CU Connections Issue: April 17, 2014

Five questions for David Reed

David Reed earned an undergraduate degree in electrical engineering, but he soon realized he was less interested in building devices than he was in assessing the bigger picture surrounding communication technology. And so he gravitated toward interdisciplinary programs during his graduate studies.

“They allowed me to focus on tech and understand how it worked, but also to incorporate the economic and policy trends and developments into describing the bigger picture more accurately,” Reed said. “That’s how I got to the Carnegie Mellon University Ph.D. program.” And that’s what also launched him into the communications and cable technology industry.

He worked for the Federal Communications Commission, then spent nearly 20 years as chief technology officer and chief strategy officer at CableLabs, a research consortium of cable television companies.

Now the Boulder native has come full circle, returning to the university where, as a youngster, he once sold sodas at Folsom Field but this time as a visiting scholar in residence at the Interdisciplinary Telecommunications Program. He also is leading the development of the Center for Broadband Engineering and Economics, which will train graduate and Ph.D. students to not only participate in the broadband ecosystem as engineers, but also become good decision-makers and natural leaders.

1. It seems that the broadband industry has exploded in the recent past. In what ways did the industry change while you were at CableLabs?

If you look at the industry from where we were 20 years ago to where we are today, it is true that it has exploded. But if you parse it down to smaller increments of time, you can see the gradual progression of advances in communications technology, incorporating and developing the notion of what we now call broadband. I think what’s been amazing is actually being able to work on developing the broadband platform, particularly on the cable side, that has had such an impact on society.

When I first started working on the cable platform, digital television was transforming society. With digital, you were able to get more channels as well as higher-quality television pictures. All of a sudden, instead of getting four to nine broadcast channels, you literally had 100 different channels, and the impact of all these different channels on lifestyle – whether you are fueled by an interest in sports, cooking or whatever – has been extraordinary.

Another change – one that emerged beginning in the late ‘90s – was the Internet. It has changed how we search for and acquire information. The cost of doing this has been cut significantly and the ease of searching has greatly improved with the improvements in broadband services. We have so much information, literally, at our fingertips as an extension of the keyboard, and that has transformed our society again. While we take it for granted today that we don’t have to go through that long, gruesome boot-up process anymore; information always is available and searching for it is second nature to us now.

The third wave of change that is coming is the increasing speed of broadband, giving us the ability to more rapidly access larger amounts of personal information or high-quality entertainment.

2. You’ve been at the university for a year. Is the job of teaching what you expected, and what have you learned? What types of research are you conducting?

I really enjoy the teaching. In the business world, you are very focused and moving really quickly and you don’t necessarily have as much time for reflection as you would like. As the professors here have told me again and again, to really learn something and to be able to understand and absorb the material, you need to teach it. Teaching has been gratifying and enriching.
I have been doing research, looking at the growth in broadband enabled by new wireless technologies. For example, the emergence of Wi-Fi has been a significant development. My research looks at the evolution of Wi-Fi standards, in particular, how Wi-Fi is used by service providers to deliver services.

I’ve also gotten a couple of research gifts. One was from Google. I worked with co-authors at Google to study the issue of the Internet in emerging countries where a significant percentage of the population is not connected and how these individuals will be connected over the next 20 to 30 years. We take it for granted here because of the incredibly rapid rollout of broadband technology, even though we just started deploying this technology less than 20 years ago. I worked with my Google co-authors to develop broadband roadmaps that described a progression for the rollout of technology to deliver broadband services to underserved areas throughout the world.

A second research gift from Comcast looks at different topics, but those are still under wraps.

Here at ITP, we’re looking at video-streaming, which, as a broadband application, consumes the most bandwidth on networks today. I will be working over the summer to create a video lab that will be filled with the equipment we’ll need to research and better understand this technology. If all goes well, this fall we will have a lab course where students will be able to conduct a set of experiments allowing them hands-on experience with this strategic technology, and prepare them for a job in the robust broadband sector.

3. Do you have concerns about the broadband industry, now or for the future, and what continues to excite you about the technology?

What’s exciting is we’re seeing a rapid increase of bandwidth that’s being delivered to consumers and that will serve as an innovation stimulus for broadband applications. We don’t know how we’ll use that in creative ways, but because the cost of delivering information on a per-bit basis is rapidly falling, we’ll see innovation that focuses on how to take advantage of that increased information-carrying capacity capability. For instance, you’ll have applications that will sense the information-carrying capacity your network has and will allow you to customize your quality of experience based on your likes and dislikes.

Of course the downside centers around privacy and the transparency associated with the decisions you make and what will be tracked and not tracked. It’s important that those decisions are respected. As huge data centers have the ability to store more information, we have to make sure the policy side keeps up from a privacy perspective.

4. Do you have a goal you’d like to accomplish in the next few years?

I’ve been fortunate to work in broadband industry where there have been enormous game changers for society. If you would have asked me in the ’90s how much cable television would change our lives, I wouldn’t have recognized it. If you would have told me that folks would be using mobile phones to check in with their spouse, I would have said that is an expensive luxury. If there’s a goal, I would say it is to help participate in the next broadband game changer through technology development and the training of students.

5. What are your interests outside of work?

My wife, Elizabeth, and I have raised two wonderful daughters, one who is now a sophomore at CU-Boulder, and the other now choosing where she will go to college. As a native Coloradan, I’ve got all the vices: fishing, hiking, skiing, sailing (on Dillon Lake) and golfing. I love the outdoors!
Record $10 million Colorado Law commitment will establish two faculty chairs

Byron Chrisman (‘66), perhaps one of the University of Colorado Boulder Law School’s most unlikely success stories, attributes his success as a tax attorney and real estate developer to his experience at Colorado Law.

Now he and his wife, Carlene, have committed a $10 million bequest to endow the Byron and Carlene Chrisman Chairs in Free Enterprise at Colorado Law. When realized upon their passing, this estate gift will be the largest cash gift in the history of Colorado Law.

