Five questions for Nikolaus Correll

Nikolaus Correll of the CU-Boulder College of Engineering and Applied Science, foreground; Ken Sugawara, a visiting professor from Tohoku Gakuin University in Japan, left; and Michael Theodore of the CU-Boulder College of Music pose at their interactive art exhibit, “Swarm Wall,” which was under construction at the time the photo was taken. (Photo by Glenn Asakawa/University of Colorado)

“Let’s change the world” was a message Nikolaus Correll often heard during his post-doctoral work at MIT, and he came to understand that this was not just another well-used phrase, but his life goal.

Correll, who was born in Germany, attended several universities before becoming an assistant professor in the Department of Computer Science at the University of Colorado Boulder. He attended the Technical University Munich, the ETH Zurich, Caltech, the ETH in Lausanne, and finally MIT, where his adviser, Daniela Rus, liked to toast using the phrase, “Let’s change the world!”

“With a European mindset, it took me almost two years to understand that she not only really means this and is totally entitled to this claim, but that I should pursue another career if my goal were any different,” he said.

During his work on a master’s degree at Caltech, he became interested in “swarm robotics,” which is inspired by behaviors of social insects such as ants. Ants perform actions on their own, but they also are influenced by the actions of those around them and the environment. Now his research focuses on these ideas, including how groups of robots use sensing, computation and communication to perform together.

He also is interested in swarms that do not move. A recent example developed in his lab was a “Swarm Wall” exhibited at the CU Art Museum (with Michael Theodore) where intelligent “nodes” created a swarming effect of color, lights and sound as they detected movement and then communicated with one another. Another example created in Correll’s lab was a shirt that can indicate to the deaf the direction from which noise is coming.

“I hope to be able to further miniaturize such ‘smart materials’ in the future by investigating polymer electronics, effectively dissolving the boundary between computer and material science,” he said.

Recently he was awarded an inaugural Space Technology Research Opportunities Early Career award from NASA, and will continue to study how robots can be used to tend gardens during space missions.

He said studying in four different countries has been an invaluable experience.

“In Germany we call the USA ‘the land of infinite opportunities,’ but we usually associate this with its past, i.e., when the first settlers arrived. That this is still the case was very obvious at MIT. For example, hiring math genius Erik Demaine as an assistant professor when he was 19 years old sends a very clear message to everyone: Give your best and anything is possible.”

He spends time mountain biking and skiing – sometimes in the same day – and, he said, “it seems hard to find a better place to live than Colorado, both personally and professionally.”

1. You have been researching robotic gardening for some time. How did you decide to study and develop this idea?

Robot gardening is a grand challenge that combines perception, planning and manipulation, and is therefore a great driver for cutting-edge robotics education. So it started out as a class at MIT. We then quickly noticed that using many small robots versus big equipment is an excellent way to make use of permaculture techniques (plants are planted next to each other to help each other out), and to save on transportation costs since food production could be done anywhere. This could be a possible solution to make our agriculture more sustainable, which is something we have to do. The NASA grant addresses the key perception and manipulation challenges that robots face when working with plants, while potentially enabling long-duration space flight, which is one of the current frontiers in space exploration.
2. What are some of the difficulties you face when trying to make robots in the garden a reality?
We see a convergence from personal computers to personal robots in almost all fields, by computers being extended with sensors, such as cameras, and with actuators, such as wheels. When it comes to gardening, robotic lawnmowers and automated irrigation systems already work pretty well. Yet gardening poses some of the toughest challenges on robotics because the environment is unstructured (because it is organic), unpredictable (because we are still far from understanding the world around us) and, well, is as dirty as it can get. The NASA grant will enable me to make progress on 3-D perception and manipulation of flexible objects. We will make use of recent advances in computer science, novel sensors for perception from the gaming industry, and an old gardening trick -- using two hands for manipulation: one that holds and one that manipulates. We hope that these basic capabilities will not only provide the basis for sustainable agriculture, but also will make robots much more agile and dexterous than they are today.

