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Letter from the Editor

The University of Colorado *Faculty and Staff Newsletter* welcomes letters to the editor from current or retired CU faculty and staff about issues of interest to the university community. Please send submissions to newsletter@cu.edu.

If you have a news item you'd like to share with the CU community, please send it to Jay.Dedrick@cu.edu.

-Jay Dedrick



PERA rescue plan signed into law by governor

Ritter calls reduction in benefits 'fiscally responsible'

By Cynthia Pasquale

Gov. Bill Ritter on Tuesday, Feb. 23, signed legislation that will reduce PERA retiree benefits but keep the pension plan afloat.

Ritter said the changes made to the Public Employees Retirement Association pension fund were necessary to keep the plan solvent.

"This legislation will ... allow the system to meet its obligations to current and future retirees," he said. "We are all confronting the harsh economic realities of the worst recession since the Great Depression. This is a fiscally responsible bill."

Under the new law, Senate Bill 10-001, more than 90,000 retirees will receive no cost-of-living adjustment (COLA) this year. In upcoming years, retirees would receive no more than a 2 percent increase, depending on inflation and the funding of the plan.

The legislation was moved swiftly through the General Assembly and signed by the governor before March in order to void a planned 3.5 percent COLA increase. That change alone will save PERA about \$80 million.

Employer and employee contributions will increase under the law, and the retirement age for most new employees will rise to 60 from 55. These and other changes will become effective Jan. 1, 2011.

Retirees will be notified by mail of the COLA change this week, said Katie Kaufmanis, PERA's communications director. Newsletters containing information about all the changes also will be sent to members in the near future.

PERA has said large payouts and stock market volatility contributed to the fund's dire condition. The plan pays nearly \$3 million each month to retirees, and the 2008 market crash led to a nearly \$30 billion decline in assets.

Higher ed budget, tuition flexibility generate fresh discussion

Governor holds line on cuts to institutions – for now

By Jay Dedrick

Funding to higher education was spared in Gov. Bill Ritter's most recent budget-balancing plan, which was announced on Thursday, Feb. 18.

Still, universities and colleges throughout the state could face further cuts depending on a state revenue forecast expected the third week of March.

Ritter submitted the \$340 million proposal to the legislature's Joint Budget Committee to re-balance the 2010-2011 budget. The committee voted in favor of the plan on Tuesday, Feb. 23.

Meanwhile, leaders from the University of Colorado and other higher education institutions met last week with lawmakers in anticipation of renewed attention for Senate Bill 10-003, which is aimed at giving higher education institutions greater flexibility in several state-regulated areas. The legislation has been on hold for the past month as a courtesy to the governor; Ritter had asked that a study panel at the Colorado Department of Higher Education be given time to announce preliminary recommendations.

Among the flexibility legislation's goals:

- Allow higher education institutions to develop their own fiscal rules and policies, apart from some state regulations. Cutting bureaucracy would improve efficiency and effectiveness.
- Remove current limits on the number of international students who may enroll in colleges. The University of Colorado at Boulder has the smallest international student population of any institution in the American Association of Universities. Without denying spots to in-state students, a greater influx of students from around the world would grow enrollment, diversify the campus experience and boost tuition revenue.
- Allow universities to determine how they allocate student financial aid money, rather than have it driven by state formulas.
- Establish that higher education institutions autonomously set their own information technology practices.
- Give colleges the ability to proceed with construction projects more efficiently by cutting down on the amount of financial data they must report to the state.

Originally part of the flexibility proposal, a bill establishing new statewide standards for transferring college credits from two-year schools to four-year schools, and between four-year schools, earned approval in the House on Friday, Feb. 19.

Another part of the flexibility proposal as first envisioned last year: tuition flexibility. Ritter had said he would not consider allowing higher education institutions' boards to determine their own tuition rates. At a news conference last week, Ritter indicated we would be willing to again discuss the possibility with higher education leaders. The Higher Education Strategic Planning Steering Committee is expected to discuss the matter at a meeting today.

CU-Boulder launches national search for Leeds School of Business dean

Plan calls for hiring by January 2011

A national search for the next dean of the University of Colorado at Boulder Leeds School of Business has begun. CU-Boulder Interim Provost and Executive Vice Chancellor for Academic Affairs Stein Sture announced the search Tuesday, Feb. 23.

