Five questions for David Brain[1]

[2]

The 1981 launch of the Space Shuttle Columbia – the first in NASA's program – made a big impression on the grade-schooler who, after watching the lift-off on television, wanted to know everything about space. "Minor course corrections" since then have led David Brain to his current research interests and his position as assistant professor in the Laboratory for Atmospheric and Space Physics (LASP) and the Department of Astrophysical and Planetary Sciences at the University of Colorado Boulder.

Globes of Mars, Venus and the moon – the subjects of many of his studies – sit on his desk, a visual cue as he considers the atmosphere and magnetism – or lack thereof – and the saga of each. This is his second year as a faculty member, but he first came to CU in 1995 as a graduate student in the same department. He is one of the scientists working on the MAVEN (Mars Atmosphere and Volatile EvolutioN) mission, which will launch in November and is scheduled to arrive at the Red Planet in September 2014. He also is a member of a CU-led NASA Lunar Science Institute devoted to studies of the lunar atmosphere and dust.

Brain and Nick Schneider, an associate professor in the department, teach thousands of students in college lecture halls around the world about the newest planetary discoveries through slide sets they prepare. Discoveries are made so often, textbooks are unable to keep up. Almost daily, planets around other stars are found or discoveries are made by spacecraft orbiting planets in our solar system, so the pair must choose the most important findings to release through the three-slide sets every four to six months.

Since he's begun teaching, Brain says he feels "connected to thousands of years of humanity who have looked up and seen the same things in the night sky. I'm amazed that the cultures were able to piece together what they were looking at and use it to make predictions about what the sky would look like in the future. These were civilizations of people who had as their night-time entertainment what was happening in the sky, and they were astute enough and shrewd enough to figure it out."

1. One area you study is the loss of atmosphere on Mars. What happened to the planet and can the same thing happen to Earth?

Mars has a very thin and cold atmosphere today. That's surprising because when you look at pictures of the surface, you see dried-up riverbeds, old lakebeds. You can see that there was once an environment capable of supporting liquid water at the surface. The big question that's excited me for a long time is what happened to Mars? What changed the climate? One of the essential ideas about climate change on Mars – one that many scientists think is valid -- is that the atmosphere used to be much thicker than it is today. So how do you lose an atmosphere? There are only two places to go: up or down. On Mars, we know both happened. As a grad student, I became interested in the "ups," the escaping away to space of particles from the atmosphere. We know this is happening today but we don't know how responsible it could have been for changing the climate.

On Mars, a large fraction of the entire atmosphere may have been ripped away. On Venus, which has a thicker atmosphere, the same processes have made the atmosphere dry. All of the components of water – hydrogen and oxygen – are nearly gone.

Earth, on the other hand, has a big magnetic field generated in the deep interior of planet that basically acts as a giant sneeze guard for the atmosphere. It keeps out particles that the sun is emitting (the solar wind). Mars doesn't have a global magnetic field so the atmosphere is exposed directly to the solar wind. On Earth, the atmosphere can escape to space primarily at the polar regions, where magnetic field lines dip back down into the atmosphere.

2. What is your role with the MAVEN (Mars Atmosphere and Volatile EvolutioN) mission and what do you hope the data will tell you?

MAVEN will look at the "ups" I described, and for the first time, we will have all the observations we need in one place, on one spacecraft, at one time. For the past 20 or 30 years, we've been approaching these problems using incomplete information and guesswork. MAVEN is led by Bruce Jakosky in the geology department, who is the principle

investigator. There are about 30 co-investigators who each have a role. Some are responsible for designing and building the instruments and some will study MAVEN data as part of the instrument teams. Then there are six of us who aren't affiliated with any single instrument, and we're called interdisciplinary scientists. We're expected to take data from multiple instruments and merge those data sets together to help answer the questions of what happened to the Martian atmosphere.

Particles can escape as neutral or charged (protons, electrons) and I specialize in charged particles. What I would like to do is use those measurements to tell me how many charged particles per second are escaping from the planet. That's step one. Then I want to take that number and see how it varies as the sun gets brighter (Does the escape rate go up?) and as the solar wind blows weakly (Does the escape rate go down?). By understanding how the escape rate varies as things change, our hope is to estimate how strong the escape rate was billions of years ago, when conditions were different than they are today.

This is the first time I've been involved in a spacecraft project from start to finish and it's a fantastic experience and a great team. Every time I talk to someone from NASA they gush about how well MAVEN is being run and what a good project this is.

