“Bionic Pancreas” brightens outlook for Type I diabetes patients

Meet the doc who cares for the (football) Buffaloes

“The frontier of science” — Dennis Roop on new stem cell center

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THIS “BIONIC” MONITOR AND PUMP IS PART OF A CLINICAL TRIAL AT THE UNIVERSITY OF COLORADO SCHOOL OF MEDICINE 17–19

The device helps inject insulin automatically as needed for Type 1 diabetes patients. Meet a plucky 10-year-old and his doctors, who are part of the trial.

Cover photo and photo left by Glenn Asakawa
More students, more beds, more changes

The Class of 2014 arrived this past summer—That year is a significant one because it is when the number of U.S. physicians per capita is projected to fall for the first time in years even though we have increased our class size (to 160, from 132 five years ago), as have other medical schools. And because this class is the sixth to experience our new curriculum, I guess it’s time to just call it our curriculum and drop the “new.”

We have had a change in organization and leadership. M. Roy Wilson, MD, MS, our chancellor for four years, left office June 30. President Bruce Benson named Jerry Wartgow, PhD, interim chancellor of the University of Colorado Denver and appointed Lilly Marks as the first CU vice president for health affairs. Lilly, formerly the medical school’s senior associate dean for administration and finance, now is responsible for the University of Colorado Anschutz Medical Campus. Her dual role includes being executive vice chancellor of the medical campus. In that position she coordinates the relationships of the health-profession schools on Anschutz with other entities that include University of Colorado Hospital (she will chair the board), The Children’s Hospital and the Fitzsimons Redevelopment Authority (she will be on the board of both). The transition has been smooth. Read more inside the magazine on this and other topics in this letter.

This fall we closed the Given Institute in Aspen. Many of you attended conferences there over the last four decades. It has been a wonderful facility on a beautiful lot overlooking Hallam Lake. But the school has had to subsidize its operations, and we have been unable to raise money to make it a year-round facility. With more significant state budget cuts looming, we simply can’t afford to keep it. So it is up for sale. Though we will miss the Given, selling it can help support, long term, our core mission of medical education.

With University of Colorado Hospital and The Children’s Hospital building new towers, in 2013 we will have more than 1000 beds on the Anschutz Medical Campus. And the Veterans Administration Medical Center will be coming the next year. We are no longer “Colorado General Hospital” with its 300 beds. That means we must provide timely access for patients who now want to come see us, as contrasted with those who previously had to come see us. And, given the passage of health care reform, we will need to more assiduously focus on quality and safety throughout our practice.

Finally, we welcomed Dan Theodorescu, MD, PhD, as our new cancer center director in July; named James Hill, PhD, executive director of the Health and Wellness Center in March; and appointed Andrew Thorburn, PhD, chair of pharmacology in August. I have now had the honor of appointing all the chairs in the School of Medicine. We are searching for chairs for our departments of medicine and emergency medicine.

With warm regards,

Richard D. Krugman, MD
Dean, School of Medicine
Vice Chancellor for Health Affairs
University of Colorado
Physician group moves to new building

Over recent weeks, University Physicians, Inc., moved into new quarters on East Montview Boulevard, in the Sciences and Technology Park on the north edge of the Anschutz Medical Campus. The 196,000-square-foot building is six stories tall and includes about 74,000 square feet of rental space. One of the early tenants is CPC (Colorado Prevention Center), the parent company of CPC Clinical Research and CPC Community Health. It will help manage clinical trials using stem cells. The building also will house the medical school’s Division of Health Care Policy and Research and the Hemophilia and Thrombosis Center. University Physicians’ new building came in on time and under budget!

New leadership

Former Denver Public Schools Superintendent Jerry Wartgow was named interim chancellor of the University of Colorado Denver, and Lilly Marks was chosen as CU vice president for health affairs and as executive vice chancellor for the Anschutz Medical Campus, where the medical school is located. Marks will oversee academic, clinical and research operations as well as issues such as transportation and development. Marks previously headed finance and administration for the medical school and will soon step down as executive director of University Physicians, Inc. Dean Richard Krugman says of Marks, “I would never have lasted 20 years in this job without her support.” She and Wartgow succeed M. Roy Wilson, who resigned as chancellor. (To read a Q&A with another new leader, University of Colorado Cancer Center Director Dan Theodorescu, go to medschool.ucdenver.edu/CUMedToday/Peaks)

Lily Marks

Jerry Wartgow

PEAKS
Med school continues to earn high national rankings

The CU School of Medicine once again earned high national rankings in the U.S. News & World Report annual survey of medical schools. The 2010 findings named the School of Medicine fifth in primary care and 27th in research. Beyond those broad categories, the school was ranked ninth in pediatrics, ninth in family medicine and 22nd in internal medicine. The physician assistant program placed eighth.

In separate rankings of hospitals, released last year, the two Anschutz Medical Campus hospitals, University of Colorado Hospital and Children’s, also were highly rated. And in recent U.S. News ratings of pediatric hospitals, Children’s was: 11th in cancer, fourth in diabetes and endocrine disorders, fifth in gastroenterology, 19th in heart and heart surgeries, and 28th in tackling kidney disease.

Go to medschool.ucdenver.edu/CUMedToday/Peaks to read the reports.

Gabow, Dinarello honored

The Bonfils Stanton Foundation honored two faculty members for their contributions. Patricia Gabow, MD, who is CEO of Denver Health, was recognized with the Community Service Award. She’s worked tirelessly to expand health care to vulnerable and underserved populations while running a hospital known for quality and efficiency. The foundation describes her as being “nationally recognized for her work to increase access to basic health care for all Coloradans.” And Charles Dinarello, MD, professor of medicine (infectious diseases) received the Science and Medicine Award for his pioneering work in inflammatory disorders and autoimmune diseases. He’s known for isolating and cloning the “fever molecule,” which helped create the field of cytokine biology. “Clinical applications of his work have alleviated pain and suffering for thousands of patients,” the foundation said.

School of Medicine adopts faculty professionalism system

The School of Medicine has approved a confidential online system through which students can report examples of exemplary professionalism and instances of possible unprofessional behavior by faculty and residents. A Faculty Professionalism Task Force, including teachers and students, recommended taking this step to respond to reports of disrespectful behavior toward students in clinical and classroom settings. Two other reasons for creating the system are to fulfill a key recommendation of the 2004 SOM report, “Enhancing Professionalism,” and to satisfy a new professionalism mandate by the Liaison Council on Medical Education, which stresses the “mutual obligations” that faculty and medical students have to encourage professionalism and ensure accountability. The Faculty Senate approved and will oversee a group that will develop policies and procedures for investigating reports of unprofessional behavior, while protecting the rights and confidentiality of both students and faculty.

To read the professionalism report and the recommendation for the online system, go to medschool.ucdenver.edu/CUMedToday/Peaks.

Vitiligo research breakthrough

New research led by a School of Medicine team suggests that vitiligo, a skin pigmentation disorder, is an autoimmune disease. This groundbreaking finding could point the way to treatment. The results, published in The New England Journal of Medicine (NEJM), also question the common belief that people with vitiligo are more susceptible to melanoma.

Richard A. Spritz, MD, head of the medical school’s human medical genetics program, led researchers; the team studied genes of about 1500 people with vitiligo and 2800 people who did not have the disease. Seven genes that showed up in people with vitiligo were associated with other autoimmune disorders such as Type I diabetes, multiple sclerosis and rheumatoid arthritis. Thanks to cooperation among patients and researchers around the world, “this is by far the largest study of vitiligo ever done,” Spritz says. Vitiligo Support International also played a key role in the study by helping recruit participants.