3. How has the field of robotics changed over the past 20 years? What are some of the biggest advancements? Stumbling blocks?
Robots are household items -- think Roombas, lawn mowers, pool butlers and those fancy espresso machines -- yet we are far away from Rosie from the Jetsons cartoon. The last 20 years in robotics have been dominated by exponential advances in computing power (Moore’s law, which basically says that processing power for computers will double every two years), eventually enabling breakthroughs in agility (e.g., Boston Dynamics’ “Big Dog,” a quadruped robot) and real-time autonomous navigation (e.g., Google’s self-driving car). Intellectually, the field of artificial intelligence has begun to understand that intelligence requires embodiment and has begun to understand Moravec’s paradox, which ponders the question of why we can calculate the square root of 2 using a couple thousand transistors, but need billions of them to make a robot run like a lizard. A lizard uses physical computation, e.g., elasticity in its legs, which is tightly intertwined with its neural networks. Building Rosie will require us to better understand how humans accomplish these tasks and make materials that are just as smart.

4. What is a favorite object you keep in your office?
I have a Rubik’s Twist. It’s a snake made of 24 prisms that can be rotated against each other. Twisting them the right way can let you form all sorts of shapes, from a ball to a rubber duck. Altogether you can form something like $10^{13}$ different shapes. I’m not good at it, but if I could automate the twisting and, better yet, have different snakes (self-)assemble into larger objects, there is probably little that couldn’t make itself just in time when needed.

5. What is a goal you would like to accomplish in the upcoming years?
I’d like to establish “swarm intelligence” as the science of everything. I feel that the interesting behavior that we can observe in social insects is just the tip of the iceberg, and that even the human body is nothing more than a very complex swarm: elementary particles interact and communicate with each other to make up atoms, molecules, cells and eventually organs like a retina or the brain.

Dozens of new exhibitors set for Supplier Showcases

The Procurement Service Center (PSC) has announced the seventh annual Supplier Showcase series on the University of Colorado campuses. The events will feature 26 new exhibitors, more than ever before.

The showcases give CU faculty and staff convenient opportunities to meet with existing suppliers and discover goods and services from potential new vendors. PSC staff will be available to answer questions about fiscal procedures,
travel rules and Marketplace.

Representatives from various campus departments also will be on hand to discuss a variety of topics, including sustainability and ethics. More than 1,200 CU employees are expected to participate in these events.

The schedule:

**CU Denver | Anschutz Medical Campus:** 9:30 a.m.-1:30 p.m. Friday, Sept. 14, RC2 Conference Room, Second Floor

**UCCS:** 10 a.m.-1 p.m. Wednesday, Sept. 19, University Center, Berger Hall

**CU-Boulder:** 10 a.m.-2 p.m. Wednesday, Sept. 26, University Memorial Center, Glenn Miller Ballroom

Showcase sponsors Staples, Dell, The Parking Spot and Xerox will be featured. Also, representatives from Colorado Correctional Industries and Christopherson Business Travel will be in attendance.

Showcase exhibitors will represent a variety of industries, offering an array of goods and services; click here for details, including the current list of exhibitors.

All faculty and staff, regardless of home campus, are invited to attend any or all of the showcases; attendees are encouraged to register now so the PSC can plan adequately.

Questions: Penny Davis, penny.davis@cu.edu or 303-764-3445.

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**Sher to step down as dean of CU-Boulder’s College of Music**

University of Colorado Boulder Provost Russell Moore announced that he has accepted the resignation of Daniel Sher as dean of the College of Music at CU-Boulder effective June 30, 2013.

Sher, who will have served in the post for 20 years when he steps down next summer, will return to the College of Music faculty. He was named dean of the College of Music in July of 1993.

“During Dan’s tenure he has developed particularly strong partnerships with our surrounding performance and outreach music communities,” Moore said. “He has also significantly increased the college’s endowment by fivefold and annual cash giving by nearly tenfold, in addition to establishing the first two endowed faculty chairs.”

Moore added that since Sher has been dean, the College of Music has established the Entrepreneurship Center for Music, which was the first of its kind in the United States; created Jazz Studies degrees from the bachelor’s through the doctorate level, and added new graduate programs in music theory, collaborative piano at the master’s and doctorate levels and graduate professional certificate programs in opera, woodwind and string quartet performance.

CU-Boulder has been cited the past three years by the Fiske Guide to Colleges as one of just 25 in the nation -- among a total of 1,200 music programs in higher education -- for its excellence in music and has been ranked in the top 20 among all college, university and conservatory music programs by U.S. News & World Report.

Moore made the announcement Aug. 30. He said that after consultation with Chancellor Philip P. DiStefano, he hopes to move forward quickly with a national search to fill Sher’s post.