3. What's the biggest change (or discovery) you've seen in your field in the past 20 years?

In all of planetary science, the biggest change is the discovery of planets around other stars. The first one was reported in my first year of graduate school (1995). Before that, we knew of nine planets, including Pluto. Now we know of 700 to 800 in our galaxy, and we have maybe 1,500 more that are probable planets waiting to be confirmed. This has really opened up our horizons in planetary science and also has drawn a bridge between planetary science and astrophysics.

In my own area – Mars, climate evolution and the moon – the most significant thing is the discovery of magnetic fields on Mars. I said before that there's no global magnetic field at Mars, but there are magnetic regions in the crust that were discovered in 1997 by an orbiting spacecraft. The regions are incredibly strongly magnetized – 10 to 20 times more magnetized than any naturally occurring rocks we know on Earth – and their presence has implications for the Martian interior, near surface, radiation environment and climate.

4. You've also done some research on comet and asteroid impact. We recently had a large asteroid come very close to Earth and a large meteorite that exploded before impacting Russia. How common is this and what would happen if an asteroid the size of 2012 DA14 collided with Earth?

There are things that hit Earth's atmosphere every day, but most are small. Shooting stars, for example, are caused by something no larger than a pea. Something bigger – basketball-sized – happens less frequently because there are fewer basketball-sized objects out there. Then you get to the size of what hit the atmosphere over Russia, and that happens every 80 years or so. The small objects entering our atmospheres burn up before reaching the ground. The same thing happened in Russia, but it was large enough and got so hot on one side that it exploded.

The near miss was a complete coincidence. Things cross the Earth's orbit all the time. NASA and astronomers know there is a population of objects that could potentially crash into Earth someday. They fund a NEO (Near Earth Object) program with a goal of identifying 90 percent or more of the objects in the solar system that are 1 kilometer or larger and could potentially strike Earth. They've been doing this for a decade or so. A couple of years ago I was on an advisory panel for this program. One kilometer is pretty big and would have a devastating impact. The Russian fireball, for instance was only 17 meters across; 2012 DA14 is nearly double that size, but still much less than 1 kilometer.

If a 1 kilometer object hit the Earth, the effects would be devastating. Hot material from the impactor and material heated from the impact site when it crashed would get splashed into atmosphere and rain back to Earth, causing fires over a very large area. There would be tsunamis. And that's just the first few hours. For weeks and months, imagine all the dust and smoke. Sunlight would be blocked and it could become dark and cold on the surface. Over years, the material in the atmosphere could contribute to greenhouse warming of the surface. The atmosphere may become poisonous. For larger impactors (approximately 20 km, or the size of the dinosaur-killing impact), all of these effects would be amplified globally. Plants would stop growing and acid rain could kill vegetation and ocean life. There could be mass extinction.

5. Many people felt as if they lost a friend when Pluto was demoted. What do you think about the move?

It was the right decision to demote it. I understand the emotional attachment to having nine planets, including this little object, named by an 11- year-old girl. But we have rocky planets close to the sun – Mercury, Venus, Earth, Mars – and we have big gas balls far from the sun -- Jupiter, Saturn, Uranus, Neptune. All of these objects are considered planets. Then, really far from the sun, we have a reservoir of icy comets. Pluto fits better with the comets, but it is so much bigger than a typical comet that it deserves its own class. And that's what happened: Pluto is one of five known dwarf planets in our solar system. In retrospect it seems that the decision to demote it was made in haste, but ultimately I think the right decision was made. What excites me is the prospect that there are many more dwarf planets waiting to be discovered, perhaps 10 or more in the years to come.

State's revenue picture better than expected[3]

Colorado's general fund revenue is projected to be $227.9 million higher this fiscal year than an earlier forecast, which may or may not mean a one-time boost to the University of Colorado and other institutions of higher education.

The good news came on Monday, when the Governor's Office of State Planning and Budgeting (OSPB) also announced a forecast for the 2013-14 fiscal year that's $256.1 million higher than was projected in December.

Better-than-expected growth in income tax revenue, from individuals and corporations, is credited with the forecast's increase.

Still, revenue is likely to remain volatile in the future; while improvement in the housing market and consumer spending is helping current forecasts, revenue from one-time stock sales is driving much of the latest growth. OSPB's forecast reports that growth might slow next year.

"While economic activity at the national level continues to be modest and uneven, Colorado has many attributes necessary for success in the post-Great Recession economy, fostering its position among the top states in economic performance," according to the forecast. "Economic growth is expected to moderate in 2013 due to recent federal tax rate increases and budget reductions, the heightened uncertainty surrounding the federal debt level, and headwinds from the European economic and financial crisis."