Former Senior Associate Dean Manuel Laguna of the Leeds School of Business is serving as interim dean until a permanent hire is made for the position. On Nov. 1, he assumed the post formerly held by Dennis Ahlborg, who accepted the presidency of Trinity University in San Antonio.

"The Leeds School of Business is one of the most innovative schools of business in the nation," Sture said. "We are seeking visionary leadership to take this unique school to new levels of success, and to cement the key relationships that have been built with faculty, staff, students, alumni and donors."

Sture named CU-Boulder Vice Provost William Kaempfer chair of the 13-member search committee. The dean position will be advertised locally and nationally through May. Applications will be reviewed in the spring and summer, a short list will be presented to the provost by August, and the provost plans to invite finalists to visit campus in the fall. A dean is expected to be on board by January 2011.

The dean will serve as the chief academic and administrative and strategic officer for the Leeds School of Business. Leeds has an extensive history of enhancing the business community by attracting outstanding faculty who create new business knowledge through research; providing interns, student consulting teams and business graduates to the global business community; offering a two-year evening MBA program specifically designed for working professionals; establishing excellence in areas that guide the practice of business including entrepreneurship, real estate, social responsibility and sustainability; and educating managers and executives through executive education programs.

Besides Kaempfer, search committee members are: Chris Leach, professor, finance division; Phil Shane, professor, accounting division; Kai Larsen, associate professor, systems division; Page Moreau, associate professor, marketing division; Cathleen Burns, senior instructor, accounting division; Victor Fleischer, associate professor, CU Law School; Aswad Allen, director, Leeds School of Business Office of Diversity Affairs; Toni Blodgett, junior, accounting major; Aaron Schlagel, master of business administration candidate; Peter Burrige, president and CEO of Greenhouse Partners and member of the Leeds School of Business board; John S. Fischer, CEO of Breakthrough Energy LLC and member of the Leeds School of Business board; and Michael Leeds, president, FlightStar Inc. and member of the Leeds School of Business board.

For information about the dean search, including the job description, visit http://leeds.colorado.edu/dean_search/interior.aspx?id=10758.

Loan forgiveness program could hold future reward for CU employees

Potential federal reimbursement promised to those in public service jobs

A federal student loan forgiveness program offers potential help to University of Colorado employees who stick with their public service profession for 10 years.

The Public Service Loan Forgiveness Program, created by Congress in 2007, encourages people to enter and continue to work full-time in public service jobs, including universities.

Borrowers may qualify for forgiveness of balances due on eligible federal student loans after having made 120 monthly payments — and while being employed in a public service job. Because the first eligible monthly payment had to have been made after Oct. 1, 2007, the earliest cancellation of loan balances won't take place until October 2017.

For more information on the loan forgiveness program, [click here](#).

Procurement Service Center sets open houses

Purchasing specialists can talk shop at four events in March, Procurement Month

The [Procurement Service Center](#) (PSC) will sponsor open houses on the four university campuses early in March, which is Procurement Month in Colorado. The events offer a chance to meet PSC staff and to discuss department-specific purchasing needs.

Four strategic suppliers — Staples, Fisher Scientific, CCI and FedEx — also will be represented at the open houses. Refreshments will be served.

Locations and times are:

- **University of Colorado at Boulder:** 9 a.m.-noon Tuesday, March 2, UMC 235
- **University of Colorado at Colorado Springs:** 9:30-11:30 a.m. Thursday, March 11, University Center 303
- **University of Colorado Denver:** 1-4 p.m. Thursday, March 4, 1380 Lawrence St., eighth floor (PSC offices)
- **Anschutz Medical Campus:** 9 a.m.-noon Tuesday, March 9, Research Center 2, second floor conference room

Register for the session of your choice by [clicking here](#).

For more information, please contact Rosemary.Contreras@cu.edu.



A love of snow, ice and cold weather has become for Tad Pfeffer a lifelong passion to help the world understand the transformation of glaciers and the implications of those changes.