“Not only has Dean Sher advanced the College of Music in unimaginable ways in an era of budget austerity, he has been instrumental in establishing the university as a cultural and performing arts hub attracting 385,000 citizens to
campus annually,” said DiStefano, who has worked with Sher for the past 20 years. “He will bring the same energy as a professor that he does as dean and I am thrilled he will remain on the faculty.”

Sher served as president of the National Association of Schools of Music, the U.S.-designated accreditation association for music in higher education, and president of Pi Kappa Lambda, the National Honor Society for Music in the U.S.

He was previously on the piano faculty at the School of Music at Louisiana State University, where he served as dean from 1984 to 1993. He is a past president of Pi Kappa Lambda, the national honor society for music, and currently serves on that group’s Board of Regents.

Sher received his bachelor’s degree in piano performance from the Oberlin Conservatory, a master’s degree from the Juilliard School and a doctorate in piano pedagogy from the Teachers College of Columbia University.

Current and former advisory board members are establishing a scholarship fund through the CU Foundation to honor Sher’s 20 years of service and leadership. The endowment will be used to support talented undergraduate music students from the state of Colorado.

Cover photo by Casey A. Cass/University of Colorado

Resources must be used to take heat off

Aug. 30: Once again it is another 90-plus-degrees day and those of us who work, teach and study in buildings without a swamp cooler or air conditioning are suffering. I not only work in such a building, McKenna, but am an alumna of the University of Colorado Boulder. For the past 25 years of my association with the university, faculty, staff and students in buildings such as McKenna and other non-administrative and non-science buildings swelter in the hot, dry days of late spring, summer and early fall.

The continuously high temperatures in these buildings make it all but impossible to successfully complete our individual mission to the university and general public. Students are crammed into classrooms which are equally as uncomfortable, making learning difficult if not impossible. Were I a parent of such a student, I would be upset at the conditions my student must endure to receive a very expensive education.

For years I have brought building problems to any administrator who would listen. Facilities Management is sympathetic but their hands are tied because the Architect will not allow window air conditioners. Each year, Facilities Management conducts a walk-through of the buildings on campus noting their problems and condition. In my 18 years as a staff person I have yet to realize any significant improvements that bring our building into the 21st century.

The occupants of this building, and others like it, are only too aware of the problems, challenges and health issues faced each day, year after year from working under these conditions. We care about the university and we love the work we do. We sacrifice a lot to work here and support its mission. Faced with five years of no raises, significant increase in job responsibilities, increases in cost of living and lack of administrative support, we continue to give 100-plus percent. Don’t you think it is about time the university and the state recognize that we are vital to their success and channel resources into the very least making a comfortable and productive work environment?

Doreen Williams
Program Assistant, Spanish and Portuguese Department
McKenna Languages Building Proctor
CU-Boulder
Caring for Colorado Foundation grant will boost nursing education at UCCS[15]

The Caring for Colorado Foundation recently awarded a $100,000 grant to the University of Colorado Foundation on behalf of the Beth-El College of Nursing and Health Sciences at the University of Colorado Colorado Springs. The grant will improve access to nursing education programs and expand the health care workforce in southern Colorado through the use of innovative, high-fidelity patient simulation technology.

Beth-El has helped train southern Colorado’s health care workforce for nearly 110 years, and in 2011 initiated the Southern Colorado Rural Nursing Education and Practice Collaborative Program to transform nursing education in southern Colorado.

The program and the Caring for Colorado grant address a critical problem. The U.S. nursing shortage is projected to grow to 260,000 by the year 2025, and Colorado’s nursing vacancy rate is double the national average. Rural southern Colorado faces extreme challenges recruiting advanced practice nurses and nursing faculty. The associate nursing degrees the community colleges offer do not alone qualify graduates for teaching or nurse practitioner roles — impeding these communities’ ability to provide high-quality health care to their citizens.

Central to the Beth-El College of Nursing and Health Sciences program is the use of Cisco TelePresence technology, which enables students to learn from electronically simulated patient encounters. Students at the community colleges take part in the classes being taught at UCCS and receive instruction through high-quality audio and the streaming of high-definition video.

Caring for Colorado’s grant will enable nurses and nurse faculty at University of Colorado Colorado Springs, Lamar Community College and Otero Community College to be trained using the high-fidelity patient simulation technology.

