Charita Smith lost 150 pounds. (Photo: Glenn Asakawa/University of Colorado)

For anyone wanting to be completely surprised as Tuesday night’s season premiere of “Extreme Weight Loss” unfolded, Charita Smith was a strutting, smiling spoiler alert.

The Colorado Springs mother walked the red carpet in downtown Denver and revealed her stunning transformation: a 150-pound loss enabled by the ABC-TV reality series with the assistance of the University of Colorado Anschutz Health and Wellness Center on the CU Anschutz Medical Campus.

Surrounded by family, friends and well-wishers -- including the center’s Holly Wyatt, M.D., and James O. Hill, Ph.D. -- Smith couldn’t stop smiling during the event at the UA Denver Pavilions Stadium 15, where about 250 guests gathered for a big-screen viewing of the episode she stars in. Her smile faded once: She was taken aback by the sight of a life-size cardboard cutout of her “before” image, when she weighed 310 pounds.

“It’s kind of scary, because I didn’t realize when I was that person that I was that size – that I really looked that way,” said Smith, 33. “I thought I did the best with what I had. And I didn’t realize there was so much more that was out there waiting for me. So now when I stand next to this cutout, I want to take it home! Because it’s a good reminder: I’m never going back.”

James Hill and Holly Wyatt at Tuesday’s “Extreme Weight Loss” premiere in Denver. (Photo: Glenn Asakawa/University of Colorado)

The fourth season’s 13 episodes were produced partly at the CU Anschutz Health and Wellness Center, with Wyatt, the center’s medical director, serving the same role on the show. She appeared in some scenes during Tuesday’s episode, as did Michael Gordon, M.D., associate professor in the School of Medicine and chief of plastic surgery at University of Colorado Hospital, who served as skin surgeon for contestants. The show stars trainers Chris and Heidi Powell; Rocco Dispirito is the nutrition consultant.

The center’s state-of-the-art facility and staff expertise played a crucial role in the success stories embodied by Smith and others. The time in the spotlight is bound to gain new converts.

“I didn’t know anything about the center before I started on the show,” Smith said. “I’m pretty local, from Colorado Springs, but I was kind of stuck in my own house, in my own world. Being affiliated with the Anschutz Health and Wellness Center, their staff is just absolutely remarkable. They are the utmost professional people and they’re caring. They give of their time, their business and the technology they provide to us to find out about our bodies. They take the steps necessary to restore our health. They’re just one special group of people and really are amazing.”

Charita Smith praised the CU Anschutz Health and Wellness Center team for its support of her weight-loss mission. (Photo: Glenn Asakawa/University of Colorado)

The center has no bigger fan than JD Roth, executive producer and creator of “Extreme Weight Loss” and predecessor “The Biggest Loser.”

“We created weight loss for television, and in all the years I’ve been doing this, I’ve had a lot of doctors stare down their nose at this reality guy who thinks he can change people’s lives,” Roth said. “It was only after we started getting success with weight loss that people got interested. And still, everybody didn’t really appreciate in the medical field
what we were doing.”

Roth said he had never before experienced the warm, open-minded welcome from a medical facility that he enjoyed at the CU Anschutz Health and Wellness Center when production began last year.

“Every doctor, every nutrition person, everyone who helped out, they’re so committed, and so convinced that we have something to offer that they can learn,” he said. “That allows me to say I have something that I can learn from you, too. The exchange of information has been fantastic.

“I'll never do a weight loss show again without this group. Sometimes, intangible chemistry just happens and you shouldn’t second guess it, just roll with it.”

Production on the series’ fifth season already is underway. But should the network want more, Roth said he doesn’t want to do it without the CU Anschutz Health and Wellness Center. Overnight ratings from Tuesday’s telecast bode well, with nearly 4 million viewers tuning in – an 8 percent increase over the previous season’s debut.

“I feel really lucky we were able to find Anschutz,” Roth said. “I never really felt like I had a place that I could grow roots and bring a lot of the creativity and ideas I have about how to transform America on the health and wellness side. I’m looking forward to growing those roots there and creatively branching out from where we are together now.”

At Tuesday’s premiere, CU President Bruce Benson introduced Hill, the center’s executive director, and Wyatt to the audience; they, too, spoke of their positive experience collaborating with the show’s producers. CU-logo tissue boxes came in handy when the screening inspired tears. Cheers, applause and a standing ovation for Smith brought the evening to a close.

“Every single person I’ve come in contact with on the show has touched my life in ways they don’t know, and probably never will understand,” Smith said. “I could not be more grateful and proud of the work I put in with them beside me.”

Extreme Weight Loss airs at 7 p.m. Tuesdays on Channel 7, KMGH-TV, Denver’s ABC affiliate.

Five questions for April Lanotte

April Lanotte has loved science since she was young, spending time gazing up at the sky with her amateur astronomer father, and her interest hasn’t waned. She currently is senior instructor/master teacher with the University of Colorado Colorado Springs UCCSTeach Program. Previously, she taught middle and high school students, was appointed to an education fellowship with NASA, and is now writing curriculum that inspires students to get involved in science and math.

Teaching was something she “tried out” in college. “I fell in love with it and didn’t want to do anything else after I gave it a try,” she says. “One of the things I really love is working with other people and getting them as excited as I am about what I’m doing.”

With degrees in English and science, she has taught in a variety of settings, from middle school in California and Colorado Springs, to high school in rural Simla, Colorado, to college students at CSU.

While she has earned a variety of awards and accolades, perhaps the one that means the most is her recent induction into the Distinguished Alumni Circle at La Roche College in Pittsburgh, where she earned a bachelor’s degree in English literature. The college had a lot to do with her educational path, which includes a master’s in English literature
with a focus on nonfiction science writing from Colorado State University and a master’s in science education from UCSC.

She and her family live in Calhan, in El Paso County, where they enjoy their own 40 acres and the rest of the wide open spaces.