The endowed chairs will fund, in perpetuity, two senior faculty positions to be held by national-caliber scholars with a deep appreciation for and commitment to capitalism and free enterprise. Endowed chairs, of which the University of Colorado has roughly 100, are a public bellwether of faculty accomplishment and help universities recruit and retain top talent.

“I think law school teaches people how to think better than anything else I know of,” Byron Chrisman said. “My goal is not to see just capitalism and free enterprise taught as the only way, but rather that all ideas will be fully taught: the good, the bad and the ugly.”

Few would have predicted law school success for Chrisman at age 12, when he left his Illinois home and quit school after eighth grade to milk cows and pick cotton. He later continued his schooling, earned a GED certificate after joining the Army, moved to Colorado, tried and failed to gain admission to Colorado Law due to poor LSAT scores, and took a job with the Internal Revenue Service.

In his IRS role he met Edward King, then dean of Colorado Law, and made such a strong impression on the dean that he was soon offered admission as a special student, so long as he retook the LSATs and got an acceptable score (which he did).

“Byron Chrisman embodies the spirit of Dean Ed King,” explained Colorado Law Dean Phil Weiser. “He is committed to ‘paying it forward’ and sharing his entrepreneurial spirit with future Colorado Law students.”

In 1975, Chrisman co-founded Chrisman and Bynum, which later (as Chrisman Bynum & Johnson) became Boulder’s largest law firm. His focus shifted later in his career toward the development of commercial real estate, eventually turning $15-plus million in outside capital into 10 times that amount for his investors. Though he retired from law practice in 1997, Chrisman-formed companies continue to hold more than 700,000 square feet of commercial space.

In addition to the establishment of the Chairs in Free Enterprise, the Chrismans’ estate gift also includes four $100,000 donations to scholarship funds established to honor four former Colorado Law faculty leaders: Harold Bruff, David Getches, Jim Carrigan and Edward King.

“One of the big reasons for giving the money to Colorado Law is the value, and the domino effect, of education,” Carlene Chrisman said. “Students who learn at Colorado Law then go off into the world, and educate and influence many others.”

Fundraising for new athletics facilities celebrated at spring football game
The University of Colorado Boulder plans to break ground May 12 on several new athletics facilities and upgrades to Folsom Field after a record-breaking year of private donations.

In the past seven months, the CU Athletic Department has made significant progress on the fundraising goals and anticipates meeting that goal in the very near future. Completion of the majority of the project is expected prior to the fall 2015 football season.

The proposed facilities include:

Construction of a 120,000-square-foot indoor multipurpose practice facility on top of Franklin Field, to include a 100-yard artificial turf football field and a six-lane, 300-meter track; Refurbishment of the Dal Ward Athletics Center, completed in 1991, to include an Olympic sports strength training room in the sub-basement level and new locker rooms and an equipment room on the field level; Redesigning of Dal Ward’s first floor for the expansion of an Olympic sports/sports medicine complex, a leadership development center and an end zone club with club seating and loge boxes; Transforming the second floor of Dal Ward to triple the athletic department’s academic support system from its current 5,000 square feet to 15,000 square feet; Building additional restrooms and concession areas on the east side of Folsom Field; and Adding a 21,900-square-foot-high performance sports center on the northeast corner of the stadium, as well as a rooftop terrace, and converting the south offices at Folsom Field to retail space. The rooftop terrace will generate revenue by being available for rent for non-gameday events. The high-performance sports center will host collaborative research conducted by CU-Boulder integrative physiology faculty and researchers at the CU Anschutz Medical Campus.

Facilities Fly Through (article continues below video)

“Thanks to the generosity of numerous donors, season ticket holders, alumni, faculty, staff and friends of the university, we’re able to move forward with this project,” said Athletic Director Rick George. “It will greatly benefit our student-athletes and will allow us to collaborate with both the campus and Boulder communities.”

CU-Boulder celebrated the announcement during halftime of Saturday’s spring football game. The ceremony featured remarks from CU President Bruce Benson, CU-Boulder Chancellor Phil DiStefano, George and two student-athletes, Juda Parker (football) and Clare Wise (skiing).

“Our success in bringing in the kind of support necessary to do these renovations is due in no small part to our membership in the Conference of Champions, the Pac-12,” George said. “We are honored to celebrate this announcement with our partners in the Pac-12 Network as we move toward a great future in the conference.”

The CU Board of Regents approved the facilities upgrades in December, but required that one-third of the funds for the $143 million project be privately raised prior to construction. No tuition money or tax dollars will go toward the project. DiStefano and George will provide a fundraising update to the Board of Regents at its April 29-30 meetings.

George, hired in August, set a goal of raising $47.6 million to serve as seed money for the project, with the balance to come from bonds.

“The performance of Rick George and his fundraising team in his first seven months at CU has been record-breaking,” said Chancellor DiStefano. “Our student-athletes, fans and community have awaited critical upgrades to our facilities for many years. We have been very conscious of the need to execute these upgrades in a responsible, deliberate and sustainable way. These facilities will help take us to the next level of excellence in the Pac-12 Conference.”

The CU Student Government, which uses Franklin Field for club sports, is working with Athletics to exchange field use. Upon completion of the Athletics indoor practice facility on Franklin Field, CUSG will be able to conduct student club sports on the football team’s existing practice fields and “bubble” north
of Folsom Field and Boulder Creek. As a result, it would provide a vital increase in the size of CUSG-controlled outdoor recreation facilities. CUSG officials have voted in favor of the field exchange, and the CUSG Legislative Council is expected to take a final vote on the project at its April 17 meeting.

Construction near Folsom Field will displace the Campus Recycling Center and Facilities Management Outdoor Services. Both programs will move to temporary sites in May while permanent facilities are built elsewhere on campus.