The news comes ahead of the Legislature's discussion of the budget, which will be decided upon in the coming weeks. CU and other institutions of higher education are not likely to see further cuts this year given the projection, though whether additional funding will be made available by lawmakers isn't known.

The state's next revenue forecast will be delivered in June.

Click here[4] for the full forecast report from the Governor's Office of State Planning and Budgeting.

Reaching exercise goals could mean $25 monthly bonus[5]

On April 1, Be Colorado is launching Move., an incentive-based campaign that will pay participants $25 a month to meet baseline goals of 30 minutes or more of exercise, 12 times per month.

Move. is the next step in developing Be Colorado's comprehensive wellness program for CU Health Plan participants.

While Be Colorado's initial efforts promoting prevention (through Biometric Screenings) and personal awareness

(through the SUCCEED Health Assessment) are meant to engage and motivate, Move. brings Be Colorado to the next level. Data clearly show sedentary behavior is one of the key drivers of diminished health, and in turn a significant driver of increased health care costs.

With a focus on prevention, greater personal awareness and an opportunity to get paid to Move., Be Colorado integrates proven components to help our university community shift to a culture of health and wellness.

In a recent email to colleagues, Rodger Kram, associate professor of integrative physiology, noted, “If you haven't yet heard, Be Colorado is about to launch Move., its innovative, incentivized program that pays $25 per month to meet proven, baseline movement goals.”

The innovation is in the free, downloadable Move. app, which will be available April 1 in iPhone and Android versions. Employees will register directly through the app and the new Be Colorado Move. website and be able to seamlessly track their monthly progress toward meeting incentive goals.

This enables participants to move in the ways that best meet their needs as opposed to only having the option to join a gym. So whether you hike, bike, walk, run, jump rope, Zumba, practice yoga or rollerblade, you can move the way you want to and meet the incentive goal.

For employees who do not have an iPhone or Android-based smartphone, the new Move. site works with hardware from Body Media and Fitbit. Baseline devices begin at around $60 (sometimes less expensive at big box retailers and online), and employees who make this investment can earn $300 dollars in a year.

More detailed information about Be Colorado Move. is available online at www.becolorado.org.[6] One important requirement for earning the incentive is to complete the SUCCEED Health Assessment available at https://my.healthmedia.com/index.html?au=CUAUTHCD[7].

If you complete the assessment by April 1, you will be automatically entered to win a $300 airfare voucher (12 to be given away) and will be helping your campus win the campus participation contest.

If you have questions or comments, please email questions@becolorado.org[8].

Aging Center offers answers to memory questions[9]

John Crumlin

Occasionally forgetting things is a normal part of aging, according to UCCS experts.

But what’s normal – and what might be a more serious psychological problem – is often difficult to comprehend without assistance. That’s where the CU Aging Center and its memory clinic can help. On a sliding fee scale that ranges from $5 to $50, those more than 50 years of age can find out if what they are experiencing is typical or worthy of closer investigation.

“I had a client who was a successful 67-year-old business man,” said John Crumlin, assistant professor, CU Aging Center. “He retired but was bored so went back to work part-time. He came to us because he felt like he wasn’t catching on to the new job as fast as he thought he should and feared he might have Alzheimer’s disease.”

Crumlin’s client later learned his cognitive functions were above average for his age. He quit worrying about Alzheimer’s and applied himself to his new job.

The lever for releasing the client's anxiety was a pencil and paper test that requires about an hour to complete and is conducted by psychology graduate students specializing in geropsychology. A staff psychologist reviews the results immediately following the test and provides feedback to the client, including any recommended actions.

While Crumlin likes to tell the story of the hardworking 67-year-old, he's direct that not all test outcomes are positive. He cited as an example an 83-year-old woman who was referred to the clinic by a daughter worried about her mother's forgetfulness and poor nutrition. The memory exam revealed depression and a recommendation for both medication and psychotherapy. In another case, fears of Alzheimer's in a 61-year-old man were confirmed.

"The fear of Alzheimer's alone can cause anxiety and its own set of problems," Crumlin said. "It's better to address those concerns and, when presented with information, take action."

For the students administering the exams, the experience of working one-on-one with seniors is invaluable as they move from a theoretical base to helping people with practical, real-life issues.

