

[Regents approve 3.1 percent salary pool for faculty, exempt professionals](#)<sup>[1]</sup>

The [CU Board of Regents](#)<sup>[2]</sup> on Tuesday agreed that keeping employees happy and keeping them, period, are necessary for the university's continued success. After hearing from campus leaders, the regents unanimously voted to approve a 3.1 percent meritorious salary pool for faculty and exempt professionals, as well as a [state mandated increase of up to 3.6 percent for classified staff](#)<sup>[3]</sup>.

"We are no longer cutting fat, we're cutting muscle and bone," said Board Chair Michael Carrigan. "We are losing our talent; we are losing the competition to bring the best generation of teachers and researchers to this university. It's a difficult decision. Because the state is not doing what it needs to be doing to invest in its flagship university system, we have to look somewhere else for the revenue to try to protect and invest in our faculty leadership and our staff leadership."

Carla Ho-a, vice chair of the University Staff Council, told the board that voting for the pool would be "an important signal (of) how the Board of Regents feels about our staff and our faculty and the value they bring to this university."

Campus leadership stressed salary increases were necessary to retain the university's best and brightest.

"My top priority as chancellor is compensation for faculty and staff," said CU-Boulder Chancellor Philip DiStefano. "We've taken \$11.5 million in cuts this year. With those kinds of cuts, we want to reward the faculty and staff who are here, who are working harder than ever before, with some sort of compensation."

CU Denver Chancellor Don Elliman said if salaries are increased, employees would be more willing to implement necessary cuts. "We believe a 3.1 salary pool is important to retain the quality of faculty we have and the quality of personnel we have. These people feel like they gave at the office and didn't get much back for themselves. And they didn't. If we go back to them and say we really do value what you're doing, then we can ask them to take some more cuts than they've already been willing to take, which is substantial."

UCCS Chancellor Pam Shockley-Zalabak said the past four years have been difficult, and that top talent have received competitive offers from other institutions.

"It's not just salary and adequately rewarding people who are doing excellent jobs for our students," she said, "it's also staying competitive so we can continue this into the future."

Lilly Marks, CU vice president for health affairs and executive vice chancellor at the CU Anschutz Medical Campus, said without adequate compensation, the loss of faculty and staff could get worse.

"As our economy starts to rebound, as other institutions with better funding start poaching for talent, we are one of the great poaching grounds," she said.

President Bruce Benson also spoke in support of the compensation pool.

"Folks, you have got to think about what the cost is of replacing good people," Benson said. "I think it's terribly important that we continue to work to keep the people here. If I were doing this, I would be proposing 3.6 percent instead of 3.1 percent. We are doing a heck of a job here and I couldn't be more proud of our faculty and staff."

[Regents vote 6-3 in favor of tuition rates proposed by university leadership](#)<sup>[4]</sup>

Kelly Fox and Todd Saliman answer budget questions during Tuesday's Board of Regents meeting. (Photo: Cathy Beuten/University of Colorado)

The CU Board of Regents on Tuesday voted 6-3 to approve a slate of tuition rates requested by leadership at University of Colorado campuses and system administration.

First presented to the board at its February meeting at the University of Colorado Colorado Springs, the recommended market plan includes resident undergraduate tuition increases of 6 percent at UCCS and CU Denver, and a combination of a slight rate increase and a linearity shift – from 11.25 credit hours to 12 credit hours –amounting to roughly an 8.7 percent tuition increase at CU-Boulder. CU Denver also will pursue a linearity shift over the next two years. Changes to rates at schools and colleges at the Anschutz Medical Campus include a \$20 per credit hour increase for resident undergraduate nursing tuition.

Detailed tuition tables are posted at the [Board of Regents' meeting agenda website](#)[6].

Regents James Geddes, R-Sedalia; Joe Neguse, D-Boulder; and Vice Chair Sue Sharkey, R-Windsor, voted against the tuition increases at the meeting at 1800 Grant St. in Denver.

Neguse said he is “deeply concerned about the affordability and accessibility of a CU education, particularly on the Boulder campus.”

“We obviously need to do something as a state, and to have the conversation is a public good,” Neguse said. “But I’m not convinced that this proposal is the best way forward.”

Geddes said he would have favored a proposal that further increased tuition rates for nonresident students in order to lessen the increase for residents; CU leaders said market forces and competition with other institutions led them not to raise nonresident rates any more than necessary, and noted the continued reliance on nonresident tuition to subsidize residents.

Sharkey expressed “anguish” over the vote, and credited CU faculty and staff with great success in efficiency, and thanked leadership for keeping proposed tuition increases as low as possible. Still, she said she couldn’t vote to support those rates.

Regent Stephen Ludwig, D-Denver, said the board and administration are “between a rock and a hard place.” Regent Glen Gallegos, R-Grand Junction, said “nobody likes having to raise tuition”; in the future, he said he would prefer to have the board presented with three-year to five-year budget proposals, for which Ludwig also voiced support.

In remarks before the board voted, President Bruce D. Benson paraphrased comments by Regent Steve Bosley, R-Broomfield, made at the February meeting: What do we really want to be?

“I know what I want this university to be, and that’s to be a really great university,” Benson said. “We are now, and we have to keep it up. I’m just like all the rest of you ... I sure as heck don’t want to raise tuition.”

Benson said he’s among the few people in the state talking about the possibility of asking voters to approve new revenue streams for CU. “This is not the year to go to the ballot; next year probably is the year.”

Earlier in the meeting, Benson said he applauds “our staff and faculty for doing more (with less). At times I think we’re holding down our costs too much.”

“Regents, we’ve got to take care of this place.”

Also at Tuesday’s meeting, the Board of Regents unanimously approved changes to existing student fees, including some fee conversions from course fees to program fees, and implemented new fees such as a \$20 biology lab level-3 fee and \$5,825 annual fee for a new student housing and dining establishment at UCCS. Some fees were eliminated, including a \$25 linguistics single-course fee at CU-Boulder and a \$400 Advanced MatLab for Bioengineers and Life Scientists course at CU Denver.

[Griego talks student support with Faculty Council](#)[7]

CU Regent Irene Griego

After conversations at recent Faculty Council and Board of Regents meetings about student success across the University of Colorado system, Regent Irene Griego attended last week's Faculty Council meeting to discuss the issue with the governance group.