New medical center in Guatemala marks CU’s first permanent presence in foreign country

BANASA FARM, Guatemala - Standing before a gleaming new building rising from the surrounding ramshackle villages, Gustavo Bolaños delivered a simple yet powerful message to the assembled dignitaries and banana plantation workers.

“Today we are making the dream of my father a reality,” the chief operating officer of major fruit producer AgroAmérica said late last month. “My father, Jose Fernando Bolaños, believed in the dignity of work, in improving the lives of his employees and the welfare of the community. And this is the result.”

With that he opened the Center for Human Development, a multifaceted medical facility developed by the Colorado School of Public Health and Children’s Hospital Colorado to serve some 4,500 banana workers and their families with plans to eventually expand into neighboring communities.

The center sits on 10-acres of AgroAmérica land and will be staffed by CU doctors, dentists, nurses, midwives, students and other health professionals rotating through Guatemala. The first physician, pediatric resident Jacob Mark, arrived April 1.

This is the university’s first permanent international presence and an outstanding example of a successful public-private partnership. Gustavo and Fernando Bolaños donated $1 million to the University of Colorado Denver in 2012 to help create the center whose initial design was drawn up by students from the CU Denver College of Architecture and Planning. Children’s Hospital Colorado stepped in as a major funder.

“This is like a marriage between CU, Children’s and AgroAmérica,” said Stephen Berman, M.D., director of the Center for Global Health, part of the Colorado School of Public Health which has overseen most of the project. “It’s a long-term partnership that will require give and take if it is to survive.”

Berman was joined at the grand opening by his wife Elaine, Edwin Asturias, M.D., director for Latin America at the Center for Global Health, Judith Albino, Ph.D., associate dean at the Colorado School of Public Health, Amy Casseri, chief strategy officer for Children’s Hospital Colorado and Doug Jackson, CEO of Project C.U.R.E.

“Few universities have this kind of comprehensive relationship in a foreign country,” Asturias said. “This isn’t medical tourism. We are here to stay.”

Asturias, who grew up in Guatemala, said the center represents the best of global health.

“It’s a huge challenge but the kind of challenge we strive for,” he said. “We dreamt big and look what’s been accomplished. Why stop now?”
A stake in the ground

The clinic includes laboratories, a dental office, exam rooms, a reception and a separate research building. Living quarters are planned for visiting health care workers.

Project C.U.R.E. donated $400,000 worth of medical equipment including a labor and delivery suite, needles, incubators and microscopes which arrived in two 40-foot shipping containers.

“That’s probably the nicest labor and delivery suite in the entire country,” Jackson said. “We plan to keep supplying them until they say enough.”

Jackson has equipped hospitals in some of the world’s poorest countries.

“More and more people are catching the spirit of compassion,” he said. “The Bolaños brothers didn’t just slap a Band-aid on a bad situation. They have gone all out and created this place using the amazing talent and resources of CU and Children’s. They have put a stake in the ground and now others can say, ‘We can do that, too.’”

The center sits in an impoverished corner of southwest Guatemala known as the Trifinio region. It’s a hot, humid place where residents often share homes with livestock, drink contaminated water and suffer all the manifestations of poverty.

With the nearest hospital an hour away in Coatepeque, the villages near the plantation have little in the way of health care. Infant mortality rates are high, children die from treatable conditions like diarrhea and pregnant women may never see a doctor.

The center expects to change much of that. Banana workers and their families who normally pay up to $50 to see a doctor in Coatepeque will now pay just $5 at the facility.

“This is a big help because it’s so close to many communities,” said Juan Carlos Cojulun, who lives nearby. “It’s much cheaper than going all the way to Coatepeque.”

Seeking the most vulnerable

The presence of the Center for Human Development means local health workers called ‘tecnicas’ won’t be spending as much time tracking down pregnant women and newborn babies.

That’s what center director Marco Celada, M.D., and two tecnicas Ada Velasquez, 23, and Sairy Lopez, 21, were doing just hours before the grand opening.

They drove deep into a steamy banana grove until they found Sandy Mendez, 20, nine-months pregnant and in dire need of a check-up.

She was living in a house of corrugated steel sheets propped precariously against each other. Ducks slumbered beneath a wood burning stove while a box of chicks peeped nearby. Her husband, David Garcia, 26, a banana worker, sat with his leg propped up after being injured by a piece of flying metal.

The tecnicas took Mendez into a room and listened for a fetal heartbeat. The rhythmic thump, thump, thump grew louder as they moved the probe around her abdomen. But there was a problem.

“The baby’s head is not in the right place,” Velasquez said.

They decided to return in a few days to see if anything changed.
“One of our big problems is getting to the babies within the first three days of birth,” Celada said. “Fifty percent of deaths occur in the first weeks of life.”

Hopefully the new center will bring pregnant women to the tecnicas.

“One of the challenges is effective community engagement and recognizing community in the broadest sense,” Berman said. “The tecnicas really understand what this is all about. The management of AgroAmérica also understands it.”

**A place to call their own**

Berman has had a storied career in global health. He’s set up immunization programs for Colorado children and designed care management systems for pneumonia for the World Health Organization. But this may be his most exciting venture yet.

“It’s rewarding in every way possible, especially when you see remarkable results like this on the ground,” he said. “But you’re only as good as your team and the people who really made this happen were Edwin, Marco, Gustavo and his brother Fernando who had the vision.”

The center is already having an impact back home.

Berman recently interviewed a Stanford professor drawn to CU because the Guatemala project. And two fellows came to work at the university for the same reason.

Asturias said more and more students and professionals are interested in global health careers.

“At CU we recognize that there’s a lot of talent in the health care field wishing to go beyond the U.S.,” he said. “This is a great way of attracting that talent.”

Back at the center, the Vatican’s representative in Guatemala, Archbishop Nicolas Thevenin, blessed the clinic and the gates were thrown open.