1. What is the UCCS Teach Program and what are some of your goals through that program?

The program works with math and science majors who, at the same time, are earning their secondary teaching certificates, which will allow them to teach middle- and high-school students. I work with the teachers to show them how to more efficiently teach content. For instance, college chemistry students will go into lab, start an experiment that has to run for 30 minutes, then go on to the next step. But if you tried to teach high school students something like that and let them loose for 30 minutes, it would be chaos, so we help teachers understand how to structure the lessons so students can still do a variety of different things.

I’m involved with a lot of curriculum work where I’m looking at how students will be impacted and that will help future teachers. After my fellowship with NASA, I changed my focus. When you are teaching in a small town, you look at the head of a pin from a teacher’s point of view, but when you see what is happening at the federal level, it really changes your perspective. In classrooms, teachers don’t care what is going on in Washington, D.C., and in D.C., they don’t have any idea what people are doing in the classroom. So I’m trying to find a way to get the two to see each other’s point of view.

2. In Washington, D.C., you were an Einstein Educational Fellow at NASA’s Aeronautics Research Mission Directorate. What did you do there and what was the most enjoyable aspect of the two years you spent there?

I was one of 20 math and science teachers who went to D.C. to help shape federal science programs. Basically, our job was to be there to put a realistic spin on what they do. I worked with NASA, where they have all these great ideas, but because they aren’t teachers, they don’t know how to translate those ideas to fit a curriculum. NASA Aeronautics was designing airplanes that you might be seeing 20 or even 30 years from now. I helped write curriculum and did a lot of outreach activities to explain what NASA does so that people actually understand it. I still work with them on a part-time basis.

I like writing curriculum – that’s partially because of my writing background – but at the same time, I love interacting with people. And NASA was always a huge thing for me because I was always interested in space science. I did research when I was a master’s candidate at CSU on the space shuttle and have always been interested in the shuttles. The most exciting thing I was able to do while on my fellowship assignment was travel around with other NASA people and help as the space shuttles were being retired around the country to their final homes. It all pretty much came full circle for me.

3. You also write curriculum for the Challenger Center for Space Science Education. What types of things do the centers do?

There are Challenger Centers all over the country. They opened after the Challenger disaster when the families -- rather than building a memorial -- developed these hands-on centers where students can go to run simulated space missions. There’s one here in Colorado Springs. One of things I started doing is helping write curriculum and adapting existing curriculum. The students take on the role of a mission control person or a space station specialist and they run experiments together. It’s pretty neat hands-on science aimed at middle-school students. They also have missions for adults and other ages, too.

4. What are two things on your bucket list?

One is to go to Antarctica. I would love to do that; it would be an adventure to the extreme, visiting a place like nowhere else here on Earth.

And if they ever start sending people to Mars, I would go. I could say I grew up in Mars, Pennsylvania, and I went to
Mars.

I have always been interested in space. I think it started because my dad was an amateur astronomer. I was always outside looking at the stars with him; he instilled that curiosity in me. It was the heyday of the space shuttle when I was growing up and I've always been a fan of “Star Trek” and “Star Wars,” which really fascinated me and allowed me to let my imagination take over.

I went away from it for a while. I wasn’t always the best math student and I let myself be convinced that that meant that I wasn’t supposed to do science. I was always a good writer, so I decided to focus on that. But when I started teaching English using science in some of the things I asked my students to write about, it dawned on me that I didn’t want to be writing about science as much as I wanted to be doing science. When I moved to Colorado Springs, I started taking classes at the Space Foundation. That cemented by suspicions and I knew this is what I wanted to be doing and that’s when I started working on my master’s in space science education.

5. Tell me about a favorite item or artifact in your office and the story behind it.

It's actually at home, but it's called a Lichtenberg or “captured lightning” sculpture. It's a piece of acrylic that's been sent through a particle accelerator. It makes a brilliant sculpture that looks like lightning and is basically fossilized lightning. I love that sculpture, which shows potential and energy, and embodies so many different things at once. An engineer at MIT makes the sculptures and I heard about it when I was at MIT for a lecture and I knew I wanted one.

Scholarship luncheon raises $100,000

The 2014 Karen Possehl Women’s Endowment Scholars pose for a picture with Karen Possehl

One of the eight women honored at the 10th annual Karen Possehl Women’s Endowment luncheon May 21 had been kidnapped by her mother, and had to eventually change her name to hide from her physically abusive dad.

Another ran away from home at age 13; at age 9, her mother had burned down her family home on Christmas Eve in anger, rendering them homeless for Christmas and some time beyond. Most had been divorced at least once. Many had to leave abusive relationships to gain their freedom to pursue higher education.

Yet all are exceptional UCCS students, with GPAs within spitting distance of a perfect 4.0. More importantly, they now have more stable, healthier home environments than those they came from.

Effective this May, all are UCCS graduates thanks to the Karen Possehl Women’s Endowment. The annual KPWE luncheon drew 450 attendees to the Gallogly Events Center.

These Karen Possehl Women’s Endowment scholars are the living embodiment of the phrase, “Nothing is impossible: but sometimes, it just takes a little longer.” These words were spoken by Nancy Lewis, who gave a keynote speech at the luncheon as the Unstoppable Woman of 2014, an annual award designated to a woman who embodies success and engagement with the Pikes Peak region community.

Lewis, who received a UCCS bachelor’s degree in 1980 (and once took communication courses from now-Chancellor Pam Shockley-Zalabak), has played an important role in Colorado Springs civic life for 50 years, including as head of the city’s Parks and Recreation division. She also played a critical role helping secure a $2 million commitment for a Veterans Health and Trauma Clinic at UCCS.

“When I look down the list of Unstoppable Women who preceded me,” said Lewis about prior honorees, which have included Colorado Springs’ first female mayor among other key influencers, “what I really want to know is, ‘Why
aren’t we in charge?”