Go to medschool.ucdenver.edu/CUMedToday/Peaks for a link to the NEJM paper.
UC Denver begins BA/BS-MD program

Ten students from across Colorado entered a new program at UC Denver this fall designed to take diverse high school graduates and turn them into tomorrow’s physicians. The goal is to provide tuition for these promising students through undergraduate education and CU’s medical school, and they must excel in the program’s rigorous academic training.

“This benefits both the school and the state,” says Christine Nyquist, MD, associate dean for diversity and inclusion. “We’re training doctors who will be able to serve Colorado’s communities. The medical school also gains because a range of [incoming student] backgrounds improves the learning environment for all students.”

Tamara Lhungay, from Longmont High School, is ready for her first year of the new BA/BS-MD program. “I love helping people, love interacting with people, love biology—this was a perfect fit.”

For more information about the BA/BS-MD program, go to medschool.ucdenver.edu/CUMedToday/Peaks.

Snapshot of the graduating class

**2010 graduates:** 145 medical students, including five graduating in December and six who will also receive a PhD through the Medical Scientist Training Program

**Average age:** 29 years, 3 months

**Gender:** 73 females and 72 males

**Tracks:** 11 in global health, 10 in Leadership, Education and Advocacy Development Scholarship (LEADS), 17 in rural health and four in women’s health

**Residencies:** 32 states; 64 students will stay in Colorado (40 matched at UCH, four matched at Denver Health, 14 matched at Exempla St. Joseph, two matched at the Colorado Health Foundation, two matched at St. Anthony’s, one matched in Greeley and one matched in Fort Collins)

**Military matches:** 6

Speaker helps grads cross the finish line

Former Olympic athlete Connie Carpenter-Phinney has advanced degrees, including a master’s from CU, but she always was training when graduation rolled around. “I have never been in a cap and gown,” she told the graduating medical school class in May. The commencement speaker, Carpenter-Phinney, drew parallels to the hard work and commitment between athletes and the new MDs in the audience: “You are outside of the bell curve. You are stronger than everyone else. You are smarter than everyone else.” She thanked the school’s doctors for their care of her husband, Davis, who has Parkinson’s disease. Then she reminded the graduates, faculty, and family and friends in the audience about a tradition in her sport; when cyclists win, they raise their arms as they cross the finish line. Led by Carpenter-Phinney, the crowd cheered and lifted their arms as they crossed their own finish line.

Connie Carpenter-Phinney

Tamara Lhungay of Longmont High School
New faces, roles at admissions office

The admissions office has some new faces and roles. Rob Winn, MD, now heads the operation as associate dean of admissions. An associate professor in the Department of Medicine’s pulmonary division, Winn has spent the last two years as assistant admissions dean. He is a lung-cancer specialist who has chaired a number of diversity committees on the CU campus. Joining him is a new director of admissions, Dimple Patel. She comes from Northwestern University School of Law in Chicago where she served as senior associate director, primarily working on international student recruiting and marketing. Finally, Oswaldo Grenardo, MD, a clinical faculty member, is director of community outreach and admissions. He owns Parker Family Medicine and is medical director of both the Rocky Ford Family Health Center in Rocky Ford and the Centennial Family Health Center in Ordway.

Read a profile of Rob Winn at medschool.ucdenver.edu/CUMedToday/Peaks.

Wellness center coming

Design work is wrapping up on another new building for the Anschutz Medical Campus—the Health and Wellness Center. James Hill, PhD, the driving force behind the center, was named its executive director. “It’s a dream come true,” Hill said at the September groundbreaking for the project. The 95,000-square-foot center, at the corner of East Montview Boulevard and North Quentin Street, is scheduled to open spring 2012 and is being funded by The Anschutz Foundation and CU. The facility will link research with clinical programs and the community, and provide a fitness center on campus. A restaurant that serves healthy food is also planned. There will be a comprehensive weight loss clinic and prevention programs for diabetes and cardiovascular health. Even the design is supposed to promote health: “The idea is, just by being at the center, your stress levels will start to decrease before you even engage in any activities,” says Jim Ellis, director of operations for the center.
A conversation with Dennis Roop

By Dan Meyers

This year, the School of Medicine created the Charles C. Gates Center for Regenerative Medicine and Stem Cell Biology. The center draws on expertise from a variety of collaborative partners. It’s come a long way and has big plans. We sat down with the director, Dennis Roop, PhD, to get the latest.

Question: When you came here to head stem cell research, what surprised you?
Roop: When I came here for the press conference in August 2006 and basically stood up and said we want to make this a world-class stem cell center, in a way it was like going into a boxing ring with one arm tied behind you. We really didn’t want to start the program on a negative note by focusing on embryonic stem cells, which are controversial in some quarters. I tried to focus on adult stem cells. But several things happened that nobody anticipated. One was the ability to reprogram adult somatic cells back into a cell that looks like an embryonic stem cell. That changed the playing field tremendously, so we could compete with institutions on the east and west coasts.

Q: Does that also mean that your program won’t be much impacted by the latest court ruling blocking expansion of embryonic stem cell research using federal funds?
A: Right.

Q: What else happened that was unanticipated?
A: I found there were some unbelievably talented young people here who had cutting-edge technology, which they had used to accomplish things that investigators at Harvard and Stanford had not.

Q: Such as?
A: We have one researcher, Yosef Refaeli, who’s started a biotech company that just got a grant of about $1.6 million to work on universal donor blood stem cells. Imagine the implications of being able to generate blood!

Q: Tell me what you found when you walked in the door here.
A: (Laughs) There was 10,000 feet of empty space. No equipment. No personnel. And yet, you could feel the potential. It’s almost like I felt the frontier of science had moved. It was no longer in Houston, but Colorado.

Q: Does the “center” designation for stem cell research and treatment really matter much?
A: Absolutely. I think eventually there will be NIH funding and new resources for stem cell research. But to compete we have to have a track record. We’re in a great position because we are the only stem cell center within at least a 500-mile radius. We’re trying to make this a regional Rocky Mountain stem cell center. That plays well not only at the national level but at the local level.

Q: You’re already working with a number of other institutions, including the University of Colorado at Boulder, Colorado State University, University of Colorado Hospital, Denver Veterans Administration Medical Center, National Jewish Health, The Children’s Hospital and other branches of Anschutz Medical Campus. The program’s growing fast. More than 60 new employees since January 2007, about $50 million in funding received or pending. What’s next?
A: We will have a new fundraising campaign that will help develop a new core facility, maybe two. One of them will reprogram cells for other investigators. This would allow them to do state-of-the-art things without having to develop the expertise themselves. We’ll also have funds that members of the center can vie for on a competitive basis. It’s a way to build teams that can rapidly be competitive for much larger amounts of [outside] money.

Q: You’re collaborating with Dr. William Hiatt and the CPC [Colorado Prevention Center] on clinical trials. Talk about that.
A: This was a perfect marriage. The criticism when I first came here was...
that any clinical application of stem cells was still 15 to 20 years away. That’s simply not true. Bill Hiatt is already doing stem cell-based clinical trials now for patients who have peripheral artery disease or blocked arteries. And already the clinical practice of treating cancer patients is benefiting from basic research on cancer stem cells.