"I truly believe that if we give students the support they need, our students can be successful," Griego told the Faculty Council during the April 4 meeting at 1800 Grant St. in Denver. "I wanted to have a conversation with you about how we are meeting the needs of our students. Because we are only as good as our graduates. The people that make that happen are all of you."

Griego said she asked to be at the meeting because of recent discussions at meetings of the Faculty Council and Board of Regents. [At February's board meeting](#),[9] Faculty Council Chair Melinda Piket-May told the board that high acceptance rates for student applications is one reason faculty members fear top-tier students might be avoiding CU campuses. Some board members took exception with that generalization and the suggestion that, increasingly, incoming undergraduates have not been properly prepared academically to begin college.

Having made her career in K-12 education, Griego told the Faculty Council, she understands the importance of students being college-ready. "But I see this as a partnership between public education and K-12, with our colleges and universities. All of us need to work together at it. I know we have a lot of programs in place that represent collaboration and working together."

As an example, Piket-May cited the Pre-Collegiate Program across the campuses as being "tremendous. We see high rates (of students who go on to enroll at CU). That's one way I feel we're reaching out and picking up some students who might not come to our campuses otherwise."

Griego told her personal story as a young minority who might have fallen through cracks in the system had it not been for outstanding mentors and professors during her undergraduate years at CU-Boulder. "But I could have been one of those students who was told (before enrolling), 'You don't quite fit here at CU.'"

Council member Pam Laird said she loves hearing such success stories, but told Griego that "every one of these stories, including your own, required enormous investments of time. ... I caution us to think about the flip side of these stories. As we are under pressure to move toward greater efficiency in the classroom, have larger class sizes, do more online teaching, hire more non-tenure track faculty, there's a limit to how many of these stories we are able to generate."

Griego said she believes CU's educators are doing their best. "That's all we can expect. As educators, it's not like we get paid a lot of money. But I have to say, what I have received in my work has meant more to me than money.

"You'd be amazed how many lives you're touching. I can't give up on that. That's where our future is at."

Griego finished by thanking the faculty for all they do.

"Sometimes we'll agree to disagree," she said. "But I value everything you do. I'm supportive of anything we can do for our students to be successful, and you're the machine that makes it happen."

[Five questions for Ron Rorrer](#)[10]

[11]

Working in the aerospace industry on a missile system might seem an exciting career. But in fact, Ron Rorrer found he was “bored out of my mind.” In the mid-1980s, to be head of research at a company, whether it employed 15 or 1,000 engineers, you needed a Ph.D., Rorrer says. He began working toward a doctorate.

“However, by the time I was finishing up right after the first Persian Gulf War, you could not buy a Ph.D. job in research.”

He began working for Gates Rubber Company and also began teaching at the Colorado School of Mines. In 1993, he taught courses at the University of Colorado Denver, and in 1997 became full-time faculty.

His research work has evolved to focus on polymers (natural and synthetic compounds that consist of millions of linked-together units) and biomechanics (the study of the structure and function of biological systems, including humans). He co-teaches a senior design mechanical engineering class where students develop and build cutting-edge designs, and has a passion for the “classics.”

**1. Tell me about your current research and the implications for the general population.**

One research project we’re working on with a small company, XDOT Engineering and Analysis, is for the United States Navy and is for water-lubricated, polymer submarine bearings. This project is of special interest to me since the Navy paid for my master’s degree almost 30 years ago to work on submarine bearings. Of interest to everyone else is that large marine vessels use a polymer bushing that is on the order of 2 to 3 feet in diameter and 5 to 10 feet long that is lubricated with sea water. Thus far, failure of these monstrous bearings is not the reason you have to suffer indignities when your cruise ship experiences catastrophic failure.

On the bioengineering front, I am working on two projects of interest in collaboration with Richard Weir. The first is graduate student Nili Krausz’ open-sourced prosthetic hand. Nili spent about a year trying to crack open and control a commercial prosthetic hand to little or no avail. We decided to create an open-source hand (and received a faculty grant from the Center for Faculty Development) such that others could download our design for free and 3-D print most of the components for the hand. In addition, the cost of the hand would be less than \$2,000. It is our intent that everyone from high schools to universities could print this hand to study prosthetic control schemes. Our wild hope is that someone may actually print and use her or his own hand. Another project I have is with undergraduate Chris “Action” Jackson working on prosthetic liners to increase comfort. Lack of comfort is one of the major reasons for diminished use or non-use of prostheses. With the Iraq War, there are many veterans and civilians who could use this technology.

**2. What are some of the current projects being worked on in the design class? What is the most interesting design a team has created and has the design been implemented or been successful in other ways?**

[12]

A team that built an alternative energy vehicle in Ron Rorrer’s senior design class won first place at the Shell Eco-marathon Americas 2013 competition April 5-7 in Houston in the hydrogen prototype category. The team’s lightweight, carbon-fiber body vehicle – the H2 Eco-Challenger -- was the most energy-efficient prototype to use hydrogen at the annual competition for high schools and universities. About 130 teams competed in several categories.

The nine-member CU team began designing the eco-friendly vehicle in the fall of 2012. The electrical efficiency of the prototype equaled 54.1 miles/kilowatt-hour. Team members are: Ryan Anderson, Ibrahim Alzamanan, Aydh Alajmi, David Edelman, Surawud Martinez, John Ngo, Dong Nguyen, Ronnie Prado and Nicholas Wager.

I co-teach senior design with Doug Gallagher, the instrument maker from National Institutes of Standards and Technology in Boulder. We have six projects under way. Four are car projects: a Formula SAE (essentially a 1/3-scale Formula 1 car), SAE Mini Baja (an off-road vehicle), a hydrogen-fueled car intended to reach 2,000-plus miles per gallon gas equivalent, and an algae-based, bio-diesel Pikes Peak Hill Climb car. In addition, we have a gas-powered quad rotor cargo air-lift project and a therapeutic tricycle for children with disabilities.

The most interesting projects are the ones that come from the students. Five or so years ago we more than doubled the amount of work as faculty in the two-course sequence by letting the students pick the projects that they wanted to do as long as it was a valid mechanical engineering project. However, the box is really big, since anything that shakes, rattles and rolls typically is valid. Frankly, I can't narrow it down to one favorite project, since every year there are great projects that just happen to be different. Last year's chancellor's undergraduate research award-winner at the Research and Creative Activities Symposium event had intended to patent and commercialize their project. It would help if the technology transfer office would modify the patentability terms for undergraduate projects from the one that applies to faculty and staff. Compared to working at a company, the patent rewards for faculty and staff and their departments are generous. However, I think it would be great PR for CU for undergraduates to be able to patent projects. As it should be, students own the intellectual property rights to their work.