Caring for Colorado is a health grantmaking foundation working to increase health and health care access statewide. For more information, please visit www.caringforcolorado.org[16].

September is Bike Month at UCCS[17]

Officer Steve Dewey, left, and Provost Peg Bacon ride as part of 2011 Bike Month festivities.

The Office of Sustainability will sponsor several events throughout September to celebrate Bike Month at UCCS.

“Sustainable transportation is something we all need to focus on,” said Josh Hendrickson, a student employee in the Office of Sustainability and event organizer for Bike Month. “We live in a great climate and a great city for bicycling, and we really want to expand the usage of bicycles on campus and help people realize what a great opportunity we have to do so.”

In addition to special events, the office is conducting a Bike Month Challenge to encourage campus members to walk or use their bike for their daily commute. There will be two grand prizes, one for the most number of days bike commuting, and one for the most overall bike commute miles (participants must commute at least four times during the month). To register for the challenge, visit http://www.ucssbikemonthchallenge.eventbrite.com[19] and follow the instructions.
Bike Month events are:

**Bike Jam 4: Pedal Power** – 10:30 a.m. – 1 p.m. today, El Pomar Center Plaza

The fourth annual Bike Jam event celebrates alternative transportation and kicks off Bike Month with music, vendor booths, bike demos, free tune-ups and contests for prizes. A free lunch will be provided by Chipotle Mexican Grill for participants who ride to campus or visit at least two booths.

**Alternative Transportation Lunch-n-Learn Movies** – Noon- 1 p.m. Sept. 11, 17 and 27, University Center Theater room 302

Half-hour films about how cities across the globe are tackling sustainable transportation issues. Bring your lunch and munch while you watch. Short discussions will follow.

**MetroRides Ride Your Bike to Work Day** – 6 a.m. Sept. 12, University Village Colorado shopping center

Students, faculty and staff members will join with Colorado Springs City Council member and others traveling from UVC to a free breakfast at the Pioneer Museum downtown. Register for the breakfast at www.springsgov.com/Page.aspx?NavID=3921.

**Bike for Bagels** – 7:30 a.m. Sept. 19, Columbine Hall entry

Those who ride bikes to campus can receive a free bagel.

**Adopt-A-Waterway** ? 10 a.m. – noon Sept. 25, Parking Lot N (University Hall)

The Office of Sustainability’s most popular volunteer event, Adopt-A-Waterway offers a free lunch to volunteers who help protect the local water supply.

**Bike Riders’ Breakfast** – 7 a.m. – 10 a.m. Oct. 2, University Center Lower Plaza

A free breakfast from Rudi’s Organic Bakery for bike riders will close Bike Month. All Bike Month Challenge logs must be turned in by 10 a.m. to be eligible for prizes.

– Matt Sidor, Office of Sustainability

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**NOAA selects CU-Boulder to continue joint leadership of CIRES**

The National Oceanic and Atmospheric Administration has selected the University of Colorado Boulder to continue a federal/academic partnership that extends NOAA’s ability to study climate change, improve weather models and better predict how solar storms can disrupt communication and navigation technologies.

The selection means that NOAA will continue funding the Cooperative Institute for Research in Environmental Sciences, or CIRES, for at least five years and up to 10 more years. CIRES was established at CU-Boulder in 1967.

The amount of the award is contingent on the availability of funding in the federal budget, but NOAA anticipates that up to $32 million may be available annually. Total NOAA funding is variable from year to year and is based on the number of projects the university proposes and NOAA approves.

Following a competitive process, NOAA selected CU-Boulder to administer the CIRES partnership, which leverages university resources to expand understanding of the “Earth system” -- the interrelationships among the atmosphere,
oceans, land, living things and the sun’s energy.

“Improving our understanding of the Earth system is critically important as the build-up of greenhouse gases in the atmosphere is forcing changes in all of its processes,” said Robert Detrick, assistant administrator of the NOAA Office of Oceanic and Atmospheric Research and chairman of the NOAA Research Council. “The University of Colorado has been an excellent partner to NOAA in pursuing this mission.”

NOAA’s first cooperative institute, CIRES is marking its 45th anniversary this year and is now one of 18 NOAA cooperative institutes nationwide. NOAA competitively funds cooperative institutes at universities with strong research programs relevant to NOAA’s mission. These institutes provide resources and opportunities that extend beyond the agency’s own research capacity.