Q: In fact, you and Dr. Antonio Jimeno recently announced clinical trials to try to fight various kinds of cancer by going after cancer stem cells. How significant is that?
A: All you have to do is talk to some of Antonio’s patients, who basically were told, “Go home and prepare to meet your maker.” They went to see Antonio and, even though they had metastatic lesions all over, some of those patients a year later are in complete remission. There’s always the possibility that the tumors will recur but at least you’ve added a year of life, maybe many years. And unlike conventional therapies that really kill everything, a scorched-earth policy, we hope the new therapies will just target the cancer stem cells.

Q: The Los Angeles Times reported in June that despite $1 billion spent on stem cell research in California, there have been no big breakthroughs. Has stem cell therapy been oversold?
A: You want to give patients hope but don’t overpromise. It’s a fine line. One of the most sobering experiences I had, not being a clinician, was when we first started working on inherited skin-blistering diseases. I went to some of the meetings of the foundations that support this research, where the patients attend. Parents are there with their little kid and saying, “How soon can you fix little Johnny?” I think all scientists should have that experience. You’ll never look at your research efforts in the same light again. You’ll see the faces of those kids and those parents and you’ll be very careful not to overpromise.

Q: What draws you to this research?
A: To see the potential, to see how fast and how far we’ve come. There’s nothing like getting up in the morning and being excited about going to work because you realize we’ve barely scratched the surface.
“There’s got to be a way to do this”
Hailstorm teaches medical school graduate a life lesson
By Tonia Twichell

Joseph Clawson was a farm boy in Lodge Grass, Mont., when one day the heavens opened and delivered a lesson that would shape his future and eventually that of 2,500 children with facial deformities in Zimbabwe and Ecuador.

Years later, that lesson would precipitate worldwide attention for Clawson, a 1957 graduate of the University of Colorado School of Medicine. He and his brainchild, Operation of Hope, have been recognized by People and O, The Oprah Magazine. Recently, he fielded a call for assistance from Nelson Mandela.

The epiphany happened near the Crow Reservation, just north of the Wyoming state line.

“My dad farmed in a little town that was subject to a lot of hailstorms,” Clawson says. “One day my dad said to me that our neighbor down the way, Wilbur, had no grain to feed his hogs because a hailstorm wiped him out. He said we were going to the granary, and we were going to haul grain to him to get him through the winter.

“I was a kid and so I suppose I groaned and moaned a little, but I went and scooped up grain, and we delivered three or four truck loads to him.

“The next year, guess who got hailed out,” he says, pausing for effect. “Every one of our neighbors showed up and filled our granary.”

He was 12 years old at the time.

“I remembered that all my life. I always thought, ‘There’s got to be a way to do this.’”

The years sped by, and Clawson moved on with his life, establishing a plastic surgery practice in Longview, Wash., after leaving the University of Colorado.

Then in 1987, the lesson still alive in his memory, he found a way to act on it. He learned through a friend that a Youth With A Mission ship had been in port near Longview, so he tracked it down the next day, applied to volunteer his services to fix cleft palates and lips, and was accepted.

“Very few people knew how to go about doing this at that time,” he says. “I’d made some inquiries over the years but didn’t get anywhere. It was a tiny, tiny accidental event that was meant to be.”

He traveled to the Dominican Republic, Jamaica, Honduras and Mexico. Within three years, he branched out on his own and founded Operation of Hope, a 501(c) that he alternatively calls Operation Esperanza—hope in Spanish.

He headed to Ecuador, hoping to find a place that needed his help, knowing that Native Americans have the highest incidence of cleft lips and palates in the world.

“I found a little town and thought, ‘Aha!’” he says. “Opportunity struck, and you don’t wait. You have to open the doors yourself. So I did, and away we went.”

Since then, Clawson has returned to the area every year, initially moving from place to place, but eventually settling in the town of Otavalo. He still fixes cleft lips and palates, and Operation of Hope has an agreement with University of California, Davis (UC Davis) to bring on other surgeons with different specialties in the area of facial deformities.

“We’re well known now through the whole nation,” he says. “We get a lot of media coverage, so people come from everywhere.”

“I hear the most beautiful stories.”
He follows up with patients for years, which has a medical benefit, but also is good for the soul.

“I hear the most beautiful stories. I have patients who come back to visit, and I say to them in Spanish, ‘OK, you had a lip repaired in ’93. What benefit has there been?’ They always say, ‘You know I really appreciate that I can look normal. I can get a job. I’m back in society. But the most valuable thing is that I can talk to people.’ That is what they value most.”

Clawson retired from his private practice 10 years ago, and in 2006, Operation of Hope established another outpost in Zimbabwe.

During his years with the charity group, he often befriended locals, including Peace Corps workers.

“Eleven of them have become doctors. I wrote letters to help them get into schools, and every one of them did,” he says. “They’re bright kids; they have a good work ethic; they’ve all graduated college—but they have no direction. But they became inspired by this work.”

He teamed up with a friend at UC Davis to help a native Ecuadoran doctor, Maria Belan Albuja Cruz, become a surgical resident at the University of Colorado. They’d met during a mission.

“I told him that I would like to help him in surgery, so he taught me how to do the procedures,” says Cruz, now a fifth-year CU resident. “By the end, I was doing cleft palates by myself.

“He’s just amazing. It’s like seeing a piece of art to see him doing surgery. And he’s very humble. I’d do anything for Dr. Clawson. I have so many things to thank him for."

In Zimbabwe, Clawson has completed seven missions, and Operation of Hope has helped 500 kids. Africans have the lowest rate of cleft lips and palates in the world, but there is a dearth of doctors who can perform such surgeries. The need is so great that the team returns twice a year now, but Clawson has most likely made his last trip to Zimbabwe.

“T he last few months I’ve been thinking about quitting. The program has gotten so big. I am 78 now, and I have to quit sometime.”

So he developed what he calls his “four-year plan.”

“It hinges on a promising young doctor named Diego Teran who he helped get into a residency program to study plastic surgery in Bogotá, Columbia.

“He’s going to be joining me in January and for the next four years. He’s an accomplished plastic surgeon who can do cleft lips and palates. I’ll be 82 then. I want him to get to where he can be comfortable. But he learns quickly. He’s very smart.”

In the interim, he’s resigned his position as director of Operation of Hope, and his daughter, Jennifer Trubenbach, has taken over leadership.

But he sees so much need that he’s now starting another nonprofit, JP Clawson Medical Missions Foundation, to reach out to other African countries. With his new organization, he’ll set up clinics in South America and Africa. Recently, he says, he was contacted by Nelson Mandela, the former president of South Africa, who was interested in beginning a training program for doctors.

“Even when I can’t continue doing surgery, I can still teach. I can still go on. I love medicine. It has kept me alive.”

He doesn’t miss having a private practice because the paperwork—insurance forms, Medicare—became tiresome.

“I thought, ‘This is no fun.’ Now I’m doing work that is the love of my life. I’m having the greatest retirement a doctor ever had.”

Go to medschool.ucdenver.edu/CUMedToday/Profiles to see these links about Dr. Clawson and the Operation of Hope:

People, O, and Operation of Hope website
ON THE WEB

As we expand this magazine to the web we are able to offer readers more stories. Here are samples of three reports that you can find in greater detail at medschool.ucdenver.edu/CUMedToday/Features.

Heart health and hairdryers

The hairdryers are already running full blast as Stanley Thomas and Moustafa Zien begin unpacking medical supplies onto a cardboard table near the front door at Winning Coiffures.

“you’re a jewel,” one woman says, gently squeezing Thomas’ arm.

Colorado Heart Healthy Solutions, designed to decrease cardiovascular risk and other chronic diseases among the medically underserved, reaches out to people in barbershops and beauty shops.