For 30 years he's studied the mechanics of how glaciers move and change in response to climate, using physics, math and engineering. He's a professor of civil, environmental and architectural engineering at the University of Colorado at Boulder, and a fellow of the Institute of Arctic and Alpine Research (INSTAAR), one of several university research organizations.

Much of his focus has been on Columbia Glacier on the southern coast of Alaska in Prince William Sound. He's watched the glacier rapidly lose ice, calving icebergs into the ocean, events that contribute to the rise of the sea level. His 2007 book, "[The Opening of a New Landscape: Columbia Glacier at Mid-Retreat](#)," is a photographic record of the glacial changes.

He also has spent a little time proving a less serious ice issue — that ski moguls don't stand still. For both studies, he relied on time-lapse photography and photogrammetry, a process that uses photography to measure changes in objects. This marriage of science and photography also helped him and fellow researcher Jim Balog, a CU alumnus, communicate to the public through initial studies of the [Extreme Ice Survey](#) the dramatic changes happening to glaciers.

— Cynthia Pasquale

1. The mogul study found that "bumps" created by skiers migrate uphill. How did you study the moguls and what did you find?

Dave Bahr, a Regis University professor, and I have skied for many years and we thought that moguls moved uphill. We started the [study](#) about five years ago, for two seasons at Winter Park. We mounted a camera on a building at the base lodge, and used ground controls for references. We used a Nikon with a timer, shooting every hour during the daylight.

If you let skiers go down a slope that is not prepared, the skiers will form a pattern in just a few hours. (As the skiers turn, the snow they scrape on the downhill side of the mogul is pushed to the uphill side of another mogul. Thus the upward migration.)

The size of the bumps — the structure and spacing — is determined by our size and the way the skis work.

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2. Why did you choose to study Alaska glaciers and what have you found?

I've worked in Antarctica, Greenland and Kilimanjaro ... but I was a grad student in Seattle and was familiar with Alaska. There's an enormous amount of interest in Greenland and Antarctica, but actually most of the sea-level rise is coming from other glaciers and ice caps, including those in Alaska. Not many people are working on that idea, so it's very important to know what's going on there.

Glaciers all over Alaska are changing, shrinking. We're putting about 880 gigatons of water into the ocean per year in terms of sea-level rise. (A gigaton is equal to 1 billion tons.) That equates to about 2.4 millimeters (about one-tenth of an inch) per year. About one-fourth of that comes from Alaska.

Columbia (the glacier) started changing dynamically about 25 years ago, losing ice about 20 times faster than it would by melting. A project was in place to study it, started by Mark Meier, who came to INSTAAR, and the whole purpose was to predict and understand this rapid flow of ice.

The climate didn't suddenly get warmer. Gradual warming and gradual thinning of the glacier has pushed it over the threshold. That's the same thing we're seeing now in Greenland.

3. How much time do you spend in Alaska and how do you measure the glacial changes?

I usually spend one or two weeks at the beginning of the summer and one or two weeks at the end. The glacier is so crevassed, we can't do much on the glacier itself. You have to take a helicopter and hang out the side to set an instrument down. (The surface) is too broken up to be safe. So we're forced to do a lot of automated study. We stay long enough to do things that require our presence. It's very productive to spend time just watching and thinking about what's going on. We have a weather station there that sends data by satellite and we use both cameras and a seismometer. The seismometer gathers lots of data ... about 100 times a second ... so it stores the data until we can go up there and swap it out.

4. Currently, where has your research taken you?

The bulk of my time in the past year has been spent considering the global sea level and realistic projections. The popular press refers to very dramatic events. (For instance, some studies predict the collapse of the West Antarctic Ice Sheet would cause the sea level to rise an average of 17 feet around the world, wiping out most coastal areas.) But what is not talked about is actual probabilities. The collapse of the West Antarctic probably would take 1,000 years to get going. But policy makers and planners don't really care about 500 years from now. They want to know what's going to happen in 5 years, 10 years, 20 years.

A lot of glaciology is not really aimed at that time scale. I've been trying to get a handle on the uncertainty of what's happening right now. Uncertainties are out there, but they are not quantified in any organized way.

This is no longer a pure science activity. When I started 30 years ago, no one really needed to know what was going on. Now, it's an applied science. Specific questions have to be answered in a specific amount of time. We have to shift gears and start focusing on solving the problems that are motivating interest in this now.