Hundreds of workers and their families rushed in. They toured spotless rooms, marveling at a place that now belongs as much to them as anyone. Signs bore the logos of the CU Anschutz Medical Campus and Children’s Hospital Colorado.

Judith Albino, former president of CU, walked among the throng.

“I am absolutely amazed by what I’ve seen here,” she said. “I’m so thrilled that the Colorado School of Public Health can be a part of this. This is exactly what we stand for.”

**UCCS students receive first John Suthers Scholarship**

Three University of Colorado Colorado Springs students majoring in criminal justice were recently selected to be the first recipients of the John Suthers Scholarship.

April Rogers, a Craig junior, and Isaac Abila, Pueblo junior, will receive a $1,000 scholarship for the 2014-2015 academic year, becoming the second and third students to receive the scholarship. They learned of their awards April 7. The first recipient, Don Apelo, Colorado Springs senior, received a $500 scholarship for the Spring 2014 semester.
“We are honored to assure John Suthers’ legacy at UCCS through granting annual scholarship in his name,” said Terry Schwartz, associate dean, School of Public Affairs. “This scholarship will be awarded to deserving young men and women who are as committed to public service as John Suthers himself.”

Currently the Colorado Attorney General, Suthers is a scholar in residence at UCCS and teaches criminal justice courses. His public service career began in 1979 as a deputy district attorney and continued for two terms as Fourth Judicial District Attorney for El Paso and Teller counties. Later, he served as executive director of the Colorado Department of Corrections and as U.S. Attorney for the District of Colorado. Since 2005, he has served as Colorado Attorney General, the state’s top law enforcement official.

During a recent reception, Suthers thanked donors to the scholarship and shared that his own college attendance was made possible through scholarship.

“I know the impact a scholarship can have,” Suthers said.

The scholarship was funded through donations to the CU Foundation and will support up to two students majoring in criminal justice annually. For more information about the scholarship or to donate, contact Jaime Garcia, executive director of development, University Advancement, jaime.garcia@uccs.edu.

About the recipients

**April Rogers**
A graduate of Moffat County High School in northwest Colorado, Rogers hopes to work in law enforcement following her planned May 2015 graduation from UCCS. She previously worked on campus, and currently works as a loss prevention. She previously worked on campus and currently works for a large retail store in loss prevention. On campus, she is active in student government and the UCCS Honors Program.

**Isaac Abila**
A graduate of Centennial High School in Pueblo, Abila hopes to work in law enforcement following his planned May 2015 graduation. He also hopes to earn advance degrees and to someday teach at the college level. Abila works at a local retail store and commutes to UCCS from Pueblo where he lives with his mother and a younger brother. On campus, he has assisted with a Thanksgiving food drive and a Christmas toy drive.

**Don Apelo**
A U.S. Army veteran, husband, and father of two children, Apelo is a nontraditional student. He enrolled at UCCS in 2012 and plans to graduate in May with a bachelor’s degree. He will begin work on a master’s degree in public administration at UCCS this summer and hopes to continue his education with a degree in law. Apelo is active on campus, serving as the UCCS Student Body Vice President, and as a peer educator.

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**Program Prioritization results to be shared Monday at forum**

Preliminary results of efforts to review and categorize 59 degree and 66 non-degree UCCS programs will be shared with faculty and staff during the April Chancellor’s All-Campus Forum.

The forum is scheduled for 11 a.m. Monday in Berger Hall. The venue was selected to allow more interested faculty and staff to attend and learn details of the data-driven process required by the CU
Board of Regents. Faculty and staff will have the opportunity to see results prior to the submission of a report to the regents scheduled for April 29.

As part of the process, all degree and non-degree programs were placed into one of five categories: exemplary, prominent, accomplished, strategic or needing further study. The effort is part of a Regents-directed process called Program Prioritization and includes all CU campuses.

At the forum, Chancellor Pam Shockley-Zalabak will review the category criteria, evaluation processes, and anticipated steps following submission to the regents. She also will answer questions from the audience.

At UCCS, more than 100 faculty and staff members took part in the evaluation of programs. The evaluators worked independently in February and met as groups in March to share information before final score submissions to the Office of Institutional Research and review by campus administrative leaders.

Related articles

- Data-driven Program Prioritization process begins
- Program Prioritization, budget discussions dominate forum
- Expanded budget reviews begin program prioritization process
- Chancellors report on program prioritization progress

Success stories abound at Boots to Suits event

Aaron Torres is one of the many success stories produced by Boots to Suits, the innovative CU Denver program that helps veterans transition into civilian careers.

Torres joined about 100 other military veterans, employers and community members as Boots to Suits celebrated its second anniversary at Sullivan's Steak House in downtown Denver on April 9.

"Izzy Abbass (Boots to Suits program coordinator, Office of Veteran Student Services), CU Denver and my mentor helped me get to where I am," said Torres, wearing a suit and a name tag identifying him as the military-veteran constituent advocate for U.S. Sen. Michael Bennet. Torres graduated last May with a bachelor's degree in criminal justice from the CU Denver School of Public Affairs.

Through Boots to Suits, he spent spring 2013 being mentored by Corina Almeida, chief counsel of the Denver office of U.S. Immigration and Customs Enforcement. "She was a really great mentor," said Torres, who served in the U.S Navy from 2002-2010. "She sat me down and talked about career paths and options."

In August, he was hired by Sen. Bennet's office. Similar success stories of veterans making the transition from the military to college and then to the workplace filled the room.

Almost 200 veterans have gone through the program

Abbass said 177 student veterans—men and women—have gone through Boots to Suits at CU Denver. "Of those, 94 percent have found a job within 90 days of graduation. For those who haven't graduated yet, we have a 95 percent retention rate," he said. "So we're doing something right, and a lot of that is due to the support we have in the community. Our business community, our government leaders, federal organizations—all of them are taking part in mentoring our student veterans."
The second anniversary event, called the Boots to Suits Salute, was sponsored by Comcast, which is part of the U.S. Chamber of Commerce Foundation's "Hiring Our Heroes" program. Since January 2012, Comcast has hired more than 2,000 veterans. CU Denver has collaborated with the Denver Metro Chamber of Commerce to partner student veterans with community mentors to provide guidance to students interested in various fields.