Read how it all works on the web.

On left, Denver Health Patient Navigator Stanley Thomas and client Ocie McDonald discuss her health at the Winning Coiffures salon. Right, Thomas talks with Winning Coiffures owner Rosalyn Redwine while waiting for her blood pressure results. Photos by Tonia Twichell

Uniting to fight disparities

Anschutz Medical Campus researchers and students are in a unique position to pair with the community that works to eliminate health disparities. The 2010 Health Disparities/Health Equity conference provided an opportunity to integrate basic science, translational research, education, community engagement and advocacy.

The full-day conference included 21 workshops. Dr. Terry Mills from Morehouse College, Atlanta, Ga., gave the keynote address, “Racial and Ethnic Health Disparities: Confronting a National Imperative.”

Go online to learn what the conference accomplished.

School offers new focus on urban patients, women

Students in various University of Colorado health care disciplines have begun two new study tracks this academic year—an urban track and a women’s health track.

The urban program plans to recruit 10 students from the School of Medicine, 10 students from the Nurse Practitioner program at the College of Nursing and three from the Physician Assistant program.

The Women’s Health Track will address patients’ gender-based health needs throughout their careers, regardless of specialty. Learn more about these programs on the web.

Dr. Terry Mills

Allegra Melillo, MD, has created a new program that focuses on urban health care

As we expand this magazine to the web we are able to offer readers more stories. Here are samples of three reports that you can find in greater detail at medschool.ucdenver.edu/CUMedToday/Features.
Dr. Eric McCarty’s office on fall weekends is 100 yards long. It’s decorated with white lines and goal posts.

Saturdays, his autumn medical practice is on the football field, where he examines knees, ankles, shoulders and other body parts that get crushed in games. McCarty is the team physician for the Buffaloes and other CU teams, and heads sports medicine for the university.

He brings more to a game than just job titles. In sports terms, McCarty is a triple threat—he’s a CU graduate, CU medical school alumnus and former CU football player.

“I love taking care of the teams,” McCarty says.

One of his biggest fans is his former coach, Bill McCartney.

“He’s special,” McCartney says. “He had that combination of being genuinely humble and yet he had fresh fire every day. The way he excelled at CU, then the way he excelled in his medical career—he still has that same combination as he lives out his life.

“What you see is genuine. It’s all the time, not just because Eric’s having a good day.”

In the big showdown with Colorado State University in September, one of CU’s top new players goes down five minutes into the game. McCarty carefully examines the player’s right knee. It’s been twisted, at the least, and there may be ligament damage. The freshman stands on the sidelines holding crutches, an ice pack draped around his knee.

His own injuries as a player, McCarty says, led him to an interest in medicine. Minor tweaks in high school, then ankle and meniscus problems in college, got him curious about how the body works and how to fix it when things go wrong.

So he went to medical school and, much training later, ended up on the sidelines with a hundred-yard office.

Learn more about Eric McCarty, and what his former coach, Bill McCartney, says about him, at medschool.ucdenver.edu/CUMedToday/Profiles

Eric McCarty, MD, top, prowls the sidelines at the CU-CSU game. McCarty played for the team in the 1980s, above.
A very large, very angry gang member stood between Dr. Christine Gilroy and the door of her tiny office at Urban Peak shelter for homeless teens. The young man, spewing expletives, had the 5-foot-3-inch doctor cornered.

“Oh crap,” she thought. Maybe this time she’d gone too far.

Gilroy, savvy in the sometimes tricky world of adolescent medicine, is known for not backing down when it comes to her patients, even the most difficult ones—especially the most difficult ones. On this day she had pushed to convince the troubled young man the stakes were high if he continued to ignore his Type I diabetes.

“Do you want to lose your eyes? Do you want to lose your feet?” she had demanded moments before. “What do you want?”

“I don’t want to have diabetes,” he bellowed.

Gilroy stood, planning an escape route while trying to salvage a treatment plan. She changed tactics and gently laid a hand on his arm. “Let’s take a walk,” she suggested. As they strolled the hallways of the shelter they talked about things he could do to feel better. Finally the young man agreed to take his medicine at least for that day, and probably the next—possibly even the day after that.

Medical breakthroughs come in all sizes.

As Gilroy, now 42, first entered medicine 14 years ago and was sorting out specialties, she was surprised and saddened to discover how underserved adolescents were.

It is a group that roughly spans age 10 to early 20s. Debbie Trueblood, executive director of the Society for Adolescent Health and Medicine, explains that young children go to the doctor because their parents take them. Adults go to the doctor when they are sick. Teens often just don’t go because they feel uncomfortable.

Adolescent medicine is a relatively new subspecialty that remains small.
There are only 1,200 members in Trueblood’s organization. One of the largest issues facing doctors is balancing a teen or young adult’s craving for privacy with their parents’ desire to know about treatment.

Another issue is the perception that teenagers will be difficult to treat, either because they will not be forthcoming or will not listen to advice, Gilroy says. Popular culture furthers the idea that teens are trouble.

Nothing irks Gilroy more.

“I love these kids,” she says. “The health challenges are so huge. I want more people to understand that they are actually a joy. I want people to be happy to see a 14-year-old walk into their office.”

Gilroy felt an immediate kinship working with teenagers and young adults even as other doctors advised her against it. Maybe it was because as a young doctor she wasn’t that far from the age group herself. Or maybe it was because she empathized with the misunderstood.

“She identifies with where they are coming from because she had kind of a tough adolescence herself. She was picked on for being so smart,” her sister, Melanie Gilroy, says.

If adolescents are, as many experts say, the most medically underserved population in this country, Gilroy has chosen to work with the most underserved of the underserved—those whose worlds are often ruled by violence, drug and alcohol abuse, and parenthood that comes too early.

“These are the ones who have fallen through every single crack,” she says.

Gilroy grew up the oldest of three children surrounded by upper-middle-class privilege in Seattle. She graduated from the University of California in San Diego with a degree in biochemistry. She went to medical school at Georgetown University and did her residency at what was then the University of Colorado Health Sciences Center.

The plan was to go into pulmonary medicine, but Gilroy couldn’t bring herself to fill out the application for a fellowship. She literally got sick to her stomach when she thought about it. At the same time, Health One Alliance, now Colorado Health Foundation, was hiring faculty for internal medicine. It would be her job to develop new curriculum in adolescent health. “I realized there were so many areas where I could make improvements,” she remembers.

But it was the kids themselves who truly captured her. One moment she was treating a gunshot wound, the next she was talking about the challenges of puberty. “The breadth of the experiences was just crazy. That was probably the biggest hook,” she says.

Dr. Julie Rifkin, her first attending physician when she left medical school, remembers how Gilroy would buy Tylenol or other over-the-counter medications from her own pocket if she thought her patients could not afford them.

Today Gilroy splits her time between Urban Peak, High Street Primary Care Center, the Englewood School District and Clinica Tepeyac. She also is an associate professor at the University of Colorado School of Medicine, where she teaches adolescent medicine. She was named a Top Doctor by 5280 magazine four times and received the Community Service and Volunteerism award from the Colorado American College of Physicians.

While Gilroy appreciates the accolades, she finds such attention “embarrassing” and notes that she is compensated for her work.

At her core she is a pragmatist, emphasizing evidence-based care. She is not one to entertain grand visions of saving every patient. She also doesn’t try to talk “street” or affect hipness because kids see through that in an instant. Instead, she figures if she can help one teen or young adult make one good decision on one day—like using birth control—she has done her job and done it well.