### **3. Your interest in cars extends beyond the design class. Are you a collector?**

[\[13\]](#)

I am not a collector, even though I still have the first enduro motorcycle that I bought when I was 12 years old. I own my favorite classic, a 1956 Studebaker pickup. Actually and unfortunately, if it interests me, I buy it and try it. Of course, what most people do not realize is that you can buy a really cool classic car or motorcycle for less than a modern used car as long as you do not have a fixation on either 100 percent reliability or one of the highly sought-after classics. My wife and I also have a first generation Mazda Miata, which is a relatively inexpensive future classic. Even though I live in Highlands Ranch, I have four motorcycles secreted around my postage stamp lot. A collector looks at his or her collection. I acquire cars, trucks, and motorcycles to use. About 10 years ago, I told my wife I was going to buy a classic car and a truck to haul lumber for my woodworking projects. She had the brilliant idea of combining the two into a classic truck to preserve her parking place in the garage as well as not drive the neighbors crazy. She is available to dole out advice to others finding themselves in the same burdened significant-other situation.

### **4. Engineers are in high demand right now. What is your best advice for turning a college diploma into a job? Are you involved in any programs to get more students involved in engineering?**

Students have to realize that they are competing with every student at their university as well as every other university in the state, if not the country. For example, there is always someone else either in an individual's department or at another university that has the same GPA. Thus, a student has to have something that differentiates him or her from everyone else, such as work experience or unique projects.

We have used our success in motorsports to start or propose to start next fall a program in motorsports. On March 22, we also hosted 30 students from Brush, Fort Lupton, and Fort Morgan high schools that will be first-generation college students. Amusedly, the person who brought them was from CSU! While we will have an industrial advisory board, we will also have an educational one composed of faculty from community colleges and high schools to help with transitioning students into engineering.

### **5. Do you have a favorite item in your office and what is the story behind it?**

[\[14\]](#)

I have a 100-year-or-so-old Wheatstone bridge that weighs about 50 pounds and is the size of a small suitcase. It measures the unknown electrical resistance of an element in an electrical circuit. Modern ones are the size of a business card and weigh less than an ounce. I bought this on Craigslist from a physics professor at another university in Colorado. The joke is that I have an inordinate fondness of tools and measurement equipment. I bought it five years ago during a time when I was indulging this weakness to the limit and had been given strict instructions by my wife not to bring anything else home. I have been meaning to sneak it home, but other things have arisen, such as moving my woodshop to a cabin in the mountains. One has to pick one's battles! I will eventually put it in a glass-topped coffee table for my son, a Ph.D. student at another university in the state that will not be named! Of course, it will be able to be removed for use. Hopefully my wife will not read this!

[Bill seeking four-year degrees at community colleges dies](#)[15]

A bill that would have allowed the state's community colleges to begin offering a limited number of four-year degrees was defeated Monday in a narrow vote by the House Education Committee.

Senate Bill 165 -- co-sponsored by Sen. Nancy Todd, D-Aurora, and Rep. Jim Wilson, R-Chaffee – sought permission for Colorado's 13 community colleges to grant four-year degrees in up to seven fields of study, including dental hygiene. Proponents said accessibility and affordability were the driving factors.

The University of Colorado and other state colleges and universities opposed the legislation, saying that such a change would create redundancies across the higher education system at a time when state funding remains limited with little immediate prospects of growing.

In media reports, Nancy McCallin, president of the Colorado Community College System, said the bill was designed to serve students and meet demand for four-year trade degrees.

The committee voted 7-6 to kill the bill.

CU President Bruce D. Benson was among the seven leaders of higher education institutions who asked the General Assembly that it not advance the legislation.

The idea could return next year; CU leaders have said they would like to work with community colleges to boost partnerships and pursue a more efficient way of achieving the goals of this year's proposed legislation.

[Regents announce 2013 slate of awards honoring commitment, service](#)[16]

The University of Colorado Board of Regents has announced the 2013 honorary degree, distinguished service and university medal award recipients.

**HONORARY DEGREE**

**Peter Balsells**, an innovator and entrepreneur, in the 1950s invented the spring-energized PTFE (Teflon) seal, a high-performance connector now known as the Bal Seal. The successful utilization of that seal for the liquid oxygen system in the Atlas Missile led Balsells to a successful business and spawned an industry. Balsell's company, Bal Seal Engineering Inc., employs more than 500 people at two manufacturing sites. The company has a global presence and creates custom sealing, connecting and shielding solutions for a variety of industrial, medical and aerospace applications. Balsell is a distinguished alumnus of the College of Engineering and Applied Science at CU-Boulder. He has provided top-notch graduate engineering education to more than 130 Catalan students through the Balsells Fellowship programs he founded and funded in partnership with the Catalan government and three U.S. institutions (UC-Irvine, CU-Boulder and UCCS). Balsells has been awarded approximately 200 patents. He'll be recognized at the CU-Boulder commencement, May 9, 2014.

**Gerald One Feather**, a former graduate student in the Department of Sociology at the University of Colorado Boulder, was elected Oglala Lakota tribal president in 1970, the youngest president in the tribe's history. He is the founder of the Oglala Lakota College in Kyle, S.D.; a leader in the International Treaty Council at the United Nations; and the

founder of Lakota Language and Cultural Education. One Feather forged the way for the creation of the Oglala Lakota College on the Pine Ridge Reservation to provide job training for police officers, probation officers, health care workers and teachers. He enlisted the support of the University of Colorado to establish a model for American Indian education that became a model to create 26 such colleges on reservations around the country. One Feather serves as a member of the Oglala Lakota College Board and on the graduate advisory committee. His support is integral in CU's continued research on critical health needs and other issues on the Pine Ridge Reservation. One Feather has been involved in the United Nations' work on indigenous rights worldwide. Will be recognized at the CU-Boulder commencement, May 10.

**Darrell G. Kirch**, a Denver native, received his bachelor of arts and doctor of medicine degrees from the University of Colorado. He is a clinician and researcher and has held medical faculty positions at Penn State, the Medical College of Georgia, and George Washington University. Kirch has been the president of the American Association of Medical Colleges since 2006. He was CEO at the Milton S. Hershey Medical Center at Penn State, where he created a unified medical school/hospital collaborative health system that has been a model for many academic schools of medicine. A prolific writer and public speaker, Kirch has published more than 125 articles and book chapters and made numerous presentations to medical, educational, scientific and advocacy organizations. He was an adviser to both the George W. Bush and Barack Obama administrations. Will be recognized at the CU Anschutz Medical Campus commencement, May 24.