“Partnership in environmental research with the NOAA Boulder laboratories is the keystone of CIRES research,” said CIRES Interim Director William Lewis Jr. “We have great ambitions in joint research with NOAA over the next five years.”

The partnership allows researchers at CU-Boulder to receive support for research projects that may involve NOAA scientists, primarily at the Earth System Research Laboratory in Boulder as well as other NOAA cooperative institutes.

The CIRES partnership will focus on nine research themes:
- Air quality in a changing environment
- Climate forcing feedbacks and analysis
- Earth systems dynamics, variability and change
- Management and exploitation of geophysical data
- Regional science and applications
- Scientific outreach and education
- Space weather understanding and predictability
- Stratospheric processes and trends
- Systems and prediction models development

“With pressing issues like air quality, climate change and space weather now at the forefront globally, the University of Colorado Boulder is eager to continue this crucial partnership with NOAA,” said CU-Boulder Vice Chancellor for Research Stein Sture. “CIRES is known around the world for advancing our understanding of the complex Earth system and as a premier institution in educating the next generation of environmental scientists.”

NOAA supports cooperative institutes to conduct research, education, training and outreach aligned with its mission. Cooperative institutes also promote the involvement of students and postdoctoral scientists in NOAA-funded research. This unique setting provides NOAA the benefit of working with the complementary capabilities of a research institution that contribute to NOAA-related sciences ranging from satellite climatology and fisheries biology to atmospheric chemistry and coastal ecology.

Study: Chemical used in hand soaps may impair muscle function[24]

A widely used antibacterial chemical found in hand soaps and other personal care products hinders muscle contractions at a cellular level, reduces muscular strength in mice and slows swimming in fish, according to researchers at the University of Colorado School of Medicine and the University of California, Davis. The findings appear online in the Proceedings of the National Academy of Sciences of the United States of America.

“It’s somewhat disconcerting to see this compound so prevalent in so many everyday products knowing that it can have such a negative effect on cardiac and skeletal muscle function,” said CU School of Medicine Professor Kurt Beam, Ph.D., Department of Physiology and Biophysics. Beam and CU School of Medicine Assistant Professor Roger Bannister, Ph.D., Department of Cardiology, are co-authors of the study.

In 1998, the U.S. Environmental Protection Agency estimated that more than 1 million pounds of triclosan are produced in the United States annually and found the chemical in waterways and aquatic organisms ranging from algae to fish to dolphins, as well as in human urine, blood and breast milk.
Triclosan is found in everyday antibacterial personal care products including hand soap, deodorant, mouthwash, toothpaste, bedding, carpets, toys and trash bags.

"The commonality between cardiac and skeletal muscle is the keystone protein that transduce the electrical signals into muscle contraction," explained Bannister, who was a post-doctoral researcher in Beam's lab at the time of the study. "Our work indicates that triclosan inhibits these proteins from engaging muscle contraction."

The experiments performed by the investigators used doses of triclosan similar to those that people and animals might be exposed to during everyday life. The investigators then evaluated the effects of the additive on muscle activity.

Triclosan was found to impair the ability of isolated heart muscle cells and skeletal muscle fibers to contract in "test tube" experiments. The team targeted its evaluation on the effects triclosan had on the molecular channels in muscle cells that control the flow of calcium ions, creating muscle contractions.

Normally, electrical stimulation- "excitation"- of isolated muscle fibers under experimental conditions evokes a muscle contraction, a phenomenon which is known as "excitation-contraction coupling" (ECC). ECC is the fundamental basis of any muscle movement, including heartbeats. But, in the presence of triclosan the communication was impaired between the two proteins that function as calcium channels, causing cardiac and skeletal muscle failure.

The team also found that triclosan impairs heart and skeletal contractility in living animals. Within 20 minutes of exposure to the chemical, anesthetized mice had up to a 25-percent reduction in heart function. And, after just a single dose of triclosan, the grip strength of the mice was reduced by 18 percent for up to 60 minutes. Grip strength is a common measure of mouse limb strength, used to investigate the effects of drugs and neuromuscular disorders.

"Our findings regarding the effects of triclosan on cardiac and skeletal muscle excitability are fairly conclusive," Beam said.

Added Bannister, "What needs to be determined next is how much triclosan gets into the tissues of people and what the toxicity levels truly are. It will also be important to determine the extent to which it accumulates in fish and other aquatic animals."