But should a girl refuse birth control, Gilroy matter-of-factly gives her prenatal vitamins. Pregnancy, she tells reluctant patients, is not a matter of if, it’s a matter of when.

The mother of three small children, she finds the teen mothers the most heart-breaking. “I don’t think it was as hard until I was a mother. I see the whole future for them. It’s just one more kid condemned to poverty and violence.”

Sometimes, though, she is wrong.

She still remembers the teenage girl, already battling anorexia and cocaine addiction, who insisted she did not need birth control because she hadn’t gotten pregnant yet. Sure enough, a few months later, the girl showed up pregnant. When Gilroy gave her the news the girl ran from the office and disappeared.

Four years later the girl stopped by to visit. She was off drugs, married, had earned a GED, had a job and was the mother of two healthy children. She said the shock of her pregnancy diagnosis forced her to take stock of her life and make it better.

“I just wanted to let you know I was OK,” the young woman told Gilroy.

To read papers by Christine Gilroy go to medschool.ucdenver.edu/CUMedToday/Profiles.
Earlier this year, the Child Health Associate/Physician Assistant (CHA/PA) program was selected to help develop its equivalent profession in South Africa. The clinical associate program, as the South Africans call it, is expected to play a huge role in a country with vast rural areas and an AIDS epidemic. Anita Glicken, MSW, director of the University of Colorado medical school’s CHA/PA program, went to South Africa in late May. She met with counterparts from Walter Sisulu University in the Eastern Cape province. We asked her to keep a journal of her experiences along with those of two colleagues—Jonathan Bowser, PA, and Dr. Cal Wilson, director of the Center for Global Health. It’s a story of careening cars, croaking birds and the effort to create a health-care profession in a country that desperately needs help.

Sunday, May 30
The flight from Johannesburg to Mthatha takes us over the rolling brown hills of the Drakensberg Mountains to the land that nurtured anti-apartheid leaders Walter Sisulu and Nelson Mandela. This journey is exciting—not just because World Cup soccer is about to arrive—and a bit daunting. Three Colorado medical school teachers are on their way to help launch a new profession in South Africa.

The province where we will be working is the poorest in the country, which overall has a doctor-to-population ratio of eight per 10,000—less than a third that of the United States (by the World Health Organization’s count). Of the children who die before age 5, some 45 percent are killed by HIV/AIDS; here it is a primary-care issue. We’ve come to learn about the people, their needs, their lives—and then to figure out how to take this new profession forward.

Things are different here: a night sky with the Southern Cross, a bird (Jon says it’s a scops owl) that sounds like a frog, a bright yellow and black spider the size of a child’s hand that stands like a sentinel at the gates of the Palm Lodge—our home for the week. Each morning I am awakened by the smells of breakfast at 5:00. There is a strong Internet connection, but our host has never learned the password, so we’ve lost our tether to the outside world.

Monday, May 31
We pass gates and security guards as we enter Sisulu’s campus to meet with Health Sciences Dean Khaya Mfenyana. He’s remarkable—a man devoted to public health who presides over a school that is a prime mover for community-based training with a strong service foundation. His vision pushes community health and the university’s involvement to new levels—water systems, sanitation, health education. We bring a spirit of enthusiasm, partnership and experience with a 40-year-old profession that in the U.S. now numbers almost 75,000 providers. Most importantly, I say, is that “we are here to learn as much as contribute. It’s an opportunity for both institutions to grow.” Khaya laughs so loud I feel the table shake. “That’s why we picked you over the others [offered by the American International Health Alliance (AIHA)]. You didn’t come to tell us what to do.”

Tuesday, June 1
The cars the university lends us have screechy sirens that erupt above 110 kilo...
meters an hour. We hear the siren a lot on the 60-minute drive to Mount Frere to visit Madzikane Ka Zulu Memorial Hospital, where we meet students already in the clinical associate program.

South Africa launched this effort three years ago in three locations. Sisulu’s is the farthest along. Its first 19 students graduate this fall. In Mount Frere we speak with second-year students who are strikingly polite as they work their way through problem-based learning. “I appreciate your description,” one student says to another who has proposed a solution to a clinical challenge. “But I am still confused. Can you please help me understand? I wonder if we might consider ... .”

The students wear white coats. They have nicknames, as do the faculty. One student was “Queen Bee” and a physician tutor was affectionately called “Muso,” which translates in Xhosa to “benevolent god.” The work here is largely conducted in English because most of the faculty are from other countries and don’t speak Xhosa, a language marked by clicking sounds. The recently built hospital is incredibly clean and smells new, more like a new hotel than a place of pain and care in an area where the life expectancy is about 45 years. There are 245 patient beds spread over a one-story building. The scene in the pediatrics ward was moving. Four kids, who appeared malnourished, lay in beds. Seated next to each child was the mother, head down on the bed, sleeping.

**Wednesday, June 2**

The healthcare system here begins with clinics in far-flung towns. These feed into their district hospitals, which feed to regional academic medical centers. Most clinical associates will work in the district hospitals. This day starts with the Mthatha district hospital, where mold grows on the walls and peeling paint and rust mark the age and wear of the building.

As we make our rounds, the staff members are warm but cautious; they clearly care deeply for the masses of patients that line the rooms. In contrast, right next door is the bright, shiny regional academic center, reserved for the sickest patients. Is it worth getting sicker to be transferred into the new academic hospital?

In rural areas like this, people still hike miles for water, carrying it home in plastic jugs and buckets. Some families have an outhouse on the property. That’s a big improvement over the alternative, which was nothing. It’s now clear that, given the rural nature and poverty of the Eastern Cape, it’s not surprising that the public healthcare system is weak and a major weakness is a lack of healthcare providers.

**Thursday, June 3**

The next morning we drive to St. Barnabas, a district hospital in Libode. They are just beginning to keep medical records here such as birth certificates. In a country lacking vital statistics, it’s hard to track patient outcomes and evaluate practice.

We enter a room with walls covered by beautiful, hand-painted murals. It’s a children’s playroom donated by a foreign charity. Yet the toys are stacked unused in a closet; the room is used for sleeping mothers and children too sick to play. The clinical associate students here ask the same questions as their peers in other facilities: “What about salaries?” “Will we always work in the hospital?” “Do you like being a physician assistant?”

We then get back in the car to drive to a nearby clinic in Mgwengane, a small town surrounded by the round huts typical of the Eastern Cape. Here, as in other parts of rural South Africa, many families grow what they eat. But things are changing. For those living closer to small towns, supermarkets have sprung up and the people walk to buy chips and soda, which leads to a predictable increase in heart disease and diabetes. Even in this rural clinic, you can see the effects of AIDS—once a week, patients line up to get their antiretroviral drugs.
Friday, June 4
Time set aside for visioning about the new profession. When they graduate, almost 80 percent of the medical students from outside the area leave for Johannesburg, Cape Town or international posts. Those from the area tend to stay but gravitate to private practice. Clinical assistants are expected to stay, building capacity in the Eastern Cape where their strong family bonds and government-sponsored posts tie them to the region. Although they will start out supporting doctors in district hospitals, we expect they ultimately will do much more to improve quality and access to care throughout South Africa.

Saturday, June 5
A colorful journey to the coast and Port St. Johns. The hillsides along the way are sprinkled with huts in blue, green, orange, yellow—each color marking a family group. Along the road women carry woven baskets on their heads. Older women wear turbans and colorful blankets of deep reds, browns and greens wrapped around their waists. Often a baby is tucked in the folds of the blanket. The landscape is lusher by the sea. Monkeys stare quizzically through the trees. Lunch at The Delicious Monster, a throwback to the 60s, where Bob Marley posters adorn the walls and cows stroll on the beach.