### **DISTINGUISHED SERVICES AWARD**

**Tucker Hart Adams** is a UCCS alumna who has contributed greatly to the state of Colorado, especially to southern Colorado. Her reputation is unparalleled in the Colorado business community because of her long-term service and foresight into creating a better business climate. In creating business strategies, Adams uses judgmental adjustments and explores whether a trend makes sense; not relying on modeling with a computer. She incorporates expert econometric research, statistical work and models, and applies what she has learned throughout the years to make adjustments for the outcomes. Tucker recently authored a report, *Innovations in Aging*, that provides critical data regarding the influx of senior citizens projected in the Pikes Peak region in the coming years. Adams served as president and CEO of the Adams Group for 21 years, president of the American Russian Collaborative Enterprises LLC for 16 years, director and principal of American Russian Collaborative Enterprises LLC in Moscow for 5 years, vice president and chief economist of the United Banks of Colorado for 10 years and adjunct professor for 21 years at the University of Colorado and Moscow State University. Will be recognized at the UCCS commencement, May 24.

**Todd Munson** is committed to making a difference in the community. Munson gives generously of his time as well as financial support to many nonprofit organizations, including the University of Colorado Denver. Munson is president and Colorado market manager for J.P. Morgan Chase bank, where he oversees public affairs and market-based business. He serves as executive board member and treasurer of the Denver Metro Chamber of Commerce, board member and co-chair of the Denver Economic Development Corp., board member and past chair (2010-11) of Goodwill Industries of Denver, board member and past member of the Mile High United Way, and served as chairman of the 2008 United Way Giving Campaign. Munson serves on the CU Denver Business School Board of Advisors. In 2011, Munson brought Jamie Dimon, J.P. Morgan Chairman and CEO, to Denver to speak at the Business School's "Celebration of Success." Dimon spoke pro-bono, helping the Business School raise more than \$260,000 for student scholarships. Munson supports and contributes yearly to the Dean's Opportunity Fund at the school. He displays a passion for philanthropy and community giving and his record of involvement is a testimony to this. Will be recognized at the CU Denver commencement, May 18.

### **UNIVERSITY MEDAL**

**George Sissel**, who earned a bachelor of science in electrical engineering CU-Boulder in 1958, is former Chairman and CEO of Ball Corp. Sissel was instrumental in moving his company's headquarters to Colorado and promoting partnerships between Ball and CU that have greatly benefitted University of Colorado students, faculty, alumni and research. Sissel is a stalwart supporter of the university through his active role as an adviser and volunteer, and his major financial contributions across the CU system. His contributions include extensive and increased financial support and involvement by Ball Corp.; advisory board service and leadership at the CU-Boulder College of Engineering and Applied Science and the CU Denver Business School; and the board of trustees/directors of the CU Foundation. Will

be recognized at the CU Anschutz Medical Campus commencement, May 24.

**Mary R. Sissel** has been involved in key projects at the University of Colorado Anschutz Medical Campus, primarily with the Center for Women's Health Research where she served as a chair of the Community Advisory Board. As chair, she led the board's fundraising effort to support the work of the director of the center while the endowed chair was being sought. The lead donor to this effort, Sissel had 100 percent participation from the board, raising more than \$500,000. Sissel has been increasingly involved in the CU Anschutz Medical Campus through her work on the Creating Futures Campaign Committee. She has provided expert leadership to numerous boards of directors including The Denver Foundation, the Craig Hospital Foundation, the Women's Foundation of Colorado and, most recently, as a trustee of the University of Colorado Foundation. Will be recognized at the CU Anschutz Medical Campus commencement, May 24.

**Michael K. Wirth** graduated in 1982 from the University of Colorado Boulder with a bachelor's degree in chemical Engineering. Wirth is a lifelong Buffs and a staunch CU supporter. He has used his influence as executive vice president of Downstream and Chemical for Chevron Corp. to increase his company's annual contributions in support of CU scholarships, departments, programs, student groups and diversity efforts. He helped bring to fruition Chevron's gift of \$500,000 for the Chevron Chemical Engineering Teaching Lab in the new Jennie Smoly Caruthers Biotechnology Building on the CU-Boulder campus. Wirth has been an adviser to the College of Engineering and Applied Science through his service on the Engineering Advisory Council and Resource Development Committee. He is described as a humble person with a passion for interacting with and supporting students and diversity. An alumnus and parent, Wirth gives generously of his time and money to support his alma mater. Will be recognized at a future commencement.

#### [Parking to go up \\$8 monthly](#)[17]

For the first time in six years, the cost to park at UCCS will increase.

Effective July 1, there will be increases in all permit types used by faculty, staff and students as well as visitors. For a faculty or staff member who buys an annual HUB permit, the cost to park will be \$50 monthly, an \$8.33 per month or 20 percent increase from prices in place since 2006.

The department will continue to offer options such as Friday-only, Lot N, specific day permits for students and one-, two- and three-day permits for honoraria faculty as well as discounted rates for motorcycles. Rates for all permits will increase by 20 percent. Free parking near Four Diamonds with shuttles to main campus will remain.

**2013-2014 Parking Fees for Faculty and Staff** Yearly Hub \$600 Yearly N \$450 Semester Hub \$240 Semester N \$180 Friday only \$31.20 Semester motorcycle \$60 Yearly motorcycle \$150

"I am proud that we were able to keep parking prices the same for so long," said Jim Spice, executive director, Parking and Transportation Services. "We were trying to be sensitive to the fact that the economy was struggling and folks weren't receiving salary increases over the past several years. However, with continued enrollment growth and an increase in lot operation and maintenance costs, we must increase parking fees."

By state law, neither student tuition nor state general fund monies can be used for parking. Instead, fees charged to those who park on campus support the cost of construction, maintenance and operation of the lots and campus shuttles.

Under construction is a new, \$23 million 1,227 space garage. A 440-space lot opened last year near Four Diamonds and additional shuttle buses were purchased as the campus accommodated students, faculty and staff who previously parked in a church parking lot in the Cragmor neighborhood. Cragmor residents are working with the city of Colorado Springs to further restrict street parking in the neighborhood.

