pod leaders in the Scott Bioengineering Building are CBE faculty members.

#### **Planning for Improvement:**

- 1. Since 2005, CBE has enjoyed a net growth of six faculty members. At the same time, the average faculty size of a CBE department at a Carnegie Research University with Very High Research Activity is sixteen. The faculty support the hire of three additional faculty, should the resources become available, in order to reach parity in size with peers and aspirational peers. In addition to benefits such as increased time for scholarship and reduced academic advising load, the student to faculty ratio in the undergraduate program would reduce to 26:1, close to what it was in 2009. The growth in faculty numbers would result in commensurate growth in Ph.D. students, postdoctoral scholars, and research opportunities for undergraduates. Plan: hire three additional junior faculty members over the next three years.
- 2. Current areas of strength within the department (systems biology, synthetic biology, advanced polymeric materials, biomanufacturing, bioanalytical devices, quantitative biology) are expected to grow in scope, importance, and impact over the next five to ten years. As discussed above, the department has always been strategic in its choice of research areas. Between the current faculty and the next three hires, CBE will be highly impactful in these areas of strength, and these will help to shape the department's national and international reputation. Plan: continue to hire in high demand, fundable research areas, and increase efforts of existing faculty.
- 3. Although the department receives a very large number of M.S. and Ph.D. applications from China, the pool rarely yields high ability students from strong universities. The existing MOUs between Colorado State University and Chinese institutions are not well aligned with needs in engineering, so faculty members have been proactive about developing and sustaining one-on-one relationships with faculty members at top-tier research universities in China. The list includes

- Nankai University, Fudan University, Zhejiang University, and Qingdao University. Plan: increase enrollments of international Ph.D. students by four or five per year.
- 4. The COE dean's top budget request for FY17 is the addition of 30 GTA lines to the college, phased in over a three year period. If supported by the Provost and President, CBE would receive 6 GTA slots by FY19. This additional resource would greatly enhance the undergraduate experience, help bridge faculty between grants, and free up much of the time GRAs currently spend on grading and office hours. Plan: strategically use new GTA lines to increase graduate student pool.
- 5. Now that the Professional Science Masters is a recognized degree on CSU's campus, the timing is opportune to bring on line several new programs that fill a regional need for workforce development, boost graduate student numbers, and increase tuition revenue for the department and university. CBE has decided to start with a PSM in Biotechnology, and it has developed a phase I proposal for consideration by the Council of Deans and Faculty Council. Another PSM in the concept stage is bioenergy. Sustainability of any new PSM degree programs will require an appropriate revenue sharing model, however. Plan: continue to push the degree proposal through the approval process with goal of admitting students in fall 2017.
- 6. There are no unused teaching laboratories under the control of the college. However, there may be underutilized research space in the original engineering building that would provide a permanent home to the CBE 101 labs, which involve 120 students each year, and CBE 452, which currently enrolls 70 students. This space could/would also serve as the home for Colorado State University's iGEM team. Additionally, the department will submit a space request in response to the Space Committee's recent call for proposals to occupy space that will open up in the Chemistry Building and Yates Hall upon completion of the new chemistry and biology buildings in May 2017. Plan: find permanent home for needed undergraduate teaching laboratories.
- 7. The International Genetically Engineering Machine (iGEM) Foundation is dedicated to education and competition, advancement of synthetic biology, and the development of open community and collaboration. The Foundation's main program each year is the iGEM competition, which involves engineering and physical and life science students from five continents. Colorado State University's team is currently mentored by CBE faculty, but includes undergraduate and graduate students from five departments on campus. The team's activities are resource intensive, and at present there is no base support for their work. Plan: develop sustainable funding model for program.

## **Civil and Environmental Engineering**

The primary mission of the Department of Civil and Environmental Engineering is to prepare graduates for creative and effective leadership in engineering practice, education, research, outreach, and service in support of the nation and world's infrastructure, environmental sustainability, economic development, and quality of life, with emphasis on responding to global changes in society and the environment. This includes collaborating closely with other CSU groups sharing the civil and environmental missions and with national and international groups addressing civil and environmental issues.

The undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET), as are all CSU undergraduate engineering degree programs. ABET accreditation provides evidence that undergraduate students are meeting nationally recognized learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are met.

The department offers the following degree programs:

Civil Engineering - B.S.

Civil Engineering Concentration Environmental Engineering – B.S.

Ecological Engineering Concentration
Environmental Engineering Concentration

Minor in Environmental Engineering

Civil Engineering - M.E.

Civil Engineering - M.S. (Plan A and Plan B)

Civil Engineering – Ph.D.

#### Students:

The department is maintaining the incoming cohort size with an average freshman retention rate of over 92%. This data also indicates that while four year graduate rates are lower than desired, five year rates are close to the university target.

The CEE department emphasizes high retention and graduation rates and is undertaking an effort to collect data with the objective of determining the key reasons why students leave the department. In particular, data collection has begun with freshman students as this is a key point when students make decisions about whether or not to continue in CEE. Surveys collected in Spring and Fall of 2015 from CIVE 103 and CIVE 102, respectively, revealed relatively high retention rates. Of students leaving CEE, 20% plan to pursue a different major within the college of engineering and thus will likely be retained by the college. These survey numbers are an overestimate of actual retention, but will serve to help identify strategies to improve retention of students where appropriate.

The CEE department offers key service courses that are particularly important for the Mechanical Engineering department students, including Statics (CIVE 260), Dynamics (CIVE 261), and Mechanics of

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Solids (CIVE 360). These are high-enrollment courses indicating that the CEE department maintains a relatively high service teaching load.

Over the last five years, 23 ME students, 54 MS students and 16 PhD students were newly enrolled on average. The department's goal is to maintain or increase these numbers; to increase enrollment of Ph.D. students in particular. The majority of students complete their degree within the targeted timeframe; 83% of ME, 91% of MS and 71% of Ph.D. students meet the targeted time to graduation objectives.

The CEE Department provides opportunities for MS and PhD graduate students to broaden their scientific horizons. Along with national and international conferences, graduate students are encouraged to participate in CEE Department sponsored events including:

- The American Geophysical Union (AGU) Hydrology Days: Hydrology Days has been held on CSU campus each year since 1981. Hydrology Days is a unique celebration of multi-disciplinary hydrologic science and its closely related disciplines. The Hydrology Days vision is to provide an annual forum for outstanding scientists, professionals and students involved in basic and applied research on all aspects of water to share ideas, problems, analyses and solutions. The focus includes the water cycle and its interactions with land surface, atmospheric, ecosystem, economic and political processes, and all aspects of water resources engineering, management and policy. A three-day program for Hydrology Days includes contributed papers, a few invited papers, student papers, and a poster session. Oral presentations are scheduled for 20 minutes, including discussion.
- CEE Tailings and Mine Waste Conference: This international conference began as a series on uranium mill tailings management in 1978. It was organized by the Geotechnical Engineering Program. It was the goal of the key alumni and sponsors to not only continue a conference that provided a forum for members of the mining community, engineers and scientists serving the mining industry, regulatory groups, and other interest groups concerned with environmental issues related to tailings and mine waste management, but to also provide funding for research to find solutions to the issues that industry now faces.
- Environmental Fluid Dynamics Seminar Series.
- I-WATER Symposium (in conjunction with Hydrology Days at CSU): All I-WATER Fellows present the results of their interdisciplinary research accomplishments.

The strong international reputation of the department continues to grow as reflected, for example, in the growing number of international graduate students admitted every year. However, it is extremely difficult to distribute an increasing number of students among 27 faculty members in any reasonable way without at the same time affecting negatively some of the other aspects of the program. The solution to this conundrum is in increasing the number of faculty members to keep up with demands of the civil engineering job market. With an unemployment rate less than 4% in Colorado, there are plenty of opportunities for graduates.

#### Research and scholarly accomplishments:

In addition to undergraduate and graduate education, the primary focus of the department is basic research funded by government agencies and private sector agencies. The research accomplishments of the CEE Department faculty are recognized globally, spanning from disciplinary areas of civil and environmental engineering to interdisciplinary areas of study. This recognition is reflected in the number and amount of externally funded research projects. Numerous graduate students are provided the opportunity to work on these research projects. These research and scholarly accomplishments are reflected also in the number of MS and PhD students graduating from CEE programs, the number of publications in refereed journals of international renown, the number and prestige of awards received by faculty and graduates, the number and amount of the externally funded research grants secured by faculty, and in the placement outcomes of CEE graduates.

CEE Department faculty members have been the recipients of many prestigious national and international honors bestowed by professional societies and other organizations to acknowledge high levels of scholarly achievement and service to the field. They are also members and/or fellows in the most prestigious professional societies in the civil and environmental engineering field.

The faculty, research associates, and students in the CEE Department are extremely active in conducting cutting-edge research in numerous areas of both civil and environmental engineering. For example, research expenditures for the CEE Department at CSU exceeded \$10.4M for FY2014. Such research not only serves to solve real-world problems of current state, national, and international significance, but also serves to advance the discipline so that future generations can reap the benefits of CEE efforts towards enhancing society's ability to sustain and develop the infrastructure necessary for our continued existence and quality of life. CEE alumni are distributed throughout the world and in every state within the USA, with many of them holding leadership positions within their companies, organizations, or countries.

Research results from MS graduates were disseminated in more than 32 peer-reviewed journals covering these interdisciplinary subjects: applied mathematics; atmospheric; earth, physical, biologic or microbiologic processes; ecological or environmental; groundwater, hydraulics and hydrology; sensor instrumentation; structural or materials; and water, water resource and water management. MS students presented papers, abstracts, and/or posters at 17 local, national, and international annual conferences. Most MS graduates opt to disseminate their research results through conference presentations.

CEE PhD graduate students authored or co-authored over 46 published refereed journal papers. Research was disseminated in more than 33 peer-reviewed journals covering these interdisciplinary subjects: agriculture; atmospheric; earth, physical, biologic and microbiologic processes; ecological and environmental; fluid mechanics; groundwater, hydraulics and hydrology; sensor instrumentation; structural and materials; social impacts and issues; industry standards; and water, water resource and water management. PhD students also presented papers, abstracts, and/or posters at 11 local, national, and international annual conferences.

In this current review period, two (or more) faculty members were elected as ASCE Fellows. Nine faculty members received awards in recognition of the high quality of published papers generated from research. Several honors highlight the innovative and significant research performed in the department. The CEE Department water-related programs have continually received designation as a CSU Program of

Research and Scholarly Excellence (PRSE). The current PRSE program in CEE is the WaterSEES program, Water Science and Engineering for Environmental Sustainability.

#### **Engagement and Outreach:**

Complementing the many and rich outreach activities associated with education and research in the CEE department (e.g., participation in professional societies, organization of national and international research conferences, publication of research results in professional journals, etc.) many programs and faculty members are continually engaged in science and educational outreach for K-12 school students. For example:

- Bogusz Bienkiewicz and graduate students have hosted an annual outreach activity for first-grade students from a local elementary school that includes a visit to the Wind Engineering and Fluids Laboratory. During their visit, students learn how wind effects on buildings and structures are modeled using wind tunnels. Students are divided into small groups, and each group is exposed to wind generated inside a large wind tunnel. The wind speed is gradually increased, and students are asked to compare their perception of the modeled wind with their "wind experiences" during outdoor activities, etc.
- Rebecca Atadero and Hussam Mahmoud hosted a structural engineering field day on campus for sixth- and eighth-grade students from West Middle School G.A.T.E. (2013). The students worked on critical and creative thinking and applied it to bridge building. Their day started with a presentation and demonstration by Mahmoud, followed by a hands-on experience in structural stability for bridges in the concrete lab led by Atadero. In addition, eight of the students built matchstick bridges that they subjected to strength testing.
- The National Science Foundation has recently granted its most prestigious award in support of junior faculty, the Faculty Early Career Development (CAREER) Program, to Peter Nelson. The award will provide \$510,848 over 5 years to support theoretical and experimental research on the morpho-dynamic effects of sediment supply and sorting in meandering rivers. The award will also support educational programs in river science, including integration of the research in undergraduate and graduate courses, as well as the development of summer science programs aimed at K-12 students and outreach events at the Fort Collins Museum of Discovery.

Furthermore, faculty and students participate in diverse global and multi-cultural learning and outreach activities. For example, they participate in Engineers Without Borders at CSU, whose student chapter works with communities in developing countries to improve quality of life through sustainable engineering and community development projects. During this report period at least two trips (in January 2014 and January 2015) were facilitated. Engineers Without Borders partners students and professionals with international aid projects addressing community needs including the design and construction of water, wastewater, sanitation, energy, and shelter systems.

The Department of Civil and Environmental Engineering supports several programs that serve the state of Colorado, the nation and the world including the Colorado Institute for Irrigation Management (CIIM), the International School for Water Resources (ISWR), and Cooperative Extension (Nationwide educational network of scientists and educators). In addition, two department faculty are staff of CSU Cooperative Extension.

#### Planning for Improvement:

Several strategies will be implemented to ensure the continued success of the program while providing the highest quality educational experience.

- The Department will improve recruitment and retention of undergraduate students and will
  work to update and improve the integration of high impact teaching practices into the
  curriculum (internships, research etc.).
- 2. The Department will enhance nationally and internationally recognized research and graduate programs by diversifying funding sources, increasing enrollment, and working to further internationalize the department.
- 3. Faculty will increase their leadership and service to the engineering profession and society.

#### **College of Engineering Intra-College Programs**

The goal of the College is to serve society by educating students, solving problems of global importance, and contributing to national and international economic development. We have set our goals high and our vision is clear: to create a better world for future generations.

The College has a strong tradition of excellence and is comprised of eight departments which offer many undergraduate and graduate degrees. There are also multiple interdisciplinary undergraduate and graduate degrees that are not housed in the departments but are administered by the Office of the Dean of Engineering.

The College offers the following interdisciplinary academic programs:

Engineering Science – B.S.

Systems Engineering – Ph.D.

Engineering Physics Concentration
International Engineering and International Studies Concentration
Liberal Arts and Engineering Concentration
Space Engineering Concentration
Teacher Education Concentration
Engineering – M.E. (Plan C)
ME Systems Engineering Specialization
Systems Engineering – M.S. (Plan A, Plan B)

#### **Students:**

Engineering Science is an interdisciplinary undergraduate major that allows students to acquire a strong base in mathematics, the physical sciences, and engineering fundamentals while pursuing a broad background in other areas of interest in preparation for specialized careers or graduate studies. Because of the interdisciplinary nature of the degree, courses are delivered in a variety of departments on campus even though the degree program is housed in the Dean's Office at the College of Engineering. The undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET), as are all CSU undergraduate engineering degree programs. ABET accreditation provides evidence that undergraduate students are meeting nationally recognized learning outcomes.

Several of the undergraduate ES program concentrations (particularly the Space concentration) are becoming constrained because of enrollment pressures on the Mechanical Engineering department, which provides a majority of credit hours taken by these students. The Teacher Education option remains small but has garnered significant national attention, including recognition in National Academy of Engineering publications. It has capacity to grow. In terms of potential growth areas, the International Engineering program has the greatest capacity. There is general recognition that international aspects of engineering are very important. To take advantage of this potential will require closer collaboration with the traditional departments to develop better coordinated curriculum for students to develop their curriculum plan along with a sustained recruiting effort.

The Systems Engineering degrees prepare students to immediately apply skills that can help solve current challenges your company may be facing. Taking a systems approach in the curriculum development itself, more than 600 industry and government leaders were surveyed to help shape the unique and innovative M.E., M.S., and Ph.D. programs with a Systems Engineering specialization. As a result, these degrees feature systems engineering courses that cover critical topics such as risk analysis, project management, support systems, and systems engineering processes.

Systems Engineering students typically fall into two categories: 1) working professionals with technical backgrounds and one to three years of working experience or 2) graduate students wanting to broaden their technical perspective to include some management of larger projects. For this reason, the M.S. and Ph.D. are delivered in a hybrid strategy. This has proven to provide convenience for students but has also a completion rate of only 19% for the M.S. program since 2009; the M.E. program has a completion rate of 32% and the Ph.D. program has yet to have a student complete to earn a degree.

#### Research and scholarly accomplishments:

Faculty that teach in the College's degree programs are housed in departments and nearly all research activity is credited to the department. However, the Engineering Science teacher education concentration is the foundation for a recently funded NSF grant for 3 years, and \$592,000. The Principal Investigator is a COE faculty who just stepped down from the Associate Dean role.

## **Engagement and outreach accomplishments:**

Each year the Teacher Education option students attend the state meeting of technology teachers, which is held in Denver. Additionally, the COE engages in several summer camps for K-12 students and the ES students help as instructors.

Students in the other options engage in other outreach activities in the college sponsored by various student organizations and departments. Since they are not COE sponsored activities they have not been tracked by the college.

## **Planning for Continuous Improvement:**

- 1. To date, all student learning outcomes have been maintained by the departments in which courses were taught. In the future, as identified in the ABET reports, better communication of the assessment results from the departments to the head of Engineering Science must be formalized. A plan is in place to wrap up course level learning outcomes into programmatic outcomes.
- 2. The graduate programs will work with TILT to create program level student learning outcomes and associated metrics.

# **Computer Science**

The mission of the Computer Science Department at Colorado State University is to provide the best possible undergraduate and graduate education in computer science, to conduct high quality research, and to disseminate knowledge obtained through graduate education and outreach programs, in order to serve the local, state and national needs in education, government, industry, and the profession. In fulfilling its mission, the department recognizes the importance of service to the department, college, university and the external community.

The department offers five degree programs:

Applied Computing Technology – B.S. Computer Science – B.S.Computer Science – M.S. (Plan A, Plan B) Master of Computer Science – M.C.S. (Plan C) Computer Science – Ph.D.

#### **Students:**

Currently, more than 600 undergraduate students major in the two B.S. programs in the department. The Computer Science (CS) degree covers key competencies including software engineering, computer networks and security, artificial intelligence, parallel and distributed computing, and computational biology. The Applied Computing Technology (ACT) degree provides students with a solid foundation in computing, while also adding a concentration in teaching, business, or human centered computing. Students with either B.S. degree are highly sought after by industry; virtually all students have a job at graduation, and salaries for CS students are among the highest of all majors granted by CSU.

More than 120 M.S. and M.C.S students (approximately 1/3 attend online) and about 50 Ph.D. students enrolled in the graduate programs. Over the last 5 years, a total of 36 Ph.D. students have graduated. The Department also graduates a large number of Master's students; 233 in the last 5 years. Approximately 2/3 of graduate students are international. Some of these are supported by Assistantships (GTAs or GRAs) but the majority of Master's students are self-funded.

In the last five years, the Ph.D. program has been revised. Students are no longer required to take 2 Ph.D. level seminars. Instead, they do more work in their area of concentration. Overall, the number of Ph.D students graduating has improved to an average of 7.2 per year. This almost doubles the annual average prior to 2010.

Additionally, the Department used to require M.S./M.C.S students to complete a total of 39 credits for a Master's degree (which was approximately 10 classes for the M.C.S.). This has been reduced to 35 credits allowing Master's students to graduate in a more timely fashion.

The Computer Science Department has a strong online Master's degree (an M.C.S. coursework only degree). It has been offered at a distance for more than 30 years and has been recognized as one of the best of its kind in the nation. Approximately 1/2 of the growth within the department in the last 5 years has been self-funded using resources from the online Master's degree program; this includes not only

faculty lines (as already noted), it also includes support for GTAs. In effect, the online program is providing support to our on-campus educational efforts.

The increases in enrollment (and comparison to peers) suggest the need for an increase in the number of faculty, but the most pressing need is for additional instructors and additional GTAs. At the same time, growth in faculty and instructional staff will put additional stress on administrative staff. The CS Department must balance the desire to have a lean and agile approach to staffing against having enough staff with the right abilities to keep the department operating efficiently.

Computer Science is atypical because the department awards more B.S. degrees than the number of freshmen entering the program. The department typically expects 20 to 30 percent of freshmen to move out of the major, but also expects that more than half of the B.S. degrees awarded will be given to transfer students, or students who have transferred into Computer Science from other majors. Usually, these new majors are from engineering or mathematics. Normally, students are successful in the major after they pass the 3rd semester class CS200 Introduction to Data Structures.

It is relatively common for Computer Science majors to have full time jobs during their senior year and sometimes even during their junior year. A senior in Computer Science who is already fully employed, but who takes 5 or 6 years to graduate does not reflect a problem, but rather a success story. However, the Department does want to make sure these students can eventually graduate. The online Master's program helps in this regard. Almost all 400 level classes are online. Students that take a full time job but need to take 1 or more 400 level classes to graduate at a distance can do so online.

A student that graduates with a degree in Computer Science or in Applied Computing Technology is virtually guaranteed a job after they graduate. Computer Science and ACT majors earn approximately \$65,000 dollars on average, but the variance can be high and students with excellent academic records can earn \$80,000 to \$90,000 dollars as soon as they graduate. Salaries for CS graduates are higher than for ACT graduates.

The Computer Science Department has an Industrial Advisory Board (IAB) that meets twice a year to provide guidance and feedback on a variety of issues; in particular the IAB provides input on industry trends and how this might impact educational trends in computer science. This can impact not only what classes the Department decides to teach, but also the areas in which faculty might be hired. Computer Science is unlike many other disciplines because it can change so rapidly and so completely. In recent years classes have been added in 1) Cloud Computing, 2) Big Data, 3) Bioinformatics and 4) Human Computer Interfaces. A class such as Cloud Computing represents a total new technology that did not exist (in its current form) as few as ten years ago. The Industrial Advisory Board provides one additional point of view on how the field of computer science continues to evolve and change.

#### Research and scholarly accomplishments:

Several faculty members have been recognized for their excellence and the department currently ranks #70 in the nation according to U.S. News. One faculty received the Board of Governors Excellence in Undergraduate Teaching award in 2010. Two others were designated as College of Natural Sciences Professor Laureates in 2010 and 2014, respectively. An additional received a National Science Foundation CAREER award in 2013. One was elected as Fellow of the Association for the Advancement of Artificial Intelligence in 2015.

Research expenditures were relatively stable from 2010 to 2014. Prior to 2010, research expenditures were approximately 1 million dollars a year. This represents research expenditures 3 times larger than were seen in the last 5 year review. This has also been matched by increases in GRA support and in Ph.D. production, both of which have more than doubled compared to the last 5 year review in 2010. The number of proposals being submitted also shows an increase in effort. It appears that this will also result in a significant increase in FY2016: new awards for this fiscal year are already in excess of 7 million dollars, which is more than any 2 previous years combined.

Faculty continue to publish as a steady rate. On average, faculty publish 1.7 journal papers per faculty member per year, as well as an additional 3.1 conference publications and Books Chapters per faculty member per year. High quality conference publications are typically considered to be as important as journal papers in Computer Science, and this is reflected in low acceptance rates as well. All faculty are expected to be active in terms of serving on conference program committees and on journal editorial boards.

#### **Engagement and outreach accomplishments:**

#### Association for Computing Machinery (ACM)

The ACM is the largest computer science professional society in the world. The ACM Club for students hosts weekly events that help to connect students to industry. There is also a chapter of ACM-Women, which is dedicated to supporting women in computer science. The CS Department is also involved in hosting events and activities related to Women-Who-Code and Girls-Who-Code.

### High School Outreach

A number of faculty have been involved in outreach to high schools. Dr. Chris Wilcox will host a summer program in 2016 that will introduce programming concepts to high school students, with the additional goal of reaching a diverse audience. Dr. Ross McConnell has often been involved in helping undergraduates and high school students prepare for programming contests and other competitions.

## Math in Action in Computer Science

One faculty has been directing a weeklong summer camp (*Math in Action in Computer Science*) for underprivileged, Native American middle school students from Cortez, CO. The students live on the reservation and have a high dropout rate in their transition from middle school to high school; the high school graduation rate among Native American students in the Cortez-Montezuma school district was 36.1% in 2010. This group of over a dozen students receives hands-on training with the math concepts that they learned in school and their applications in computer science. Students build intuition and learn how to work through problems by using a unique, multi-thronged approach that mixes traditional blackboard sessions, exercises on paper, and programming activities to increase the students' concept retention and assimilation by reinforcing and clarifying aspects of that concept. The programming activities are a key element of the camp. The camp also includes sessions on how to apply to college and financial aid opportunities.

#### **Planning for Quality Improvement:**

Increase GTA/GRA salaries
 It has been difficult to recruit domestic graduate students because graduate student stipends are below the national median and dramatically below the stipends and fellowships offered by the

top 50 Computer Science programs in the United States. Graduate students are the life blood of a research department so this represents a significant challenge for the department. CS will continue to work toward increasing the GTA/GRA salaries.

- 2. Increase diversity
  - A long standing problem in Computer Science and to some degree in all STEM areas in general is the lack of diversity. Only about 9 to 12 percent of CSU CS majors are women (depending on whether one counts the number of majors that are women or the number of graduates that are women in any given year). Nationally, about 14 percent of Computer Science majors are women. The number of Black and Hispanic students that major in Computer Science is tiny relative their representation in the population. Various efforts to try to improve the situation have had little effect. The Department will work intentionally to increase the number of females and domestic students of color to bring the strengths of diversity into the department.
- 3. Increase faculty and GTA FTE to accommodate increasing enrollments that are expected with the interdisciplinary emphasis of other majors.

## **Construction Management**

The Construction Management (CM) program at Colorado State University is considered one of the top-ranked programs in the nation by the construction industry. This high level of quality is evidenced by accreditation by the American Council for Construction Education. The CM program at CSU has created a culture that promotes ownership and participation by all in building a program of excellence. The program values the contributions of students resulting in a sense of ownership and pride. Industry's role has evolved from being advisory in nature to being a full partnership with the program. The increase in program engagement from students and industry has led to a variety of opportunities for students to grow as leaders.

The mission of the Department of Construction Management is to advance the knowledge and practice of construction management for the betterment of society through teaching, applied research, and service to local, national, and global communities.

Key Objectives:

- Assure excellence in academic programs
- Create distinctive undergraduate experiences
- Enhance the quality of graduate education
- Strengthen research culture
- Improve discovery capabilities
- Engage citizens through community involvement
- Prepare and empower learners outside the campus environment
- Expand fundraising and marketing
- Build necessary infrastructures
- Nurture human capital
- Guarantee financial stability
- Monitor plan progress

The department offers two degree programs:

Construction Management – B.S. Construction Management – M.S. (Plan A, Plan B)

#### **Students:**

Effective Fall 2008, all newly admitted students, external transfer students, and internal change of major students are admitted into the Pre-Construction Management program. Acceptance into the Construction Management major requires successful completion of the Departmental admission requirements. Once a student has met the minimum requirements, they are eligible to formally apply to the program. No more than 100 students will be admitted each semester. The undergraduate graduation rate is consistently over 70% (the most recent cohort had a 75.4% graduation rate).

As a competitive major with an 800 student cap, in 2008 the CM Minor was phased out. Given the multidiscipline nature of construction management education, the program interest in creating a classroom that simulates the real world of construction (design, engineering, and business), and input from the department PADB, the CM Minor has since been approved to be offered again effective Fall 2015.

The department established a Recruitment Taskforce in Summer 2011 which lead to a permanent Recruitment Committee and 50% effort of one academic advisor for student recruitment coordination. Recruitment and retention of diverse and female students are the top priority for this committee and also participation in recruitment events for military and transfer students. Student diversity percentage (as shown in the Student Population Diversity Statistics link) has continued to increase each year since the taskforce was established.

The department encourages industry members to become involved with the program in a variety of ways. As with many construction management programs, the department has an actively-engaged Industry Advisory Board (IAB). Members of the IAB are guest speakers in classes and for student clubs, host field trips, and sponsor students for their required internships. Beyond the common ways that IABs support programs, the construction management program at Colorado State University has seen the benefits of an enhanced relationship with the construction industry.

#### **Research and Scholarly Accomplishments:**

Faculty members pursue applied research opportunities by maintaining a close association with the needs of the regional, national, and global architecture/engineering/construction industry. In pursuing this applied research, the faculty have identified three core Research Alliance areas that span research, teaching, and outreach activities and provide a common ground for interaction between faculty and students. As the demands of the industry change over time, these Research Alliance areas may evolve and additional areas may be established. Current Research Alliance areas are:

- **Sustainability** (e.g., energy-efficient buildings, sustainable development and construction, social sustainability, life cycle assessment)
- **Transportation Infrastructure** (e.g., asset management, traffic and work-zone safety, transportation project management, asphalt and concrete paving)
- **Productivity and Workforce Development** (e.g., construction safety, construction leadership, construction pedagogy and training, construction productivity improvement)

Faculty members in the Department of Construction Management collaborate with researchers in other units at CSU including the Department of Civil and Environmental Engineering, School of Education, Department of Psychology, and Department of Environmental & Radiological Health Sciences.

There has been a significant increase in research productivity, including a more than 3-fold increase in research expenditures between fiscal years 2011 and 2014. The department lost two tenure-track faculty members at the end of fiscal year 2014 which explains the drop in the research productivity. Most recently, the department has added three tenure-track faculty and expects the research productivity to increase again. Please note that the faculty research productivity is similar to CSU CM peer institutions without a Ph.D. program. Major funders include the US Department of Transportation, Transportation Research Board, National Institute for Occupational Safety and Health, Department of Labor, USAID, Colorado DOT, and Wyoming DOT. While the construction industry is highly supportive of student

scholarships, building renovations, student competitions, there is no great research funding available from the construction industry.

#### **Engagement and Outreach:**

### Speaker Series

In addition to guest speakers in classrooms, the program now enjoys a sponsored speaker series to bring nationally-recognized construction leaders to campus to engage the students in discussions on the topics of leadership, construction trends, and current practice. In 2013, an alumni committed funding to the construction management program to host industry speakers on campus and engage students in the possibilities of their future careers. "Colorado State University played an important role in my growth and education," said the graduate. "I saw this speaker series as a way to support and deepen my connection with the University." The unique aspect of the speaker series is that the majority of the process is in the hands of the students. They must submit a request for funding a presentation or a seminar with significant impact on advancing construction education and leadership. Once approved, the students organize the visit, market to students across multiple disciplines, and host the guest during their visit. In spring 2014, students brought two nationally-known construction leaders to campus including a vice president of Clark Construction and a senior executive of Fluor Construction. As a result of the success of the initial offerings, the sponsor decided to continue funding the speaker series. The department is currently working to create an endowment to support the speaker series indefinitely.

#### CM Cares

The recently developed CM Cares program plays a major role in accomplishing the mission of the program by providing CM students the opportunity to serve their communities through projects that apply their classroom skills to real-world situations. CM Cares, established in spring 2011, is a service learning program sponsored by the CM Department to infuse the traits of community service, leadership, team building and ethics throughout the culture of the CM program through construction-related community service projects. The program includes a Construction Leadership course involving guest lectures from industry leaders on the non-technical aspects of running a successful business, such as leadership, ethics, team building and creating company culture. Students from this course serve as leaders of the various CM Cares projects and work on identifying community service agencies in need, fundraising, matching volunteers from specific CM classes to the projects' needs, and mentoring and organizing the volunteers. Students must be nominated and apply to be part of the CM Leadership course. The criteria for selection includes: participation in competition teams, student club leadership, academic performance, and volunteer experience on community service projects.

To date, CM Cares has completed 16 projects valued at over \$250,000. It has given the students excellent leadership opportunities and has helped them develop a sense of service to others that is so strong in the construction industry. One of the projects, the James and Libby Project, was highlighted nationally by ABC's Good Morning America. In 2013, with the help of several construction companies, one of the CM Cares Leadership teams created a wheelchair-accessible, kid-friendly backyard space including a giant swing for twins with cerebral palsy. Students who participate in CM Cares truly believe that they are a part of something much greater than their individual selves. This is often lost in an academic culture of exams, grades, and graduation. Industry has recognized the impact that CM Cares has had on helping to create the future leaders of the construction industry by announcing a \$1 million endowment to support

CM Cares. In addition, with the recognition that CM Cares has received locally and nationally, it has helped to change the impression/image of construction management with the public and within the university.

#### IAB Relationship

These opportunities wouldn't have been possible under the traditional one-way relationship of an IAB where their role is only advisory. The department changed the relationship with industry from a one-directional role of industry support to a mutually beneficial industry-academy partnership. As a partner, industry members see the return on investment from upgrading classroom facilities, sponsoring faculty scholars and faculty internships, in the higher quality of CM graduates. Together, IAB members have created an executive council that works with the department head to enhance the program by working with university administration to support the program's mission, vision, and goals. Like the students, industry has gained a sense of pride and ownership in the quality of the program and the success of the students.

#### **Boot Camps**

The Construction Management curriculum focus has always been about the construction management basics. Due to rapidly changing technology and the associated costs, it is a challenge for faculty to stay "ahead of the curve" when it comes to technology in the construction management industry. To give students exposure to state-of-the-art construction technology, the department created "Boot Camp" courses taught by industry experts. These courses are limited in size (less than 20 students) and are taught one night a week for five weeks. Each course focuses on identifying and understanding the current practices and applications of each subject in the construction industry. Students are evaluated based on their completion of in-class exercises, assignments, and a team project. Opportunities for job site visits are also available to enhance in-class work. Industry provides the software and case studies, while a faculty member is present to assist with any academic operational issues.

#### **Planning for Continuous Improvement:**

- 1. Strengthen the relationship with industry to support curriculum updates, facilities upgrade, and endowments.
- 2. Implement the new ACCE student learning outcomes standards (SLOs) across the CM curriculum.
- 3. Strengthen the commitment to diversity and community service.
- 4. Work with CSU administration to maintain the students to faculty ratio which is required for accreditation.
- 5. Continue to engage students in the learning process and leadership development.
- 6. Support faculty and staff professional development.
- 7. Support CM Cares and Boot Camps through industry support
- 8. Develop and maintain the following areas of excellence: Virtual Design and Construction, Heavy Civil Construction, and Commercial Construction.
- 9. Supporting faculty research and scholarship.

## **Electrical and Computer Engineering**

The department exists to educate and prepare undergraduate and graduate students to pursue exemplary careers in the electrical and computer engineering industries and academia, and to generate new knowledge by the pursuit of research in selected areas of electrical and computer engineering.

The undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET), as are all CSU undergraduate engineering degree programs. ABET accreditation provides evidence that undergraduate students are meeting nationally recognized learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are met.

The department offers four degree programs (listed below) and is currently pursuing new master's and Ph.D. programs in computer engineering.

Computer Engineering – B.S.
Electrical Engineering – B.S.
ME Electrical and Computer Engineering Specialization
Electrical Engineering – M.S. (Plan A, Plan B)
Electrical Engineering – Ph.D.

#### **Students:**

On the heels of the recession, there is growth in both undergraduate and graduate enrollments and degrees awarded. Students who enter the ECE department have a high probability of success within the university. Within the college or department, retention rates are lower. The NSF RED project, highlighted throughout the program review, aims to improve retention in the department through new approaches to teaching and learning.

"The RED Project requires a fundamental change in the nature of department culture (values, norms and structure). Core activities include: (1) curricular redesign of 9 core sophomore- and junior-level studio courses to include more realistic, consequential work leveraging research-based pedagogies like problem-based learning and model-eliciting activities; (2) growing faculty and students' capacity to engage issues of inclusivity by shifting their cognitive and affective knowledge of power and privilege; (3) planning and implementing student professional development pods, longitudinally mixed student teams where students help one another understand the university experience and how it relates to professional practice; and (4) implementing formal changes in governing policies and procedures within CBEE. This project will provide the first well-documented case study of institutional, cultural change in engineering making use of a situative theory. As more institutions and faculty experience an inclusive culture centered on engaging students with work that connects to engineering practice as well as their own identities and communities, we expect retention, recruitment and graduate numbers to increase. Additionally, faculty empowered to participate holistically in their teaching and research will reap personal benefits likely to be reflected in measurable outcomes such as research productivity, teaching effectiveness, sense of belonging, and growth"

(https://vcea.wsu.edu/event/the-nsf-red-revolutionizing-engineering-departments-grant/).

#### **Research and Scholarly Accomplishments:**

The award cycle for the department's two National Science Foundation Engineering Research Centers (ERCs) ended during the five-year review period. There has, therefore, been a corresponding drop in research expenditures. While the ERCs represented a major source of research funding for the department, faculty remain active and competitive in the field, submitting more proposals than ever in 2015. Given that most of our projects are federally funded, the decline in research funding also correlates with the budget sequestration in 2013.

Further, ECE is now home to three Colorado State University Distinguished Professors (UDPs), the highest recognition available for CSU faculty. With no other departments on campus boasting a higher number of UDPs, our faculty are advancing the research quality and reputation of the University overall. The ECE department has a high percentage of Fellows and professional awards - a true measure of faculty impact - with more than 40% of our faculty holding the coveted status of IEEE Fellow.

#### **Engagement and Outreach:**

To attract and retain talented, diverse students, outreach is an important pillar of the RED project. The project will address social inequality by creating engineering educational systems and interpersonal interactions that are professionally and personally life-affirming for all people across their differences. Change will come through construction of a culture of inclusion that will allow for a higher level of engagement and outreach than in the past.

Further, this funding opportunity will allow the department faculty and students to inform change in similar departments across the nation.

#### **Planning for Improvement:**

Departmental plans for the future centers around two anticipated developments.

First, change is on the horizon for the Department of Electrical and Computer Engineering. Still in the first year of a National Science Foundation grant to Revolutionizing Engineering Departments (RED), significant pedagogical and organizational changes are beginning to take hold. The next five to seven years will be spent implementing, refining, and assessing the project, as well as extending the work to institutions across the country.

#### 1. Revolutionizing Engineering Education

The NSF RED project presents exciting new opportunities for the department to lead the nation to change in engineering and computer science education. The research findings will advance theoretical development of engineering education and organizational development frameworks, while providing case studies of organizational change interventions for STEM education.

Striving to be a leader in reversing the attrition trend in ECE and filling the pathway with graduates who are prepared for the grand challenges of the profession, our vision creates opportunities to attract talented, diverse students into the field and change longstanding perceptions about what it means to be an engineer. As faculty extend the model to other institutions – and promote the impacts of our innovative

work – ECE students will no longer need to ask questions such as: Why am I learning this, and why should I care? Will I ever need this information when I get a job? What does it mean to be an engineer?

2. Create a new Computer Engineering graduate program

The ECE department is requesting new master's and Ph.D. programs in computer engineering. Building on the foundation of the computer engineering bachelor's degree, the proposed graduate degrees combine many aspects of electrical engineering and computer science, preparing students to continually push the capability and applicability of computers in every industry and facet of modern life. The proposals to the University demonstrate a strong need for both a master's and Ph.D. program in computer engineering. In examining the student demand for both programs – combined with a substantiated need for computer engineering talent in industry – there is an opportunity to produce sought-after graduates with deep knowledge of the discipline.

3. Improve recruitment (overall and specifically with diverse students) and increase departmental retention rates.

The work of the NSF RED project aims to reverse the attrition trend, hook students' interest earlier in the program, and build a more inclusive environment for individuals of all backgrounds.

4. Expand research infrastructure and funding

A new graduate program in computer engineering will allow the department to expand our contributions to the field and improve our rankings with both new faculty and research areas of emphasis, coupled with an influx of high quality graduate students and new partnerships with industry. We seek to provide incentives for faculty to grow their research programs and seek high-impact funding for major research projects.

## Food Science and Human Nutrition

The mission of the Department of Food Science and Human Nutrition (FSHN) is to illuminate the role of food and nutrition in the health of society through education, research, outreach and service.

The department delivers the following degree programs:

Fermentation Science and Technology – B.S. Hospitality Management– B.S. Nutrition and Food Science – B.S.

Interdisciplinary Minor in Food Science/Food Safety Minor in Nutrition

Food Science and Nutrition – M.S. (Plan A, Plan B)

Dietetics Option (online) (Plan B)

Interdisciplinary Studies Program Food Science/Food Safety

Peace Corps Master's International Program

Master's of Public Health - Nutrition Focus

Food Science and Nutrition - Ph.D.

#### **Students:**

The Department of FSHN is one of 8 units in the College of Health and Human Sciences (CHHS) and is housed in the Gifford Building which is located on the south end of the main CSU campus. Programs in the department provide students interested in nutrition, dietetics, food science, food safety, fermentation science and hospitality management with the knowledge and skills necessary to enter graduate or professionals schools, or to compete for employment in the public sector. The Department confers Bachelor of Science degrees in three majors; Nutrition and Food Science, Fermentation Science and Technology and Hospitality Management. Master of Science and Doctor of Philosophy degrees in Food Science and Human Nutrition are conferred with specializations in nutritional science, community nutrition, and food science. The Department also accepts students in the Interdisciplinary Food Science/Safety Program at both the undergraduate and graduate level. There is a coordinated Master of Science/Internship program in dietetics that provides the didactic requirements and the supervised practice component that fulfills the Registered Dietitian requirements of the American Dietetic Association.

The department is also a member of the Great Plains Interactive Distance Education Alliance (GPIdea). This is a 36 credit non-thesis, on-line Master's program for Registered Dietitians that involves CSU, Kansas State University, University of Kansas Medical Center, University of Kansas, Michigan State University, and South Dakota State University. The Department also provides a Plan B thesis option Peace Corps

International Master of Science Degree and accepts master's students from the School of Public Health with a nutrition focus.

There are several highlights related to successful planning that have improved the quality of the department, these include:

- New major in Fermentation Science and Technology
- Hired an Internship Director (0.5 FTE)
- New Medical Nutrition Therapy Laboratory and Fermentation Science and Technology Laboratories
- Developed a strategy to increase recruitment of students into the Hospitality Management Program
- Hired two full-time Academic Success Coordinators
- Restructured faculty workloads to better match expertise and passion
- Developed a faculty mentoring program
- Hired five tenure track faculty
- Acquired funding for two Centers of Excellence

The department has also used opportunities that have arisen to strengthen the quality of our programs, these include:

- Developed a 30 member Advisory Board for the Fermentation Science and Technology Program that has helped acquire ~\$1.3 million dollars in donations for the program.
- Used the new Fermentation Science and Technology Program to initiate new partnerships with industry and other departments at CSU.
- Used the success of the Kendall Anderson Nutrition Center to explore and develop opportunities
  for space in the new Student Health Center. This opportunity has resulted in a new gift to the
  Center of \$600K.
- The Hospitality Management Programs success, in particular with the Aspen Grille, has resulted in several industry relationships that are in development.
- The Department is actively considering opportunities for increased internationalization (Anhui Province 2+2 program), and new signature programs in Food Systems and Obesity Prevention.

The number of degrees awarded has remained relatively stable from 2010 to 2015. The department has increased undergraduate majors by 48 and undergraduate student hours by 938 from 2010 to 2015. The new undergraduate major in Fermentation Science and Technology, which was initiated in the Fall of 2013, is largely responsible for the growth in undergraduate student enrollment. Growth in both the Fermentation Science and Technology and Hospitality Management undergraduate programs represents a significant opportunity for the department. FSHN Freshman Retention rates ranged from 81-94%. The addition of two Academic Success Coordinators and implementation of FSHN 192 Freshman Seminar should help to maintain and increase retention. Four year graduation rates ranged from 46-64%. However, a large portion of majors in the department are transfer students rather than freshman. The five year

graduation rates ranging from 68-82% better reflect the transfer student population. This aligns with the University six year graduation goal of 80%. Most students graduate in five years.

The number of graduate student degrees awarded increased from 2010 to 2015. However, there was a significant reduction in both the number of graduate students and graduate student credit hours over this time period. The reduction in graduate students and credit hours was, in part, intentional and the direct result of the limited number of GTAs in the department and the expense of funding graduate students through external sources. The department has instituted a course-directed Plan B thesis program, hoping to allow acceptance of more qualified students into the Master's program. The majority of MS students graduate in 2.5 years and PhD students in 4.5 years. Based on data from 81% of the graduate students who graduated between 2010 and 2015, 94% are currently working in the nutrition field.

The student-to-faculty ratio in the CHHS is high. In the Department of FSHN it is approximately 29:1 if only undergraduates are considered and 32:1 when both undergraduate and graduate students are considered.

#### Research and Scholarly Accomplishments.

The Department of FSHN has the highest research expenditures in the CHHS. Research programs include basic nutritional science, which focuses on fundamental questions related to the nutritional basis of metabolic diseases; clinical nutrition, which focuses on nutritional interventions in pregnancy, minority populations, and in aging populations; community nutrition, which focuses on the development and assessment of nutrition education programs in schools and underrepresented populations; and food science/safety, which focuses on product development and best practices in food safety education.

Research expenditures have fluctuated from a high approximately \$3.1 million in 2011-12 to a low of approximately \$1.7 million in 2014-15. The primary sources of external funding for the department are the NIH and USDA. A large reason for the reduction in funding observed in 2014-15 is due to an intentional decision to not renew the SNAP-ED program. The department has a number of young faculty members with competitive research programs, and therefore has an opportunity to both increase the number of grant proposals submitted and received.

#### **Outreach and Engagement:**

The department has an active Extension program in both Nutrition and Health, and Food Safety. In addition, the department houses or participates in the Kendall Anderson Nutrition Center, a Regional Nutrition Education Center of Excellence, Expanded Food and Nutrition Education Program, Colorado Integrated Food Safety Center of Excellence, and the Center for Food Safety and the Prevention of Foodborne Disease.

The Department has a number of signature outreach and engagement programs, some of which are highlighted here, and are also discussed in the Effectiveness and Planning for Improvement Section and in documents located below and in the Gallery. The Kendall Anderson Nutrition Center provides science-based nutrition information and classes to the CSU and Fort Collins Community. This program has garnered \$530K in gifts between 2010 and 2015, doubled the number of nutrition counseling sessions to students and increased the number of Community clients by 500% between 2010 and 2015. The Department is home to one of four Regional Nutrition Education Centers of Excellence funded by the USDA. The objective of this center is to build the evidence-base for nutrition education interventions

through rigorous evaluation and support effective education, policy, systems and environmental activities that promote health in low income populations. The Department is home to the Expanded Food and Nutrition Education Program which functions to assist limited-resource audiences gain the ability to improve the total family diet and nutritional well-being. The Department is a member of the Colorado Integrated Food Safety Center of Excellence, a joint effort between the Colorado Department of Public Health and Environment, the Colorado School of Public Health and Colorado State University. The center is dedicated to identifying best practices for outbreak detection and response, and sharing successes with public health authorities. The Department also houses the Center for Food Safety and the Prevention of Foodborne Disease which aims to improve food safety and prevent foodborne disease. The Department has active Extension programs in Nutrition and Health, and Food Safety.

### **Planning for Quality Improvement:**

- 1. Improve review and recognition of faculty through use of the Digital Measures Faculty Activity System and through development of new and valid metrics for analysis of teaching, mentoring, and advising efficacy.
- 2. Improve the value of the undergraduate majors by developing new emphasis areas, new courses, and new multidisciplinary opportunities for students.
- 3. Develop approaches to monitor outcomes after graduation.
- 4. Improve the value of the graduate degrees through the creation of lab courses, increased funding, and approaches to broaden/enhance career mentoring.
- 5. Promote inclusive excellence and diversity by recruiting first-generation students and students of color. Additionally, the Department will increase participation in training and educational activities related to retention of diverse faculty and students.

## **Forest and Rangeland Stewardship**

Professional programs in forest, rangeland and natural resources stewardship, through collaboration with other programs in the college and university, produce graduates who are prepared to meet the challenges facing future land managers. Teaching, research, extension and outreach programs generate and communicate knowledge to students, managers, policy makers, peers, and the public and establish the department as a preeminent authority in natural resources management and stewardship.

The Forest and Rangeland Stewardship (FRS) Department is one of two departments (Ecosystem Science and Sustainability is the other) that resulted from the reorganization of the Forest, Rangeland, and Watershed Stewardship (FRWS) Department. The reorganization has created some challenges but also the opportunity to better focus the department mission.

The Department offers the following degree programs: Forestry – B.S.

Forest Biology Concentration
Forest Fire Science Concentration
Forest Management Concentration
Forestry-Business Concentration

Natural Resources Management – B.S.

Rangeland Ecology – B.S.

Conservation and Management Concentration Range and Forest Management Concentration Restoration Ecology Concentration

Fire and Emergency Services Administration – B.S.

Forest Sciences – M.S. (Plan A, Plan B)

Forest Sciences – Ph.D.

Master of Natural Resources Stewardship – M.N.R.S. (Plan C)

Ecological Restoration Specialization

Forest Sciences Specialization

Rangeland Ecosystems Specialization

Sustainable Military Lands Management Specialization

Rangeland Ecosystem Science – M.S. (Plan A, Plan B)

Rangeland Ecosystem Science – Ph.D.

#### Students:

The number of undergraduate degrees awarded has grown steadily over the past 5 years. The department experienced a 40% reduction in the number of regular FRS faculty in 2011-12 as a result of the reorganization, but SCH production remained steady. Growth of FRS undergraduate programs has been facilitated, in part, by increasing the number of temporary faculty who remain critical to achieving our teaching mission.

The Fire and Emergency Services Administration (FESA) online program was acquired by the department in 2012. This program provides training and skills needed to assume administrative, management and leadership positions in a variety of fire protection, prevention, emergency medical, emergency preparedness, and first responder positions. The program is geared toward career firefighters and first responders, with most having at least five years of work experience.

The four-year graduation rate averaged 60% over the last 6 years and meets the university's goal of a 60% four-year graduation rate. The graduation rate at six years has been variable, but averaged 81%, meeting the university goal of 80%.

The department changed from faculty advising to professional advising in 2009. Increased efforts of an advisor solely focused on ensuring students are on the path to on-time graduation could explain the increased graduation rates post 2009. Faculty still provide disciplinary mentoring for students.

In an effort to enhance recruiting and retention, the department developed a new course - NR193 Forest and Rangeland Stewardship Seminar - taken by incoming freshman and transfer students. This course offers an additional mechanism for students to receive guidance as they develop their plan of study, provides exposure to professionals in all fields of natural resources, and facilitates career exploration, all of which helps students more quickly and clearly identify the best program fit given their career goals.

The number of master's degrees awarded generally remained constant despite the loss of faculty in the reorganization. The deficit was partially made up by the increased enrollment in the coursework intensive Masters of Natural Resources Stewardship (MNRS) program. The MNRS program has seen steady enrollment growth, with program improvements resulting from curriculum reviews and increased financial support for key course instruction. The MNRS program has been expanded to offer an online version and two new areas of specialization: rangeland ecosystem science and sustainable military land management. The online program was approved immediately prior to the Fall 2014 semester; promotional activities and a hard launch of the online degree occurred fall 2015. Following the hard launch of the online degree there was a doubling of students in the MNRS program; enrollment increased from 25 students in Spring of 2015 to 49 students in the Fall of 2015, and increased by another 17 students in the Spring of 2016. Coursework has been approved for online delivery of the ecological restoration area of specialization starting in Fall 2016, which is expected to further increase enrollment. Given the increase in online graduate student enrollment and the addition of new departmental faculty, the number of graduate degrees awarded is projected to increase.

Some enhancements and upgrades have been made to research laboratory space. Graduate student office spaces have been expanded and upgraded and several classrooms have been upgraded for greater functionality. A Student Advising Center offers additional space for students to meet with instructors and to seek guidance with their courses and curriculum.

The department continues to strengthen its presence in forest fire science and management, with the growth of the Colorado Forest Restoration Institute (CFRI) and increased collaborations with the Western Forest Fire Research Center (WESTFIRE). The FRS department supports CFRI through salary support for the director, office space, and administrative and business operations support. CFRI employs eight full-time research associates and provides applied research and experiential learning opportunities for undergraduate and graduate students. CFRI also encompasses two applied research and engagement initiatives, the Center for Managing Wildland-Urban Interface Fire Risk and the Southern Rockies Fire Science Network. CFRI is the face of the FRS program to forest managers, client groups, and policy-makers in Colorado and nationally. Collectively, these efforts serve both research and outreach roles by bringing cutting edge science and solutions to land managers and the general public.

#### **Research and Scholarly Accomplishments:**

Faculty are engaged in comprehensive research programs that advance scientific knowledge and communication pertaining to sustainable and resilient forest, rangeland, and water resources for the benefit of Colorado, the nation, and the world. Our research contributes to evolving scientific knowledge of forest, rangeland, and water resources and their stewardship, is responsive to constituency needs, provides for student involvement, and is integrated with our teaching and outreach programs.

We are recognized by peers, clientele, and the general populace as a program that produces relevant, high-quality research in diverse biophysical and social scientific topic areas associated with forestry, rangeland, and water resource stewardship. FRS faculty as a whole consistently rank high on citation indices, and our faculty consistently receive public and media attention and professional awards or recognition. Since 2010, 185 refereed papers, 18 refereed proceedings/reports, three books, and 18 book chapters have been published.

FRS generates and sustains productive biophysical and social science research programs related to forestry, rangeland ecology, and water. Research funding and publications generated by faculty comprise the range of biophysical and social sciences represented in the faculty. FRS faculty have successfully competed for over \$18.5 million in external research funding as PIs, earned more than \$5.8 million in external research funding as Co-PIs, and garnered \$2.7 million in internal funding since 2010.

The department produces and disseminates research that is used by managers and other clientele to solve real-world, on-the-ground problems. Faculty and their publications are in demand by both the scientific community and natural resource practitioners as evidenced by speaking invitations and requests for information or published materials.

#### **Engagement and Outreach:**

FRS actively exchanges information with individuals and organizations concerned with forest, rangeland, and water resource stewardship to disseminate current knowledge and best management practices. From these activities feedback is obtained for evaluation and modification of departmental curricula or programs. The department serves the lifelong educational and training needs of forest, rangeland, and water resource stewardship professionals, continuing its strong relationship with the Colorado State Forest Service. FRS conducts outreach and engagement programs across Colorado, the Western United States, nationally, and globally. Faculty and researchers average at least two outreach engagements per year for local, state, or federal natural resource management activities.

FRS is also an active participant and leader in local, university, national, and international scholarly and professional organizations. The department is involved in faculty governance, professional, special or *ad hoc* committees, and other services, activities, or events in our respective disciplines, also contributing to the governance of our department, college, and university through service-oriented activities. FRS faculty are represented on college and university committees and governance bodies, actively serve in leadership positions and play substantially active roles in professional societies and organizations such as the Society of American Foresters, Society for Range Management, and the Society for Ecological Restoration.

## **Planning for Continuous Improvement**

The department is in the process of developing a strategic plan based on the outcomes of a faculty retreat held in November 2015 which resulted in a list of shared core values. The goals listed below are a reflection of these core values. As part of the strategic planning process, the department intends to begin surveying current graduating students, with follow-up surveys at regular intervals, to gather basic information currently not held, to track graduates through their careers, and to identify changing needs of the profession over time. Department goals are as follows.

- Continue training students to be proficient in the technical skills needed by the professional natural resource management community, while enhancing communication and collaborative skills. Specific goals may include assessment and continued incorporation of high impact practices, exploration of new technologies and degree programs, and hybrid/online delivery options.
- 2. Expand FRS research capacity and impact through collaborative research initiatives. Focal areas may include fire ecology and management, disturbance ecology, adaptive management in the face of climate change, wildlife habitat management, and restoration of forests, woodlands, and grasslands. Expanding research capacity may rely on enhancing faculty access to diversified research funding from agency-sponsored applied research to highly competitive basic research.
- 3. Enhance outreach efforts and engagement with natural resource practitioners and stakeholders, and ensure delivery of the knowledge needed to make sound management decisions.
- 4. Enhance the diversity of students, faculty and staff, and foster an inclusive culture within the department.

## **Health and Exercise Science**

The mission of the Health and Exercise Science Department is to discover new knowledge through excellence in research in the areas of health and exercise science, and to disseminate that knowledge through academic and outreach programs. Physical activity, wellness, and disease prevention concepts are central to the mission. The Department is committed to producing nationally and internationally recognized research programs and graduates that focus on helping people protect, maintain, and improve their health and quality of life throughout the lifespan.

The department delivers the following degree programs:

Health and Exercise Science – B.S.

Health Promotion Concentration

Sports Medicine Concentration

Health and Exercise Science – M.S. (Plan A, Plan B)

Exercise Science

Human Bioenergetics – Ph.D.

#### **Students:**

The department delivers one undergraduate degree with two concentrations: Sports Medicine and Health Promotion. Health and Exercise Science is one of the 2 most popular majors at CSU with approximately 1,350 undergraduates. HES students tend to migrate to this department from other majors on campus. The sports medicine concentration offers the student a strong science-based education dealing specifically with applications of the natural sciences to the study of health and exercise science. The program represents an excellent foundation for students seeking clinical careers such as physical and occupational therapy, medicine, as well as for students planning to continue with graduate study. The curriculum in health promotion interfaces a strong science foundation in exercise science and health promotion with business courses. The combination prepares students for a wide variety of health/wellness promotional careers.

The M.S. degree in Exercise Science focuses on the physiology and biomechanics of exercise for health and disease prevention. The Ph.D. program in Bioenergetics (focused on the multidisciplinary study of processes of energy transfer and conversion in cells, tissues, and organisms was established in the fall of 2007. To date, 14 students have graduated and most have accepted prestigious post-doctoral positions at institutions such as the Mayo Clinic, The Liggins Institute (Auckland, NZ), Duke University, University of Colorado School of Medicine, University of Cincinnati School of Medicine, and others.

In the last 5 years, undergraduate enrollment has increased by 14% and degrees awarded are up 3%. Enrollment in both the master's and doctoral program has been reasonably consistent but Master's degrees awarded have increased 17% and doctoral degrees awarded increased by 13%.

With 13.5 tenure-track or tenured faculty members, 12 of whom teach classes, the department's undergraduate student to tenured/tenure-track faculty ratio is 112 to 1. To assist with delivering a quality curriculum to 1350 majors, 6 special appointment faculty have been hired. Even with this level of staffing, and including the 1.5 faculty who do not have teaching responsibilities, HES has a student-faculty ratio of 70:1. While efforts have been made to decrease the unwieldy ratio, it is still a significant concern to the quality of the program and faculty research productivity.

To enhance the quality of the undergraduate training and experience, and minimize structural/programming roadblocks to a 4-year graduation as an added benefit, HES has worked in the past 6 years to reduce pinch-points in the curriculum.

- 1. Class sizes have been reduced by adding additional sections to key classes to accommodate the large number of students with the goals of enhancing the learning process, facilitating instructor/student interactions, minimizing pinch points and providing students with more flexibility in creating class schedules.
- 2. The new educational building north of Moby provides students with a large multi-use classroom, additional laboratory space, updated equipment and technology all designed to enhance the learning environment and transfer of knowledge.
- 3. Academic Success Coordinators meet individually with all freshman and sophomores to provide guidance in course selection. All coordinators encourage students to maintain 15 credits/semester to support the 4-year graduation plan.
- 4. A major overhaul of the undergraduate curriculum was initiated in Fall 2015 that is complete and is working its way through the CHHS curriculum committee. Details follow in later sections but highlights include; making the first 3 semesters identical for the Sports Medicine (SM) and Health Promotion (HP) tracks that comprise the major, adding courses to increase the physiological science offerings in the HP track, adding courses to increase the behavioral science components to both tracks, condensing or eliminating courses that are not consonant with future directions of the field and adding an overarching capstone to the SM track.
- 5. Two classes have been identified; HES 145 (Health and Wellness) and 207 (Anatomical Kinesiology) that appear to serve as useful early predictors of student success in the major, including likelihood of timely graduation. Plans to delve more deeply into that information and develop a strategy to intervene both during (akin to U-turn efforts) and after those classes will help to "right the ship" for students who are struggling.
- 6. Faculty meet with juniors and seniors to guide in course selection for the major, minors, career goals, and completion of graduate school admission requirements.
- 7. Faculty encourage students to enroll in summer school when appropriate and possible, to aid in completing graduation requirements without requiring additional semesters.