Sunday, June 6
Where do we go from here? We meet with AIHA staff and Walter Sisulu faculty to talk about next steps. Our partners will come to Denver in December to see our program, meet with others on campus including our PA grads.

Monday, June 7
Early flight to Jo’burg. A late-morning meeting with the Centers for Disease Control (CDC-South Africa). Before we return, a stop in Soweto, the former black township, where kids play soccer on any flat land and men wearing white smocks sit in chairs on the side of the road getting hair and beards trimmed by the local barber. A small boy makes a house out of cardboard boxes emptied of World Cup treasures. Tourists haggle with locals over the price for a plastic vuvuzela.

Tuesday, June 8
Flying home. I left with more questions than answers. Will our South African partners allow us to contribute? Will we have the fortitude and wisdom to make informed choices as we learn to trust our work together? Generations of history and beliefs create obstacles to the growth of this new profession. My purpose: to turn these challenges into opportunities. For all the differences, there are many similarities: problems of access in rural areas, lack of trust across the professions, working with a cohort of colleagues and students who do what we do. My head is exploding—new experiences, knowledge, visions for the future … a new window for viewing our work together and our potential role. Our shared goal is clear: to bring health care to those who need it here and abroad.
Ask 10-year-old Jackson Panzer what he feared most when he learned he had Type 1 diabetes, and he’s quick to answer: “The shots.”

As the son of a Type 1 patient, he’d looked on for years as his mother, Jill Panzer, slipped a needle into her abdomen several times a day, pricked her fingers with a glucose monitor until they were raw and performed careful calculations before each meal to determine just how much insulin she needed.

“I was a little worried that it was going to really change my life and keep me from doing what I want to do,” says Jackson, who got the news July 1.

But chances are, life with diabetes will be different for Jackson.

He’s one of the first participants in a trial of what some are calling a “bionic pancreas.” Within four days of his diagnosis, Jackson was fitted with a tiny sensor. It automatically tested his blood sugar every minute, sent the information to a nearby laptop computer that determined precisely how much insulin he needed and ordered a pager-size pump on his hip to deliver it—all without him doing a thing. He used the so-called “closed-loop system” for just 72 hours in The Children’s Hospital for the experiment, then went home with a pump and sensor that, while state-of-the-art, requires some input from him. But his mother Jill is already thinking about the future.

“My hope is that eventually he will be able to wear a closed-loop system all the time,” she says. “There is no doubt that, with all this new technology, he is going to be able to live a lot longer, more complication-free life than I have.”

Jackson’s clinical trial is among roughly 20 under way through the Barbara Davis Center for Juvenile Diabetes on the Anschutz Medical Campus.

Since the center opened in 1980—at a time when Type 1 diabetes was scarcely understood and minimally funded—it has become a model for blending bedside practice with research. And with juvenile diabetes rates soaring 3 percent annually, the center, one of just seven nationwide that focus exclusively on the disease, is helping unravel the mysteries behind what causes it and how to prevent and manage it.

“They have been able to bring hardcore science to the study of human Type 1 diabetes and have provided profound insights into its pathogenesis,” says Richard Insel, MD, executive vice president of research for the Juvenile Diabetes Research Foundation. “They have essentially created the paradigm by which we can better understand this disease.”
When Peter Gottlieb, MD, began studying diabetes in the 1980s, nobody was sure what caused it. Hormone imbalances? A virus that attacked pancreatic beta cells, which produce insulin? Today, researchers have come to realize the disease is actually the result of an overactive immune system leading the body to, essentially, attack itself.

“There is a lot of new evidence, some of which we have published here, showing that even pre-diabetic individuals have an over-active immune system,” says Gottlieb, a professor of pediatrics and medicine at the Barbara Davis Center and the father of two children with Type 1 diabetes.

One theory to explain what’s going on is the “hygiene hypothesis.” The idea is that our hair-trigger immune system is wired for a far dirtier world than the one we live in today. The result is that our immune system no longer can distinguish between enemy and friend and, in some genetically predisposed people, overreacts, bombarding the pancreas with beta-cell damaging antibodies.

How early does this start and what causes it to be activated?

To try to answer those questions, the Barbara Davis Center, part of the School of Medicine, joined a 20-year, six-center trial called TEDDY (The Environmental Determinants of Diabetes in the Young) in 2004. The study follows nearly 8,000 infants who have a relative with Type 1 diabetes or genes associated with it. Over the course of their lives, they will be tested to determine if factors such as diet, stress, vaccines, illness or environmental influences may send their immune system into overdrive.

“You are at genetic risk, something in the environment turns it on, T-cell autoreactivity develop and eventually you get disease,” Gottlieb says. “If you could prevent development of T-cell autoreactivity in the first place maybe you could prevent the whole cascade of disease.”

The notion of preventing diabetes once seemed like science fiction. But today, nearly a dozen clinical trials at the Barbara Davis Center are testing compounds that might do just that. One is the NIP (Nutritional Intervention to Prevent Diabetes) trial. It studies whether the omega-3 fatty acid DHA (docosahexaenoic acid), administered in infancy, might prevent the immune system from overreacting. Professor Peter Chase, MD, who launched the trial two years ago, says the results are promising.

“Our hope is to take it a step further and do a larger trial worldwide using DHA and vitamin D in young infants to see if we can thwart the development of autoimmunity in diabetes,” Chase says.

Meanwhile, Gottlieb is in the midst of six trials that are testing the “anti-CD3 antibody,” which is designed to lend off islet-destroying immune cells.

“We are trying to find a way to prevent patients from needing as much insulin or—ultimately—ever needing it in the first place,” Gottlieb says.

“"If you could prevent development of T-cell autoreactivity in the first place maybe you could prevent the whole cascade of disease.”
While broadly available drugs for stalling the progression of Type 1 diabetes remain years away, new high-tech insulin pumps and sensors such as Jackson used may be able to achieve the same outcome.

Of children who develop Type 1 diabetes, “those who have extremely high blood-sugar levels that are uncontrolled have either no honeymoon at all or a very short one,” says Robert Slover, MD, who heads the Barbara Davis Center’s involvement in the three-center, 75-patient, closed-loop NIP trial. He notes that high blood sugar itself can destroy beta cells in the pancreas. “These kids seem to have lost most of their beta cells right up front, as opposed to those who are caught very early and put on insulin.”

Already, research trials show that people who use a sensor-augmented insulin pump can control blood sugar far better than those who are administering shots. They also tend to have fewer incidences of hypoglycemia (when too much insulin causes blood sugar to crater).

Slover, an associate professor, hopes to learn whether putting newly diagnosed youth on a sensor-augmented insulin pump right away might stabilize their blood sugar so much it preserves their beta cells, and slows the progression of the disease.

Meanwhile, by “closing the loop” for 72 hours with patients like Jackson, Slover is testing a concept that could revolutionize diabetes management.

“The holy grail of that closed-loop system would be a time when the patient could live life without having to worry about glucose at all,” Slover says, noting that ultimately such automated systems could be implanted in the body, serving as a sort of artificial pancreas. “That is our goal, and it is probably achievable within the next decade or so.”

Already, Jackson is seeing phenomenal results. “Sometimes he hangs out in the normal blood-sugar range for so long that I find myself asking ‘does he really have diabetes?’” says his mother. “Fortunately, he hasn’t been on the rollercoaster ride that I was on, and that is really exciting to see,” she says. “He is basically a normal little boy. I’m so proud of him for taking this leap of faith.”