Fathead minnows, often used as a model organism for studying the potential impacts of aquatic pollutants, were also part of the study. After seven days of exposure to triclosan in the water, the fish exhibited significantly reduced swimming activity compared to the controls during both normal swimming and swim tests designed to imitate fish being threatened by a predator.

Previous UC Davis research had linked triclosan to other potentially harmful health effects, including disruption of reproductive hormone activity and of cell signaling to the brain.

Triclosan was developed more than 40 years ago to prevent bacterial infections in hospitals. Since then, it has become prevalent in household antibacterial products. But, according to the U.S. Food and Drug Administration (FDA), with the exception of its use in some toothpastes to prevent gingivitis, there is no evidence of other health benefits from triclosan, nor that antibacterial soaps are more effective than washing with soap and water. There also is concern among experts that resistant strains of bacteria could be developed due to the overuse of antibacterial products.

The chemical structure of triclosan resembles other toxic chemicals in the environment, sparking the FDA and U.S. Environmental Protection Agency to conduct new risk assessments. Pointing to their study outcomes, the researchers are calling for greater restrictions on the chemical to safeguard against potential health risks.

"One concern is the direct application of this product," said Beam, "when, for example, a person brushes their teeth or uses a soap dispenser in a washroom. This research suggests that we may need to rethink triclosan's presence in a lot of these marketed products. Besides the possibility that it may affect human health, there is also a danger that its constant discharge into the water may negatively affect fish and other aquatic organisms."
"The findings concern us in a much broader context," concluded Bannister. "There are many unnecessary additives out there, not only in our hygiene products but also in our food. Triclosan is just one example and is almost certainly not the worst one of the lot."

A copy of the study, titled "Triclosan impairs excitation-contraction coupling and Ca2+ dynamics in striated muscle," can be requested by e-mailing PNASNews@nas.edu[26].

The research was funded by the National Institutes of Health, the Muscular Dystrophy Association and the J.B. Johnson Foundation.

Other authors of the study are Isaac Pessah, principal investigator, professor and chair of the Department of Molecular Biosciences in the UC Davis School of Veterinary Medicine; Gennady Cherednichenko, Rui Zhang, Erika Fritsch, Wei Feng and Genaro Barrientos of the UC Davis School of Veterinary Medicine; Nipavan Chiamvimonvat, Valeriy Timofeyev and Ning Li of the UC Davis Division of Cardiovascular Medicine; Bruce Hammock and Nils Schebb of the UC Davis Department of Entomology.

Students briefed on how to find jobs in federal government[27]

Getting a job can be difficult. Getting a federal government job can be twice as difficult, but members of the United States Office of Personnel Management[29] (OPM) were on the Auraria Campus to give students tips on how to navigate USAJobs.gov[30], how to write a resume for the government sector and the opportunities for students in the government. The workshop was put on by the School of Public Affairs[31].

Director of OPM John Berry described the government job sector: “It’s an amazing operation. Anything you can imagine, the government has a position for it.”

Under President Obama, the process for students to get their foot in the federal door has become easier. Previously students competed in open competition with people who had numerous years of experience. Now there are three ‘pathways’ that students can take.

The first pathway is for students currently enrolled in an undergraduate program. The intern pathway gives students a paid internship and, after 600 hours, the student can be hired into a permanent position. In order to be eligible, students must be enrolled in an accredited school, ranging from high school through technical, vocational and traditional four-year colleges/universities.

The second pathway is for students who have already graduated with an undergraduate degree. Individuals are eligible for as long as two years after their degree is received, unless they are on active duty in the military; it is then extended to six years.

Especially beneficial for graduates is the fact that this pathway is not an open competition, so there are only other recent graduates applying.

“In open competition, students will always lose,” Berry said.

The final pathway is for students enrolled in graduate studies. This program is called Presidential Management Fellows Program[32] (PMF). This pathway is more directed to making the next generation of high-level management. The PMF program is very competitive, but places students in a mid-level management position when completed.

Todd Floershein from the Recruitment Policy and Outreach team walked through how to find and apply for jobs on USAJobs.gov.
“Read the whole description, that alone will put you in the upper 10 percent of applicants,” Floersheim said. He added, “Don’t just send out 100 resumes that are all the same. Really take the time to tailor to each job description.”