"For those who do not want to, or cannot afford to purchase a hub permit, parking at the Four Diamonds will remain a



free and convenient alternative,” Spice said. “The shuttles to main campus operate Monday through Friday from 7 a.m. to 10:30 p.m. and average stops are between five and 15 minutes. Other options include walking, biking, or using the city of Colorado Springs bus service or carpooling.”

[‘Explore shop’ addresses communicating in a diverse world](#)[18]

[19]

The world is ever changing; having the ability to communicate in a diverse world is a key to success in many aspects of life. This was a key message from [Brenda J. Allen](#)[20], Ph.D., associate vice chancellor for Diversity and Inclusion, during last week’s brown bag lunch and learn hosted by Staff Council.

The session was presented by Allen from the Executive MBA Conference Room in the CU Denver Building and video-conferenced to the Anschutz Medical Campus.

Though the session originally was titled “Communicating Effectively in a Diverse World,” Allen said she changed the title to add “Effectively and Humanely.”

“‘Humanely’ is such an important part of communication,” said Allen, who also pointed out that humanely can mean a variety of things to many people.

In the “explore shop,” as Allen redubbed the workshop, she led the group members to talk about their personal preconceptions and what they mean. “I want you to learn from each other and teach each other,” Allen said. “This is an ongoing process that will last your whole life.”

Allen told the group of faculty and staff a story from early in her teaching career about assuming that a Latina woman could speak Spanish.

“I was able to learn from her and she was very gracious in teaching me the lesson,” Allen said.

One major topic of discussion was respect and what it means for different people. In pairs, participants were encouraged to talk about what it represents to them and how they perceive it in others. Allen emphasized that a person must be open to learn in order for this process to work.

One participant said her major take-away from the “explore shop” was learning that you can’t change anything but yourself.

Allen gave three recommendations to leading an effective and humane way of communication in life, which are to commit to improving yourself, to be mindful of yourself and to be proactive. “Do a little homework before you engage with someone new, you’ll be amazed what it can do for you,” Allen said.

She also recommended taking the [Harvard Implicit Associations Test](#)[21] to see your biases so you can be more mindful and proactive.

[CU Eye Center gains momentum from \\$2 million donation](#)[22]

Naresh Mandava, M.D.

In appreciation of the outstanding treatment she received from University of Colorado ophthalmologists, Sue Anschutz-

Rodgers has donated \$2 million that, combined with other commitments, establishes the Sue Anschutz-Rodgers Endowed Chair in Retinal Diseases.

This endowment fund, which will support CU School of Medicine research in retinal diseases, represents a strong vote of confidence as CU prepares for ophthalmology program growth and greater impact in the coming years.

The initial holder of the Sue Anschutz-Rodgers Endowed Chair in Retinal Diseases will be Naresh Mandava, M.D.

Mandava is chair of the Department of Ophthalmology at the University of Colorado School of Medicine and executive director of the CU Eye Center, located at University of Colorado Hospital. An endowed chair gift provides a reliable and perpetual stream of faculty research funding, is a public indicator of a program's prestige, and helps universities recruit and retain top talent.

"Sue Anschutz-Rodgers's generosity in establishing the first endowed chair in the Department of Ophthalmology is commendable, and I am extremely grateful," Mandava said. "We have the right people in place as well as the infrastructure to find solutions for macular degeneration, and develop one of the top retinal research programs in the world."

Mandava has spent the last 16 years researching age-related macular degeneration (a leading cause of vision loss in people over age 60, for which there are therapies but currently no cure) and other retinal diseases. His research focus is toward finding solutions through new technologies in imaging, drug therapy, and artificial vision. Under Mandava's leadership, the University of Colorado has pioneered the concept of stimulating the retina with photovoltaic nanoparticles, which have the potential to restore sight in blind people.

"My gift honors the outstanding clinical care and research that has flourished at the University of Colorado School of Medicine under Dr. Mandava's leadership," said Sue Anschutz-Rodgers, a philanthropist, rancher and conservationist. "My hope is that the gift will inspire others to support the eye care and groundbreaking research that will be critical to the Rocky Mountain region and to those suffering from diseases of the eye everywhere."

The gift comes at a time of outstanding momentum for the University of Colorado Eye Center, a research and clinical center based at the Anschutz Medical Campus, and the only academic eye center within a 500-mile radius.

The CU Eye Center has set a goal of establishing new, interconnected research programs in six high-priority areas and doubling its annual patient capacity from 75,000 to 150,000. The latter would be enabled in part by an anticipated tripling of space at its home at the Rocky Mountain Lions Eye Institute building in University of Colorado Hospital.

This "Bringing Sight to Life" CU initiative will depend heavily on private support, and the program hopes that Sue Anschutz-Rodgers's gift will generate attention and momentum for this fundraising effort, and for the caliber of eye care and research at CU. With more than 50 faculty members in the Department of Ophthalmology, CU's program is growing rapidly to rival the size of the largest departments in the country. CU has been the first U.S. academic center to perform femtosecond laser cataract surgery, and is the first to discover use of silicone oil to mitigate radiation damage to the eye, among other pioneering achievements.

Anschutz family members have been integral to the rapid development of CU's 227-acre health sciences campus in Aurora.

Sue Anschutz-Rodger's gift is one of more than 275,000 gifts made during Creating Futures, a \$1.5 billion fundraising campaign to enhance University of Colorado education, research, outreach, and health programs benefiting citizens throughout and beyond Colorado. Visit [www.cufund.org](http://www.cufund.org)[24] for more information.

[Thin, low Arctic clouds played important role in massive Greenland ice melt](#)[25]

The ICECAPS Mobile Science Laboratory at Summit Station sits atop the Greenland Ice Sheet against a backdrop of Arctic clouds. (Image courtesy CIRES/University of Colorado)

Clouds over the central Greenland Ice Sheet last July were “just right” for driving surface temperatures there above the melting point, according to a new study by scientists at the National Oceanic and Atmospheric Administration (NOAA) and the universities of Wisconsin, Idaho and Colorado.

The study, published recently in *Nature*, found that thin, low-lying clouds allowed the sun’s energy to pass through and warm the surface of the ice, while at the same time trapping heat near the surface of the ice cap. This combination played a significant role in last summer’s record-breaking melt.