#### Research and scholarly accomplishments:

The Human Performance Clinical/Research Laboratory (HPCRL), which has its academic home in the Department of Health and Exercise Science within the College of Health and Human Sciences, has, as its original purpose, the aim of supporting the departmental mission to discover new knowledge through excellence in research in the areas of health and exercise science, and to disseminate that knowledge through teaching and outreach programs. The laboratory focuses on the prevention and treatment of metabolic disorders such as obesity, diabetes, and cardiovascular disease, in addition to promoting physical activity across the life span; utilizing translational research that spans basic (cell culture, cell and molecular biology, animal models of human disease), applied (gerontology, cardiovascular physiology, neuromuscular physiology, skeletal muscle physiology, biomechanics, public health/epidemiology), and pre-clinical (obesity, diabetes, neuromuscular disease (MS), clinical gerontology) research.

In the near future, the goals of the laboratory are to solidify depth in research and training in these areas with some horizontal growth in related (e.g. osteoarthritis and cancer) areas of high priority in disease prevention and treatment. Growth of the physical infrastructure of the HPCRL (now more than twice the original gsf), and the strategic hires of a number of highly talented faculty have positioned the HPCRL to

be a strategic core facility at CSU for human clinical research. To this end, the HPCRL has hired a clinical research coordinator who oversees regulated research (FDA GxP), and coordinates training for all lab personnel, provides quality assurance oversight for clinical research in the HPCRL (including SOP development, data management, etc.). The research portfolio in the HPCRL has grown so that annual research expenditures are consistently \$1 – 1.5 million. In addition to the two active R01 held by HES faculty, pharma grants totaling >\$1.0 million dollars (Astra Zeneca, Pfizer) were awarded in 2015, and funded research in the lab has been (or is being) conducted for: American Diabetes Association, American Heart Association, DARPA, Office of Naval Research, Dairy Council, National MS Society, etc. Faculty have been productive in publishing their work in top tier journals (89 peer-reviewed publications in 2014-15).

Many Faculty/Staff have won Honors and Awards since 2010. Some of the highest honors include the Board of Governor's Excellence in Undergraduate Teaching Award and Association of Public and Land-Grant Universities Undergraduate Research Mentor Award and the Citation Award by the American College of Sports Medicine.

#### **Engagement and Outreach:**

### **Youth Sport Camps**

Through innovative programming and the use of active learning practices focusing on obesity prevention, lifelong fitness, and skill development, the Youth Sport Camps (YSC) provide hands-on experience and outreach opportunities for CSU students and staff while promoting the benefits of physical activity and healthy lifestyles for youth in the community. Camp Objectives are to 1) promote physical activity in a fun and safe environment, 2) promote lifelong activity and a healthy approach to obesity prevention, 3) challenge each child to improve his or her own level of performance, and 4) offer opportunities for CSU students to gain hands-on experience in health program delivery. The summer camps are extremely popular, providing 4,694 camper weeks in 2015 (+17% compared to 2014). Additional growth is constrained by availability of indoor and outdoor space. YSC originally operated only in summer but now has an After-School Program. Due to space constraints, the after-school program is limited to 20 kids/day.

## Adult Fitness Program

The Adult Fitness Program provides clinical experiences for students and a forum for research while promoting the benefits of physical activity among adults in the community. The Adult Fitness Program offers a variety of exercise options, with the goal of improving members' cardiovascular fitness, strength, and flexibility. All activities take place in a group setting, although each person follows an individualized program. All activities are supervised by staff and practicum students trained in exercise physiology. Staff members provide individualized exercise guidelines and closely monitor all participants. Enrollment in the Adult Fitness Program has averaged 235 participants for the last three years [see linked Engagement and Outreach Data Summary for detail]. New advertising materials are being created to boost participation into the range of 275-300 members to provide this experience to more students.

#### Faculty and Staff Noon Hour Exercise Program

The mission of the Faculty and Staff Noon Hour Exercise Program is to assist members in discovering healthy lifestyles, by providing a knowledgeable staff and comprehensive facilities. In addition, this program provides hands-on opportunities for CSU students and staff while promoting the benefits of physical activity and training to CSU faculty and staff. Students lead programs with the common goal of improving member's cardiovascular fitness, muscle strength, endurance, and flexibility. Enrollment in the Noon Hour Exercise Program averages 125 participants/year [see linked Engagement and Outreach Data

Summary for detail]. Minor effort is being made to increase participation but it is not a high priority as other campus options are available.

## **Heart Disease Prevention Program**

The Heart Disease Prevention Program (HDPP) is a unique outreach program that screens people for the presence or likely risk of heart disease and promotes healthy lifestyle changes in these individuals. The program is focused on preventing heart disease in firefighters, a frequent cause of premature death in this profession. It has served >1,000 firefighters since its inception in 1999. Currently, the HDPP serves 24 firefighting departments in Colorado, spanning the state from Eagle to Platte Valley and Canon City to Wellington. Both the clinical and research arms of the HPCRL provide unmatched learning experiences for graduate and undergraduate students. Marketing efforts are underway to increase these numbers.

#### Muscles Alive!

Muscles Alive! is a thriving neuroscience education community outreach program from the lab of Dr. Brian Tracy in HES. The program has done over 52 different events at Poudre schools, community centers, CSU/community events, museums, and after school programs. Muscles Alive! has interacted with over 3,700 school children from 7-18 years of age and has done events for adults. Over 30 undergraduate and graduate students have helped to develop, refine, and lead demonstrations. To date, the program has been used for one undergraduate honors thesis and many independent study experiences.

## CSU Homecoming 5k Race

The Annual Homecoming Race is organized by the Department of Health and Exercise Science. **Proceeds from the race benefit the Heart Disease Prevention Program (see above)**. Community members, students, children, alumni and families enjoy running or walking in this event as part of Homecoming Weekend activities. It is one of the most highly visible Homecoming events on campus; in 2015, there were 1,886 participants. There is also a Homecoming Kids Fun Run sponsored by the Healthy Kids Club at Poudre Valley Hospital. Over 300 children participated in 2015.

#### **Planning for Continuous Improvement:**

- 1. Implement a new undergraduate curriculum (currently in review by the CHHS curriculum committee) to emphasize student learning outcomes, efficiency to graduation and high impact practices (integrative learning across the discipline, labs, capstones etc.). CHHS will bolster the physiology/mechanics curriculum for the Health Promotion track and the behavior change/lifestyle modification curriculum for the Sports Medicine track. More overlap was also created between tracks in the first 3 semesters so that students can decide on a track until as late as midway through the 2<sup>nd</sup> year without any setback in time to graduation.
- Diversify extramural funding for the research program to compensate for historically low governmental funding rates. In order to grow the quality and reach of research enterprise, the Department will need to enhance the ability to attract more funding even in the face of increased competition for limited resources.
- 3. Hire 2 more research-active faculty members to complement the 4 hired in 2015 and 2016 and expand the physical footprint of the *Human Performance Clinical / Research Laboratory* to match resource space with growth. As a CSU Program of Research and Scholarly Excellence, compete to become a Core Research Facility for the campus and researchers outside CSU.
- 4. Increase diversity in the faculty, graduate and undergraduate programs. This need for more inclusivity is a quality issue; CHHS is not gaining sufficient perspective and breadth of viewpoint and approach to raise the bar in terms of "excellence".

## **Human Development and Family Studies**

The mission of the Department of Human Development and Family Studies (HDFS) is to promote the optimal development of individuals and families in the context of the larger social environment. Research and education in HDFS covers the lifespan, and considers context as a prime influence on development. Signature areas of expertise include: risk, resilience, and developmental psychopathology; treatment, intervention, and prevention science; emotion, regulation, and relationship processes; adult development and aging; and cultural context and diversity.

The Department offers the following degree programs:

Early Childhood Education – B.S.

Human Development and Family Studies – B.S. Degree concentrations include:

Early Childhood Professions

Leadership and Entrepreneurial Professions

Human Development and Family Studies

Pre-Health Professions

Prevention and Intervention Sciences

Human Development and Family Studies – M.S. (Plan A). Specializations include:

**Prevention Science** 

Marriage and Family Therapy

Applied Developmental Science—Ph.D.

HDFS currently houses three centers: The CSU Early Childhood Center (ECC); the CSU Center for Family and Couple Therapy (CFCT); and the CSU Prevention Research Center (PRC). The Department is also heavily invested in the new Columbine Health Systems Center for Healthy Aging (CHA) to be housed in the new Health and Medical Center at CSU, and a newly developing Child Trauma and Resilience Assessment Center (CTRAC) that will be co-located with the CFCT in HDFS and is in partnership with the Larimer County Department of Human Services.

#### **Students:**

During the review period, significant undergraduate programmatic revision took place, with several outcomes. First, a new undergraduate major in early childhood education was added that leads to teacher licensure with a P-3 endorsement. Second, three years (2012-2015) were spent engaged in a significant overhaul of the undergraduate curriculum. This included developing core concentrations in the degree that are transcripted and relevant to career goals; developing student learning outcomes for both bachelor's degrees; revising existing courses and developing new courses to align with students' development and mastery of these learning outcomes; identifying major completion maps; and creating documents such as common course elements, course blueprints, and student learning outcomes assessments. These enhancements apply to the HDFS major, delivered through both RI and online (through CSU Online) mechanisms, and to the BS in Early Childhood Education (note: the licensure courses are taught in SOE, with whom the major is collaborated). All elements of this revision are set to be fully active in fall 2016.

HDFS currently has 935 undergraduate majors (835 are RI, 100 are CSU online). This is an increase of nearly 100 RI students since fall 2010, and an increase of 342 RI students (158%) since 2005, just 10 years ago. This number is expected to continue to grow, both in RI as well as online, based on marketing of the new major and degree concentrations. Graduate enrollment has increased from 36 to 41 students over the review period, and shifted somewhat with the advent and growth of the PhD program (growing from 2 to 16 students), and a decline in the Family and Developmental Studies program (which has spurred the new specialization in Prevention Science, and closure of the FDS program); the Marriage and Family Therapy program admits 8-10 students each year based on accreditation standards and this has stayed steady over the review period.

The HDFS student body (FY15) is 26% minority, 94% female, 26% Pell Recipient, and 32% first generation. These diversity numbers have somewhat improved since FY10 (19% minority, 95% female, 19% Pell Recipient, 30% first generation). These numbers suggest the department is modestly increasing access to students and slowly working toward a more diverse student body.

The 4-year graduation rates over the last 6 years ranged from 50% to 61.3% (most recent year), on par with university goals. The 6-year graduation rate has ranged from 71.1% to 84.4%, and was most recently at 76.1% (which is somewhat lower than the university goal of 80%). Finally, CSU First Destination data for two years (FY13 and FY14; n=363) show that 86.5% of HDFS students graduate into a meaningful career step. About 46% graduate into a job and 40.5% are continuing their education in a graduate program; 13.5% report that they are seeking employment or education. Of those that are graduating to a job, about 74% are employed in a position directly related to the major and about 25% are hired directly by the employer with whom they did an internship. Average salary for HDFS BS graduates is about \$30,000/year.

The master's degree specialization in family and developmental studies was changed to specialization in prevention science, to reflect the centrality of the prevention science framework in research and teaching efforts. The department believes that this new specialization in prevention science, which was effective fall 2015, will better prepare students for a variety of careers, from applied work in the human services to contributing to the knowledge base as a researcher or policy analyst. These course changes are also reflected in the doctoral program, which was launched at the start of the review period.

In 2009, HDFS launched a new PhD in Applied Developmental Science. Two students were admitted in 2009, and the doctoral program has grown to 16 enrollees; in the past 3 years, 4 PhD degrees have been awarded. These students graduated to a postdoc (2), faculty position (1), and position in a human services agency (1). During the review period, three doctoral students have applied for, and two have received, NIH pre-doctoral awards. All doctoral students have been funded on .5 FTE GTA or GRAs. Over the review period, 78 master's degrees (average of 13/year) have been awarded. Students have largely graduated to positions as therapists in private, group, or agency settings; programming or research positions in human service agencies; or gone on to PhD programs. Over 95% of master's students have received some form of funding, including hourly assistantships or .25 FTE - .5 FTE GTAs or GRAs.

### Research and scholarly accomplishments:

Annual grant expenditures are consistently over \$1M. Faculty have continued to publish in peer-reviewed journals, at an average rate of 2.4 publications per tenured/tenure-track faculty per year. Many faculty have won awards. Most post-tenure faculty sit on editorial boards of journals and several serve as editor or associate editor in significant journals.

HDFS has approached hiring from an overt perspective of building collaborative teams (relevant to research, but also synergistic with undergraduate and graduate curriculum), and maximized two different opportunities to build: (a) hire of 4 positions related to youth, families, and prevention science; (b) hire of 2 positions in adult development and aging that add to a core in HDFS as well to the CSU cluster hire in aging related to the Center for Healthy Aging.

The department has formalized the research structure of the Early Childhood Center, developed a research board, and applied for and were awarded status as a CSU CIOSU. A re-envisioned version of the CSU Prevention Research Center (PRC) has been launched. The PRC focuses on innovative research programs that apply a lifespan developmental science approach to understanding health and maladaptation from birth through death. Finally, HDFS has been intricately involved in developing the new Columbine Health Systems Center for Healthy Aging, an interdisciplinary, university research center, and a new centrally-funded cluster hire in aging.

#### **Engagement and Outreach:**

#### Extension

HDFS is an applied interdisciplinary field, firmly committed to translational science. Nowhere is this better exemplified than by our partnership with Extension. During the review period, HDFS had the opportunity to re-configure its approach to collaborating with Extension. From a previous model of one specialist, who had to be a jack of all trades, HDFS has reconfigured funding to support better engagement across the department.

### **Campus Connections**

Campus Connections (CC; formerly, Campus Corps) is a powerful campus-based therapeutic mentoring program for at-risk youth, ages 10-18, and a service-learning course for CSU students. Youth are paired in one-on-one mentoring relationships with undergraduate CSU students for a 12-week program. The program engages 300 youth and 300 CSU mentors each year – since its inception in 2010, over 1540 community youth, and 2000 CSU students have participated. The CC program has been highly effective for youth (e.g., lower recidivism, better school engagement, improved family and friend relationships) and CSU students (e.g., development of interpersonal skills, citizenship, and personal responsibility). CC has brought in roughly \$1.5M in external research and contract dollars, has been trademarked, and is currently being licensed for use at the University of Northern Colorado, and the University of Aukland, NZ.

#### Early Childhood Center

The ECC has a tri-part mission of offering quality programming for young children, training CSU students for careers in the field of early childhood, and providing opportunities for research related to children, families, and early childhood education. The ECC is licensed by the Office of Early Childhood at the Colorado Department of Human Services and accredited through the National Association for the Education of Young Children (NAEYC).

In 2009/2010 the department purchased the historic Washington School on Shields Street. The project entailed a \$4M renovation, supported largely by the CSU UFFAB, along with private and foundation funds that were solicited. In 2012, the ECC expanded its services to include infants and toddlers (increasing service from some 40 or so families, to about 150 families), and increased the number of student interns, practicums, student teachers, and courses utilizing observations at the center. The business operation of the center was developed, and moved from a heavily department-subsidized operation (annual revenues of about \$100,000) to a fully independent operation (an annual budget of \$1.1M, fully funded by childcare tuition and donor/foundation/grant funding).

#### **Planning for Quality Improvement:**

- Priority areas include a senior hire in childhood autism and developmental disabilities (FY17);
  a spousal special appointment hire in childhood trauma assessment and treatment (FY17);
  and a special appointment assistant professor with expertise in adult development and aging
  (FY17). HDFS has requested a line for someone with expertise in developmental disabilities
  in adulthood to bridge between our strategic initiatives in developmental disabilities and in
  aging.
- 2. The department will be evaluating student learning and placement outcomes in these new programs. Second, the Marriage and Family Therapy program is accredited, and will undergo re-accreditation in 2017. The goal, of course, is successful re-accreditation. Third, though completely specific plans have not yet been formulated, the department is significantly interested in two graduate opportunities graduate certificates (in program evaluation; child trauma; and potentially others) and a plan C master's program (in Prevention Program Management). Proposals for both will be developed in the next year.
- 3. Owing to a commitment to the land-grant mission, faculty are also invested in pursuing community engagement opportunities. Specific opportunities include: (a) building the relationship with Extension and pursuit of larger funded project opportunities; (b) supporting faculty who have opportunities to be in local/state leadership positions (e.g., on early childhood task force, or United Way board); and (c) specifically growing the portfolio of institutions using Campus Connections.
- 4. HDFS is firmly committed to celebrating diversity and promoting inclusive excellence and will intentionally work to expand the diversity within the department.

### **Mechanical Engineering**

The mission of the College of Engineering is to engineer global solutions that contribute to the quality of life by educating for tomorrow's needs, advancing society, generating and applying new knowledge, and stimulating economic development. The Mechanical Engineering B.S. program is one of the original undergraduate programs at Colorado State University. It has been offered continuously since 1870.

The undergraduate degree program is accredited by the Accreditation Board for Engineering and Technology (ABET), as are all CSU undergraduate engineering degree programs. ABET accreditation provides evidence that undergraduate students are meeting nationally recognized learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are met.

The department currently offers the following degree programs.

Mechanical Engineering – B.S.

ME Engineering Management Specialization

ME Mechanical Engineering Specialization

Mechanical Engineering – M.S. (Plan A, Plan B)

Mechanical Engineering – Ph.D.

#### **Students:**

The curriculum has been organized into multiyear threads in math, science/systems, mechanics, themofluids, and design. With the design thread in place, the program has developed a multi-course design sequence that continually reinforces program outcomes such as hardware design/build/ test, teamwork, communication, engineering with constraints, and problem solving. A variety of High Impact Practices are integrated into the curriculum including case studies of real-world issues, individual and group projects, mandated participation in the Professional Learning Institute, and hands-on experimentation.

There have been numerous curricular changes over the past few years in response to where the discipline is heading and in an effort to continue to have a

The Department of Mechanical Engineering has seen a recent surge in the number of undergraduates in our program which has led to a significant increase in our need for instructors, faculty, support staff, and graduate teaching assistants. With the help of ABET lines and support from the Office of the Provost and the College of Engineering, we have hired additional lab staff, an academic advisor, and increased the number of special faculty and GTA positions within the department.

This increase in the undergraduate student population has greatly increased the teaching responsibilities of faculty. With such a significant increase in class sizes and lab sections, faculty have been asked to dedicate more time to the classroom, leaving less time to dedicate to our graduate student population. Further, although faculty continue to research and publish at a steady rate, it has become very challenging to dedicate the necessary amount of time to research related activities such as grant and proposal writing and research as well as graduate student recruitment and advising. Additionally, although the graduate student population remains steady, we attribute the lack of growth in the graduate program to the surge in the undergraduate student population.

To help alleviate the teaching demands, there is currently a plan in place to control/cap undergraduate enrollment starting in Fall 2016. These controls will include a cap on the number of undergraduate students admitted to the program as well as raised entrance requirements. There is hope that these controls will allow the Mechanical Engineering department to maintain undergraduate program quality while allowing faculty to dedicate more time to research and ultimately to growing and improving the graduate program. The controls should help to increase retention and ensure that the majority of students graduate within a 4-5 year timeline.

#### **Research and Scholarly Accomplishments**

The primary focus of the department's research is to conduct cutting-edge research funded by several government agencies and private companies. The research accomplishments of the Mechanical Engineering faculty are recognized globally, spanning mechanical and biomedical engineering to interdisciplinary areas of study. Such research not only serves to solve real-world problems, but it also serves to push the envelope of the broad mechanical engineering discipline. Despite significant growth in undergraduate students, putting immense pressure on faculty to teach large courses, the research funding in the department is on an upward trend, exceeding \$7M in 2014-15.

The department would like to see an increase in research and scholarly accomplishments over the next few years and plan to use upcoming vision and goals meetings to help achieve those goals.

#### **Engagement and Outreach:**

It is important to the department that the Mechanical Engineering faculty are engaged in, as well as recognized for service and scholarship from professional societies. Faculty members participate in professional society committees and board memberships, and actively review proposals and manuscripts. Mechanical Engineering faculty are extensively active in scientific and professional societies, with memberships in the American Society of Mechanical Engineers, American Society for Engineering Education, American Institute of Aeronautics and Astronautics, Society for Biomaterials, American Society of Biomechanics Society of Women Engineers, and Orthopaedic Research Society, to name a few. Faculty also served on editorial boards of prominent journals maintained by these professional societies, as well as other distinguished journals in the field.

#### **Planning for Continuous Improvement:**

Mechanical Engineering continues to be an extremely popular field of study for students interested in engineering. It is predicted that between the years 2014 and 2024 the demand for mechanical engineers is expected to rise 5% according to the Bureau of Labor Statistics. As this type of growth is expected, it is important that the ME program continue to combine theory, experimentation, and hands-on experience to allow students to transition into their careers. Students will also need to position themselves for success by participating in internships, pursuing graduate degrees, and staying up to date with technological changes in the field.

- Continue to build relationships with donors that result in scholarships and departmental support and funding:
  - Continue to work with Development Office to build rapport with potential donors and enhance relationships with current donors. The Department Head will continue to work

with Development to schedule regular phone calls and visits with current and prospective donors.

Securing a donor for the ME seminar series. Over the past two years, the ME Department has spent approximately \$10,000 and put a considerable amount of time and effort into increasing the quality of our ME Graduate Seminar Series. There has been a great effort to invite high-ranking faculty members (specifically Deans and Department Heads) from top engineering programs to campus in an effort to build connections and increase our rankings. Not only have students and faculty greatly benefited from these sessions, but if they were to continue, the department's reputation and rankings would increase. Unfortunately, although we have successfully met our goals each semester, our current budget reallocation has resulted in the need to decrease departmental funding in certain areas. Ultimately, the seminar series will be one of the first areas that will be affected. Although there is no longer funding for these visits, attempts will be made to locate a sponsor so that our seminar series will continue on.

#### Anticipate the need for new positions and plan for the retirement of faculty and staff:

- o Mindful hiring: fill gaps in expertise while planning for changes in the field
- Establish mentoring expectations and practices to ensure faculty and staff are well prepared for this transitional period
- o Be respectful of time of members of the department
  - Encourage communication while minimizing the time spent travelling to and from facilities
  - Enhance quality of interactions in spite of physical distance between facilities

#### • Expand quality of online graduate program:

- Increase offerings
- o Increase visibility through working with CSU Online
- o Increase applications and number of students
- o Focus on developing Engineering Management Program
  - Propose curriculum changes that will allow for more flexibility while maintaining quality of the program (see attached 2, 3, and 4 year timeline which will allow for elective credit—a curriculum change that we plan to request by Fall 2016)

#### • Engage faculty in regular vision and goal setting meetings:

- Use goals established at faculty retreat as a guideline
- Organize faculty into groups—each group will meet 5 times throughout the semester starting with first meeting on 1/14/16
- Meeting topics outlined in ME Goals document
- Meeting outcomes will be reviewed and discussed in faculty meetings and 2016 Faculty Retreat

# Increase diversity of undergraduate and graduate students Chartenies

**Strategies** 

 Identify areas of ME w/ more women and minorities (biomed., IE/EM/systems, environ/energy, materials, and grow in these areas

## Mechanical Engineering

- Identify schools w/ better diversity records in mechanical engineering and borrow their best practices
- More diverse faculty

### Tactics

- More outreach (4-6<sup>th</sup> grade and high schools)
- More mentoring programs
- Win grants to support students in these areas
- Develop and promote scholarships for these students
- Visit best practice schools (MIT, U PR, U Iowa, etc.)

## Occupational Therapy

The Occupational Therapy Department exists to optimize human performance and participation in every day occupations and contexts across the lifespan.

The department offers three graduate degree programs:

Occupational Therapy – M.O.T. (Plan C)
Occupational Therapy – M.S. (Plan A)
Occupation and Rehabilitation Science – Ph.D.

Degree programs are accredited by the Accreditation Council for Occupational Therapy Education. The programs were found to be in compliance with all ACOTE standards with no deficiencies.

#### **Students:**

The department maintained and graduated relatively stable numbers of Masters-level students (Both Plan A and Plan C) over the last 6 years. The number of graduates in the 2012-13 academic year were slightly lower, because of a planned lower enrollment number in the Fall of 2010—the year a significantly revised curriculum began. Since 2010, the number of enrolled students has gradually increased up to 50 students. It is worth noting, however, that the applicant pool has ranged between 500 and 600 for those 50 slots.

The PhD program enrolled its first cohort of students in 2013. The enrollment goal has been to average 3 new enrollees per year. Although not represented in the above table, 4 new students were enrolled in the Fall of 2015, such that current totals of students, as projected originally, is 9.

### **Research and Scholarly Accomplishments:**

Over the last 5 years, the Department has increased the number of publications and number of faculty submitting publications. During the reporting period, faculty published a total of 107 times with an average of 8 faculty publishing each year. Total research expenditures was \$3.9 million. Compared to the previous review period, these expenditures represent a 37% increase. This is notable given that the competition for grant dollars has substantially increased over the last 6 years. Six-year total funding amount for grants and contract: \$5.3 million. Compared to the previous review period, this funding amount represent a 25% increase.

As a collective, the Department's faculty members conduct research and scholarship across a broad spectrum of areas and populations. In general, core research areas include: (a) cognitive and motor performance, and sensory and neurophysiological function; (b) everyday occupation, disability, rehabilitation, and health; and (c) educational research from an occupation and rehabilitation science perspective. Research efforts are also integrated with the Department's three centers dedicated to outreach: Assistive Technology Resource Center (ATRC), Center for Community Partnerships (CCP), and Center for Occupational Therapy Education (COTE).

Faculty members engage in close research collaborations across a number of Departments and entities at CSU: Food Science and Human Nutrition, Psychology, Human Development and Family Studies, Social Work, Human Exercise Science, Agriculture, and the Molecular, Cellular and Integrative Neurosciences Program. Faculty also maintain strong partnerships with a number of external agencies and universities.

These include, but are not limited to: Anschutz Foundation, Allina Health, Penrose Hospital, the Department of Vocational Rehabilitation, Clemson University, San Jose University, Stanford University, St. Catherine University, University of Wisconsin-Madison, University of Utah, Washington University, Worcester University, Lund University (Sweden), and Umeå University (Sweden)

#### **Engagement and Outreach:**

The Department of Occupational Therapy (OT) is extraordinarily active in engagement and outreach, exemplified by student- and faculty-level accomplishments. Faculty and staff lead or participate in unique and numerous service, practice and outreach activities being carried out through the Assistive Technology Resource Center, the Center for Community Partnerships, the Center for Occupational Therapy Education, and the Fieldwork Education Office. Occupational therapy students also play a big role in the work of these programs, as described below:

### Assistive Technology Resource Center

The ATRC ensures equal access to technology and electronic information for CSU students and employees with disabilities. In addition, the ATRC assists the CSU campus with creation of accessible electronic content, including course materials, web pages and courseware. The ATRC also receives referrals from the Office of Equal Opportunity for CSU employees with disabilities seeking work-related assistive technology (AT) accommodations. As a direct service arm of the Department, the ATRC services include assistive technology assessments and training, as well as consultation and education regarding accessibility and universal design of mainstream and instructional technologies. The ATRC provided assistive technology training and consultation to over 200 CSU students with disabilities in the 2014-2015 academic year and well-surpassed this number in the 2015-2016 academic year, with the number of students served by the ATRC having doubled in the past five years. The ATRC employs three OT GRAs each year to provide assistance with the delivery of assistive technology services for CSU students with disabilities from all eight colleges at CSU. The ATRC is also a training site for first and second year OT graduate students, with 1 – 3 students completing fieldwork at the center each year, and AT content being included in numerous courses within the Department, resulting in over 100 OT graduate students benefitting from hands-on AT training sessions each semester.

#### Center for Community Partnerships

The CCP is a direct service, outreach and applied research arm of the Department, providing supported employment, supported education, and community and campus based occupational therapy (OT) services for transitioning youth, community members, and CSU students. The CCP partners with numerous agencies and programs in the community, as well as hundreds of employers across the Front Range. On campus, the CCP works in close partnership with all offices and programs that provide support and academic guidance for students with disabilities. The CCP is the home of the New Start for Student Veterans Program, where post-9/11 student veterans with injuries and disabilities benefit from supported education services. The CCP is also home of the Opportunities for Postsecondary Success (OPS) Program, which provides supported education, mentoring and guidance for CSU students and transitioning youth with complex needs related to autism spectrum disorders, traumatic brain injury, and other disabilities. The New Start and OPS programs serve over 150 students with disabilities each academic year, with a focus on persistence, retention and graduation for all participants. New Start and OPS research includes studies on resilience, goal attainment scaling, self-advocacy, and insomnia. The CCP is also a fieldwork

training site for occupational therapy graduate students, who become entry-level practitioners in community and campus-based OT after completing internships at the Center. In addition to the work of five OT Graduate Research Assistants employed by the CCP each year to assist with research, and for many, to complete their theses, 15 - 20 OT graduate students serve as professional mentors for CCP participants with disabilities, guiding these clients as they develop self-advocacy skills and pursue their academic and life goals.

### Center for Occupational Therapy Education

COTE conducts theory-building research to develop a model for education in the health sciences. Its research is then used in outreach initiatives, namely professional development and consultation, to promote excellence in teaching, curriculum design, and educational research. For example, the Center conducts a national faculty development institute biannually on designing courses for subject-centered, integrative learning, the model developing out of the center. To date, these outreach efforts have involved 150 health science educators who have attended the institute and multiple occupational therapy curricula who have utilized its consultative service.

#### Fieldwork Education

Graduate OT students complete a total of 27 credits (1,080 real-time hours) of fieldwork education as part of their required training. Fieldwork occurs in community-based, hospital, public schools, and skilled nursing facilities. The Department of Occupational Therapy Fieldwork Education Office partners with fieldwork sites across the nation and internationally, supporting the educational bridge linking the OT academic program with practice. Fieldwork educators collaborate with OT faculty to guide students to become competent and confident entry-level occupational therapists. The Fieldwork Education Office hosts the annual 2-day American Occupational Therapy Association Fieldwork Educator Certificate Program (FWECP), training and mentoring fieldwork educators from across the country to increase their skills to provide high-quality educational opportunities for OT students. Since 2009, 329 fieldwork educators from across the country have attended 13 workshops taught by the CSU Occupational Therapy Academic Fieldwork Coordinator.

In addition to the many contributions of OT students in the work of the Centers and Departmental programs, occupational therapy students are quite active in the Department's Student Occupational Therapy Association (SOTA) and the Pi Theta Honor Society, as well as the Occupational Therapy Association (OTAC), as detailed in the Student Learning Section.

#### **Planning for Continuous Improvement**

In 2011, Occupational Therapy conducted an in-depth strategic planning process, resulting in Department goals aligned with the institution's strategic goals. Since that time, the resulting strategic plan has been a guide for Department initiatives and improvements. For example, the strategic goals related to growth of the faculty resulted in hiring of three new faculty since 2010 and a plan to hire two additional faculty members in 2016, new processes for continuous improvement of teaching effectiveness, new outreach initiatives to support the large number of clinical educators who work with CSU-OT students, new GTA positions, and a fully-revised Department Code. The strategic goals related to graduate enrollment resulted in new admission processes and an increase in the number of enrolled students by 25%. Strategic goals related to quality graduate programs resulted in new Masters and PhD curricula and a successful

review with a subsequent 10-year accreditation, the highest level awarded by the professional accrediting body. Please see attached Strategic Plan with updates for a full overview of strategic plan and resulting improvements.

While the strategic plan was quite comprehensive, additional opportunistic enhancement have also resulted in programmatic improvements. For example, a major gift to the Center for Community Partnerships was instrumental in growing department research and outreach initiatives related to veterans returning to CSU. New partnerships with primary care and other health providers in Fort Collins, as well as the Equine Sciences Department at CSU are resulting in new lines of funding, research, and M.S. and PhD student involvement. Further, a leadership transition for the department resulted in a new organizational structure in which some of the responsibilities of the Head position have been redistributed to Program Directors for the entry level and PhD programs. This new structure was part of a successful search for a new Head, who began service January 1, 2016.

Specific plans include the following.

- 1. Increase funding opportunities for PhD students and further enhance the preparation of PhD graduates to fill faculty roles in OT.
- 2. Increase opportunities for culturally diverse experiences, both locally and internationally, of students and faculty in the Department. This includes targeting greater diversity in recruitment as well as deepening international collaborations and exchange.
- 3. Enhance entry-level graduates' preparation for the complex, ever-changing practice of OT by developing high-quality curricular and fieldwork opportunities in areas of emerging practice.
- 4. Strengthen the Department's visibility on- and off-campus by building innovative outreach and research partnerships.
- 5. Establish an external advisory committee to provide ongoing guidance related to curriculum, research and outreach.
- 6. Create a new Strategic Plan reflecting the University and College plans.
- 7. Evaluate the implications on faculty, staff and existing programs of developing a clinical doctorate (OTD) at the entry- or post-professional level and make a firm plan for moving forward.

### **School of Education**

The mission of the School of Education (SOE) is to be the epicenter of excellence in educational practice, innovation, and leadership across educational and learning organizations. The focus is to continuously develop and enhance multi-disciplinary collaboration for life-long and life-wide learning across key areas of classroom teaching and learning, educational and professional development, and the advancement of pedagogical and andragogical inquiry and practice. The School aims to develop and enrich the knowledge, wisdom, and imagination of diverse and talented people and societies around the world.

The department offers the following degree programs:

Family and Consumer Sciences – B.S.

Family and Consumer Sciences Concentration

Family and Consumer Sciences Education Concentration

Education and Human Resource Studies – M.Ed. (Plan A, Plan B)

Adult Education and Training Specialization

Counseling and Career Development Specialization

**Education Sciences Specialization** 

Option 1- Instructional Science Option

Option 2- Administration/Principal Preparation

Option 3- Teacher Preparation

Organizational Learning, Performance, and Change Specialization Masters of Science -

M.S. Specialization in Student Affairs in Higher Education (Plan A and Plan B)

Education and Human Resource Studies – Ph.D.

**Education Sciences Specialization** 

Higher Education Leadership Specialization

Organizational Learning, Performance, and Change Specialization

School Leadership Specialization

Non-degree Granting Programs

Teacher Preparation Academic Program

Principal Preparation Academic Program

School Counselor Academic Program/Endorsement

The School has struggled to maintain a shared vision and faculty alliance due to multiple leadership transitions. This struggle has resulted in each program acting independently instead of as a unified whole. Recognizing that unity in the School is critical, a significant strategic planning effort was recently undertaken. The planning effort was inclusive of all faculty and resulted in a more unified vision that will be implemented in the coming years. However, since completion of the planning effort, the Director has resigned and there is no Associate Director or Director of Graduate Studies. The School continues to work through issues of transition.

#### **Students:**

The School of education offers many degree programs but also plays a significant role in teacher/principal/counselor preparation. In FY15, 6% of all educator preparation in Colorado was completed at CSU.

Educator preparation is organized within the Center for Educator Preparation (CEP) and led by faculty co-chairs. The Center is responsible for administering, delivering, and recommending students to the Colorado Department of Education for teacher, counselor, occupational therapy, and principal preparation. The program is built on partnerships with local school districts that allow future teachers and school based administrators to gain experience in real schools with real students from the very beginning of the program. The Center offers the following teaching endorsement areas:

- Ages 0-8 (PreK Grade 3): Early Childhood Education
- Kindergarten Grade 12: Art, Foreign Languages, Instructional Technology; Music
- Secondary Grades 7-12: Agricultural, Business, English, Family and Consumer Sciences, Marketing, Mathematics, Science, Social Studies, Speech, Technology (Engineering).

In Colorado, bachelor degrees are not awarded in general education, so in order to obtain a teaching license students earn a bachelor's degree in one of six colleges with a concentration in educator preparation. The Center for Educator Preparation delivers approximately 28% of the required credit hours for students from these six colleges who graduate with a concentration in education.

Students served within the Center for Educator Preparation who already have earned a degree and are seeking a teaching license are offered two options towards completing teacher licensure requirements;

- Complete the Post Bachelor's Teacher License or license renewal if a teaching license was previously held but is currently expired, or
- Earn a Master's Degree in Educational Leadership and Change while obtaining a teaching license at the same time.

Enrollment in the educator preparation programs (undergraduate, graduate, and post-baccalaureate) has increased by nearly 100 students from 2010 through 2015 to 892. However, in 2010, the School initiated a realignment effort to better balance graduate student enrollments between the Master's degree and the Doctoral degree. The data shows that in 2010 the number of Ph.D. peaked at 487 with nearly one fourth of the students in Educational Leadership, Renewal, and Change specialization. The numbers of students enrolled in the Ph.D. degree programs was recognized as being excessive and unsustainable with the current faculty staffing and advising loads.

In response to the need for "right sizing" and a clear focus to offer high quality programs, four Ph.D. specialization were discontinued (Educational Leadership, Renewal, and Change, Interdisciplinary Studies, Learning, Teaching, and Culture, and Research Methodology) and no new students were admitted into these specializations.

### **Research and Scholarly Accomplishments:**

The School of Education seeks to promote a culture of research, discovery, and the advancement of educational interventions that promote advances in teaching and learning across the multiple learning contexts found in schools and learning organizations. These contexts and multifaceted interdisciplinary research are reflected in the funded research and scholarship generated within the School.

The sponsored research activities are trans-disciplinary in nature and faculty members are often co-PIs with faculty from other departments. Sponsored research agencies include the National Science Foundation, NASA, U.S. Department of Education, US Department of Agriculture, Colorado Department of Higher Education, Colorado Department of Education, Foundations, collaborating Universities, and school districts.

From 2010-2015 the faculty have published 396 journal manuscripts, books, book chapters and technical reports spanning the varied contexts in education and organizational learning. Within this same time, faculty have made 492 State and National level conference presentations and 28 international conference presentations. Faculty have received 108 awards and recognitions for their scholarly accomplishments and 55 other citations/recognitions of their scholarship.

### **Engagement and Outreach:**

The breadth and depth of faculty engagement and outreach includes service to the Colorado State University Board of Governors, chairing major university standing committees, serving on institutional review boards, holding elected national leadership positions in professional societies, serving as journal editors and reviewers, to leading outreach activities that serve to support and recruit underserved K-12 students in Colorado.

### **Planning for Improvement:**

- 1. Continue to build review/accountability structures within the unit to support and ensure the implementation of recently developed student learning outcomes and quality assurance metrics. This accountability for program quality applies to undergraduate and graduate degrees. Fund C-ALT to establish quality measurement systems for SOE (Years 1-5).
- 2. Establish a coordinated effort to align and build centroids of research excellence within the School of Education that reflect and are responsive to the most pressing issues in education. These priority areas are well documented and published by national funding agencies and the School of Education must position its self to engage in these efforts. Parallel to this effort is the need to expand funding opportunities for graduate students. Support for graduate students can be expanded through direct support from faculty research grants or funding raised through research centers or institutes. (Years 1-5)
- 3. Leverage the work of the various current and emerging centers in the School (i.e., Center for Analytics on Learning and Teaching [C-ALT], Center for Scenario Planning, Center for Educator Preparation, Center for Research and Advocacy on Racial Justice) by making available competitive research funding opportunities (\$50K grants) to scale up their research projects, which will increase the visibility of the School and increase the opportunities for interdisciplinary research.

- 4. Create a School of Education External Advisory Board to help ensure program quality and relevance. (Year 1-2)
- 5. Search for and hire a second financial officer for the School of Education. (Year 1)
- 6. Conduct an external review to try to determine why the School of Education has had such trouble retaining leadership and administrative personnel. Based on the findings from the review, create an action plan to redress this problem. (Year 1)
- 7. Formalize strategic partnerships with other units and colleges by offering formal "joint appointments" to their faculty members who routinely serve on masters and doctoral committees (e.g., Siller, Pilgrim, Buchan, & Levenger). (Year 1)
- 8. Based upon the findings of the external review of the M.S. Degree Program in SAHE, search for and hire a senior and a junior tenured/tenure-track faculty member to teach in the HEL and SAHE programs, to integrate these two programs, and to be the academic leader of the SAHE M.S. Degree Program. (Year 1)
- 9. Search for and hire another tenure-track junior faculty member to work in the SAHE and HEL program areas due to a retiring faculty member. (Year 2-3)
- 10. Because the M.Ed. and the Ph.D. programs in Organizational Learning Performance, and Change (OLPC) are very large (100 and 45 respectively) and served only by 2.5 FTE, search for and hire two junior tenure-track faculty members in the Organizational Learning Performance, and Change (OLPC) program area. (Year 1; Years 2-4)
- 11. Implement the Organizational Learning Performance, and Change (OLPC) online undergraduate program that has already been designed. This has been considered in the past but the timing may be better for it now. (Years 2-4)
- 12. Implement the M.Ed. in Elementary Education that has already been designed and approved by the Colorado Department of Education. Although students in this program would live in Northern CO, this could be an RI program or run through CSU Online. (Years 2-5)
- 13. Design and implement an academic program pathway for students to obtain the coursework needed for the Culturally and Linguistically Diverse (CLD) endorsement while also completing coursework for their content area teacher licensure requirements. This area of opportunistic enhancement responds to the need in schools for culturally and linguistically diverse trained teachers to meet the needs of culturally and linguistically diverse students in our schools. This initiative aligns with faculty expertise in diversity, equity, and inclusion. Potentially this program would be in collaboration with the University of Northern CO and CSU's Department of English and Department of Ethnic Studies. (Years 3-5)
- 14. Create and implement an undergraduate minor in education (21 credits) unrelated to licensure. (Years 3-5)
- 15. Search for and hire a tenure-track junior faculty member in Family and Consumer Sciences. (Years 2-3)
- 16. Search for and hire a tenure-track junior faculty member in the Counseling and Career development program area both to accommodate the increase in required coursework from 45 to 60 credits by the credentialing body and to help increase enrollments largely through revenue generating certificate programs. (Years 1-3)

### **School of Social Work**

The School of Social Work provides exemplary education, applied research, and transformative outreach toward the accomplishment of the School's Vision. The School of Social Work will advance social, environmental, and economic justice, promote equity and equality, alleviate oppression, and enhance human health and well-being across local and global community systems.

The department offers the following academic programs:

Social Work – B.S.W.
Social Work – M.S.W. (Plan A, Plan B)
Social Work – Ph.D.
Graduate Certificate in Advanced Clinical Behavior Health
Graduate Certificate in PreK-12 School Social Worker

#### **Students:**

The School of Social Work is an accredited program through the Council on Social Work Education as assurance of the quality of the degree programs. The Department ranks #58 according to U.S. News and World Report. Maintaining accreditation and a high ranking, undoubtedly help to attract top quality students.

During the review period, there have been multiple programmatic changes and/or additions.

- An evening, part-time MSW was started and will graduate its first cohort next year.
- Ph.D. has been in place for two years.
- The School just completed collaborations with the Colorado School of Public Health to develop a joint graduate degree program for an MSW/MPH, which can be completed in three years. Applications are currently being accepted for this program and those admitted will begin studies in summer 2016. The focus is on Global Health and Health Disparities. This is one, of only a couple, joint degree programs of this type in the intermountain west. First admissions will begin summer 2016.
- The MSW program was revamped in that it is a hybrid program. Previously, the distance program was fully face-to-face. A great deal of work and energy went into assessing student needs while balancing what could be taught online vs. in person and maintain quality. Additionally, a new cohort is starting in Denver. Applications will be accepted during spring semester. With the expansion of the MSW program, through the hybrid model, into the Denver area, there are opportunities to increase the diversity of the MSW graduate student body.
- A new Advance Standing option was offered and 7 students are being admitted in the Colorado Springs cohort.
- The School also has multiple transcripted certificate programs moving through the university curricular process or have started being offered. These certificates are/will be open for professionals with an undergraduate degree who wish to advance their professional development. The topics for the certificates were chosen based upon community assessment of need. We anticipate that there will be further programs that will be developed.

The Director of the School co-wrote a \$1.5 million dollar grant for HRSA with another university and was awarded the money to create 22 \$10,000 stipends for students for workforce development. This is aimed

at training students to work with at-risk adolescents and transitional aged youth in the area of behavioral health. This training is a new experience for students.

A new Ambassadors program was created to enhance student engagement and leadership learning opportunities. Eight students participated last year and have a new cohort participating currently.

Multiple faculty and leadership have been collaborating with State and County child welfare to develop child welfare stipends for our undergraduate and graduate students. The School anticipates that such funding has a high likelihood of starting fall 2016.

### **Research and Scholarly Accomplishments:**

The School has seen a large percentage of retirements among tenure track faculty. This had a direct impact on external funding. With hiring several new junior faculty, there will be a lag in their ability to be successful in obtaining funding. However, they all participated in a competitive, year-long grant writing training. They have all submitted at least one grant application and two of those were to NIH. Time is needed to build research trajectories that are a necessary element of building externally funded research programs.

Peer reviewed publications increased five-fold contributing to knowledge in the areas of child welfare, mental health and aging.

The School has the Human Animal Bond In Colorado (HABIC) program, which is an excellent program to advance the human-animal bond. They provide support and treatment in hospitals, detention centers, VA medical centers, and schools. Leadership has developed the Human Animal Relationship Research and Teaching (HARRT) group which is an interdisciplinary team consisting of faculty in VetMed, College of Agriculture, College of Natural Sciences and College of Health and Human Sciences. This group has written grant applications together and will continue with future collaborations.

The Social Work Research Center (SWRC) is committed to student training and research in child welfare and at-risk youth. The Center fulfills the tripart mission of CSU. The faculty in the Center teach undergraduate and graduate research courses in the School, serve on and chair master's and PhD research committees, and supervise student interns in their field placement. They also mentor junior faculty and collaborate with them on writing grants and journal articles. They are extremely productive in extramural funding totaling nearly four million. Lastly, research and evaluation work is community-based, which allows engagement with and outreach to community stakeholders through trainings, workshops, presentations, and publications. The Social Work Research Center (SWRC) has a decade of successful extramural funding. The Center has been self-sustaining for over ten years and has grown exponentially. It has moved from a Center that had to seek out funding opportunities to now being a Center where constituents across the state seek expertise and collaboration.

Faculty in the School are active researchers with High Plains Intermountain Center for Agricultural Health and Safety Center (HICAHS). The Center was established with funding from the National Institute of Occupational Safety and Health (NIOSH) in 1991. The Center is a Colorado State University CIOSU and has been funded every year since in five year cycles. There are currently 8 other Centers across the country and 1 center with a focus on children in agriculture. HICAHS consists of multiple disciplines representing multiple colleges at CSU working together to undertake basic research, intervention/translation research, and development of education and training materials, and distribution of results through outreach. The mission has expanded to include occupational issues in forestry and fishing industries as well. Average

funding over the last 23 years has been approximately \$1million per year, with competitive renewals every five years. With additional leveraged projects and increased funding more recently, the Center has generated over \$30 million total.

#### **Engagement and Outreach:**

#### Colorado Collaborative Project (CCP)

CCP was engaged statewide with Child Welfare Agencies and agencies and organizations that contribute to the strengthening of Colorado's families and children's safety & well-being. CCP's work with Colorado organizations and communities spanned the state and included professional development and training, strategic planning and system change consultation and facilitation services.

### Center for Lifelong Learning and Outreach Education (CLOE)

CLOE has multiple roles. The first is overseeing and running our distance MSW program. There has been a successful cohort model for MSW education in Colorado Springs that has seen multiple cohorts graduate. The CLOE team has lead the transfer of the 100% face-to-face MSW program to a hybrid model. This change decreased the travel and housing costs associated with students coming to Colorado Springs for weekend classes. A new cohort of distance MSW students will start in a new Denver site in a year.

#### **Community Needs Assessment**

The School completed community needs assessments regarding advanced training needs two years ago. In response to the community input and at the advice of our Community Advisory Board, multiple certificates have been launched or are being created currently. These certificates include: Graduate Certificate in Advanced Clinical Behavioral Health, Social Work Certificate in Healthy Aging, Graduate Certificate in Military and Veteran Culture, Graduate Certificate in Nonprofit Management, Graduate Certificate in PreK-12 School Social Worker, and the Graduate Certificate in Mediation and Conflict Management.

#### **CSU Extension**

Work with the CSU Extension has been undergoing revision. Previously, the School had a single faculty member who worked with Extension on specific projects. The current, new model of partnership between SOSW and CSU Extension will be one that is a broader School partnership. The Community Disaster Response Plans for Pets and Service Animals projects (PETAid) is a funded collaboration between Extension and School of Social Work.

#### **Practicums and Service Learning**

Students are required to fulfill practicum requirements as part of their BSW and MSW training. Currently students contribute \$1.9 million worth of service to the community through their practicum work. Many of the BSW courses require service-learning activities, all of which are based in the community. SOWK 286 A & B places 125 to 150 students in 12 to 15 community agencies each year to serve agency clients. SOWK 342 performs community change projects each semester for local human service agencies. All advanced MSW students participate in a two-semester program evaluation course in which they work with community agencies conducting either needs assessment research or program evaluation research. This work helps agencies inform programmatic decision-making.

#### Social Work in Action (SWA)

The School provides support and faculty advising to SWA; a student organization that provides service to the community through student volunteer work. For example, CSU Fall Clean-Up, Care Housing Fair, Fundraiser for Crossroads Safe House, Veteran's Day 5K Race, Veteran's Day Roll Call, Cans Around the

Oval, Fall Diversity Showcase, Holiday Toy/Gift Card Donations, RamRide, and Relay for Life. Community outreach and service/learning activities included Suicide Prevention Program, Homeless Gear, Fort Collins Rescue Mission, Community Corrections Self-Care Day for women offenders, Human Trafficking, community safety initiative with the Poudre Fire Authority, Food Bank, A Face to Reframe, Fort Collins Police Department.

### **Planning for Quality Improvement**

The School has been in an active state of change over the last 3 years. Such changes are driven by market need and future forecasting, changes in research funding climate, and the evolving role of the profession nationally and internationally. The next few years will require a concerted effort to maintain accreditation and national ranking. The School just completed an extensive strategic planning effort that produced actionable plans.

- For continued accreditation through the Council on Social Work Education, the School is required
  to maintain a 1:25 student-teacher ratio in the BSW program and a 1:12 student-teacher ratio in
  the MSW program. This is a new requirement that the department will require additional funding
  to meet. Due to the importance of the accreditation, faculty hiring is a top priority. The goal is to
  hire faculty with a background in practice and who can build collaborations in Behavioral Health,
  Productive/Healthy Aging, and Child Welfare.
- 2. Revise the MSW curriculum to be more relevant and to respond to the needs expressed by students, graduates, and advisory board. The focus on social justice will be increased as will the incorporation of high impact practices.
- 3. Collaborate with the School of Education in moving forward the development of the Center for Racial Justice Research and Advocacy in Education.
- 4. Identify opportunities to expand the Social Work Research Center to have a broader reach outside of solely child welfare. Expand the Social Work Research Center to have a research arm in behavioral health and healthy aging in addition to their current child welfare work.

### **Statistics**

The mission of the Department of Statistics is to devise, develop, and apply statistical and probabilistic theories and techniques, and to disseminate statistical knowledge through teaching, advising, and outreach programs, in order to serve the needs of the University, and local, state and national bodies in research, government, business, and industry.

The department delivers the following degree programs:

Statistics – B.S.
Minor in Applied Statistics
Minor in Statistics
Applied Statistics – M.A.S. (Plan C)
Statistics – M.S. (Plan A and Plan B)
Statistics – Ph.D.

#### Students:

The Department is the home to several outstanding senior faculty and has a national reputation for excellence in survey sampling, time series, and environmental statistics, as well as the quantification of uncertainty and modern semi-parametric and nonparametric methods. It has a substantial graduate program and a recently revitalized undergraduate major. The department is ranked #42 in the country by U.S. News and World Report.

Indeed, statistics as a discipline is in the middle of a scientific revolution, in part because of the growing emphasis on "big data" and the growing demands of an information-oriented society. Statistics competes favorably with mathematics and even computer science for undergraduate students. At CSU, the number of undergraduates majoring or minoring in statistics is also experiencing steady growth, although at a pace slower than at many other universities.

The Department expects to hire two new faculty in FY17 to replace faculty who left in recent years. One new position is also expected, to be filled in FY17 or FY18, to accommodate new growth in majors/minors, growth in service credit delivery, and to remain competitive with other institutions which continue to experience growth and revitalization.

The Department of Statistics has on-going student and faculty exchanges with the Ecole Nationale de la Statistique et de l'Analyse de l'Information (ENSAI), located just outside Rennes, France. It is the main school for statistics in France. The exchange program was started in 2006, at the initiative of Jay Breidt and faculty at ENSAI. Since 2009, 15 ENSAI graduate students have come to CSU for 8-week summer internships. During those internships, they work with individual department faculty on a statistical project and write a report as part of a required ENSAI internship. In addition, 6 students have come to CSU for a full academic year. While they are not officially registered as CSU students, they are allowed to enroll in graduate courses in statistics and in other programs.

#### **Research and Scholarly Accomplishments:**

All Department regular faculty are active researchers, and every current faculty member is funded through external grants from a wide range of agencies/organizations. Special appointment faculty affiliated with

the Statistical Laboratory are also frequent collaborators. Because of this, the Department has been very successful in submitting and obtaining grants. Over the last 7 years, 61 out of 139 proposals were funded. The average size of the grants obtained over that period is approximately \$168,000.

Interdisciplinary research has always played a central role in the Department. This effort includes very active participation in the submission of interdisciplinary proposals, co-authoring of research papers, and co-advising service on graduate student committees. Faculty collaborate with personnel in universities, government agencies/laboratories and private industry. The faculty published 397 peer-reviewed journal articles during the review period; 71% were interdisciplinary, 53% published in non-statistics journals, 60% addressing a statistical problem that arises in a scientific/engineering application.

Statistics faculty are active in professional service and outreach at the highest levels. During the review period, faculty served on 18 national or international panels and scientific advisory boards, including four National Academy of Sciences committees. Through these activities, the department has provided statistical expertise and oversight for various federal agencies (Census Bureau, Bureau of Labor Statistics, Bureau of Economic Analysis, USDA, National Institute of Standards and Technology, etc.), and for two national laboratories, among others. Further, the department has also served on grant review panels for the NSF and NIH.

Editorial contributions of faculty, beyond the level of refereeing papers, include serving as associate or consulting editors for 46 journals and book series during the review period. In addition, two faculty served as founding co-editors for journals: Hoeting for *Advances in Statistical Climatology, Meteorology and Oceanography (ASCMO)*, a new open-access journal from Copernicus Publications, and Estep for *the Journal on Uncertainty Quantification*, a new joint offering by the Society for Industrial and Applied Mathematics (SIAM) and the American Statistical Association (ASA).

The Graybill conference series (hosted by the department) has kept faculty very involved in the organization of professional conferences, including the 6<sup>th</sup> International Conference on Extreme Value Analysis (first ever outside of Europe), the 2012 Western North American Region (WNAR) meeting of The International Biometric Society, and the 2015 meeting of the International Chinese Statistical Association (ICSA). In addition to these activities, Statistics faculty have been engaged with many other workshops and conferences, including serving as program chairs for the overall Joint Statistical Meetings (JSM) and major components of the JSM, developing SAMSI (Statistical and Applied Mathematical Sciences Institute) programs and workshops, and organizing SIAM workshops and conferences. Further, faculty have served in a dozen positions as elected or appointed officers in professional associations, including the ASA, the Institute of Mathematical Statistics, the International Association of Survey Statisticians, SAMSI, and SIAM.

Since 2008, department faculty have been honored with 19 awards (outside of awards internal to Colorado State), including several ASA and IMS fellowships, two best paper awards, and two young researcher awards. As indicated by the faculty's numerous awards, editorial positions, panel memberships, etc., the Statistics department is active in the profession and well-regarded by peers.

#### **Engagement and Outreach:**

#### Franklin A. Graybill Statistical Laboratory

The Franklin A. Graybill Statistical Laboratory (the "Stat Lab" as it is most commonly referred to) provides statistical consulting services to the CSU community and external entities, with the latter focusing

primarily on organizations in Colorado. Personnel provide consultation on all aspects of the statistical design/analysis of experimental and observational studies. Overall, the three Stat Lab consultants perform approximately 1,000 consulting appointments during the last calendar year with an additional several hundred email/phone interactions. Survey results indicate that the services provided by the Stat Lab are beneficial to the campus community and well delivered.

Traditionally, the majority of the consulting services have been offered free of charge to the campus community, with only longer-term projects and those outside CSU done on a fee-for-service basis. The university has recognized the value of this broad-based statistical support to the research and educational mission by providing funding for the Stat Lab. This has come in the form of base budget provided by the College of Natural Sciences and partial salary support from the College of Agricultural Sciences through the Experiment Station. More recently, this has been supplemented by funding from the Vice President for Research, who has also designated the Stat Lab as a "CSU Core Facility."

### The Center for Interdisciplinary Mathematics and Statistics (CIMS)

CIMS focuses on initializing/facilitating interdisciplinary projects that foundationally require new advances in mathematics and/or statistics. It provides support for faculty that strive to become lead interdisciplinary researchers involving mathematics and statistics. It also acts as a clearinghouse and advising source for individuals wishing to investigate new interdisciplinary areas. The fundamental goal of CIMS activities is to provide faculty with the support needed to overcome the significant barriers associated with interdisciplinary research. The CIMS is ideally placed to leverage modest institutional investment through initialization of interdisciplinary research projects and submission of large scale external proposals. CIMS has been recognized as a Program of Research and Scholarly Excellence (PRSE) since its inception 12 years ago, and was recently reappointed as a PRSE for 4 years.

#### **Planning for Continuous Improvement**

#### 1. Fashioning a Departmental Vision

The Department is at a crossroads and a critical component for the future is the development of a collective vision for the Department. Hence, the first priority is to decide what the Department wants to be. How does it want to be seen nationally? What role does it want to play at CSU, especially in interdisciplinary research initiatives? These are questions that require collective discussion among the faculty, and they help to fashion a clear departmental vision. The discussion about these important topics is currently on-going and will continue during the remainder of this academic year.