Matt Depuy, a 20-year U.S. Army veteran, last spring was paired with Nita Mosby Henry, executive director of Human Resources with the city and county of Denver. Depuy graduated from CU Denver in spring 2013 with a degree in criminal justice.

"I realized that criminal justice wasn't the way I wanted to go, so I went and talked to Izzy about getting into human resources," Depuy said. "He then placed me with Nita."

When a talent and acquisition recruitment job opened with the city and county of Denver, Depuy applied and got the job. "I like it," he said. "I've been there a year now."

Chuck Ward, vice president of public affairs for the Denver Metro Chamber of Commerce, joined Jeff Hamstad, Comcast vice president of human resources, Mile High Region, and Abbass as speakers at the event. Ward noted that many veterans have taken advantage of the post-9/11 GI bill, which has helped them further their education and enter the 21st century workforce. "We're proud to be able to play some role in helping connect students with the workplace—basically helping your guys get out of boots and into suits," Ward said.

Keynote speaker: Vets make exceptional employees
The keynote speaker was Lida Citroen, author of "Your Next Mission: A Personal Branding Guide for the Military to Civilian Transition." Citroen helps veterans transition into civilian jobs, putting a strong focus on their ability to create a personal brand. She noted that veterans make exceptional employees because of their training in the high-stress, fast-paced, global environment.

She encouraged veterans to "get in front of your reputation and make yourself findable online." Mostly, she emphasized that they stay true to themselves. "There's a reason you raised your hand and said I will serve this country in the most noble way possible," Citroen said. "Tap back into that, tap back into that passion and commitment to make yourself marketable on the other side."

**NASA Administrator Charles Bolden to visit CU-Boulder Friday**

NASA Administrator Charles Bolden will give a free public talk Friday at CU-Boulder, speaking on America’s space program and the challenges and opportunities the space agency will encounter as it moves through the 21st century.

The talk, titled “NASA’s Roadmap to Tomorrow’s Missions,” will be at CU-Boulder’s East Stadium Club on the east side of Folsom Field from 2:45 p.m. to 3:30 p.m. The presentation will be followed by a question-and-answer session with the audience.

Bolden will address the current and future capabilities of the orbiting International Space Station, as well as the growing opportunities for commercial providers in the space industry. He also will address new rocket and crew vehicle systems under development to extend the human reach into the solar system, as well as current and future NASA space missions.


CU-Boulder is the No. 1 public university in the nation in NASA funding, with nearly $500 million in
sponsored research awards from the space agency in the past decade. LASP currently is involved with a number of NASA planetary and solar science missions, including spacecraft now en route to Mars, Jupiter and Pluto, as well as a $32 million instrument package flying on NASA’s Solar Dynamics Observatory to help scientists better understand and mitigate damage from severe space weather.

CU-Boulder’s Center for Astrophysics and Space Astronomy designed a $70 million instrument now flying on the Hubble Space Telescope to gather information from ultraviolet light emanating from distant objects, allowing scientists to look back in time and space and reconstruct the physical condition and evolution of the early universe.

The Cooperative Institute for Research in Environmental Sciences, or CIRES, a joint venture of CU-Boulder and the National Oceanic and Atmospheric Administration, has been involved with NASA on a number of collaborative research efforts. NASA chose the CIRES/CU-Boulder National Snow and Ice Data Center, for example, to manage the nation’s data on sea ice, ice shelves, ice sheets and snow cover, data often critical for decision makers. Water managers and farmers in the arid West, for example, rely on up-to-date snowpack conditions, since melting snow feeds thirsty cities and crops.

In 2013, CU-Boulder led a NASA airborne science campaign staged out of Houston using satellites, a NASA DC-8 airliner, jets and ground-based instruments that probed weather patterns and air pollution over a vast expanse of North America that have potential global climate consequences. The campaign also involved CIRES, NOAA, the National Center for Atmospheric Research and 15 universities, including CU-Boulder, Harvard, the California Institute of Technology and the University of Innsbruck.

Bolden, who has been the NASA administrator since 2009, has overseen the transition from 30 years of space shuttle missions to a new era of exploration focused on the space station and the development of space and aeronautics technology. During his tenure, NASA has made significant progress toward returning to launching astronauts from American soil, which is now expected to occur by 2017.

A retired major general, Bolden had a 34-year career with the Marine Corps, including 14 years as a member of NASA’s Astronaut Office, flying four space shuttle missions to the space station during that period.

NASA’s $671 million MAVEN mission to Mars, led by LASP and launched in November 2013, is slated to slide into Mars orbit in September to begin gathering data about how the planet’s climate changed, where its water went and what happened to its atmosphere during the past several billion years.

Orr named producing artistic director of Shakespeare Fest

Timothy Orr has been hired as the producing artistic director of the Colorado Shakespeare Festival at the University of Colorado Boulder. Orr has served as interim director since February 2013 and was hired at the conclusion of a nationwide search for a permanent director.

Orr has been with the Colorado Shakespeare Festival as a performer since 2007 and joined the staff as the associate producing director in 2011. Steven R. Leigh, dean of the College of Arts and Sciences, which oversees the festival, said Orr was selected from an “outstanding” pool of applicants.

The Colorado Shakespeare Festival is a professional theater company under the auspices of CU-Boulder. It was launched in 1958 and is one of a relative few companies to have performed the entire Shakespearean canon. It is the second-oldest U.S. theater company dedicated to Shakespeare.

On Orr’s watch, ticket sales for the 2013 season rose nearly 10 percent from 2012, and revenue was up
by 18 percent. It was the first time ticket sales had increased over the previous year in five years. Also in 2013, CSF produced its first profitable season since 2006.