Some of the graduating KPWE scholars may change that. Video profiles were shown at the luncheon of each student: Lani Duran, Tabitha Barile, Ingrid Henderson, Laura Horvath, Sarah Lang, Maryellen Lavandar, Kimberly Warren and Nicole Wilder.

Selected as Karen Possehl scholars based on their need and potential, each recipient received not only monetary support, but also community mentorships, peer counseling and child care support to help these women concentrate on their education.

Denver residents Karen and Jim Possehl made a lead gift in 1998 to endow the scholarship program. Their generous continued support (including $65,000 donated in connection with this luncheon) has been joined by that of hundreds of community donors. At this luncheon, attendees contributed more than $36,000 in gifts, for an event total of more than $100,000.

The 2014 graduating scholars are among 141 KPWE scholars who have received $684,010 in support since the program’s inception. Despite the outsized obstacles these women have overcome, 94 percent have received bachelor’s degrees or are on target to do so.

One of these is Laura Horvath, who was married at age 18 and was a stay-at-home mom with four kids by age 25 before furthering her education at UCCS thanks to the KPWE program. In her video testimonial, she cited a silver lining of her experience: “What’s really special is that we can say that our entire family is in school all at the same time.”

For more information or to make a gift to the Karen Possehl Women’s Endowment, contact 719-255-5100 or visit cufund.org/kpwe

---

Diet beverages shown to play positive role in dieters’ weight loss

A groundbreaking new study released this week by the University of Colorado’s Anschutz Health and Wellness Center and published in Obesity, the journal of The Obesity Society, confirms definitively that drinking diet beverages helps people lose weight.

“This study clearly demonstrates that diet beverages can in fact help people lose weight, directly countering myths in recent years that suggest the opposite effect – weight gain,” said James O. Hill, PhD, executive director of the University of Colorado’s Anschutz Health and Wellness Center and a co-author of the study. “In fact, those who drank diet beverages lost more weight and reported feeling significantly less hungry than those who drank water alone. This reinforces that if you’re trying to shed pounds, you can enjoy diet beverages.”

The 12-week clinical study of 303 participants is the first prospective, randomized clinical trial to directly compare the effects of water and diet beverages on weight loss within a behavioral weight loss program. Conducted simultaneously by researchers at the University of Colorado Anschutz Health and Wellness Center in Aurora and Temple University’s Center for Obesity Research and Education in Philadelphia, the study shows that subjects who consumed diet beverages lost an average of 13 pounds – 44 percent more than the control group, which lost an average of 9 pounds. More than half of the participants in the diet beverage group —64 percent — lost at least 5 percent of their body weight, compared with only 43 percent of the control group. Losing just 5 percent of body weight has been shown to significantly improve health, including lowering the risk of heart disease, high blood pressure and type 2 diabetes.

“There’s so much misinformation about diet beverages that isn’t based on studies designed to test cause and effect, especially on the Internet,” said John C. Peters, PhD, co-author of the study and the chief strategy officer of the CU Anschutz Health and Wellness Center. “This research allows dieters to feel confident that low- and no-calorie sweetened beverages can play an important and helpful role as part of an effective and comprehensive weight loss
strategy.”

Study participants were randomly assigned to one of two groups: those who were allowed to drink diet beverages—such as diet sodas, teas and flavored waters—or those who were in a control group that drank water only. With the exception of beverage options, both groups followed an identical diet and exercise program for the duration of the study.

In addition to losing 44 percent more weight than the control group, the diet beverage group also:
- Reported feeling significantly less hungry;
- Showed significantly greater improvements in serum levels of total cholesterol and low-density lipoprotein (LDL)—the so-called “bad” cholesterol;
- And saw a significant reduction in serum triglycerides.

Both diet soda and water groups saw reductions in waist circumference, and blood pressure.

This latest study adds to the body of research demonstrating that diet beverages do not hinder, but in fact help, with weight loss. In particular, two studies published in the American Journal of Clinical Nutrition by researchers from the University of North Carolina in 2012 and 2013 randomly assigned non-dieting participants to drink either water or diet beverages. While both groups cut their food intake significantly, after six months the diet beverage group had a greater likelihood of reaching a meaningful (5 percent) amount of weight loss compared to the control group. The diet beverage group also experienced a greater reduction in dessert consumption than the water group. Overall, the findings suggest that diet beverages do not fuel a preference for sweet foods and drinks.

Additional research published in 2009 on weight loss maintenance, drawn from the National Weight Control Registry, found that successful weight-loss maintainers drank three times more diet beverages than those who had never lost weight.

The study was supported by the American Beverage Association (ABA), a trade association in Washington, D.C. It was peer-reviewed and posted on www.clinicaltrials.gov. Neither ABA, nor any of its members, was involved in any part of the study, its analysis or the writing of this paper.

---

New CU study illuminates how cancer-killing gene may actually work

Scientists armed with a supercomputer and a vast trove of newly collected data on the body’s most potent “tumor suppressor” gene have created the best map yet of how the gene works, an accomplishment that could lead to new techniques for fighting cancers, which are adept at disabling the gene in order to thrive.

Scientists from the University of Colorado Cancer Center and the University of Colorado Boulder used a new technology to tease out how the p53 gene—which is responsible for recognizing damaged DNA in cells and then marking them for death—is actually able to suppress tumors by determining what other genes p53 regulates. The study, published in the journal eLife, describes dozens of new genes directly regulated by p53.

The study authors say further research can explore which of these genes are necessary for p53’s cancer-killing effect, how cancer cells evade these p53-activated genes, and how doctors may be able to moderate cancer cells’ ability to stay safe from these genetic attempts at suppression.

The exhaustively studied p53 gene—which has been the subject of 50,000 papers over more than 30 years of research—is the most commonly inactivated gene in cancers. When p53 acts, cells are stopped or killed before they can survive, grow, replicate and cause cancer.