#### 2. Reinventing the Graybill Statistical Laboratory

A proposed expansion of the scope and size of the Stat Lab is currently being considered. There is a large unmet need on campus for analysis of large scale datasets from sequencing and microarray experiments, and more generally, for a variety of "omics" type data. This unprecedented demand in bioinformatics, more broadly in data analytics for quantitative biology and health science, has been growing along with the expansion of relevant research on campus. Recent surveys of the CSU research community indicate a large number of researchers who feel that their research has been hampered by a lack of bioinformatics service capacity at CSU and that many of these researchers have had to look outside of CSU for this expertise. Several Colleges and the VPR have recognized the need for more research infrastructure support in this area.

#### 3. Redesigning the Graduate Programs

Graduate education in the discipline of statistics looks very different in 2015 than it did a decade ago. To address the demand for a more practically oriented statistical education and provide a new source of funds for Statistics, the department created a new Masters of Applied Statistics (MAS) program a few years ago. This new program also forms the basis of the graduate degree program that is offered online, where there is a steady demand for such courses.

At the same time, the Department has retained a traditional two-year MS degree program built around course work in probability, methodology, and mathematical statistics, and a small dose of consulting experience in the Statistical Laboratory. This remains a gateway to the PhD program, and virtually all entering students must complete the MS program before moving on to the PhD program. Moreover, the MS examinations are used as a filter for entry to the PhD program. The MS/PhD program retains a heavy set of course requirements, both leading up to the preliminary examinations, and afterwards.

This stands in stark contrast to the revamped PhD programs at many universities which (a) admit students directly into a PhD program, (b) have eliminated qualifying examinations or at least drastically curtailed them, and (c) reduced course requirements to a fraction of those at CSU. Therefore, the department plans to undertake a complete "bottom-up" review of the MS/PhD program, to assess whether a more modern structure that relies of fewer courses and increased early research interactions might need to be transitioned into, and if so, how to accomplish this. Such a revision of the MS/PhD program is likely to take several years.

#### 4. Redesigning the Undergraduate Programs

In a data-centric world, there is a rapidly growing interest in statistics as an undergraduate degree program. For 2012-2022, the Bureau of Labor Statistics predicts a much faster than average growth of the number of jobs for statisticians. The numbers of CSU statistics majors and co-majors are already on the rise, and are likely to rise much more with little additional effort. The Department is in the process of revising the undergraduate major and minor curricula, including an increased emphasis on computing, and plan to continue this effort as soon as sufficient faculty resources are available.

There are also plans to revisit the undergraduate service courses, which have experienced strong growth in recent years. One possible approach being considered is to reformulate these courses with a reduced emphasis on some of the mathematical aspects, and instead provide more story-based, hands-up learning. Many of the lab sciences have successfully begun to shift to this learning by experience models. With the abundance of data that is available, both from outside and within the university, there is every opportunity to do this in statistics as well. The department believes that such an approach can provide a far more stimulating learning environment for the students.

Finally, the department will actively explore the possibility of adding an undergraduate major in Data Science. While statistics is the fundamental component of such a degree, it is also clearly interdisciplinary and includes components from computer sciences, mathematics and possibly business and engineering. Hence, there are different ways to structure such a degree, and plans to see which would be the best fit for CSU will be explored.

## **Biomedical Engineering**

The Colorado State University School of Biomedical Engineering (SBME) is a Special Academic Unit that combines the institution's strengths in veterinary medicine, engineering and the sciences to provide an interdisciplinary focus on improving health, fighting disease and aiding persons with disabilities.

The SBME delivers the following degree programs.

Biomedical Engineering – B.S. Biomedical Engineering Specialization (on campus and via distance) - ME Bioengineering – M.S. Bioengineering – Ph.D.

#### Students:

According to the national rankings of US News and World Report, Biomedical Engineering at CSU was ranked 71st in 2014 and 63rd in 2015. ABET accreditation provides evidence that students are meeting nationally recognized learning outcomes. Publication in peer-reviewed journals, presentation at national meetings, and successful completion of a dissertation and final oral examination all provide evidence that graduate student learning outcomes are met.

The Ph.D. student population, over the last 5 years, has been growing due to a deliberate emphasis on admitting Ph.D. students and a de-emphasis on admitting students for thesis-based M.S. degrees. This is primarily due to the significant difference in productivity from Ph.D. students relative to the required time training. In lieu of traditional M.S. degrees, online and on-campus M.E. degrees have been emphasized.

SBME is a graduate program first; the program must be attractive to the best graduate student prospects. Thus the SBME website has been extensively revised to make it more attractive and informative to potential students and collaborators. This process, based on feedback from all of those individuals with a stake in SBME success, will be continued. In parallel, the newsletter, social media, and email outreach will also be created/revised.

To achieve the goal of making SBME available to strong students with appropriate background, skills, and interest, Development/Advance personnel have helped to raise funds from industry and alumni to support student scholarships. From 2009 to 2014 donations/gifts grew 8-fold resulting in a current count of 3 scholarship awards.

The undergraduate program is the only one of its kind in Colorado and maintains specialized accreditation through the Accreditation Board for Engineering and Technology (ABET). Students earn this B.S. as a dual degree in conjunction one of three other degree programs within the College of Engineering (Chemical and Biological, Electrical or Mechanical).

Although the undergraduate program is only affiliated with, rather than an official subdivision of SBME as an SAU, we are highly synergistic and we would be remiss in not pointing out that among those schools seeking ABET accreditation, CSU is the first program to require a degree in a fundamental engineering discipline (Mechanical, Electrical and Computer, or Chemical and Biological) to obtain a degree in Biomedical Engineering. We heard tremendously positive feedback at two national meetings (BME-IDEA, BMES) and from industry professionals. The feedback pertains to the greater depth of knowledge in

students having the 2 degrees that is appreciated by employers. This would likely be true for any interdisciplinary (undergraduate) major, which often requires sacrifice of fundamentals to make room for novel, exciting application-oriented learning. The strength of students, having both rigorous traditional engineering underpinnings as well as fluency in current biomedical topics fostered by senior design projects, internships, Co-op opportunities, and ultimately career placements will position the SAU for expanding future collaborations in great places.

#### Research:

A distinguishing strength of the SBME program is the collaborative nature of faculty interactions across more than a dozen departments and four colleges. Together, it is essential to ensure successful recruitment of faculty in departments across the campus with interests in Biomedical Engineering.

The SAU is able to promote interactions among faculty from different disciplines (e.g., all the different departments) to help make them more competitive for the larger project opportunities in science that require large interdisciplinary teams. This is accomplished by choosing faculty additions based on collaborations (avoiding silo'ed researchers) and by having faculty present regularly at SBME seminars to make others aware of ongoing projects. Giving 1st year students the opportunity to rotate through laboratories also provides for cross-fertilization that can lead to new, or strengthen and lengthen old/ongoing collaborations.

To date, the SAU has not deliberately evaluated and tracked individual faculty accomplishments. Grant proposals are submitted through home departments, not SBME. However, the SBME was a key partner in the funding of a National Science Foundation National Research Training award to SBME faculty member Dr. Thomas Chen in 2015. Routinely, SBME faculty are among the top grant awardees at CSU.

Further, faculty who teach in the SBME have received many accolades including an Outstanding Teaching and Service award, an Outstanding Early-Career award, CSU Ventures Award for Innovative Excellence, University Distinguished Professor Awards, and the Ross M. Wilkins, M.D. Limb Preservation University Chair in Musculoskeletal Biology and Oncology in the College of Veterinary Medicine and Biomedical Sciences.

#### **Engagement and outreach:**

The SBME Director serves on the National Biomedical Engineering Council of Chairs and representatives of SBME were selected for presentations related to the BME program at CSU at the National Meeting of BME-IDEA (a satellite meeting for the National Biomedical Engineering Society).

SBME faculty and graduate students provide regular outreach in high schools in the local area in conjunction with programs funded by local industry (e.g., Northrup Grumman supported an SBME summer outreach event in the summer of 2015 in the Denver area).

#### **Planning for Improvement**

- 1. The SBME would benefit from increasing racial/ethnic diversity of its student population. This will require collaboration with the Dean as most recruitment efforts originate at the college level.
- 2. The SBME has very talented and productive faculty who teach in the degree programs. The SAU should pursue designation as a Program of Research and Scholarly Excellence through the VPR Office. Additionally, given the high level of cross-discipline collaboration required within the SAU, the faculty involved should pursue designation as a University Interdisciplinary Research Scholar.

- 3. Work with faculty within SBME to strategize, draft, and execute appropriate training grant applications (could be NSF as we have previously, NIH, or other).
- 4. Work with CSU Online to increase the scope of our ME Online opportunities. Work to create a graduate certificate program online to complement the ME degree and provide a transcript opportunity that can be accomplished for less than 30 credits.

Board of Governors of the Colorado State University System December 8-9, 2016 Report Item

#### MATTERS FOR ACTION:

Report on CSU-Pueblo approved sabbatical leaves for 2017-2018

#### **EXPLANATION:**

Presented by Richard Kreminski, Provost and Executive Vice President for Academic Affairs.

This report provides the names and term for sabbatical requests for the 2017-2018 academic year.

#### REPORT ON APPROVED SABBATICAL LEAVES FOR AY2017-2018

Sabbatical leave requests for AY2017-2018 were submitted in fall 2016. Per section 2.11.2 (Sabbatical Leaves) of the Faculty Handbook, "The purpose of sabbatical leave is to provide tenure contract faculty an opportunity to engage in research, scholarly or creative activity, or otherwise enhance professional stature as teachers and scholars." 2.11.2.2.i states in part that "Sabbatical leaves will be granted on the merits of the faculty member's application, the availability of funds, and institutional priorities... Faculty members must demonstrate in writing, as part of their application, a well structured plan involving research, scholarly or creative activity, study for advanced degrees outside their primary discipline, or other activities which will result in the faculty member's professional growth, increase the overall level of knowledge in the leave holder's area of expertise, and enhance the institution's reputation, and the students' educational experience." The following individuals submitted proposals that were reviewed and approved at the department, college/school and university levels.

Dr. Iver Arnegard	Associate Professor of English	academic year 2017-2018
Dr. Ian Brennan	Professor of Marketing	spring 2018
Dr. Krista Bridgmon	Associate Professor of Psychology	fall 2017
Dr. David Dillon	Assistant Professor of Chemistry	academic year 2017-2018
Dr. Aun Hassan	Associate Professor of Economics	spring 2018
Dr. Dana Ihm	Professor of Music	fall 2017
Dr. Steve McClaran	Associate Professor of Exercise Science	fall 2017
Dr. Chris Messer	Associate Professor of Sociology	fall 2017
Dr. Kristy Proctor	Professor of Chemistry	fall 2017
Dr. Pam Richmond	Associate Professor of Social Work	fall 2017
Dr. Karen Yescavage	Associate Professor of Psychology	spring 2018

In addition to the above sabbatical leaves, two faculty have requested Educational Leave, i.e. enhancement leave without pay:

Dr. Jonathan Poritz Associate Professor of Mathematics academic year 2017-2018

Dr. Jennifer Schlosser-Couch Assistant Professor of Sociology spring 2018

Board of Governors of the Colorado State University System December 8-9, 2016 Report Item

#### MATTERS FOR ACTION:

Report on CSU-Pueblo program reviews completed in AY2015-2016

#### **EXPLANATION:**

Presented by Richard Kreminski, Provost and Executive Vice President for Academic Affairs. This report consists of the outcome of our program review process in AY2015-2016

### REPORT ON PROGRAM REVIEWS COMPLETED IN AY2015-2016

As outlined in 1.2.6.2 of the Faculty Handbook, the duties of the Curriculum and Academic Programs (CAP) Board include being responsible for review of existing academic programs. From the "Guideline for Academic Program Self-study" maintained by the CAP Board:

"The primary purpose of systematic self-study is to maintain and support academic departments: teaching and learning; research, professional, and creative activity; and university service, community service, and outreach. It's a vehicle by which departments can better understand if and how well programs are achieving their purpose and if not, what courses of action to take to make them more successful. The program review process... represents a shift away from input-based evidence to a learning centered, outcomes-based approach to on-going improvement and planning. It is a conceptual and practical change in emphasis from conducting a program review to a useful meaningful inquiry into the program's purpose and its effectiveness in achieving that purpose. The results of the program review should be integrated into the department and campus process of planning and budgeting. It also represents a shift from an episodic snapshot of the program's effectiveness to a more relevant and useful on-going, continuous plan of action the department can use for renewal and improvement. The conclusions drawn from the program review are to be informed by evidence; that is, all claims about a program's strengths, weaknesses, and proposed improvements are to be supported by relevant, valid qualitative and quantitative evidence. This contrasts with program reviews that are largely descriptive and based on advocacy of the program."

In addition, the document notes that "Programs on a professional accreditation self-study cycle will complete the self-study required by the accrediting agency. The documentation used in the accreditation self-study for new or continuing accreditation may also be used for the campus self-study..."

The timeline for self-study development begins in the fall semester with a data-informed self-study draft submitted to the dean, an external reviewer selected in consultation with dean and chair, a report prepared by the external reviewer after a site visit and examination of the self-study, the convening of a campus seminar panel, with the CAP Board final analysis sent to the Faculty Senate for approval at the last Senate meeting in the spring semester. The explicit contents of the self-study report are as follows, with the caveat noted above (namely that programs with external professional accreditation may deviate slightly from the details below, since they must complete the self-study required by their accrediting agency):

### Contents of Self-Study

- I. Cover Page
  - A. Program name
  - B. Program college/school
  - C. Year of review
  - D. Date self-study submitted
  - E. Name of program chair
- II. Executive Summary (maximum of two pages)
  - A. Key findings
  - B. Planned action steps
- III. Response to Review Standards (see below for the precise standards)
  - A. Response to each review standard
  - B. Supporting documents and data
- IV. Supporting Documents
  - A. External Reviewer's Report
    - 1. Program strengths
    - 2. Program challenges, areas for improvement
    - 3. Summary of recommendations
  - B. Dean's Seminar Review Panel results summary
- V. Program Development Plan

Program review standards contextualize the review in the larger planning and effectiveness framework of the campus. Required documentation is included as appendices and referenced in the body of the review.

Standard 1. The purpose of the program reflects and supports the mission and strategic vision of Colorado State University-Pueblo and the mission of its school or college.

Please reflect on the following:

- 1. Purpose of the program
- 2. Alignment of the purpose with the campus mission and the program's school or college
- 3. Distinctive aspects of the program
- 4. The primary strengths and challenges of the program

- 1. Mission/purpose of the program
- 2. Campus mission statement
- 3. Campus strategic plan

Standard 2. The program engages in on-going, systematic planning that reflects the campus strategic priorities.

### Please reflect on the following:

- 1. Program's goals (desired big-picture results or purposes) and objectives (specific, measurable things the program will accomplish, at least one of which will be related to teaching and learning)
- 2. Process for developing and revising the goals and objectives
- 3. Relationship of the programs goals and objectives to program activities (i.e., describe the activities that accomplish the goals and objectives of the program)
- 4. Process of implementing the program goals and objectives

### Required documentation:

- 1. Description of the program's ongoing planning process
- 2. Program's strategic plan

Standard 3. The program provides and evaluates a high quality curriculum that emphasizes student learning as its primary purpose.

Please reflect on the on the following:

### Curriculum

- 1. Alignment of the curriculum with disciplinary standards
  - A. Establishment of and adherence to pre- and co-requisite courses
  - B. Rationale for selection and organization of courses in the curriculum
  - C. Logic, sequence, and coherence of the curriculum
- 2. Amount of time needed to complete the program
- 3. Multi-or interdisciplinary strengths of the programs
- 4. Alignment of curriculum to meet general education needs
- 5. Role of service course offerings that support other programs
- 6. Statement of course objectives that reflect the expected student learning outcomes of the program in all syllabi, including general education course offerings
- 7. Internal processes employed by the program to modify the curriculum

### **Learning Outcomes Assessment**

- 1. Learning outcomes are observable, measureable statements of what students will know or be able to do upon completion of the program
- 2. The curriculum (i.e., course objectives) is aligned with the program's student learning outcomes
- 3. Assessment measures effectively evaluate the student learning outcomes and inform curricular decision-making

- 4. Assessment results are consistently used to make changes to the curriculum
- 5. The assessment process, including program improvements, is documented.

- 1. Catalog copy of program curriculum
- 2. Curriculum and advising checklists
- 3. Frequency of course offerings and mean class size for each of the previous five years
- 4. Number of majors and minors for each of the last five years
- 5. Program's current assessment plan with curriculum map
- 6. Program's assessment reports for the previous five years
- 7. Transfer Guide and Four-Year Plans

Standard 4. The program has sufficient faculty resources to meet its mission and goals.

### Please reflect on the on the following:

- 1. Credentials of full-time and part-time faculty and instructional staff
- 2. Appropriateness of background of faculty for teaching in the program
- 3. Representativeness of faculty in terms of demographics, tenure, and diversity
- 4. Continuing growth of faculty as teachers and scholars
- 5. Adequacy of professional and pedagogical development opportunities for faculty
- 6. Presence of a positive, productive work environment in the department
- 7. Evidence of equitable distribution of instructional loads among faculty
- 8. Standards for faculty review, tenure, and promotion
- 9. Orientation of faculty and instructional staff, including teaching assistants, to goals and student learning outcomes of program

### Required documentation:

- 1. Distribution of age, tenure status, gender, and ethnic origin of faculty
- 2. Credentials for all full- and part-time faculty for the last academic year
- 3. Summary of sponsored research activities for all faculty
- 4. Summary of scholarly and creative activities by tenure-line faculty
- 5. Summary of service activities by tenure-line faculty
- 6. Current CV for full-time faculty
- 7. FTE for program faculty for previous five years
- 8. SCH production for previous five years
- 9. Course load by instructor for the past five years

Standard 5. The program attracts, retains, and graduates high-quality students.

### Please reflect on the on the following:

- 1. Diversity of student populations
- 2. Enrollment patterns relative to institutional and national enrollment patterns
- 3. Future viability of the program in terms of enrollment
- 4. Academic qualifications of students admitted compared to those of all CSU-Pueblo students
- 5. Accuracy and consistency of student advising, mechanisms to monitor progress toward

- degree and use of training to provide quality advising
- 6. Opportunities for students to engage in faculty research, independent study, study abroad, internships, honors courses, student organizations and other enriching activities that promote retention and graduation.
- 7. Processes and activities to recruit and retain students
- 8. Student performance on licensure or professional exams relative to regional and national standards
- 9. Adequacy of financial support/opportunities to recruit and retain high-quality students

- 1. Five-year program profile to include 1) the number of women, first generation, ethnic minority, and international students in the program; and 2) number of students graduated each year.
- 2. For programs with specified admissions standards, 1) entry requirements for admission to the program, 2) the number of applicants to the program, 3) the number of students admitted to the program, and 4) the academic qualifications of admitted students;
- 3. Number and types of minors completed by students in the past five years.
- 4. Employment or graduate degrees held (or in progress) by graduates
- 5. Summary of student, alumni, and/or employer survey responses

Standard 6. The program has an administrative structure that facilitates achievement of program goals and objectives.

### Please reflect on the following:

- 1. Processes in place to ensure efficient and effective decision-making, and shared governance.
- 2. Support for department chairs/associate deans and others in department or program leadership roles
- 3. Faculty involvement in ongoing program activities such as assessment; curriculum development, review, and revision; and tenure and promotion standards.
- 4. Involvement of students, alumni, and other program stakeholders in program decision-making
- 5. Evaluation of chairs/associate deans, faculty, and staff

### Required documentation

- 1. Organizational chart
- 2. Minutes of relevant department meetings

Standard 7. The program has adequate resources to meet its goals and objectives.

#### Please reflect on the following:

- 1. Adequacy of the budget to support the mission and goals of the program
- 2. Currency and adequacy of facilities and laboratories, instructional technology, and library resources to support the mission and goals of the program
- 3. Documentable program faculty and staffing needs
- 4. Effective and appropriate use of faculty and staff

- 1. Equipment, travel, technology, and operating budgets for the past five years.
- 2. List of major facilities and equipment
- 3. List of major hardware and software used by the program
- 4. List of major library resources, databases, and journals
- 5. List of support personnel, including non-teaching graduate students

In AY2015-2016, the following programs were originally scheduled to undertake a program review:

Athletic Training (BS)
Biochemistry (MS)
Biology (MS)
Chemistry (MS)
History (MA)
Mass Communications (BA/BS)
Nursing (BSN and MS)
Sociology (BA/BS)

The History Department requested a one-year delay, which was granted.

Each program review is generally hundreds of pages long. Sample materials from the program reviews are included below; one sample from each dean's report is provided, along with a sample of an external reviewer report, a departmental executive summary, and a final action plan. The materials below are first from athletic training (dean's seminar panel report); then the natural science master's programs (dean's seminar panel report; the master's programs are referred to internally as the Graduate Programs in Natural Sciences or GPNS); then mass communications (dean's seminar panel report, external reviewer report); then nursing (executive summary prepared by department prior to external reviewer visit and seminar panel report); and finally sociology (Program Review Action Plan). The external reviewers were Dr. Christopher Schmidt, Director of the Athletic Training Program at Azusa Pacific University; Dr. Haobin Wang, Professor and Chair, Department of Chemistry, University of Colorado Denver; Dr. Samuel Sauls, Department of Communications, Susquehanna University; the Accreditation Council of Education for Nursing (ACEN) site visit team; and Dr. Shirley Jackson, Portland State University. (Note that sometimes the departments and reviewers refer to an "external evaluator" rather than an "external reviewer".)

### ATHLETIC TRAINING (BS) SAMPLE:

The following is the dean's seminar panel report:

Athletic Training Program (BS)
Program Review Report
Prepared by
Sylvester A. Kalevela, Dean
College of Education, Engineering, and Professional Studies

#### A. Introduction

This report on the Bachelor of Science (BS) in Athletic Training (AT) program was prepared based on information from three main sources:

- 1. A self-study report prepared by the Athletic Training program and submitted to the Curriculum and Academic Programs Board (CAP Board),
- 2. A report prepared by and an external program reviewer, and
- 3. A program review panel discussion

The program review panel discussion was held on March 30, 2016, chaired by Sylvester A. Kalevela, Dean of the College of Education, Engineering, and Professional Studies. The seminar panel included the following individuals:

- Daniel Caprioglio, Professor of Biology
- Helen M. Caprioglio, Assistant Provost for Assessment, Student Learning and Effectiveness
- Ruth DePalma, CAP Board Representative (Coordinator of the Nursing Undergraduate Program)
- Roger Clark, Director of Athletic Training program
- Steve McClaran, Chair of the department of Exercise Science Health Promotion and Recreation (EXHPR) which house the AT program

### **B.** Procedure

The seminar started with a brief presentation from Dr. Roger Clark who introduced the Athletic Training program. Dr. Clark indicated that the BS program is a nationally accredited program with a strong professional focus that promotes high standards of education supported by instructions that emphasize competence and professionalism. In addition, Dr. Steve McClaran provided information about how the program is linked to the rest of the EXHPR department. Dr. Clark and Dr. McClaran also spoke of the program challenges and echoed the sentiments of the external program evaluator. They also informed the panel about the need to transition the BS

Program to a Master's level program as dictated by expectations of the Athletic Training profession and by the Commission on Accreditation of Athletic Training Education (CAATE). Following the program introduction, the panel discussed a variety of items including program enrollment, internal capacity of instructional services, marketing of the program, capacity of

enrollment, internal capacity of instructional services, marketing of the program, capacity of external clinical facilities, program cost, and program needs. The panel observed that it was in agreement with most of the sentiments from the external evaluator. For example, the panel concurred with the sentiments of the external evaluator that the program needs to define its measurable program objectives. The remainder of this report provides a summary of program

strengths, weaknesses, and opportunities; on the basis of which recommendations for program improvement are suggested.

#### C. Strengths

- The EXHPR department provides a great home for the Athletic Training (AT) program
- Current relationship with the University's Athletic Department enriches the AT program
- Broad diversity of student population including high school graduates aspiring to obtain a Bachelors degree in AT, students from two-year community colleges, and non-traditional students
- Local medical community members (orthopedic and family practitioners) are highly supportive of the AT program
- Close collaboration with local high schools resulting in opportunities for clinical practice for students at the schools.
- Highly qualified and committed faculty with passion to teach.
- Student admission into the program is based on a policy established to enhance success prospects for the admitted students.

#### D. Weaknesses

- Low institutional funding for the program makes it hard to maintain attractive faculty salaries in the program.
- The AT faculty position that also serves Athletics significantly reduces the AT program instructional capacity.
- Limited number of community facilities and preceptors for student clinical practice off campus
- Lack of clearly defined and/or measurable program objectives and student learning outcomes
- Added cost of degree program due to needing a Masters in the field for certification

#### E. Opportunities

- Online/hybrid course offerings
- Use of off-site facilities to increase capacity of clinical opportunities
- Potential for a Masters program
- Alternative funding sources for the master program including University Foundation and Athletics Department support.
- Athletics benefits greatly from the AT program. Therefore, funding support from Athletics could be arranged
- Increased future enrollment in the program if other institutions decide to shut down their BS programs and not transition to masters level programs.
- Institutional support/funding for marketing the new Masters program to areas that are closing down their programs

#### F. Recommendations

The AT program should clarify its goals and objectives, confirm its intention to transition the BS program to a Masters program, and work with the administration to have a decision made regarding

its future. In addition, the following are recommended for both the short-term and long-term plans for program operations:

- Develop a recruitment plan and marketing plan with the university
- Communicate clearly program objectives and expectations to internal and external constituencies and make effort to seek long-term funding.
- Update the assessment plan to include alignment of course and program student learning outcomes with specific and measurable outcomes
- Develop more partnerships with local private enterprise organizations in order to increase funding support and clinical sites and employment opportunities for AT graduates.
- Investigate the legal situations regarding opportunities for using out-of-state clinical sites.
- Enhance the online and/or hybrid course offerings.

# NATURAL SCIENCES SAMPLES (BIOLOGY, CHEMISTRY AND BIOCHEMISTRY MS PROGRAMS):

One external reviewer evaluated the programs in combined form. The following is the seminar panel report from the Dean:

#### **GPNS Program Review**

Prepared by
David Lehmpuhl, Dean
College of Science and Mathematics

This report of the Graduate Programs in Natural Sciences program review, is the result of three major independent procedures:

- 1) a self-study report prepared by Dr. Brian Vanden Huevel, Chair of Biology with contributions from Dr. Rick Farrer, GPNS program director for Chemistry and Biochemistry and consultation with the Dean and Faculty of the College.
- 2) an external reviewer's report prepared by Dr. Hoabin Wang (Chemistry Professor and Chair, University of Colorado, Denver), and
- 3) a seminar panel meeting co-chaired by Dr. Brian Vanden Heuvel and Dr. Rick Farrer along with CSM Dean Dr. David Lehmpuhl. The following comprises a summary of the members of the seminar panel and those in attendance at the meeting of February 19, 2016. Seminar panel members were provided copies of the program review self-study and external reviewers report.

#### Seminar Panel Summary from February 19, 2016 meeting:

#### **Member of Seminar Panel:**

Brian Vanden Heuvel, co-chair (Chair of Biology)
Rick Farrer, co-chair (GPNS Director, Chemistry and Biochemistry)
David Lehmpuhl, (Dean of CSM)
Chad Kinney, (Acting Chair of Chemistry)
Dan Caprioglio, (GPNS Director, Biology)

Bruce Lundberg, (Chair Mathematics) Janet Nichols, CAPB representative Helen Caprioglio, Provost Representative

**Procedures**: The meeting began with an overview of the GPNS program by the panel co-chairs (Brian Vanden Heuvel and Rick Farrer) based on the self-report and the external reviewer report from Haobin. Discussion ensued of the program strengths and weaknesses, however, much of the discussion focused on brainstorming action items and ideas for program improvements. The meeting was closed with a summary of key findings and requests for any suggestions and recommendations to be included in this report. The following is a summary of strengths, weaknesses and recommendations discussed at the panel meeting:

#### **Strengths:**

- There were 29 students in the GPNS program during the review period 2010-2014 which is close to capacity for students completing the thesis option.
- The GPNS disciplines are projected to have 10-19% growth in the next 10 years so demand for the program should remain consistent or grow.
- Currently there is a 1.8-2.0% unemployment rate for the MS degrees offered in the GPNS program so students completing the degree should be able to find employment. Actual employment statistics for the graduates from the program has been difficult to obtain.
- Facilities for the GPNS programs are good. Space is available for research and recent implementation of a program fee in chemistry has enabled some resources to be available for equipment maintenance, repair and replacement. A source of funding outside of a direct student fee would be ideal.
- The presence of a MS program strengthens and forces research to occur in the chemistry and biology departments.
- The presence of a MS program provides a strong faculty recruitment tool.

#### Weaknesses

- Only 50-60% of the students actually earn degrees from the program. Anecdotally a number of students who are not receiving support end up working and once making a paycheck elect to not finish the degree. A couple of students have been released from the program for not meeting GPA requirements.
- Faculty resources are decreasing and the program weighs heavily on the undergraduate program. Resources for travel and research come from the department or foundation accounts. A budget for the program is not available.
- Our program has fewer faculty and fewer students than our peers but most of our peers have a coursework-only option which we are unable to offer due to lack of faculty instructors. Additional courses would have to be offered more often to allow student to fulfill a coursework Masters option and that requires additional resources.
- Although 100% of the chemistry faculty would retain the program, only about 50% of the biology faculty would keep the program considering current funding levels.
- The number and amount of student support creates difficulties with recruitment, leading to a mostly in-house graduate program. For example, the U. of WY provides \$27K + tuition and has easier entrance requirements and are accepting as many graduate students as they can.

- Related to the resource issue is the length of time to degree. The average is 48 months to degree for biology students and 32-36 months for chemistry, which is too long. Many students work to raise income in addition to the graduate work significantly increasing the time to degree.
- Loss of the RAGE program funding and the inability of the university to institutionalize any of the initiatives has resulted in the loss of the graduate writing course instruction and will negatively impact degree completion for current and future students.

#### **Recommendations:**

- In order for the GPNS program to grow, additional faculty lines are needed to accommodate additional thesis supervision.
- Target grants/scholarships for good students.
- Funding for faculty and student development/travel needs to come from E&G sources instead of Foundation accounts.
- Out-of-state students should get one year of in-state tuition. This has just recently been implemented and needs to be capitalized on.
- Need a strategic plan to reflect the CSM strategic plan which is currently being created.

#### **GPNS Action Plan:**

Specific action plans are split into two categories, those requiring resources and those not and are a result of all three components of the program review.

#### Proposed actions not requiring resources:

- 1) It became apparent during the review process that the Graduate Programs in Natural Sciences are integrally entwined with the undergraduate programs in Biology and Chemistry. Almost all coursework and teaching is accomplished through stacked courses at the 400 and 500 level. As a result it is quite difficult to obtain data specific to the GPNS program. Costs are split and difficult or impossible to differentiate from the undergraduate program and it was also apparent that there are procedural and capacity differences between the programs housed in biology versus those in chemistry.
  - a. Plan: Request that the formal, separate review of the GPNS degrees be discontinued and that the reviews of the graduate programs are included in the regularly scheduled program reviews for the Chemistry and Biology Program Reviews. The Chemistry M.S. and Biochemistry M.S. would be included in the Chemistry Program Review while the Biology M.S. would be included in the Biology Program Review.
  - b. Timeline: Request should be made during the 2016 CAPB presentation of the GPNS Program review.
  - c. Responsibility: Program Directors and CSM Dean
- 2) The ability of the graduate students to complete the requirements for the degree is important but difficult to discern from the entrance exams as evidenced by the dismissal of two chemistry graduate students due to poor GPA's.
  - a. Plan: Assess the scholarships available for graduate students to ensure that the maximum advantage is taken of the available resources to recruit graduate students capable of completing the degree. Also revisit the entrance requirements

- for the GRE and TOEFL to determine if they still align with the correct percentile of graduate student we wish to admit.
- b. Timeline: Assessment and any changes needed should be done for the scholarship application process commencing during Spring 2017 for admittance in Fall 2017.
- c. Responsibility: Program Directors and the Chemistry and Biology Departments.
- 3) Recruitment for the graduate program falls under two areas, recruitment of new graduate students working toward the degree, and recruitment of students to help fill graduate-level courses. Because the program (biology in particular) is close to capacity, graduate student recruitment would help increase the pool of candidates and ensure that the program is operating to its fullest capacity and allow the program to enhance its selectivity and reputation. Recruitment of students into graduate courses will ensure the cost effectiveness of offering graduate-level curricula. Assuming no additional resources, these plans are kept modest.
  - a. Plan for additional graduate students: Investigate any collaborations with Ft. Collins that might allow students not accepted there to be considered for a graduate program at CSU-Pueblo. However possible, expand recruitment out-of-state to take advantage of the in-state tuition offering for the first year.
  - b. Timeline: Can begin immediately and would be ongoing.
  - c. Responsibility: CSM Dean and the GPNS Program Directors.
  - d. Plan for additional students in graduate courses: Investigate the possibility of working with area teachers who may want to update their credentials to meet HLC requirements. Investigate the possibility of offering/developing hybrid or online courses to serve a working population. Ensure scheduling of courses allows interested and qualified undergraduates to enroll.
  - e. Timeline: Can begin immediately although these suggestions may want to be thought out by the programs and added to GPNS Strategic Plan goals (see Action Plan #4).
  - f. Responsibility: GPNS Program Directors and the Biology and Chemistry Departments.
- 4) The University has a new Strategic Plan and the College is beginning work on a Strategic Plan that fits within it. Once the College plans are complete the GPNS program can develop its own Strategic Plan to fall under both.
  - a. Plan: Develop a strategic plan for the M.S. Programs within the departments.
  - b. Timeline: Initial discussions can begin immediately, with the full plan developed after the CSM Strategic Plan is complete, currently scheduled for Dec, 2016.
  - c. Responsibility: Department Chairs for Chemistry and Biology with significant input from the GPNS Directors, assuming the first Action Plan of this document is successful.

#### Proposed actions requiring resources:

- 1) The funding for the TA's in the program has dropped from 6 to 5 and the amount of support has not increased in almost a decade. To remain the least bit competitive, additional support for the TA lines and increasing the number of TA's supported is important.
  - a. Plan: Request funding is restored to a minimum of 6 TA positions.
  - b. Timeline: This request was completed during the Fall 2015 budget requests.

- c. Responsibility: CSM Dean
- d. Plan: Request additional TA lines.
- e. Timeline: This request was completed during the Fall 2015 budget requests but will almost surely have to be repeated in coming years.
- f. Responsibility: CSM Dean
- 2) The time to degree completion could be improved by lessening the workload of current TA's. Current TA's are normally required to teach 3 lab sections in addition to taking 9 credit hours of coursework. Because the TA support is not enough to cover tuition and living expenses, additional income is often needed by graduate students, which many times takes the form of a second job. Reducing the workload to 2 lab sections with a third "section" of time where the student is available for help with faculty grading may be a way to decrease graduation time. Additionally this could free up much-needed time for faculty members teaching large lecture sections.
  - a. Plan: Work at reducing the TA work requirement to 2 lab sections with grading availability. This may require additional adjunct funding.
  - b. Timeline: As soon as possible.
  - c. Responsibility: CSM Dean
- 3) Support for the graduate program through a budget for research work and for professional development is needed.
  - a. Plan: Request such support through the University Budget process.
  - b. Timeline: Fall 2016 and likely years thereafter.
  - c. Responsibility: CSM Dean

#### MASS COMMUNICATION (BA/BS) SAMPLE:

The following is the report of the dean in the seminar panel, followed by the report of the external reviewer:

**TO:** Janet Nichols, Chair Curriculum & Academic Programs Board and members:

Donna Souder; Ida Whited; Helen Caprioglio; Amy Robertshaw; Ruth DePalma;

Rick Huff; Carol Langer; Karen Yescavage

**FROM:** William Folkestad, Dean, College of Humanities and Social Sciences

**DATE:** February 24 2016

**RE:** CHASS Dean's Report on the Mass Communications Department and Center for

New Media Program Review Seminar

Per the general intent of program review seminars, this discussion was designed to provide members of the academic community an opportunity to come together to assess and recommend ways to strengthen the program. All seminar panel members contributed to the discussion and made meaningful suggestions for the future of the program at CSU-Pueblo.

The Mass Communications Department and Center for New Media (MCCNM) Program Review Seminar discussed three principal topics.

• The self-study report prepared by Dr. Ebersole and faculty members of the MCCNM Department.

- An external reviewer's report prepared by Dr. Samuel Sauls of Susquehanna University, Selinsgrove, Pennsylvania.
- A program review question and answer session chaired by William Folkestad in conjunction with Dr. Ebersole, Department Chair, responding to Dr. Richard Kreminski, Provost, Dr. Helen Caprioglio, Assistant Provost, and Dr. Ida Whited, CAPBD representative.

#### Procedure

The seminar panel discussion took place on January 27, between 1:00-2:00 pm in the conference room of the Buell Center. Dr. Ebersole reviewed the process he had directed and provided a summary of the self-study findings. Those present discussed this overview of the self-study in relation to their own reading of the MCCNM document, and the external reviewer's report. Dr. Ebersole clarified several points brought out by the external reviewer that have changed since the review process ended. The more important change was administrative approval to fill the three visiting assistant positions that had been vacant for several years.

The external reviewer's report was very commendatory, but it as well highlighted the pressure points acting on this quality program. The panel discussed a number of issues related to the strengths and challenges faced by the department. For example, Dr. Whited raised the question regarding a possible pre-professional student society, in addition to tracking time from graduation to employment.

The remainder of this report briefly lists the strengths and weaknesses of MCCNM per the external reviewer's report.

#### **Strengths**:

- MCCNM benefits from an engaged and dedicated faculty;
- MCCNM employs efficient and effective shared governance;
- MCCNM students and faculty were commended by the external reviewer for the awards received by Rev89, the Today Magazine, and the daily, Rocky Mountain PBS production "Homework Hotline."
- MCCNM students benefit from audio and video state-of-the-art software and hardware supported by associated computer technology.

#### Challenges:

- Curriculum and Teaching
  - The program's dependence on MAC computers requires regular funding and dependable IT support.
  - o It was strongly suggested that the department establish a depreciation schedule within the existing fee structure to support technological needs.
  - o MCCNM syllabi list student learning outcomes. However these require evaluation in regard to implementation and measure.
- Increased funding for faculty lines, technology, and technological support.

#### **Recommended Action Plan and Timeline:**

The MCCNM action plan and timeline will be provided by Dr. Ebersole. The proposed plan and timeline will adhere to Dr. Sauls's recommendations.

Next, the report of the external reviewer:

January 1, 2016

To: William Folkestad, Acting Dean

College of Humanities and Social Sciences

Samuel Ebersole, Chair Mass Communications Department

From: Samuel J. Sauls, Susquehanna University

RE: <u>External Evaluation of Mass Communications Department and Center for New Media</u>, Colorado State University-Pueblo

Please consider this my report as an external evaluator for the Program Review of the Mass Communications Department and Center for New Media at Colorado State University-Pueblo. This assessment is provided as supporting documentation of the program review & self-study detailing strengths, challenges, and recommendations.

<u>Process</u> – A brief overview of the structure of the review, including details about the groups or individuals consulted.

The Mass Communications Department and Center for New Media 2015 Five Year Program Review & Self Study provides a comprehensive detail of curriculum issues, strategic planning, and pedagogical and technology factors in the department. The supplemental materials (Appendix) of the review include useful details on the department, as well as supporting data acknowledging current and former student perceptions of the department attributes. The Self-Study Team, under the leadership of Dr. Ebersole, should be commended for this extensive report which includes program strengths and weaknesses, as well as recommendations and action plans. The review can truly serve as a working document.

In addition, a one-day on-site campus visitation by the external reviewer was conducted on December 4, 2015. The schedule included meeting with the following individuals from the detailed areas:

- Dr. Samuel Ebersole, Chair of MCCNM
- Scott Jones, RMPBS
- Tour of BCC, Rev89, TODAY
- Lunch meeting with MCCNM students
- Meeting with department faculty
- Dr. William Folkestad, Dean of CHASS
- Dinner with available MCCNM faculty

The open schedule allowed for additional informal conversations with numerous faculty, staff members and students in the department providing for all-encompassing viewpoints.

<u>Review of Academic Programs</u> – This is intended to take advantage of the outside perspective the reviewer brings in analyzing the department's curriculum and evidence for learning outcomes. The following should be considered as guides:

- a. Overall assessment of the quality of graduates produced by the programs in the department.
- b. Do the department's learning outcomes reflect the current state of the discipline?
- c. Is the curriculum current and in alignment with other similar programs in the country?
- d. Are there specific recommendations regarding the curriculum?

The curriculum (blue) sheet which details the 42-credit curriculum and three areas of study to the complete the major is very easy to understand and provides a clear detail for each of the department options. The core requirements (required of all MCCNM majors) and each of the required emphasis areas provide for what can be viewed as a unique approach within the major. This undertaking assures that all Department majors are exposed to communication methodologies, theories and applications. Such an integrated undertaking helps to ensure consistent and uniform learning outcomes. The catalog copy of the program curriculum, along with the curriculum and advising checklists, in the Appendix provided for detail.

As described in both the Self-Study (page 4) and Appendix (Standard 1.1) the mission of the Mass Communications Department and Center for New Media is met through offerings in the three emphasis areas of (1) Integrated Communication (Advertising, Journalism, Public Relations), (2) Electronic Media, and (3) Journalism. The program attempts to attract, retain, and graduate high-quality students from a diverse student population (as outlined in the basic demographics presented on p. 22 of the Self-Study).

Based on total fall FTE, the Mass Communications department has been on an upward track with the greatest gain between 2011-12 and 2012-13, and closely mirroring these numbers in 2014-15. While the most recent three years have been fairly flat, the Self-Study notes that this was while the University at-large has seen a downward trend. (It is noted that total headcount in the department has experienced a minor decline in the past two years.) Furthermore, the department's average program retention rate over the four years with available data is 66.64%, substantially higher than the University's average of 63.86%. Also, the 6-year graduation rate for the department (39.13%) is substantially higher than the University (32.75%). In total, these facts place the department in very good standing within the University.

The Self-Study specifically addressed concern of academic standards when it made note that like many departments at CSU-Pueblo, Mass Communications has a large number of students who are inadequately prepared for the academic rigor of their curriculum. Noting that student success can be measured by GPA, which in turn can have a negative effect on retention and graduation rates, the department changed its policy in 2006 to require a grade of C or better in all MCCNM courses. While this has slowed the progress of some students, it should be applauded as it is offset by the benefit of better-prepared graduates who are able to maintain the reputation of the program. Additionally, more rigorous requirements can attract higher quality students.

The Mass Communications Department and Center for New Media is commendable for various facets that are student focused. Most impressive are:

- Every MCCNM major is required to complete a Media Lab at either Rev89 radio, the Today magazine/website, or Rocky Mountain PBS television.
- MC Madness. Held in late March whereby students can receive immediate advising and learn more about the aspects the department has to offer, including the various Media Labs.
- The MCCNM internship (Field Experience, MCCNM 494) fostering positive relationships with area professional entities.
- MCCNM faculty member's evaluation of student portfolios enrolled in the Senior Seminar capstone course as demonstrated in the student satisfaction responses contained in the Appendix, as well as alumni supporting comments (Standards 5.4 & 5.5).
- Every year the MCCNM department distributes approximately \$40-45K in scholarships to approximately 20 new and continuing students who are declared majors.

While the MCCNM program is not accredited by an external agency, the curriculum is consistent with similar curricular programs across the country. There are though entities to which the department could entertain for curricular guidance. For example:

- Public Relations Option, the Public Relations Society of America (PRSA).
- Broadcasting Option, the Broadcast Education Association (BEA) and University Film and Video Association (UFVA)
- Journalism Option, ACEJMC-The Accrediting Council on Education in Journalism and Mass Communications.

\*Student and faculty comments regarding curricular issues are also detailed in the next section.

<u>Challenges</u> – The challenges relate specifically to the department's ability to meet the goals of its own vision.

<u>Opportunities</u> – These are the specific recommendations designed to assist the department in achieving its goals.

<u>Recommendations</u> – Broad and specific recommendations to the department, school, and central administration regarding all aspects reviewed during the visit.

<u>Considerations</u> – Specific to the department/program.

As opposed to addressing challenges, opportunities and recommendations individually, a converged approach follows that looks at individual areas of note and concern. Opportunities and recommendations are provided where appropriate in each individual area.

#### Challenges

<sup>\*</sup>Ascertaining of achieving learning outcomes in regard to overall departmental academics is addressed in the next section of this report.

The self-study highlighted that the current student evaluation process is an online survey and participation rates are very low, thus calling into question the validity of the responses.

Mac computers remain the preferred platform for media creation. And while the University's IT department provides support for PCs, they have been unable to support the Macintosh computers on campus for the past several years. With the anticipation that IT is to have a position about to hire in this regard, it is hoped that Macintosh computer support will be forthcoming. Additionally, it is understood that IT plans to upgrade the academic labs in summer 2016.

According to the self-study (and included in the sample syllabi provided), the statement of course objectives that reflect the expected student learning outcomes of the program are in all syllabi, including general education course offerings. While MCCNM course syllabi reflect SLOs applicable to the course, program SLOs in all syllabi have not been implemented. This will be a topic of discussion at the department's retreat. The Outcomes Curriculum Map as included in the Appendix (Standard 3.8) dwells into this area.

Also stated in the self-study was an unsatisfactory result in the area of critical thinking from last year's assessment review, causing the department to rethink how it incorporates critical thinking exercises in the 200-level courses in particular. This topic was expressed during the meeting with the faculty as a group and noted later in this report.

The department is scheduled to begin the process of reviewing and revising tenure and promotion standards in the upcoming year. The department should utilize resources of both the Broadcast Education Association (BEA) and University Film & Video Association (UFVA) for reviewing "creative works" in the tenure process.

#### Need for More Faculty

As expected, a great deal of the conversation by the external reviewer with the MCCNM Chair focused on faculty alignment within the department. While the Integrated Communication area has the highest number of majors, faculty appear to be evenly split among all three areas (Integrated Communication, Electronic Media, and Journalism.) As of fall 2015, of the 7 full time faculty, 4 held the ranks of Full/Associate Professors with a combined 50 years of academic experience; the remaining 3 as first or second year at the Assistant Professor level.

In detail, at the end of the spring 2015 semester there were four full-time tenured faculty and active searches for one tenure-track and two visiting professors. In addition the department has a full-time media manager and a half-time administrative assistant. The faculty and staff serve over 220 majors and minors. The self-study points out that the last two program reviews noted the high student/faculty ratio and recommended increasing the number of faculty. This has not occurred. MCCNM faculty have carried a 4/4 teaching load since the inception of the program (detailed in Appendix Standard 4.9). At the same time they have produced scholarly/creative work and contributed meaningful service in leadership roles at the university, in the professions, and community (see faculty achievements in the Appendix Standards 4.4-4.6).

Noting that retirements and departures of faculty, and subsequent replacements with temporary positions, have limited the ability to respond to student demand, this has been cited as a goal to address within the area of enhancing academic excellence, as well as a strategy to replace

visiting Assistant Professor lines with tenure-track lines. As a result, three tenure track positions for fall 2016 have been approved, each replacing two visiting Assistant Professor lines and one retiring Associate Professor line. This will allow for the recruitment of those holding a terminal degree (Ph.D. or MFA) which will serve to foster the program's academic standing as these individuals move through the tenure process. (NOTE: Faculty needs are further discussed as an addendum at this end of this report.)

#### Fees

A departmental fee structure can be used to support the program infrastructure. Applicable charges for specific courses or subject areas could allow for a continued stream of funding for technology and program maintenance, acquisition and upgrades. Examples of fee structures provide for either area specific (audio, video, computer, etc.) support or combined support whereby funds are pooled and allocations are made on a needs basis throughout the department or program. Students appreciate that the fees paid are put directly back into their program and facilities are available for their direct utilization.

Currently, MCCNM program fees generated by student enrollment help to fund computer hardware and software, production equipment, and other technology used by students (see Appendix pages 330 & 331). The department should investigate the possibility of initiating a "depreciation schedule" within the fee structure to replace equipment/software on a rotation/scheduled basis (i.e., 5 years or 10 years). Given that the department is a technology-intensive program, it has been required to purchase and use online software.

#### **Funding**

The department faculty development budget allows for \$500 per full-time/tenure-track faculty to help offset the cost of travel. Participation in some activities is hampered by limited travel funds. The self-study comments that some related budget shortfalls and resulting reductions in staff and services have taken a toll on department morale.

There has been a marked decline in interest monies generated by the account from the sale of the KTSC-TV license in 2000 from \$40,000 to less than \$10,000. A percentage of the interest on the revenue from the sale of the license to RMPBS was allocated to departmental scholarships and equipment/facility needs. However, for various reasons that are still unclear (according to the self-study), the amount generated by those funds has dropped dramatically.

The budget for Rev89 radio (KTSC-FM) has been \$7,500 per year.

Likewise, the budget for the Today website/magazine has been \$2,500 per year. Today magazine has been published once each semester (fall and spring) at a cost of nearly \$12,000 per issue, while also supporting its website.

#### **Tracking**

A specific system for tracking graduates, including tracking alumni placement (an integral role in Outcome Assessment) can help in recruitment. Data can also be garnered to attract transfer

students and note the needs of both minority and non-traditional students. Graduate rates were extremely helpful in the Program Review, as were retention rates. This information was complimented by an accounting of faculty achievements in the Appendix (Standards 4.4-4.6). Such detailed information about faculty activities (publications, presentations, performances, external activities, etc.) could be available for promoting the Department, College, and University in program-related matters.

#### Facilities

The use of the current equipment/technology is impressive. The Department is utilizing current state-of-the-art programs (software) and equipment (hardware) in both the audio and video areas, including the associated computer technology. It was evident through on-site viewing of students working on productions that contemporary standards are being utilized in preparing students for "real world" applications. 6

The stand-alone Center for New Media which houses the Mass Communications Department is impressive with the facilities of Rocky Mountain PBS television. Having the visitor's center located in the facility actually plays in the favor of both the department and University. As anticipated, the continued upgrade/update in the building structure and hardware/software components will serve to provide a great boost to faculty/staff/student moral and student recruitment and retention. This is a factor upon which the University central administration needs to be aware (see the following discussion).

#### **Keeping Current**

The department identification of the top trends in terms of curriculum and the overall educational experience (for example technological changes, the ongoing effects of the privatization/defunding of public education and rise of an administrative 'audit culture', and the globalization of practices of production, distribution and consumption of culture & communication), further illustrates that the unit must be aware of current trends as they impact higher education. Each of the areas of Integrated Communication, Electronic Media, and Journalism must align themselves to the realities of industry convergence, consolidation, and content creation.

To this end, a formal departmental advisory board could greatly assist in the response to these and other changes to further ensure the continued success of the Mass Communications Department and Center for New Media at Colorado State University-Pueblo. Such an alignment could be initiated beginning with alumni contacts, as well as current area internship sponsors.

#### **Strategic Planning**

The Mass Communications Department and Center for New Media plans to invest its energy and resources in various ways as noted in their report as Planned Action Steps. These are intended to ensure that an applied department design is undertaken to prepare graduates to work in the media industries, as well as pursuing graduate study.

This is evidenced by the fact that over the review period the department had 245 students graduate with either a BA or BS in Mass Communications. This is further enhanced by the Department's initiative to foster "image building" through the continued contributions to the local community and region by producing media content for public consumption (Rev89 radio and Today website/magazine) and partnering with KTSC/Rocky Mountain PBS to create and deliver media programming for the Southeastern Colorado region. These endeavors have allowed the department to secure approximately \$91,000 in underwriting and advertising support over the past five years.

The goals of the action steps of the department as presented are certainly achievable within the available resources. As with any strategic plan, implementation and continued assessment are key to projected success. It is advised that clear directives of the program goals are provided within the action plan to ensure that completion dates\* are met. Further tasks might be undertaken based upon recommendations included in this report.

\*It should be noted that the departmental retreat (typically scheduled during fall convocation) provides for an opportunity to engage in long-term goal setting and strategizing. Any proposed goals and strategies are scheduled to be discussed at the spring 2016 retreat with an implementation schedule planned to begin in fall of 2017.

#### Faculty and Students

Everyone was very collegial from the staff, to faculty, to central administration. It was evident that the University is an "inviting working/learning/engagement environment." I was very impressed with the students that I met. They spoke very highly of the faculty and the program, as well as the University. The students were articulate and I appreciated the opportunity to meet with a group representing the numerous facets of the department. In detail, they included:

• 9 Integrated Communication majors, 3 Electronic Media majors, and 2 Journalism majors. Of those students, 7 had experience at the Today magazine/website, 5 at Rev89 radio and 4 on the production of "Homework Hotline" at KTSC/Rocky Mountain PBS

The students expressed appreciation for the "on-hands" environment, noting in particular how the faculty are very helpful and not judgmental. A concern noted by a few students was that of many liberal arts institutions with the math requirement for the BS degree and the foreign language requirement for the BA degree. Stating that the Internship program was very good, the students did express a concern with the turnover of faculty ("in flux" as they put it with not knowing "who's teaching what?"). Four of the students had transferred from local community colleges and those hoping to pursue graduate studies felt as those the curriculum was preparing them for such. Many of the students wish there were more media lab hours, while a few also expressing a need for detailed prerequisite courses to reduce overlap in course content.

The discussions with the faculty as a group focused initially on curriculum, including the idea of eliminating the designated three areas of study and moving to a more general approach. Positive aspects of the current alignment provides for keeping focus and separation (for example, between news and public relations), with the negative side being there is a "blurring of the lines" between

the areas. The budget constraints supporting in particular the Today magazine/website and Rev89 radio were noted in detail by the faculty. With the turnover of the faculty during the 5-year review period, there was concern as to needed courses not being taught. In sum, the faculty expressed their approach of the inclusion of "critical thinking" with Mass Communications while viewing the "big picture" as applied to the real world.

#### Considerations

Graduate Program. While not part of the discussions during the one-day on-site campus visitation, the department might wish to explore the development of a graduate program and consider the advantages that such a unit can offer. Specifically, to help alleviate faculty demand on teaching, graduate Teaching Fellows could cover sections of such courses. Additionally, graduate assistants and teaching assistants could allow for larger sections of courses, reducing the number of sections needed. Furthermore, graduate research assistants could align with faculty in their research and creative activities to foster both academic publications/ presentations and grant opportunities. A graduate program would enhance the reputation of the Department and University and promote student and faculty recruitment. 8

Study Abroad Program. Currently, there is no Study Abroad offering specifically in the Department (it is available University only). The department might consider mounting a communications centered study abroad to a major media center (i.e. London, New York, Los Angeles). An abbreviated (2-week) program would be a good starting point to a more extensive (summer session, one semester or full-year) program. The cultural and study-focused advantages to the student (as well as the participating faculty) could be outstanding.

#### **SUMMATION**

I concur with the strengths and challenges noted in the previous self-assessment reports of 2005 and 2010. This is based upon an engaged and dedicated faculty, an integrated approach exposing students to the theory and practice of communication, and appropriate co-curricular activities and student opportunities across the discipline that serve to enhance learning in each of the three emphasis areas (Integrated Communication, Electronic Media, and Journalism).

Endorsing the activities of the faculty, their students and the curriculum of the Mass Communications Department and Center for New Media at Colorado State University-Pueblo, in 2014 the Broadcast Education Association (BEA) named Rev89 radio the Signature Station of the Year. This is the highest award given to a non-commercial radio station. The fall 2014 edition of the Today magazine was honored with the top award by the Society of Professional Journalists (SPJ) in their Region 9 Mark of Excellence. The daily RMPBS television production "Homework Hotline" with local area schools is a unique undertaking.

While the self study states processes in place to ensure efficient and effective decision-making and shared governance, it was obvious through discussions with the department faculty that this approach is utilized. Furthermore, the department is commended for its acceptance of being an integral part of the University structure; working within a corporate model as it understands the importance of course offerings for good of the University; the approach as a social service

agency through such applications as those exhibited by its media outlets outreaching to the local community; and adherence to the Community of Scholars through the various publications, creative works, and conference presentations of the faculty who are active in their respective academic organizations.

Based on my review of the Mass Communications Department and Center for New Media 2015 Five Year Program Self Study and associated support materials (Appendix) and my campus visit with faculty, staff and students, I would conclude that the program is succeeding in its charge and is in alignment with other similar programs in the country.

#### NURSING (BS AND MS) SAMPLE:

Nursing program MS Executive Summary (prepared by nursing program Associate Dean and graduate nursing program coordinator):

#### **Executive Summary**

#### **Standard 1: Purpose and Mission**

Standard 1 is met. This mission is consistent with those of the University and the College of Education, Engineering and Professional Studies (CEEPS).

#### **Standard 2: Ongoing Systematic Planning**

Standard 2 is met. The nursing department's Systematic Evaluation Plan (SPE) is based on NLNAC standards and criteria and is used for continuous quality improvement. As data is collected and analyzed, the findings are used to inform program decision-making.

#### **Standard 3: Curriculum**

Standard 3 is met. The integrated curricular design is evidence-based and flows from the nursing department's philosophy through an organizing framework. The program outcomes are congruent with established advanced nursing practice standards and competencies Classroom and lab courses are taught in a hybrid format. Practicum experiences provide students with teaching and clinical experiences in a variety of settings and with patients from diverse ethnic and cultural backgrounds.

#### **Standard 4: Faculty**

Standard 4 is not met. Although graduate faculty members are academically and experientially qualified and maintain expertise in their areas of teaching and administrative responsibilities, there are not enough in full-time tenure track positions. Adjunct instructors comprise about 70% of the total faculty workload.

#### **Standard 5: Students**

Standard 5 is met. Nursing student policies are congruent with those of the university, publicly accessible in both print and electronic formats, non-discriminatory and consistently applies. The policies that differ include: selection/admission/dismissal, academic progression,

expected student behaviors in the classroom and clinical practice areas, academic and professional standards, requirements for clinical participation and graduation requirements.

#### **Standard 6: Administration**

Standard 6 is met. The associate dean, who is academically and experientially qualified, is accountable for the administration, planning, implementation, and evaluation of the graduate and undergraduate programs and is granted institutional authority to meet the requirements of the Nurse Practice Act, the CBON Rules and Regulations and all other state/federal regulations. The associate dean works closely with the CEEPS dean who provides support person. The graduate program coordinator has a DNP degree and 12 years of clinical practice which meets national criteria. Students, alumni and nursing advisory board members have input in program decision-making.

#### **Standard 7: Resources**

Standard 7 is not met. Fiscal and other institutional resources are not adequate to support the nursing education unit. The amount budgeted for nursing has been cut by 20% over the last five years and faculty FTE has decreased. Yet student enrollment has stayed steady . Non-nurse support staff is minimally able to keep up with the current demands of faculty and students. There is no support for grant writing and administration.