So far this year, advance ticket sales are double those of this time last year.

Orr also raised $75,000 to replace the decades-old and sometimes-failing stage lights in the Mary Rippon Outdoor Theatre. The new energy-efficient lights will cut electricity use by 25 percent and will enhance CSF’s artistic capabilities.

During his tenure at CSF, Orr started the CSF School of Theatre, which offers camps and classes for children and extend CSF’s reach into the community. He also launched CSF’s nationally recognized Shakespeare anti-bullying school tour, which has been seen by more than 46,000 children and featured on “PBS NewsHour.”

Orr is committed to CU undergraduate students. He plans to raise by 50 percent the weekly stipend of the acting interns this summer, who are drawn from the Department of Theatre and Dance, from $100 per week to $150 per week.

Orr holds degrees in music and arts management from California State University, Sacramento, and an MFA in theater from the University of California, Davis, and was a fellow with the League of American Orchestras. As an actor, he has appeared in 10 productions at CSF and also at numerous theaters across California.

In its 2014 season, which begins June 6 and runs through Aug. 10, the Colorado Shakespeare Festival will perform “The Tempest,” “Henry IV, Part 1,” “Henry IV, Part 2,” “The Merry Wives of Windsor” and “I Hate Hamlet.”

Hankiewicz receives honor from Tech Transfer Office

Janusz Hankiewicz, a member of the University of Colorado’s BioFrontiers Center and a research associate at UCCS, received the UCCS New Inventor of the Year Award from the Technology Transfer Office (TTO) for his efforts in developing and commercializing new medical imaging contrast agents.

Hankiewicz’s research focuses on diagnostic medical imaging techniques like magnetic resonance imaging (MRI), nuclear magnetic resonance imaging (NMRI) and positron emission tomography (PET). Along with his UCCS colleagues, he has developed improved imaging procedures as well as several improved contrast agents – substances used to enhance the visibility of body structures like blood vessels during medical imaging procedures.

Recently, Hankiewicz and his collaborators were selected to receive a proof-of-concept award under the state of Colorado’s Bioscience Discovery and Evaluation Grant (BDEG) program. The grant will allow the team to further develop a novel contrast agent designed to provide precise internal temperature measurements, which can be used to detect some cancers and some types of inflammation.

In addition, temperature mapping is used to monitor the tissues surrounding metal implants during imaging procedures, and to guide certain therapeutic procedures. By providing precise, non-invasive 3D temperature sensing, this novel contrast agent represents a major improvement over conventional temperature monitoring, which is usually performed with invasive, single-point measurements.
Spicher receives national honor

Jeff Spicher, director of the UCCS HealthCircle Primary Care Clinic, received the Outstanding Faculty Practice Award from the National Organization of Nurse Practitioner Faculties (NONPF). The Washington, D.C.-based organization honored Spicher as the top nursing faculty practice member in the nation.

“Jeff Spicher’s work inside and outside of the classroom is outstanding as judged by his peers,” said Nancy Smith, dean of the Beth-El College of Nursing and Health Sciences. “He was selected for this award from all nurse practitioner faculty in the country, a testament to his excellence and the high-quality faculty of the University of Colorado Colorado Springs.”

Spicher was nominated for the award in part because of his efforts with the UCCS Student Health Center, an innovative El Paso County/City of Colorado Springs Employee Health Clinic, his vision for the UCCS HealthCircle Primary Care Clinic, and excellence in teaching.

HealthCircle Clinic opened in March to UCCS faculty and staff in the Lane Center for Academic Health Sciences. The clinic is a leading-edge, primary care practice managed by the professionally licensed nurse practitioner faculty from the UCCS Beth-El College of Nursing and Health Sciences. It is believed to be the only clinic of its kind in Colorado.

The clinic incorporates the best traditions from medicine and nursing practice. Providers spend more time with individual patients and incorporate a preventive and patient-focused approach to primary healthcare. It incorporates behavioral and mental health services within the primary care model to promote wellness and disease management from a whole-person perspective attempting to deliver stronger long-term patient outcomes.

Spicher joined the UCCS faculty in 2002 and previously worked in a family practice clinic in Pennsylvania. He was instrumental in starting the County-City Medical Clinic, a partnership with El Paso County and the City of Colorado Springs, providing primary healthcare services to county employees and their dependents. He served as the director of this clinic from 2004 until 2008 and previously practiced in the UCCS Student Health Center as a Family Nurse Practitioner, diagnosing and treating university students.

Gould named Pikes Peak Poet Laureate

Janice Gould, assistant professor in the Department of Women’s and Ethnic Studies, was named the 2014-2016 Pikes Peak Poet Laureate by the Cultural Office of the Pikes Peak Region (COPPeR).

As poet laureate, Gould will be an ambassador for poetry in the region. The Pikes Peak Poet Laureate Project is a partnership of five organizations: Pikes Peak Library District, Colorado College, UCCS, COPPeR and the local nonprofit Poetry West.

Gould earned bachelor’s and master’s degrees from the University of California at Berkeley, a Ph.D. in English from the University of New Mexico and a master’s from the University of Arizona. Previously she was the chair of creative writing at Willamette University, Salem, Ore. Her collections of published work include Colorado Book Award finalist “Doubters and Dreamers,” “Earthquake Weather,” “Alphabet,” and “Beneath My Heart.” She co-edited with Dean Rader, “Speak to Me Words: Essays on Contemporary American Indian Poetry.”

She received fellowships from the National Endowment for the Arts and the Ford Foundation. In 2011, she received the Literary Excellence Award in Poetry from the Pikes Peak Arts Council.
Golkowski receives major NSF CAREER Award

Mark Golkowski, assistant professor of electrical engineering at the College of Engineering and Applied Science at CU Denver, has received a $456,000 National Science Foundation (NSF) Faculty Early Career Development (CAREER) Program Award.