As such, all cancers must deal with p53’s anti-tumor effects. Generally, there are two ways that cancer cells do this: by mutating p53 directly or by making a protein called MDM2, which stops p53 from functioning.
The current study explores cancer cells’ second strategy of blocking p53 function by producing the protein MDM2. Researchers have reasoned that treating a patient with an MDM2 inhibitor should allow p53 to restart its anti-cancer activities.

“MDM2 inhibitors, which are through phase I human trials, effectively activate p53 but manage to kill only about one-in-20 tumors,” said Joaquín Espinosa, an investigator at the CU Cancer Center, an associate professor of molecular, cellular and developmental biology at CU-Boulder, and the paper’s co-senior author. “The question is why. What else is happening in these cancer cells that allow them to evade p53?”

The answer is in what are called “downstream” effects of this gene, Espinosa said. The gene p53 doesn’t act against cancer alone. Instead, it is the master switch that sets in motion a cascade of genetic events that lead to the destruction of cancer cells. And until now, it was unclear exactly which other genes were directly activated by p53.

The imperfect knowledge of p53’s effects isn’t for lack of research interest. Researchers have written thousands of papers exploring p53’s targets and, in fact, many genetic targets are previously known. Most of these studies determine genetic targets by measuring levels of RNA.

When a gene is activated, it creates a protein. But between the gene and its protein product is the measurable step of RNA—the more gene-specific RNA, the more often a gene’s informational blueprint is carried to the cell’s manufacturing centers, and the more protein is eventually made. Researchers measure RNA to see which genes are being turned up or down by any other gene.

“But the problem is, measuring overall RNA levels is like looking in a huge bucket full of water—you see the water but you don’t really know where it came from. And imagine you are dripping water into this bucket—it takes a long time for those drips to create a measurable change in the overall water level,” Espinosa said.

Also, it’s very difficult with traditional methods to tell whether increased RNA is a direct effect of a gene or whether more RNA in the bucket is a product of two- or three-steps removed signaling. The p53 gene may activate another gene, which activates another, and down the line until the far downstream result is increased RNA.

“Instead, to measure the direct genetic targets of p53, we measured not the water in the bucket, but the faucet dripping into it,” Espinosa said.

The technique is called GRO-Seq, or Global Run-On Sequencing, and it measures new RNA being created, not overall RNA levels.

“Many teams around the world have been getting cancer cells, treating them with MDM2 inhibitors and waiting hours and hours to see what genes turn on and then only imprecisely. GRO-Seq lets us do it in minutes and the discoveries are massive,” Espinosa said.

The technique also generates an astounding quantity of data. That’s because it requires counting tens of thousands of RNA molecules before and after p53 activation.

So the experiment required designing algorithms—sets of instructions for solving problems—to sort through the data, and a computational biologist driving a supercomputer.

Espinosa partnered with computational biologist Robin Dowell at CU-Boulder’s BioFrontiers Institute. Together they co-mentored a postdoctoral fellow, Mary Allen, who was capable of doing both the molecular biological and computational aspects of the work.

“The data collection took a year and the computational analysis took a year and a half,” Dowell said.

The results helped the scientists pinpoint dozens of new genes directly regulated by p53, which may lead to future cancer-fighting strategies.
The technique of GRO-Seq also may have additional, far-reaching applications. For example, the Dowell lab plans to find RNAs whose synthesis is changed by a third copy of chromosome 21 in Down Syndrome individuals.

The study was supported by the Howard Hughes Medical Institute, the National Institutes of Health, the National Science Foundation, a Boettcher Foundation Seed Grant and the Boettcher Foundation’s Webb-Waring Biomedical Research program.

**Engineering students rev up the innovation in capstone projects**

Nick Paris of the The Missing Lynx/SAE Mini Baja team (purple shirt) explains mechanical features of the off-road vehicle's engine to other students at the Engineering Senior Design Competition.

It's no wonder that engineering students get pumped about their capstone projects. Not only do their creations tie together everything they've learned as undergraduates, but, in many cases, the students have a product that may bring them notoriety and revenue in the marketplace.

The usual stunning array of innovation, which typifies the kind of hands-on learning students receive at CU Denver, was on display May 16 as the Engineering Senior Design Competition showcased 28 projects in the North Classroom atrium. College of Engineering and Applied Science students spend a year working on projects for their Senior Design course, a capstone to their undergraduate studies. A panel of industry judges inspect each project and ask questions of each team of students. The judges select the best overall project ($1,000) and a top project from each discipline ($250).

Many of this year's projects focused on dynamic transportation design (FasTracks-RTD Colfax Station, Swift Tram-DIA, Twin Tunnel Reclamation), health care and healthy living (MapMyFitness, Therapeutic Response Exoskeleton, CU Denver Prosthesis, Remote Emergency Biometric System, Track Team/Con-Track) and energy conservation (Micro-Hydro Generator, E-Home Automation, Power Patroller and Archetype, a hydrogen-fuel-cell vehicle). Other projects ranged from way out there (Magnetic Rail Spacecraft Liftoff Accelerator) to whimsical (re-mindful, a mobile app that delivers a daily reminder to smile).

The mechanical engineering team that built The Missing Lynx—SAE Mini Baja was looking forward to racing its off-road vehicle at a Society of Automotive Engineers (SAE) event in Kansas in late May. "The idea is you're supposed to design it as if a company has come up and said, 'We want you to design an off-road vehicle for us,'" said team member Matt Reed. "They put us through a technical inspection to make sure everything is looking good and then they put us through four dynamic events—acceleration, sled pull, maneuverability/traction and braking."

The design competition judges liked what they saw of the Mini Baja, awarding it best design in the Mechanical Engineering Department. "The nice thing about this big of a project is it lets us tie everything together at once and really settle into the things we've learned over the past several years," Reed said.