“At left, Jill Panzer talks with her son Jackson and Dr. Robert Slover. The Panzers live in Omaha, Neb. Below, Dr. Peter Gottlieb works in his lab with Becky Wagner, a professional research assistant at the Barbara Davis Center for Childhood Diabetes.
ON CAMPUS

New towers, by the numbers

University of Colorado Hospital and The Children’s Hospital are planning major expansions, including two new buildings with hundreds of beds. These towers are meant to increase the number of patients that can be treated, add jobs to the community, expand training for students and increase revenue for the medical school. Here is a look at the projects.

The Children’s Hospital
Type: Patient rooms, intensive care and maternal-fetal medicine

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<tr>
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<td>120–144</td>
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<td>12</td>
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<tr>
<td>Square feet</td>
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<td>659,000</td>
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<td>Additional jobs</td>
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“We’re full and needing to increase capacity. The surprise is how quickly we’ve needed to expand.”
– Jim Shmerling, president and chief executive

University of Colorado Hospital
Type: Inpatient and emergency care

<table>
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“UCH has been working near or above capacity since moving our inpatient facilities to the Anschutz Medical Campus in 2007.”
– Bruce Schroffel, president and CEO

Also, the Veteran’s Administration is moving its healthcare center from Denver to Aurora, where an $800 million, 1.1 million-square-foot project is planned next to the Anschutz Medical Campus. The opening is scheduled for 2014.
First the students spoke. They represented the schools of medicine and dental medicine, including the Physical Therapy and Child Health Associate/Physician Assistant (CHA/PA) programs.

Then came the families and friends. They recalled their loved ones—a musician, a baseball player, a man who lived in the basement of a church.

By the end of the Anatomical Donor Memorial Ceremony, there had been many tears … and many smiles.

Each year, Anschutz Medical Campus honors the deceased who have donated their remains to science. The event started decades ago, when some students decided to bring flowers to the last day of anatomy class to thank the deceased for their generous educational gift.

At this year’s ceremony, medical student Evelyn Brosnan spoke of seeing the spinal cord for the first time: “It took my breath away.”

“It was simply beautiful and strangely seemed so alive. A thought flashed into my mind that [the donor] hadn’t ever seen this, and I caught myself almost tapping her on the shoulder to say, ‘Look at this—it’s amazing.’”

Stacey Britain of the CHA/PA program felt a great sense of responsibility “knowing this body in ways that he [the donor] never did, that those closest to him never would. Yet there was the understanding that I really did not know him at all.”

Jennifer Ann Keller from the physical therapy program described the donors as great teachers.

“You can’t imagine the knowledge your loved ones have taught us in silence, even after speaking their last words and breathing their last breath in this life,” she said to the donor families.

And Resa Espinoza said the dissection experience will help humanize her dentistry practice.

“Our donors allowed us the opportunity to ponder the details of their lives, reminding us that our future patients are people and not physical symptoms,” she said. “Their donation will echo throughout our careers into our future patients’ lives.”

Then the donors’ families spoke, and the other half of the picture emerged. The donors were people with quirks, talents, longings, names.

There was Jake, an attorney, architect and multi-instrument musician who loved Willie Nelson. “If you touch his hands,” a family member told the medical students, “know that they worked every day.”

Lloyd, a pragmatic Nebraska Swede, was a bit of a feminist. “He would have been pleased to see all the woman doctors today,” his daughter said.

Dorothy was widowed young and raised her girls to believe, as she did, in education. “My mom is still teaching,” her daughter said. “She’s just teaching anatomy now.”

The widow of Barry, who played baseball, said she still receives requests for his autograph from fans who don’t realize he died.

Then there was Richard, achingly remembered by a friend as a man who had no children and lived in a church basement for most of the last 15 years. He wanted to donate his body to science “to give back to the people who gave to him.”

Brad was a man “who could fix anything.” You need to know, his widow said, that at the end “he was surrounded by people he loved.”

Many of the speakers wanted students and faculty to understand the life and joy marked now by only physical remains.

“You got to see the muscles that made him smile. We got to see the smile,” one relative told the students. “You got to see the heart, but we got to know it.”
Lincoln University in Pennsylvania took a lot of heat last fall for enforcing a fitness curriculum requirement for its larger students.

Four years ago university faculty began requiring freshmen to take a body mass index (BMI) test—a measurement of their weight compared to their height. Obese students (BMI >30) were told to enroll and complete a one-credit course in fitness walking and conditioning.

The university's efforts to reduce obesity reflect the concerns of American society in general. The Centers for Disease Control and Prevention (CDC) describes American society as “obesogenic,” meaning that we are lazy and eat too much (unhealthy) food, and so we get fat.

According to an article in the Journal of the American Medical Association, prevalence of the overweight and obese in America is 68 percent, half of whom are obese. Health consequences of being overweight or obese include increased risks for heart disease, Type 2 diabetes, cancer, stroke, hypertension … and the list goes on. The bottom line: America is becoming fat, and being fat is bad for your health.

So an esteemed institution tried to tackle the challenge of obesity by requiring a course in walking. Sounds easy enough, right? Unfortunately, it turned out that two dozen Lincoln seniors were being denied their diplomas for failing to register for the fitness course. The resulting outcry spawned a decision to retract the policy. Instead, the school now recommends a “fitness for life” course to those students with potential health risks, but enrollment will not be mandatory.

Was that the right decision? The students who were initially denied their degrees enrolled in the university with the knowledge that they would be subject to health assessments. The university’s intent was in the right place. Right? So what went wrong?

Lincoln University made the mistake of requiring the class for only a select population. While the university faculty should be applauded for their intent, their tactics were less than tasteful. Some would argue that they were discriminatory. Others claim that it is illegal for universities to force this level of medical disclosure. Critics are quick to point out that academia should stay academic and that BMI is not always an ideal indicator of fitness (Lincoln addresses this by taking waist measurements as well). Whatever the criticisms may be, the university’s approach was not without flaws.

If the university wants to promote health and wellness, it should promote it to everybody. Just like biology majors are required to take humanities electives, all majors at Lincoln University should have a physical activity elective. If students don’t want physical activity to be part of their curriculum, they can choose to attend school somewhere else.

The steps taken at Lincoln pose a question to which this nation must find an answer: What should we do about obesity? Along with all of the health consequences, the economic consequences of obesity are just as real. According to the CDC, the country spends $147 billion a year in direct medical costs for obese and overweight patients. With the increasing prevalence of an overweight and obese population, this epidemic is sure to strain an unsustainable healthcare system in uncertain financial times.

Something must be done. Schools of all levels should follow Lincoln University’s initiative in addressing this preventable epidemic. Whether it be requiring formal physical education classes, extended recess time or healthier food options, schools need to institute measures to turn the tide against obesity. For example, the Anschutz Medical Campus is building a Health and Wellness Center with the aim of improving nutrition and increasing exercise on campus as well as in Colorado as a whole.

Lincoln University’s model was not perfect, but it set an example that we can learn from and improve upon. We should follow its lead and fight obesity with force.

Mark del Rosario is a second-year medical student at the University of Colorado School of Medicine. He is passionate about community health and envisions a fitter future for America.

What are medical students talking about? See more essays at medschool.ucdenver.edu/CUMedToday/Features and click on Student Voices.

Courtenay Holscher recalls watching drunken people roll into the emergency room during a Friday night shift, knowing that many of these patients will return.