#### **Planned Action Steps**

#### Standard 2: Faculty

- Recruit at least two more doctorally-prepared faculty with teaching experience as tenure track positions become available (One by fall 2016 and one by fall 2017)
- List on position announcements, under "Required Qualifications", that a doctoral degree and nine credits of education courses are required
- Increase faculty salary to be competitive with other universities of our size as funds become available
- Provide release time for scholarly activity beginning fall 2016

#### Standard 7: Resources

- Secure a grant writer by fall 2016
- Ensure that department receives 64% of graduate differential tuition for FY 2016-2017
- Hire full-time Simulation Coordinator by Fall 2016
- Hire part-time simulation technician by Fall 2016
- Improve IT infrastructure

#### NOTE:

Accreditation Commission for Education in Nursing (ACEN) provides external reviewers for the CSU-Pueblo Nursing Program. The last Graduate Program site visit was in February 2011 and the last follow-up report was October 2013. The next visit is scheduled for spring 2019. Three visitors

were from HLC accreditation institutions and demonstrated knowledge and experience in professional accreditation of nursing programs. ACEN is approved by the US Department of Education

#### SOCIOLOGY (BA/BS) SAMPLE

SOCIOLOGY Program Review Action Plan (prepared by department chair of sociology) 2016

This action plan is based on the Sociology program self-study, the report from the external reviewer, Dr. Shirley Jackson, and CHASS Dean William Folkestad's report on the program review seminar panel. The following plan is intended to guide the next five years as we respond to the strengths and weaknesses, i.e., opportunities and challenges, facing the department.

[KEY: (MF) = relatively minimal funding required; (F) = more significant funding required.]

#### Year One

- **Hire 1 new TT faculty**. A search is presently ongoing for a Tenure-Track Assistant Professor. If the search is successful, this hire will bring the number of TT faculty lines in Sociology to 6. While this addition to the faculty will help alleviate the current staffing shortage, the Department remains interested in hiring replacement faculty for two lines that have been vacant since retirements in spring 2013. (F)
- Seek approval for a 2nd TT search. Our department is one of the least costly programs on campus due to several factors, including the number of majors and faculty size. For several years, extending back beyond this review period, this situation has stressed program and faculty resources, to the detriment of our students. Approval of a TT search for a August 2017 hire would benefit the program and our students in several ways and make some of the goals stated in this action plan (and other initiatives) more feasible. (F)
- Establish a CSU-Pueblo chapter of Alpha Kappa Delta (Sociology International Honor Society. In the past we have had both a student club and an honor society and feel with our new faculty hires that this is a good time to reestablish these groups and create more experiences for majors to connect with the discipline and with a number of resources and opportunities offered through the American Sociological Association. Not only is the honor society a way to support the program's commitment to academic excellence, we also believe this will help in the areas of student recruitment and retention. (MF)
- Begin a discussion to review and revise curriculum. (This is expected to continue into year two). While we continue to keep our course offerings current and in line with disciplinary standards, the addition of new faculty presents us an excellent opportunity to consider more extensive revisions to our sociology curriculum. Given the number of our majors interested in the criminology emphasis we will examine the feasibility of developing a criminology major (F) in addition to revising the curriculum for sociology majors and minors. Additional areas of concentration will also be considered keeping in mind current staffing.
- Enhance department website so that it is a more dynamic representation of the program. This also relates to our interest in developing a more effective system for connecting with graduates and involving alumni with fundraising and other program activities with direct benefits to students such as scholarships, service learning & other types of experiential education, career planning, and employment opportunities.

#### Year Two

- Continue to review curriculum, course offerings, and alternative delivery methods to enhance academic experience and meet student needs. Areas that will be addressed: experiential education & online and hybrid course development.
- Proposed revisions from year one discussion prepared for review by college and university curriculum committee/board in fall 2017.
- Implement newly developed program assessment test. This year, after reviewing an ASA report on department/program assessment methods, the faculty decided to develop our own test for program assessment of student learning outcomes. The first draft of the test will be completed in spring 2016. In line with this effort our program assessment plan, including student learning outcomes, curriculum map, and our assessment timetable, will be revised and updated as needed.
- Evaluate how to further develop our internship program; examine ways to develop an effective internship/capstone experience. With the number of Sociology majors, staffing continues to be the biggest challenge to integrating a required capstone experience. However, following the recommendation of our external reviewer we will think creatively about how to integrate this as part of the major. Different options are likely to require variable resources. (MF;F) This process could also help us strengthen links to: community organizations and alumni.

#### Year Three

- Implement changes to internship program. This will enable us to build a stronger network of community partnerships as well as expand field experience options for students.
- Expand general education offerings in the department, primarily in the social science area. Possibilities include: Racial and Ethnic Minorities, Understanding Human Diversity, Environmental Sociology and Physical Anthropology (ST).
- Create a community advisory board or other mechanism for strengthening community connections between faculty, students and staff. This will serve to enhance the program's visibility, create more opportunities for students, assist the program's interest in serving the community, and increase community support for CSU-Pueblo.

#### Year Four

- Evaluate efficacy of program assessment test as primary means of assessment.
- Develop effective ways to facilitate and support undergraduate research, and student/faculty collaboration, including sponsoring students' travel to regional and national conferences. At present, this relies more on individual faculty initiative. There is interest in elevating undergraduate research to a program-level commitment with the necessary resources and support for interested faculty.

#### Year Five

- Evaluate effect of curricular changes, and alternative delivery methods, e.g. hybrid course offerings. In year five of our program review we will evaluate the success and preferences of students who have participated in hybrid MCCNM course offerings.
- Assess changes to internship program.

Board of Governors of the Colorado State University System December 8-9, 2016 Consent Item

#### MATTERS FOR ACTION:

CSU-Pueblo – Academic Calendar AY2017-2018 & AY2018-2019

#### RECOMMENDED ACTION:

MOVED, that the Board of Governors approve the CSU-Pueblo Academic Calendar for AY2017-2018 & AY2018-2019.

#### **EXPLANATION:**

Presented by Richard Kreminski, Provost and Executive Vice President for Academic Affairs.

The CSU-Pueblo Academic Calendar historically is prepared by the Registrar and presented to the Board for approval. (No campus body is required to approve it in advance of the Board meeting). Once approved by the Board, the calendar is posted with wording that states that these calendars are planned in advance and are subject to change, and unless otherwise stated, the University is open and classes will be held as scheduled. (The AY2017-2018 calendar was approved by the Board in December 2015, and there are no changes in what follows below.)

#### **UNIVERSITY CALENDAR 2017-2018 & 2018-2019**

<u>FALL</u>	<u>2017</u>	<u>2018</u>
Registration Begins Classes Begin End Add Period (full-term courses) End Drop Period (full-term courses) Fall Graduation Contract Deadline End of Full-term Course Withdrawal Period Thanksgiving Break Classes End Final Exams	Mar. Aug. Aug. Sept. Sept. Oct. 20 Nov. 20-24 Dec.1 Dec.4-8	13 Mar. 12 21 Aug. 20 25 Aug. 24 4 Sept. 3 15 Sept. 14 Oct. 19 Nov. 19-23 Nov. 30 Dec. 3-7
<b>SPRING</b>	<u>2018</u>	<u>2019</u>
Registration Begins Classes Begin End Add Period (full-term courses) End Drop Period (full-term courses) Spring Graduation Contract Deadline End of Full-term Course Withdrawal Period Spring Break Classes End Final Exams Commencement  SUMMER  Registration Begins	Oct. 16 (17) Jan. 15 Jan. 19 Jan. 29 Feb. 9 Mar.16 Mar.19-23 Apr.27 Apr.30-May 4 May 5  2018 Oct. 16 (17)	Oct. 15 (18) Jan. 14 Jan. 18 Jan. 28 Feb. 8 Mar. 15 Mar. 15 Mar. 18-22 (Tentative) Apr. 26 Apr. 29-May 3 May 4  2019 Oct. 15 (18)
First 4, 6 and 12-week Sessions		
Classes Begin Memorial Day (University Closed) Summer Graduation Contract Deadline Classes End First 4-week First 6-week 12-week	May 14 May 28 June 1 June 7 June 21 Aug. 2	May 13 May 27 May 31 June 6 June 20 Aug. 1
Second 4-week Session Classes Begin Independence Day Observed (University Closed) Classes End	June 11 July 4 July 5	June 10 July 4 July 3

Second 6-week Session Classes Begin Independence Day Observed (University Closed) Classes End	June25 July 4 Aug. 2	June July Aug.	4
Third 4-week Session			

Classes Begin

Classes End

These Calendars are planned in advance and are subject to change. Unless otherwise stated, the University is open and classes will be held as scheduled.

July 9

Aug. 2

July 8

Aug. 1

## Colorado State University: Fort Collins Campus

<b>.</b>		1						
	FY11	FY12	FY13	FY14	FY15	FY16		Change
Degrees Awarded	6,176	6,615	6,838	6,937	7,181	7,176	-5	-0.1%
Bachelors	4,436	4,676	4,879	4,962	5,049	4,995	-54	-1.1%
Masters	1,399	1,577	1,587	1,606	1,755	1,774	19	1.1%
Doctorate	204	235	232	230	251	249	-2	-0.8%
D.V.M.	137	127	140	139	126	130	4	3.2%
Graduate Certificate						28	28	
STEM Degrees	2,015	2,186	2,327	2,475	2,615	2,712	97	3.7%
Non-STEM Degrees	4,161	4,429	4,511	4,462	4,566	4,464	-102_	-2.2%
	FA11	FA12	FA13	FA14	FA15	FA16		Change
Student Credit Hours	354,229	355,814	358,230	357,648	364,995	376,759	11,764	3.2%
Headcount	26,735	26,769	27,034	27,086	27,566	28,297	731	2.7%
Undergraduate	22,300	22,412	22,565	22,506	23,009	23,768	759	3.3%
Freshman	5,953	5,835	5,798	5,604	6,096	6,268	172	2.8%
Sophomore	4,844	4,928	5,006	5,145	4,965	5,340	375	7.6%
Junior	5,099	4,939	5,177	5,127	5,314	5,311	-3	-0.1%
Senior	6,404	6,710	6,584	6,630	6,257	6,849	592	9.5%
Graduate	3,887	3,808	3,927	4,047	4,008	3,962	-46	-1.1%
Graduate I	2,401	2,351	2,438	2,608	2,507	2,536	29	1.2%
Graduate II	1,486	1,457	1,489	1,439	1,415	1,426	11	0.8%
Professional	548	549	542	533	549	567	18	3.3%
New Undergraduate	4,504	4,544	4,443	4,353	4,737	4,956	219	4.6%
Female	13,812	13,829	13,909	13,891	14,102	14,507	405	2.9%
Male	12,923	12,940	13,125	13,195	13,464	13,790	326	2.4%
Nonresident, Non-WUE	4,992	5,291	5,721	6,259	6,781	7,273	492	7.3%
Nonresident, WUE	509	567	613	665	700	748	48	6.9%
Resident	21,234	20,911	20,700	20,162	20,085	20,276	191	1.0%
Not First-Generation	20,446	20,403	20,852	21,038	21,285	21,939	654	3.1%
First-Generation	6,289	6,366	6,182	6,048	6,281	6,358	77	1.2%
Not Pell (undergraduate only)	16,864	16,912	17,155	17,304	17,875	18,855	980	5.5%
Pell (undergraduate only)	5,436	5,500	5,410	5,202	5,134	4,913	-221	-4.3%
Nonminority	22,825	22,584	22,603	22,456	22,725	22,885	160	0.7%
International	1,133	1,226	1,506	1,859	1,981	1,985	270	0.2%
Unknown	1,568	1,653	1,533	1,191	1,290	1,011		-21.6%
White	20,124	19,705	19,564	19,406	19,454	19,889	435	2.2%
Minority	3,910	4,185	4,431	4,630	4,841	5,412	571	11.8%
Asian	468	468 515	528 511	609 560	681 590	723 501	42	6.2%
Black	508	515	511	569	589	591	2	0.3%
Hawaiian/Pac. Islander	42	36	22	27	37	33	-4	-10.8%

Hispanic/Latino	2,066	2,254	2,401	2,560	2,797	3,084	287	10.3%
Multi-Racial	718	808	873	726	565	850	285	50.4%
Native American	108	104	96	139	172	131	-41	-23.8%
Agricultural Sciences	1,549	1,576	1,518	1,610	1,646	1,689	43	2.6%
Business	2,333	2,395	2,456	2,477	2,495	2,564	69	2.8%
Engineering	2,474	2,653	2,920	3,012	3,308	3,443	135	4.1%
Health and Human Sciences	4,866	4,592	4,670	4,832	4,765	4,987	222	4.7%
Intra-University	2,897	2,934	2,888	2,908	2,990	2,760	-230	-7.7%
Liberal Arts	5,538	5,354	5,065	4,786	4,640	4,644	4	0.1%
Natural Sciences	4,003	4,150	4,346	4,282	4,337	4,657	320	7.4%
Veterinary Medicine & Biomedical Sci	1,543	1,518	1,481	1,474	1,618	1,715	97	6.0%
Warner College of Natural Resources	1,532	1,597	1,690	1,705	1,767	1,838	71	4.0%

Note: Unless otherwise specified, all data reflect student headcount; fall 2016 Pell Grant data preliminary.

#### STUDENT SUCCESS SUMMARY

Retention, persistence and graduation rates are calculated annually for the entering full-time, first-time (FTFT) student cohorts and many subpopulations. In addition to this summary, success rates are also available online (<a href="http://www.ir.colostate.edu/retention.aspx">http://www.ir.colostate.edu/retention.aspx</a>).

#### **Highlights**

- 86.2% of the fall 2015 cohort was retained (still enrolled) in fall 2016.
- The 4-year graduation rate increased to a record high of 44.8%. Graduation rates also increased to record levels at 4.5 years and 5 years. Students are graduating faster than in the past which not only saves them tuition dollars but also allows them to enter the workforce sooner. The 6-year graduation rate is at 66.8%

79% of our graduates earn their degree in four and a half years or less and 63% do so in just four years.

Cohort Term	Cohort Size	Freshman Retention	4-Year Grad Rate	5-Year Grad Rate	6-Year Grad Rate
FA06	3,971	82.5%	37.9%	59.6%	63.8%
FA07	4,288	82.8%	37.7%	60.5%	65.2%
FA08	4,308	83.6%	39.4%	63.0%	66.6%
FA09	4,203	84.6%	41.2%	63.5%	67.6%
FA10	4,369	83.5%	41.9%	63.3%	66.8%
FA11	4,419	84.7%	43.9%	64.2%	
FA12	4,449	86.6%	44.8%		
FA13	4,373	86.0%			
FA14	4,284	86.6%			
FA15	4663	86.2%			

# Number of students: 4,274 roll over each bar for detail data 65% 9% 14% Graduated: Reporting institution Transferred & Graduated: Other Institution WITHIN 6 YEARS Enrolled: Reporting institution Transferred & Enrolled: Other Institution Transferred & Enrolled: Other Institution Current Status Unknown WITHIN 4 YEARS ON 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

Note: FA10 cohort data are not available for this bar chart until December 2016

### Fall 2016 Student Success Summary University

#### **New Freshmen**

	Return to Sec	ond Fall (	FA15 cohort)	4-Year Grad	uation (FA	(12 cohort)	6-Year Graduation (FA10 cohort)		
	Cohort Size	Rate	Change	Cohort Size	Rate	Change	Cohort Size	Rate	Change
Overall	4,663	86.2	-0.4	4,449	44.8	0.7	4,369	66.8	-0.8
Resident	3,252	87.6	-0.2	3,330	44.7	0.7	3,477	68.0	-1.0
Non-Resident	1,411	82.8	-0.8	1,119	45.3	0.6	892	62.3	-0.1
Non-Resident - WUE	225	88.0	-2.4	204	55.4	-6.4	159	79.9	-1.3
Non-Resident - Non-WUE	1,186	81.9	-0.3	915	43.1	2.8	733	58.5	-0.6
Minority	990	83.9	-0.5	860	38.6	0.4	721	59.1	-3.1
Hispanic/Latino	576	82.8	0.2	470	40.9	5.2	370	54.9	-5.8
Multi-Racial	121	82.6	1.6	197	39.1	-5.8	137	62.0	-2.2
Native American	27	70.4	-14.6	17	23.5	6.8	14	50.0	-10.9
Asian American	152	88.2	1.0	81	42.0	-0.5	84	66.7	0.0
Black	104	88.5	-0.9	91	27.5	-11.0	107	66.4	1.4
Hawaiian/Pac Islander	10	90.0	-10.0	4	~	~	9	~	~
Non-Minority	3,673	86.8	-0.4	3,589	46.3	0.8	3,648	68.3	-0.3
International	98	81.6	-6_1	53	39.6	9.9	34	64.7	-3.3
White	3,430	87.0	-0.3	3,293	46.9	0.9	3,388	68.5	-0.3
No Response	145	84.8	3.1	243	40.7	-1.0	226	67.0	0.9
Resident Minority	731	85.9	0.9	679	37.4	-1.1	596	61.2	-3.7
Resident Non-Minority	2,521	88.1	-0.5	2,651	46.6	1.2	2,881	69.4	-0.4
Non-Resident Minority	259	78.4	-3.5	181	43.1	6.1	125	48.8	-2.4
Non-Resident Non-Minority	1,152	83.9	0.0	938	45.7	-0.5	767	64.5	0.2
Female	2,479	86.0	-0.4	2,479	52.5	1.9	2,444	68.8	-1.3
Male	2,184	86.4	-0.4	1,970	35.2	-0.9	1,925	64.3	-0.3
Pell Recipient	946	84.0	1.2	1,008	37.7	1.0	961	61.8	2.8
Not Pell Recipient	3,717	86.7	-0.9	3,441	46.9	0.4	3,408	68.2	-1.4
First Generation	1,194	82.7	3.0	1,162	38.4	1.4	1,013	55.7	-5.8
Not First Generation	3,469	87.3	-1.5	3,287	47.1	0.5	3,356	70.2	0.6
STEM	1,843	87.2	0.2	1,577	39.9	-2.7	1,410	68.4	-1.5
Non-STEM	2,820	85.5	-0.9	2,872	47.6	2.7	2,959	66.0	-0.5
CCHE Index 0 - 100	563	78.5	1.2	510	29.6	-0.9	509	53.9	-1.2
CCHE Index 101 - 114	1,718	84.1	-1.3	1,653	38.3	2.0	1,772	60.8	-0.5
CCHE Index 115 - 124	1,155	88.5	0.5	1,167	47.8	0.6	1,087	70.7	-1.9
CCHE Index >= 125	1,150	91.0	0.2	1,056	59.2	-0.4	963	80.5	0.7
CCHE Unknown	77	81.8	-8.8	63	44.4	9.5	38	60.5	5.7

<sup>~</sup> Indicates that the cohort is too small (less than 10)

<sup>\*</sup> Change represents the percentage point difference between the current year and the immediate previous year.

## CSU - Global Campus Enrollment and Demographic Trends: Fall 2012 - Fall 2016

		2012 <sup>(2)</sup> onths]		2013 <sup>(2)</sup> onths]		2014 <sup>(2)</sup> onths]		2015 <sup>(2)</sup> nester]	Fall 2	
Student Credit Hours <sup>(1)</sup>	46	,285	67	,184	83,	,191	66	,690	77,	746
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Headcount <sup>(1)</sup>										
Undergraduate	3,686	70.1%	5,282	71.4%	6,506	70.3%	6,831	69.4%	7,742	66.7%
Graduate	1,404	26.7%	1,824	24.6%	2,352	25.4%	2,643	26.9%	3,441	29.6%
Non-Degree Seeking	168	3.2%	296	4.0%	401	4.3%	364	3.7%	426	3.7%
Total	5,258	100.0%	7,402	100.0%	9,259	100.0%	9,838	100.0%	11,609	100.0%
New Undergraduate <sup>(1,3)</sup> (% UG)	1,321	35.8%	1,930	36.5%	2,155	33.1%	1,782	26.1%	1,950	25.2%
Attendance Status <sup>(1)</sup>										
Full-Time Students	2,132	40.5%	3,092	41.8%	3,734	40.3%	2,084	21.2%	2,356	20.3%
Part Time Students	3,126	59.5%	4,310	58.2%	5,525	59.7%	7,754	78.8%	9,253	79.7%
Total	5,258	100.0%	7,402	100.0%	9,259	100.0%	9,838	100.0%	11,609	100.0%
Gender <sup>(1)</sup>										
Male	2,557	48.6%	3,552	48.0%	4,247	45.9%	4,400	44.7%	4,946	42.6%
Female	2,701	51.4%	3,850	52.0%	5,012	54.1%	5,438	55.3%	6,663	57.4%
Unknown	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Total	5,258	100.0%	7,402	100.0%	9,259	100.0%	9,838	100.0%	11,609	100.0%
State of Residence <sup>(1)</sup>	П									
In Colorado	3,471	66.0%	3,929	53.1%	4,413	47.7%	4,400	44.7%	4,833	41.6%
Out of Colorado in US <sup>(4)</sup>	1,741	33.1%	3,363	45.4%	4,743	51.2%	5,316	54.0%	6,625	57.1%
Foreign Country <sup>(4)</sup>	46	0.9%	110	1.5%	103	1.1%	122	1.2%	151	1.3%
Total	5,258	100.0%	7,402	100.0%	9,259	100.0%	9,838	100.0%	11,609	100.0%
First Generation <sup>(5)</sup> (% UG)	1,153	31.3%	1,786	33.8%	2,666	41.0%	2,871	42.0%	3,213	41.5%
Financial Aid <sup>(6)</sup>	Count	% UG	Count	% UG	Count	% UG	Count	% UG	Count	% UG
Not PELL Recipient	2,599	70.5%	3,674	69.6%	4,297	66.0%	4,406	64.5%	4,836	62.5%
PELL Recipient	1,087	28.1%	1,608	30.4%	2,209	34.0%	2,425	35.5%	2,906	37.5%
Federal Loans Recipient <sup>(7)</sup>	1,929	52.3%	2,715	51.4%	3,871	59.5%	3,904	57.2%	4,592	59.3%
Total Undergraduate	3,686	100.0%	5,282	100.0%	6,506	100.0%	6,831	100.0%	7,742	100.0%
Race/Ethnicity <sup>(1)</sup>										
Asian	110	2.1%	175	2.4%	284	3.1%	323	3.3%	421	3.6%
Black or African American	325	6.2%	458	6.2%	600	6.5%	596	6.1%	829	7.1%
Hawaiian/Other Pacific Islander	18	0.3%	30	0.4%	41	0.4%	38	0.4%	47	0.4%
Hispanic	560	10.7%	801	10.8%	1,049	11.3%	1,130	11.5%	1,402	12.1%
Native American/Alaskan Native	44	0.8%	57	0.8%	80	0.9%	80	0.8%	80	0.7%
White	3,589	68.3%	5,030	68.0%	6,327	68.3%	6,102	62.0%	7,784	67.1%
	95	1.8%	124	1.7%	76	0.8%	117	1.2%	298	2.6%
Two or More Races										
Two or More Races Non resident Alien	89	1.7%	181	2.4%	30	0.3%	42	0.4%	54	0.5%
			181 546	2.4% 7.4%	30 772	0.3% 8.3%	42 1,410	0.4% 14.3%	54 694	0.5% 6.0%

<sup>(1)</sup> Data Source: SURDS Reporting

<sup>(2)</sup> Data are reported for each Fall term, as per SURDS reporting. Fall 2015 reflect the Fall Trimester, while Fall 2012 - Fall 2014 reflect the period of July 1 - Dec 31 of each given year.

<sup>(3)</sup> Data regarding "New Undergraduates" reflect students new to the institution; at CSU -Global students must have 13 or greater transfer credits, thus these data do not reflect first time undergraduates

<sup>(4) &#</sup>x27;Out of Colorado in US' - includes Washington DC, but excludes US Commonwealths and Territories. The category of 'Foreign Country' includes US Commonwealths and Territories (e.g. American Samoa, Guam, Puerto Rico), and may include American Service Members or dependants stationed abroad.

<sup>(5)</sup> First Generation Status is self-reported by the student and used internally at CSU-Global; these data are not reported via SURDS (Source: CampusVue)

<sup>(6)</sup> Student Financial Aid Data are not reported via SURDS (Source: CampusVue)

<sup>(7)</sup> Students receiving loans may also have received PELL, that is, these categories are not mutually exclusive, and as such the percentages do not equal 100%

## CSU - Global Campus Enrollment and Demographic Trends: Fall 2012 - Fall 2016

									<b>016<sup>(2)</sup></b> ester]
511	9.7%	790	10.7%	1,051	11.4%	1,060	10.8%	1,306	11.2%
2,244	42.7%	3,291	44.5%	4,184	45.2%	4,443	45.2%	5,375	46.3%
1,589	30.2%	2,154	29.1%	2,650	28.6%	2,837	28.8%	3,193	27.5%
732	13.9%	964	13.0%	1,139	12.3%	1,251	12.7%	1,452	12.5%
159	3.0%	191	2.6%	219	2.4%	234	2.4%	273	2.4%
6	0.1%	5	0.1%	8	0.1%	12	0.1%	10	0.1%
17	0.3%	7	0.1%	8	0.1%	1	0.0%	0	0.0%
5,258	100.0%	7,402	100.0%	9,259	100.0%	9,838	100.0%	11,609	100.0%
AY20	11-12	AY20	)12-13	AY20	13-14	AY20	14-15	AY20	15-16
Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
438	68.5%	701	68.5%	896	70.2%	1,334	72.8%	1,729	71.7%
201	31.5%	323	31.5%	380	29.8%	498	27.2%	681	28.3%
639	100.0%	1,024	100.0%	1,276	100.0%	1,832	100.0%	2,410	100.0%
	511 2,244 1,589 732 159 6 17 5,258 AY20 Count 438 201	2,244 42.7% 1,589 30.2% 732 13.9% 159 3.0% 6 0.1% 17 0.3% 5,258 100.0%  AY2011-12  Count Percent 438 68.5% 201 31.5%	[6 months]         [6 months]           511         9.7%         790           2,244         42.7%         3,291           1,589         30.2%         2,154           732         13.9%         964           159         3.0%         191           6         0.1%         5           17         0.3%         7           5,258         100.0%         7,402           AY2011-12         AY20           Count         Percent         Count           438         68.5%         701           201         31.5%         323	S11   9.7%   790   10.7%	[6 months]         [6 months]         [6 months]         [6 months]           511         9.7%         790         10.7%         1,051           2,244         42.7%         3,291         44.5%         4,184           1,589         30.2%         2,154         29.1%         2,650           732         13.9%         964         13.0%         1,139           159         3.0%         191         2.6%         219           6         0.1%         5         0.1%         8           17         0.3%         7         0.1%         8           5,258         100.0%         7,402         100.0%         9,259           AY2011-12         AY2012-13         AY20           Count         Percent         Count         Percent         Count           438         68.5%         701         68.5%         896           201         31.5%         323         31.5%         380	[6 months]         [6 months]         [6 months]           511         9.7%         790         10.7%         1,051         11.4%           2,244         42.7%         3,291         44.5%         4,184         45.2%           1,589         30.2%         2,154         29.1%         2,650         28.6%           732         13.9%         964         13.0%         1,139         12.3%           159         3.0%         191         2.6%         219         2.4%           6         0.1%         5         0.1%         8         0.1%           17         0.3%         7         0.1%         8         0.1%           5,258         100.0%         7,402         100.0%         9,259         100.0%           AY2011-12         AY2012-13         AY2013-14           Count         Percent         Count         Percent         Count         Percent           438         68.5%         701         68.5%         896         70.2%           201         31.5%         323         31.5%         380         29.8%	[6 months]         [6 months]         [6 months]         [7 months]           511         9.7%         790         10.7%         1,051         11.4%         1,060           2,244         42.7%         3,291         44.5%         4,184         45.2%         4,443           1,589         30.2%         2,154         29.1%         2,650         28.6%         2,837           732         13.9%         964         13.0%         1,139         12.3%         1,251           159         3.0%         191         2.6%         219         2.4%         234           6         0.1%         5         0.1%         8         0.1%         12           17         0.3%         7         0.1%         8         0.1%         1           5,258         100.0%         7,402         100.0%         9,259         100.0%         9,838           AY201-12         AY2012-13         AY2013-14         AY20           Count         Percent         Count         Percent         Count         Percent         Count           438         68.5%         701         68.5%         896         70.2%         1,334           201	[6 months]         [6 months]         [6 months]         [7rimester]           511         9.7%         790         10.7%         1,051         11.4%         1,060         10.8%           2,244         42.7%         3,291         44.5%         4,184         45.2%         4,443         45.2%           1,589         30.2%         2,154         29.1%         2,650         28.6%         2,837         28.8%           732         13.9%         964         13.0%         1,139         12.3%         1,251         12.7%           159         3.0%         191         2.6%         219         2.4%         234         2.4%           6         0.1%         5         0.1%         8         0.1%         12         0.1%           17         0.3%         7         0.1%         8         0.1%         1         0.0%           5,258         100.0%         7,402         100.0%         9,259         100.0%         9,838         100.0%           AY2011-12         AY2012-13         AY2013-14         AY2014-15           Count         Percent         Count         Percent         Count         Percent           438 <td< td=""><td>[6 months]         [6 months]         [6 months]         [Trimester]         [Trimester]           511         9.7%         790         10.7%         1,051         11.4%         1,060         10.8%         1,306           2,244         42.7%         3,291         44.5%         4,184         45.2%         4,443         45.2%         5,375           1,589         30.2%         2,154         29.1%         2,650         28.6%         2,837         28.8%         3,193           732         13.9%         964         13.0%         1,139         12.3%         1,251         12.7%         1,452           159         3.0%         191         2.6%         219         2.4%         234         2.4%         273           6         0.1%         5         0.1%         8         0.1%         12         0.1%         10           17         0.3%         7         0.1%         8         0.1%         1         0.0%         0           5,258         100.0%         7,402         100.0%         9,259         100.0%         9,838         100.0%         11,609           AY2011-12         AY2012-13         AY2013-14         AY2014-15         &lt;</td></td<>	[6 months]         [6 months]         [6 months]         [Trimester]         [Trimester]           511         9.7%         790         10.7%         1,051         11.4%         1,060         10.8%         1,306           2,244         42.7%         3,291         44.5%         4,184         45.2%         4,443         45.2%         5,375           1,589         30.2%         2,154         29.1%         2,650         28.6%         2,837         28.8%         3,193           732         13.9%         964         13.0%         1,139         12.3%         1,251         12.7%         1,452           159         3.0%         191         2.6%         219         2.4%         234         2.4%         273           6         0.1%         5         0.1%         8         0.1%         12         0.1%         10           17         0.3%         7         0.1%         8         0.1%         1         0.0%         0           5,258         100.0%         7,402         100.0%         9,259         100.0%         9,838         100.0%         11,609           AY2011-12         AY2012-13         AY2013-14         AY2014-15         <

<sup>(1)</sup> Data Source: SURDS Reporting

<sup>(2)</sup> Data are reported for each Fall term, as per SURDS reporting. Fall 2015 reflect the Fall Trimester, while Fall 2012 - Fall 2014 reflect the period of July 1 - Dec 31 of each aiven year.

<sup>(3)</sup> Data regarding "New Undergraduates" reflect students new to the institution; at CSU-Global students must have 13 or greater transfer credits, thus these data do not reflect first time undergraduates

<sup>(4) &#</sup>x27;Out of Colorado in US' - includes Washington DC, but excludes US Commonwealths and Territories. The category of 'Foreign Country' includes US Commonwealths and Territories (e.g. American Samoa, Guam, Puerto Rico), and may include American Service Members or dependants stationed abroad.

<sup>(5)</sup> First Generation Status is self-reported by the student and used internally at CSU-Global; these data are not reported via SURDS (Source: CampusVue)

<sup>(6)</sup> Student Financial Aid Data are not reported via SURDS (Source: CampusVue)

<sup>(7)</sup> Students receiving loans may also have received PELL, that is, these categories are not mutually exclusive, and as such the percentages do not equal 100%

#### Fall to Fiscal Year Retention/Graduation Rate - Full Time Undergraduate

CSU-Global does not currently have a cohort of full-time, first-time undergraduate students, therefore does not have retention and graduation metrics based on these cohorts like CSU and CSU-Pueblo.

CSU-Global has developed its own metrics to measure graduation and retention which it shares on its web-site and which are designed to help the public understand student retention and persistence at CSU-Global.

#### Fall to Fiscal Year Retention/Graduation Rate - Undergraduates

#### Full time Undergraduates

FY Retention Sir Start	ice				First Year to 2 <sup>nd</sup> Year Retention			Year 4			Year 5			Year 6		
Cohort	Level	Cohort	Ret	Grad	Tot	Ret	Grad	Tot	Ret	Grad	Tot	Ret	Grad	Tot		
Fall 2009	UG	123	46%	40%	86%	10%	69%	79%	4%	71%	75%	1%	71%	72%		
Fall 2010	UG	307	51%	30%	82%	9%	58%	67%	5%	61%	65%	2%	64%	66%		
Fall 2011	UG	350	43%	36%	79%	9%	55%	64%	4%	60%	64%					
Fall 2012	UG	437	45%	36%	81%	7%	61%	68%				-				
Fall 2013	UG	767	45%	38%	82%											
Fall 2014	UG	800	45%	31%	76%											

#### Methodology:

'Retention' is based upon whether or not the student attempted credit at any time in the subsequent fiscal years from their 'start' Fall

'Total' reflects the rate of graduates plus the rate of students still attending.

If a student was truly retained but not graduated, they are counted as retained. If a student was both retained and graduated then the student is only counted as graduated, therefore each student is counted once.

Start "Fall" is determined by earliest course, rather than date started or expected start date and aligns to SURDS/IPEDS (Fall = Terms beginning in months beginning July through December).

Full-Time and Part-Time Statuses are determined as outlined by federal methodology and are based upon credits attempted within the student's first term. Once determined, full-time and part-time status is not updated for this analysis.

#### Colorado State University - Pueblo

Enrollment Report (Fall 2011 - Fall 2016 Census)

All data reflect student headcount unless otherwise specified. Fall 2016 enrollment data are based on census data, which are

preliminary.

	2010-11	2011-12	2012-13	2013-14	2014-15	2015-16	One-Y	ear Change
Degrees Awarded	871	875	991	991	952	905	-47	-4.9%
Bachelor's	738	785	889	870	852	809	-43	-5.0%
Master's	133	90	102	121	100	96	-4	-4.0%
STEM Degrees *	147	113	121	125	155	152	-3	-1.9%
Non-STEM Degrees	724	762	870	866	797	753	-44	-5.5%
	Fall 2011	Fall 2012	Fall 2013	Fall 2014	Fall 2015	Fall 2016	One-Y	ear Change
Student Credit Hours	66,479	61,932	59,219	57,353	53,445	53,350	-95	-0.2%
Headcount	5,230	4,868	4,679	4,535	4,244	4,242	-2	0.0%
Undergraduate	4,961	4,609	4,394	4,274	3,988	3,990	2	0.1%
Freshman	1,429	1,290	1,198	1,194	1,170	1,261	91	7.8%
Sophomore	1,004	882	839	750	721	750	29	4.0%
Junior	1,089	1,009	945	929	819	786	-33	-4.0%
Senior	1,170	1,174	1,156	1,126	1,026	905	-121	-11.8%
Other	269	254	256	275	252	288	36	14.3%
Graduate	269	259	285	261	256	252	-4	-1.6%
New Undergraduate	1,443	1,296	1,124	1,247	1,162	1,143	-18	-1.5%
Female	2,803	2,609	2,523	2,418	2,232	2,243	11	0.5%
Male	2,427	2,259	2,156	2,117	2,012	1,999	-13	-0.6%
Nonresident, Non-WUE	294	296	279	325	308	289	-19	-6.2%
Nonresident, WUE	324	310	290	301	299	304	5	1.7%
Resident	4,612	4,262	4,110	3,909	3,637	3,649	12	0.3%
Not First Generation	3,195	2,972	2,921	2,952	2,549	2,520	-29	-1.1%
First Generation **	2,035	1,896	1,758	1,576	1,694	1,722	28	1.7%
Not Pell	2,809	2,702	2,692	2,689	2,667	2,626	25	0.9%
Pell **	2,421	2,166	1,550	1,839	1,576	2,053	-26	-1.7%
Non-minority	3,103	2,829	2,680	2,539	2,343	2,299	-44	-1.9%
International	111	122	119	135	137	107	-30	-21.9%
Unknown	219	194	165	136	125	133	8	6.4%
White	2,773	2,513	2,396	2,268	2,081	2,059	-22	-1.1%
Minority	2,127	2,039	1,999	1,996	1,901	1,943	42	2.2%
Asian American	103	82	78	60	53	60	7	13.2%
Black	423	370	343	333	291	288	-3	-1.0%
Hawaiian/Pac. Islander	4	6	8	5	8	13	5	62.5%
Hispanic/Latino	1,448	1,417	1,394	1,403	1,322	1,335	13	1.0%
Multi-racial	96	125	144	167	202	230	28	13.9%
Native American	53	39	32	28	25	17	-8	-32.0%
Coll of Educ, Engr, & Prof Stud	1,361	1,531	1,473	1,498	1,466	1,472	6	0.4%
Coll of Humanities & Soc Sciences	2,056	1,696	1,552	1,441	1,327	1,270	-57	-4.3%
Coll of Science & Math	549	499	503	462	430	461	31	7.2%
Hasan School of Business	934	835	817	826	741	710	-31	-4.2%

<sup>\*</sup> STEM programs as designated per Immigration and Customs Enforcement (ICE)

<sup>\*\*</sup> As reported on student FAFSA forms

#### Colorado State University – Pueblo

Enrollment Summary for Fall 2016

Fall Census Resident Instruction (RI) Headcount and Percent Change

	Fall								
	2008	2009	2010	2011	2012	2013	2014	2015	2016
Undergraduate	4,347	4,731	4,815	4,981	4,549	4,387	4,269	3,990	3,987
Graduate	263	320	330	265	251	282	259	253	255
Total	4,610	5,051	5,145	5,246	4,800	4,669	4,528	4,243	4,242
1 yr change rate		10%	2%	2%	-9%	-3%	-3%	-6%	0%
5 yr change rate						1%	-10%	-18%	-19%

*Note.* Does not include off-campus concurrent enrollment. Note that CSU-Pueblo had over 3,000 non-RI enrollments through extended studies offerings (approximately 920 FTE) in Fall 2015.

#### Highlights

- The student RI population stabilized in Fall 2016, the first in five years that CSU Pueblo has not experienced declining enrollment. There was a 7.8% increase among freshmen students and a 4% increase among sophomores this year.
- RI student population is 53% female and 47% male.
- 47% of undergraduates have minority backgrounds, including 32% who self-identify as Hispanic.
- CSU Pueblo's preliminary retention rate for the Fall 2015 cohort (first-time full-time degree seeking RI students) returning in Fall 2016 is 66.0%, the highest it has been since 1999.
- Our preliminary 6-year graduation rate, based on the Fall 2010 cohort, is slightly lower than last year. However, given the sizeable drop in retention rates that occurred for that cohort returning in Fall 2011, the 6 year graduation rate is higher than anticipated.
- Among Hispanic students, the retention rate increased 3% and the 4- and 6- year graduation rates increased approximately 2%.

#### Retention and Persistence Rates

Co	hort		Perce	nt Returni	ng for	
Year	Size	2 <sup>nd</sup> Fall	3 <sup>rd</sup> Fall	4 <sup>th</sup> Fall	5 <sup>th</sup> Fall	6 <sup>th</sup> Fall
Fall 2006	642	62.9%	44.1%	41.6%	38.5%	38.3%
Fall 2007	608	65.6%	49.7%	42.8%	40.1%	37.2%
Fall 2008	1,007	65.6%	46.7%	39.4%	36.5%	35.2%
Fall 2009	1,016	63.6%	44.7%	38.1%	36.1%	35.3%
Fall 2010	979	65.6%	44.0%	38.8%	36.8%	34.6%
Fall 2011	1,025	57.8%	45.8%	41.3%	38.4%	37.7%
Fall 2012	867	62.6%	43.6%	38.1%	35.1%	
Fall 2013	764	63.2%	45.4%	42.3%		
Fall 2014	877	64.3%	49.6%			
Fall 2015	765	66.0%				

Note. The most recent values in each column are preliminary (i.e., based on Fall 2016 census).

#### **Graduation Rates**

Col	nort	Percent graduating in						
Year	Size	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	6 <sup>th</sup> Year			
Fall 2004	753	2.6%	15.7%	26.8%	30.7%			
Fall 2005	665	1.8%	18.6%	28.1%	30.8%			
Fall 2006	642	2.8%	17.5%	26.9%	33.8%			
Fall 2007	608	1.8%	18.4%	28.3%	32.9%			
Fall 2008	1,007	1.5%	16.2%	27.7%	31.8%			
Fall 2009	1,016	1.2%	17.3%	29.5%	33.3%			
Fall 2010	979	2.9%	18.7% 29.6%		32.6%			
Fall 2011	1,025	2.0%	18.6%	31.3%				
Fall 2012	867	2.9%	17.3%					
Fall 2013	764	2.9%						

Note. The most recent values in each column are preliminary (i.e., based on Fall 2016 census).

#### Colorado State University - Pueblo

First Time Full Time (FTFT) Cohorts

	Fall 2015 Cohort Return to 2 <sup>nd</sup> Fall			Fall 2012 Cohort 4-Year Graduation Rates			Fall 2010 Cohort 6-Year Graduation Rates		
	Cohort		%	Cohort	Rate	%	Cohort Size		%
Overall	765	Rate 66.0%	Change	Size 867	18.6%	Change -1.3%	979	Rate 33.3%	Change
NOT THE PARTY OF T			1.5%						
Resident	649	67.2%	1.5%	740	19.5%	-0.3%	853	32.7%	0.8%
Non-Resident	116	58.6%	-0.6%	127	13.8%	-7.5%	126	38.1%	-11.9%
Non-Resident - WUE Non-Resident - Non-	62 54	69.4% 46.3%	-0.8% -14.0%	69 58	16.0% 11.3%	-7.3% -7.9%	71 55	49.2% 24.0%	-21.0% -0.4%
WUE									
Minority	398	64.6%	3.1%	445	16.2%	0.9%	458	27.1%	-0.5%
Hispanic/Latino	287	64.5%	3.0%	316	18.3%	2.0%	273	27.4%	1.9%
Multi-Racial	46	65.2%	-1.5%	32	12.0%	-2.6%	25	32.0%	~
Native American	3	~	~	2	~	~	10	30.8%	-10.8%
Asian American	7	100.0%	25.0%	9	15.8%	-4.7%	20	41.9%	8.1%
Black	51	62.7%	-6.6%	83	11.6%	-3.2%	129	22.3%	-5.2%
Hawaiian/Pac Islander	4	25.0%	~	3	~	~	1	~	~
Non-Minority	367	67.3%	13.0%	422	21.1%	-3.6%	521	38.2%	-0.4%
International	14	71.4%	-1.3%	8	8.3%	-8.3%	7	57.1%	~
White	341	66.6%	0.6%	393	21.3%	-3.0%	487	38.6%	-0.8%
No Response	12	83.3%	61.1%	21	25.0%	-15.5%	27	35.9%	-2.6%
Resident Minority	341	67.2%	4.2%	379	17.4%	1.3%	404	26.8%	-0.8%
Resident Non-Minority	308	67.2%	-1.3%	361	21.6%	-1.9%	449	37.6%	2.7%
Non-Resident Minority	57	49.1%	-19.2%	66	9.9%	-2.3%	54	30.8%	0.7%
Non-Resident Non- Minority	59	67.8%	15.0%	61	17.3%	-12.4%	72	41.9%	-19.7%
Female	404	66.8%	-1.9%	434	23.4%	-2.4%	467	37.9%	-3.4%
Male	361	64.8%	4.0%	433	14.2%	-0.6%	512	28.5%	2.4%
Pell Recipient	329	65.3%	1.2%	433	15.0%	-2.1%	495	24.8%	2.5%
Not Pell Recipient	436	66.5%	1.7%	434	22.5%	-0.8%	484	40.3%	-2.3%
First Generation *	329	62.9%	-2.5%	362	15.1%	0.6%	439	26.9%	0.7%
Not First Generation *	436	68.3%	2.9%	505	21.2%	-2.8%	540	36.5%	0.2%
STEM **	179	67.0%	7.5%	227	17.5%	-5.2%	215	36.4%	-4.8%
Non-STEM **	586	65.5%	-0.7%	640	19.0%	0.1%	764	32.4%	0.5%
CCHE Index 0-100	369	59.3%	-0.1%	452	8.9%	-1.2%	544	21.0%	2.2%
CCHE Index 101-114	228	69.3%	4.8%	263	24.7%	-2.6%	255	44.7%	-7.4%
CCHE Index 115-124	97	74.2%	-5.1%	92	39.1%	1.1%	93	57.5%	0.6%
CCHE Indexs >= 125	46	84.8%	-1.4%	30	60.6%	-3.9%	33	57.8%	21.0%
CCHE Unknown	25	68.0%	24.2%	30	13.5%	-3.5%	54	16.7%	16.6%

Note. Subgroups with fewer than 5 students are excluded from comparison.

<sup>\*</sup> As reported on student FAFSA forms

<sup>\*\*</sup> STEM programs as designated per Immigration and Customs Enforcement (ICE)

# **ACADEMIC FREEDOM**

BOARD OF GOVERNORS of the Colorado State University System

# Why a University?

- Universities exist to <u>promote the common good</u> by <u>advancing</u> and <u>disseminating knowledge</u>
- (Research/Discovery; Teaching/Learning; Service/Engagement)
- The currency of university activity is <u>Ideas!</u>
- "The Common Good" can be at odds with political parties; with government interests; with conventional wisdom; with religious sentiments, with power; etc. Ideas Are <u>Dangerous!</u>

BOARD OF GOVERNORS of the Colorado State University System

# How?

- There is broad agreement that the best way to satisfy our Knowledge Mission is to rely on the principle that we always seek the truth, wherever it be found. Each discipline has evidence-based 'rules' for converging on the truth.
- This sounds deceptively attractive and simple....
- The faculty have an interest in the freedom to explore and to expound on what they have learned.
- The University has an interest in managing the enterprise: determining who are admitted; who are hired to teach; what the courses and degree programs are offered; and (in concert with the faculty) how those courses are taught.
- The students have an expectation that the announced learning outcomes for a course/degree will be addressed.

BOARD OF GOVERNORS of the Colorado State University System

# What is Academic Freedom?

- Academic freedom is a broad doctrine giving faculty leeway in addressing academic subjects, allowing them to challenge 'conventional wisdom' in research, creativity and instruction
- Academic freedom serves two purposes:
  - Advancing knowledge through research and creativity (good research and creative activities need breathing space)
  - Educating students to develop their own independence of mind (by exposing students to new ideas, new conceptual approaches, and new forms of argument and creativity)

BOARD OF GOVERNORS of the Colorado State University System

# Core Concepts - AAUP: 1940 Statement of Principles on Academic Freedom and Tenure

- Institutions of higher education are conducted for the common good and not to further the interest of either the individual teacher or the institution as a whole. The common good depends upon the free search for truth and its free exposition.
- Academic freedom is essential to these purposes and applies to both teaching and research. Freedom in research is fundamental to the advancement of truth. Academic freedom in its teaching aspect is fundamental for the protection of the rights of the teacher in teaching and of the student to freedom in learning. It carries with it duties correlative with rights.

BOARD OF GOVERNORS of the Colorado State University System

## Judicial Recognition of Academic Freedom

Sweezy v. New Hampshire, 354 U.S. 234 (1957) "It is the business of a university to provide that atmosphere which is most conducive to speculation, experiment and creation. It is an atmosphere in which there prevail 'the four essential freedoms' of a university - to determine for itself on academic grounds who may teach, what may be taught, how it shall be taught, and who may be admitted to study."

## AF in the FC Manual

- From the Preface: Academic freedom is the freedom of the faculty to discuss all relevant matters in the classroom, to explore all avenues of scholarship, research, and creative expression, to speak or write on matters of public concern as well as on matters related to professional duties and the functioning of the University. These freedoms come with responsibilities; faculty are expected to follow professional standards for discourse and publication, to indicate when speaking on matters of public interest that they are not speaking on behalf of the institution, and to conduct themselves in a civil and professional manner consistent with the normal functioning of the University.
- Section E.8 of the Manual is devoted to the policy and concepts of academic freedom. "The policy of the University is to foster and maintain an environment in which the professional activities of faculty are encouraged through freedom to pursue such activities."

## AF in the Pueblo Faculty Handbook

- "Professors, guided by a deep conviction of the worth and dignity of the advancement of knowledge, recognize the special responsibilities placed upon them. Their primary responsibility to their subject is to seek and to state the truth as they see it. To this end professors devote their energies to developing and improving their scholarly competence. They accept the obligation to exercise critical self-discipline and judgment to using, extending, and transmitting knowledge. They practice intellectual honesty."
- "As teachers, professors encourage the free pursuit of learning in their students... Professors demonstrate respect for students as individuals and adhere to their proper roles as intellectual guides and counselors...They avoid any exploitation, harassment, or discriminatory treatment of students... They protect their academic freedom..."

## AF in CSU-Global Policy

- "Academic freedom of all learners, including faculty and students, to pursue knowledge, speak, write and creatively explore within collaboratively defined policy guidance. It is the freedom to be judged based on legitimate intellectual and professional criteria, not personal beliefs, political views, religious or individual preferences...
- These freedoms are best achieved when faculty members are free to express viewpoints within the classroom in accordance with the standards of scholarly inquiry and professional ethics."

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# Subject Matter Test:

Faculty have significant discretion in the teaching of course material provided the teaching methods are germane to the subject matter of the class and align with the institution's teaching standards; however, academic freedom does not extend to speech that is not germane to the class.

Pueblo Faculty Handbook: "Teachers are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce controversial matter that has no relation to their subject. Controversy is at the heart of the free academic inquiry, but teachers need to avoid persistently intruding material which has no relation

BOARD OF GOVERNORS of the

COLORADO STATE UNIVERSITY SYSTEM

# Tony Frank August 2016

- "How do we strike a balance that preserves the primacy of free speech while also preserving a campus climate in which all members of our community feel included and respected?"
- Clearly, there are many wrong responses to this question:
- 1. Any failure to protect academic freedom and freedom of speech is a failure of everything we stand for as a University.
- 2. Any failure to create an environment in which minds young and old – feel invited and safe to question, push, and demand more would be a comparable failure of our mission and character as a University.
- 3. Any failure to avoid an environment where the loudest voice drowns out the thoughtful, quiet voices, where we debate the person delivering the ideas or their style more than the idea, where people avoid discussion because it doesn't feel like they can comfortably participate, is failure of similar stature.

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# Controversy in the Classroom

- "Safe Space" debate nationally: some have argued for them, 'trigger warnings', etc.
- University of Chicago statement: Civility and respect are vital to all of us, and people should never be harassed. However, "You will find that we expect members of our community to be engaged in rigorous debate, discussion and even disagreement. At times this may challenge you and even cause discomfort." "Our commitment to academic freedom means that we do not support so-called trigger warnings, we do not cancel invited speakers because their topics might prove controversial and we do not condone the creation of intellectual safe spaces where individuals can retreat from ideas and perspectives at odds with their own."
- UNC's Bias Response Team was seen to have gone too far in regulating speech
- Recent case in Aurora: a faculty member was let go over a disagreement regarding academic freedom. (Not a 'safe space' issue.)

## Section 4

## CSU-Pueblo Campus Reports

- CSU-Pueblo Student Representative's Report
- CSU-Pueblo Faculty Representative's Report
- CSU-Pueblo President's Report



#### Colorado State University-Pueblo Student Representative's Report ASG President Antonio Huerta December 2016

#### **General Statement**

Over the course of the past semester, many departments and offices have been extremely productive in working towards completing many positive projects and tasks.

#### **Campus and Student Initiatives and Projects**

Some upcoming campus projects include renovation of the commuter student lounge, a safe driver program, food-delivery service, rent-a-room for commuter students, adding additional student artwork around campus, organizing an Earth fair, and development of the curriculum center.

Some projects currently being implemented are adding more recycling bins in the Library and Academic Research Center and a onesie run scavenger hunt.

Together, the Facility Fee committee and ASG have set some major projects in motion. Our major project is resurfacing the student recreation field which should be started and completed by spring break. Other projects include adding sustainable water fountains for the exercise science building, additional seating around the residence halls, finishing the fire pit in the residence halls oval, and adding 5 points of pride signs around campus.

#### **External Initiatives and Projects**

Through the office of Student Engagement and Leadership comes the Campus Activities Board. This board is a group of students that help plan, book, and implement acts such as comedians, singers, and magicians, as well as DIY crafting and other such events for the students.

For Halloween, CAB planned an event called Halloween Town that was hosted by Residence Life and Housing. This event incorporated the residence halls and student organizations. The involvement between different aspects of campus helped create a positive outcome that will make this a recurring event in years to come.

A great aspect of Halloween Town was that Residence Life and Housing involved the Pueblo community by doing an event called Trunk or Treat. Trunk or Treat was where parents and children came to campus and Trick or Treated with our student organizations. The student orgs decorated their vehicles and put them in a circle for people to trick or treat.

Some other events from this semester included an Ugly Christmas Sweater Competition and Drag Show. Soon, there will be a Relaxation Station event that occurs every year during finals week.

As for next semester, the annual spring concert will be held on April 28 with headliners Dan+Shay. In addition, the Student Leadership Experience will be in Colorado Springs at the Cheyenne Mountain Resort.

The Center for Teaching and Learning brought in renown racism and social justice speaker Cornel West. Dr. West spoke in Hoag Hall to a full house full of campus and community members.

The Biology Pre-Veterinary club brought in the Defenders of Wildlife to present an early showing of Before the Flood by Leonardo DiCaprio and National Geographic.

Later this semester, the Black Student Union will be holding a poetry slam night, so students still have something exciting to attend before the semester is done.

#### **Internal Initiatives and Projects**

On Tuesday November 15<sup>th</sup>, ASG celebrated the last meeting ever to be held in the current ASG chambers. Our Student Center has been shut down in order to continue the renovation.

In addition, because of all the interest in being involved in ASG, we have added 12 new ASG Positions. These positions are called legislative aides. Interviews are currently being conducted and those positions will start in January.

#### **Closing Statement**

With so many great initiatives, projects, and events happening on our campus, there is no doubt that our campus will continue to grow and become more prosperous. Success may not come from student enrollment, but from the quality of the students that are attending Colorado State University- Pueblo and from the richness and beauty such a diverse group of people bring to campus.

"For the strength of the pack is the wolf, and the strength of the wolf is the pack."

#### Colorado State University System Board of Governors

#### CSU-Pueblo Faculty Representative Report submitted by David Volk November 21, 2016

#### Items currently under discussion among CSU-Pueblo Faculty Senate and Faculty:

#### Permanent APR policies (second reading, vote)

o Faculty Policies and Procedures Committee and Chair's Council met to finalize permanent APR policy after some faculty senators offered recommendations. Second reading of policy and vote to take place November 28. Expected to pass.

#### Clarification of position of Assistant Department Chair in Faculty Handbook (first reading)

The Department of English and Foreign Languages is proposing clarification/definition of the position of Assistant Department Chair in the Faculty Handbook, including institutionalizing the one-course release for administrative duties. This would clarify the role of the current director (Assistant Chair) of Foreign Languages within the Department of English.

#### Wildlife and Natural Resources Program (expedited reading requested)

O An expedited reading and vote on this proposed program will take place on November 28. The program is one of five proposed programs CSU-Pueblo faculty are anxious to move forward with BOG approval. Others include the Master of Social Work, the Doctor of Nursing Practice, the Masters degree in Athletic Training, and the additional Early Childhood as an endorsement area for teaching licensure.

#### Changing minimum required score for admission for graduate students on International English Language Testing System (IELTS) (expedited reading requested)

o Faculty Senate approved raising the required score for undergraduate international student admission to CSU-Pueblo on the IELTS to 5.5 (up from 5). This proposal establishes the increased requirement for graduate international students seeking admission to CSU-Pueblo as well. The MS program in Nursing and MBA already require, and will continue to require, a minimum IELTS score of 6

#### Changing compensation for merit in promotion salary increases (first reading)

Compensate for merit in ranked faculty by increasing the current promotion salary increases to \$6000 and \$8000 respectively for assistant to associate and associate to full professor. Compensate for increased experience by providing a salary increase of 0.72% yearly, independent of any cost of living adjustment. Provide cost of living adjustments yearly, as a function of the current inflation rate.

#### Presidential Search Committee convened Monday, November 14 with Parker Executive Search

 Received timeline, position description and advertisement, and proposed advertising venues for review, November 21.

#### PRESIDENT'S REPORT

#### I. ACADEMIC EXCELLENCE

#### A. Preeminent Researcher to Speak at 2017 ICR Conference

The individual considered by many as the "Father of Cannabis Research" will present the inaugural Mechoulam Lecture named in his honor as part of the 2017 Institute for Cannabis Research (ICR) Conference in April. Dr. Raphael Mechoulam, an organic chemist and professor of Medicinal Chemistry at the Institute for Drug Research at Hebrew University of Jerusalem in Israel, will speak as part of the 2017 ICR conference, April 28-30. The Bulgarian born professor is a pioneer in the field of cannabis research and a discoverer of the endocannabinoid system. He is often considered the most prominent figure in the world of cannabis research as his ground breaking discoveries in the 1960's -- isolating, determining the chemical structure of and synthesizing CBD and THC -- are the basis for nearly every piece of research conducted today.

#### B. ICR to investigate Curriculum Development

CSU-Pueblo will begin to collaborate with representatives of the Marijuana Education Initiative (MEI) on potential college curriculum to help students better understand and confront the challenges associated with the changing dynamics created by legalized marijuana in Colorado. President Lesley Di Mare said faculty and administrators have had preliminary meetings with MEI representatives in the hopes of collaborating on marijuana education and intervention curriculum. MEI Representative Molly Lotz met with a handful of CSU-Pueblo faculty members last week to begin discussions of possible collaborations. According to Lotz, MEI fills a need for post-legalization, marijuana-specific curricula that shifts the dialogue and approach to adolescent drug prevention. Di Mare said the University will meet with the superintendents of the local school districts to discuss the curriculum later this month.

#### C. Certificate in Cyber Security Defense

Given the recent NSA designation of CSU-Pueblo as a Center of Academic Excellence (NSA-CAE) in Cyber-Defense Education, the CSU-Pueblo Extended Studies Division in cooperation with the Hasan School of Business offered a professional Certificate in Cyber Security Defense Nov. 7-11 at the CSU-Pueblo Tower Location in Colorado Springs. This intensive one-week training seminar (32 CPUs or PDUs) featured experts in Cyber Security and Homeland Security to incorporate both the technical and broader national issues related to these topics. This program seminar was geared towards professionals and military personnel who currently work in the related fields of IT ops, information security ops, and information assurance who are interested in pursuing a

professional certificate from a NSA-CAE designated University. The Certificate in Cyber Security Defense is designed and offered in collaboration with the faculty of the Hasan School of Business with coverage of all Knowledge Units (KUs) that were required for NSA-CAE designation.

#### D. Mullen to Serve as Interim ICR Managing Director

Former Mass Communications Department Chair Jen Mullen has been hired to serve as interim managing director of the newly formed CSU-Pueblo Institute of Cannabis Research (ICR) to help faculty and administration advance the Institute's goals. Mullen began her duties on Nov. 1 to provide assistance to the ICR in areas that include coordination of processes necessary to the functioning of the Institute, along with internal and external communication on the progress and plans of the institute to elected officials, the media, and local, state, and national audiences.