There are also programs for veterans to obtain government jobs. Shelley Anderson described the process: “Currently there are 570,000 veterans working for the United States government, and we always want to increase that number.”

In addition to Veteran Affairs, representatives also were at the session from the U.S. Forest Service and the FBI (Federal Bureau of Investigation).

The pathways program just went into effect in mid-July. Floersheim said the goal is to have every agency fully updated and on board with the new recruitment system by the end of the year.

Berry said, “I am so pleased with students these days. They want to know ‘where can I make the biggest difference’ and that is really uplifting.”

President’s Employee of the Year Award includes $1,000

CU System Staff Council is soliciting nominations for the Sixth Annual President's Employee of the Year Award, which will be presented to one system administration employee in recognition and appreciation of exceptional job performance. An award of $1,000 (subject to payroll taxes) will be presented to the chosen employee at a recognition reception hosted by System Staff Council on Oct. 26.

All system administration classified and professional exempt staff may be nominated for the award; however, temporary employees, student workers, university officers, the HR director and recognition committee (David Pierce, Teena Shepperson-Turner and Lisa Vallad) are ineligible. Nominations are accepted from fellow staff, faculty or students who have first-hand knowledge of the nominee’s performance. The nominee’s supervisor must provide written approval of the nomination.

Submit a letter of nomination, and two or three additional letters supporting the nomination, electronically to the HR Director, Lisa Landis, at lisa.landis@cu.edu (confirmation of receipt will follow). The total submission should not exceed six pages. Nomination letters must describe why the person deserves to receive the award. Click here for more details.

Nominations will be accepted through 5 p.m. Friday, Sept. 28.

Blood drive next week at UMC

Boulder Staff Council has announced dates for its next blood drive.

Appointments or walk-ins are available from 10 a.m. to 3:30 p.m. Monday through Thursday, Sept. 10-13, in University Memorial Center rooms 380-386. See the poster here.

To schedule an appointment in advance, contact the Bonfils Appointment Center, 303-363-2300, or www.bonfils.org. Use Site Code: 0248.
Obituary: Alvin M. Malkinson, Ph.D.

Alvin M. Malkinson, a professor and longtime lung cancer researcher at the University of Colorado School of Pharmacy, died Aug. 3 at his home in Boulder. He was 71.

Malkinson earned his Ph.D. in biochemistry at Johns Hopkins University in Baltimore, then he and his wife, Lynn, spent two years in Kenya with the Peace Corps. He went on to post-doctoral work at the University of Leicester in England and Yale. In 1974, he worked as an assistant professor at the University of Minnesota and joined the University of Colorado in 1978.

During his 38 years at CU, he researched lung cancer, published numerous papers and, in 2004, won the Shell prize for outstanding research and teaching. As a professor of biochemical pharmacology, he taught both undergraduate and graduate classes through spring of this year. He also mentored many students over the years, offering career advice and support.

He loved creative writing, and wrote both under his own name and a pseudonym, and attended dozens of concerts, plays and films each year.

In a eulogy on behalf of colleagues, Lori Dwyer-Nield, an associate research professor at the School of Pharmacy, said, “He cared about each individual. It didn’t matter if you needed to talk to him about a personal problem or an irksome experiment. He did his best to help. … Goodbye Al. Science won’t be nearly as fun without you, but we’ll carry on with your work because you taught us to keep trying even when things seem impossibly hard — and when all else fails, go see a movie."

Malkinson is survived by his wife, children Zak and Sabra, and several grandchildren. Contributions may be forwarded to the Family Hospice Foundation, 1790 30th Street, Suite 306, Boulder, CO 80301, or the Dairy Center for the Arts. The funds will be earmarked for the Boedecker Theater under the Al Malkinson Memorial Fund.

Smerdon named interim AVP for Tech Transfer

Tom Smerdon, who has worked in the Technology Transfer Office (TTO) since 2005, has been named interim associate vice president for technology transfer. In his new role, Smerdon has responsibility for intellectual property and technology licensing matters across all CU campuses.

He joined TTO in 2005 as director of new business development, and since 2007 has served as director of licensing and new business development. In that role, he is particularly focused on start-up companies based on CU technologies. Smerdon also manages TTO’s Proof of Concept investment (POCi) program and handles shareholder and equity-related agreements for the University License Equity Holdings Inc., which holds the private equity received in connection licenses to start-up companies.