Another project in the mechanical engineering group—Track Team/Con-Track—was inspired by a disabled woman who is a friend of one of the team members. The team developed a battery-powered wheelchair that travels over rocks, gravel, snow and other outdoor obstacles. The team members built 90 percent of the parts that are on the all-terrain wheelchair.

"We have suspension on ours," said Nathan James. "Most of the other (all-terrain wheelchairs) just have a straight drive, so if it gets bumpy, it's really bumpy."

Reed said the capstone project was the best educational experience he had in his undergraduate years. "Actually applying the knowledge we've learned does way more than just taking a test."
A team in the Electrical Engineering Department created E-Home Automation, which allows a user to wirelessly connect and control home systems—such as light switches, dishwashers and home security systems—via the E-Home website or mobile phone application.

Some of the team members already had experience working as electricians, said Josh Hartley. "We thought it would be interesting to integrate what we know with something we've learned (in class)," he said. "There's nothing (on the market) where the home automation is really yours and you can control it and run it. With other systems you have to call a third party to come in and install it for you. This is so easy to install that anyone can do it. It's plug and play."

Here are this year's winners:


**Galleries of Contemporary Art to dazzle creative scene with third annual Brilliant**

"BRILLIANT 2014," the UCCS Galleries of Contemporary Art's third annual art party fundraiser extravaganza, is scheduled for 7 p.m. June 14 on the Nosh Restaurant Patio and GOCA 121, 121 S. Tejon St.

Free parking will be provided in the Plaza of the Rockies garage for this event.

Advance tickets are now available at www.uccs.edu/goca. Tickets range from $40 for members to $80 for VIP. Students are $25 with ID. Discounted four-packs and 10-packs as well as VIP Packages are available.

"BRILLIANT" combines artists and dancers, cocktails, Nosh catered food, live(ly) auction, art installation and music, with a creative twist. GOCA 121 and the Nosh patio will be transformed into the party place of the year and, in the words of Daisy McConnell, gallery director, "brilliant."

For "BRILLIANT 2014," GOCA will feature new works and original performances by Ormao Dance Company, Denver Digerati/IvarZeile, Soul Mechanics Krew, DJ Prominent and visual artist Wendy Mike. Rana Novini, KRDO News Channel 13 anchor, will emcee the evening's program with guest appearances by regional leaders throughout. A live(ly) auction includes an original artwork by artist and UCCS alumnus Dareece Walker, plus more.

"BRILLIANT 2014" is a creative extravaganza that raises critical financial support needed to realize future gallery programs, exhibits, and innovative collaborations. GOCA is known as a regional leader in contemporary culture programming. Money raised at "BRILLIANT" will be used to bring 2014-2015 exhibits and programs in both gallery spaces and to the community.
GOCA is a regional hub of contemporary art, culture, and conversation. By featuring world-class artists, hosting artist and expert talks, and offering meaningful events, GOCA engages UCCS students, faculty, staff and Pikes Peak Region community members in contemporary culture and life.

For more information, contact McConnell, dmcconne@uccs.edu or call 719-255-3504.

GOCA is a contemporary arts organization with two galleries – one founded on the UCCS campus in 1981 and a satellite downtown location opened in 2010 in the Plaza of the Rockies building.

Students start next chapter of lives at commencement ceremonies

The skies cleared Friday morning, bathing the Anschutz Medical Campus in bright sunshine after days of drenching rains and swirling winds. It couldn't have been a more perfect setting for the commencement ceremonies that saw more than 865 students walk to the podium for their degrees.

The School of Medicine ceremony brimmed with poignant moments as longtime Dean Richard Krugman, M.D., who recently announced he will be stepping down as dean, delivered a touching and thought-provoking address. Also, one of the class’s standout leaders, Igor Shumskiy, was greeted by four generations of his family, including his physician grandmother, who hooded him.

Here are profiles of just a few of our many talented graduates:

IGOR SHUMSKIY: Keeping up a family tradition in health care

Shumskiy

Practicing medicine goes back generations in the Shumskiy family, extending into Eastern Europe in the 1940s. At the University of Colorado School of Medicine Commencement, the circle became complete when Igor Shumskiy was hooded by his grandmother, Nella.

The odds of Nella Ravdel entering medical school in Ukraine some 70 years ago were not good. With the outbreak of World War II, the Shumskiy family fled their home country to Siberia. They returned in 1945, and although health-care training wasn’t a certainty for the family as religious persecution mostly barred the Jewish community from medical schools, the lack of males in the immediate post-war era opened the doors for her.

Nella’s father was a renowned inventor of medical equipment in Ukraine and pushed her toward medicine. She attended school in Dnipropetrovsk and graduated in 1950. She started out in family practice, which surprised many of her professors because they noted her skills in working with children.

“Even when I was a child it was very obvious she was extremely good with kids,” Igor said. “They felt very comfortable with her and she understood them.”

The family—including Nella and her husband, Anatoliy—moved to Colorado in 1991 when Igor was 4. Under his grandmother’s guidance, Igor grew up aspiring to become a physician.
“She was always a big influence in my life in terms of medicine and caring for children,” he said. “That was always a big motivation for me to go to medical school and become a pediatrician.”

He earned a bachelor’s degree in biochemistry and mathematics at CU-Boulder and enrolled at the CU School of Medicine with plans of practicing emergency medicine. “Over time, I realized that didn’t fit my skills or interests,” Igor said. “It became pretty clear during my pediatrics rotation. I was much happier and more content with what I was doing. I came home pleased with my day and was excited to go to work.”

On Match Day, Igor was matched with his first choice, Boston Children’s Hospital. He’ll join the hospital’s urban health and advocacy track. “I got pretty lucky,” he said.

On Friday (May 23), Igor’s family—parents, sister, two nieces and grandparents—watched another pediatrician enter the family. As class speaker at the graduation ceremony, Igor delivered a compelling speech about the complexities and opportunities that await his fellow graduates in the field of medicine. As he spoke holding the microphone, he occasionally paused to solve a Rubik’s Cube that he held in his other hand. At the end of his talk, he held the solved cube aloft and said, “We chose to do the simplest, most beautiful act. We’ve chosen to help people.”