Crumlin encouraged members, relatives and friends of the campus community who are more than 50 years of age to consider memory testing. Testing is recommended when there are:
Concerns about memory loss Difficulties with daily responsibilities because of memory problems Family histories of Alzheimer's or memory problems Changes in behavior, personality, mood or work habits Frequently misplaced important items, forgotten medications, instances of getting lost or making financial errors Desires to have a baseline test of current memory abilities.
For more information, call 471-4884 or visit
http://www.uccs.edu/Documents/agingcenter/documents/Memory_Clinic.pdf[11] .

The CU Aging Center is a nonprofit community clinic specializing in addressing daily living challenges, social problems and mental health needs unique to older adults. The clinic operates in association with the Clinical Geropsychology doctoral program.

Recent graduate finds problem with biological incubators and patents solution[12]

Lucas Portelli, who earned his doctoral degree from the University of Colorado Boulder in December, with his incubator device (Photo: Glenn Asakawa/University of Colorado)

The strength of magnetic fields inside biological incubators can vary by orders of magnitude from one incubator to the next as well as from one location to another inside the same incubator, a finding with direct implications for some biologists, according to a new study by a recent University of Colorado Boulder graduate, who also patented a solution.

The findings, published this month in the journal Bioelectromagnetics, offer another possibility for explaining why cells sometimes behave differently when grown in identical incubators. Biologists have assumed that those differences, including rates of growth and death, are due to natural variation but it's possible that differing exposures to magnetic fields may play a role.

Incubators are ubiquitous fixtures in biology labs worldwide because they are essential equipment for growing and maintaining cell cultures. They most often resemble small refrigerators.

"Researchers expect that the conditions inside incubators — like the temperature, humidity, light and concentrations of oxygen and carbon dioxide — are homogenous," said Lucas Portelli, lead author of the paper, "because the most important thing is that you can replicate the experiment."

The results of the new study also have direct implications for biologists who are trying to study the health effects of

exposing cells to electromagnetic radiation, which can be emitted from a number of sources, including high-voltage power lines and cell phones. Those researchers need to have a “clean” electromagnetic field environment where they can carefully control the magnitude of the fields bathing the cell cultures to successfully carry out experiments.

Portelli, who earned his doctoral degree in December from CU-Boulder’s Department of Electrical, Computer and Energy Engineering, stumbled across the problem while trying to study the effects of magnetic fields on the bacteria E. coli.

“Every time I opened an incubator, I measured something different,” Portelli said. “I thought, ‘Is it just me or is this a widespread problem?’ It was hard to answer the question with just anecdotal data.”

Portelli built a variety of probes that can measure the magnitude of the magnetic field in the exact location where cells would be cultivated. He and Theodore Schomay, an undergraduate student majoring in both physics and mathematics, then set about knocking on the doors of biology labs across campus, asking for permission to measure the invisible fields.

What the pair found, after placing the sensors in 27 locations within each of 21 incubators, is that the magnitude of the magnetic fields varied far more than expected. They also found that the magnitudes of the fields measured frequently fell outside the range that would occur naturally outside, due to the Earth’s own magnetic field, or in most inside spaces, such as homes or offices, where electricity creates its own field.

Part of the problem, Portelli said, is that equipment built into the incubators such as fans, heating elements and sensors can generate their own electromagnetic fields. Even the magnet that keeps the incubator door shut creates a field.

Those localized magnetic fields are layered on top of other fields generated by currents flowing through the walls of the labs — which typically use six times more electricity than regular habitation spaces — and the magnetic field generated by the Earth. The structure of the incubator, essentially a metal box, the laboratory building and all the metallic equipment surrounding the incubator also can bend and focus the magnetic fields that pass through them.

To address the problem, Portelli went to work building a shield that can fit inside an incubator and protect the specimens. The challenge, Portelli found, was building a box that could entirely block the fields while still allowing easy access for the researcher.

Critically, the shield would also have to be easy to clean. Because incubators are designed to provide an environment that’s especially hospitable to microorganisms, hinges, latches and other features that create difficult-to-clean nooks and crannies can quickly become bacterial breeding grounds. Those bacteria can then contaminate future experiments in the incubator.

Portelli’s solution — a four-sided box that nests within another four-sided box — has been patented by CU’s Technology Transfer Office. The ultimate idea, Portelli says, is to have that technology integrated into the manufacture of future incubators.

“As scientists work to explore biological systems more deeply and, therefore, look for smaller or more subtle effects, electric and magnetic fields may become another environmental factor that we have to control just as we do with temperature and humidity,” Portelli said.