#### E. Marley Named SHAPE Higher Ed Teacher of the Year

A CSU-Pueblo faculty member received the Outstanding Higher Education Teacher of the Year Award from SHAPE Colorado, an organization committed to advocating for quality physical education, health education, and physical activity resources. Karen Marley, a lecturer in the Department of Exercise Science, Health Promotion, and Recreation, accepted the honor at the 2017 SHAPE Colorado convention held Oct. 19-21 in Colorado Springs. Founded in 1933, SHAPE Colorado (formerly the Colorado Association for Health, PE, Recreation and Dance) is a non-profit professional organization committed to educating children and adults about health and physical activity and is comprised of more than 500 committed professional and future professionals, mostly physical education and health teachers from across the state of Colorado.

#### II. STUDENT ACCESS AND SUPPORT

#### A. Project SEED Scholar Earns National Award

CSU-Pueblo sophomore and former Project SEED participant Brooklynn Trujillo has received a prestigious three-year national scholarship from the American Chemical Society (ACS). Trujillo was awarded one of three \$15,000 2016 Ciba Specialty Chemicals Scholars scholarships (\$5,000 for three years awarded per year by the ACS), with renewal based on her grades, her status as a chemistry major, and recipient of a first year, non-renewable Project SEED Scholarship. Since 2008, faculty in the Chemistry Department have helped to spark a passion for research among disadvantaged area high

school students through Project SEED sponsored by the ACS. CSU-Pueblo is the only Project SEED site in Colorado.

#### A. Library @ the U

CSU-Pueblo celebrated the start of a new partnership with the Pueblo City-County Library District (PCCLD) on Oct. 20 that will establish the Library @ the U location on the first floor lobby of the Library and Academic Resources Center (LARC) along with a host of new services to campus users. As part of the agreement with the University, PCCLD will provide a variety of adult fiction and non-fiction books and DVDs that will rotate on a monthly basis and will be available for checkout at the LARC. PCCLD books placed on hold from other PCCLD locations or online may now be delivered and picked up at the University Library.

#### B. Search and Rescue Team Gets State Nod

The Student Search and Rescue team was voted in as a state-recognized team at the September 2016 membership meeting of the Colorado Search and Rescue Board. An October 10 email announcement to Colorado Search and Rescue membership, noted that the CSU-Pueblo Search and Rescue had been approved as members of the Colorado Search and Rescue Board, meaning the team has been added as an available resource for mutual aid call outs in other areas of the state. In all, the Colorado SAR membership includes 87 teams, agencies, and individual members. The voting membership includes 41 search and rescue teams across the state of Colorado.

#### C. Cross Country Makes History

Program history was made when the U.S. Track & Field and Cross Country Coaches Association released its weekly national rankings, this week as the CSU-Pueblo men's team earned its highest-ever ranking at No. 6, while the women's team garnered its first-ever NCAA Division II top 25 nod during a regular season poll at No. 21. The Pack men jumped five places and back into the top 10 after a week hiatus following a strong performance at the Chile Pepper Cross Country Festival in Fayetteville, Arkansas. The ThunderWolves finished second (of 45 teams) to then-No. 1 Colorado School of Mines in the Division II section. CSU-Pueblo is the third highest ranked team in the RMAC behind No. 1 Adams State University and No. 3 Colorado Mines. The Pack are also third in the South Central Region behind those two squads. As for the women, the ThunderWolves are into the top 25 following a winning performance in the Division II section of the Chile Pepper Festival. The Pack bested 39 other non-Division I teams to catapult them from non-ranked to No. 21.

#### III. DIVERSITY

#### A. CSU-Pueblo Hosts Chinese Educators

The Teacher Education Program, English Language Institute, and the Center for International Programs are helping a delegation of 10 professors from two Chinese universities learn about American teaching practices and pedagogy as part of the first Chinese Teacher Training Program. The delegates from Shangqiu Normal University and Xuchang University represent various fields of study, including journalism, communication, physics, electrical information engineering, art and design, international studies, electrical engineering, and business. During their two-month stay in Pueblo, the educators will learn about American teaching practices and pedagogy by auditing classes in their respective fields of study and attending seminars presented by the faculty of the Teacher Education Program, with CSU-Pueblo students occasionally serving as interpreters. The delegates also are attending English classes through the English Language Institute Monday through Friday mornings. The program will culminate at the end of November with a dinner and presentation of certificates in American Higher Education Pedagogy to the delegates.

#### B. CSU-Pueblo Hosted U.S. Poet Laureate Juan Felipe Herrera

Juan Felipe Herrera, the 21st Poet Laureate of the United States (2015-2016) and first Chicano to hold the position was a guest speaker at CSU-Pueblo in November. From 2012-2014, Herrera served as California State Poet Laureate. Herrera is also a performance artist and activist on behalf of migrant and indigenous communities and atrisk youth. Herrera's appearance was made possible through the Center for Teaching and Learning in partnership with the Southern Colorado Reading Series.

#### C. HSI STEM Grant to Fund Research Communities

CSU-Pueblo will receive nearly \$6 million over the next five years from the U.S. Department of Education to increase the number of Hispanic and other low-income students earning degrees in STEM (science, technology, engineering, mathematics) fields through development of new curriculum, centers for learning and engagement, and a model transfer and articulation agreement between CSU-Pueblo and Pueblo Community College. CSU-Pueblo was one of only two Colorado schools, and the only four-year institution, to be awarded funds from the HSI STEM and Articulation Program. Community College of Denver was the other Colorado recipient.

#### D. CSU-Pueblo hosts Author/Philosopher/Activist Cornel West

Report Item

Prominent and provocative author and activist Dr. Cornel West spoke at CSU-Pueblo on Thurs. Nov. 17 as part of a speaker series sponsored by the Center for Teaching and Learning. West gave a public lecture at 6:45 p.m. in Hoag Recital Hall. The event was open to the public at no charge. West, professor emeritus at Princeton University, has a passion to communicate to a vast variety of publics in order to keep alive the legacy of Martin Luther King, Jr. – a legacy of telling the truth and bearing witness to love and justice. He graduated magna cum laude from Harvard in three years and obtained his M.A. and Ph.D. in Philosophy at Princeton. The author of 20 books, West is best known for his classics, *Race Matters* and *Democracy Matters*, and for his memoir, *Brother West: Living and Loving Out Loud*. His most recent book, *Black Prophetic Fire*, offers an unflinching look at 19<sup>th</sup> and 20<sup>th</sup> century African American leaders and their visionary legacies.

#### V. COMMUNITY OUTREACH

#### A. Civic Health and Equity Initiative

CSU-Pueblo is one of four Colorado higher education institutions selected to participate in the first phase of the higher education Civic Health & Equity Initiative led by Dr. Cecilia Orphan, assistant professor in the Higher Education Program at the University of Denver, in partnership with Colorado Compact Mountain West (CCMW). Orphan was previously the director of the American Democracy Project and received a Public Good grant from the Center for Community Engagement and Service Learning at the University of Denver to launch this initiative. CSU-Pueblo, the University of Colorado Denver, University of Denver, and University of Northern Colorado will participate in the Civic Health & Equity Initiative to better assess and share the story of how colleges and universities directly impact the civic health of local communities as anchor institutions.

#### **B.** PLP Class Project Helps Vets

The junior class of the President's Leadership Program (PLP) has chosen as its class project to work with a veteran's organization committed to providing support to service men and women through physical fitness. According to PLP Director Shelly Moreschini, the class will work with Veterans Overcoming Obstacles (VO2) on a variety of projects including a community event held on Veterans Day. VO2 is a local nonprofit organization that, through Devil Dogg Gym in Pueblo West, helps veterans battle post-traumatic stress disorder and prevent suicide through health and fitness. Students will work with CSU-Pueblo exercise science and health promotions alumnus Chris Carter, A05, on a business plan for VO2 as well as provide fundraising assistance and coordination for a Hero Workout event at the Neta and Eddie DeRose ThunderBowl. A hero workout involves selecting a military member who has died through service and

honoring them by incorporating components of their lives into the workout itself. For example, three reps of a certain exercise would be accomplished to honor a soldier's

#### VI. RESOURCE MANAGEMENT

three children.

#### A. Educational Opportunity Centers (EOC) Grant Awarded

CSU-Pueblo will receive more than \$435,000 annually over the next five years to improve college access for adult learners. The award from the U.S. Department of Education was among \$48 million in grants distributed to 143 colleges and organizations in 42 states, the District of Columbia and Puerto Rico under the Educational Opportunity Centers (EOC) program – all aimed at providing accessible college guidance to adults who have difficulty deciphering the steps needed for college admissions and continued success through graduation. CSU-Pueblo has sponsored this program since 1985, earning perfect scores in the last two grant competitions and accomplishing all objectives from 2011-2016. The program has earned all 15 possible prior experience points. The EOC program will continue to be the largest of the TRIO grants at the University with annual funding of \$435,670 per year for a total of \$2,178,350 over the five years of the grant, which runs through August 2021.

#### **B.** Haven Sexual Assault Grant

Last month, Colorado Attorney General Cynthia H. Coffman and students and educators from Pueblo Community College, Lamar Community College, Trinidad State Junior College, and CSU-Pueblo joined together to launch a new program that will provide critical sexual assault prevention education to colleges and universities across Colorado. Through funding provided by the Attorney General's Office, the *Haven-Understanding Sexual Assault* program created by EverFi Inc., will be provided at no cost to students at six higher education institutions including: Colorado State University-Ft. Collins, Colorado State University-Pueblo, Lamar Community College, Otero Junior College, Pueblo Community College, and Trinidad State Junior College. *Haven* is the nation's leading online training program focused on preventing sexual assault, relationship violence, and stalking. Built in collaboration with leading researchers, prevention professionals, and legal experts, *Haven* empowers students to create safe, healthy campuses while helping institutions comply with federal training mandates. The course is interactive, and customized to create a tailored, campus-specific experience that connects students with essential resources.

#### C. Grants to Preserve La Cucaracha

The University Archives has received several grants to preserve and make available to researchers La Cucaracha, a Chicano movement newspaper published in Pueblo, Colorado from 1976-1983. CSU-Pueblo's University Archives is a part of the University Library. Its mission is to collect, preserve, and make accessible materials that document the University's history and Southern Colorado's ethnic heritage and diversity. Former editors and staffers David Martinez, Juan Espinosa, and Rita Martinez will use the Colorado Historic Newspaper Collections website to illustrate important stories they worked on at La Cucaracha. The event included a reception in the LARC lobby and a workshop on how to navigate the La Cucaracha newspaper using the Colorado Historic Newspaper Collections (CHNC) website. Participants learned how to navigate the website, search for topics and people, save and print articles or issues, and even how to help edit the scanned copy for accuracy.

# Section 5

# Real Estate and Facilities Committee

#### BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM REAL ESTATE/FACILITIES COMMITTEE MEETING AGENDA December 8, 2016 – CSU Denver Center, 475 17<sup>th</sup> Street, 7<sup>th</sup> Floor

Committee Chair: Scott Johnson Committee Vice Chair: Dennis Flores

Assigned Staff: Jason Johnson, Deputy General Counsel, CSU System; Lynn Johnson, CFO,

CSU System; Kathleen Henry, President/CEO, CSU Research Foundation

#### **AGENDA**

#### **OPEN SESSION**

1. Public Private Partnerships Discussion

(Tony Frank) Discussion (30 min)

#### **EXECUTIVE SESSION**

#### **OPEN SESSION**

2. Sale of .7 Acres at Foothills Campus

(Nancy Hurt) Action Item (5 min)





Bob Hunt Managing Director, JLL

## What is a Public Private Partnership P3?

- Medium- to long-term arrangements between the public and private sectors whereby some of the service or capital improvement obligations of the public sector are provided by the private sector
- A clear agreement of shared objectives and sharing of risks
- Capital investment typically made by the private sector

Simply defined a P3 involves leveraging the private sector to provide the capital and expertise to partner with the public sector to develop and /or operate and maintain infrastructure and facilities on publicly owned land

## Common Reasons for Creating a Higher Ed P3

- Design and construct new capital improvements by transferring risk (design, construction cost, financing, leasing, management and maintenance, etc.) to private sector
- Address whole life cycle costs of project
- Access new capital markets for project financing thus freeing balance sheet for its core projects
- Save time in new project delivery and costs
- Reduce outstanding debt burden by transferring debt obligations to private sector
- Tap unique expertise and resources offered by private sector
- Keep campus staff focused on core mission while allowing private sector partner to concentrate their expertise in project delivery and operations

## Typical P3 Structures

- Lease / Lease-back
- Sale / Lease-back
- Development / Concession Agreements
  - Design-Build-Maintain
  - Design-Build-Finance-Operate/Manage-Maintain
- Management and Operating Agreements
- Joint Ventures

There are many contractual P3s and new variations emerge continuously as each P3 contract responds to very precise needs. Each project requires careful analysis and planning to structure appropriately. There is no "one size fits all" solution.

## Comparing Alternatives

## Development Assessment Matrix

	OPTION 1	OPTION 2	OPTION 3	OPTION 4	OPTION 5
	Design, Bid, Build	Design Build	CM at Risk	P3 - DB Lease/leaseback	P3- DBFOM
Risk	High University retains all the risk for design, construction, operations & maintenance	High University retains all the risk for design, construction, operations & maintenance	Medium University retains all the risk for design,& Operations. Developer retains cost and schedule risk for construction	Med- Low University retains risk for design, & Operations. Developer retains construction-cost and schedule risk. No payment until delivered	Low Developer retains risk for cost, schedule of design, construction, operations & maintenance. Payment deductions for non-performance
Innovation Opportunity	Low, developer deliver exactly what the University specifies, no leveraging of trades		Medium, opportunity for innovation between design and builder	Medium, opportunity for innovation between design and builder	High opportunity for innovation between design, builder & operator
Financial Impact	Financing is on the books and impacts bonding capacity	Financing is on the books and impacts bonding capacity	Financing is on the books and impacts bonding capacity	Lease structure does not require debt issuance. Can be off balance sheet	Financing can be structured in a variety of ways, but does create long term financial obligation
Best used when	University knows exactly what it wants, has funding capacity, is not in hurry and has resources to oversee every step	University knows generally what it wants, has funding capacity, speed is important and has some resources to oversee every step	University knows generally what it wants, has funding capacity, speed is important and wants to transfer cost and schedule risk	University knows generally what it wants, needs alternative financing, and wants to transfer cost and schedule risk	University wants to lower life cycle costs, transfer cost, schedule, construction and O&M risk. Can also provide alternative financing

# P3 Keys to Success

- Determining the Right Path to Follow
- 1. Define the need. What is the problem to be solved?
- 2. Evaluate alternative approaches to solving the problem
  - Always compare the P3 contemplated against your traditional delivery method
- 3. Develop a clear program of requirements rooted in the overall project objectives
- 4. Determine the project timing / critical path for delivery
- 5. Evaluate financing needs and resources
- 6. Identify the key stakeholders and approval process
- 7. Evaluate the appropriate governance structure
- 8. Determine what staff and consultant resources are required
- Identify the key risks and determine how they should be allocated between public and private partners







### P3 Evaluation & Decisions

### **Colorado State University**

JLL Conclusions and Recommendations: P3 Workshop July 26, 2016

#### **Background:**

In February 2016, Colorado State University ("CSU") released an RFP to procure master developer services for the South campus and Foothills campus master plans. CSU received qualifications from development teams in March 2016 and prequalified four candidate firms.

In June 2016, based on industry feedback and CSU identified goals, the university embarked on a process to evaluate the procurement with the goal of achieving best value for its stakeholders and donors. CSU engaged JLL to participate in this evaluation process.

From June to July 2016, JLL completed a review of the CSU RFP, project program, CSU's design and construction specifications, and the draft Project Agreement. In addition, JLL completed interviews with a variety of project stakeholders and CSU staff focusing on the following topics: project finance, operations and maintenance, design and construction, legal and regulatory issues and user expectations.

JLL conducted a workshop on July 26, 2016 with key CSU stakeholders and developed the attached presentation materials to facilitate discussion and to present its findings and conclusions with respect to the procurement.

CSU stakeholder and staff attending the workshop included representatives from the following groups:

- CSU Facilities Management
- IBTT / CVMBS user group
- CSU Procurement
- CSU Operations/Finance
- CSU Legal
- University Advancement
- CSURF

#### JLL findings included the following:

- The current solicitation had been successful in engaging highly qualified development teams
- CSU had made significant progress in identifying the program and goals for the near-term proposed facilities
- CSU had built a multi-disciplinary team with strong stakeholder communication and aligned goals
- Development teams had expressed confusion related to the procurement due to the more traditional design-build approach CSU had taken with respect to the RFP, but its desire to form a long-term public-private partnership
- CSU had not fully contemplated or designed the procurement to comprehensively transfer development and operations risks to the private sector
- The RFP limited opportunities for development teams to innovate due to the prescriptive nature of CSU's specifications
- The procurement was heavily focused on near-term project and lowest cost

#### JLL Recommendations:

JLL concluded that the then-current procurement process was at a pivot point between a full public-private partnership ("P3") model and a more traditional design-build solicitation. Further, JLL concluded that CSU could utilize either method to achieve its near term goals; however, that it should more decisively and thoughtfully focus the procurement using a single approach.

Based on the findings summarized above, JLL made the following recommendations to the CSU stakeholder group during the July 26 workshop:

- Adopt a performance-based P3 model, including operations and maintenance services (if cost effective), to more
  comprehensively transfer risk, leverage development team innovation and to create a framework for a longer term
  partnership
- Expand the scope of the RFP to formerly incorporate longer-term projects to leverage the next phases of development
- Reevaluate and adjust the RFP scoring criteria to focus on value and partnership rather than lowest cost
- Incorporate a target-based scope to align RFP and scoring priorities with user identified needs
- Update the Project Agreement to reflect the P3 model and approach

#### **CSU Decisions:**

Based on JLL's recommendations and the goals of the CSU stakeholder group, CSU agreed to adopt the following approach:

- Create performance specifications for design and construction
- Develop a scope ladder for use as part of the RFP scoring criteria
- Incorporate operations and maintenance services within the RFP (subject to a JLL estimate of costs), and develop performance-based specifications for these services
- Include future phases/facilities in the RFP; however, with the requirement for continued competition for contractors and design firms and with a mechanism to maintain developer price competition
- Modify RFP evaluation criteria to include design, operations and maintenance and scope ladder
- Adjust/update the Project Agreement to align with the P3/performance-based approach

The CSU stakeholder group unanimously approved the approach outlined above with the goal of completing the master developer solicitation by year-end 2016.

# Attachment: JLL July 26, 2016 Workshop Presentation Materials



P3 Workshop July 26, 2016
RFP Evaluation and Recommendations







#### **EXISTING FACILITIES**

- 1. Veterinary Teaching Hospital
- 2. Diagnostic Medicine Center
- 3. Equine Orthopaedic Research Center
- 4. Facilities Carpentry Shop
- 5. Chill Plant
- 6. Hay Barn
- 7. Tennis Courts

#### PROPOSED FACILITIES

- 8. Sheep Barn
- 9. Hay Barn
- 10. Small Animal Barn
- II. Institute for Biological & Translational Therapies
- 12. Equine Hospital
- 13. Second Year DVM
- 14. Community Practice
- 15. Parking
- 16. Relocated Large Animal Program
- 17. Stormwater Detention/Treatment
- 18. Cancer Innovation Center
- 19.900-Space Parking Lot (Summer 2015)

### **Team Introductions**

- Bob Hunt, Managing Director, JLL
- Peter Morris, Director, AECOM
- Tom Taylor, Senior Vice President, JLL
- Matthew Do, Senior Associate, JLL







## Project Goals & Objectives

Establish a long range partnership with a master developer to provide innovative solutions to CSU at best value

Utilize a comprehensive integrated approach to development

Deliver high quality facilities on an aggressive time schedule

Take a life cycle approach to building design and operations

Transfer operations and maintenance risk where appropriate

Maintain urgency in the development schedule

Where viable, leverage University land for commercial uses to provide amenities and revenue potential





### Situation Overview

- RFP released February 2016
  - Two-step process
- Prequalification proposals submitted March 2016
  - 4 teams prequalified
- Pre-proposal conference and RFP addenda issued April 2016
  - Responses to RFIs
  - Bridging and Documents
  - Extension of Cost Proposal Submittal Date
- Examination of process to achieve best value
  - JLL engaged June 2016

STATE OF COLORADO OFFICE OF THE STATE ARCHITECT STATE BUILDINGS PROGRAMS



REQUEST FOR PROPOSALS
FOR A PUBLIC PRIVATE PARTNERSHIP FOR THE PHASED
DEVELOPMENT OF THE SOUTH AND FOOTHILLS CAMPUSES
UTILIZING MASTER DEVELOPER SERVICES

#### FOR

Colorado State University

#### FOR THE

Phased development of the South and Foothills Campuses CSU Project Number: 15-018 Bid Number: B300825





### JLL Scope and Process

#### Scope:

Determine potential for improvements to the procurement process that will help achieve project goals through viable alternatives that maintain urgency in the schedule

#### **Process:**

- Assemble a team with a diversity of skills and experiences
- Keep an open mind on outcomes
- Listen and learn from stakeholders and staff
- Compare what we hear and see to industry best practices
- Leverage the work that's been done and the resources available to the effort
- Use project goals and urgency of schedule as the lens for all analysis





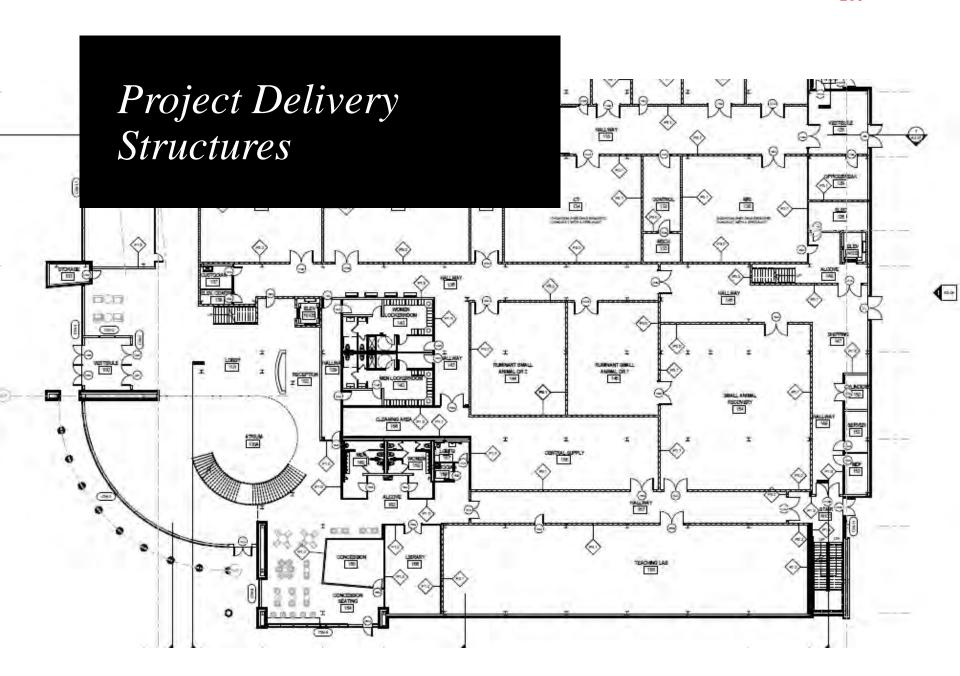
### JLL Scope and Process

#### Due Diligence Review:

- Complete review of all existing documents pertinent to the master developer solicitation
  - RFP and developer submission requirements
  - Program and specifications
  - Draft Project Agreement
- Meetings with key staff and stakeholders on topics that influence solicitation process
  - Project Finance
  - O&M
  - Design & Construction
  - Commercial Opportunities
  - Legal
  - User Groups







### Delivery Structures Overview

### Structure

#### **Description**

Design-Bid-Build

Traditional procurement method whereby University completes 100% design and procures contractor for build. University has a high level of control through the process but does not transfer risks to private party

**Design-Build** 

Commonplace solicitation approach whereby University procures a private partner capable of completing both design and construction, thereby transferring some or all design risk and increasing opportunities for innovation

Lease / Leaseback Typically involves use of a design-build structure combined with a Lease to the private party and Leaseback by the University to, in part, facilitate alternative financing mechanisms; transfers construction and schedule risk to private developer, while the University retains operations risk

Design-Build-Operate-Maintain Combines design-build structure with requirements for operations and maintenance to transfer additional risks and responsibilities to private party. Offers increased opportunities for innovation with operator

Design-Build-Operate-Finance-Maintain The University grants the right to design, build, finance, operate and maintain a project to the private sector typically through the use of a long-term Ground Lease. At the end of the lease term, the project is transferred back to the University





# Comparing Alternative Structures

	Design-Bid- Build	Design-Build	Lease- Leaseback	DBOM	DBFOM
Risk	High University retains all risks for design, construction, operations & maintenance	High University retains risks for design (full or partial), construction, operations & maintenance	Med-Low University retains risk for design and operations. Developer retains construction cost and schedule risk. No payment until delivered	Low Developer retains risk for cost, schedule of design, construction, operations & maintenance. University retains full or partial financing risk	Low Developer retains risk for cost, schedule of design, construction, operations & maintenance. Payment deductions for non-performance
Innovation Opportunity	Low Developer delivers exactly what the University specifies, no leveraging of trades	Medium Opportunity for innovation between design and builder	<b>Medium</b> Opportunity for innovation between design and builder	High Opportunity for innovation between design, builder & operator	High Opportunity for innovation between design, builder & operator
Financial Impact	University responsibility; debt financing is on the books and impacts bonding capacity	University responsibility; debt financing is on the books and impacts bonding capacity	Lease structure does not require debt issuance. Can be off balance sheet	Financing can be structured in a variety of ways; direct impact or long term financial obligation may be created	Financing can be structured in a variety of ways, but does create long term financial obligation





# **Evaluating Delivery Structures**

Structure	Best Used When
Design-Bid-Build	University knows exactly what it wants, has funding capacity, no urgency in schedule, and has resources to oversee every step
Design-Build	University generally knows what it wants, has funding capacity, speed is important and has some resources to oversee every step
Lease / Leaseback	University generally knows what it wants, needs alternative financing, and wants to transfer cost and schedule risk
Design-Build- Operate-Maintain	University wants to lower life cycle costs, transfer cost, schedule, construction and O&M risk
Design-Build- Operate-Finance- Maintain	University wants to lower life cycle costs, transfer cost, schedule, construction and O&M risk and needs alternative financing options





### Alternative Structures & Trade-offs

**Structure** 

Design-Bid-Build

**Design-Build** 

**How** – Detailed Specification; Performance is owned by Owner

Lease / Leaseback

Design-Build-Operate-Maintain

Design-Build-Operate-Finance-Maintain What – Detailed Requirements; Performance is owned by Developer





## Prescriptive Specification vs. Performance

#### DIVISION 26 - ELECTRICAL SECTION 26 50 00 - LIGHTING PART 1-GENERAL 1.1 SUMMARY: A. Extent, location, and details of lighting work are indicated on drawings and in schedules. B. Types of lighting in this section include the following: I. Fluorescent. 2. Light Emitting Diode (LED) A. Product Data: Submit manufacturer's product data and installation instructions on each type of luminaire and component. B. Shop Drawings: Submit layout drawings of lighting and their spatial relationship to each other. In addition, submit luminaire out sheets from the manufacturer. For standard products submit shop drawings; for non-standard products submit in booklet form with separate sheet for each luminaire, assembled by "huminaire type" with proposed luminaire and accessories clearly indicated on each sheet. Submit details indicating compatibility with ceiling grid system. Shop drawings shall detail luminaire dimensions, weights, methods of field assembly, mounting components, features and accessories. All features and accessories shall be clearly defined. C. Wiring Diagrams: Submit wiring diagrams for lighting showing connections to electrical power panels, switches, dimmers, controllers, and feeders. Differentiate between portions of wiring which are manufacturer-installed and portions which are field-installed. D. Samples: Submit one complete operating unit for each type of custom luminaire specified. E. Maintenance Data: Submit maintenance data and parts list for each luminaire and accessory, including "trouble-shooting" maintenance guide. Include that data, product data, and shop drawings in a maintenance manual; in accordance with general requirements of Division 1 F. Illumination Data: Submit lighting calculations identified below for all projects not listed first in the luminaire schedule and where otherwise noted. 1. Interior: Provide isofooteandle(isohur) plot diagram of footeandles on horizontal workplane surface which shows composite values of illuminance projected from the arrangement of light sources from indicated luminaire locations and heights. Show on the graphic plots the locations, spacings and heights of luminaires. Indicate values of maximum, average, minimum, maximin ratios, and Lumen Maintenance factor utilized. Institute for Biological and Translational Therapies (IBTT) Colorado State University 26 50 00 -1

- Lighting Intensity (foot candles)
- Lighting Color Temperature (CCT)
- Lighting Color Rendering Index (CRI)
- Contrast Ratios
- Lighting Controls



### Prescriptive Specification vs. Performance

Lighting	
L1	Typical for classrooms, laboratories, large meeting rooms: 50 FC at work surfaces and teaching displays
	with multiple sets
L2	Typical for offices & other work spaces: 35 FC at work surfaces
L3	Typical for conference rooms: 35 FC at work surfaces and walls
L4	Typical for dormitory rooms: 15 FC ambient
L5	Typical for circulation, stairwells, public areas: 25 FC ambient with focus lighting areas
L6	Typical for service & utility: 40 FC ambient, 70 FC at any service points or equipment
L7	Typical for restrooms, locker rooms: 25 FC ambient

#### **Luminance Balance**

Illuminance uniformity and balance shall not exceed 3 to 1 for task to immediately surrounding areas and 40 to 1 at any point in any space.

#### **Color Appearance**

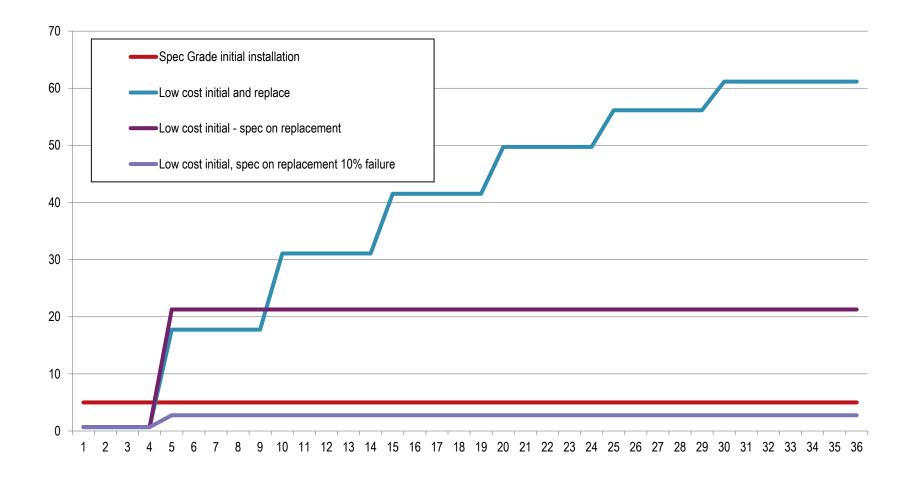
The color corrected temperature (CCT) shall be 4,000K. The color rendering index shall be 80 or greater.

#### Illumination levels

Illumination levels shall be as specified in the area data sheets. Minimum surface reflectance levels shall be 80% for ceilings, 50% for walls, and 20% for floors.

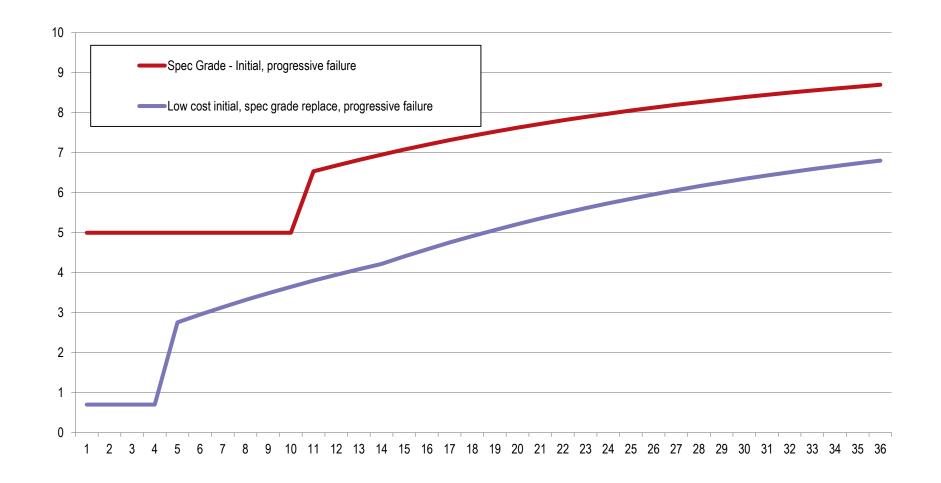






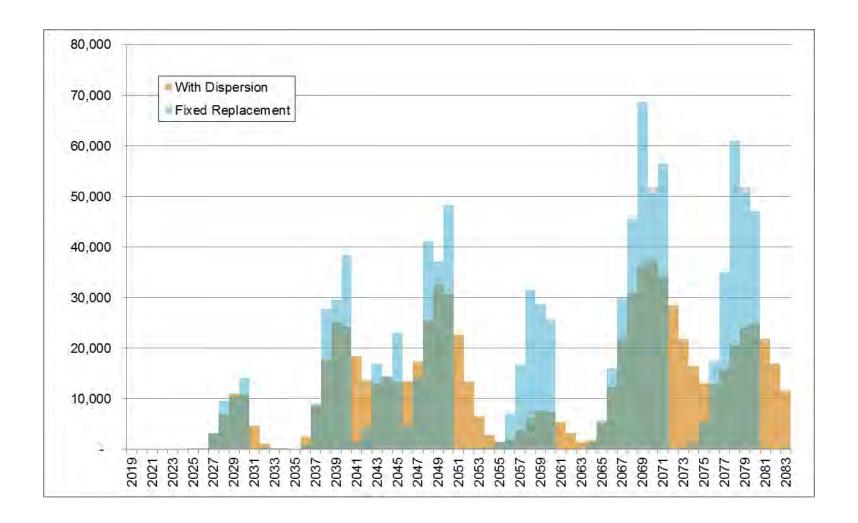






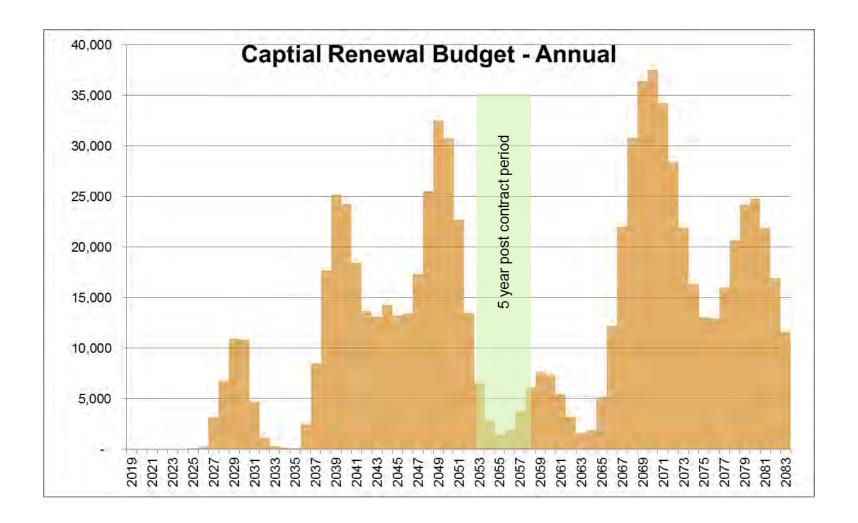


















## Key Topic Areas



Program Scope



**Design & Construction** 



Operations & Maintenance



**Project Financing** 



**Project Agreement** 





### Program Scope



- IBTT scope and program goals clearly articulated; scope priorities need some attention
  - Clear vision and expectations users, donors, equipment partners
  - Defining priority of scope (including alternates) and space needs have been challenged by multiple design leads and do not necessarily reflect user's priorities
  - Size of program has grown from 117,000 SF to 186,000 SF; however best use of space not fully vetted and users believe this may be more space than needed
    - Would prefer to have slightly less space and use funding for other building amenities
    - Private leasing options not initially considered
  - With financing in place, IBTT expected to follow traditional design-bid-build/design-build process and is currently set up to move along that path
  - O&M risk assumed to be held with the University; however, regardless of how this risk is allocated; minimizing operational impacts will be a key goal
  - Any move towards P3 will need to track how a potential shift increases and leverages value
- While IBTT scope is fully developed, future phases have not been defined





### Design & Construction



- RFP establishes more of a design-bid-build approach
  - Prescriptive design limits a key opportunity to leverage skills and value of developer design
  - Developer RFIs demonstrate tension and focus on specifications rather than innovation
  - University retains risk for future design defects
- Prescriptive design increases University design risk and influences developer motivations
  - Encourages developers to cut any corners possible to compete on price
- Current pricing assumptions for expanded program may be unrealistic to achieve
  - Assumes developer will be able to reduce costs through P3 process, but does not provide them any flexibility to do so
  - If base program cost cannot be met, it likely would result in schedule delays to allow for redesign





### Design & Construction



- Evaluation Criteria not aligned with current RFP requirements
  - Major weighting towards cost of initial facilities
  - Current categories to address future facilities, O&M and financing have no submission requirements sufficient to support evaluation of responses
  - Prescriptive nature of specifications make it impossible for developer to have the flexibility to provide innovative solutions in design or performance
- State Architect has received industry feedback
  - Architects and engineers feel they are being hired as "draftsman" under current CSU design-build structure
  - On future project phases, the selected developer will need to ensure there is competition for design and construction services





### Operations & Maintenance



- University currently self performs all campus operations and maintenance
  - Over 6 million SF of facilities
  - 286 staff working on operations
- University measures O&M performance based upon APPA standards
  - Currently funded between a level 3 and level 4 but goal is to be funded at a level 2
  - Actual performance is not consistently measured against goals
  - Current CWMS system does not provide easy access to performance measured
- O&M requirements consistently underfunded
  - Capital renewal budget subject to State and CSU funding levels
  - Funding levels are prioritized based on needs of CSU and relative needs of other state agencies
  - Resource constraints sometimes limit ability to respond in a timely manner.
  - Current deferred maintenance is at \$600 million and growing
  - CSU is considering a requirement for donors to contribute to a controlled maintenance fund that is set aside in an interest bearing account to be drawn from when needed





### Operations & Maintenance



- O&M responsibility has not been made clear through the current RFP and process
  - Operations and maintenance ("O&M") called-out as a responsibility for the master developer
  - O&M specifications not included in the RFP
  - Developer pricing not requested for O&M services
  - Developer confusion demonstrated in submitted RFIs
- Current approach does not incentivize developers to consider life-cycle maintenance costs in the design of the building





### **Project Financing**



- Sources of funding include: cash, State funding, debt, gifts, grants
- Successful fundraising for initial IBTT development, but current structure does not address ongoing capital needs
  - IBTT budget of approximately \$65.65 million
    - \$32.5 million committed donor cash
    - COPs from the State that will allocate \$3.15 million to IBTT (expected)
    - University has agreed to put in \$10 million (debt issuance)
    - \$20 million estate gift
  - Horse Barn budgeted at \$7.8 million (\$3.8 million COPs balance and donor funding to bridge gap)
  - Infrastructure total cost budgeted at \$11.3 million for entire South Campus; CSU will only cover
     \$4.4 million
    - Expectation that the delta will be bridged through fund raising, but could also use developer financing





### **Project Financing**



- Developer Financing responsibilities not clearly defined in current RFP
  - Financing responsibilities called-out as a master developer responsibility in the RFP; however,
     University has secured its own funding for expected development costs of the IBTT
  - The RFP does not indicate or require the developer to provide equity for any component of the initial project
  - Developer equity "at risk" in a project can incentivize them to ensure long term performance obligations are met
  - Requirements for developer equity not included
- Donor funding can take 5 10 years to cultivate
  - More donor focus on life-cycle of the investment
- Any partnership structure will need to provide flexibility to accommodate University-raised funds, collateral for State Certificates of Participation and developer financing





### Project Agreement



- The Project Agreement (PA) has been limited by lack of clarity of scope and structure
  - Without the benefit of a clear project structure, the draft PA is ambiguous and contains undue flexibility
  - O&M expectations/agreements not clear and therefore not included in draft
  - Developer responsibilities and risk obligations are not clearly defined
- Price submittals and basis for developer fees not currently set up to allow for transparent relationship on future phases
  - Creates opportunity for developers to low-bid initial phases/IBTT to obtain award without long term commitments on competition, price structure and fees
- The PA does not provide cost transparency or define expectations for future phases
  - The current evaluation criteria is almost entirely weighted to the pricing submitted on the IBTT
- Transaction structures described may not be most appropriate for all phases





## Summary of Findings

What Seems to be Working?



Participation by highly qualified respondents with P3 experience



Significant programming efforts for priority scope items



Funds in place for near-term scope



Multidisciplinary Colorado State team



Strong stakeholder communication



Alignment of stakeholder goals and objectives





## Summary of Findings

Where are the Challenges?



Confusion expressed by development teams



Project scope, key goals and corresponding delivery structures not defined or aligned in some cases



Ability / option to transfer risk not fully contemplated in the RFP or draft agreements



Lack of opportunity to leverage developer innovation or financing



Competing concepts on transaction structures: design-bid-build, design-build, P3



A more robust P3 structure will require adoption of new processes and agreements



Current RFP evaluation focused on first project/IBTT and does not contemplate criteria for a long term relationship





### **Current Position**

- Procurement "stuck between first and second base"
- Solicitation includes elements of designbid-build / design-build and P3 structures
- Both options still available, each with their own considerations
- Currently, neither choice is completely ready to move ahead
- Worst position is to be caught in the middle



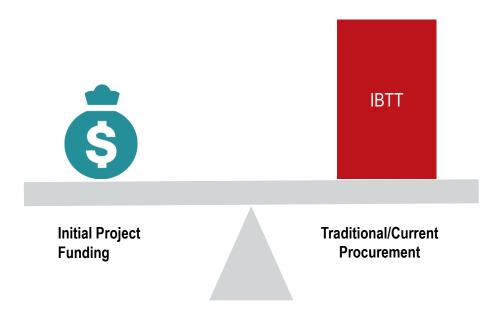




### **Current Process**

Illustrative Overview

The current process will likely deliver the IBTT through a traditional project and risk model



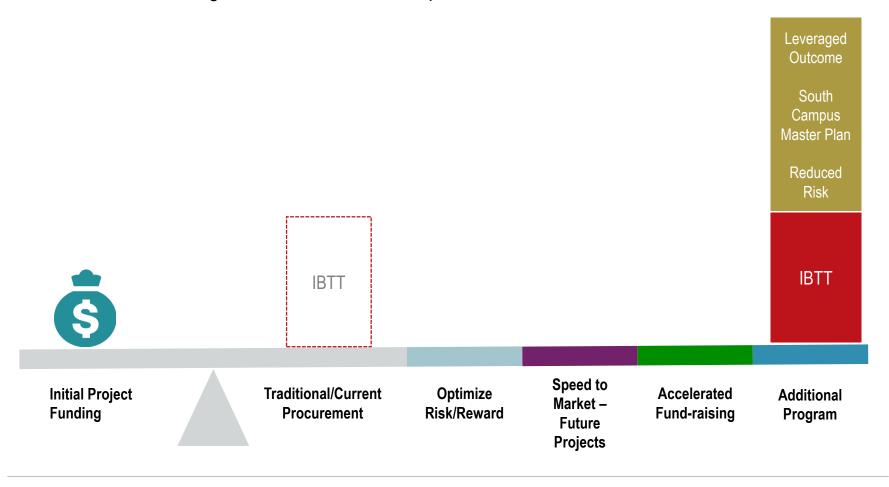




## Ability to Leverage Project Concept

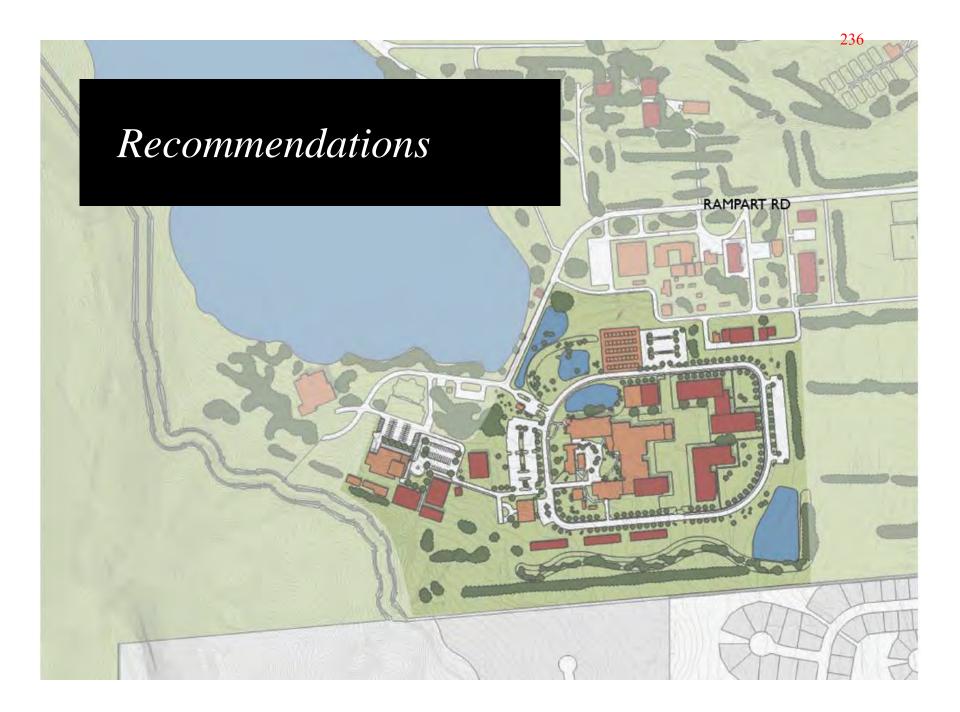
Illustrative Overview

A P3 model can leverage additional value and optimize risk and reward









### Major Recommendations

Summary

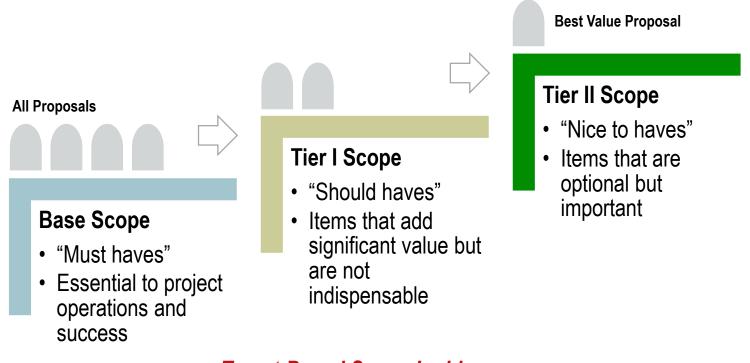
- ✓ Adopt performance-based P3 structure
- ✓ Expand scope of the RFP to leverage next phase of development
- ✓ Revaluate RFP scoring criteria to focus on value and partnership.
- ✓ Align program priorities to incentivize developers to provide additional scope to address user's hierarchy of needs (e.g. target-based scope)



### Target-Based Scope

#### Illustrative Overview

- A target-based approach provides a framework for prioritizing needs and organizing a project program
- Target-based scopes also create ability to leverage value in proposals









### Design and Construction



- 1
- Change current prescriptive specifications to be more performances based to provide development teams the opportunity to provide innovative solutions
- Transfers the performance risk of design and construction to the developer, instead of being held by the University
- Process makes users think more deeply about how they need to have their facility perform and what their priorities are
- To ensure ongoing competition and prevent industry complaints, require developers to re-compete architects and contractors for future projects
- Develop a scope ladder that defines a basic program and prioritized additional program desired above the baseline
  - RFP defines maximum University will pay for baseline program and if developer can provide more scope they are rewarded accordingly in the evaluation





### Operations & Maintenance



- 1
- Develop O&M specifications and include them in initial facilities program
- Ensures facilities are operated and maintained to a measurable standard
- Insulates University from the risk of reductions in funding for O&M
- Provides a strong incentive for the developer to take a life-cycle approach to developing the project instead of trying to do it in the cheapest way to meet prescriptive specifications
- Provides the University the opportunity to test the viability and cost of transferring this risk
- Demonstrates the University has contractually ensured a set level of O&M performance that can support donor funding efforts
- 2
- Benchmark current O&M costs in order to have comparison against developer pricing proposals





### **Project Financing**



- 1 Consider including some component of developer financing in initial facilities
  - If O&M is included, having some level of developer financing in the deal ensures they stay interested in long term operations
  - Developer financing can be used to accelerate delivery of phase II buildings
- <sup>2</sup> Negotiate pricing transparency structure for initial facilities and future facilities
  - Locks in agreement on developer returns for the long term





### **Evaluation Criteria**



- 1 Modify evaluation criteria to reflect long term nature of the relationship
  - Develop criteria to address developer commitments on future projects as element of scoring
- 2 Include O&M in the evaluation criteria
- Balance program needs against cost criteria
  - Include target-based scope ladder
- 4 With relaxation of prescriptive specifications, include design in evaluation criteria
- 5 Ensure submission requirements directly align with the evaluation criteria





### Major Recommendations

Summary

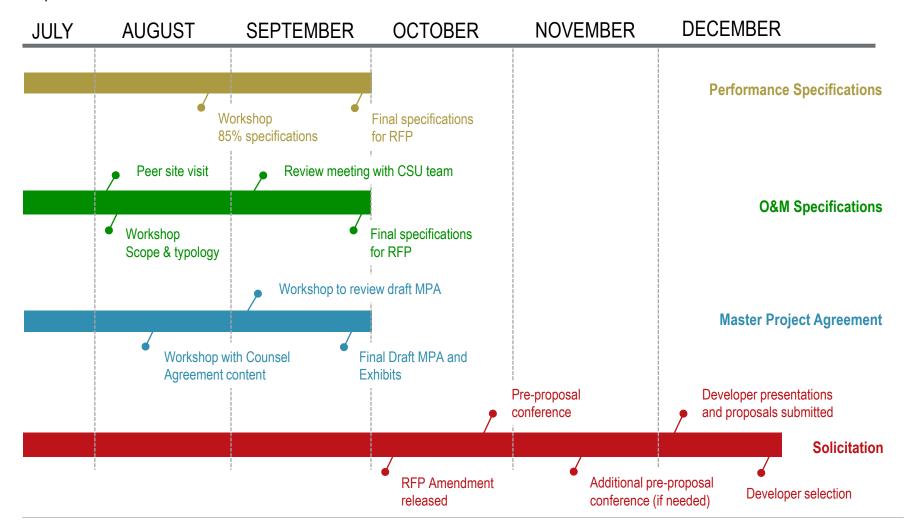
- ✓ Adopt performance-based P3 structure
- ✓ Expand scope of the RFP to leverage next phase of development
- ✓ Revaluate RFP scoring criteria to focus on value and partnership.
- ✓ Align program priorities to incentivize developers to provide additional scope to address user's hierarchy of needs (e.g. target-based scope)





### Timeline

### Implementation of Recommendations







### Next Steps & Action Items

### Summary

- ✓ Start immediately once a path is selected
- ✓ Begin to schedule meetings
- ✓ Peer site visit: IBTT/VTH
- ✓ Obtain external legal counsel for Project Agreement
- ✓ Concurrent development performance-based design, O&M specifications and revised Project Agreement









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Thank you

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### Appendix





### P3 Keys to Success

### Set the Stage for Success

- Establish clear and measurable project objectives (program, timing, cost, performance, risk)
- Identify key stakeholders and decision process
- Evaluate alternative approaches to solving the problem
  - Compare anticipated outcomes against traditional project delivery methods
- Carefully evaluate risk transfer, associated value and what risks should be managed by the private partner and what risks should be retained by the University
- Determine what you want the private partner to do to achieve the project objectives
- Develop a clear program of requirements and performance specifications rooted in the project objectives





### **Project Readiness**

Project Definition Readiness Index (PDRI)

D6. Utility Sources with Supply Conditions			
D7. Site Life Safety Considerations			
D8. Special Water and Waste Treatment Req'mts			
Do. Special water and waste freatment Req ints	CATEGORY D TOTAL		
E. BUILDING PROGRAMMING			
E1. Program Statement			
E2. Building Summary Space List			
E3. Overall Adjacency Diagrams			
E4. Stacking Diagrams			
E5. Growth & Phased Development			
E6. Circulation and Open Space Requirements			
E7. Functional Relationship Diagrams/Room by Room			
E8. Loading/Unloading/Storage Facilities Req'mts			
E9. Transportation Requirements		1	
E10. Building Finishes			
E11, Room Data Sheets			
E12. Furnishings, Equipment, & Built-Ins			
E13. Window Treatment			
CATEGORY E TOTAL			
F. BUILDING/PROJECT DESIGN PARAMETERS			
F1. Civil/Site Design			





### **Project Readiness**

	Design Build	Р3	
Scope	Just IBTT	IBTT and South Campus?	
Budget/Scope Reconciliation	Re-scope to fixed budget	Re-scope to availability payment	
Procurement Documents	Change to straight DB	Change to P3	
Reliability Philosophy	Build to CSU standard specifications	Document reliability by space	
Performance Expectations	Build to CSU standard specifications	Document performance expectation by space	
Risk Philosophy	CSU retains quality and O&M risk	Transfer risk to appropriate party	





### Evaluation Committee

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### Executive Session

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### CSU-Global Campus Reports

- CSU-Global Campus Student Representative's Report
- CSU-Global Campus Faculty Representative's Report
- CSU-Global Campus President's Report



7800 East Orchard Road, Suite 200 Greenwood Village, CO 80111 P: 800-462-7845 • F: 303-741-2084

Board of Governors to the Colorado State University System December 8-9, 2016 Student's Report

#### **New Outreach Advocates Program**

To a certain extent, every very successful organization relies on positive customer reviews and word of mouth conversations. Today, with easy access to social media and online reviews, this positive feedback is more important than ever. No amount of advertising can reach as many potential consumers as each consumer can reach via their own network. Realizing this important opportunity, on November 15<sup>th</sup>, CSU-Global launched the Outreach Advocates Program with a goal to reach new audiences across the world.

The Outreach Advocate Program is open to anyone who wishes to spread the word about CSU-Global; the quality programs and curriculum, Global's top notch instructors, and the real world application of new knowledge, and how this new knowledge is beneficial to the Advocate's career. Engagement in one's own community is the focal point of this new program. The local Rotary Club, Lions Club, Boy Scouts, Girl Scouts, School groups, neighborhood Home Owner Associations, Parks and Rec sports groups, and many other local community groups are the key audience for this program.

So how does it work? CSU Global has a simple on line application and once approved, the Advocate will review a short, online training program to ensure consistent messaging and branding, be given access to a template power point deck if needed, and access to Global staff for any questions or needed guidance. Global also asks that the Advocate post the event on related social media channels and once complete, write a blog for the CSU-Global blog. An Advocate has a real life perspective on the positive impact a quality education from CSU-Global will play in life and sharing that message is the goal of the Outreach Advocate Program.

Imagine harnessing the excitement and energy of CSU-Global students and the expansive reach of the student population; over 17,000 global students. Spreading the word of the quality CSU Global program will keep CSU Global on the current trajectory of growth and success, filling a need for adult learners.

#### MATTERS FOR ACTION:

Report Item. No action necessary.

#### **EXPLANATION:**

Presented by Tony Vrba, Ph.D., Faculty Representative from CSU-Global

Report to the Board of Governors that provides an overview of the CSU-Global's Faculty Professional Development Opportunities, Faculty Scheduling, and Fall Break.

Faculty Development Opportunities

- Faculty Retreat Oct 3-4
  - Over 40 Faculty, Leads, Program Coordinators, Cohort Mentors and Academic Leaders
  - o Academic and Faculty Operations review and discussion
  - Working Group Sessions
    - Curriculum and Innovation
    - Graduate Education
    - Academic Policies
    - Faculty-Student Engagement
    - Curriculum Handbook review
    - Faculty Handbook review
- The Outreach Advocates Grant Program is being offered to faculty to help support their interests and passions while providing CSU-Global with opportunities to reach new audiences. Faculty is offered reimbursement for presentations given in the community.
  - Complete CSU-Global brand training
  - o Present at an event and include university messages
  - o Submit an audio or video recording of the presentation
- Mentor Moments for faculty to share best practices within the online environment, including video updates, Zoom session and introduction examples.

Updated faculty scheduling and availability in faculty portal to better indicate faculty availability for scheduling purposes.

Due to increased enrollment we have a new Writing Center Coordinator and new Program Coordinators in:

Board of Governors of the Colorado State University System Meeting Date: December 9, 2016

- Undergraduate Accounting
- Master of Professional Accounting
- Marketing Communication

At this calendar year end there will be a one-week fall break where faculty and students will have the week of December 26 – January 1, 2017 off.

This overview focused on CSU-Global's commitment to support faculty development through the offering of Faculty Retreat, implementation of the outreach grant program, sharing of best practices and faculty availability scheduling.

Board of Governors of the Colorado State University System December 8-9, 2016 President's Report Item



### CSU System Strategic Goals: Service, Fiscal Health, Student Success CSU-Global Transformation Plan Goal: Utilize Evidence-based Practices

- Academic leaders of CSU-Global met for two days in October to review and discuss various aspects of academic and faculty operations. Working group sessions focused on the areas of curriculum and innovation, graduate education, academic policies, and faculty-student engagement. The culmination and summary of each group's findings will be analyzed and assessed over the coming months for determination of actions during the June 2017 Commencement Retreat.
- CSU-Global was one of 12 participants in Colorado's CareerWise examination of the Swiss model of pathways to apprenticeships and higher education. CSU-Global alongside representatives from Colorado Department of Education, Denver Public Schools, UC Denver, UCCS, Mesa State, and Colorado Mountain College, participated in lectures provided by Swiss-based economists and business leaders, and toured apprenticeship facilities for insight into how such a model might be adapted for Colorado.
- The Faculty Operations team, the 2.0 version of its faculty management system designed to schedule over 500 sections each term using faculty analytics that include faculty credentials, ratings, and rankings.
- The university's Internal Communications Task Force was created to develop campuswide communications expectations and best practices across all areas and departments. The Task Force has identified specific ways in which staff and faculty at CSU-Global can help build and maintain clear communication given the university's ongoing dynamic growth, and its staff and faculty flexibility in working from remote, non-headquarters locations.