5. What do you want students to take away from the classes you teach at the university?

It would be having an in-depth, skilled technical knowledge that engineers tend to focus on, combined with the awareness of context of that knowledge.

In my engineering geology class, the students actually go outside and look at the ground and learn a great deal about the properties of rocks and soil. I'm making people aware of their surroundings.

Want to suggest a faculty or staff member for Five Questions? Please e-mail Jay.Dedrick@cu.edu

People

Chemistry professors awarded fellowships



Palmer



Weber

Amy Palmer and **J. Mathias Weber**, assistant professors of chemistry at the University of Colorado at Boulder, have been awarded prestigious 2010 Sloan Research Fellowships.

"The Sloan Research Fellowships support the work of exceptional young researchers early in their academic careers, and often at pivotal stages in their work," says Paul L. Joskow, President of the Alfred P. Sloan Foundation.

Palmer and Weber are among [118](#) faculty members from 56 colleges and universities in the United States and Canada who are conducting research at the frontiers of physics, chemistry, computational and evolutionary molecular biology, computer science, economics,

mathematics and neuroscience.

Weber's research is dedicated to understanding how molecules interact with each other to form complexes and how energy flows through molecules. Palmer studies signaling pathways in cells, especially in relationship to how they contribute to diseases such as cancer and Alzheimer's.

Grants of \$50,000 for a two-year period were awarded to the two researchers.

Medical staff honored at awards dinner



The University of Colorado Hospital recently held its Medical Staff Awards dinner at the Seawell Grand Ballroom at the Denver Center for the Performing Arts. The event honored several faculty and two members of the nursing staff at the hospital. Medical Staff President Andy Meacham served as master of ceremonies as the winners of seven awards were announced:

- **Todd Kingdom**, associate professor: President's Award
- **Bennie Lindeque**, professor: Outstanding Full-Time Physician of the Year
- **Michael Cain**, radiology administration: Extraordinary Service Award
- **Paul Maroni**, assistant professor, and **Fred Severyn**, associate professor: Pioneer Award.
- **Harri Brackett**, case manager palliative care, and **Maren Diercks**, transplant coordinator: Partners in Care Award
- **Shandra Wilson**, assistant professor: Partners in Care Physician Award
- **Ethan Cumbler**, assistant professor, and **Erin Egan**, assistant professor: Performance Improvement and Patient Safety Award

Professor elected to European Academy of Science and Arts

Fernando Feliu-Moggi, associate professor of languages and cultures at the University of Colorado at Colorado Springs, recently was elected a member of the European Academy of Science and Arts. He will be officially installed during the group's March meeting in Salzburg, Austria. Feliu-Moggi is founding president of the Miguel Angel Asturias Society, which is devoted to international study and promotion of the Nobel Prize-winning Guatemalan author.

School of Pharmacy professor part of reference book team



Borgelt

Laura Borgelt, associate professor at the University of Colorado Denver School of Pharmacy, and three colleagues recently completed "Women's Health Across the Lifespan," an educational, comprehensive pharmacotherapy [reference](#) focused on women and women's health issues. Designed as a contemporary educational text, the book contains contributions from more than 150 clinical experts in pharmacy, medicine and nursing. The work comprises 49 peer-reviewed chapters organized into eight sections, resulting in an in-depth examination of every aspect of women's health from a pharmacotherapy perspective.

Cancer support grants awarded to professors

The University of Colorado Cancer Center recently awarded four seed grants to for innovative research efforts by professors. This year's P30 Cancer Center Support Grants boost projects that explore new areas of cancer-related research and, in two cases, demonstrate new collaborations among members. Grantees are:



Andrew Bradford, Ph.D., associate professor, obstetrics and gynecology, School of Medicine; \$20,000 for "regulation of protein kinase co-expression and sensitivity to chemotherapy in endometrial cancers"



Robert Dellavalle, M.D., Ph.D., associate professor, dermatology, School of Medicine and Chief, Denver VA Dermatology Service; **Neil Box**, Ph.D., assistant professor, dermatology, School of Medicine; **Lori Crane**, Ph.D., professor and chair, community and behavioral health, Colorado School of Public Health; \$40,000 for "determining the relationship of ultraviolet photography severity scores with genetic, phenotypic and sun exposure melanoma risk factors in a cohort of Colorado children."