Denver Public Schools students told that university ‘is place for you’[14]

Associate Vice Chancellor for Student Affairs Raul Cardenas addresses an audience of Denver Public Schools students Friday during the DPS Expo.

More than 1,000 Denver Public Schools students received a warm University of Colorado Denver welcome on Friday as the annual Higher Education Expo at Auraria gave them an up-close look at what the university has to offer.

Raul Cardenas, Ph.D., associate vice chancellor for student affairs, delivered a welcoming address to the mostly ninth-graders in the King Center. He listed some of the many fields of study available to them at the University of Colorado Denver | Anschutz Medical Campus and encouraged the high schoolers to start thinking long term.

“You’re the class of 2016? I think you’re the class of 2020,” he told the full auditorium. “Because in 2020 you’ll be graduating from our institution. We want you here. This is the place for you.”

The students spent their day visiting various classrooms and other facilities on the Auraria Campus. Volunteer university students guided the groups from building to building.

“It’s like College 101, so they can ask college students any questions they like,” said CU Denver student volunteer Stephanie Anderson. “Most of them have asked me about admissions – what they need to do to get in.”

Cardenas told the high school audience that the university admits about 900 freshmen a year. He filled them in on housing, academic programs, tuition costs and extra-curriculars. When a student asked about sports, Cardenas explained that CU Denver recently launched a club sports program and adopted a new mascot, the lynx.

The students also learned about Auraria’s other institutions – Metropolitan State University of Denver and Community College of Denver – during their visit.

Participation in the Expo and other outreach efforts are part of the university’s strategy to interact with students well before they enroll. In his state of the university address on the Denver Campus[16] last fall, Chancellor Don Elliman set a goal of developing a comprehensive strategy to enhance student access, increase enrollment, improve student satisfaction and increase student retention and graduation rates.

Bernard McCune, executive director of DPS’s Office of College and Career Readiness, called the University of Colorado Denver | Anschutz Medical Campus a “tremendous partner" in ensuring that DPS students reach their full potential. He said that when students go to college they not only advance their education, but also expand their world view and meet a diverse group of people. “Another huge benefit is that students who graduate from college on average earn about $1 million more (in a lifetime) than students who just graduated from high school,” McCune said. “Who wants a million dollars?” Hands went up around the room.

Cardenas told the students that they’re lucky to have parents, teachers and other mentors in their lives providing knowledge and guidance. “They can only help you so much,” he said. “You have to be the one who wants it. We're here to help you, so ask questions.”

He closed by giving out his phone number and encouraging the students to call him with any questions.

Medical students (Harlem) shake things up at Match Day[17]

[18]
The students were easy to see. Surrounded by well-wishers, they milled around the Denver Hyatt Regency ballroom, complexions a little pale, eyes a little glazed, waiting for the Match Day festivities to begin.

They ignored the pastries and fruit and fiddled with the gold-colored gift bags. But there was no denying the stars of the show. Roped off behind velvet cords were tables with 166 letters holding the destiny of exactly that many soon-to-be physicians from the CU School of Medicine.

And at 10 a.m. Friday, they learned where they would spend their residency years.

Every year in mid-March, the nation's medical school graduates find out simultaneously where they will perform their residencies, which can last between three and 10 years. The students have ranked places where they hope to get that training. Those places have ranked students. Then, they match.

A hush fell as letters were opened and read. Screams and hugs followed. Then, a tsunami of text messages sped around the world to friends and family waiting for the news.

Ramya Mishra was the first to jump in front of a camera simulcasting the event to let her fiance in California and her relatives in northeastern India know she'd be spending the next few years in Oakland, Calif. – her first choice of schools.

Other students followed, letting family in Vietnam, Russia, Egypt, Minnesota, Louisiana and other spots know how happy there were with the news.

[19]
Some performed skits. Ian Justl Ellis and his wife, Sonia, donned baseball caps with "I (heart) NY" placards and performed "New York, New York," ditching the lobster-adorned hardhats and cowboy hats Sonia had made in case one of their other top choices (Maine, Texas) was in the envelope. And of course what's Match Day without the Harlem shake – by costumed medical students.

Tiffany Tello bounded around the room sharing her news of a dermatology placement at University of California San Francisco – her first choice. When asked on a scale of 1-10 how nervous she'd been and how happy and relieved she is now, "All 10s!" was her response before hugging a fellow student at his good news.

[20]
Dean Richard Krugman recalled opening his letter on a March 15 exactly 45 years ago when he learned he'd be moving to Colorado.