“Thicker cloud conditions would not have led to the same amount of surface warming,” said Matthew Shupe, research meteorologist with the Cooperative Institute for Research in Environmental Sciences (CIRES), a joint institute of the University of Colorado Boulder and NOAA, and the NOAA Earth System Research Laboratory. “To understand the region’s future, you’ll need to understand its clouds. Our finding has implications for the fate of ice throughout the Arctic.”

Scientists around the world are trying to understand how quickly Greenland is warming because ice melt there contributes to sea level rise globally. The Greenland Ice Sheet is second only to Antarctica in ice volume. In July, more than 97 percent of the Greenland Ice Sheet surface experienced some degree of melting, including at the National Science Foundation’s Summit Station, high atop the ice sheet. According to ice core records, the last time the surface at Summit experienced any degree of melting was in 1889, but it is not known whether this extended across the entire ice sheet.

To investigate whether clouds contributed to, or counteracted, the surface warming that melted the ice, the authors modeled the near-surface conditions. The model was based on observations from a suite of sophisticated atmospheric sensors operated as part of a study called the “Integrated Characterization of Energy, Clouds, Atmospheric State and Precipitation at Summit.”

“The July 2012 ice melt was triggered by an influx of unusually warm air sweeping in from North America, but that was only one factor,” said David Turner, research meteorologist with the NOAA National Severe Storms Laboratory and one of the lead investigators. “In our paper, we show that low-lying clouds containing a low amount of condensed water were instrumental in pushing surface air temperatures up above freezing and causing the surface ice to melt.”

Clouds can cool the surface by reflecting solar energy back into space, and can warm it by radiating heat energy back down to the surface. The balance of those two processes depends on many factors, including wind speed, turbulence, humidity and cloud “thickness,” or liquid water content.

In certain conditions, the clouds can be thin enough to allow some solar radiation to pass through, while still “trapping” infrared radiation at ground level. That is exactly what happened last July when the clouds were just right for maximum surface warming. Thicker clouds would have reflected away more solar radiation; thinner ones couldn’t have trapped as much heat, and in either of those cases, there would have been less surface warming.

The researchers also found the thin, low-lying liquid clouds occur 30 to 50 percent of the time in summer, both over Greenland and across the Arctic. Current climate models tend to underestimate their occurrence in the Arctic, which limits those models’ ability to predict how clouds and their warming or cooling effects may respond to climate change.

“The cloud properties and atmospheric processes observed with the Summit Station instrument array provide a unique dataset to answer the large range of scientific questions we want to address,” Turner said. “Clouds play a big role in the surface mass and energy budgets over the Greenland Ice Sheet. Melting of the world’s major ice sheets can significantly impact human and environmental conditions via its contribution to sea-level rise.”

Better understanding of clouds also improves climate models.

“Our results may help to explain some of the difficulties that current global climate models have in simulating the Arctic surface energy budget, including the contributions of clouds,” said Ralf Bennartz, lead author for the study and professor at the University of Wisconsin-Madison. “Above all, this study highlights the importance of continuous and detailed ground-based observations over the Greenland Ice Sheet and elsewhere. Only such detailed observations will lead to a better understanding of the processes that drive Arctic climate.”

[Pinwheel garden promotes prevention of child abuse](#)[27]

This pinwheel garden is planted on the southwest lawn of Building 500 on the Anschutz Medical Campus.

They’re popping up in front yards, at community events and in front of city halls. They’re spinning statewide as the country recognizes [Child Abuse Prevention \(CAP\) Month](#)[29] throughout April. They’re pinwheels, the centerpiece of the Pinwheels for Prevention campaign.

The pinwheel represents Colorado’s efforts to change the way our state thinks about prevention, focusing on community activities and public policies that prioritize prevention from the start to make sure child abuse and neglect never occur.

In honor of Child Abuse Prevention Month, the Colorado School of Public Health is partnering with Denver Human Services, Denver Court Appointed Special Advocates, Prevent Child Abuse Colorado and many more agencies by planting our very own pinwheel garden on the southwest lawn of Building 500 on the Anschutz Medical Campus.

“When I read that Denver Human Services was looking for organizations interested in planting a Pinwheel Garden for raising awareness during National Child Abuse Prevention Month in April, I thought it seemed like a natural opportunity for the Colorado School of Public Health to partner with other organizations to promote a message for greater Public Health in the Rocky Mountain Region,” said faculty organizer Amanda Allshouse. “When I mentioned Pinwheels to school’s Faculty Senate, they helped connect me with the Kempe Center.”

[The Kempe Center](#)[30] is hosting several [awareness activities and events](#)[31] including the annual [blue ribbon campaign with Children’s Hospital Colorado](#)[31].

The school’s pinwheel garden will be on display through mid-April. Stop by to view the garden and think about ways you can “Be the One” to make a difference for a child including:

Be a Bounce Back Family. Since challenging times impact every family, it’s important to recognize stressful situations and keep a sense of hope. These things can help us take constructive action to turn things around. Make Parent Growth a Priority. Take time to learn what is age appropriate and how to set realistic expectations. These tools help us cope positively with various situations. Learn More About Child Growth. Helping children develop emotionally helps them identify their feelings, clearly communicate and problem solve, and prepares them for positive social interaction. Surround Yourself with a Network of Friends and Family. Having a strong support system of neighbors and community members helps us get needed breaks, cope with difficult times and prevents us from becoming isolated. Call a Pro. Getting to know a day care professional, caseworker, teacher or doctor gives us an expert to turn to in times of need. These five things help make families and our community stronger. To learn more about making a difference, visit [www.denvergov.org/BeTheOne](http://www.denvergov.org/BeTheOne)[32].

[Jin receives Laureate for North America honor](#)[33]

Deborah Jin of JILA, NIST and the University Of Colorado is honored as the 2013 L’OREAL-UNESCO For Women In Science Laureate for North America. (PRNewsFoto/L’OREAL)

**Deborah S. Jin**, a world-renowned physicist at CU-Boulder, recently was honored as the 2013 Laureate for North America by the L'OREAL-UNESCO for Women in Science program. Jin, whose [award was announced last fall](#)[35], was one of five women scientists from around the world who were honored at a March 28 award ceremony at Sorbonne University in Paris. She was named laureate for her work in ultracold gases of fermions.

Jin's research was the first to cool down molecules so that chemical reactions could be observed in slow motion. The research helps further the understanding of molecular processes, which have tremendous relevance for medicine and new energy sources.

"Finding ways to use new knowledge coming from this field could potentially transform society," Jin said. "The study of ultracold molecules could lead to new precision-measurement tools, new methods for quantum computing and help us better understand materials that are essential to technology."