Prior to the ceremony Igor reflected on the Class of 2014, which he called a “phenomenal” group of students. “We’re going to go on to do some pretty amazing things—if we’re not already doing them,” he said.

One of the memorable things Igor has done is serve for the past year as president of CU Peru, a nonprofit that educates community health workers in the Peruvian Amazon. During the past four years, Igor has spent a total of about five months in Peru working on health projects. “I have a lot of experience with community development in Peru and international nonprofit work,” he said. “I’m hoping I can intertwine that and work on better systems of medical care, especially with pediatrics.”

He has also worked to create a better sense of community among School of Medicine students, residents and faculty, as one of two Lead Student Advisors in the Advisory College Program, an 18-month-old advising and wellness program for SOM students.

The Advisory College Program, a joint effort with the Office of Student Affairs, is broken into eight “colleges” comprising problem-based learning groups. The Spring Stampede caps each academic year with field day-style events on the quad at the Anschutz Medical Campus.

The hope is that the Advisory College Program, which improves opportunities for cross-class collaboration and mentorship, will be integrated with the medical school curriculum. “It’s a very innovative program and we’re hoping it continues to grow and provide new opportunities for our students,” Igor said.

He is also interested in improving education for medical students. “I want to help keep them excited and engaged and keep them loving what we do,” Igor said. “It’s easy for us to forget why we’re doing what we’re doing, or why we went into this in the first place.”

NOELLE DILGARDE: From rural Africa to advanced degrees in health care

Dilgarde

As a young girl in Cameroon, Noelle Djongoue Dilgarde often dreamed about becoming a nurse. She lived in the city with her family, but summers were spent in the village where her grandfather lived.

"I come from a family of traditional practitioners," Dilgarde said. "My grandfather and mom used herbs to treat people in the village—what we call here natural medicine from plants."

In 2003, Dilgarde moved to the United States to pursue her dream of earning a university degree and working in health care. Knowing no English, she enrolled in English-as-a-second-language classes in Chicago. She soon met her future husband, who was from Colorado, and her future began to fall in place when she started an undergraduate registered
nursing program in Denver.

But then her husband fell ill. He had a series of surgeries, including liver and sigmoid colon operations, before suffering from significant complications, including a bout with listeria. "I did that entire RN program with my husband in and out of the hospital—now I'm doing my master's program with my mom in and out of the hospital."

This spring Dilgarde graduated with a master of science in nursing from the University of Colorado College of Nursing, with an emphasis as a family nurse practitioner.

Her mother has been battling heart problems and between classes, and often overnight, Dilgarde has been at her bedside at University of Colorado Hospital. "I just love to take care of people," she said. "Even as a little girl I just loved that. Nursing gives you that opportunity to be one-on-one with a patient and you get to see the progress of your work. It's rewarding when that person gets better."

Over the past several years, Dilgarde has frequently felt overwhelmed. But, she says, "you have to find a way to laugh about the situation. You can't just sit there and cry and say, 'I can't do this.'"

Dilgarde is currently doing two clinicals—at Dermatology Associates of Colorado in Lone Tree and Romanat Clinic in Aurora—and her story of perseverance especially serves as an inspiration to her patients at Romanat. The clinic treats an underserved population: immigrants, Medicaid patients, the poor.

She said patients often gaze at her wide-eyed when they see her in her white coat. "Every day I tell my story to young patients who ask questions: Is it hard to learn English? Go to school? I tell them at the start it was. When I first met my husband we communicated in sign language.

"My intention is to just push these young girls and boys who come to the clinic with this message: 'Hey, you can do this.'"

The physician at the clinic, Haftu Gebrehiwot, M.D., is glad to have Dilgarde on the team. "Our patients have responded to her," he said. "This means she's good."

Dilgarde, who is also raising a 15-year-old daughter, has still more degrees—and lofty ambitions—in her future. This fall she will start her doctorate of nursing program at the CU College of Nursing; concurrently, she will pursue her second master's degree—a master of public health in the Colorado School of Public Health.

Ultimately, Dilgarde, who speaks French, English, Bantu and Spanish, wants to move from one-to-one patient care to serving larger populations. "I want to come up with something—design a health-care program—and see how it applies to a whole organization or a village. I would also love to work with an international organization, like UNICEF, because I don't want to waste the language skills I have."

This summer, she plans to volunteer for International Medical Relief on a trip to Kenya.

Having grown up poor in Africa, not a day passes when Dilgarde isn't grateful for the opportunities she has found in the United States and at CU Anschutz. "I dream of one day going to university and having a degree, and being able to work in the medical field," she said. "This is a dream that, as a little girl, you have in the back of your mind and you never imagine that you'd be in such a program."

LEVI BONNELL: Inspired to improve global public health

Bonnell

Levi Bonnell finds inspiration on foreign soil, especially in countries that are struggling to improve public health.

So when Bonnell spoke to the Class of 2014 at the Colorado School of Public Health's commencement ceremony, he shared snippets from his adventures in Guatemala, Asia and sub-Saharan Africa.
The path to his Master's in Public Health (MPH), a 4.0 GPA and the speaker's podium started inauspiciously. Back in his early undergraduate days at CU-Boulder, Bonnell lacked focus, landed on academic probation and then flunked out. He'd always enjoyed traveling and exploring other cultures, so the summer after his freshman year he went to Guatemala to help build an orphanage.

"The trip changed my life. It gave me a lot of perspective," Bonnell said. "It inspired this lifelong love of travel and helping people who are less fortunate."

Bonnell turned his academics around and earned a bachelor's degree in quantitative economics with a minor in applied mathematics. He then spent a year studying methodology in the Engineering Management Program at CU-Boulder.