Antonio Jimeno, M.D., Ph.D., assistant professor, medical oncology, School of Medicine; **Yosef Refaeli, Ph.D.**, assistant professor, dermatology, School of Medicine; \$30,000 for "development of a xenochimaeric mouse with tumor and hematopoetic system obtained from the same patient."



Rodrigo Maegawa, M.D., fellow, medical oncology, School of Medicine; \$10,000 for "identification of new therapeutic targets whose inhibition sensitizes acute myeloid leukemia to FLT3 inhibitors."

Leukemia Lymphoma Society honors professor



DeGregori

James DeGregori, Ph.D., professor and director of Biochemistry and Molecular Genetics and director of the Molecular Biology program in the University of Colorado Denver School of Medicine, recently was honored by the Leukemia Lymphoma Society for his research and fundraising efforts. DeGregori received a society grant for his project, "development of mechanism-based combination therapies for Bcr-Abl+ leukemias."

Want to suggest a colleague -- or yourself -- for People? Please e-mail information to Jay.Dedrick@cu.edu

Did you know...

System Staff Council is planning a supply drive for people in need

With spring an ideal time to clean out closets and pantries, the council's 2010 service project will consist of collecting new and used clothing, nonperishable food items, cleaning supplies and more. The drive is set for the weeks of March 22 and March 29, when a variety of drop-off locations will be available.

The council will announce more details on the drive soon.

Did You Know... offers tips and information from CU's Employee Learning and Development office and others. To submit an item, e-mail Jay.Dedrick@cu.edu

Forum

Humor helps with technical transition

Like many of my fellow staff members in the CU system, I have been dealing with the huge amount of extra work that has resulted from migration to the new expense system. To give one example of many, I just recently finished working on a travel reimbursement that would have taken me 20 minutes to complete using the old process. Receipt upload issues resulted in a total of over three hours to finally complete one reimbursement. This does not even take into account the time of Brian Dyet and Mary Ellis at the PSC Help Desk as they attempted to help with the problem.

I would like to thank Mary and Brian for all their help over the last many months. They have been incredibly patient and helpful with multiple phone calls and e-mails as we attempt to pound our "square peg" travel and procurement card processes into the "round hole" of the expense system.

I cannot imagine how much extra stress and workload Mary and Brian must be dealing with as the two of them take care of all their usual Help Desk communications with the addition of what I am sure is not an insignificant amount of communications with frustrated end users of our new and improved expense system. Mary and Brian helped me laugh instead of pulling my hair out. The laughter was appreciated more than they know. Mary and Brian should be the CU system employees of the year for their expense system efforts!

Bernadette Garcia

Colorado Space Grant Consortium, University of Colorado at Boulder

Where is news coverage of campus faculty assembly meetings?

We are approaching the one-year time point since the demise of the Silver & Gold. I count exactly 14 letters to the editor during the entire existence of the Faculty and Staff Newsletter. Two of them (one is mine) discuss how few letters there are.

The demise of print journalism is lamentable on many counts, but its disappearance from our academic lives has been especially painful. At Tuesday's Anschutz Medical Campus Faculty Assembly, I made a motion (passed unanimously) that asked the administration to find funds within

our campus. This topic has engendered considerable discussion in our meetings over the past year, yet I would predict that almost no one outside of those in attendance (about 10-15 faculty members at most) knows anything about this.

In the "good old days," one could count on press coverage of this kind of issue. The Silver & Gold would report on resolutions, the regents would read about it and, in general, there would be a system response. Instead, we find ourselves having to re-raise the issue with our administration or else it will seemingly drop off the radar. I believe we can say that the effort to have the Newsletter replace the Silver & Gold is an abject failure in terms of disseminating campus affairs to the faculty and staff, based on the responses in the letters section alone.

As a test, I invite any regent who happens to see this on his/her own (don't bother if another regent or administrator pointed it out to you, please) to contact me and I will gladly discuss the logic of having AEDs to protect the health and safety of faculty, staff and students. Maybe we could discuss the logic of a campus newspaper or at least an independent campus reporter to work on this problem.