### CSU System Goals: Service, Fiscal Health, Student Success CSU-Global Transformation Plan Goal: Develop Innovative Stakeholder Engagement

- The university hosted a Career Expo via the Internet to provide students and alumni with resources to help them move towards their career goals and put their education into practice. Faculty and affiliates were engaged as presenters and speakers with all presentations taped and made accessible to students via the CSU-Global's Career Center.
- CSU-Global's Outreach Advocates Program has been launched to provide students, staff, faculty, and other stakeholders with support to speak about CSU-Global at meetings and speaking engagements in their communities. The Program will provide university

Board of Governors of the Colorado State University System December 8-9, 2016 President's Report Item

stakeholders with facilitated pathway towards personal sharing while ensuring accuracy of university information.

- Industry experts, CSU-Global affiliates, and Program Coordinators will be meeting again in December to review CSU-Global degree and certificate programs to offer their expertise on the knowledge and skills needed to meet new marketplace trends and associated industry certifications.
- CSU-Global sponsored the "Up with People" performance in Aurora, CO which encourages audience members to engage and unite through community service and collaboration with others across the globe. Over 1000 people attended their performances at Hinkley High School in Aurora.

### CSU System Strategic Goal: Student Success CSU-Global Transformation Plan Goal: Sharing for Global Good

- Three CSU-Global students attended conferences within their area of study as part of CSU-Global's Conference Participation Grant program. The Grant program was developed in response to student interest in academic conferences that support their interests, networking needs, and careers.
- Representative members of CSU-Global faculty, students, and staff provided a panel presentation on CSU-Global's Quantifying Quality and Return-on-Investment paradigm for members of UPCEA at its Central Region conference. The presentation was previously provided at UPCEA's Annual Conference and CSU-Global was invited to present the information again at the regional gathering.
- As a conclusion to work under the Obama administration, the Department of Education leadership hosted a White House Convening that included CSU-Global and 15 other institutions of higher education. During the Convening CSU-Global was highlighted for its work toward affordability and data-driven outcomes towards academic quality.
- CSU-Global provided the Keynote Address for USDLA's International Forum for Women in e-Learning in November. The speech included information on leading in dynamic environments, accountability through the use of data, and driving change and vision.
- CSU-Global Career Center Services and Coaching Program were presented by faculty and staff members at ACBSP's Region 7 Conference. Information shared included CSU-Global's life-long career management framework and the role of faculty in its livesession coaching program.

Chancellor's Report



### COLORADO STATE UNIVERSITY SYSTEM CHANCELLOR'S REPORT

December 8, 2016

#### CSU-System Wide

- Continued meetings around best practices and collaboration between Fort Collins and Pueblo related to IT.
- Academic system-wide integration opportunities in relation to admissions and transfers continue to make progress through efforts of Cheryl Lovell.
- Hosted first Campus Employee Councils biannual meeting.

#### CSU-Pueblo

- Held Open Forums October 20, 2016, on the CSU-Pueblo Campus for community, faculty, students, and staff about the search process for the next CSU-Pueblo president.
- Held first CSU-Pueblo Presidential Search Advisory Committee meeting November 14, 2016.

#### CSU System Government Affairs - Federal:

- Chancellor Frank meet with Sally Rockey, Executive Director of the Foundation for Food and Agriculture, to discuss opportunities around National Western Center.
- Chancellor Frank attended a meeting of the University Research Association Board in Washington, D.C., November 1.
- Chancellor Frank participated in a long-term strategic planning session for the National Renewable Energy Laboratory.

#### CSU System Government Affairs – State:

- Meetings with key members of the legislature and local delegations continue.
- In preparation for the 2017 Legislative Session, the internal team has begun to meet.
- The Chancellor hosted a meeting of the Governor's Cabinet on the Fort Collins campus in October.

#### Statewide Partnerships:

- CSU and Denver Museum of Nature and Science have committed to collaboration regarding research, outreach, and connecting CSU students to the educational resources at the Museum. The entities began working together on the reimagining of the National Western Center, and have many parallel areas of focus. CSU is also sponsoring the Extreme Mammals exhibit at the Museum, which runs through early January.
- Executive Vice Chancellor Parsons represented the CSU System in Dubai October 20-27 as part of the Destination Dubai delegation led by Denver Mayor Michael Hancock and Kim Day.
- Hosted and facilitated the OneWest Retreat on November 10-11, 2016, in Denver with key stakeholders in the National Western Center redevelopment and area thought leaders.

• Chancellor Frank attended the National Western Stock Show Board Meetings and the Denver Chamber Board meetings in October and November.

#### National higher education engagement:

- Chancellor Frank attended the national meeting of the Reinvention Collaborative in November, moderating a panel discussion of presidents focused on building higher-education institutions that encourage learning and discovery across cultures and identities.
- Chancellor Frank attended the Association of Public & Land-grant Universities (APLU) national conference in Austin in November, participating in the Board of Directors meeting, the Council of Presidents meeting on the internationalization of university campuses, and his final meeting as chair of the Council on International Initiatives.
- Vice Chancellor Parsons presented at the APLU conference on the Todos Santos Center during the *Cross-Border Collaborations: The North American Zone of Knowledge* session.

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### INVEST -

#### RECOGNIZING AN EXCEPTIONAL PARTNER OF THE MONTH

### PARTNER Of the month



School is back in full swing and if you're the parent of a high-schooler, you know that the pressure is already on for completing college applications. **Colorado State University (CSU)** is an institution renowned throughout our local community, around the state and across the country.

We are honored to recognize CSU as our partner of the month for their incredible commitment to building a mutually beneficial partnership that reflects the complementary nature of the land-grant mission of the university to provide access and opportunity to individuals from all segments of society and the work that Boys & Girls Clubs are doing to help every Club

member to graduate from high school with a plan for the future. With leadership from Amy Parsons, the Vice Chancellor of CSU, on the Boys & Girls Clubs of Metro Denver's Board of Directors, as well as a sponsorship of our teen programming at the Clubs coupled with a unique scholarship opportunity for Boys & Girls Clubs members, CSU has become an essential partner in our ever more-challenging quest to help low income youth overcome the obstacles they face in life and succeed in college and career.

For their thoughtful, comprehensive and impactful approach to partnering with us and the young people we serve, we are proud to recognize CSU as our outstanding partner of the month!

### ENGAGE

### UPCOMING OPPORTUNTIES FOR YOU TO ENGAGE YOUR EMPLOYEES, CLIENTS AND PARTNERS IN OUR MISSION

**HALLOWEEN PARTIES, CRAFTS & CELEBRATIONS – Monday – Friday throughout October in the 3-7pm timeframe at various Club locations:** Get into the spirit of the season with spooky games, crafts or cooking activities that make our Club members feel special and give your team a break from the ordinary. Or, if your company is interested in running/walking in our 5k (see below), why not sponsor a team of Club kids and help them design and execute a fun team costume?!

"GIVING THANKS" EVENT - Monday – Friday throughout November in the 3-7pm timeframe at various Club locations: Thanksgiving is a time to celebrate and receive the bounty of the season and the kindness and generosity of our community. Our kids, though they are thrilled to be recognized and celebrated themselves, often prefer to recognize and celebrate others. Support our Club members in organizing and executing a service project for others in need in our community during this special time of year.

START THINKING NOW ABOUT YOUR HOLIDAY CELEBRATION PLANS! The holidays are a fun, popular, joyful time at our Clubs. We have opportunities for organizations to host events like winter holiday dinners or craft parties for our Club members. Please let us know if you'd like to spend your holidays with our Club family! We'd be happy to talk through specific details with you for your group. THESE OPPORTUNITIES BOOK FAST!

Please contact us if you're interested in getting involved!

### Celebrate :

UPCOMING SPECIAL EVENTS THAT HIGHLIGHT OUR MUTUAL WORK & PUT YOU IN FRONT OF THE WHO'S WHO OF DENVER



**SCREAM SCRAM - 10.21.2016** 

There's still time to get involved in one of our best events of the year, the annual Halloween-themed Scream Scram 5K Run/Walk!

Put the challenge out to your employees...for just \$250 you can put together a **Scream Team** of up to 10 runners/walkers to take part in this family-friendly, costume-optional event with a great post-race expo!

Register your team today!

Thank you to all of this year's Scream Scram event sponsors:

#### PRESENTING SPONSOR







#### **ADDITIONAL SPONSORS**













#### FOOD & BEVERAGE SPONSOR



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### Board Chair's Agenda

### National Western Update







- January 2, 2017 Young Guns Reception at Coors Western Art
- January 3, 2017 Coors Western Art Exhibit Reception
- January 5, 2017 CSU Presents National Western Stock Show VIP BBQ
- January 5, 2017 Mayor/City Council Dinner
- January 6, 2017 Boots n Business Luncheon
- January 9, 2017 Citizen of the West Dinner
- January 14, 2017 CSU Day at National Western
- January 19, 2017 Legislators Dinner







### REIMAGINED

Colorado State University is proud to be one of the key partners in the reimagining of the National Western Center (NWC). Read on for updates about CSU's activities within the NWC, as well as stories that spotlight neighbors, partners, and collaborators of this landmark project.











#### **News**

**CSU** collaborates with Denver Museum of Nature & Science to further education

#### **Upcoming Events**

#### Fall Feast

November 19, 2016 10 a.m.-2 p.m. National Western Complex

Free to families and individuals in attendance, and includes lunch, a Kids Zone, haircuts, a backpack giveaway, and entertainment.

Sign up to volunteer here.

CSU Day @ the National Western Stock Show



CSU and the Denver Museum of Nature & Science announced an agreement to work together in order to elevate research, enhance educational opportunities for students and the public, and highlight their academic alignment. "The museum and CSU each has a history of education, innovation and outreach," said Amy Parsons, executive vice chancellor of the CSU System. "Working with the museum to plan the revolutionary redevelopment of the National Western Center sparked a meaningful relationship that we are thrilled to have." As part of the agreement, CSU is a major sponsor of the <a href="Extreme Mammals exhibit">Extreme Mammals exhibit</a> at the Museum, which runs through January 8, 2017.

Read more.

### Community and CSU host free neighborhood pet clinic



Pets in northeast Denver received health pick-me-ups during the Pet Wellness and Vaccine Clinic at the Focus Points Family Resource Center on October 15. For the third year in a row, Colorado State

January 14, 2016

See more information about CSU's presence at the Stock Show in our special edition newsletter, out in mid-December.

National Western Center Executive Oversight Committee Meetings

October 27, 2016

November 17, 2016

December 15, 2016

All meetings are from 1:30-2:30 p.m. in Room 4.F.6 of the Webb Building

National Western Center Citizens Advisory Committee Meetings

October 27, 2016

November 17, 2016

December 15, 2016

All meetings are from 5:30-7:30 p.m. in the Centennial Room of the National Western Complex

Click <u>here</u> to view the NDCC event calendar.

#### **NWC Profile**



**Kelly Leid** 

University veterinary students and faculty, <u>PetAid Colorado</u>, and volunteer practitioners hosted the outreach effort, providing free physical exams and vaccinations for 152 dogs and cats. This year, the addition of <u>Dumb Friends League</u> allowed spay and neuter surgeries for 36 pets of qualified families in the Globeville and Elyria-Swansea neighborhoods.

Read more.

#### **Extreme Community Makeover in North Denver**



On Saturday, October 22, CSU volunteers, including seven Construction Management students who do start-to-finish renovation projects in Fort Collins and Denver as part of the CM Cares team, power-washed, stripped, and re-painted Tessie and Joe Medina's house in North Denver, as well as cleared weeds, removed trash, and trimmed trees at four additional properties on the same block. Read more.

### C.I.G. selected as National Western Center communications team

Executive Director of the Mayor's Office of the National Western Center

"As a third generation
Coloradan, I'm humbled to be
part of a team that will not only
secure the National Western
Stock Show for future
generations, but also establish
a unique global agribusiness
campus that will convene
public and private interests to
help solve some of our most
pressing global food system
challenges. [It] is truly a once
in a lifetime opportunity."
Read more of Kelly's interview
here.

#### **Partner Spotlight**



CSU and PetAid Colorado have collaborated to host pet clinics and outreach in the Globeville and Elyria-Swansea neighborhoods for the past three years. The completion of the CSU Equine Sports Medicine Clinic at the National Western Center will expand the partnership, as PetAid Colorado plans to provide veterinary services for companion animals within the space.

"PetAid Colorado is thrilled to collaborate with CSU in caring for underserved pets in



"C.I.G. is thrilled to join the National Western Center team! Every member of our team grew up here in the Denver area and we share a very deep, personal pride in what the transformation of the iconic National Western Complex and Denver Coliseum sites into a year-round destination and regional asset will mean for the community we love. We're eager to jump right in and help achieve the joint vision of the National Western Center becoming the global destination for agricultural heritage and innovation," said Karen Morales, CEO/Owner, C.I.G.

#### **Articles and Links of Interest**

#### Sustainability:

- <u>Eight years of collaborative energy research nets Colorado</u> \$194M
- CSU to lead \$1.8M study on methane emissions from oil and gas

#### Health:

- Colorado State University vet studies kidney pill alternative for cats
- New Clinical Nutrition Service helps veterinarians, pets and their owners

#### Food Systems, Agriculture, and Innovation

 Third-graders learn about food and farming at Ag <u>Adventures</u>

#### Water:

Denver's urban neighborhoods," said Ralph Johnson, Executive Director of PetAid Colorado. "The talent, passion, and commitment that CSU volunteers and staff bring to the table is invaluable and inspiring. Together, we are expanding the healthcare safety net for pets – so that pain and suffering are relieved for our furry best friends that seldom have access to veterinary care. By serving pets and people in need we help our communities thrive, and PetAid Colorado is grateful for CSU's engagement in this vital work."

#### **Project Spotlight**



Colorado State
University alumni and staff
enjoyed The Greenway
Foundation annual Fall
RiverSweep in September.
The event brings together
more than 300 volunteers to
clean up areas around the
South Platte River and
maintain one of Denver's
greatest natural assets.

The Greenway Foundation is a Denver-based 501(c)(3) nonprofit organization that has led efforts, since 1974, to

reclaim the South Platte River and its tributaries.

NSF network tackles urban water problems

This quarterly newsletter is sent to CSU partners and to individuals who have expressed interest in CSU's role in the National Western Center redevelopment and the university's activities in Denver.

The intent of the publication is to share news and updates about the NWC, showcase local and national stories related to the redevelopment, and to spotlight partners, residents and professionals active within the project.

### Audit and Finance Committee

#### BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM AUDIT and FINANCE COMMITTEE MEETING AGENDA December 9, 2016

#### Audit

1.	Discussion/Presentation – Status of FY 2016-2017 Audit Plan	5 min.
2.	Discussion/Presentation – Review of Audit Reports Issued	10 min.
3.	Discussion/Presentation – Past Due Audit Recommendations	5 min.
Financ	ce	
4.	Introduction of Margaret Henry – CSU System Treasurer <b>Discussion</b> – CSU System Debt Policy Review	10 min.
5.	Discussion/Presentation – Update on Series 2016 A&B Bond Issuance	10 min.
6.	Discussion/Presentation – Debt Capacity Discussion	20 min.
7.	Discussion/Presentation – FY18 Governor's Budget Request	10 min.
8.	Discussion/Presentation – Campus Budget Updates	15 min.
9.	Discussion/Presentation – FY17 1st Quarter Financial Statements	10 min.
10	. Discussion/Presentation/Action Item – Reserves Report	10 min.
11	. <b>Action Item</b> – CSURF Capital Lease Annual Renewal	5 min.

# Finance & Audit Committee Presentation December 9, 2016

## Item 1 Status of FY2016-17 Audit Plan

#### Colorado State University System Department of Internal Audit Status of FY 2016-2017 Audit Plan

Institution	Audit Area	Reporting Area	Status			
Carried Forward from FY 2015-2016						
CSU	Data Centers (IT)	VPIT	Fieldwork			
CSU	Social Media (IT)	VP External Relations				
CSU	Disaster Preparedness (IT)	VPIT				
CSU	Recharge Centers	Business & Financial Services	Report 17-03			
CSU	CEMML	WCNR/Provost	Review			
CSU	Athletics (Compliance areas) FY 15-16	President	Planning			
CSU	College of Business - transition	COB/Provost	Report 17-02			
CSU	Early Childhood Center (Special)	College of Health & Human Sciences	Report 17-01			
CSU	Natural Resources Ecology Lab	WCNR/Provost				
CSU	Electrical & Computer Engineering Dept	College of Engineering/Provost	Fieldwork			
CSUP	Cashier Operations	Business Financial Services	Review			
	New for 201	6-2017				
CSU	Fringe Pool	Budget Office/VPUO	Fieldwork			
CSU	Data Security-Advancement	VP Advancement				
CSU	Management of Financial Commitments	President/Provost/VPUO				
CSU	Export Control	VP Research	Review			
CSU	Human Resources/Hiring Process	VPUO				
CSU	Office of Sponsored Programs - transition	VP Research				
CSU	Facilities-Campus design and Construction	VPUO				
CSUP	Human Resources					
CSUP	Office of International Programs					
CSUGC	Financial Reporting					
All	Continuous Auditing		Ongoing			
CSU	Special Project-CSU Bookstore		Review			
CSU	Special Projects					
CSUP	Special Projects					

## Item 2 Review of Audit Reports Issued

#### Colorado State University System



#### Audit of the College of Business-Dean's Transition Review – Colorado State University

## EXECUTIVE SUMMARY October 4, 2016

### **Background Information**

The College of Business (College) prepares students for enterprise in the modern global economy with an emphasis in sustainability and social responsibility. In 2016 the College celebrated its 50<sup>th</sup> birthday after welcoming a new Dean in 2015. The Dean's Department is the central administrative organization and there are five departments: Accounting, Computer Information Systems, Finance and Real Estate, Management, and Marketing. Available to students is a Bachelor of Science in Business Administration and several Graduate Programs leading to Master's degrees in Accountancy, Administration, Computer Information Systems, and Finance. Online there is a Professional MBA graduate program as well as six different graduate certificates offered by the College.

### **Scope and Objectives**

The objective of the review was to provide a risk assessment to the incoming Dean regarding the internal control environment within the College. This included determining whether the College limits its risk through a strategic plan, policies, procedures, and internal controls that are in practice on a daily basis.

#### **Results and Conclusions**

The initial risk assessment process calculated this as HIGH risk operation. During the audit, we assessed controls, processes and procedures designed to mitigate risks. Based on the audit, we concluded that the risk mitigation activities provide a MEDIUM residual risk level.

The College appears to be in compliance, for the most part, with CSU policies and procedures. Some opportunities for improvement to further strengthen internal controls were explored with management, but we did not identify any findings resulting in formal recommendations during this audit. Details may be found in Audit Report 17-02 issued the same date as this Executive Summary.

We would like to express our appreciation to the staff of the College of Business for their assistance and cooperation during the audit.

Allison A. Horn – Director, Internal Auditing

#### Colorado State University System



Audit of Recharge and General Operations Subfunds – Colorado State University

#### EXECUTIVE SUMMARY November 3, 2016

#### **Background Information**

The University uses two types of subfunds—Recharge and General Operations subfunds—to administer the financial activity of self-funded activities that regularly sell goods and services. Recharge Center (21) subfunds are used for the purpose of accumulating and billing costs related to goods and services supplied at cost between University departments or accounts. General Operations (22) subfunds are used to record revenues and expenses related to the sale of goods and services provided to students, faculty, staff, and the external community, and activities must be substantially related to the University's mission of instruction, research, and public service.

### **Scope and Objectives**

Active accounts in the Recharge or General Operations subfunds were evaluated primarily for the period July 1, 2014 through March 31, 2016, although financial activity beyond this scope was considered to identify inactive accounts

The audit objectives were to:

- 1. Determine if controls over the University's Recharge (21) and General Operations (22) subfunds provide adequate assurance that the funds are operating in accordance with University and federal policies and procedures.
- 2. Determine if the University's General Operations and Recharge accounts are in compliance with University and federal policies and procedures.

#### **Results and Conclusions**

The initial risk assessment process calculated this as HIGH risk operation. During the audit, we assessed controls, processes and procedures designed

to mitigate risks. Based on the audit, we concluded that the risk remains HIGH. The management response to recommendations, when implemented, will mitigate the residual risk to MEDIUM.

Based on the audit objectives listed above, we made the following recommendations, based on the audit findings:

- 1. Develop a more formal mechanism for preparing, approving, documenting, and tracking billing rates and updates.
- 2. Ensure that training opportunities are made available to staff for the development and ongoing review of billing rates to ensure they are adequately recovering costs and adequately managing deficits (21 and 22 accounts) and surpluses (21 accounts).
- 3. Communicate that a mechanism exists to adjust for deficits incurred due to large, infrequent expenditures; specifically, the uniform guidance provides that surpluses and deficits must be a consideration in adjusting billing rates for subsequent years.
- 4. Implement a mechanism to ensure that departments can readily produce supporting documentation for audit of billing rates corresponding to 21 and 22 accounts.
- 5. Clarify policies and procedures for approval and use of billing rates and clearly communicate these policies and procedures through training.

We have discussed the findings and recommendations with management, and are satisfied that completion of the proposed action will mitigate the issues noted. Details may be found in Audit Report 17-03 issued the same date as this Executive Summary.

We would like to express our appreciation to Campus Services and department staff for their assistance and cooperation during the audit.

Allison A. Horn – Director, Internal Auditing

## Item 3 Past Due Audit Recommendations



## All Overdue Recommendations

Audit	Audit Name	Institution		Recommendation	Audit Report Response		Revised
Number			No.			-	Target
						Date	Completion
16-06	Risk Management & Insurance	CSU		Consider engaging a consultant to evaluate the adequacy of CSU insurance reserves, and make recommendations as to a methodology that can be used to evaluate the adequacy of the reserves.	Agree. RMI has recently retained the services of AON Risk Services. AON will assist RMI to evaluate CSU's insurance reserves, and to make recommendations as to a methodology that can be adopted to evaluate adequacy of reserves.	7/1/2016	07/01/2017
16-07	Conflict of Interest	CSU	8	Initiate a review to determine why select employee groups are excluded from the annual disclosure process and assess the feasibility of including these employee groups in the annual conflict of interest disclosure process.	Agree. Legal Counsel will determine if there are existing COI disclosure procedures for State Classified employees. If not, the COI Committee will determine if they should be incorporated into the University COI policy		01/06/2017
16-13	Life and Housing	CSU-P		Review Facilities overhead charges and the chargeback process to ensure Housing maintenance and utilities expenses accurately reflect the actual costs incurred.	Agree. BFS and Facilities are currently in the process of adopting CSU – Fort Collins' methodology of direct billing facilities costs. As a result, facilities expense will be removed from the overhead charge.		07/01/2017
16-13	Residence Life and Housing	CSU-P		Ensure total costs of maintenance and utility expenses are available, accurate, and consistently recorded over time.  Total costs would include amounts paid directly by Housing and amounts charged by Facilities to Housing.	Agree. At the start of FY16-17, Colorado State University – Pueblo will be changing the billing process for Housing maintenance and utility expenses. The process will more closely follow the current process used by CSU-FC.	9/30/2016	07/01/2017

# Item 4 Introduction of CSU System Treasurer and CSU System Debt Policy Review

## Item 5 Update on Series 2016 A&B Bond Issuance

## Board of Governors of the Colorado State University System Series 2016 Financing Update

#### Structure -

Series 2016A (Taxable):	Par Amount - \$5,235,000
Series 2016B (Tax-Exempt, Non-Intercept):	Par Amount - \$39,700,000
Series 2016B Refunding (Tax Exempt, Non-Intercept)	Par Amount - \$23,170,000
Series 2016C Refunding (Tax-Exempt, Intercept)*	Par Amount - \$11,010,000
Total Series 2016	Par Amount - \$79,115,000

- Accommodates unique debt service schedule for Pueblo project to be matched against utility savings
- Allows for level debt service for other projects
- Need for taxable Series for IBTT project to accommodate long-term management contract

#### <u>Interest Rates – </u>

- Rates have increased over 60 basis points since the bond financing resolution in October
- Projected Savings from refunding Series 2007A and 2008A with Series 2016B
  - o \$3 million Net PV
  - o Percentage savings of refunded bonds 12.09%
- Projected Savings from refunding Series 2012A with Series 2016C Intercept\*
  - o \$359,235 Net PV
  - o Percentage savings of refunded bonds 3.21%

#### Ratings -

•	Moody's	Aa3	Series 2016C (Intercept)	Aa2
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• Standard & Poor's A+/Stable Series 2016C (Intercept) AA-/Stable

<sup>\*</sup>Current rates will not allow for this refunding to move forward

## Item 6 Debt Capacity Discussion

## CSUS Debt Capacity Update

NOVEMBER 1, 2016

## Rating Agency Capacity Views

### Standard and Poor's Draft Report Dated **November 11, 2016**:

The System's rating outlook was changed from **negative** to **stable** reflecting:

- CSU's status as the land-grant institution in Colorado,
- Broad pledge of system net revenues,
- Increasing enrollment, with a combined 55,596 total headcount as of fall 2016, and expectations for continued growth in fall 2017,
- Adequate financial resources relative to operating expenses, and
- Improved operating results in fiscal 2016.

#### Offsetting factors include:

- Significant increase in debt recently; above-average, but manageable MADS burden of 6% of FY16 expenses,
- Low financial resources relative to debt for the rating, with adjusted UNA equal to 30% of total debt,
   and
- Relatively small, although increasing, endowment for the rating.

Standard and Poor's Report Dated **August 3, 2015**:

"In our view, the university is at its debt capacity to maintain the current rating."



## Rating Agency Capacity Views

Moody's Report Dated **November 11, 2016**:

"The System's Aa3 rating reflects the its role as the land grant institution for the State of Colorado, sizable \$1 billion scope of operations and significant research enterprise. Steady student demand and strong growth of net tuition revenue demonstrates good national brand reputation. The Aa3 is also supported by good philanthropic momentum, with favorable capital campaign results, and strong fiscal stewardship with well managed fiscal performance despite substantial campus investment. Offsetting challenges include high leverage, historically limited state support for operations and capital, and execution risk associated with the sizeable capital program still under construction.

WHAT COULD MAKE THE RATING GO DOWN – "Sustained deterioration of cash flow margins and debt service coverage, erosion of liquidity, and **significant increase in leverage beyond the current offering."** 

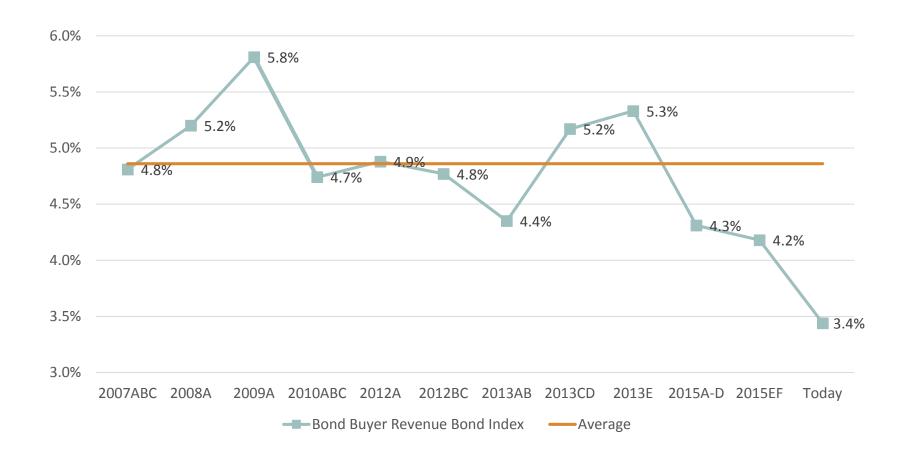
Moody's Report Dated July 29, 2015:

"The System is highly leveraged compared to other Aa3-rated public universities, from both a balance sheet and operating perspective, as leverage rises further with these Series 2015E&F bonds, following the prior 2015 financing for the new stadium. High leverage reflects historically weak state capital funding and a period of significant capital investment.

WHAT COULD MAKE THE RATING GO DOWN - Significant additional leverage given substantial recent growth in debt levels."



## Low Interest Rates Contribute to Debt Capacity



## Refunding Savings Exceed \$55 Million

**Proposed Series 2016 Refunding** 

Est. Cash Flow Savings - \$8.56 Million Est. Present Value Savings - \$6.33 Million

Series 2015C

Cash Flow Savings - \$7.76 Million Present Value Savings - \$5.54 Million

Series 2013A and B

Cash Flow Savings - \$33.55 Million Present Value Savings - \$10.39 Million

Series 2012B and C

Cash Flow Savings - \$5.31 Million Present Value Savings - \$4.16 Million



## Debt Capacity Recap and Current Status

Capacity Update	Debt Capacity Forecast	Current Years' Issuance	Cumulative New Issuance
October 2012	\$300 - \$400 Million	\$33.5 Million	
October 2013	\$150 - \$250 Million	\$138 Million	\$171.5 Million
October 2014	\$50 - \$100 Million	-	\$171.5 Million
October 2015	Negligible at Current Rating without Growth in Unrestricted Net Assets and Operating Margin	\$390.5 Million	\$562.0 Million
October 2016	\$50 - \$100 Million	\$50.5 Million	\$612.5 Million



## Debt Capacity Defined

As stated in the CSU System Finance Policy:

The System's "debt capacity" will be determined from time to time, giving consideration to bond rating agency input and related industry guidelines, with the goal of maintaining the then current credit ratings from each rating agency.

CSU System Office working definition of Debt Capacity:

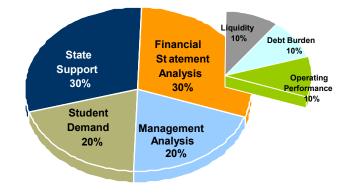
"Debt capacity" represents the additional amount of debt (principal) that can be issued before placing our current underlying bond ratings of Aa3 (Moody's) and A+ (S&P) in jeopardy, assuming System financial conditions remain relatively constant.



## Measuring Debt Capacity

Debt capacity is both a function of qualitative and quantitative factors.

**Credit Ratings Factors:** 



Quantitative analysis of debt capacity focuses on a grouping of key financial ratios:

- Capital ratios compare the System's resources to debt outstanding
- Operating ratios compare annual debt service to income

A below average ratio in any one measure does not indicate a lower rating. Rather, various pro-forma ratios need to be evaluated collectively and in conjunction with the various qualitative factors and in the context of the System's financial strategy.

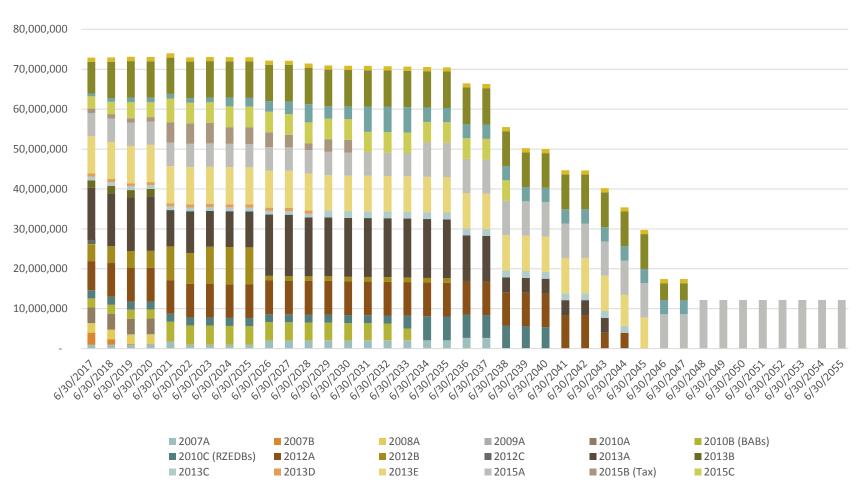


## **Current Debt Outstanding**

Name of Bonds	Original Principal Amount	Outstanding Principal Amount	Interest Rates
Series 2007A	\$ 160,665,000	\$ 19,185,000	4.625% - 5.250%
Series 2007B	34,260,000	4,570,000	4.000% - 5.000%
Series 2008A	83,285,000	8,480,000	3.000% - 5.000%
Series 2009A	56,090,000	845,000	3.000% - 5.000%
Series 2010A	25,330,000	13,870,000	4.000% - 5.000%
Series 2010B (BABs)	40,335,000	40,335,000	4.900% - 5.957%
Series 2010C (RZEDBs)	33,250,000	33,250,000	6.057%
Series 2012A	126,245,000	123,665,000	2.000% - 5.000%
Series 2012B	54,115,000	52,150,000	2.000% - 5.000%
Series 2012C	5,340,000	1,095,000	0.728% - 1.864%
Series 2013A	181,970,000	170,095,000	1.000% - 5.000%
Series 2013B	16,690,000	7.065,000	0.427% - 2.073%
Series 2013C	18,610,000	18,610,000	5.000% - 5.250%
Series 2013D	7,855,000	6,940,000	0.963% - 5.251%
Series 2013E	138,740,000	137,700,000	0.250% - 4.610%
Series 2015A	134,730,000	134,730,000	3.450% - 4.200%
Series 2015B (Tax)	32,815,000	32,815,000	2.688% - 4.081%
Series 2015C	67,675,000	67,090,000	0.180% - 3.720%
Series 2015D (VR)	66,655,000	66,655,000	Variable
Series 2015É	139,675,000	138,615,000	2.230% - 4.380%
Series 2015F	16,610,000	16,975,000	0.280% - 2.370%
Total	<u>\$ 1,440,940,000</u>	<u>\$ 1,094,735,000</u>	



## **Current Debt Outstanding**





## Item **7**FY18 Governor's Budget Request

## FY 2018 Governor's Budget

- There are \$926M in new costs and only \$426M in new revenues available creating a budget gap of \$500M.
- This includes TABOR rebates to taxpayers totaling \$195M.
- The Governor is proposing a number of budget balancing transfers and statutory changes to balance the budget.

## Impact to Higher Education

- The proposed budget includes a \$20.5M increase (2.5% increase) in funding for higher education institutions.
- The CSU System's portion of the funding increase is \$3.9M, slightly above the average increase.
- Resident, undergraduate tuition rate increases will be capped at 6% for the CSU System.
- No funding for new capital construction projects for higher education institutions.

## Item 8 Campus Budget Updates

#### FY18 Incremental E&G Budget - V.2.1 Colorado State University - Fort Collins

Monday, November 28, 2016

New Resources		<u>Rate = 5%</u>	<u>Rate = 6%</u>	Rate = 4.5%	
Tuition					
Undergraduate-Enrollment Growth					
Increase in FTE	\$	9,635,000	_	9,635,000	
Change in mix - RES vs. NRES	т	4,996,000	5,023,000	4,983,000	
Undergraduate Rate Increase		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,525,555	,,,,,,,,,,	
Resident		7,446,000	8,937,000	6,701,000	
Non-Resident		2,799,000	-	2,799,000	
Graduate Rate Increase		_,,,,,,,,,		_,,,,,,,,,	
Resident		422,000	_	422,000	
Non-Resident		606,000	_	606,000	
Professional Veterinary Medicine Rate Increase		1,507,425	_	1,507,425	
Differential Tuition		974,594		974,594	
Total Tuition	\$	28,386,019	29,904,019	27,628,019	
State Funding Impact	۲	2,934,210	29,904,019	2,934,210	
Facilities and Administrative Overhead		255,000		255,000	
Other		233,000	_	233,000	
Total	\$	31,575,229	33,093,229	30,817,229	
	Ş	31,373,229	33,093,229	30,817,229	
New Expenses  Multi-Year Central Investments in Strategic Initiatives	¢	1,700,000		1,700,000	
Faculty/Staff Compensation	Ş	11,743,000	-	1,743,000	
Academic Incentive Funding		8,756,623	-	8,756,623	
Financial Aid		6,324,000	6,622,000	6,175,000	
Mandatory Costs		4,968,000	-	4,968,000	
Quality Enhancements		1,370,000	-	1,370,000	
Reallocation		(3,000,000)	-	(3,000,000)	
Total	\$	31,861,623	32,159,623	31,712,623	
Net	\$	(286,394)	933,606	(895,394)	
				1 200/	
Incremental Cost of Salary Increases		3.00%	<u>3.50%</u>	<u>4.00%</u>	
Faculty/AP	\$	1,669,863	3,340,173	5,010,484	
State Classified		262,708	525,326	787,944	
	\$	1,932,571	3,865,499	5,798,428	

1% RUG Increase = student share \$87/yr 1% Increase NRUG = student share \$260/yr \$1,491,000 \$1,120,000

#### **Base Assumptions**

Resident Undergraduate 5%; \$435.80/yr

Non-Resident Undergraduate 2.5%; \$650.20/yr

Resident Graduate 3%; \$288.80/yr and Resident Professional Veterinary Medicine 7%; \$2,058/yr

 $Non-Resident\ Graduate\ 3\%;\ \$705.20/yr\ and\ Non-Resident\ Professional\ Veterinary\ Medicine\ 2\%;\ \$1,088/yr\ Argument Frofessional\ Veterinary\ Medicine\ 2\%;\ \$1,088/yr\ Argument\ A$ 

Differential Tuition - UG - 2%

Salary Increases Faculty/AP -2.5%

Salary Increases SC 2.5%

Internal Reallocations 1.2%

Fees around X%

### FY18 Incremental E&G Budget - V.2.0 Colorado State University - Pueblo

Tuesday, November 22, 2016

Rate = 5% Rate = 6% Rate = 4.5%

#### **New Resources**

Tuition			
Undergraduate Rate Increase			
Resident	\$ 915,000	\$ 1,098,000	\$ 824,000
Non-Resident and WUE	388,000	466,000	350,000
Graduate Rate Increase	-	-	-
Resident	28,000	33,000	25,000
Non-Resident	18,000	22,000	16,000
Resident Teacher Education Program	10,000	12,000	9,000
Differential Tuition	41,000	49,000	37,000
Projected Enrollment Change (2.6% decline)	 (780,000)	(780,000)	(780,000)
Total Tuition	620,000	900,000	481,000
Change in State Funding	 958,000	958,000	958,000
Total	\$ 1,578,000	\$ 1,858,000	\$ 1,439,000
New Expenses			
Total Financial Aid Change	155,000	225,000	120,000
Salary increases: Faculty and Administrative Professionals (2.5%)	625,000	625,000	625,000
Salary increases: State Classified Employees (2.5%)	188,000	188,000	188,000
Equity Adjustments	100,000	100,000	100,000
Faculty Promotions	150,000	150,000	150,000
Fringe Benefit Rate Increase	250,000	250,000	250,000
Other Mandatory Costs*	430,000	430,000	430,000
Miscellaneous Adjustments	-	-	-
Repayment to CSU-Global (loan value \$1,320,713 due June 30, 2017)	-	-	-
Commitments/Quality Enhancements:	-	-	-
Contingency Funds			
Total	\$ 1,898,000	\$ 1,968,000	\$ 1,863,000

Net

\$ (320,000) \$ (110,000) \$ (424,000)

Incremental Cost of Salary Increases	3.0%	3.5%	4.0%
Faculty/AP	\$ 125,000	\$ 250,000	\$ 375,000
State Classified	\$ 37,500	\$ 75,000	\$ 112,500
	\$ 162,500	\$ 325,000	\$ 487,500

#### **Base Assumptions**

Scenario 1: 5.0% tuition increase for all tuition categories.
Scenario 2: 6.0% tuition increase for all tuition categories.
Scenario 3: 4.5% tuition increase for all tuition categories.

Salary increases Faculty/AP: 2.5%. Salary increases Classified: 2.5%. Fees at X%.

\* This line includes anticipated increases for the following expenses: utilities, maintenance costs, statewide indirect costs, library subscriptions, sheriff's contract, payments to risk management (liability and property insurance), information technology inflation, background checks, system costs, audit expenditures, and fees for collections.

## FY18 Incremental Educational & General Budget | As of December 2016

## Colorado State University GLOBAL CAMPUS

**New Resources** 

Tuition (net)

Undergraduate - Retention Growth \$9,619,148

Undergraduate - New Student Enrollment Growth \$1,756,955

Graduate - Retention Growth \$4,122,371

Graduate - New Student Enrollment Growth \$752,981

**New Expenses** 

3
1
6
7
3
6

Net

Total \$6,228,382

10,500

New student enrollment target

Projected First Year Retention

82%

Full-Time Undergraduate

60%

Part-Time Undergraduate

90%

Full-Time Graduate

66%

Part-Time Graduate

\$350/\$500

New student undergrad/grad tuition rate per credit

70:30

Undergrad to grad ratio

2%

Percentage of gross tuition revenue for bad debt estimate

## Item **9**FY17 1<sup>st</sup> Quarter Financial Statements

		Colorado Stat	e University Sys	tem			
Staten	nent c	of Revenues, Expe	enses and Chang	ges in Net Position			
		Three	Year Trend				
		FY 2015	FY 2016	FY 2017	FY 2017	FY 2017	
		Actual	Actual	Original Budget	YTD Budget Q1	Q1	% Varianc
Operating revenues							
Student tuition and fees	\$	460,303,854	500,084,091	553,384,945	264,849,410	265,295,949	0.2%
State fee for service revenue		78,930,768	91,722,886	91,470,591	22,867,647	22,867,647	0.0%
Grants and contracts		274,318,833	291,130,967	308,375,701	76,541,473	76,140,887	-0.5%
Sales and services of educational activities		33,762,571	37,875,339	35,144,436	9,584,207	9,762,393	1.9%
Auxiliary enterprises		153,865,332	163,533,393	166,495,715	66,848,229	67,739,524	1.3%
Other operating revenue		10,132,729	10,928,246	12,293,893	2,029,482	2,104,312	3.7%
Total operating revenues	\$	1,011,314,087	1,095,274,922	1,167,165,281	442,720,448	443,910,712	0.3%
Operating expenses							
Instruction	\$	293,171,205	307,078,021	309,147,442	65,126,662	64,286,436	1.3%
Research	•	187,160,137	195,137,959	200,700,000	48,322,580	49,559,140	-2.6%
Public service		90,677,017	101,730,984	112,150,120	26,925,036	26,962,487	-0.1%
Academic support		79,861,280	84,590,370	102,368,731	28,285,976	29,404,688	-4.0%
Student services		51,875,352	58,968,676	67,849,382	16,131,448	16,220,453	-0.6%
Institutional support		62,601,791	66,189,484	69,071,024	20,300,514	19,975,456	1.6%
Operation and maintenance of plant		75,940,549	74,160,688	77,013,196	18,936,694	18,982,412	-0.2%
Scholarships and fellowships		30,660,619	30,185,078	34,495,178	12,689,395	12,747,641	-0.5%
Auxiliary enterprises		143,188,413	148,649,236	145,814,773	37,293,744	36,508,977	2.1%
Depreciation		89,538,159	94,957,807	101,825,596	23,599,896	22,959,045	2.7%
Total operating expenses	\$	1,104,674,522	1,161,648,303	1,220,435,442	297,611,946	297,606,734	0.0%
Operating Income (Loss)	\$	(93,360,435)	(66,373,380)	, , ,	145,108,503	146,303,978	-0.8%
Non-operating revenues (expenses)							
State appropriations	\$	2,355,000	2,143,895	2,150,000	_	_	
Gifts	Ψ	44,404,784	48,507,119	43,100,000	10,246,700	10,247,872	0.0%
Investment income		3,900,704	7,108,698	6,114,172	1,489,022	1,666,815	11.9%
Interest expense on capital debt		(26,971,190)	(25,533,657)	, ,	(7,021,000)	(6,995,376)	
Federal nonoperating grants and contracts		41,115,631	41,175,739	46,795,178	18,921,811	18,916,647	0.0%
Other nonoperating revenues (expenses)		10,788,905	5,805,246	6,100,000	2,501,000	2,510,660	0.4%
Net nonoperating revenues	\$	75,593,834	79,207,040	70,259,350	26,137,533	26,346,619	0.4%
Income (Loss) Before other revenues	\$	(17,766,601)	12,833,660	16,989,189	171,246,036	172,650,597	0.8%
		. ,					
Other revenues (expenses)	_						
State capital contributions	\$	17,152,774	19,831,209	41,826,475	7,488,383	7,492,792	0.1%
Capital grants		12,591,382	8,116,638	8,000,000	1,092,000	1,122,939	2.8%
Capital gifts		21,054,584	10,451,580	11,000,000	314,000	313,695	-0.1%
Payments (to)/from governing boards or other institutions		629,140	220,042	1,037,615	183,116	170,697	6.8%

Special items							
Transfer of assets of OPEB plans to irrevocable trust	\$	-	-	-	-	-	
Total special items	\$	-	-	-	-	-	
la conservation and the state of the state o	•	00 445 505	50 700 040	70.050.070	400 000 505	404 750 700	• ••
Increase (decrease) in net position	<u> </u>	33,415,525	50,723,349	79,853,279	180,323,535	181,750,720	0.8%

(245,754)

51,182,126

(729,780)

37,889,689

1,000,000

62,864,090

9,077,499

9,100,124

0.2%

Additions to permanent endowments

Total other revenues

Colorado State University
Statement of Revenues, Expenses and Changes in Net Position
Three Year Trend

	_	Three	Year Trend				
		FY 2015 Actual	FY 2016 Actual	FY 2017 Original Budget	FY 2017 YTD Budget Q1	FY 2017 Q1	% Variance
Operating revenues							<u> </u>
Student tuition and fees	\$	363,593,738	391,162,529	426,000,000	226,747,684	226,318,587	-0.2%
State fee for service revenue	·	71,706,368	82,680,714	82,668,228	20,667,057	20,667,057	0.0%
Grants and contracts		261,659,846	278,955,266	296,000,000	73,447,548	72,960,457	-0.7%
Sales and services of educational activities		33,749,510	37,737,530	35,000,000	9,442,660	9,616,289	1.8%
Auxiliary enterprises		144,809,559	155,275,006	157,600,000	63,289,943	64,023,155	1.2%
Other operating revenue		6,661,758	7,630,516	8,000,000	1,708,226	1,776,400	4.0%
Total operating revenues	\$	882,180,779	953,441,561	1,005,268,228	395,303,118	395,361,945	0.0%
Operating expenses							
Instruction	\$	261,240,321	270,439,490	269,000,000	55,952,369	55,137,338	1.5%
Research	*	186,131,875	194,049,160	198,700,000	48,022,580	49,255,880	-2.6%
Public service		90,494,542	101,570,692	112,000,000	26,880,000	26,882,017	0.0%
Academic support		71,353,494	75,957,441	92,000,000	25,760,000	26,896,125	-4.4%
Student services		29,482,324	31,304,849	34,000,000	7,416,016	7,762,402	-4.7%
Institutional support		45,298,522	48,321,483	49,000,000	15,009,780	14,723,230	1.9%
Operation and maintenance of plant		67,843,943	65,926,619	68,000,000	16,681,908	16,644,411	0.2%
Scholarships and fellowships		9,952,019	10,832,032	11,000,000	4,642,584	4,601,737	0.9%
Auxiliary enterprises		130,258,276	133,761,203	132,600,000	33,593,608	32,695,598	2.7%
Depreciation		82,575,435	87,776,634	94,600,000	21,758,000	21,053,782	3.2%
Total operating expenses	\$	974,630,751	1,019,939,603	1,060,900,000	255,716,845	255,652,520	0.0%
Operating Income (Loss)	\$	(92,449,972)	(66,498,042)	(55,631,772)	139,586,273	139,709,425	-0.1%
Non-operating revenues (expenses)							
State appropriations	\$	2,355,000	2,143,895	2,150,000	_	_	
Gifts	Ψ	41,342,150	42,798,208	40,000,000	10,163,000	10,162,714	0.0%
Investment income		3,262,710	6,070,823	5,500,000	1,394,000	1,393,883	0.0%
Interest expense on capital debt		(22,218,575)	(24,192,123)		(6,171,000)	(6,171,147)	
•		, , , ,	23,692,431	23,500,000	10,975,000	10,974,800	0.0%
Federal nonoperating grants and contracts Other nonoperating revenues (expenses)		23,989,284 10,415,187	, ,		2,476,000	2,476,604	
	•		5,718,468	6,000,000			0.0%
Net nonoperating revenues Income (Loss) Before other revenues	\$ \$	59,145,756 (33,304,216)	56,231,702 (10,266,340)	48,150,000 (7,481,772)	18,837,000 158,423,273	18,836,854 158,546,279	0.0%
moonie (2003) Delote offici Tevendes	Ψ	(00,004,210)	(10,200,040)	(1,401,112)	100,420,210	100,040,210	0.176
Other revenues (expenses)							
State capital contributions	\$	3,084,287	16,210,709	40,000,000	7,324,000	7,324,255	0.0%
Capital grants		12,573,030	7,955,584	8,000,000	1,092,000	1,092,216	0.0%
Capital gifts		21,054,584	10,127,744	11,000,000	314,000	313,695	-0.1%
Payments (to)/from governing boards or other institutions		(3,351,010)	(5,001,606)	(4,500,000)	(1,234,000)	(1,234,438)	0.0%
Additions to permanent endowments		(245,754)	(729,780)	1,000,000	-	-	
Total other revenues	\$	33,115,137	28,562,651	55,500,000	7,496,000	7,495,727	0.0%
Increase (decrease) in net position	\$	(189,079)	18,296,311	48,018,228	165,919,273	166,042,006	0.1%
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## Colorado State University - Board of Governors Statement of Revenues, Expenses and Changes in Net Position Three Year Trend

	1	I hree Year	I	FY 2017	<u> </u>		
		FY 2015	FY 2016	Original	FY 2017	FY 2017	%
		Actual	Actual	Budget	YTD Budget Q1	Q1	% Variance
Operating revenues	<u> </u>	, 151441	Autuui	Daugot	1 Duagot Wil		+ an anoe
Student tuition and fees	\$	_	_	_	_	_	
State fee for service revenue	Ψ.	_	_	_	_	_	
Grants and contracts		_	_	_	_	_	
Sales and services of educational activities		_	_	_	_	_	
Auxiliary enterprises		_	_	_	_	_	
Other operating revenue		_	_	_	_	_	
Total operating revenues	\$	-	-	-	-	-	
0							
Operating expenses	Φ.						
Instruction	\$	-	-	-	-	-	
Research		-	-	-	-	-	
Public service		-	23,820	-	-	36,049	
Academic support		-	-	-	-	-	
Student services		- E 20E 074	-	6.045.042	- 1 720 070	1 701 052	4.00/
Institutional support		5,395,974	6,236,950	6,915,912	1,728,978	1,701,053	1.6%
Operation and maintenance of plant		-	2 707	-	-	-	
Scholarships and fellowships		18,179	3,707	-	-	-	
Auxiliary enterprises		-	-	-	-	-	
Depreciation	Ф.	- E 414 1E2		6.045.042	1 720 070	1 727 102	
Total operating expenses	<u>\$</u> \$	5,414,153 (5,414,153)	6,264,477	6,915,912	1,728,978 ) (1,728,978)	1,737,102 (1,737,102)	
Operating Income (Loss)	<u> </u>	(5,414,153)	(6,264,477)	(6,915,912)	(1,720,976)	(1,737,102)	
Non-operating revenues (expenses)							
State appropriations	\$	-	-	-	-	-	
Gifts		-	-	-	-	-	
Investment income		(36,148)	(16,928)	-	-	(0)	
Interest expense on capital debt		-	-	-	-	-	
Federal nonoperating grants and contracts		-	-	-	-	-	
Other nonoperating revenues (expenses)		-	-	-	-	(4)	
Net nonoperating revenues	\$	(36,148)	(16,928)	-	-	(4)	
Income (Loss) Before other revenues	\$	(5,450,301)	(6,281,405)	(6,915,912)	(1,728,978)	(1,737,106)	
Other revenues (expenses)							
State capital contributions	\$	_	_	-	_	_	
Capital grants	•	-	_	-	_	_	
Capital gifts		-	_	-	-	_	
Payments (to)/from governing boards or other institutions		5,259,678	5,970,638	6,915,912	1,728,978	1,722,349	-0.4%
Additions to permanent endowments		-	-	-	-	-	
Total other revenues	\$	5,259,678	5,970,638	6,915,912	1,728,978	1,722,349	
Increase (decrease) in net position	\$	(190,623)	(310,767)	-	_	(14,757)	

Colorado State University - Global Campus						
Statement of Revenues, Expenses and Changes in Net Position						
Three Year Trend						

		Three `	Year Trend				
		FY 2015 Actual	FY 2016 Actual	FY 2017 Original Budget	FY 2017 YTD Budget Q1	FY 2017 Q1	% Variance
Operating revenues							
Student tuition and fees	\$	63,603,436	76,468,054	91,343,096	19,359,964	19,518,275	0.8%
State fee for service revenue		-	-	-	-	-	
Grants and contracts		-	-	-	-	-	
Sales and services of educational activities		-	-	-	-	-	
Auxiliary enterprises		-	-	-	-	-	
Other operating revenue		1,843,092	1,919,797	2,193,893	69,256	69,256	0.0%
Total operating revenues	\$	65,446,528	78,387,850	93,536,989	19,429,220	19,587,532	0.8%
Operating expenses							
Instruction	\$	12,605,994	16,240,963	19,277,427	3,956,789	3,799,904	4.0%
Research		-	-	-	-	-	
Public service		_	_	_	_	_	
Academic support		4,457,086	4,651,949	6,268,731	1,418,976	1,369,063	3.5%
Student services		16,905,263	21,886,826	27,749,992	6,885,615	6,602,579	4.1%
Institutional support		6,306,771	5,935,999	7,382,631	1,656,838	1,600,309	3.4%
Operation and maintenance of plant		491,710	531,924	514,878	130,207	139,002	-6.8%
Scholarships and fellowships		8,474,220	9,628,414	13,095,178	2,846,811	2,746,790	3.5%
Auxiliary enterprises		-	-	-	_,,	_,,	
Depreciation		287,116	399,948	525,596	99,896	99,896	0.0%
Total operating expenses	\$	49,528,160	59,276,022	74,814,433	16,995,131	16,357,544	3.8%
Operating Income (Loss)	\$	15,918,368	19,111,828	18,722,556	2,434,089	3,229,987	32.7%
Non-operating revenues (expenses)							
State appropriations	\$	_	_	_	_	_	
Gifts	•	_	_	_	_	_	
Investment income		332,273	940,078	274,172	27,022	207,193	666.7%
Interest expense on capital debt		-	-				
Federal nonoperating grants and contracts		8,474,220	9,628,414	13,095,178	2,846,811	2,746,790	-3.5%
Other nonoperating revenues (expenses)		(161,250)	-	-	_,,	8,834	
Net nonoperating revenues	\$	8,645,243	10,568,492	13,369,350	2,873,833	2,962,817	3.1%
Income (Loss) Before other revenues	\$	24,563,611	29,680,320	32,091,906	5,307,922	6,192,804	16.7%
Other revenues (expenses)							
State capital contributions	\$	_	_	_	_	_	
Capital grants	Ψ	_	_	_	_	_	
Capital gifts		_	_	_	_	_	
Payments (to)/from governing boards or other institutions		547,235	(724,056)	(724,056)	(181,014)	(191,562)	-5.8%
Additions to permanent endowments			( 1,000)	(. = 1,000)	(.01,017)	(.01,002)	2.070
Total other revenues	\$	547,235	(724,056)	(724,056)	(181,014)	(191,562)	5.8%
Increase (decrease) in net position	\$	25,110,846	28,956,264	31,367,850	5,126,908	6,001,242	17.1%

#### Colorado State University Pueblo Statement of Revenues, Expenses and Changes in Net Position Three Year Trend

	Inree Ye	ear irend				
	FY 2015 Actual	FY 2016 Actual	FY 2017 Original Budget	FY 2017 YTD Budget Q1	FY 2017 Q1	% Varian
Operating revenues		•	•			•
Student tuition and fees	33,106,680	32,453,508	36,041,849	18,741,761	19,459,086	3.8%
State fee for service revenue	7,224,400	9,042,172	8,802,363	2,200,590	2,200,590	0.0%
Grants and contracts	12,658,987	12,175,701	12,375,701	3,093,925	3,180,430	2.8%
Sales and services of educational activities	13,061	137,809	144,436	141,547	146,104	3.2%
Auxiliary enterprises	9,055,773	8,258,387	8,895,715	3,558,286	3,716,370	4.4%
Other operating revenue	1,627,879	1,377,933	2,100,000	252,000	258,656	2.6%
Total operating revenues	63,686,780	63,445,510	68,360,064	27,988,110	28,961,236	3.5%
Operating expenses						
Instruction	19,324,890	20,397,568	20,870,015	5,217,504	5,349,194	-2.5%
Research	1,028,262	1,088,799	2,000,000	300,000	303,260	-1.1%
Public service	182,475	136,472	150,120	45,036	44,421	1.4%
Academic support	4,050,700	3,980,980	4,100,000	1,107,000	1,139,500	-2.9%
Student services	5,487,765	5,777,000	6,099,390	1,829,817	1,855,471	-1.4%
Institutional support	5,600,524	5,695,052	5,772,481	1,904,919	1,950,864	-2.4%
Operation and maintenance of plant	7,604,896	7,702,145	8,498,318	2,124,580	2,198,999	-3.5%
Scholarships and fellowships	12,216,201	9,720,925	10,400,000	5,200,000	5,399,114	-3.8%
Auxiliary enterprises	12,930,137	14,888,033	13,214,773	3,700,136	3,813,379	-3.1%
Depreciation	6,675,608	6,781,225	6,700,000	1,742,000	1,805,366	-3.6%
Total operating expenses	75,101,458	76,168,199	77,805,097	23,170,991	23,859,568	-3.0%
Operating Income (Loss)	(11,414,678)	(12,722,689)	(9,445,033)	4,817,119	5,101,668	5.9%
Non-operating revenues (expenses)						
State appropriations	-	-	-			
Gifts	3,062,634	5,708,911	3,100,000	83,700	85,158	1.7%
Investment income	341,869	114,725	340,000	68,000	65,738	-3.3%
Interest expense on capital debt	(4,752,615)	(1,341,534)	(5,000,000)	(850,000)	(824,229)	3.0%
Federal nonoperating grants and contracts	8,652,127	7,854,894	10,200,000	5,100,000	5,195,058	1.9%
Other nonoperating revenues (expenses)	534,968	86,778	100,000	25,000	25,226	0.9%
Net nonoperating revenues	7,838,983	12,423,774	8,740,000	4,426,700	4,546,951	2.7%
Income (Loss) Before other revenues	(3,575,695)	(298,915)	(705,033)	9,243,819	9,648,619	4.4%
Other revenues (expenses)						
State capital contributions	14,068,487	3,620,500	1,826,475	164,383	168,538	2.5%
Capital grants	18,352	161,054	-	-	30,724	
Capital gifts	-	323,836	-	_	-	
Payments (to)/from governing boards or other institutions	(1,826,763)	(24,934)	(654,241)	(130,848)	(125,652)	-4.0%
Additions to permanent endowments	-	-	-	-	-	
Total other revenues	12,260,076	4,080,456	1,172,234	33,535	73,609	119.5%
Lancard Manager No.	0.004.00	0 =04 = 44	407.00:	0.077.076	0 700 000	
Increase (decrease) in net position	8,684,381	3,781,541	467,201	9,277,353	9,722,229	4.8%

## Item 10 Reserves Report

	АВ	C D		Е	F	G	Н		1	
1	Colorado	State University System		•		•				
2	Reserves	Report - Global Camus IR Inclusive	FY16 Actual Results/FY17 Approved Budget							
3	1									
4										
5				<u>CSU</u>	CSU-Pueblo	CSU-Global	CSU-System		<u>Total</u>	
6										
7	MAXIMU	M AVAILABLE UNRESTRICTED NET ASSETS:								
8	Unrestric	ted Net Assets 6/30/16	\$	(309,884,398)	(37,640,219)	76,165,175	(1,798,712)	\$	(273,158,154)	
9	Add:									
10		GASB 68 Adjustment		483,548,488	36,712,982	2,919,935	2,335,960		525,517,365	
11	Less:									
12		Non E&G Fund Balances		(84,567,117)	796,448				(83,770,669)	
13										
14		Maximum Available Unrestricted Net Assets (MAUNA)	\$	89,096,973	(130,789)	79,085,110	537,248	\$	168,588,542	
15										
16		ESERVE FLOOR:								
17	FY 16	Actual General Fund Expenditures <sup>(1)</sup>	\$	456,053,643	46,150,966	58,876,074	-	\$	561,080,683	
18	_									
19	Board	d Reserve Floor (20% for CSU, CSU-P and 40% for CSU-G)	\$	91,210,729	9,230,193	23,550,430	-	\$	123,991,351	
20 21	200/	Dulmann Bassinia Calaulatiani		424 220 002	0.000.400	70 005 440	527.240		240 020 640	
22	20%	Primary Reserve Calculation: MAUNA	\$	<b>121,338,092</b> 89,096,973	<b>9,968,168</b> (130,789)	<b>79,085,110</b> 79,085,110	537,248	>	<b>210,928,618</b> 168,588,542	
23		Non E&G Allocated Reserves		32,241,119	10,098,957	79,085,110	537,248		42,340,076	
24		Reserve Level Maintained <sup>(2)</sup>				- V	Yes			
25		Reserve Lever Manitaliled		Yes	Yes	Yes	res		Yes	
26	ES.C DOA	RD RESERVES AVAILABLE FOR DEPLOYMENT:								
27		mum Available Unrestricted Net Assets	\$	89,096,973	\$ (130,789)	79,085,110	\$ 537,248	¢	168,588,542	
28		Less:	Y	03,030,373	(130,703)	75,005,110	ý 337,240	Y	100,500,542	
29	'	Global 250 DCOH <sup>(3)</sup>		_	_	(51,589,470)	_		(51,589,470)	
30		10% Institutional Reserves - 10% (CSU-Global included in 250 DCOH)		(8,909,697)	_	(51,505,470)	(53,725)		(8,963,422)	
31		Prior Commitments Not Yet Met		(77,433,404)	_	_	(450,000)		(77,883,404)	
32				(11) 133) 13 17			(1.00)000)		(77,000) 10 17	
33	1	E&G Board Reserves Available for Strategic Deployment	\$	2,753,872	(130,789)	27,495,640	33,523	\$	30,152,246	
34		<b>.</b>		· · ·		· · ·	· · · · · · · · · · · · · · · · · · ·		, ,	
35										
36										
		Actual figures for FY15 are a subset of the audited financial statements	for t	he respective yea	r relating to the Ger	neral Fund only, as rep	oorted within the Bud	dget [	ata Book for	
37	(1)	CSU and CSU-P, and per the CSU-G Annual Audited Financial Statement								
38	(2)	20% Primary Reserve Calculation (a figure including all funds that could	l be s	pent if needed at	the specific point in	time) exceeds the 20	% Reserve Floor.			
	1	CSU Global's 250 DCOH is calculated by utilizing their budgeted expend	liture	s less depreciation	n for the following f	iscal year as approved	d by the Board of Gov	/erno	rs. For FY 15 this	
39	(3)	would be the approved Budget for FY16. FY16 budgeted expenditures		•	•		•			
				•	·	· · · · · · · · · · · · · · · · · · ·				

The Board of Governors of the Colorado State University System Meeting Date: December 9, 2016 Action Item

Approved

#### **MATTERS FOR ACTION:**

The Board of Governors of the Colorado State University System (the "Board") approval of a withdrawal from the Board Reserves in accordance with Board Policy 205.