"My wife looked at me stunned and said, 'It's brown and ugly there. You promised me water,'" he said. "I told her, 'It's the computer. I had nothing to do with it.'"

He reassured students that even if their placement wasn't their top choice, they would all succeed.

"Whatever happens, enjoy."

CU licenses dental polymer technology to 3M[21]

An advanced polymer technology developed at the University of Colorado Boulder recently was licensed to 3M, a diversified technology company based in St. Paul, Minn. The licensed technology, developed by a team led by CU-Boulder Distinguished Professor Christopher Bowman[22], enables formation of very low-shrinkage composites, improving performance of many materials currently used in dental fillings and sealants, dentures and dental implants.

Current dental restoration methods use light-cured polymer materials fitted by a dentist or oral surgeon; eventually, the internal stresses built up within the material by the curing process cause it to shrink, which decreases the effectiveness and durability of the restoration. For instance, as the material within a dental filling shrinks, the seal binding the filling to the tooth surface is compromised, and recurrent decay may occur beneath the fillings; this can cause serious damage to patients' gums and teeth damage until repaired. The process pioneered by Bowman uses a unique light-cured material that reduces the physical stress within dental composites, avoiding shrinkage and other physical changes in the restoration. Dental restorations using this new composition will prove more durable, require fewer replacements, and improve patient comfort and dental health.

“We are delighted that 3M has licensed Dr. Bowman’s polymerization technology, and we believe that the technology presents the 3M team with numerous opportunities for product development not only in dental applications but in any product category that would benefit from reduced polymer shrinkage,” said MaryBeth Vellequette, a licensing manager at CU’s technology transfer office.

Biotech Building wants to show off your art[23]

The Jennie Smoly Caruthers Biotechnology Building (JSCBB) at CU-Boulder is holding an art competition for all CU students, faculty and staff, with prizes of up to $300 promised.

Details on the JSCBB art competition, open now through the end of April.
All submissions must be related to bioscience in some way. Sculptural, mixed-media and other 3-D art may be submitted. Please take a photo of the piece to submit online. Prizes will be awarded to first, second and third places (gift cards of $300, $200 and $100, respectively), plus priceless bragging rights. The JSCBB Art Committee will narrow the competition to 50 submissions; the JSCBB Executive Committee will choose 13 pieces to hang in common areas. You **do not** have to be a resident of JSCBB to submit artwork. Submit artwork online at: http://jscbb.colorado.edu/about/art-contest[24]

Proposals for technology conference due in April[25]

Faculty, staff and graduate students are reminded to submit proposals for the COLTT (Colorado Learning and Teaching with Technology) 2013 conference. The program committee looks for dynamic sessions that explore groundbreaking and/or proven uses of technologies in teaching and learning settings.

The 16th annual COLTT is set for Aug. 7 and 8 at the Wolf Law Building on the CU-Boulder campus.

The call for proposals is now open and the submission deadline is April 9.

Click here[26] for details about the call for proposals.

COLTT 2012 broke previous attendance records and the new venue was resoundingly popular. Comments from COLTT 2012 attendees:

“Fascinating and thought-provoking options for learning and teaching”

“I have no experience with WordPress or website design, so this provided a great introduction- my mind is swimming with ideas!”

“Provided really great resources and examples for creating Android apps. No programming required!”

“I gained some personal tips and tricks to make how I personally use social media less cumbersome.”

“Got me thinking in a whole new way.”

The COLTT 2013 Keynote Speaker will be CU Regent At-Large Stephen Ludwig.

Click here[27] for more information about the conference. Registration will open soon.

Scholarship partners include Arts and Sciences Support of Education Through Technology (ASSETT) ATLAS, and the Graduate School on the CU-Boulder campus and the Colorado Community College System (CCCS) for their affiliates.

Questions: Jill Lester, COLTT Conference Coordinator, jill.lester@colorado.edu[28].

Inspire a friend to get fit in 2013[29]

According to the Anschutz Health and Wellness Center[30] (AHWC), individuals who work out with a partner have a higher probability of reaching personal fitness goals. And when two people are focusing on the same goals, it's harder to quit. As the old saying goes, there is strength in numbers. Find a friend and get moving today:
Refer a friend to AHWC and you can each save up to 10 percent on membership dues for as long as you both are members. If you and your friend enroll for an annual prepaid membership, you will each receive a free month of dues. If you sign up for a monthly membership, the center will lower your assessment fee to $59, a savings of over $90. Annual memberships can save even more.
Inquire with membership for details. Certain restrictions apply. University students are not eligible for this promotion, but can earn a certificate to Bistro Elaia for referring a friend.