This is not meant to be critical of the staff of the Newsletter or of the administration. Indeed, both have functioned admirably on a number of issues. Examples include the administration working very well with the faculty assembly in developing the case statement for a day care center on our campus and planning for a recreational/health center — both long-standing needs the faculty have been concerned about. My point is that without independent reporters and journalism of the kind the Silver & Gold brought to our academic campuses, we have lost one of the communication links that I view as vital to a healthy democratic environment. It remains possible that other journalists such as those from the Aurora Sentinel or Boulder's Daily Camera could attend more open campus meetings and fill this need in other ways — but we have not seen this yet.

L. Michael Glode, M.D., F.A.C.P.

University of Colorado Denver, CU Cancer Center

Alumni status should always be acknowledged

I always find it disappointing and even appalling when CU publications don't mention that someone they're writing about is an alum of CU. Maybe you didn't know, but Joanne Belknap ([Feb. 17 issue](#)) graduated from CU-Boulder with a bachelor's degree in political science in 1981.

Marc Killinger

Alumni Association, CU-Boulder

[Forum Archive](#)

Letter Submission Guidelines

The *Faculty and Staff Newsletter* welcomes letter submissions from current or retired University of Colorado faculty and staff about issues of interest to the university community. Submissions may be edited for length, style and clarity. Anonymous submissions will be neither considered nor published. Please send submissions to newsletter@cu.edu.

Please indicate whether or not you would like to see your comment published in the newsletter as a letter to the editor. Thank you.

News from the CU system - CU-Boulder

Search under way for Alumni Association director

A national search for the next executive director of the University of Colorado Alumni Association is under way. The search was announced recently by University of Colorado at Boulder Chancellor Philip P. DiStefano.

Ron Stump is serving as interim executive director of the association until a permanent hire is made for the position. Stump formerly served for more than a decade as CU-Boulder's vice chancellor for student affairs.

"This is a key post and an important moment in the life of our CU family," DiStefano said. "Under Ron's leadership, the Alumni Association has moved in a bold new direction with the 'Forever Buffs' membership concept. Now we are seeking an individual of unique talents who can build on this achievement, and help us continue to shape a visionary affinity model for our alumni for the 21st century."

DiStefano named CU-Boulder Chief Financial Officer Ric Porreca chair of the 12-member search committee. The Alumni Association position will be advertised locally and nationally through March; applications then will be reviewed and a short list will be presented to the provost. The executive director of the Alumni Association is expected to be on board by the end of spring semester.

The executive director is responsible for building and operating a leading alumni program, expanding CU-Boulder's relationship with its 240,000 alumni and supporting CU-Boulder's Flagship 2030 strategic plan. He or she will be appointed by, and report to, Vice Chancellor for Student Affairs Julie M. Wong.

Besides Porreca, search committee members include Jimmy Calano, alumni board president; Lisa Severy, director of Career Services; Jon Tsuda, Student Organizations Finance Office alumni; Pam Jones, associate vice president of development, CU Foundation; Ally Frusciano, assistant director of alumni events and outreach; Sarah Lindsay, sophomore in pre-journalism and president of the student alumni organization; Kathleen Majewski, University of Colorado Student Union liaison to the Alumni Association; Bob Schulzinger, history professor; Marty Evans, Director's Club member; Mike Bohn, athletics director; and Bronson Hilliard, CU-Boulder spokesman.

Applications submitted by March 31 will receive full consideration. A position description and information on how to apply is available [here](#).

UCCS

Bosley talks budget issues with Faculty Assembly

Praising a "fabulous leadership team" at the University of Colorado at Colorado Springs for insight and optimism during trying times, CU Board of Regents Chair Steve Bosley addressed the Feb. 12 meeting of the UCCS Faculty Assembly. He reported on efforts at the CU system to deal with budget issues that affect higher education, including competition for resources, constitutional complications and an under-informed public.

Bosley talked about the regents' work with CU President Bruce D. Benson in presenting CU's needs to the governor and state legislature. He said Benson uses his speaking engagements to talk about higher education as an investment rather than a cost. Lawmakers agree with this perspective, Bosley said, but find obstacles in the priorities set by the state constitution.