#### **RECOMMENDED ACTION:**

MOVED, that in accordance with the CSUS Board Reserves Policy, the Board hereby approves the withdrawal of \$2,910,713 from the E&G Board Reserves Available for Strategic Deployment ("Board Reserves") and such funds will be used, as follows: CSU System Shared IT Systems Initiative (\$125,000); assistance with the CSU-Pueblo housing debt payment for fiscal years 2015-2016 and 2016-2017 (\$1,415,000); repayment of the CSU-Pueblo loan to CSU-Global (\$1,320,713) and, the establishment and implementation of five academic programs at CSU-Pueblo (\$50,000); and it is

FURTHER MOVED, that the Chancellor and the Chief Financial Officer of the System are authorized to withdraw and deploy \$2,910,713 from the Board Reserves consistent with this Resolution.

**EXPLANATION PRESENTED BY:** Dr. Tony Frank, Chancellor, Colorado State University System

In October 2016, the Board discussed the Board Reserves policy and the CSU-Pueblo financial sustainability plan during its Finance Committee meeting, and consistent within that financial sustainability plan and the Board's discussion is the provision of certain strategic Board support for CSU-Pueblo. In accordance with Board Policy 205, the Board Reserves may be used to support the educational mission of the System and its institutions, with a focus on deployment for compelling and unique circumstances.

The recommendations contained herein support System priorities in accord with previous Board actions (CSU-Pueblo Financial Sustainability Plan and CSU-Global campus loans to CSU-Pueblo) and the expenditures represent slightly less than 10% of the available reserve.

The CSU System has a Shared IT Systems initiative, and approximately \$417,000 from the Board Reserves would be used to fund CSU-Pueblo's portion of that initiative over the next three to four fiscal years, which would allow CSU-Pueblo to be the first System institution to implement the Kuali Student system. The initial expenditure is included in this resolution at an

The Board of Governors of the Colorado State University System Meeting Date: December 9, 2016 Action Item

amount of \$125,000. The Board also discussed the CSU-Pueblo housing debt payment shortfall for fiscal years 2015-2016 and 2016-2017, and approximately \$1,415,000 would be used for those payments. CSU-Pueblo has an outstanding loan to CSU-Global which the Board has discussed and \$1,320,713 will be utilized to pay this loan in full. In addition, CSU-Pueblo, in consultation with the Chief Academic Officer of the System, has developed five new academic programs that align well with community and market needs, as well as the current academic strengths at CSU-Pueblo. These programs are anticipated to sustain themselves on the basis of tuition associated with enrollments, but in order to implement these programs, \$845,000 would be deployed over the next three to four years. The initial expenditure (for the remainder of FY17) is included in this resolution at an amount of \$50,000.

Approved	Denied	Scott C. Johnson, Board Secretary	
		Date	

# Item 1**1**CSURF Capital Lease Renewal

Meeting Date: December 8-9, 2016

#### **MATTERS FOR ACTION:**

A Resolution, for the purposes of complying with Revenue Ruling 63-20, approving the purposes and activities of the Colorado State University Research Foundation ("Foundation") and approving certain borrowing transactions by said Foundation on behalf of the Board of Governors of the Colorado State University System for the purpose of acquiring equipment to be used by and for Colorado State University, Colorado State University-Pueblo and Colorado State University – Global Campus (the "Institutions").

#### **RECOMMENDED ACTION:**

For purposes of satisfying the requirements of Revenue Ruling 63-20, 1963-1 C.B. 24, the Board hereby approves the Line of Credit Agreements, the Security Agreement and the Note, in substantially the forms filed with the Secretary, and the Board hereby approves the execution and delivery by the Foundation of the Line of Credit Agreements, the Security Agreement and the Note and the issuance by the Foundation, on behalf of the Board, of the Note (provided, however, that the Board shall have no obligation to make any payment on the Note, which shall be solely the obligation of the Foundation, and the Board shall be obligated only to the extent provided under Lease Agreements entered into by the Board). The Foundation may make draws on the Line of Credit and thereby incur obligations to make payments on the Note from time to time, within one calendar year following the adoption of this resolution by the Board, but only for purposes of acquiring tangible personal property consisting of scientific, administrative support and research equipment to be used by and for the Institutions (the "Equipment"), and only with the written approval of the President or authorized delegate of CSU for Lease Agreements relating to CSU, the President or authorized delegate of CSU-Pueblo for Lease Agreements relating to CSU-Pueblo and the President or authorized delegate of CSU-Global Campus for Lease Agreements relating to CSU-Global Campus (together, referred to herein as the "Representatives" or, individually, a "Representative"), which written approval may be made by the execution of the corresponding Lease Agreement or in such other manner as the respective Representative may deem appropriate. Subject to the foregoing provision, the Note is hereby approved in a total principal amount not to exceed \$1,000,000 outstanding at any time (the unused loan commitment being increased by repayments on the Note as provided therein), bearing interest at a rate determined in accordance with the provisions of the Note and the Line of Credit Agreements but in no event to exceed eighteen percent (18%) per annum, and maturing on the calendar anniversary of the date on which it is executed and delivered by the Foundation (but no later than December 31, 2017).

Requests for Equipment to be financed through the Line of Credit shall be submitted to the respective Representative of the Institution requesting the Equipment. Upon approval of any such request, such Representative is authorized and directed to cause a Lease Agreement to be entered into for such Equipment on behalf of the respective Institution. Upon execution and delivery of such Lease Agreement to the Foundation, the Foundation

shall draw on the Line of Credit for the amount necessary to acquire such Equipment, which moneys shall be used to acquire such Equipment as soon as practicable; and the Board shall pay to the Foundation, from legally available moneys of the Board (but not from moneys drawn under the Line of Credit) an amount equal to the greater of \$800 or 4% of the amount so drawn, as compensation for the Foundation's administrative expenses and services in connection with the Line of Credit. Payments under a Lease Agreement shall be made from the Board to the Foundation either quarterly or semiannually, as negotiated between the Representative of the Institution on behalf of which the Lease Agreement has been entered and the Foundation, over a term to be negotiated between such Representative and the Foundation, but not exceeding the useful life of the Equipment (as determined by such Representative), and in no event to exceed five (5) years (subject, however, to the provisions of Section 7 of the Lease Agreement), and in such amounts as to provide for repayment of the principal amount drawn under the Line of Credit for such equipment, plus interest at rates to be determined as follows:

- (a) The initial rate of interest for Lease Agreements to be entered into during calendar year **2017**, which rate shall be effective for each such Lease Agreement from the date of delivery thereof through December 31, **2017**, shall be <u>4.75 %</u> per annum (subject to increase as provided in paragraphs (b), (c) and (d) below).
- (b) During the month of December in **2017** and in each subsequent year while any Lease Agreements are in effect, the Foundation shall, based upon information furnished to it by the Bank and such other information as the Foundation may deem relevant, estimate the Average Rate of interest expected to accrue on the Note, in accordance with the current or anticipated terms of the Line of Credit Agreements, during the following calendar year. The Foundation shall notify the Board of such estimated average rate of interest on the Note, and the rate of interest for Lease Agreements to be effective during the following calendar year shall be such estimated average rate of interest on the Note plus .5% per annum (the .5% increment being added to provide for the possibility that interest on the Note will be higher than estimated).
- (c) Notwithstanding the provisions of (b) above, the increment which is to be added to the estimated average interest on the Note to determine the rate of interest on Lease Agreements may be higher than .5% per annum to the extent that the Foundation certifies to the Board that such higher increment is necessary to make up, over the course of the following calendar year or such longer period as the Foundation may agree to, any excess of interest actually paid by the Foundation on the Note over the total interest received by the Foundation on the Lease Agreements; provided, however, that the higher increment certified to the Board shall not exceed 1.5% per annum.
- (d) In the event that the rate of interest on the Note is increased as the result of a determination that such interest has lost its exclusion from gross income for federal income tax purposes under the Internal Revenue Code of 1986, as amended (the "code"), or is treated as an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations (except with respect to corporations, as such interest is required to be taken into account in determining "adjusted current earnings" for

the purpose of computing the alternative minimum tax imposed on such corporations), the rate of interest on the Lease Agreements shall immediately be further increased to the average rate of interest expected to accrue on the Note for the remainder of such calendar year on such "taxable" basis, as estimated by the Foundation in substantially the same manner as provided in paragraph (a) above, plus the increment in effect immediately prior to such increase as determined pursuant to paragraphs (b) and (c) above, plus any additional increment necessary to make up, over the course of the remaining calendar year or such longer period as the Foundation may agree to, any retroactive additional interest owed or paid by the Foundation to the Bank pursuant to the Note as a result of such determination.

(e) Notwithstanding any other provision hereof, the rate of interest on the Lease Agreement shall not exceed eighteen percent (18%) per annum. Notwithstanding any other provision thereof, all payment obligations of the Board under any Lease Agreement shall be subject to renewal and appropriation or availability of funds as provided in Sections 7 and 10 of the Lease Agreement. The Lease Agreements shall be in substantially the form filed with the Secretary, and the appropriate Officers of the Board, the Institutions and the State are hereby authorized to execute and deliver such Lease Agreements as may be approved by the Representatives or any one thereof. Any other obligations issued by the Foundation either to make improvements to the Equipment or to pay principal or interest on the Note will be discharged no later than the latest maturity date of the Note (including renewals).

The Board shall have the exclusive beneficial possession and use of any Equipment financed through the Line of Credit (except to the extent that the Bank may enforce its security interest in the Equipment in the event of a default by the Foundation under the Line of Credit Agreements, the Security Agreement, or the Note, and subject to the Bank's right to inspect the Equipment at any reasonable time as provided in the Line of Credit Agreements). When all payments due under a Lease Agreement have been made by the Board, or when payments on the Note allocable to the draw on the Line of Credit for the related Equipment have otherwise been made, full and unencumbered legal title to such Equipment shall be conveyed by the Foundation to the Board, without demand or further action on the part of the Board, and the Board shall then accept such title to any Equipment (including any additions thereto). This paragraph shall operate independently of the Lease Agreements and notwithstanding any failure to enter validly into any Lease Agreement. Prior to making any draw under the Line of Credit, the Foundation shall furnish to the respective Representative an instrument of grant from the Foundation to the Board confirming the provisions of this paragraph.

All proceeds of the Line of Credit, and investment income thereon (if any), shall be used to provide tangible personal property for use by the Board. If any excess proceeds of the Line of Credit or investment income thereon, if any, remain after full payment of the costs of acquiring the related Equipment, such excess proceeds shall be applied to make payments or prepayments on the Note as soon as practicable, and the schedule of rental payments under the corresponding Lease Agreement shall be adjusted accordingly. Prior

to making any draw under the Line of Credit, the Foundation shall furnish to the respective Representative a certification confirming the provisions of this paragraph.

The proceeds of any fire or other casualty insurance policies received in connection with damage to or destruction of any Equipment financed through the Line of Credit, including any additions thereto, will, subject to any claims of the Bank or CSURF, at the direction of the respective Representative, either (a) be used to repair or replace the Equipment, regardless of whether the insurance proceeds are sufficient for such repair or replacement, or (b) be remitted to the Board.

The Board acknowledges that one of the purposes of this resolution is to establish that interest paid by the Foundation on the Note is not included in gross income under present federal income tax laws pursuant to the Code (as defined below), subject to certain exceptions, conditions and limitations as further set forth below, thereby resulting in more favorable interest rates on the Note and more favorable payment terms to the Board under the Lease Agreements. Accordingly, the Board hereby covenants for the benefit of the Bank and its successor and assigns that it will not (i) make any use of the proceeds of the Line of Credit or any other funds of the Foundation; (ii) make any use of the Equipment; or (iii) take (or omit to take) any action with respect to the Note, the proceeds of the Line of Credit, any other funds of the Foundation, or the equipment, or otherwise, if such use, action or omission would, under the Code, cause the interest on the Note to be included in gross income for federal income tax purposes or be treated as an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals, trusts, estates and corporations (except, with respect to corporations as defined for federal alternative minimum tax purposes, as such interest is taken into account in determining adjusted current earnings for purposes of computing the alternative minimum tax imposed on such corporations). The Board further covenants, represents and warrants that the procedures set forth in a Federal Tax Exemption certificate hereby authorized to be signed by an Officer of the Board or Representative of the Institution implementing the above covenant shall be complied with to the extent necessary to maintain the above-described exclusions from gross income and alternative minimum taxable income or to avoid the application of any penalties under the Code (except to the extent noted in the foregoing provisions of this paragraph). The foregoing covenants shall remain in full force and effect notwithstanding the payment in full or defeasance of the Note until the date on which all obligations of the Board in fulfilling the above covenants under the Code and Colorado law have been met.

Appropriate Officers of the Board, the Institutions, the State and the Foundation are hereby authorized and directed to execute such documents and instruments and generally to take such actions as may be necessary or appropriate to effectuate the transactions contemplated by this resolution. The Officers of the Board, the Institutions and the Foundation with the advice of counsel executing the Line of Credit Agreements and the Lease Agreements hereby approved may make such necessary or appropriate variations, omissions and insertions in such documents as may be required or appropriate under the circumstances, so long as such variations, omissions and insertions

are not inconsistent with this resolution. In the event of any inconsistency between this resolution and any document or instrument hereby approved, the provision of this resolution shall be controlling.

If any section, paragraph, clause or provision of this resolution shall for any reason be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining provisions of this resolution.

All bylaws, orders and resolutions, or parts thereof, inconsistent with this resolution or with any of the documents hereby approved, are hereby repealed only to the extent of such inconsistency. This repealer shall not be construed as reviving any bylaw, order or resolution, or part thereof, heretofore repealed.

This resolut	ion shall be in full force ar	nd effect immediately upon its passage and adoption.
Approved	Denied	Board Secretary
		Date

Board of Governors of the
Colorado State University System
Meeting Date: December 8-9, 2016

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Approved

#### MATTERS FOR ACTION:

Consent Item

EQUIPMENT LEASING-COLORADO STATE UNIVERSITY SYSTEM/COLORADO STATE UNIVERSITY RESEARCH FOUNDAITON LINE OF CREDIT PROGRAM Approval of resolution for Colorado State University Research Foundation to Undertake Certain Borrowing and Equipment Lease/Purchase Transactions on Behalf of the Board of Governors of the Colorado State University System to Acquire Equipment at Colorado State University, Colorado State University – Pueblo and Colorado State University – Global Campus.

#### **RECOMMENDED ACTION:**

Approval of the attached resolution.

#### **EXPLANATION:**

Submitted by: Dr. Anthony A. Frank, President

For several years Colorado State University Research Foundation (CSURF) has held a Line of Credit (with a tax-exempt interest rate) with First National Bank of Fort Collins, for the purpose of providing a lease/purchase mechanism for the Board of Governor's to acquire much needed equipment for use in departments/programs at Colorado State University, Colorado State University – Pueblo and CSU-Global Campus. CSURF acquires the equipment (valued at \$50,000 or less) (specified by a particular department or program) and leases it to the Board of Governors on an annual appropriation basis for a term of not more than five (5) 1-year periods. The Board of Governors makes lease payments to CSURF which CSURF then uses to repay First National Bank. When the lease is retired, and the equipment amount has been fully paid, CSURF conveys title on the equipment to the Board of Governors. The Board of Governors has been provided a quarterly activity report on the CSURF leases since the program's inception. Such reporting will continue in the future.

Approval to continue the lease/purchase arrangements through the line of credit must be obtained from the Board of Governors yearly. The total amount of the line of credit permitted to be outstanding at any time is \$1,000,000. Amounts previously drawn under the Line and currently outstanding total approximately \$150,507.86. Therefore, moneys available under the Line for calendar year 2017 are approximately \$849,492.14. CSURF will consult with the respective representatives of each Institution to discuss needs and allocations of available amounts.

Board of Governors of the	
Colorado State University System	
Meeting Date: December 8-9, 2016	
Consent Item	Approved

The average total amount financed through the Leasing Program in thousands of dollars by year is as follows:

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<u>YEAR</u>	<b>TOTAL AMOUNT</b>
1976-1990	\$ 211
1991-2000	214
2001-2010	124
2011	108
2012	121
2013	242
2014	40
2015	37
2016	37

Mr. Frederic H. Marienthal of Kutak Rock LLP will be providing the tax exempt opinion on the 2017 Line of Credit. In order to comply with the applicable federal tax requirements for an "on behalf of" financing in support of the tax exempt opinion, the attached resolution must be approved by the Board of Governors. The attached resolution and accompanying documents referenced in the resolution have been reviewed by the Board of Governors' General Counsel.

## Section 13

Strategic Mapping

#### **System Mission**

Be the most effective, nimble, and impactful educational System of higher education in the US by delivering high quality resources and results to a broad marketplace to drive human, social, ecological, and technological advances throughout Colorado and the world.

Strategy

Rapidly Respond to the Market through Innovation and Research

Leverage and Integrate Human Infrastructure Resources Across
All Institutions

Provide Comprehensive Array of Diverse Points of Access and Experiences to a Broad Marketplace

Work Areas



**Engagement and Community Building** 



**Academic Coordination** 



**Process Alignment** 

**Outcomes** 

Student Success, Fiscal Strength, Community Impact

**System** 

**Institutional Strategic Plans** 

### Work Areas Aligned to the System Strategic Framework

Engagement and Community

Building

Community

Community

Building

- System-wide Councils
- Coordinated and deliberate presence at influential events and organizations
- Student Access across System

Academic Coordination

- Admissions and Completion Coordination
- Credit Transfer Agreements
- Faculty Exchanges

**Process Alignment** 



- IT Systems
- Training Coordination
- Purchasing



# **Engagement and Community Building**

- Employee Councils meeting
  - November 17, 2016
- Events



## **Academic Coordination**

- CSU-Pueblo and Todos Santos
- Six Academic Programs in Collaboration
- Access Programs



## **Process Alignment**

- Enrollment Management
- Shared Integrated Library System Deployment

#### AGB BOARD OF DIRECTORS' STATEMENT ON

Governing Board Accountability for

### CAMPUS CLIMATE, INCLUSION, AND CIVILITY

they are the nature that the material series of the projection of care and an expensive the path are of the projections are the state of the projection of t



## Early Bird Registration closes early February, 2017

Please let us know by the February Retreat and Meeting in Pueblo if you plan to attend.



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## Section 14

## Consent Agenda

- Colorado State University System
  - Minutes of the October 6-7, 2016 Board and Committee Meetings
- Colorado State University
  - New Graduate Certificate Performance Management
  - New Graduate Certificate Organizational Development
- Colorado State University Pueblo
  - Academic Calendar AY 2017-18 and AY 2018-19
- Colorado State University Global Campus
  - Faculty Manual Updates
  - New Master of Science in Data Analytics

## BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM MEETING CSU Agricultural Research, Development & Education Center (ARDEC), Fort Collins October 6, 2016

#### **CALL TO ORDER**

Chair Mosher called the meeting to order at 8:33 a.m.

#### **ROLL**

Governors present: William Mosher, Chair; D. Rico Munn, Vice Chair; Scott Johnson, Secretary; Nancy Tuor, Treasurer; Dennis Flores (by phone/Evaluation Committee meeting); Mark Gustafson; Jane Robbe Rhodes; Dean Singleton; Joseph Zimlich; Andrea Buchmeier, Student Representative, CSU-Global Campus; Paul Doherty, Faculty Representative, CSU; Antonio Huerta, Student Representative, CSU-Pueblo; Daniela Pineda Soracá, Student Representative, CSU; David Volk, Faculty Representative, CSU-Pueblo

Administrators present: Tony Frank, Chancellor, CSU System, and President, CSU; Amy Parsons, Executive Vice Chancellor, CSU System; Lesley Di Mare, President, CSU-Pueblo; Becky Takeda-Tinker, President, CSU-Global Campus; Allison Horn, Director of Internal Auditing, CSU System; Lynn Johnson, Chief Financial Officer, CSU System, and Vice President of Operations, CSU; Rick Miranda, Chief Academic Officer, CSU System, and Provost and Executive Vice President, CSU; Michael Nosler, General Counsel, CSU System

**System Staff present:** Adam Fedrid, IT Manager; Melanie Geary, Executive Assistant; Allen Sneesby, IT Technician; Sharon Teufel, Executive Assistant to the General Counsel

Guests Present: Ken Barbarick, Associate Dean for Academic Programs, College of Agricultural Sciences, CSU; Erika Bentz, Ag Business student; Jennifer Bornhoff, Operations Manager, ARDEC, CSU; Rick Callan, Sr. Real Estate Analyst, CSURF; Stephanie Chichester, North Slope Capital; Johnna Doyle, Deputy General Counsel, CSU-Pueblo; Kelly Enns, Associate Professor, College of Agricultural Sciences, CSU; Mark Gill, Chief of Staff, CSU; Kathleen Henry, President/CEO, CSURF; Jason Holderliath, Ag Econ Ph.D. student; Blanche Hughes, Vice President for Student Affairs, CSU; Sam Jalerli, Animal Sciences, Ph.D. student; Jason Johnson, Deputy General Counsel, CSU; Eugene Kelly, Associate Dean for Extension and Deputy Director of Agricultural Experiment Station, CSU; Rick Kreminski, Executive Vice President of Academic Affairs and Provost, CSU-Pueblo; Jan Leach, Associate Dean for Research, College of Agricultural Sciences, CSU; Ajay Menon, Dean, College of Agricultural Sciences, CSU; James Pritchett, Executive Associate Dean, College of Agricultural Sciences, CSU; Bob Reynolds, Ag Ed student; Marcela Riddick, Ag/Animal Sciences student; Kat Rocha, Soil & Crop Sciences student; Michael Schleining, Horticulture/Landscape Architecture student; Brandon Schenk, Soil and Crop Sciences student; Karl Spiecker, Vice President for Finance and Administration, CSU-Pueblo; Emily Springer, Ag Ambassadors student; Nick Taylor, North Slope Capital; Jacon Walter, Ag Ambassadors student; Jason Warr, Vice President of Operations, CSU-Global Campus; Shauna White, Ag Ed-Farm Bureau student

#### VISION FOR THE FUTURE OF AG SCIENCES

Chair Mosher convened the meeting and introduced Dr. Menon. Dr. Menon provided an overview of the College of Agricultural Sciences (CAS), the four directives for planning for the future, the leadership, and three areas for global preeminence. Drs. Pritchett and Leach provided highlights on supporting the CAS

research infrastructure through partnerships, education and engagement. Plans for physical renovations and additions, locations of the experiment and research stations, and educational initiatives and opportunities were also shared. The meeting recessed for a tour of the ARDEC campus and reconvened at 11:07 a.m. In response to questions, Drs. Menon and Pritchett explained funding for the facility was a combination of private funds, university support, research grants and cash operations. Dr. Menon concluded the presentation by expressing appreciation for the opportunity to host the Board meeting.

#### AUDIT AND FINANCE COMMITTEE

Committee Chair Tuor convened the meeting and asked Ms. Horn for her report.

Status of FY 2016-17 Audit Plan: Ms. Horn reported two reports have been issued this fiscal year. The executive summary of the audit report for the CSU Early Childhood Center was included in the meeting materials and recommendations were made on internal controls for billing processes, employee discounts and PCard controls. A report for the CSU College of Business transition audit for the new dean to ensure internal controls are in place was recently issued with no findings. The exit conference for the CSU Recharge Center has been completed with a report to be issued and an entrance conference was completed for the CSU fringe benefits pool audit.

Past Due Recommendations: Ms. Horn reported there were no red flags; two of the recommendations for the CSU conflict of interest audit have now been implemented; and only one recommendation remains open with the CSU-Pueblo athletics audit. She noted the Internal Audit follow-up system is working well and the cooperative efforts for implementation of the recommendations have improved.

State Budget and Amendment 70 Updates: Ms. Johnson reported state general funds are forecasted to increase by 5% in FY 2018 with expenditures increasing by 1.2% and flat funding for higher education.

Ms. Johnson explained the estimated cumulative economic impact for CSU and CSU-Pueblo with increases in the minimum wage should the Amendment 70 initiative be voter-approved. Students, who are largely employed in auxiliary operations, would be the most impacted employee category which could potentially affect housing and dining rates. Dr. Frank indicated discussions on a variety of options to address the impacts have been suspended pending the election and noted there are also budget implications with changes to the Fair Labor Standards.

In response to questions, Ms. Johnson explained students are allotted \$3,000 through work study and the increase in minimum wage could result in reducing the number of eligible work hours. At the state level, there continues to be discussions on the hospital provider fee; however, any potential progress on the issue would not be determined until the legislative session.

Campus Budget Updates: Dr. Frank recounted how the budget process began with the initial presentation of static inflation-only budgets in August. As directed by the Board, the updated draft budgets provide various scenarios prepared on the basis of 1%, 3% and 5% tuition increases and there is no recommendation at this time to approve the budgets.

<u>Colorado State University:</u> Ms. Johnson reviewed the four scenarios presented in the draft FY 18 budget. She commented on the DHE cost matrix to estimate incremental cost increases for higher education based on inflationary costs. Additional considerations are an increase for employer PERA contributions which have been increasing .9% annually as mandated by state legislation through FY 17 and are currently at 20.15%; and health care costs that are increasing at a rate higher than inflation. The net result of these three items could be a recommendation for an additional \$75 million in state funding and would provide a

basis for tuition recommendations. Key ramifications for the CSU budget not considered in that analysis are quality enhancements, the impact of new facilities, and salary pressures.

<u>CSU-Pueblo</u>: Mr. Spiecker explained the draft budget was developed on four scenarios similar to that of CSU with a conservative projection of a 2.6% enrollment decline. Base assumptions in the four scenarios include a placeholder for a 2% salary increase for all employees and a line item for salary equity adjustments. There are variances in the amount of institutional financial aid with a goal of 25% of new revenues. Overall enrollment for the current fall semester was flat relative to last year with a 5.4% increase in freshmen enrollment.

<u>CSU-Global Campus:</u> Mr. Warr explained how the projected E&G budget is prepared by analyzing current operations in context of enrollment and trends, consistent monitoring on retention, and scaling expenses accordingly. Additional impacts on the budget include strategic initiatives and new technology that assist in improving efficiency. The financial results of the first quarter of the current fiscal year indicate the FY 18 budget projections are on track.

Approval of Plan of Finance – Eleventh Supplemental Resolution: Ms. Johnson reported the series 2016 A and B bonds for improvement and refunding projects will have 20 and 30-year maturities and are expected to be tax-exempt. Debt service will be primarily level except for the CSU-Pueblo energy saving projects that will utilize the energy savings to cover the debt service and will escalate the associated debt service payment relative to the savings generated.

Based on the recent annual surveillance process meetings held with Moody's and Standard & Poors (S&P), current ratings will probably be maintained. The previous S&P ratings report had led to the expectation of a potential downgrade. The unaudited FY 16 financials, increases in enrollment and fundraising, and other achievements were seen as positive by the rating agencies. The impact of the additional bonds on the annual principle payment is relatively small. Discussion followed on the fiscal, political and public relations issues were there to be a downgrade and comparisons to peer and other Colorado institutions.

Ms. Johnson reviewed the parameters of the bond resolution that includes a maximum principal amount of \$100 million in new bonds for improvement projects and a maximum of \$230 million for the refunding project that could potentially generate substantial savings. Various considerations have been taken into account in developing the bond issuance timeline to optimize the proceeds of the bond sale. The supplemental resolution includes different options for the short and long-term funding mechanisms and the underwriters will be consulted on the best options and the timing of the sale.

Ms. Johnson reviewed a project cost and resource summary for the projects to be funded through the bond issuance. All of the project plans, except for the Warner College of Natural Resources building, were approved at the August meeting.

When asked about contractor guarantees for the CSU-Pueblo energy performance projects, Ms. Johnson responded the contractor will guarantee pricing and a contract has not yet been signed with Johnson Controls who completed the energy audit and identified the projects. Mr. Spiecker explained how the contractor will guarantee the savings and monitor usage. The Governor's Energy Office was involved in the development of the project and the contract will include conservative and realistic assumptions in terms of the energy savings.

Committee Chair Tuor indicated details on the projects are included in the resolution. **Motion/Action:** Governor Gustafson moved to approve the resolution; Governor Singleton seconded; and the motion carried unanimously.

Approval of CSUS Board Reserve Policy 205: Committee Chair Tuor expressed appreciation for the work done to address the issues and concerns. Dr. Frank reviewed the revisions and recommended approval of the revised policy. Governor Zimlich was acknowledged for his assistance in finalizing the revisions. **Motion/Action:** Chair Mosher moved to approve; Governor Munn seconded; and the motion passed unanimously.

CSU System Shared IT Systems Initiative: Ms. Johnson explained the need to upgrade the CSU-Pueblo student system and, based on the estimated \$2 million to \$3 million in costs to move the university to the Banner system utilized at CSU, a proposal was prepared to partner with Kuali in the development of the student system. Kuali already has a curriculum and catalog module that is in production and utilized at some schools; is in the process of developing the enrollment module with the expectation that the beta portion will be released in early 2017 with a final module in 2018; and two additional modules of student accounts and financial aid will be developed.

The recommendation is to participate in the development of the Kuali student system with the intent to bring CSU-Pueblo online prior to implementation at CSU. Staff from CSU-Pueblo, CSU and the CSU System will be engaged in the functionality and implementation. Costs for the project would be \$1.5 million as a developing partner and \$810,000 one-time staffing costs. CSU is also in the process of implementing the Kuali research module and associated costs will be paid from the CSU budget with no ongoing funding required. The total budget request for the next three years is \$3.5 million.

Dr. Frank indicated there was no action item. The proposal addresses the Board's direction to work on shared systems and is a key component of CSU-Pueblo's financial sustainability plan endorsed at the May meeting. Funding options including potential use of the CSU System reserves are being evaluated and an update will be provided at the December meeting.

The meeting recessed for lunch at 12:26 p.m. and reconvened at 1:37 p.m.

*CSU-Pueblo Equity Study:* Mr. Spiecker commented that Dr. Di Mare approved a \$3,000 base increase for faculty and administrative professionals in 2011 which was the first salary adjustment in several years. He reviewed the equity study timeline that began in late 2012 with the study commissioned by Dr. Di Mare to ensure the institution is competitive with peers and aligned with the industry. The preliminary cost estimates were completed in September 2016.

An equity study team that included faculty compensation committee members and administrative professionals was charged with evaluating the study to ensure accuracy with no data integrity issues and to make recommendations on how funding adjustments should occur when funds are available. Work continues on matching 26% of the administrative professional positions to ensure an appropriate match. The preliminary estimate for the salary adjustments is \$3.75 million. Another component of the study was to ensure there were no inherent biases pertaining to gender, race or ethnicity in the pay structure.

Dr. Di Mare noted the study has been reviewed by legal counsel, the CSU System and at the campus level. Dr. Kreminski explained how the results were analyzed with a multilinear regression. He reviewed the statistically significant variables for faculty in the gender and race analysis with 89% of variances determined by the college/school, rank, degree, age and race. Other variables such as merit or a higher initial salary could also be factored into the variances.

Mr. Spiecker explained the administrative professional analysis utilized several data sources and commented on how comparisons to the local market rather than other higher education institutions can also be useful. Dr. Di Mare reported \$50,000 has been initially designated to begin phasing in the equity

adjustments with the committee to recommend how the funds would be distributed between the two employee categories.

In response to questions, Mr. Spiecker clarified the \$3.75 million would be for base adjustments on an ongoing annual basis and the recommendations would bring salaries to the 25<sup>th</sup> percentile of peers with the comparison to a larger pool of institutions rather than only the Board approved peer group. Dr. Kreminski noted the faculty reports presented annually in August include information on salaries and then he provided salary comparisons to CSU and peers by full, associate and assistant professor levels. The annual faculty reports utilize IPEDS statistics that do not include regional cost of living data and CSU-Pueblo is 10% to 15% below the average for faculty salaries. Dr. Frank commented that the methodology for the faculty reports results in basically the same conclusions as the equity study analysis and noted the difficulty of determining appropriate administrative professional peer groups.

Mr. Spiecker pointed out that routine cost of living adjustments will also need to be part of the solution to address the equity issues. Dr. Frank indicated next steps are to begin with the initial \$50,000 set aside for adjustments; CSU-Pueblo will continue to make progress on the analysis and recommendations; and next August there will be an update on the administrative professional comparisons. Committee Chair Tuor affirmed that the Board endorsed moving forward with addressing the salary issues.

Dr. Di Mare expressed appreciation for the work completed on the equity study and noted faculty and administrative professionals have worked together to create a different culture. She also thanked the Board for its guidance and direction.

When asked about CSU-Global Campus, Dr. Takeda-Tinker explained how faculty are all part-time with compensation based on class size and graduate/undergraduate level and whether a faculty member holds a doctorate degree. Based on market surveys, compensation is in the middle of the range and 90% of faculty have work experience in their areas of expertise.

#### REAL ESTATE/FACILITIES COMMITTEE

Committee Chair Johnson reviewed the agenda and asked Ms. Johnson to proceed with the first action item.

Land Acquisition for Easement: Ms. Johnson reviewed the resolution for the no fee easement to acquire land at Centre Avenue and Bay Drive to build a water quality pond. **Motion/Action:** Governor Gustafson moved to approve; Governor Tuor seconded; and the motion passed unanimously.

Status of Program Plans: Ms. Johnson explained the list of the program plans provided in the meeting materials includes the projects, funding amount, date of Board approval, and the status of the project. The two parking garage projects are currently on hold.

Executive Session: General Counsel Nosler read the meeting into executive session for the purposes of discussions related to the sale of property and consideration of naming proposals, and to receive the litigation report and legal advice, all confidential pursuant to statute as set forth in the meeting notice. **Motion/Action:** Governor Tuor moved to convene in executive session; Governor Robbe Rhodes seconded; and the motion carried unanimously. Chair Mosher indicated the meeting would reconvene in open session prior to the Evaluation Committee meeting to approve action items. The meeting convened in executive session at 2:10 p.m. and reconvened in open session at approximately 2:42 p.m.

#### **OPEN SESSION**

General Counsel Nosler identified for the record the following action items for CSU: the easement related to the Shields Street underpass; the naming for the Meat Lab within the College of Agricultural Sciences; the naming for the Design Center within the College of Health and Human Services; and the naming related to the College of Engineering. **Motion/Action:** Governor Tuor moved to approve; Governor Robbe Rhodes seconded; and the motion carried unanimously.

#### **EVALUATION COMMITTEE**

General Counsel Nosler read the meeting into executive session for the purpose of discussing and evaluating public officials and professional staff employees, confidential pursuant to statute as set forth in the meeting notice. **Motion/Action:** Governor Johnson made the motion to convene in executive session; Governor Singleton seconded; and the motion carried unanimously. The meeting convened in executive session at 2:45 p.m. and then adjourned for the day at 4:04 p.m.

#### BOARD OF GOVERNORS OF THE COLORADO STATE UNIVERSITY SYSTEM MEETING Lory Student Center, Colorado State University, Fort Collins October 7, 2016

#### **CALL TO ORDER**

Chair Mosher called the meeting to order at 8:06 a.m.

#### **ROLL**

Governors present: William Mosher, Chair; D. Rico Munn, Vice Chair; Scott Johnson, Secretary; Nancy Tuor, Treasurer; Mark Gustafson; Jane Robbe Rhodes; Dean Singleton; Joseph Zimlich; Andrea Buchmeier, Student Representative, CSU-Global Campus; Paul Doherty, Faculty Representative, CSU; Antonio Huerta, Student Representative, CSU-Pueblo; Daniela Pineda Soracá, Student Representative, CSU; David Volk, Faculty Representative, CSU-Pueblo.

Administrators present: Tony Frank, Chancellor, CSU System, and President, CSU; Amy Parsons, Executive Vice Chancellor, CSU System; Lesley Di Mare, President, CSU-Pueblo; Becky Takeda-Tinker, President, CSU-Global Campus; Allison Horn, Director of Internal Auditing, CSU System; Lynn Johnson, Chief Financial Officer, CSU System, and Vice President of Operations, CSU; Rick Miranda, Chief Academic Officer, CSU System, and Provost and Executive Vice President, CSU; Michael Nosler, General Counsel, CSU System

**System Staff present:** Adam Fedrid, IT Manager; Melanie Geary, Executive Assistant; Allen Sneesby, IT Technician; Sharon Teufel, Executive Assistant to the General Counsel

Guests Present: Jeni Arndt, State Representative; Jon Bellum, Provost, CSU-Global Campus; Johnna Doyle, Deputy General Counsel, CSU-Pueblo; Mark Gill, Chief of Staff, CSU; Maggie Gilman, CSU Climate Reality Project; Joann Ginal, State Representative; Gwen Gorzelsky, Executive Director, CSU Institute for Learning and Teaching; Kathleen Henry, President/CEO, CSURF; Blanche Hughes, Vice President for Student Affairs, CSU; Alex Hurtado, CSU Climate Reality Project; Jason Johnson, Deputy General Counsel, CSU; John Kefalas, State Senator; Kelly Long, Vice Provost for Undergraduate Affairs, CSU; Rick Kreminski, Executive Vice President of Academic Affairs and Provost, CSU-Pueblo; Mike Pruznick; Alan Rudolph, Vice President of Research, CSU; Karl Spiecker, Vice President for Finance and Administration, CSU-Pueblo; Ben Withers, Dean, College of Liberal Arts, CSU;

#### DIALOGUE WITH NORTHERN COLORADO LEGISLATIVE DELEGATION

Chair Mosher convened the meeting and asked Dr. Frank to begin the conversation. Dr. Frank commented on the positive relationship the university has with the local state legislators. State Senator Kefalas and State Representatives Ginal and Arndt introduced themselves and shared their legislative priorities. Board members commented on the challenges for higher education to balance budgets with increasing expenditures and without additional state funding, and how seriously tuition setting is taken with budget modeling discussed at every meeting. Dr. Frank outlined the annual budget planning process that begins initially in August and culminates upon the completion of the Long Bill.

Chair Mosher noted another regular agenda item is the new stadium to ensure the project remains on budget and the marketing is progressing to ensure the revenue streams. Dr. Frank thanked the legislators for their service to the university, the community and the State of Colorado.

#### **BOARD CHAIR'S AGENDA**

Chair Mosher shared a video clip of Dr. Di Mare's state of the university address wherein she announced her retirement as of June 30, 2017, and then acknowledged her work at CSU-Pueblo. Ms. Parsons reported that, upon completion of a search process, Parker Executive Search was selected to assist with the recruitment of a new president at CSU-Pueblo. Chair Mosher read a resolution to appoint a CSU-Pueblo presidential search advisory committee that will include campus and community members. Governors Munn, Robbe Rhodes, Tuor and Gustafson will serve on the committee and Governor Flores will also provide input. Dr. Frank indicated open forums with various constituent groups will be held on the campus to gather input for the position description and the search process. **Motion/Action:** Governor Tuor moved to approve the resolution; Governor Munn seconded; and the motion carried unanimously.

Chair Mosher announced General Counsel Nosler will be retiring as of January 1, 2017, and has been assisting the Evaluation Committee for the past 18 months on the transition. Agreement has been reached with Deputy General Counsel Johnson to assume the position as of the first of the year. Chair Mosher read a resolution to appoint Mr. Jason Johnson as the new General Counsel. **Motion/Action:** Governor Munn moved to approve; Governor Johnson seconded; and the motion carried unanimously.

#### **CHANCELLOR'S REPORT**

Dr. Frank indicated the written report would stand as submitted and recounted that, as previously reported, Dr. Takeda-Tinker is serving in a dual role as the president of CSU-Global Campus and Beyond Campus, Inc. Conflict of interest has been managed through the General Counsel's Office.

National Western Center: Ms. Parsons reported CSU has been working with the city on review of RFPs and the selection of contractors for the project management team; assisting with development of the governance structure; taken the lead on sustainability and regeneration efforts with broad participation from across the campus; and continues to work with Denver Water on the development of the Water Center. Several successful community events have been held and more will be planned. CSU will be hosting a stakeholders retreat on November 11<sup>th</sup> and continues to participate in speaking engagements. Plans for the January 2017 National Western Stock Show are also in process.

Government Relations: Ms. Parsons reviewed the state ballot issues that continue to be tracked by the CSU System. Congress has completed its continuing resolution and the federal lobbyists continue to track a number of grant programs that are basically on hold until after the November election. CSU has submitted several competitive Zika funding proposals for \$25 million and been awarded \$5 million thus far.

#### STRATEGIC MAPPING UPDATE

Ms. Parsons provided updates in each of the three work areas identified in the CSU System strategic plan. Under community building, the CSU and CSU-Pueblo administrative professional and classified staff leadership will be convening at the CSU System on November 17<sup>th</sup> to discuss best practices, expanding resources and coordinated responses during the legislative session. Efforts are also being made to coordinate attendance at events and to leverage organizational memberships.

Under academic coordination, representation from each of the three institutions from six disciplinary groups and the three provosts convened on September 28<sup>th</sup> to consider collaboration opportunities. Dr. Miranda indicated the session was productive with a variety of opportunities discussed and a report to inform next steps is being drafted. Three of the six programs – social work, wildlife and early childhood education – are initiatives currently being developed at CSU-Pueblo. Ms. Parsons reported progress is

also being made in process alignment with coordination in areas such as finances, purchasing and training.

Campus Safety Reports: Ms. Parsons explained the climate issue identified for this meeting was campus safety. Each year by October 1<sup>st</sup> every university in the nation is required by the federal Clery Act to submit a campus security report. Secondly, the AGB recently published the top priorities for governing boards that includes campus safety with responsibility to ensure institutions have policies and procedures.

Colorado State University: Deputy General Counsel Johnson reported campus safety has been a priority at CSU and CSU-Pueblo. He provided an overview of the background and requirements of the Clery Act that include policy disclosure to campuses with procedures for reporting crimes and emergencies; records retention and reporting including an annual security report; and timely warnings and emergency notification. He explained how campus safety is managed by the CSU public safety team and the CSU police department with coordination from other law enforcement agencies. There is also a Clery Act compliance group that meets regularly. Failure to comply with the federal law can result in a fine of \$35,000 per violation by the U.S. Dept. of Education. There is also a student and employee consult team that evaluates responsiveness and safety issues.

Deputy General Counsel Johnson reviewed the 2015 CSU safety statistics on sex offenses, dating violence, domestic violence and stalking, all of which were lower than the previous year and consistent with national trends. During the past three years, CSU has increased efforts on awareness, education, programs about sexual violence, and reporting. In addition to the annual security report, the U.S. Dept. of Education maintains a clearinghouse on safety information and crimes.

<u>CSU-Pueblo</u>: Deputy General Counsel Doyle reported the university has a similar process for Clery Act compliance with the campus safety team working throughout the year. The major difference from CSU is the law enforcement is through a contract with the Pueblo County Sheriff's Office with an on-campus unit. There is access to all resources through the sheriff's office including training, i.e., active shooter situations.

The 2015 safety statistics for sex offenses were lower than the previous year, and dating violence, domestic violence and stalking were slightly higher but still low with only 7 such incidents. There have been efforts to increase the sexual assault and Title IX trainings. The campus safety team is working with the sheriff's office to update the emergency preparedness plan and planning a campus emergency drill.

Governor Huerta commented the campus is very safe with numerous emergency stations across the campus to contact the sheriff's office. Deputy General Counsel Doyle remarked that the sheriff's office has also had several officers undergo national bicycle policing training which increases visibility of law enforcement on the campus.

#### ACADEMIC AND STUDENT AFFAIRS COMMITTEE

Committee Chair Robbe Rhodes explained the committee has been asked to present an educational component at meetings and accordingly, following the review of the regular business items, there would be a presentation on the science of learning. Board members were encouraged to submit topics for future presentations.

*New CSU Degree Programs:* Dr. Miranda explained the two proposed new degree programs, MS in Computer Engineering, Plan A and Plan B, and Ph.D. in Computer Engineering, are basically breakouts of existing curricula from electrical engineering in the College of Engineering. Descriptions of the new degree programs were provided in the written materials.

New CSU-Global Campus Undergraduate and Graduate Certificates: Dr. Miranda explained the certificate programs are generally suites of three to six courses that have a coherent theme and can be utilized to either upgrade skills or assist with degree completion. Based on Title IV requirements to offer financial aid, Board approval is required for the certificates.

Dr. Miranda reviewed the proposed new certificates as follows: Graduate Certificate in Business Analytics; Graduate and Undergraduate Certificates in Cyber Security; Undergraduate Certificate in Data Management and Analysis; Undergraduate Certificate in Information Technology Operations; Undergraduate Certificate in Management and Leadership Fundamentals (in partnership with Guild Education through the Dept. of Education EQUIP program); Undergraduate Certificate in Business Administration; and Undergraduate Certificate in Marketing.

Dr. Bellum explained Guild Education provides boot camps primarily focused on management leadership skills and works directly with employers. The Management and Leadership Fundamentals Certificate will be a combination of coursework provided online through Guild Education and CSU-Global Campus for a total of 24 credits. The certificate will have faculty oversight and be branded under CSU-Global Campus who was one of eight institutions from 1,000 applications awarded an experimental site under EQUIP that allows a third party, non-accredited entity to provide some of the coursework. Dr. Takeda-Tinker added that the certificate is an experiment limited to 80 students at a time and CSU-Global Campus will provide data that a non-regional accrediting body will review to verify the outcomes and quality.

CSU Faculty and Administrative Professional Manual Change: Dr. Miranda explained the change in Section C.2.1.9.5.d refers to the protocols for the Faculty Council Committee on Libraries with a new member delegated by the Vice President of Research.

CSU-Pueblo Student Conduct Code: Dr. Miranda explained that the student conduct codes are presented to the Board for approval. The CSU-Pueblo student conduct code has undergone relatively minor changes including the definition of domestic and dating violence has been upgraded; the definition of stalking has been aligned with language in the federal Violence Against Women Act; and information on disciplinary action is presented in a more organized manner with a table and a flow chart on the Title IX investigation process. The revised student conduct code has been reviewed by the Office of General Counsel and the President's Office.

Committee Chair Robbe Rhodes noted all of the items presented for Board approval are on the consent agenda.

Science of Learning: Dr. Miranda explained the presentation will explore how students learn differently today and address the challenges and opportunities for campuses. He acknowledged Gwen Gorzelsky, the Executive Director of the CSU Institute for Learning and Teaching, who assisted with the presentation preparation.

Dr. Miranda provided an overview of how learning has changed in the last thirty years with active learning methodologies, virtual and face-to-face modalities, and educational technologies. He explained the three research-based learning types of robust, integrative and self-regulated; implications for educational practices; ways to connect social, cognitive and cultural learning in an integrative manner for both curricular and co-curricular learning; and basic teaching tactics for introductory instructors.

Examples of curricular and co-curricular initiatives in progress and planned for CSU were shared. A variety of learning mechanisms and initiatives have also been implemented at CSU-Pueblo including a

new Center for Teaching and Learning funded with a Title IV grant and program assessment efforts to revamp curriculum.

CSU-Global Campus utilizes a research-based and faculty-led approach to curriculum and learning that is student-centered and data-informed with alignment of learning outcomes. Dr. Miranda reviewed the implementation details and research activities for the 3 P model (purposeful, participatory and project-based) incorporated in the curriculum development.

Dr. Miranda concluded that all three CSU System campuses have embraced the pedagogical thinking in the sciences of learning that continues to improve with new tools, better assessments and more effective ways to incorporate the learning elements into curriculum. Discussion followed on responsiveness of faculty to the shifts in learning; opportunities available for faculty; and incentivizing faculty. Dr. Frank recounted changes that have occurred over the last fifty years for large comprehensive research universities with shifts in funding, better understanding on learning, greater student success expectations, and evolutionary selection pressure on residential campuses with online learning.

Semester at Sea: Dr. Miranda reported CSU is the official academic partner as of June 1, 2016, and all courses taught on the ship are CSU courses. There are 30 faculty from CSU and other universities as well as other CSU personnel onboard. Courses are taught while the ship is at sea and each course has focused field experiences that occur at various ports. The 560 students onboard are from all over the world and include 25-30 CSU students. Dr. Miranda outlined the fall and spring itineraries for the ship.

The meeting then recessed for a break at 10:33 a.m. and reconvened at 10:50 a.m.

#### **CSU CAMPUS REPORTS**

Student Report: Governor Pineda Soracá provided highlights from the written report on ASCSU initiatives in academics, diversity and inclusion, environmental, health, marketing and outreach, state and local policy, and traditions and programs. Under university affairs, Governor Pineda Soracá reported representatives from ASCSU and other campus units visited the University of Minnesota to see its oncampus stadium and have provided feedback to the Game Day Experience Committee. A proclamation from the City of Fort Collins declaring October 4<sup>th</sup> as CSU Day and a card of appreciation from the family of an ASCSU alum who had received a handwritten note from Governor Pineda Soracá upon the death of their son were circulated.

Faculty Report: Governor Doherty noted the written report includes a summary of the September Faculty Council meeting and the annual report for last year. At the October meeting, there was a presentation related to the ongoing conversations for better integration of the non-tenure track faculty into the campus system and recommendations for changes in the faculty manual will be forthcoming. Work continues on course surveys and teaching effectiveness. Governor Doherty extended invitations to attend the ground breaking for the new addition to the Warner College of Natural Resources building and upcoming council meetings that occur on the first Tuesday of the month.

*President's Report:* Dr. Frank acknowledged the work of the President's Commission on Women and Gender and the Standing Committee on the Status of Women Faculty to establish the faculty ombuds position. Seven years of statistics on various enrollment parameters were provided in the written report. The increasing enrollment along with improvements in diversity and academic qualifications, retention, graduation rates, alumni participation, research funding, philanthropy and engagement have had an impact on financial ratings for the institution. Board members received a complimentary bottle of beer that was brewed in celebration of the 50<sup>th</sup> anniversary of the College of Business and was the result of a collaboration between the College of Business' Beverage Institute, the CSU Fermentation Science

program, the College of Health & Human Sciences, the College of Agricultural Sciences and Odell Brewing Co.

Dr. Miranda introduced Dr. Ben Withers, the new Dean of the College of Liberal Arts, who expressed appreciation for the opportunity to serve the institution in his new role.

Stadium Update: Ms. Parsons explained the reports are posted on the stadium website. She noted the modification to the construction budget and schedule to include the academic and alumni portions that are outside the stadium budget and funded through other resources, and being constructed simultaneously for efficiency and cost savings. All aspects of the project are on time and on budget. The written report includes updates on the work of the Stadium Advisory Group and the Game Day Experience Committee. Meetings have been held with the Fort Collins city manager and the Larimer County commissioners to gather input as part of the process for disposition of Hughes Stadium. A meeting will also be held with ASCSU. An update was provided on the pro forma with the combined sale of luxury assets at 100%.

#### **CSU-PUEBLO CAMPUS REPORTS**

Student Report: Governor Huerta reviewed highlights from the written report on the Dean's Advisory Councils events, the student emergency fund, the President's Council, dining services, external initiatives and projects, the student discount program, Pueblo community involvement, and internal initiatives and projects. Additional updates pertaining to student facility fees included there was a reopening ceremony for the disk golf course; there was a successful fire pit event in the residence hall oval with excitement for the actual fire pit that is forthcoming; plans are in process for adding sidewalks to the sand volleyball court and ropes course; the gazebo that had been on hold will now be constructed by the end of the year; and a new swing set has been installed and, due the popularity, additional swings are being considered. Governor Huerta reported he and Governor Pineda Soracá are working with their student affairs officers on collaborative efforts.

Faculty Report: Governor Volk indicated the written report includes updates on the Chairs Council; the faculty session during which proposals and actionable items for the coming year were received; and the first fall Faculty Senate meeting. The Faculty Senate will be finalizing permanent APR policies based on the temporary policies that were enacted in the spring with action at the next meeting. Governor Volk reflected on the progress made towards stabilizing the institution and the future of the institution with new leadership by sharing three anecdotes.

*President's Report:* Dr. Di Mare reported several national awards and recognitions for excellence have been received. The fall 2016 enrollment was flat with a 5.4% increase in freshmen enrollment and the best retention rate in 13 years. The *On the Move* campaign raised \$28.4 million which exceeded the \$25 million goal and over \$6 million in grants have been received in the past two weeks. The diverse student population is now at 49.3% which means the university might be able to apply for MSI status in the future.

Progress has been made towards a new wildlife degree and the owners of the Walker Ranch have agreed to allow the university to use 77 acres as an open laboratory. A \$1.3 million gift from the Parkview Hospital will assist with expansion of the nursing program. Title IX training has been expanded and conducted across the campus. Effective January 1, 2017, a 1% cost of living salary increase will be implemented for faculty and staff. Over 500 students and their parents participated in the Discover Downtown event held on move-in day with the expectation to continue the activity in the future. When asked about the rodeo program that was restarted last year, Dr. Di Mare responded the rodeo team will be able to ride the horses on the Walker ranch and there appears to be interest in expanding the program.

#### **CSU-GLOBAL CAMPUS REPORTS**

Student Report: Governor Buchmeier explained the written report is focused on the importance of discussion boards for students. She reported she spends several hours weekly on the discussion board; explained that classes are self-regulated with deadlines; and shared a personal experience on a challenge presented by an instructor for a discussion board assignment that ultimately improved her writing skills.

Faculty Report: Dr. Bellum reported that, due to personal circumstances with Governor Quinn, a new faculty representative is being appointed to replace her. He reviewed highlights from the written report on faculty professional development opportunities. CSU-Global Campus will be holding the second annual virtual online conference in the fall for faculty and graduate students with stipends for presentation of papers.

The university is striving to enhance the graduate student educational experience with a committee that is developing a framework for faculty expectations. The graduate class size has been reduced from 22 to 18 to provide more engagement with students and there is an expectation of increasing the amount of video time. The faculty compensation model has been adjusted for increased interaction with students. A second curricular committee has been created to focus on graduate education and a director of graduate education has been hired to ensure the new plans and processes are implemented.

*President's Report:* Dr. Takeda-Tinker expressed appreciation for the work completed to revise the reserve policy. The written report was prepared on the basis of aligning CSU-Global Campus' strategic goals with the CSU System strategic plan. First to third term retention improved nine out of eleven terms over the past two years with rates of 80% and 85%. Faculty are working on a new adaptive learning technology tool to customize programs based on students' designated learning outcomes that should prevent students from taking remedial courses.

#### **CONSENT AGENDA**

Chair Mosher reviewed the items on the consent agenda. **Motion/Action:** Governor Tuor moved to approve; Governor Johnson seconded; and the motion carried unanimously.

The meeting then recessed for lunch at 12:08 p.m. and reconvened at 12:55 p.m.

#### RESEARCH REPORT

Colorado State University: Dr. Rudolph commented on the highly competitive research environment; presented data on the number of awards, proposals, expenditures, patents and patent applications, and licensing agreements; provided examples of research stories that communicate the impact of research and help attract sponsors; and reviewed the components that make research accomplishments possible. A synopsis on the research and scholarly success initiative that began six months ago to sustain and grow the research impact was provided. Examples of research opportunities and challenges utilizing a strategic focus and prioritization were given to demonstrate the impact of CSU's research.