Jin earned a Ph.D. in physics from The University of Chicago in 1995, after graduating from Princeton with an A.B. in physics in 1990. In 1997, Jin was hired by National Institute of Standards & Technology (NIST), elected a Fellow of JILA, and appointed Professor Adjoint in the Department of Physics at the University of Colorado. There she began studying ultracold gases of fermions, a class of particles (including electrons) that cannot share the same quantum state. In 1999, her group cooled a gas of fermions (potassium atoms) to less than a millionth of a degree above absolute zero. Science Magazine hailed this accomplishment as a "Science Breakthrough of the Year."

Jin is a member of the National Academy of Sciences and the American Academy of Arts and Sciences. Her other honors include the American Physical Society's Maria Goeppert-Mayer Award, NIST's Samuel Wesley Stratton Award, The Franklin Institute's 2008 Benjamin Franklin Medal in Physics, the Service to America Medal, and the 2009 William Procter Prize for Scientific Achievement.

[Riggs to be recognized for work in adolescent substance abuse treatment](#)[36]

[37]

**Paula Riggs**, professor of psychiatry at the University of Colorado School of Medicine, has been selected the 2013 recipient of the Kathleen Ann Mullen Award for "Outstanding Contributions to the Field of Adolescent Health and Medicine," given by the Rocky Mountain Regional Chapter of the Society for Adolescent Health and Medicine (RM-SAHM).

The regional chapter's highest award, which will be presented later this month, recognizes Riggs for her distinguished career through clinical work and research in the field of adolescent substance abuse treatment.

In the award notification to Riggs, Elsie Humes, president of RM-SAHM, said: "You have contributed to the health and well being of adolescents by your clinical work and research in the field of adolescent substance abuse treatment. Not only having done this research on adolescents with substance abuse and psychiatric disorders you have been able to put this research into practice in many schools, private practice and specialty clinics. Your dedication to improving the lives of adolescents has made you highly respected by those who serve youth and very deserving of this award."

The honor is named for Kathleen Ann Mullen who completed her graduate nursing work at the University of Colorado School of Nursing, where she became certified as a nurse practitioner. For 28 years, Mullen worked for the Denver Neighborhood Health Program, and she helped operate the East Side Teen Clinic. Mullen died in 1996 of breast cancer.

[Otero named Woman Physicist of the Month](#)[38]

[39]

**Valerie Otero**, a physics education researcher and associate professor of science education at the University of Colorado Boulder, has been named Woman Physicist of the Month by the American Physical Society's (APS) Committee on the Status of Women in Physics (CSWP). The award recognizes female physicists who have positively impacted other individuals' lives and careers.

She is a first-generation college student from a family who has lived in New Mexico for more than six generations. Her academic career has paved a path for many members of her extended family and friends to attend college and work toward earning higher degrees.

As an academic, she has helped CU-Boulder develop a nationally recognized presence in science, technology, engineering and mathematics (STEM) education research and STEM teacher preparation, and has been the driving force behind the development of the Colorado Learning Assistant Model, a program now emulated by more than 30 universities throughout the nation. In addition, she is author of two nationally recognized physics curricula; a leader in Boulder's teacher education program, CU-Teach; and a dedicated and active proponent of projects that bring access to education including Vamos Buffalos and the I Have a Dream Foundation, which focus on students like herself who are traditionally underrepresented in science.

Otero will be featured on the Women in Physics website and recognized at a reception at an APS national meeting.

[Watson named to newly created position of research liaison](#)[40]

[41]

**Pete Watson**, associate professor of medicine, has been appointed to the new position of Research Liaison between the University of Colorado Anschutz Medical Campus and the Denver Veterans Administration Medical Center (Denver VAMC). This position was created to facilitate greater collaboration in clinical and basic research between the faculty at the two entities.

Watson welcomes input regarding any areas of concern, or difficulties colleagues have encountered regarding university-VA interactions. He also is interested in brokering collaborations across the institutions and access to equipment housed at the VA.

[Dropping names ...](#)[42]

Kim

**Jimmy Kim**, associate professor in civil engineering at the CU Denver, has been invited by the American Composite Manufacturers Association (ACMA) to deliver a lecture at the upcoming ACMA specialty conference (Corrosion, Mining, and Infrastructure) May 15-16 at the Denver Tech Center. His presentation will focus on his recent research findings regarding advanced composite materials for infrastructure applications with emphasis on carbon fiber reinforced polymers for structural rehabilitation. ... **Tomas Berl**, professor of medicine in the Department of Medicine's Division of Renal Diseases and Hypertension, has received the National Kidney Foundation's David M. Hume Award, the highest honor the group bestows on scientist-clinicians in the field of kidney and urologic diseases. The foundation annually bestows the award upon an individual who exemplifies the high ideals of scholarship and humanitarianism in an outstanding manner. ... **Kelley Capocelli**, assistant professor in the Department of Pathology and medical director of Transfusion Medicine Services at Children's Hospital Colorado (CHC), has received the 2013 Century Award, which

recognizes CHC staff, five or fewer years out of training, for showing leadership and initiative. Kelley collaborated with clinical service leaders to establish and enforce specific blood transfusion parameters, resulting in improvements to patient health and safety and cost savings. Kelley will receive her award today at the Annual Medical Staff Dinner at the Denver Marriott City Center. ... Faculty Representative Assembly officers and members for the University of Colorado Colorado Springs were announced April 2. Those elected to 2013-2014 positions are: President-Elect, **Michele Companion**, associate professor, Department of Sociology; secretary, **Monique Dooley**, associate professor, College of Business; Faculty Council Representative, **Julaine Field**, associate professor, College of Education; College of Business representatives, **Peggy Beranek**, associate professor, and **Morgan Shepherd**, professor; College of Education. **Barbara Frye**, associate professor, and **Monica Yoo**, assistant professor; College of Engineering and Applied Science, **Pam Carter**, senior instructor, and **Rebecca Webb**, assistant professor; College of Letters, Arts & Sciences, **Valerie Brodar**, associate professor in the Department of Visual and Performing Arts, **Suzanne Cook**, senior instructor in the Department of Languages and Culture, **Lisa Hines**, assistant professor in the Department of Biology, **Paddington Hodza** and **Curt Holder**, assistant professors in the Department of Geography and Environmental Studies, **Roger Martinez**, assistant professor in the Department of History, and **Sonja Tanner**, assistant professor in the Department of Philosophy; Kraemer Family Library, **Norah Mazel**, instructor; Beth-El College of Nursing and Health Sciences, **Vicki Brownrigg**, assistant professor, and **Craig Elder**, instructor; and School of Public Affairs, **Anna Kosloski**, assistant professor. ... Two new staff members joined UCCS in March: **Frederick Thomas**, shipping and receiving supervisor, Bookstore; and **Samuel Hausman**, police officer, Department of Public Safety.