This award will support Golkowski’s idea for using the popularity of smartphones to demystify engineering and science material known to intimidate students.

Golkowski’s CAREER award project, “Whistler Mode Wave Propagation, Amplification and Coupling,” is a five-year investigation of electromagnetic wave propagation in the near-Earth-space environment. The research involves ground-based observations of low-frequency waves in Alaska, special laboratory experiments performed at the Naval Research Laboratory in Washington, D.C., and theoretical simulations performed at CU Denver.

The space environment enveloping the Earth (the near-Earth-space environment) hosts a rich array of physical processes as well as billions of dollars of spacecraft assets. Golkowski sees the scientific discoveries of the CAREER project as significantly enhancing current understanding of magnetospheric physics, including the large-scale energy dynamics known as space weather. Space weather effects are a leading limitation to spacecraft lifetime and thus a significant economic burden. Furthermore, with the prevalence of interconnected electronics, ground-based electrical and communication systems are more vulnerable to detrimental space weather events than ever before.

Through his project, Golkowski will provide a diverse audience exposure to advanced research and use novel numerical tools to improve engineering and mathematics instruction. He was motivated by two well-documented deterrents to science and engineering career paths: 1) insufficient mathematical proficiency, and 2) a perceived lack of instruction in applicable “real-world” skills in college level curricula. Unfortunately, these impediments tend to be most prevalent for underrepresented minorities.

“Electromagnetic waves are a prime example of key engineering and science material that is notoriously challenging to potential students,” Golkowski said. “Through this project we will attempt to address these issues by leveraging the current popularity of mobile smartphones among students.”

Golkowski and his research assistants will work with CU Denver senior design instructors to develop a special smartphone application that allows students to make recordings of electromagnetic waves and also visualize key aspects of electromagnetic phenomena. This application will allow students to improve their understanding of math and science and to record and examine the low-frequency waves that are the primary topic of Golkowski’s research. Through this application, the project will provide a much-needed bridge between a dominant mobile culture and the underrepresented education and career paths necessary to create and sustain it.

Golkowski said that through new smartphone tools and outreach efforts, cutting-edge space science research will be made accessible to all thus enhancing scientific and technological understanding.

Wienholtz earns Employee of Quarter honor

Sabrina Wienholtz, assistant director of the Office of Student Life and Leadership has been named the UCCS Employee of the Quarter.
Brad Bayer, executive director of the office, said no one is more deserving of the award.

“Sabrina has an amazing work ethic, demonstrates ongoing flexibility, is solution-focused and has a genuine passion for student services and UCCS,” Bayer said in his nomination letter. “Overall, our department, the Division of Student Success and Enrollment Management, and the university operate effectively because of Sabrina.”

A seven-year UCCS veteran, Wienholtz is responsible for many of the day-to-day office tasks that keep Student Life and Leadership running smoothly, ranging from advising student clubs to managing the office budget to launching a leadership development program for first- and second-year students.

Wienholtz said working with students is the most gratifying part of her job. “The reason we’re all in these jobs in Student Life is because we want to help develop students and we buy into higher education and the transformation that happens here,” Wienholtz said. “To be able to take someone who comes in as a freshman, who has potentially never had a job before, and to take them from a place where they don’t know how to professionally answer a phone to a place where they’re ready for a career and they’ve learned a lot and have discovered who they want to be through that process is amazing to be a part of.”

A member of the UCCS staff since 2007, Wienholtz served as program assistant in the Office of Student Life and Leadership for four years. In 2011, she was named a student activities specialist. In 2012, she became assistant director following a national search.

Outside of Student Life and Leadership, Wienholtz serves as secretary and treasurer of the Professional Exempt Staff Association and teaches a freshman seminar. When not at work, Wienholtz can often be found either bowling or doing yoga.

**Dropping names ...**

**Samantha Bruner**, alumni relations with the College of Business at UCCS, recently received the Leadership Pikes Peak 2014 Emerging Leader Award. Bruner was cited for her work with the College of Business as well as with a business she operates, Colorado Springs Food Tours, and a Leadership Pikes Peak alumni advisory board. She is a 2006 UCCS College of Business graduate. ... A group from the CU Anschutz Medical Campus and National Jewish Health has been awarded a patent for a novel, antibody-based approach to prevent or treat Type 1 Diabetes and other autoimmune diseases. The inventors listed on this patent are [John Kappler](#) (School of Medicine departments of Immunology, Medicine and Pharmacology, and National Jewish Health), [Li Zhang](#) (SOM department of pediatrics, and Barbara Davis Center), and George Eisenbarth (the former director of CU’s Barbara Davis Center, now deceased), as well as Brian Stadinski, a former CU-NJH researcher now at the University of Massachusetts Medical School. Another group of researchers led by [Alan Weimer](#) (Department of Chemical and Biological Engineering) has been awarded a patent for a process that uses concentrated sunlight to form syngas or hydrogen. This process can efficiently and inexpensively produce useful fuels with no emissions, waste, or transportation requirements. Other inventors listed on this patent are former CU researchers Karen Buechler and Jaimee Dahl, former CU instrument maker Willy Grothe, and collaborators from the National Renewable Energy Laboratory (Allan Lewandowski and Carl Bingham).

**Wing to talk computational thinking today at ATLAS**

The ATLAS Speaker Series and the Phi Beta Kappa Visiting Scholar Program present Jeannette M. Wing,
corporate vice president of Microsoft Research, this afternoon at CU-Boulder.

The event is at 4 p.m. at the ATLAS Black Box theater, lowest basement level, B2, Roser.

Why is thinking like a computer scientist much more than programming a computer? Wing, former head of computer science at Carnegie Mellon, discusses computational thinking as a way to solve complex problems. She'll focus on the idea of our children learning computational thinking as an essential part of developing their analytical abilities.