"That got me interested in epidemiology and biostatistics. I thought I could apply this knowledge to helping people—so that's where the idea of getting a master's in public health came in," he said. "Also, I was a teaching assistant in that program, and it ignited a passion for teaching as well."

Before he entered the master's program at the Colorado School of Public Health, Bonnell traveled to Asia and bought a motorcycle. He spent six months riding around Vietnam, Laos and Cambodia. "I planned to get off the beaten path, to look at it as a way to find inspiration, but it was really eye-opening and also a ton of fun," he said of the adventure.

Not speaking the languages, Bonnell found his way into the homes of villagers and monks by smiling, using hand gestures and pulling out his maps. "It was amazing how people with nothing can offer everything," he said.

While touring Southeast Asia he logged onto a computer just long enough to finalize his enrollment into the MPH program at the school's Anschutz Medical Campus location.

Also fun and inspiring has been his experience with the "fantastic professors" at the Colorado School of Public Health. Bonnell has especially been influenced by Jessica Bondy, MSHA; Deborah Thomas, Ph.D.; John Hokanson, MPH, Ph.D.; and Sharon Lutz, Ph.D.

"They are so cool and so willing to help," Bonnell said. "We have these ski days where a lot of professors come. They are experts—some of them are the best in the world in their field—and they like to come hang out with us."

He enjoys how professors from other schools and colleges on the Anschutz Medical Campus[96] also contribute to his academic experience. "It's a nice mix. You get a lot of different viewpoints."

Bonnell has also benefited from Associate Professor Thomas's six-year association with the Catholic University of Health and Allied Sciences (CUHAS) in Tanzania. Last summer, Bonnell joined Thomas on a trip to the East African nation to continue the collaborative work between the Colorado School of Public Health and CUHAS on public health projects. They worked on a project that involved artisanal gold miners who'd been exposed to mercury and arsenic. Their research also focused on knowledge, awareness and attitudes about rabies in rural areas. "The mining towns just pop up out of nowhere," Bonnell said. "They have no infrastructure, no running water. The rates of STDs are incredibly high."

This spring, Bonnell completed his capstone project which involved data analysis from Tanzania. The goal is to upgrade sanitation in northwestern Tanzania.

Bonnell enjoys using GIS mapping to improve global health. Statistical data presented on maps, for example, can show villagers their proximity to health clinics. "It's a literal and visual representation of data analysis," he said. "I think it's a really easy way to convey ideas to people who, otherwise, may not fully understand because of language or cultural barriers. It's a framework to communication."

He recently communicated to the masses when he was featured in an "extreme makeover" segment on Fox 31's "Everyday" program. A friend's father owns a local business, Montana Salon, so Bonnell, who at the time had long hair and scruffy beard, sat in the chair and transformed into a clean-cut, bowtie-wearing graduate student. The segment
includes Bonnell talking up his university and Tanzania experiences.

Now he's setting his sights on the next experience, which will undoubtedly include more overseas travel. "My five-year plan is to find a specific passion and pursue a Ph.D.,” Bonnell said. "I'm trying to find that particular passion, because everything is so interesting at the moment."

FRANK HALL: Serving the rural corners of Colorado

Between his junior and senior years of high school, Frank Hall traveled from his small hometown of Akron, Colorado, to Aurora to participate in the Colorado Rural Health Scholars Program (CoRHSP) at the University of Colorado School of Medicine.

The experience changed his life.

Obituary: Clarence ‘Skip’ Ellis

Clarence "Skip" Ellis, much-loved Professor of Computer Science at the University of Colorado Boulder, died unexpectedly on May 18, 2014. He was 71.

He grew up in a poor part of Chicago as one of five children. Winning a scholarship to Beloit College in 1960 launched him on a lifelong passion for education. He graduated in 1964 with a bachelor's degree, double major in math and physics, and then went to further schooling at the University of Illinois. His academic experience includes teaching at Stanford University, the University of Texas, MIT, Stevens Institute of Technology, and in Taiwan under an AFIPS overseas teaching fellowship. Skip is noted for being the first black man to earn a Ph.D. in Computer Science in 1969, but he was so much more.

During his college years, he met his first wife, Anna Yang, and together they had two children, Delilah and Damon. Anna passed away in 2001 and he later found love again with Lynn St. Pierre of Boulder.

Skip and Lynn traveled the world for several years, visiting parts of India, Europe and Africa. In doing so fulfilled their passion for teaching in developing countries.

Skip was an amazing human being who gave back on so many levels. He loved Africa, Ashesi University, international folk dancing, sweets of any kind (literally), his extended family and his students, many of whom became lifelong friends.

Skip's family will miss him dearly: Wife, Lynn St. Pierre; Daughte, Delilah; son-in-law, Scott; granddaughter, Hendrix; grandson, Samuel; son, Damon; son, Josh; and many in his extended family.

A memorial service was held May 22. In lieu of flowers, the family asks for donations to "Education Worldwide" or his beloved Ashesi University in Ghana (http://ashesi.org/).
Accolades announced for School of Medicine educators

The School of Medicine 2014 Annual Golden Stethoscope Preceptors Awards were announced last week, honor[ing] 11 for their excellence in clinical education and recognizing the preceptors' outstanding contributions to the next generation of physicians. Students nominate their preceptors.

This year's recipients are:

- Emergency Medicine – J.P. Brewer
- Family Medicine – Daniel Kortsch
- Internal Medicine – Amber Wobbekind
- OB/GYN – Ken Moss
- Patient/Physician Communications – Anthony Elias
- Pediatric – Tai Lockspeiser
- Physical Exam – Karin Susskind
- Role Model – Susan Ryan
- Specialty – Kimi Kondo
- Foundations of Doctoring Faculty Choice Award – Jerome Buckley
- and Kris Wenzel Award – Bobbi Siegel.