[President's Teaching and Learning Collaborative calls for research proposals](#)[44]

The President's Teaching and Learning Collaborative – CU's scholarship of teaching and learning program – is calling for research proposals for 2013-14.

Central to the work of the collaborative is creating and publishing scholarship in teaching and learning that contributes to theory and effective teaching practice in and across disciplines. To this end, each faculty researcher designs and undertakes an investigation aimed at deepening understanding of disciplinary pedagogy and related to an important issue in learning.

Faculty from all disciplines are invited to become investigators in CU's President's Teaching and Learning Collaborative (PTLC), now beginning its eighth year and establishing its 2013-14 cohort of faculty researchers. Faculty researchers design, carry out and publish research on a particular aspect of learning in a specific course. Each investigator is supported by a coach and short seminars in how to do education research.

Faculty researchers will receive \$1,550 in funding for their research; it may include a student research assistant and presenting one's research.

All application materials must be submitted electronically in attached Word documents only to [Suzanne.Eyerman@Colorado.EDU](mailto:Suzanne.Eyerman@Colorado.EDU)[45] by May 22.

Complete details are posted at: [http://www.colorado.edu/ptsp/ptlc/PTLC\\_Call.html](http://www.colorado.edu/ptsp/ptlc/PTLC_Call.html)[46]

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**Links**

[1] <https://connections.cu.edu/stories/regents-approve-31-percent-salary-pool-faculty-exempt-professionals>[2]

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<https://www.cusys.edu/regents/>[3] <https://connections.cu.edu/news/pay-raises-tuition-benefit-in-spotlight-at-staff-council-meeting>[4] <https://connections.cu.edu/stories/regents-vote-6-3-favor-tuition-rates-proposed-university-leadership>[5] <https://connections.cu.edu/file/bor-tuitionpng>[6] <http://www.boarddocs.com/co/cu/Board.nsf/vpublic?open>[7] <https://connections.cu.edu/stories/griego-talks-student-support-faculty-council>[8] <https://connections.cu.edu/file/regent-griegopng>[9] <https://connections.cu.edu/news/chancellor-don-elliman-loses-interim-from-title>[10] <https://connections.cu.edu/stories/five-questions-ron-rorrer>[11] <https://connections.cu.edu/news/five-questions-for-ron-rorrer/5q-rorrer>[12] <https://connections.cu.edu/sites/default/files/wp-content/uploads/2013/04/5q-rorrer-hydrocar1.png> [13] [https://connections.cu.edu/news/five-questions-for-ron-rorrer/5q-rorrer\\_studebaker](https://connections.cu.edu/news/five-questions-for-ron-rorrer/5q-rorrer_studebaker)[14] [https://connections.cu.edu/news/five-questions-for-ron-rorrer/5q-rorrer\\_wheatstone-bridge](https://connections.cu.edu/news/five-questions-for-ron-rorrer/5q-rorrer_wheatstone-bridge)[15] <https://connections.cu.edu/stories/bill-seeking-four-year-degrees-community-colleges-dies>[16] <https://connections.cu.edu/stories/regents-announce-2013-slate-awards-honoring-commitment-service>[17] <https://connections.cu.edu/stories/parking-go-8-monthly>[18] <https://connections.cu.edu/stories/%E2%80%98explore-shop%E2%80%99-addresses-communicating-diverse-world>[19] <https://connections.cu.edu/file/ucd-allenpng>[20] <http://www.ucdenver.edu/about/WhoWeAre/spotlight/faculty/Pages/Associate-Vice-Chancellor-for-Diversity-and-Inclusion%20Brenda%20Allen.aspx>[21] <https://implicit.harvard.edu/implicit/>[22] <https://connections.cu.edu/stories/cu-eye-center-gains-momentum-2-million-donation>[23] <https://connections.cu.edu/file/cufmandavpng>[24] <http://www.cufund.org/>[25] <https://connections.cu.edu/stories/thin-low-arctic-clouds-played-important-role-massive-greenland-ice-melt>[26] <https://connections.cu.edu/file/ucbgreenlandpng>[27] <https://connections.cu.edu/stories/pinwheel-garden-promotes-prevention-child-abuse>[28] <https://connections.cu.edu/file/amcpinwheelpng>[29] <http://www.denvergov.org/DenverHumanServices/ProtectionPrevention/PreventingChildAbuse/tabid/441760/Default.aspx>[30] <http://www.kempe.org/>[31] <http://www.childrenscolorado.org/news/inthenews/2013-news/child-abuse-prevention-month.aspx>[32] <http://www.denvergov.org/BeTheOne>[33] <https://connections.cu.edu/people/jin-receives-laureate-north-america-honor>[34] <https://connections.cu.edu/file/pjinpng-0>[35] <https://connections.cu.edu/people/jin-receives-loreal-unesco-for-women-in-science-award>[36] <https://connections.cu.edu/people/riggs-be-recognized-work-adolescent-substance-abuse-treatment>[37] <https://connections.cu.edu/file/priggspng>[38] <https://connections.cu.edu/people/otero-named-woman-physicist-month>[39] <https://connections.cu.edu/file/poteropng>[40] <https://connections.cu.edu/people/watson-named-newly-created-position-research-liaison>[41] <https://connections.cu.edu/file/pwatsonpng>[42] <https://connections.cu.edu/people/dropping-names-66>[43] [https://connections.cu.edu/sites/default/files/wp-content/uploads/2013/04/p\\_kim.png](https://connections.cu.edu/sites/default/files/wp-content/uploads/2013/04/p_kim.png)[44] <https://connections.cu.edu/stories/president%E2%80%99s-teaching-and-learning-collaborative-calls-research-proposals>[45] <mailto:Suzanne.Eyerman@Colorado.EDU>[46] [http://www.colorado.edu/ptsp/ptlc/PTLC\\_Call.html](http://www.colorado.edu/ptsp/ptlc/PTLC_Call.html)