On leave from Carnegie Mellon University, Wing is President’s Professor of Computer Science and twice served as the head of the Computer Science Department. She was the assistant director of the Computer and Information Science and Engineering Directorate at the National Science Foundation and has worked at Bell Laboratories, USC/Information Sciences Institute and Xerox Palo Alto Research Laboratories. She received her S.B., S.M. and Ph.D. degrees from the Massachusetts Institute of Technology and is a member of Sigma Xi, Tau Beta Pi, Eta Kappa Nu and Phi Beta Kappa.

For details on this and other events at ATLAS, click here.

**Procurement Service Center recognized for efficiency**

The CU system’s Procurement Service Center (PSC) is honored as one of eight Models of Efficiency for spring 2014 in University Business magazine.

PSC's work in digitizing travel and procurement card expenses, achieved via the implementation of Concur Travel and Expense in 2010, is featured in a story in the April issue of the publication, as well as on its website.

“The Concur system has drastically reduced staff time required at all steps in expense review,” the story reads. “The number of full-time equivalent staff members processing travel reports declined by 75 percent, from six to 1.5. The time required to process reimbursements fell 85 percent, from three weeks to 18 hours.”

Sandy Hicks, assistant vice president and chief procurement officer, tells the magazine that the change has resulted in a better customer experience.

**Health Sciences Library social media project celebrates CU Anschutz Medical Campus**

The Health Sciences Library on the CU Anschutz Medical Campus has launched #iheartCUAnschutz, a social media project bringing together what the community loves about CU Anschutz from Facebook posts, tweets, images, videos, blog posts, songs, poems, haikus, jingles and more.

Students, staff, faculty and anyone who loves CU Anschutz is invited to participate. Tag your posts with #iheartCUAnschutz.

Don't do social media? Email your content to hsl.socialmedia@ucdenver.edu .
Check out all the posts on the #iheartCUAnschutz page: http://hslibrary.ucdenver.edu/iheartcuanschutz

The project runs through May 31.

**Colorado Diversity Golf Classic to benefit CU scholarships**

The Colorado Diversity Golf Classic, founded by Stephen McMillon, is set for June 9 at Cherry Creek Country Club.

This event, set to benefit CU Denver, is being supported by Aswad Allen, Assistant Dean in the School of Education & Human Development (SEHD). Sign up as an individual or gather your best foursome and come out for a great round of golf while raising scholarship funds in support of CU Denver’s commitment to diversity.

RSVP by May 30 at https://www.alumniconnections.com/olc/pub/UCO/event/showEventForm.jsp?form_id=171770

For more information, visit www.CODGC.org.

**Campus to commemorate Ludlow Massacre centennial with series of events**

In southern Colorado on April 20, 1914, fighting broke out between a camp of striking coal miners and an alliance between the Colorado Fuel and Iron Company and the Colorado National Guard. In the end, at least 18 miners and their family members were dead. The event galvanized national efforts to promote higher labor standards and social justice in the early 20th century. Many modern-day labor laws can trace their origins to what is now known as the Ludlow Massacre.

This month, the University of Colorado Anschutz Medical Campus commemorates the centenary of the Ludlow Massacre with a series of events, including a reading on April 22 of the award-winning verse novel “Ludlow,” by David Mason. Mason is professor of English at Colorado College and the state’s first poet laureate. Selected arias from the opera “Ludlow,” by Mason and Lori Laitman, will follow the reading, with soprano Amanda Balestrieri, tenor Steven Soph and pianist Robert Spillman. The unique event is sponsored by the Colorado School of Public Health’s Center for Worker Health and Environment, the University of Colorado Anschutz Medical Campus Health Sciences Library, and the Center for Bioethics and Humanities.

Complementing these events from April until June, the Health Sciences Library is featuring the exhibit “Holding Mother Earth Sacred,” a photojournalism essay about North American tribal communities engaged in energy resource development. According to Library Director Jerry Perry, "One of our missions is to connect the campus and community with our intellectual history. The Ludlow Massacre changed Colorado and the nation, and it changed our thinking about occupational health and safety. The library’s exhibit reminds us that energy is a key part of our state's legacy and, with hydraulic fracturing, potentially its future."

One of the primary objectives of the miners' strike in 1914 was to stem the tide of preventable injuries, illnesses and deaths caused by unsafe working conditions below ground. “In the early 20th century,
mining was substantially more dangerous than it is today. Remembering the bravery of the striking Ludlow miners reminds us that miners still face preventable injury and illness in the course of their work," says Cecile Rose, M.D., MPH, Occupational Medicine physician at National Jewish Health and professor in the Colorado School of Public Health and School of Medicine. Rose works with coal miners throughout the region and notes that while progress has been made, we still have a long way to go to protect the health and safety of miners and other workers. “The Upper Big Branch Mine disaster is just one example of history repeating itself. We’ve also witnessed an increase in coal mine dust lung diseases in recent years, including a rapidly progressive and virulent form of Black Lung. Tragic events still occur, and we need to redouble our efforts to prevent them.”

Additionally, new public health threats including epidemic chronic disease, climate change and globalization have become prominent issues in the ongoing effort to promote safe and healthy work environments.

The Colorado School of Public Health’s Center for Worker Health and Environment promotes healthy and safe workplaces through education, research, public health practice and community partnerships. “We consider this commemoration of the coalfield wars to be an important way to remind people of the debt we owe to previous generations of Colorado workers, their families, and the U.S. labor movement,” said Center Director and Professor, Lee Newman M.D., MA. “Our center’s mission is to help our region by serving as a gathering place for employers, unions, academics, and government entities to work together to make the region the healthiest and safest place to work.”

To learn more about the center and other events honoring the legacy of Ludlow, visit [http://bit.ly/1iO77Sx](http://bit.ly/1iO77Sx).

Mason’s reading and reception are made possible through a grant from the University of Colorado’s President’s Fund for the Humanities as well as generous donations from The Harold E. Hollis Trust and WorkSafe Colorado.