Dropping names …

Marc Moss, professor of medicine at CU's School of Medicine, was elected secretary-treasurer of the American Thoracic Society for 2014-15. The election puts him on a path to become president of the group in 2017-18. In addition to Moss, other society board members from Colorado are Robin Deterding, professor of pediatrics and chair of the society's pediatrics assembly; Greg Downey, professor of immunology and chair of the society's allergy, immunology, and inflammation assembly; and James Beck, professor of medicine and chair of the society's planning and evaluation committee. ... Kathryn L. Mueller, professor at the School of Medicine and the Colorado School of Public Health and the medical director for the Colorado Division of Workers' Compensation in Denver, has been named the president of the American College of Occupational and Environmental Medicine (ACOEM), the nation's largest association representing occupational and environmental physicians. Mueller was installed during ACOEM's American Occupational Health Conference (AOHC) last month.

PERA demystifies your retirement plan this June

If you’re among the 7,000 or so CU employees who have a pension plan through the Public Employees’ Retirement Association, your retirement planning likely revolves around a set of tables.

There are seven tables, to be exact, and each helps answer a key question: When can I, as a PERA member, expect to retire?

That’s a familiar question to PERA’s Gordon Steuck, who’s preparing to answer this and dozens of other questions about PERA’s defined contribution plan during campus visits and workshops this June. Those seven tables—which help members calculate when they’ll be eligible to retire and what their monthly pension will be upon retirement, based upon their age and how long they’ve been in PERA—will be key in helping workshop participants understand where they are and where they’d like to be in the retirement savings process.

The June workshops and information tables aim to serve all members’ needs; while the workshop will provide general information about everything from service credit to the differences between PERA and a traditional 401(k) retirement savings plan, the information tables allow members to delve into specific questions about their PERA service and retirement outlook with a PERA expert.
Among some of the most insightful things PERA members will learn: 

**One of seven tables will help you determine when you can retire and what your monthly lifetime PERA benefit will be.**

Just which table you should refer to depends on when you were first hired into PERA-covered employment. You’ll receive printouts of each chart when you attend one of the PERA Fundamentals workshops. 

**The longer you’ve been in PERA, the more generous your benefit will be.**

This extends beyond simple retirement savings. Once you’ve been in a PERA-covered job for three years, you’re eligible for PERA’s survivor benefit. After five years of PERA service, you become eligible for its disability benefit. 

**Most PERA members do not contribute to Social Security. But if they have a Social Security benefit that they earned in the past or receive through their spouse, it may be reduced.**

Steuck will cover in detail the two scenarios in which PERA members could see reductions from Social Security:

In short, he says, “Rather than obsess about a possible penalty, focus your attention on what you can build in a PERA benefit, because our formula is much more generous than the Social Security formula.”

**PERA differs greatly from CU’s 401(a) plan.**

For PERA members who have had a 401(k) -- or, in CU’s case, a 401(a) -- it can be confusing to switch to a plan that does not heavily focus on employer contributions to their retirement, says Steuck.

Instead, PERA members should focus on its guarantee of a lifetime, monthly payment, he says.

**PERA Fundamentals Workshop & Info Table**

**Information tables:**
10 a.m. - noon
and 1 - 2 p.m.

**Workshops:**
Noon - 1 p.m.

All workshops are free.

**UCCS Thursday, June 12**
University Center Theater
Room 302 [Register](#)

**CU Anschutz Tuesday, June 17**
Nighthorse Campbell Native Health Building
Room M24-103 Conference Room [Register](#)

**CU- Boulder Thursday, June 19**
University Memorial Center
Room 335 [Register](#)

**CU Denver Wednesday, June 25**
Lawrence Street Center
Classroom 500-GSPA [Register](#)

### University Controller hosts CPE instructor appreciation event

The CU system Office of University Controller recently hosted an appreciation event for instructors in its Continuing Professional Education (CPE) Program.

The program provides free CPE credit to the university’s Certified Public Accountants, as well as those with certain other certifications. It also offers no-cost professional development and training to employees who are not CPAs.
The April 23 event recognized the significant contributions of more than two dozen people who volunteer to teach almost 50 CPE courses. Assistant Vice President/University Controller Robert Kuehler and CPE Program Manager Lisa Vallad highlighted the instructors’ roles and accomplishments and thanked them for their service. Social networking time included a discussion of new course topics as the CPE Program wrapped up a highly successful third year and began gearing up for the start of its fourth.

For more information about CPE Program courses and schedules, view the CPE Program website[61] or contact Lisa.Vallad@cu.edu[62].

Connections begins summer publication schedule today[63]

Even if you’ll be away from your campus for any of this summer, you can stay up to date on happenings across the University of Colorado system by connecting with CU Connections.

The Connections summer schedule begins today, as we shift to biweekly publication. No new issues are scheduled to appear on the following dates (subject to change):
June 5 June 19 July 3 July 17 July 31
Weekly publication will resume with the Aug. 7 issue.

Throughout the season, the site will be updated with news should events warrant.

If you’re sending postcards from your vacation, be sure to keep us in the loop, too. We always welcome Letters to the Editor on topics of interest to current and retired CU faculty and staff. Please send submissions to newsletter@cu.edu[64]. And if you have a news item or story suggestion you’d like to pass along, please send it to Jay.Dedrick@cu.edu[65].

Deadline for submissions is noon Friday prior to the Thursday publication.

Links
[3] https://connections.cu.edu/file/ewl01png
[5] https://connections.cu.edu/file/ewl02png
[6] https://connections.cu.edu/file/ewl03pngpng
[8] https://connections.cu.edu/stories/five-questions-april-lanotte
[9] https://connections.cu.edu/file/5q-lanottepng
[14] https://connections.cu.edu/file/diet01png
[18] https://connections.cu.edu/stories/engineering-students-rev-innovation-capstone-projects
[19] https://connections.cu.edu/file/ucengineeringfpng