Contact: 303-724-WELL (9355), membership@anschutzwellness.com[31]

Marcoulier named Rising Star in business[32]

[33]
Aikta Marcoulier, director, Colorado Springs Small Business Development Center, recently was named a 2013 Rising Star by the Colorado Springs Business Journal. The SBDC operates as a part of the University of Colorado Colorado Springs College of Business and offers business consulting and training that assists small businesses in El Paso and Teller counties. Marcoulier was named director in May 2012.

Marcoulier was one of 30 Colorado Springs young professionals recognized as "those in the local community 40 and younger who have made significant strides in their careers and who have given back to the community through their dedication to volunteerism and charity." A panel of judges rated the nominees in five areas that gauged their work ethic and community involvement. The group will be honored today at a reception. Click here[34] for a full list of award recipients.

Kerrane to host fiery Iron Pour on Friday[35]

Rian Kerrane, an associate professor of sculpture in the College of Arts and Media at the University of Colorado Denver, hosts Iron Pour outside the Arts Building on the Auraria Campus from dusk until 10 p.m. Friday. Scrap iron is heated to 2300 degrees or higher, becoming molten, and is then poured into molds -- while sparks and fire fill the darkening sky. The event is free and open to the public.

Kerrane created the event in 2005 to bring attention to this creative process. She describes this effort and the few others like it around the country as an underground resurgence of industrial casting in the art studio.

“Iron is the core of the earth,” she said. “Casting iron is hard work and doing it generates community. The communal aspect of doing it as a public performance makes the audience a huge part of the Iron Pour.”

The Iron Pour is a massive effort with some of the iron poured from as high as 8 feet. Kerrane describes it as being like a waterfall of iron. “It is mesmerizing,” she said. “The art is almost produced as a side effect, which is curious. The performance takes on a life of its own.” A crew of 15-20 CU Denver students, faculty and staff are outfitted in fireproof gear to complete a number of tasks.

College of Nursing faculty host professional guests from Japan[36]

[37]

The CU College of Nursing (CON) International Program hosted 19 nursing faculty from seven Japanese universities. Travelling from the islands of Kyushu and Okinawa, the faculty visited University of Colorado Hospital (UCH) to learn about the Nurse Residency Program in a presentation by **Sarah Ward**, clinical nurse educator, who gave them a tour of UCH. The visitors also met with **Kathy Oman**, associate professor adjoint at CON and UCH research nurse scientist and clinical nurse specialist, regarding clinical research. They then visited the CON Center for Clinical Education (CEC) with **Fara Bowler**, instructor and CEC coordinator, where they met Caitlin Shay, a junior Bachelor of Science accelerated student, who had just recently visited Tokyo.

The second day, **Kathy Magilvy**, professor and associate dean for Academic Programs, gave a presentation on the college. The group also met with **Susan Bonini**, instructor, to learn about the bachelor of science program, and they ended the day with a tour of the medical school’s Center for Advancing Professional Excellence (CAPE) with **Joey Failma**, senior simulation clinical educator.

The group attended the 24th Annual Rocky Mountain Regional Research and Evidence Based Practice Conference where they joined CON Dean **Sarah Thompson** and faculty. CON Ph.D. student **Yuki Asakura**, MS ’05, RN, served as interpreter. **Diane Lenfest**, director of the International Program, said the visitors expressed great appreciation for their meetings with CON faculty, visits to the CEC, CAPE and UCH, and participation in the conference.

Tung tapped as new senior editor for Injury Prevention[38]

[39]

Gregory Tung, Colorado School of Public Health assistant professor of Health Systems, Management and Policy, was named the new senior editor for Injury Prevention Editor’s Blog.

Published by BMJ Group, Injury Prevention is an international peer-reviewed journal. The journal features articles on the science, policy and public health practice of injury prevention. The Editor’s Blog is a supplemental publication featuring insights and opinions of the journal’s editorial board. As the blog’s new senior editor, Tung is responsible for overall blog content and quality, in addition to blogging on issues of injury prevention in higher-income countries of North American and Europe.

Besides departmental faculty responsibilities, Tung is a member of the school’s Pediatric Injury Prevention Education and Research (PIPER) program. PIPER is a collaboration among the Colorado School of Public Health, University of Colorado School of Medicine and Children’s Hospital Colorado.