Prior to that, he was associate director for The Ohio State University’s Office for Technology Licensing. Before entering
the university tech transfer arena, Smerdon was general counsel and director of environment, health and safety for an Ohio-based private adhesive and polymer manufacturer and before that was assistant general counsel of the Chemical Manufacturers Association in Washington, D.C. Tom is a graduate of Duke University and the University of Texas Law School.

**Hiltner hired as assistant athletic director**

Hiltner

Erin Hiltner, a Limon native and the former assistant commissioner of the Great Lakes Valley Conference (GLVC), is the new assistant athletic director for compliance for the University of Colorado Colorado Springs Athletic Department.

“It feels great to be coming back home to Colorado with this opportunity to be at UCCS and part of the (Rocky Mountain Athletic Conference) again,” Hiltner said. “UCCS is such a remarkable campus and I feel so fortunate to be coming in at a time where a lot of great things are going on. I am elated and very much looking forward to working with the student-athletes, coaches, alumni and staff.”

Hiltner spent the last year as an assistant commissioner and senior woman administrator for Indianapolis-based GLVC. She worked with 17 Division II institutions to validate National Letters of Intent, review institutional self-study guides and helped with 18 conference championships. She also was the liaison to the Student-Athlete Advisory Committee and organized SAAC professional development and community service engagement activities.

Before joining GLVC, Hiltner worked in a variety of positions at Colorado Mesa University from 2004 through 2011. She worked with the Maverick Wrestling Camps before moving on to be the camp coordinator for the athletic department. She was the ticket manager for the NCAA Division II Central Region Baseball Tournament in 2009, taught introduction to higher education in the 2010 and 2011 fall semesters and was a graduation and registration specialist for the Colorado Mesa University Registrar’s Office during the 2010-11 academic year.

She earned her bachelor’s degree in management in 2006 from Colorado Mesa University. She graduated from Limon High School in 2003. Hiltner is active in the National Association of Collegiate Women Athletics Administrators.

**Harding leads international seminar on Afro-Brazilian art, religion**

Harding

Rachel E. Harding, assistant professor of indigenous spiritual traditions, Department of Ethnic Studies at the University of Colorado Denver, led a 12-day travel seminar to Brazil earlier this summer.

The program was for members of the Society for the Study of Black Religion, a professional organization of scholars of Afro-Atlantic religious traditions.

The seminar focused on the conjunction of activism, art and religion in the Afro-Brazilian human rights movement and introduced participants to one of Brazil's major African-based ritual practices, Candomblé.

In July, Harding presented a lecture on Afro-Brazilian Religion for North American and Brazilian faculty participating in
the 2012 UNCF/Mellon International Faculty Seminar "Race, Rights and Rebellion."

Dropping names …[48]

Qualls

**Sara Qualls**, Kraemer Family Professor of Aging, Department of Psychology at the University of Colorado Colorado Springs, received the Mentorship Award from American Psychological Association Division 12, Section II (Society for Clinical Geropsychology). The award was presented last month at the APA Annual Convention in Orlando, Fla.

… University of Colorado Colorado Springs faculty members were part of a contingent who represented Team USA at the Paralympic Games in London. **Craig Elder**, instructor, Beth-El College of Nursing and Health Sciences, and **Garrett Klugh**, instructor, College of Business, worked at the games. Bryce Boarman, a Colorado Springs junior majoring in sport management in the College of Business, and Asya Miller, a member of the class of 2008, participated as athletes.

Links
[1] https://connections.cu.edu/stories/five-questions-nikolaus-correll
[8] https://connections.cu.edu/file/showcasejpg
[9] https://www.cu.edu/psc/purchasing/supplier_showcase.html
[11] mailto:penny.davis@cu.edu
[14] https://connections.cu.edu/letters/resources-must-be-used-take-heat
[17] https://connections.cu.edu/stories/september-bike-month-uccs
[24] https://connections.cu.edu/stories/study-chemical-used-hand-soaps-may-impair-muscle-function
[26] mailto:PNASNews@nas.edu
[27] https://connections.cu.edu/stories/students-briefed-how-find-jobs-federal-government
[33] https://connections.cu.edu/stories/president%E2%80%99s-employee-year-award-includes-1000
[34] mailto:lisa.landis@cu.edu
[36] https://connections.cu.edu/stories/blood-drive-next-week-umc