An overview was presented on the CSU innovation ecosystem to illustrate the entrepreneurial aspect of research activity that involves both students and faculty as well as colleagues such as CSU Ventures and CSURF. The three-phased research and scholarship success initiative over a five to ten-year timeframe helps structure the research framework in an organized manner.

Dr. Rudolph responded to a question by explaining the process of transferring intellectual property and the benefits for the university. He also explained how the Colorado Wheat Research Foundation is

connected to the Colorado Wheat Growers and the reason plant activity is not truly patented because of hybridization of plants that are called PBPs.

CSU-Pueblo: Dr. Kreminski reported the university is a research comprehensive institution that offers ten Master's degrees and explained the expectation for faculty to engage in the triad of teaching, research and service. A summary of external grant submissions and success for the past four years and examples of current activities supported by external funding were provided. There are also internally funded opportunities with SEED and SURP grants. Examples were provided on other recent faculty activity including peer-reviewed publications, books and fine arts performances. Campus dissemination occurs through a variety of activities including the annual Student Works Symposium and conferences, and achievements are celebrated at an annual scholars' reception.

#### **PUBLIC COMMENT**

Chair Mosher indicated there were 15 minutes allotted for public comment. Mike Pruznick commented on a personal experience on campus; Alex Hurtado and Maggie Gilman asked for support of the CSU Climate Reality Project.

#### **NEXT MEETING**

Chair Mosher noted the next meeting will be held December 8-9, 2016, in Denver. Ms. Parsons shared plans for the December 7<sup>th</sup> annual holiday party. With no further business to come before the Board, the meeting adjourned at 1:53 p.m.

Board of Governors of the Colorado State University System Meeting Date: December 9, 2016

Consent Item

#### MATTERS FOR ACTION:

**Graduate Certificates** 

#### RECOMMENDED ACTION:

MOVED, that the Board of Governors approve the Graduate Certificates.

#### **EXPLANATION:**

Presented by Rick Miranda, Provost and Executive Vice President

In order to qualify for Title IV funding, graduate certificates awarded by Colorado State University must demonstrate approval by the Board of Governors, the Colorado Department of Higher Education and the Higher Learning Commission. The certificates listed here for which we are seeking approval have received approval from the University Curriculum Committee and the Faculty Council.

Board of Governors of the Colorado State University System Meeting Date: December 9, 2016

Consent Item

#### **Graduate Certificates:**

**College of Natural Sciences** 

Performance Management – 9 credits Organizational Development – 9 credits Board of Governors of the Colorado State University System December 8-9, 2016 Consent Item

#### MATTERS FOR ACTION:

CSU-Pueblo – Academic Calendar AY2017-2018 & AY2018-2019

#### RECOMMENDED ACTION:

MOVED, that the Board of Governors approve the CSU-Pueblo Academic Calendar for AY2017-2018 & AY2018-2019.

#### **EXPLANATION:**

Presented by Richard Kreminski, Provost and Executive Vice President for Academic Affairs.

The CSU-Pueblo Academic Calendar historically is prepared by the Registrar and presented to the Board for approval. (No campus body is required to approve it in advance of the Board meeting). Once approved by the Board, the calendar is posted with wording that states that these calendars are planned in advance and are subject to change, and unless otherwise stated, the University is open and classes will be held as scheduled. (The AY2017-2018 calendar was approved by the Board in December 2015, and there are no changes in what follows below.)

#### **UNIVERSITY CALENDAR 2017-2018 & 2018-2019**

FALL	<u>2017</u>	<u>2018</u>			
Registration Begins Classes Begin End Add Period (full-term courses) End Drop Period (full-term courses) Fall Graduation Contract Deadline End of Full-term Course Withdrawal Period Thanksgiving Break Classes End Final Exams	Mar. Aug. Aug. Sept. Sept. Oct. 20 Nov. 20-24 Dec.1 Dec.4-8	13 Mar. 12 21 Aug. 20 25 Aug. 24 4 Sept. 3 15 Sept. 14 Oct. 19 Nov. 19-23 Nov. 30 Dec. 3-7			
<b>SPRING</b>	<u>2018</u>	<u>2019</u>			
Registration Begins Classes Begin End Add Period (full-term courses) End Drop Period (full-term courses) Spring Graduation Contract Deadline End of Full-term Course Withdrawal Period Spring Break Classes End Final Exams Commencement  SUMMER  Registration Begins	Oct. 16 (17) Jan. 15 Jan. 19 Jan. 29 Feb. 9 Mar.16 Mar.19-23 Apr.27 Apr.30-May 4 May 5  2018 Oct. 16 (17)	Oct. 15 (18) Jan. 14 Jan. 18 Jan. 28 Feb. 8 Mar. 15 Mar. 15 Mar. 18-22 (Tentative) Apr. 26 Apr. 29-May 3 May 4  2019 Oct. 15 (18)			
First 4, 6 and 12-week Sessions					
Classes Begin Memorial Day (University Closed) Summer Graduation Contract Deadline Classes End First 4-week First 6-week 12-week	May 14 May 28 June 1 June 7 June 21 Aug. 2	May 13 May 27 May 31 June 6 June 20 Aug. 1			
Second 4-week Session Classes Begin Independence Day Observed (University Closed) Classes End	June 11 July 4 July 5	June 10 July 4 July 3			

June 25 June 24
Closed) July 4 July 4
Aug. 2 Aug. 1
July 9 July 8
Closed) July 4 Aug. 2 July 4 Aug. 1

Classes End

These Calendars are planned in advance and are subject to change. Unless otherwise stated, the University is open and classes will be held as scheduled.

Aug. 2

Aug. 1

Board of Governors of the Colorado State University System December 9, 2016 Consent Item

### Matters for Action

Updates to the CSU-Global Faculty Handbook

### Recommended Action

Moved that the Board of Governors approve the edits to the CSU-Global Faculty Handbook

### Explanation

Presented by Dr. Jon Bellum, Provost and Executive Vice President

### Changes to Faculty Handbook - December 2016

- Delete Faculty Support phone number and replace with faculty support email
- Updated fact sheet with current numbers
- Deleted references to office of Student Success updated and replaced with Student Affairs
- Deleted references to Manager of Faculty Recruiting updated and replaced with Faculty Recruitment and Development Coordinator
- Deleted references to ADP and changed to Ultipro
- Changed references to Faculty Scheduling Coordinator to Faculty Operations Specialist
- Added Student Disability Services
- Added the following statement to faculty responsibilities: Faculty members acknowledge that student feedback about faculty performance will be solicited and faculty members have the obligation and responsibility to respect that process. Faculty members must not attempt to single out or directly respond to students who provide feedback and comments, whether the student feedback and comments are submitted by name or anonymously.
- Directed faculty members to contact Course Support or their respective Program Coordinators for more information about course development and materials (instead of to the Curriculum and Assessment Handbook).
- Added section about faculty awards: At the discretion of the leadership of CSU-Global, faculty recognition awards may been conferred at the end of each academic year.
- Added to all courses are predicted courses: and faculty are not guaranteed a particular course or section
- Added graduate expectations: Faculty teaching graduate level courses are expected to adhere to the additional graduate level expectations.
- Added: Report any issues or errors found via the Course Support button on the Faculty Portal homepage under "Quick Links." Errors will be reviewed and corrected before courses open for students.
- Changed final grading to reflect gradebook change to cumulative points: Accumulated points determine the student's final letter grade and must be calculated based on the grading scale in the course syllabus. Faculty will use the drop down menu in the Overall column and select the grade equivalent for the points received.

### Added step 5 to faculty grievance process:

- 5. The Faculty Affairs Committee will review and respond in writing to the grievance appeal within 10 business days. A copy of the written response will also be sent to the Provost.
- 6. If the issue remains unresolved, the Provost will review and respond in writing to the grievance appeal within 5 business days. A copy of the written response will also be sent to the President.

### Additional expectations for faculty teaching graduate courses:

- Include a video introduction that includes (1) the course and (2) the faculty member describing academic and professional background and highlight areas of research/expertise/experience
- Encourage early interaction, interest, and engagement in the course by providing students with the opportunity for a live session (the polling feature may be used). If students are interested, schedule a live session, record, and post the link
- Faculty member provides additional outside materials, videos or resources to encourage deeper understanding of the material.
- Provide at least two video updates <u>within a course</u> (5-10 minutes) that include content or information tied to the course outcomes not already addressed in weekly materials
- Invite students to schedule an individual live session or phone call with the instructor to discuss course content, or personal career/professional goals.
- Responses should extend critical thought on content and weekly objectives, suggest additional resources, include a follow up question, and/or move the student to a deeper understanding and ability to apply knowledge gained. Attempt to continue conversation beyond the first question and answer.
- Encourage continued interaction, interest, and engagement in the course by providing students with the opportunity for a live session (the polling feature may be used). If students are interested, schedule a live session, record, and post the link
- Provide substantive feedback to students including areas of strength and areas of growth. Grading rubrics and criteria are clearly incorporated into feedback.
- Tie discussion content to real world situations.
- Encourage students to use Academic Peer Reviewed journals to support ideas in discussions to further critical thinking and industry relevance.
- Instructors provide content specific feedback (including additional points of view, questions, examples, or other resources) supporting additional learning as well as guidance on proper APA format and style.
- Balance APA comments with content and concept specific comments within the assignments.
- Require Academic peer reviewed journal and industry journals when consistent with the assignment instructions.
- Encourage the use of highly credible resources in all assignments.

Board of Governors of the Colorado State University System December 9, 2016 Consent Item

### Matters for Action

Master of Science in Data Analytics.

### Recommended Action

Moved that the Board of Governors approve the request from Colorado State University-Global Campus to approve the Master of Science in Data Analytics.

### Explanation

Presented by Dr. Jon Bellum, Provost and Executive Vice President

Colorado State University-Global Campus (CSU-Global) is proposing a Master of Science in Data Analytics (MSDA) program. The MSDA graduate degree is a 36 credit hour program designed to prepare students to be organizational leaders through the use of business intelligence and data analytics. Students will learn to improve decision making and business processes in core business functions such as accounting, finance, logistics, management, and strategy through the application of business intelligence solutions and data analytics principles. Technical topics include data warehouse, data mining and visualization, business analytics, predictive analytics, and enterprise performance management. The program prepares students for careers such as business/systems analysts, business intelligence developers/analysts, ETL developers, data analysts, data architects, and data scientists.

# Section 15

## Meeting Evaluation

This section intentionally left blank

# **APPENDICES**

- Appendix I: Construction Reports
- Appendix II: Correspondence
- Appendix III: Higher Ed Readings

# APPENDIX I

Construction Status Reports

### CSU FORT COLLINS-CONSTRUCTION STATUS OF BOND FUNDED PROJECTS

Project	Bond \$	Bond Project Status Picture	Occupancy	Status as of 11/16
Multipurpose Stadium  Total Budget: \$220,000,000	\$220,000,000 Stadium Revenue		August 2017	This project will construct a multi-use stadium on main campus.  Project is in budget and on schedule. Construction is approximately 64% complete. GMP in place with associated contract amendment fully executed.
Stadium Alumni and Academic Space Total Budget: \$18,500,000	\$18,500,000 General Fund and Alumni		August 2017	This project consists of approximately 82,000 gsf of classroom, advising and Alumni Center space.  Design documents are complete. Construction to be concurrent with the Stadium project.

	358						
Project	Bond \$	Bond Project Status Picture	Occupancy	Status as of 11/16			
Health and Medical Center  Total Budget: \$56,100,000	\$49,000,000  Hartshorn Health Center  Remaining funding from donations - Columbine Center for Healthy Aging and UC Health		May 2017	This project will construct an approximately 161,000 gsf medical center with 27,500 gsf on the 4 <sup>th</sup> floor unfinished to accommodate future growth.  Project is in budget and on schedule. Exterior glazing, interior framing and MEP are underway. Construction is approximately 60% complete.			
Biology Building Total Budget: \$70,000,000	\$70,000,000 Student Facility Fee, General Fund and Donations	ASSESSA	July 2017	This project will construct an approximately 152,000 gsf biology building.  Project is in budget and on schedule. Interior framing is 90% complete and MEP is underway. Construction is approximately 61% complete.			
Prospect Road Underpass Total Budget: \$6,000,000	\$6,000,000  Parking and Transportation Services		Phased through November 2016	This project will construct a bike and pedestrian underpass at Center Ave and Prospect Road.  Project is in budget and approximately 95% complete. Project is behind schedule and substantial completion has been extended to November 2016.			

COLORADO STATE UNIVERSITY- FORT COLLINS

	359							
Project	Bond \$	Bond Project Status Picture	Occupancy	Status as of 11/16				
Chemistry Building Total Budget: \$56,566,618	\$5,400,000  General fund  State funding: \$51,166,618	WALKS	July 2017	This project will construct an approximately 61,000 gsf chemistry building.  All phases of state funding have been received. Project is on schedule and in budget. Glazing, interior framing and MEP are underway. Construction is approximately 59% complete.				
Institute for Biologic Translational Therapies and Research Horse Barn  Total Budget: \$77,800,000	\$9,600,000  General fund  Remaining funding from donations and State COP.		March 2019	This project will construct an approximately 130,000 gsf research building and a 48 stall research horse barn on South Campus.  Public Private Partnership (P3) developer selection underway, with final selection on or about Dec 23, 2016.				
Michael Smith Natural Resources Addition Total Budget: \$20,200,000	\$5,000,000  General fund  Remaining funding from donations and Student Facility Fees.	N.C. N. R. S. Sunning.	August 2018	This project will construct an approximately 37,400 gsf addition to the Warner College of Natural Resources.  Project is in preliminary procurement.				

				360
Project	Bond \$	Bond Project Status Picture	Occupancy	Status as of 11/16
Shields and Elizabeth Underpass Total Budget: \$10,800,000	\$10,800,000 General Fund		August 2017	This project will construct a bike and pedestrian underpass at West Elizabeth Street and Shields Street.  Design Build team has been selected and design is underway.
Richardson Design Center Total Budget: \$16,500,000	\$5,500,000  General Fund  Remaining funding from donations	\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	January 2019	This project will construct an approximately 41,000 gsf building to house interdisciplanary design programs.  Project is in preliminary procurement.
Global Food Innovation Center in Honor of Gary & Kay Smith  Total Budget: \$13,100,000	All funding from donations and General Fund	The second secon	August 2018	This project will construct an approximately 36,600 gsf food animal handling and meat processing facility addition to Animal Sciences.  Project is in preliminary procurement.

	COLO						
CONSTRUCTION PROJECT STATUS REPORT							
Project	Total Budget & Funding Source	Construction Start	Scheduled Completion	STATUS as of 11/21/2016	Description		
Corridor Extension @Student Recreation Center	\$856,260 Student Rec. Ctr. Fee		Constructio	n Completed January 2012	PAYMEND CONTROL CONTRO		
South Campus Entry Drive, Parking Addition, Foyer addition, Internal Renovation @ Buell Communication Center Building	\$1,062,500 Student Fee- \$300,000 Parking funds\$301,000 Building Repair/Replacement \$462,500		Construction	Completed Februrary 2012			
Occhiato University Center Renovation and Addition	\$35,000,000 Debt to be repaid with student fee facility fees, grants, & auxiliary services revenue	GMP establish All Bid Packaş plumbing, H Build Tean Addition) 10	Developmed, Notice to Proceed to Proceed to ges 1, 2, 3, underway- (FVAC, finishes) n of Nunn Construction/10% complete for occupa ec. 1, 2016. approximately	hematic Design completed. Design ment Phase completed. Design Commence Construction issued Novemeber 3, 2015. Earth work, utilities, foundations, steel frame, elctrical, Design- nord-coplan-macht Architects. Phase 1 (New ney November 28, 2016. Phase 2 (Renovation) Entire project 15% overall complete to date. upletion estimated 03/2018			
Exterior Door Security Access Control at all Academic Buildings.Phase II	\$998,351 Controlled Maintenance		12/2015	Add electronic card access/monitoring, new keyways, and replace worn exterior entrances at 11 academic buildings.	Project under budget and on schedule. 11 buildings are live on-line.Project is Complete		
New General Classroom Building	\$16000000 Capital Funds	Construction Start 06/14 Completion 07/15		Completion July 28, 2015. On time and on budget. Classes are in process G H Phipps Construction Co., General Contractor hord-coplan-macht Architects	mman/		
Soccer/Lacrosse Complex	\$3,100,000 cash funded project from grants and donations		Construction began 3/2014, Completion Phase1 field and bleachers June 2014, Phase 2 Building completed February 1, 2016	Phase 2 (building) 100% complete. Occupancy on February 1, 2016 Press box Completed 6/1/16 (Phase I-Synthetic turf field completed and in use.) H. W. Houston General Contractor			

# APPENDIX II

Correspondence

CSUS Board of Governors Correspondence Received [dates]						
Date Received	Email/Letter	From	<u>Subject</u>	Response		
October 29,	Email	Bob	Collegian Commentary on			
2016		Vangermeersch	tuition			

### Geary, Melanie

**From:** bobvangermeersch@aol.com

Sent: Saturday, October 29, 2016 12:17 PM

To: CSUS Board

**Subject:** Fwd: Collegian commentary on rising tuition

Hi Melanie

Please forward this email to all the Governors.

**Thanks** 

Bob Vangermeersch

----Original Message-----

From: Shulman, Steven < Steven. Shulman@ColoState. EDU> To: Bob Vangermeersch < bobvangermeersch@aol.com>

Sent: Thu, Oct 27, 2016 9:44 am

Subject: RE: Collegian commentary on rising tuition

Bob – Of course, send it to whoever you like.

Prof. Steven Shulman
Department of Economics
Center for the Study of Academic Labor
B213 Clark Building
Colorado State University
Ft Collins, CO 80523
970-491-6940

From: Bob Vangermeersch [mailto:bobvangermeersch@aol.com]

Sent: Wednesday, October 26, 2016 7:52 PM

**To:** Shulman, Steven < <u>Steven.Shulman@ColoState.EDU</u>> **Subject:** Re: Collegian commentary on rising tuition

Hi Steve

Great work. May I share this with the sosh crew?

Thanks

Bob Vangermeersch Sent from my NOOK

"Shulman,Steven" < <a href="mailto:Steven.Shulman@ColoState.EDU">Steven.Shulman@ColoState.EDU</a>> wrote:

ATHLETIC SPENDING DRIVES UP TUITION AND FEES

by Steven Shulman Professor of Economics

The CSU administration continues to make misleading claims about rising tuition, some of which are repeated in the Collegian's Oct 26 article on "The Exponential Rise of Tuition Beyond Inflation."

CSU President Tony Frank claims that cuts in state support are the primary cause of the dramatic increase in tuition. That is simply not true. Tuition has risen by far more than was needed to offset cuts in state support.

For example, CSU's budget for the next fiscal year shows that tuition increases will add \$18.8 million to revenue. Yet state budget cuts are projected to reduce revenue by only \$0.1 million (see <a href="http://www.pres.colostate.edu/pdf/FY17-final-summary.pdf">http://www.pres.colostate.edu/pdf/FY17-final-summary.pdf</a>).

What is the university doing with all the additional revenue? Unfortunately, it is not increasing spending on academics. As President Frank notes, instructional spending per student has remained flat. Instead the university has used the additional money to dramatically increase spending on athletics, especially football.

CSU athletic spending has risen from \$26.0 million to \$38.8 million since Tony Frank was appointed president in 2009. Over the same period, revenues from ticket sales, contributions and other athletic enterprises rose from \$14.2 million to just \$18.0 million.

Driving up costs faster than revenues would be a losing strategy in any industry aside from higher education. CSU is forced to make up the difference by subsidizing athletics with increased tuition and fees.

According to the NCAA, total athletic subsidies at CSU came to \$20.4 million in 2015 (see <a href="http://sports.usatoday.com/ncaa/finances/">http://sports.usatoday.com/ncaa/finances/</a>). That is what drives up the cost of education, not state budget cuts.

During Tony Frank's tenure as president of CSU, these athletic subsidies have risen by 70% while academic budgets have been cut or frozen. Students have been paying more and more for their education but getting less and less in return.

The administration has tried to deny and deflect these basic facts. That has led them into some very questionable claims about tuition and fees at CSU.

For example, Lynn Johnson, a CSU vice president, has claimed that raising the minimum wage would force the university to raise student fees or to cut budgets. Yet CSU would be able to afford the minimum wage increase if it reduced its huge subsidies of athletics. Blaming its lowest paid workers for student fee increases is divisive and dishonest.

President Frank has set CSU on a permanent path toward much higher athletic spending. Mike Bobo's \$1.45 million salary is the highest in the Mountain West. Lynn Johnson should blame his excessive pay for the university's inability to afford a minimum wage increase.

The new stadium will dramatically increase CSU's debt obligations. Students are the ones at risk since their tuition and fees will have to be raised even further in the likely event that the stadium cannot generate sufficient revenues to cover its own costs.

The cost of a college education has risen far too much in large part because of excessive spending on non-essentials like football. Blaming it on cuts in state support is nothing more than a way for the CSU administration to avoid responsibility for its own bad values and choices.

Department of Economics

Center for the Study of Academic Labor

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# APPENDIX III

Higher Ed Readings

### How one university closed the gender gap in STEM-faculty hiring

The Chronicle of Higher Education; 10/7/2016

A gender diversity problem remains persistent in male-dominated STEM fields – nationally, although women earn 42 percent of new STEM doctorates they make up only about 15 percent of STEM faculty – but at Montana State University every year since 2012 has seen close to equal numbers of men and women hired for tenure-track STEM jobs. With the help of an NSF grant, the university was able to tweak its search process to include training for faculty to help recognize implicit bias, new practices to recruit diverse candidates, and providing an unaffiliated "family advocate" to talk to finalists about work-life policies in a confidential manner. Tenure-track women in STEM at the university has increased from 18 percent in 2012-13 to 28 percent this year.

### Universities are not 'trade schools,' but they should prepare students for the workforce

The Washington Post; 10/7/2016

University participation in joint education programs and strategic corporate partnerships, as well as expanding their online presence, can boost job prospects for traditional and non-traditional college students alike. A recent survey indicated that 28 percent of parents with high school students had a child that had considered not attending college, even though college graduates consistently out-earn their less formally educated peers. Creating new programs that incorporate concrete skills and job training can help universities show the ROI on a college degree to skeptical potential parents and students without compromising the goal of higher education – to produce graduates who are astute and responsible members of society.

### CSU retains A+ bond rating

The Coloradoan; 10/20/2016

Despite a construction blitz, warnings of a possible downgrade, and a negative outlook score in a previous report, Standard & Poor's Global Ratings maintained the CSU System's A+ overall bond rating, based on record enrollment numbers and strong philanthropic support. Read the S&P letter here.

### How colleges can do better at helping students get jobs

The Chronicle of Higher Education; 10/23/2016

Pressure on colleges to link academics to professional preparation is growing and universities around the country are thinking of new and innovative ways to collaborate with potential future employers, particularly in and around the college campus – their "economic cluster". The possibilities are endless but some examples include: inviting employers to locate student jobs on campus; collaborating with a corporate partner on a degree program; partnering with data companies to map the employment needs of online students in diverse markets; or working with career-solutions platforms to expose students to a wider network of internships and jobs.

### The need to validate vocational interests

The Atlantic; 10/31/2016

According to a Gallup poll, 14 percent of Americans believe that college adequately prepares students for workplace success; 11 percent of business leaders and 96 percent of chief academics officers agree. Clearly, there is a gap – in this article a high school teacher lays out her proposal that curriculums be built around the interests and skills of students, encouraging "nonacademic" students toward a vocational track with the same enthusiasm and commitment used to guide students into more traditional programs.

### National Western Center October newsletter

Check out all the latest news from the National Western Center!

### Todos Santos Center November newsletter

Check out all the latest news from the CSU Todos Santos Center!

### How one university closed the gender gap in STEM-faculty hiring

*The Chronicle of Higher Education* 

For many years, Montana State University had a gender-diversity problem that seemed intractable: Women weren't well represented on the faculty as a whole, and in the fields of science, technology, engineering, and math, male professors outnumbered women roughly four to one. Yet today the number of female faculty members in STEM is approaching what some would call critical mass. Every year since 2012, the university has hired an equal number of men and women — or close to it — for tenure-track jobs in those fields. Of 72 hires, 36 have been women

How did Montana State pull off such a shift? A five-person interdisciplinary team of faculty and administrators, fueled by a \$3.4-million grant from the National Science Foundation, made some purposeful tweaks in the search process.

They developed and carried out an intervention that included training faculty to recognize implicit bias, sharing tips on how to recruit diverse candidates, and making sure finalists could have a confidential conversation about Montana State's work-life policies with a "family advocate" unaffiliated with the search.

"The most common question I hear is, If I could do one thing to achieve gender diversity on the faculty, what would it be?" says Jessi L. Smith, a professor of psychology at Montana State and the principal investigator on the NSF grant. "But it's a process. It takes very careful, strategic planning."

In the male-dominated STEM fields, the <u>gender gap</u> has been particularly stubborn. More women are earning Ph.D.s in science and engineering fields — about <u>17,000 in 2014</u>, roughly double the number in 1994 — and they now represent 42 percent of those new doctorates. But the faculties in some STEM fields don't reflect their presence. In engineering, for instance, women made up about 15 percent of the faculty in 2013, the latest year with available data. And about 20 percent of computer-science professors are women.

The dearth of female faculty members means that many young women don't see <u>role models</u> up in front of their classes. Some research has suggested that women who have completed graduate school show <u>disproportionately low interest</u> in pursuing an academic career at a research university. When women do become academic scientists, they often face discrimination in the department or the lab. Some find it tricky to balance life with work and start a family. And science loses out on the problem-solving skills of an inclusive faculty.

"When we started, we had multiple departments that had one woman or even no women at all," says Ms. Smith, who has been at Montana State since 2006 and was the first woman in the psychology department to earn tenure and, later, a promotion to full professor. "We've made great strides since then."

### **Shortlists and Offers**

Montana State has recognized the reality that faculty members aren't usually trained to recruit and screen job candidates. That's particularly apparent when it comes to attracting a diverse slate of applicants.

Casting the intervention as a form of support for faculty with search-committee duties was important, Ms. Smith says. The group that led the effort didn't want it to be seen as a mandate for diversity. Still, some faculty members questioned whether a focus on gender diversity would result in lower standards for women.

The first year, 2012-13, brought 23 searches for STEM faculty. In 14 of them, the search committees were randomly selected to participate in voluntary training (all accepted). Researchers collected data to document the process and outcomes.

The search committees with the training produced shortlists that were about 41 percent female, compared with about 14 percent for the other committees. And the trained committees were about six times as likely to offer a woman the job.

And candidates themselves responded positively: Women were six times as likely to accept an offer from a committee that conducted an intervention search. The limited rollout resulted in 10 women and seven men hired in 2012-13 (as often happens with academic searches, some didn't pan out in that cycle). The following year, when the intervention was applied to all STEM searches, 10 men and 10 women were hired into tenure-track jobs.

"At first glance I was disappointed because I thought that the majority of hires would be women," Ms. Smith says. "But in retrospect I'll say that if we'd had 80- or 90-percent women hires, then somehow those old stereotypes of lowering the bar would have taken over."

Before the intervention, the computer-science faculty at Montana State was all male. John Paxton, director of what recently became the Gianforte School of Computing, had been committed to adding women to the ranks, but four searches failed to yield a female hire despite an offer to at least one. He followed the new approach, and last fall, computer science hired two female tenure-track faculty members.

"We had good intentions, but we just didn't have the right knowledge," Mr. Paxton says of earlier efforts. "You don't know what you don't know until you know it. Then it's obvious."

Rather than just posting job openings and waiting for people to apply, the computer-science department reached out to potential candidates personally. Search committees also learned how to word job ads "in such a way that a broader set of people can see themselves in the position," Mr. Paxton says.

This month the computing school will again be an academic sponsor of an annual international conference for women in computing and an exhibitor at the event's career fair. That gives Mr. Paxton and his colleagues access to a database of attendees, a key recruiting tool to help fill at least two current openings.

Montana State's booth at the conference two years ago attracted Brittany T. Fasy, who is now on the faculty. The university wasn't on her radar at the time, but Ms. Fasy ultimately applied, and so did her husband. The department hired them both as assistant professors. Such hires could help smooth the way for more women there.

"If you looked at the composition of our faculty before," Mr. Paxton says, "we were saying one thing, but our faculty was illustrating something different."

### **Work-Life Balance**

Recruiting female faculty members to Montana State has hurdles beyond the gender gap. The institution has seen some gender-discrimination battles, in the past and more recently. Some professors believe the institution's small-town location in a sprawling, rural state is an automatic drawback for men and women alike. One obstacle the intervention process is designed to combat is concern about work-life balance.

Jia Hu, who started at Montana State in June 2013, recalls her visit to the university. "I wasn't even sure if talking about kids was something I could do," she says. "I was hesitant to ask people about it." Now such discussions, between all candidates and a family advocate who doesn't weigh in on the hiring decision, are a given. "That's great," says Ms. Hu, an assistant professor of ecology and mother of two. "It just shows that Montana State understands that people have families."

The share of tenure-track women in STEM at Montana State has jumped from 18 percent in 2012-13 to to 28 percent in 2015-16. But the grant money that supported the university's efforts will run out in August. The challenge now is to secure the resources needed to keep the momentum going. Discussions about the program's future are underway.

"One way to change a culture is to put new people in it, but if all we're doing is hiring new, vulnerable, junior women faculty, that cannot be where the process stops," says Ms. Smith, the principal investigator on the grant. "If we can create a culture where both men and women in a department feel committed to equity and diversity, that's what we want."

## <u>Universities are not 'trade schools,' but they should prepare students for the workforce</u> The Washington Post

Universities are grappling with the best way to integrate traditional classroom learning and workforce training in the face of changing economic demands. Employers want graduates with work experience and competencies beyond the credential they've earned, as much as they want someone with solid communication and writing skills. Meeting all of these demands is a challenge for higher education, but not one that is insurmountable, says Christopher B. Howard. The newly inaugurated president of Robert Morris University, a small private school in Moon Township, Penn., argues that colleges and universities must find a way to produce graduates who are astute members of society and competent members of the labor market. — Danielle Douglas-Gabriel

The world as we know it in higher education ended in 2008, when the financial collapse decimated home values and other investments for millions of Americans, wrecking their plans to finance their children's education. Eight years on, many colleges and universities struggle to navigate this new landscape, but we still have the chance to be on the right side of history — if we act now by ensuring students graduate with skills relevant for today's workforce and an education that prepares them for an increasingly complex and unpredictable world.

Consider this: In a recent survey by the College Savings Foundation, 28 percent of parents of high school students said their children had considered not attending college, up from 17 percent just one year earlier. That's bad news for higher education and for those students. Not every good-paying job requires a college degree, however, college graduates, including millennials, continue to out-earn their less formally educated peers.

A 2014 Pew Research Center report found that college-educated workers ages 25 to 32 earn a median salary of \$45,000, compared to \$30,000 for those with a two-year degree. According to the Georgetown University Center for Education and the Workforce, the U.S. economy will grow by 25 million jobs through 2020, and 65 percent will require some form of postsecondary education; 35 percent will require a bachelor's degree.

The demographics of some regions mean that the demand for workers will be particularly high. I'm the president of Robert Morris University (RMU) near Pittsburgh, and our region will see approximately 290,000 workers retire over the next 10 years, according to a report by the local Allegheny Conference on Community Development. The most high-demand fields, including health care, cyber security, and financial technology, will require many new workers with college degrees.

It's not exactly in our DNA in higher education to talk about return on investment, but we are going to have to start demonstrating it to parents, students and government officials from both sides of the aisle. In addition, we are going to have to demonstrate what makes each of our institutions distinct from our peers, something that our industry's cookie-cutter approach to marketing has often failed to do.

We have some good examples of institutions getting it right. Take Northeastern University in Boston, which delivers two, six-month co-op experiences to students enrolled in its four-year degree program, with a five-year program that gives students the opportunity for three co-ops. This is meaningful work experience that not only will help students ensure they are picking the right career but also give them a competitive edge when they graduate.

Northeastern also is notable as one of eight colleges and universities to participate in the U.S. Department of Education's Educational Quality through Innovative Partnerships initiative. As part of this program, Northeastern is teaming up with General Electric to offer a bachelor's degree program in advanced manufacturing, as well as advanced certificate and online education programs aimed at adult workers who need to burnish their skills to get high-tech jobs.

That speaks to another way that colleges and universities can find their niche: strategic corporate partnerships and joint education programs that not only boost the job prospects of traditional-age college graduates, but also help older workers who need to complete a degree or update their skill set. The growth in online education at traditional nonprofit colleges and universities like RMU is evidence of this.

In Pittsburgh, employers, colleges and universities, government agencies and nonprofits are coming together at the Energy Innovation Center, where they will conduct research, education, and job training aimed at boosting western Pennsylvania's growing energy and advanced manufacturing sectors. Robert Morris will soon join this partnership and offer three undergraduate and graduate certificate programs through our School of Engineering, Mathematics and Science. We are also forming our own strategic corporate partnerships and bolstering our relationships with community colleges to create more affordable paths to degrees in high-demand fields such as cyber security.

Of course, colleges and universities are not trade schools. Our mission is to touch our students' souls, not just help them find a job, and the best institutions don't have to choose one or the other: They do both. That Pittsburgh workforce study I mentioned counted among the most sought-after traits for employees communication skills, leadership, and the ability to collaborate. These attributes transcend the skills of today's hot jobs, and will always form the basis for a complete education.

### CSU retains A+ bond rating

The Coloradoan

Still concerned that Colorado State University has borrowed too much to fund its construction binge?

Don't be, says Standard & Poor's Global Ratings, which maintained the university system's A+ overall bond rating and revised its outlook to "stable" in an analysis released Thursday. The analysis paints and improved picture of the university's financial outlook only months after CSU President and Chancellor Tony Frank predicted that the university's bond rating could be downgraded the next time it takes on debt.

Why does the university's bond rating matter? Think of it like your credit score. As your score improves, you're more attractive to lenders when you ask for a loan to buy a car or a home. If your score drops, you're seen as a greater risk of default, and risk-averse lenders will either decline your application or approve it at a higher interest rate than they would offer to someone with better credit.

Universities borrow by issuing bonds backed by their assets, including funds raised through tuition and fees and philanthropy. Interest rates on bond repayment are influenced by a university's rating, so a downgrade would hamper CSU's future borrowing capacity.

And CSU, for its part, has been active in the bond market during a decade-long, \$1 billion construction boom.

S&P, concerned about the amount of bonds issued by the university system, set CSU's outlook as negative in a previous report. In August, Frank warned the CSU Board of Governors of a possible rating downgrade tied to new borrowing, and said that some might blame CSU's \$220 million on-campus stadium for any such downgrade.

University officials call Thursday's S&P release an affirmation of a financial plan bolstered by record enrollment and fundraising.

"We are confident that our sound investment strategy is paying dividends through CSU's remarkable success in growing our capacity to deliver — in the best ways possible — our mission of teaching, research and service," Frank said in a written statement.

CSU has been the subject of rampant Monday morning quarterbacking of its plans to expand its Fort Collins campus while growing enrollment to a stated goal of 35,000. During a time when state support for higher education in Colorado has dwindled, critics have painted university growth plans as overly optimistic, or — in the case of the stadium project — misguided.

But September enrollment of 33,198 students, along with more than \$700 million raised through a university campaign started in February, seems to have resonated with S&P.

According to the S&P report, "The revised outlook reflects the system's improved operations and financial resource ratios in fiscal 2016, with expectations of continued improvement in fiscal 2017, as well as the system's continued growth in demand and enrollment."

CSU reported earlier this month that premium seating sales at the on-campus stadium had eclipsed even the most optimistic revenue projections offered prior to the start of stadium construction.

As that lightning-rod project moves toward scheduled fall 2017 completion, it will be joined by a new round of construction.

Earlier this month, the CSU Board of Governors approved a \$208 million financing plan that crystallizes the future of five projects planned at CSU's Fort Collins campus, along with energy efficiency upgrades at CSU-Pueblo.

While S&P's affirmed "stable" rating allows CSU to remain active in bonding for projects, the role of donor support to fund projects has grown in prominence. Donors have contributed a combined \$95.6 million to four of the seven projects included in the recently approved financing plan.

"Philanthropic support is an increasingly important piece of the CSU System's long-term plan to invest strategically in infrastructure, using donor funds while also strategically managing the debt load of the institution to deliver the very best environment for our students and faculty to succeed," Board of Governors Chairman Bill Mosher said in a written release.



One California Street, 31st Floor San Francisco, CA 94111-5432 tel 415 371-5000 reference no.:808027

October 19, 2016

Board of Governors of the Colorado State University 319 Administration Building Fort Collins, CO 80523 Attention: Ms. Margaret Henry, Treasurer

Re: Colorado State University System Board Of Governors, Colorado, Revenue Bonds

Dear Ms. Henry:

S&P Global Ratings hereby affirms its rating (Underlying Rating for Credit Program) of "A+" for the above-listed obligations and changed the outlook to stable from negative. A copy of the rationale supporting the rating and outlook is enclosed.

This letter constitutes S&P Global Ratings' permission for you to disseminate the above rating to interested parties in accordance with applicable laws and regulations. However, permission for such dissemination (other than to professional advisors bound by appropriate confidentiality arrangements) will become effective only after we have released the rating on standardandpoors.com. Any dissemination on any Website by you or your agents shall include the full analysis for the rating, including any updates, where applicable.

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### How colleges can do better at helping students get jobs

The Chronicle of Higher Education

In 2006, the Spellings Commission on the Future of Higher Education sparked a national debate about the purpose and promise of a college education, with a focus on jobs. The recession of 2008 added greater urgency to the argument that colleges should do more to prepare students for the workplace.

While some in higher education may have hoped that things would return to normal once we recovered from the recession, today the pressure on colleges to link academic and professional preparation seems only to be growing. John Williams, president of Muhlenberg College, recently told me he was having a hard time understanding how his institution could continue to attract top students without delivering greater value. "I can't cut costs sufficiently to keep tuition flat," he said. "What do I do when tuition hits \$80,000 a year?"

He believes one way to deliver value is to focus on supporting his graduates' personal and professional success — whether they go into business, nonprofit work, the clergy, or graduate school, or take some other path. He aims to make his college a leader in that respect, particularly among his liberal-arts peers. A new Muhlenberg initiative to pair parents and alumni with first-year students to provide career mentoring represents one effort in that direction.

Examples from innovative colleges suggest that one key step in improving career prospects is for colleges and employers to collaborate in deeper ways: by jointly developing curricula that prepare students for success in diverse professional fields, by bringing the workplace into the classroom via experiential learning, and by bringing the classroom into the workplace via diverse delivery models, such as degree programs designed to blend online study with short-term residencies and noncredit programs tailored to the needs of particular employers.

Even more important, colleges must work across academic disciplines to design more market-responsive curricula. Take Bentley University, recently recognized by the Princeton Review as the top college for career services. Susan Sandler Brennan, associate vice president for university career services, told me: "Our approach is a holistic one. We are not just linking majors to a career down a vocational pathway, where someone with an accounting degree always pursues a career with a CPA firm. It's about creating a world of options through the fusion of business and the arts and sciences."

Similarly, colleges must work across key constituent groups to support students' professional preparation, as Wellesley College seeks to do. "We want a seamless experience across the ecosystem," Christine Y. Cruzvergara, associate provost and executive director for career education, told me, "and that encompasses parents, student groups, alumni, faculty, and employers." For Wellesley, this means assembling mini "advisory boards" for individual students, made up of professors and other potential mentors.

Committing to such efforts requires thinking about higher education and its relationship to the economy in different ways. While the myth of the Ivory Tower may persist, the truth is that

colleges have always been embedded within their local ecosystems. But it has never been more crucial for colleges to recognize their roles as drivers of economic and talent development in those ecosystems.

Michael Porter, a professor at Harvard Business School, uses the term "economic clusters" to refer to geographic concentrations of interconnected companies and institutions. Colleges can step up their efforts to support work readiness by seeking new ways to collaborate within these clusters. That may mean forming ties with companies that employ their graduates, or supporting local-government initiatives to promote high-demand careers, or partnering with start-up companies that are bringing new career solutions to market faster than most campus career centers could ever dream of doing.

Indeed, the past few years have witnessed an explosion of start-ups seeking to supplement, or in some cases supplant, the work of traditional campus-career centers. In Silicon Valley, people are calling this phenomenon the "employment tech" sector. Mentoring platforms like CampusTap enable campus career offices to promote career readiness via a social-media platform that connects students with mentors, promotes job events, and points students toward employment opportunities. "It's not about getting them a job their freshman year," said Remy Carpinito, CampusTap's founder and chief executive, "but about integrating that kind of conversation into things like student clubs early on."

Another employment-tech company, Fidelis Education, underscores the importance of embedding career preparation across the student life cycle by providing a "learning relationship management" platform that gives students access to mentoring, coaching, and academic support. "The idea," Gunnar Counselman, Fidelis's co-founder and chief executive, told me, "is to get institutions thinking in terms of relationships rather than processes. That way you're not seeing student problems as help-desk tickets to be solved, but as people who need support."

Such companies can also help colleges see their constituencies in all their complexity. Take alumni: Sometimes treated as though they were little more than contributors to the annual fund or tailgating fans at the big game, alumni in reality may be parents of prospective students (or prospective students themselves), potential mentors to students, recruiters of recent graduates, future research partners, or subject-matter experts whose experience could help inform the design of new courses.

So what happens if colleges do all these things? The short answer is, they behave differently. Like the University of Cincinnati, they might locate student jobs on campus by inviting employers into their academic community. Like the Georgia Institute of Technology, they might collaborate with a corporate partner, such as AT&T, to launch a professionally focused degree program, such as Georgia Tech's online master of science in computer science. Like Northeastern University, they might collaborate with a labor-market-data company, such as Burning Glass Technologies, to better understand how their online and hybrid degree programs map to the needs of particular employment markets across the country. Like the University of Texas at Austin, they might team up with an academic-analytics company, such as Civitas Learning, to better understand how to improve student retention. Like Stanford University, they

might work with a career-solutions platform, such as Handshake, to expose their students to a wider network of internship and job opportunities.

Of course, moving down this path requires making long-term career investments in the face of other pressing needs. Moses Lee, of Keypath Education, another employment-tech company, thinks focusing on career services is a smart investment. "Many universities have near-term challenges related to enrollment and retention that they need to address," he told me. "Career outcomes are important, too, but that's a long-tail return on investment because students need to succeed after they've graduated. And in the long term, the benefits are there — in terms of alumni engagement, more research dollars, and, ultimately, enrollment performance, as the value proposition becomes stronger."

If colleges focus only on the short term, he said, "you're not innovating for the future."

### The need to validate vocational interests

The Atlantic

At a recent conference, I listened to a university president boast about a program she had developed in partnership with several local high schools. She told the story of one teenager who lived in a rural area and worked full time on his family's farm in addition to attending high school. The university president explained that the young man had little promise for attending college because of his circumstances. But through the dual-credit program, he was able to gain college credit while still in high school, which gave him the confidence to seek an associate's degree in agriculture and return home to work on his family farm. I listened as she proudly told this young man's story and the audience cheered for both of them, and all I could think was: What an extraordinary waste of time.

It may be shocking for a veteran high-school teacher to feel that a student gaining any kind of degree is a waste of time, but considering that 44 percent of recent college graduates are underemployed, and many employers such as Deloitte are now completely ditching college degrees as a requirement altogether, it is becoming increasingly difficult to sell the same old story—working hard to make good grades to go to college to get a good job—to millennials. When I think of the young agriculture student in the aforementioned anecdote, my heart hurts for him because I believe the system misled him. I wonder if he acquired any college debt during this journey, why he didn't feel the need to continue on to attain a bachelor's degree, and why it was necessary for a young man who grew up on a family farm to learn about agriculture miles away in a community-college classroom. I would feel a bit better if he wanted to be a teacher, or photographer, or engineer, and that's why he went to college, but he didn't. He went to learn something he probably already knew, but chances are no one had ever validated his expertise, and no one had ever found a way for his secondary education to be integrated into the work he loved.

Obviously, the counterargument here is the largely touted maxim that people with college degrees make more money than those without them, which is statistically true. But this idea is misleading: Crushing student-loan debt <u>increases yearly</u> and ethnicity, class, and gender <u>factor into</u> salary levels, regardless of education. And low-income kids <u>can become</u> "targets for diploma mills that load them up with debt, but not a lot of prospects." Additionally, the average American worker will spend 90,000 to 125,000 hours working during the course of a lifetime, as Bill Burnett and Dave Evans write in *Designing Your Life: How to Build a Well-Lived, Joyful Life*, so the greatest portion of a person's life is often spent at work. Although it is easy to proclaim to students coming of age that "you will make more money if you get a degree," it is much more difficult to shed light on the intricacies of such a claim. I believe students should hear the whole story and more than one traditional path should be laid out before them.

While in high school in the late '70s, my dad took every shop class his school offered. He spent hours hanging out with the shop teacher (a man with whom he still visits occasionally), working on projects at home with his own carpenter dad, and losing himself in sawdust and splinters. Because it was the '70s and things were quite different then, a guidance counselor advised him to go ahead and drop out of school since he'd taken all the shop he could—"There's nothing else we can do for you here," the counselor had said, according to my dad. So that's exactly what my

dad did: He dropped out, joined the army, and, years of sweat and toil later, he continues to work as a carpenter today. And for the most part, he is happy doing it. But he will be the first to say that he wishes he had gone to college and that going to college would have made his life easier overall. Maybe it would have, but I wonder what would have happened if rather than telling my dad that there was nothing left for him in traditional education, his educators had recognized his passion and his individual needs as a learner, and offered him options beyond dropping out, the military, and college.

I see students who disengage from school because they believe that what they are learning doesn't relate to who they are or what they want to be—or worse, they are tracked by the system into programs that appear to be for their benefit but actually perpetuate an unspoken bias, and are sometimes for the benefit of universities, businesses, and government agencies. In Kentucky and other states around the U.S., dual-credit programs and community-college initiatives receive quite a bit of attention, and although I am not suggesting that these programs are unnecessary, I do believe it is important to be intentional in the creation and execution of such initiatives to avoid perpetuating biases and tracking students onto paths that do not empower them to capitalize on their strengths. While many states and policymakers are increasingly promoting post-graduation alternatives to college, many of these efforts are half-baked or seemingly based on the premise that such alternatives are for students who aren't good enough to go to college. A blind acceptance of the same old story can unintentionally invalidate the experiences of truly exceptional young people. Why should students have to go to college to find ways to be good at what they love? And why should what they love not sync in authentic, empowering ways with what they do in high school?

For example, during my first year of teaching in Lexington, Kentucky, one of our state requirements for high-school graduation was a writing portfolio. The portfolio was great in theory, but its rigid requirements for what and how to write often tied the hands of both teachers and students. I had a student in class who wanted to be a barber; his father was a barber and he hung out in the barber shop every day after school. He would flat out tell me that his writing portfolio was simply a hoop to jump through in order to get out of school. He wanted just to get to the work that really mattered to him. He told me he would never write a day in his life after he crossed the stage at graduation. I understood his perspective and had to concede that, no, he probably wouldn't have to write an annotated bibliography or a persuasive piece about whether or not dress codes were necessary in schools after he graduated. But I disagreed with him in that he would indeed need to know how to write as a barber. Barbers tell stories. Barbers listen to the stories of others and respond to them. So although he wouldn't need to write on paper in his chosen career, he would need to know how to engage in the same processes for writing that real writers do.

I will never forget the shift in his expression when he realized I was right. As a barber, he would inherently also be a writer, but few people, if any, had ever taken the time to acknowledge his interests and suit assignments to his needs. He was a senior in high school before he recognized the need to develop skills relevant to his aspirations. How might his experience have been different if he had begun his high-school career with that mindset? And how might I have better served him if I had not been obligated by the mandatory requirements of the portfolio, but had been allowed to modify it according to the personal needs of my students? Schools, especially

secondary schools, should build curriculum around the interests and skills of its students, rather than expect students to adhere to arbitrary plans of a school system and false perceptions about what that schooling will do for a student's life.

A couple of years ago, a mother broke down crying during a parent-teacher conference when we were speaking about her son because she was frustrated that all he wanted to do was fish. He didn't care about school. He had no desire to go to college. She said she just kept telling him if he went to college and got a good job, then he could fish all he wanted on the weekends. I had taught the student for two years and knew him well. I saw his face in my mind as the mother spoke; I saw him with his head down in the back of class. I imagined what it must feel like to walk around all the time in a world that views your greatest passion, the one thing you truly love and are good at, as a weekend hobby.

I said to the mother, "What if you change the conversation? What would happen if you start talking to him about what a career as a fisherman would look like and what it would take to accomplish it?" And she must have seen his face in her mind, too, because she said, "Yeah, you're right." She went home that day and, she later told me, had that conversation. His grades didn't go up, nor did he suddenly love school, but he did engage more in class and seemed happier overall. And he told me proudly when the year ended that he was going to be a fisherman.

As much as parents, educators, and school systems proclaim the importance of a college degree, according to Gallup, only 14 percent of Americans believe that college adequately prepares students for success in the workplace, and only 11 percent of business leaders agree that college graduates are adequately prepared for the workforce. But like the university president I listened to at the recent conference, 96 percent of chief academics officers at colleges and universities are confident that they are preparing students for job success. Clearly there is a gap between what the American public and business leaders believe and what universities claim to achieve. Yet, the myth persists and the result is harmful to kids.

I am a creative, a writer, a person who was always destined to work with words, but I took shop class with the same shop teacher who taught my dad because I respected him and the work he did. I was and still am a terrible carpenter, but I value the work. I see it as not only a skill, but a talent: When my students tell me they work on houses in the summer, I respond to them in a way that shows them the reverence I have for people who work with their hands. I want to teach them that Advanced Placement classes are no more important nor do they involve more talent than working on a car or welding machine. Vocational programs can be beneficial as long as they are not attached to bias and therefore track "nonacademic" kids into trades classes because the students have nowhere else to go. Doing so would not be much different than the counselor telling my dad to go ahead and drop out; it just sounds a little nicer. My father and many of my own students including the barber and the fisherman deserved an education that was personalized and empowering, and that is what any program should offer every kind of learner.

In a study of more than 30,000 U.S. college graduates, the Gallup-Purdue Index <u>noted</u> that there were six essential key ingredients that led to students attaining a degree, and more importantly, thriving socially, emotionally, financially, and physically after graduation. These "Big Six"

include a professor who cares about students as people, a professor who makes students excited about learning, a mentor who encourages students to pursue their dreams, the opportunity to work on a long-term project, the opportunity to apply what they learned in a job or internship, and involvement in extracurricular activities. The results of this massive study make me wonder: How might the experience of the agriculture student have been different if he had been given these opportunities from the start of high school? Why not provide internships, mentors, interdisciplinary curriculum, project based, blended, and personalized learning into traditional k-12 curriculum?

I don't know what became of him, and his dual-credit program may have been life-changing for all I know. But from what I know after 11 years of teaching kids, for many of them, just getting some college credit is not enough to inspire them to follow their bliss and become their best selves. Dual-credit programs that actually benefit kids would probably look more like the Big Six, rather than bragging rights for university presidents. And why should students drag their feet through traditional school before they get the chance to do what they love? Integrating validating experiences into high school rather than hoping that universities will provide them down the road gives opportunities for students who feel ignored, disengaged, and disregarded to recognize the virtue of their talents and pursue them happily—and with pride.





## REIMAGINED

Colorado State University is proud to be one of the key partners in the reimagining of the National Western Center (NWC). Read on for updates about CSU's activities within the NWC, as well as stories that spotlight neighbors, partners, and collaborators of this landmark project.











### **News**

**CSU** collaborates with Denver Museum of Nature & Science to further education

### **Upcoming Events**

### Fall Feast

November 19, 2016 10 a.m.-2 p.m. National Western Complex

Free to families and individuals in attendance, and includes lunch, a Kids Zone, haircuts, a backpack giveaway, and entertainment.

Sign up to volunteer here.

CSU Day @ the National Western Stock Show



CSU and the Denver Museum of Nature & Science announced an agreement to work together in order to elevate research, enhance educational opportunities for students and the public, and highlight their academic alignment. "The museum and CSU each has a history of education, innovation and outreach," said Amy Parsons, executive vice chancellor of the CSU System. "Working with the museum to plan the revolutionary redevelopment of the National Western Center sparked a meaningful relationship that we are thrilled to have." As part of the agreement, CSU is a major sponsor of the <a href="Extreme Mammals exhibit">Extreme Mammals exhibit</a> at the Museum, which runs through January 8, 2017.

Read more.

## Community and CSU host free neighborhood pet clinic



Pets in northeast Denver received health pick-me-ups during the Pet Wellness and Vaccine Clinic at the Focus Points Family Resource Center on October 15. For the third year in a row, Colorado State

January 14, 2016

See more information about CSU's presence at the Stock Show in our special edition newsletter, out in mid-December.

National Western Center Executive Oversight Committee Meetings

October 27, 2016

November 17, 2016

December 15, 2016

All meetings are from 1:30-2:30 p.m. in Room 4.F.6 of the Webb Building

National Western Center Citizens Advisory Committee Meetings

October 27, 2016

November 17, 2016

December 15, 2016

All meetings are from 5:30-7:30 p.m. in the Centennial Room of the National Western Complex

Click <u>here</u> to view the NDCC event calendar.

### **NWC Profile**



**Kelly Leid** 

University veterinary students and faculty, <u>PetAid Colorado</u>, and volunteer practitioners hosted the outreach effort, providing free physical exams and vaccinations for 152 dogs and cats. This year, the addition of <u>Dumb Friends League</u> allowed spay and neuter surgeries for 36 pets of qualified families in the Globeville and Elyria-Swansea neighborhoods.

Read more.

### **Extreme Community Makeover in North Denver**



On Saturday, October 22, CSU volunteers, including seven Construction Management students who do start-to-finish renovation projects in Fort Collins and Denver as part of the CM Cares team, power-washed, stripped, and re-painted Tessie and Joe Medina's house in North Denver, as well as cleared weeds, removed trash, and trimmed trees at four additional properties on the same block. Read more.

## C.I.G. selected as National Western Center communications team

Executive Director of the Mayor's Office of the National Western Center

"As a third generation
Coloradan, I'm humbled to be
part of a team that will not only
secure the National Western
Stock Show for future
generations, but also establish
a unique global agribusiness
campus that will convene
public and private interests to
help solve some of our most
pressing global food system
challenges. [It] is truly a once
in a lifetime opportunity."
Read more of Kelly's interview
here.

### **Partner Spotlight**



CSU and PetAid Colorado
have collaborated to host pet
clinics and outreach in the
Globeville and Elyria-Swansea
neighborhoods for the past
three years. The completion of
the CSU Equine Sports
Medicine Clinic at the National
Western Center will expand
the partnership, as PetAid
Colorado plans to provide
veterinary services for
companion animals within the
space.

"PetAid Colorado is thrilled to collaborate with CSU in caring for underserved pets in



"C.I.G. is thrilled to join the National Western Center team! Every member of our team grew up here in the Denver area and we share a very deep, personal pride in what the transformation of the iconic National Western Complex and Denver Coliseum sites into a year-round destination and regional asset will mean for the community we love. We're eager to jump right in and help achieve the joint vision of the National Western Center becoming the global destination for agricultural heritage and innovation," said Karen Morales, CEO/Owner, C.I.G.

### **Articles and Links of Interest**

### Sustainability:

- <u>Eight years of collaborative energy research nets Colorado</u> \$194M
- CSU to lead \$1.8M study on methane emissions from oil and gas

### Health:

- <u>Colorado State University vet studies kidney pill alternative</u> for cats
- New Clinical Nutrition Service helps veterinarians, pets and their owners

### Food Systems, Agriculture, and Innovation

 Third-graders learn about food and farming at Ag Adventures

#### Water:

Denver's urban neighborhoods," said Ralph Johnson, Executive Director of PetAid Colorado. "The talent, passion, and commitment that CSU volunteers and staff bring to the table is invaluable and inspiring. Together, we are expanding the healthcare safety net for pets – so that pain and suffering are relieved for our furry best friends that seldom have access to veterinary care. By serving pets and people in need we help our communities thrive, and PetAid Colorado is grateful for CSU's engagement in this vital work."

### **Project Spotlight**



Colorado State
University alumni and staff
enjoyed The Greenway
Foundation annual Fall
RiverSweep in September.
The event brings together
more than 300 volunteers to
clean up areas around the
South Platte River and
maintain one of Denver's
greatest natural assets.

The Greenway Foundation is a Denver-based 501(c)(3) nonprofit organization that has led efforts, since 1974, to

reclaim the South Platte River and its tributaries.

NSF network tackles urban water problems

This quarterly newsletter is sent to CSU partners and to individuals who have expressed interest in CSU's role in the National Western Center redevelopment and the university's activities in Denver.

The intent of the publication is to share news and updates about the NWC, showcase local and national stories related to the redevelopment, and to spotlight partners, residents and professionals active within the project.

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As a graduate student and a Todos Santos CSU Ambassador, I have been fortunate to be a part of the ongoing collaboration of CSU staff, student ambassadors, and Todos Santos community members, whom are passionate believers in sharing knowledge and respect to unite our communities and cultures to learn, live, and grow together.

From collaboration on sustainable agriculture, to community and youth engagement, I have not only learned from the Todos

Santos community, but also built lifelong relationships.

As my graduate experience has revolved around Todos Santos, is was only fitting my thesis research would as well. I have had the amazing opportunity to work with the students from a local boarding school, Casa Del Estudiente, investigating agricultural youth engagement and empowerment. In the time I have worked with these young individuals, I have been humbled by their eagerness to learn and impressed by their mature understanding of the world around them.

I believe CSU has a unique opportunity and responsibility to work alongside the people of this beautiful community to build a positive productive future that respects the cultural heritage in which the foundation of the community was built. I would like to thank the people of Todos Santos and the staff at the CSU Center for welcoming me with open homes and hearts.

- Augusta Ahlm, CSU Master of Agriculture graduate student

### **Latest Stories**



Language courses meet community ask

### Join our efforts

CSU needs your support to expand international educational experiences for students, enhance the CSU Todos Santos Center facilities, and develop innovative research.

Click here to learn more.

### In Profile





College of Business in Todos Santos

CSU families invited to Todos Santos



Cultural experiences, marine biology combine

### Nancy Irlbeck

Associate Professor in Animal Sciences, CSU
"[I want people to know about CSU in Todos
Santos] that we have worked to ensure that our
relationship is two-way – we learn from them as
much as they learn from us."

Read more about Nancy's experiences.



### Kim Kita

Director of Special Projects and Partnerships,
CSU

"While there are tensions in the world, as reflected by recent election rhetoric and aggression, this emerging shift toward collaboration, understanding, and mutual respect is strong, and it's growing. This is the heart of why this work is so meaningful and inspiring to me, personally and professionally, and why I work to support the efforts of those engaging through the CSU Todos Santos Center."

Read more about Kim's experiences.

### Click here for events at the Todos Santos Center









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