Another factor legislators face is that the public in general has little understanding of how higher education is funded in Colorado. Some voters believe that state funds provide 50 percent of college tuition costs, Bosley reported. Others consider many university programs, even research, to be a frivolous waste of tax dollars. Some voters see higher education as a necessary investment for Colorado's future, Bosley conceded, but it is not their highest priority.

System administrators also are looking at solutions used elsewhere, Bosley said. Georgia, for example, has a dedicated revenue source provided by its state lottery. At this time the constraints of Colorado's constitution are problematic, he said, but everyone involved continues to seek possible alternatives.

Benson and the regents are using every opportunity to inform Colorado residents of higher education realities, Bosley said. He admitted there is sometimes difficulty in finding the right words to use but that the regents and president are dedicated to educating the public about the importance of investing in the future.

Bosley told faculty that the system admires UCCS for its conservative budgeting practices. A university can't practice deficit spending or take out enormous loans, he said. He praised the use of stimulus money in a backfill strategy rather than for operating costs, calling this as an example of the leadership team's prudent decisions.

He noted that business restructuring takes years to implement, and it will be a similar journey for the CU campuses. But by taking its budget steps with a foremost idea that economic conditions will get better, UCCS is setting an example for the state and the CU system.



CU Board of Regents Chair
Steve Bosley

UC Denver

Faculty to play prominent role in student symposium

Faculty are invited to take part in this year's University of Colorado Denver Research and Creative Activities Symposium, which promotes and showcases scholarly activities of undergraduate and graduate students. The 13th annual event is set for April 30 on the Anschutz Medical Campus.

Students on the downtown and Anschutz campuses who are involved in faculty-mentored research and creative activities are encouraged to apply. At last year's event, about 100 student researchers presented work to an

audience of peers, faculty, family and visitors.

Faculty are asked to nominate their most talented students to submit an application to compete for one of four \$250 awards. Faculty also are encouraged to serve as judges for the Chancellor's Awards on the day of the event.

Nominations may be submitted at the [event Web site](#), where submission information also is posted. The application deadline is March 31.

For more information, contact symposium coordinator Candy Berryman, candace.berryman@ucdenver.edu, 303-724-8156.

Anschutz Medical Campus

New type of complex genetic variation discovered

Two University of Colorado School of Medicine scientists have discovered a previously unknown type of complex genetic variation. This unexpected finding might help explain how some organisms maintain high levels of diversity and can adapt rapidly to new stresses.

University of Colorado postdoctoral fellow Chris Todd Hittinger and Mark Johnston, chairman of the Department of Biochemistry and Molecular Genetics at the School of Medicine, and their collaborators at Vanderbilt University and Universidade Nova de Lisboa made the discovery. They identified a network of six genes that are wildly different in two populations of the same species of yeast, a close relative of the common baker's and brewer's yeast.

"This level of genetic divergence is expected between distantly related species, like human and mouse, but is unprecedented within a single species," Johnston said. "Most genes do not vary much between individuals because natural selection usually favors an optimal version of the gene, but sometimes no version is right for every situation. A well-known example in humans is a gene encoding a key component of hemoglobin: people in malaria-infested areas benefit from a form of the gene that provides resistance to malaria, but it can also cause sickle cell anemia."

The yeast's genes are responsible for its ability to eat galactose, a type of sugar found in milk and many fruits and legumes. A Portuguese population of the yeast has functional versions of all six genes and can use galactose; a Japanese population is unable to eat galactose because all six of those genes are riddled with mutations that make them nonfunctional. By comparing the genome sequences of every known strain of the species, the researchers found that the functional and nonfunctional versions of this gene network have existed for millions of years. Experiments in the lab revealed how strong natural selection could maintain high variation in this gene network, even though variation in other genes was limited.

"Lots of single-celled parasites, like those that cause sleeping sickness and malaria, have life cycles similar to yeast," Hittinger said. "They mostly reproduce asexually but occasionally mate and exchange genes. These are exactly the conditions we expect to allow for the maintenance of this type of complex genetic variation."

The study will be published online in the journal [Nature](#).

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