Dropping names ...[40]

Abbott

Lon Abbott, University of Colorado Boulder geoscientist, and his wife, Terri Cook, recently discussed their new book, "Geology Underfoot Along Colorado's Front Range," at the Boulder Bookstore. Abbott and Cook narrate the Front Range's tale, from its humble beginnings as a flat seafloor through several ghostly incarnations as a towering mountain range. The book's 21 vignettes lead you to easily accessible stops along the Front Range's highways and byways, where you'll meet dinosaurs, discover beaches, look for diamonds, and learn how Pikes Peak developed from molten magma into the significant landmark it is. … **Roger Giller,** professor of pediatrics at the School of Medicine and clinical director of bone marrow transplantation at Children's Hospital Colorado, recently became the Barton Family Chair in Bone Marrow Transplant. The endowment will support Giller and his colleagues with expertise in hematopoietic stem cell transplantation, and provide additional training in oncology, hematology and immunology.

In memoriam[42]

Names of current and former University of Colorado faculty and staff who have died in recent weeks. List compiled by Payroll & Benefit Services.

CU-Boulder
Kevin F. Burns, 49, facilities management. Feb. 6, 2013. **Lois M. Jones,** 91, faculty retiree. Feb. 21, 2013. **Thomas W. Noyes,** 65, classified staff retiree. March 1, 2013. **Phyllis J. Pittman,** 80, classified staff retiree. Feb. 11, 2013. **Wendell A. Stewart,** 89, classified staff retiree. Feb. 15, 2013. **Paul W. Winston,** 92, faculty retiree-emeritus. Feb. 22, 2013.
CU Foundation
Charlie McCord, 78, CU Foundation president emeritus. March 16, 2013.

Links
[1] https://connections.cu.edu/stories/five-questions-david-brain[2] https://connections.cu.edu/file/brainpng[3] https://connections.cu.edu/stories/state%E2%80%99s-revenue-picture-better-expected[4] http://1.usa.gov/XlnHz8[5] https://connections.cu.edu/stories/reaching-exercise-goals-could-mean-25-monthly-bonus[6] http://www.becolorado.org./[7] https://my.healthmedia.com/index.html?au=CUAUTHCD[8] mailto:questions@becolorado.org[9] https://connections.cu.edu/stories/aging-center-offers-answers-memory-questions[10] https://connections.cu.edu/file/uccscrumlinpng[11] http://www.uccs.edu/Documents/agingcenter/documents/Memory_Clinic.pdf[12] https://connections.cu.edu/stories/recent-graduate-finds-problem-biological-incubators-and-patents-solution[13] https://connections.cu.edu/file/ucbincubatorspng[14] https://connections.cu.edu/stories/denver-public-schools-students-told-university-%E2%80%98-place-you%E2%80%99[15] https://connections.cu.edu/file/ucd-dpspng[16] http://www.ucdenver.edu/about/newsroom/newsreleases/Pages/Chancellor-Elliman-emphasizes-student-success-in-State-of-University.aspx[17] https://connections.cu.edu/stories/medical-students-harlem-shake-things-match-day[18] https://connections.cu.edu/file/amatch1png[19] https://connections.cu.edu/file/amatch3png[20] https://connections.cu.edu/file/amatch2png[21] https://connections.cu.edu/stories/cu-licenses-dental-polymer-technology-3m[22] http://www.colorado.edu/chbe/christopher-n-bowman[23] https://connections.cu.edu/stories/biotech-building-wants-show-your-art[24] http://jscbb.colorado.edu/about/art-contest/art-contest-submission/view[25] https://connections.cu.edu/stories/proposals-technology-conference-due-april[26] http://coltt2013.pbworks.com/w/page/61544581/FrontPage[27] https://www.cusys.edu/coltt/2013/index.html[28]

mailto:jill.lester@colorado.edu[29] https://connections.cu.edu/stories/inspire-friend-get-fit-2013[30]
http://www.anschutzwellness.com/[31] mailto:membership@anschutzwellness.com[32]
https://connections.cu.edu/people/marcoulier-named-rising-star-business[33]
https://connections.cu.edu/file/pmarcoulierpng[34] http://csbj.com/2013/02/07/congratulations-2013-rising-stars/[35]
https://connections.cu.edu/people/kerrane-host-fiery-iron-pour-friday[36] https://connections.cu.edu/people/college-nursing-faculty-host-professional-guests-japan[37] https://connections.cu.edu/file/pconpng[38]
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