Helenka Rowe wonders if our disinfectant-dependent lifestyle is actually hurting, not helping, our health by encouraging allergic responses.
Maybe it all began with Whiskers, the Seal of Iceland.

Not familiar with Christina Crumpecker’s first “publication,” complete with illustrations, cover and pretend library check-out card? That was third grade. Today, she’s the one taking copious notes during rounds as a fourth-year medical student at CU. She’s writing down medical data … and literary ideas. She won second place in a national poetry contest for medical students. She also won CU’s Melissa Adams Memorial Award in Medicine and the Humanities for her essay, “Little Things.” It’s about a patient who, without explanation, gives her a piece of glass smoothed by the sea. Here’s a sample:

“You don’t know it, won’t believe it yet, but you will come to collect and carry treasures of your own, an odd mix of river stones and hurts, worries and braided wheatgrass to fill your heart and pockets. Joys and pawprints and scraps and yarn.”

She’s good. Crumpecker, 36, embodies that embrace of the arts and medicine, fostered at the School of Medicine through courses, lectures and the journal, The Human Touch.

“She is the warmest most empathetic person I ever met,” says her friend and fellow med student Chris Galton. “Her smile makes me forget most of the ills of the world.”

Crumpecker grew up in Kansas City, Mo., with a lawyer father, an art teacher mother and a younger sister. She says she started writing “at about the time I could hold a pencil.”

Her first literary work, in kindergarten, was titled “I Lick My Dog.” Actually she liked her Shetland sheep dog, Wookie, and had a teacher who saw the humor in a child’s error.

She was introverted as a girl, living in a world of imagination.

“The books I loved were The Chronicles of Narnia and The Secret Garden,” she remembers. “You know, if I just look around long enough I will find the entrance to the secret world I’m supposed to be in.”

In third grade, the girl from the Midwest became fixated on aquatic mammals. Her mother taped lined paper behind plain paper so Christina could write her story about Whiskers the seal in neat, straight rows. The teacher put a cover on it and tucked a library card into the inside jacket.

“It was the most thrilling thing. That was a real book if you could check it out of library,” Crumpecker says.

Crumpecker majored in English and writing at Colorado College. Romance took her to Durango in 1996, where she planned to teach English. To meet more people, she became an emergency medical technician and then a volunteer firefighter.

Although Crumpecker kept writing, she was drawn to the healthcare side of her life. Maybe that was the magic world she was supposed to be in. She moved to Denver to become a paramedic. She loved the hands-on stuff, “being able to fix things.” There was an odd intimacy to the job.

“You have two people who are total strangers, yet you’re instantly in one of the most intense experiences you could have. There’s nothing quite like it.”

Eventually she applied to medical school and came to CU. Three of her paramedic pals did the same, including Chris Galton.

Galton says that in medical school, and before, Crumpecker was a big note taker: “Meticulous. And she’s like a kid with a big box of crayons. She uses all kinds of different colors.”

Yes, Crumpecker says, she takes rainbow notes. If she’s writing in blue and something leaps out at her, she might grab a red or black pen to set it apart.

Medicine, she found, helps writing. Sometimes it’s life or death stuff, grist for a story. And you get a new vocabulary, phrases such as “insensible losses”—water lost from breathing or through the skin—a medical term, a metaphor and, eventually, the title of the poem she read to an audience in Ohio after it placed second in the national William Carlos Williams poetry contest.

But even more, writing helps medicine. “Especially in family medicine, it is a narrative, a story,” Crumpecker says. “Patients are telling you who they are as a person. People don’t just say, ‘I have diabetes because I lost faith in God last year.’ But it may be their story. The cultural competency curriculum here emphasizes asking what do you think is wrong, what do you call your problem.”

It’s in the details, Crumpecker says. She could be talking about writing but she means medicine. “I have a soft spot in my heart for our frailties and weakness,” she adds. “They make us human.”

To read Crumpecker’s short story or listen to her read her poem, go to medschool.ucdenver.edu/CUMedToday/Profiles.
The 2010 reunion started with the all-class breakfast and Dean Krugman’s state-of-the-school address. Krugman began by bringing alumni up to speed on the school and current events. He spoke of the transition to the Anschutz Medical Campus, and attendees were blown away by how medical education has changed since they were in school. Some highlights of the campus tour that followed were Building 500 (in which many alumni remember working when it was the Fitzsimons Army Hospital), the Center for Advancing Professional Excellence and the Visible Human Dissector software that is available to students in the integrated anatomy lab.

That evening, the Classes of 1960 and 2010 came together at the honors convocation and Silver & Gold Banquet at Invesco Field at Mile High Stadium. More than 350 people gathered to celebrate this long-time tradition the night before graduation, where the accomplishments of many outstanding Class of 2010 students were highlighted. Alumni met and mingled with the students and their families, congratulating them on their graduation.

At the Silver & Gold Banquet, Krugman welcomed everyone and recognized Clara Winter (MD ‘66), the outgoing president of the Medical Alumni Association (MAA), who also served as the evening’s emcee. A “thank you” was extended for the efforts of several board members, including Barbara Wilson (MD ’10) and Lisa Foley (MD ’10), who served as student representatives on the board and were instrumental in engaging students with alumni. The highlight of the evening was Winter’s presentation of the annual Silver & Gold Awards to E. Chester Ridgway (MD ’68), John Farrington (MD ’52) and Watson Bowes (MD ’59).

As the evening came to an end, Krugman congratulated the Class of 1960 on their 50-year celebration and called each alumnus and alumnae up to the stage to be honored with a certificate. He asked the Class of 2010 to stand and be recognized, then to greet the alumni who would be processing them into their graduation.
The following morning, the Class of 1960 put on their regalia just as they did 50 years ago. This time, they were not receiving their diplomas but instead leading a new generation of physicians to the beginning of their medical careers. Jim Grant (MD ’60) shared his graduation memory of when the Class of 1910 processed them: “I remember thinking about how accomplished and old they were, and now here we are,” he chuckles.

The 1883 luncheon followed the graduation ceremony, where speaker Susan Berdine, Denver Police Department Crime Lab supervisor, discussed the department’s DNA cold case project. Individual class dinners were held on Friday and Saturday nights.

Plans are already under way for the 2011 alumni reunion, so if you graduated in years ending in 1 or 6, be sure to mark your calendar now for May 25–28 and look for further reunion details soon.

To see more reunion photos go to medschool.ucdenver.edu/CUMedToday/Features.
During the School of Medicine alumni reunion each year, the Medical Alumni Association (MAA) recognizes a select group of alumni at the Silver & Gold Banquet. On May 27 at Invesco Field, Clara Winters presented, for the MAA, awards to the following outstanding alumni.

Watson Bowes, MD ’59, was given the Distinguished Achievement Award, which recognizes outstanding service benefiting the community, the practice of medicine, delivery of health care and the University of Colorado School of Medicine.

An obstetrics doctor, Bowes pioneered RH sensitization and published several papers on intrauterine transfusion early in his career. He was a faculty member at the University of Colorado and later moved to the University of North Carolina (UNC) at Chapel Hill where he was presented with several faculty and teaching awards. His colleague at UNC and fellow alumnus, William Droegemueller, recalls Bowes as “the best possible role model for students and residents I can think of. He was a devoted physician and a doctor’s doctor—literally, because so many physicians wanted him to deliver their babies.”

Bowes, who is retired, still attends department conferences, reviews literature, contributes reviews to Faculty 1000 and continues to play a prominent role in the field of physician ethics, both locally and nationally.

John Farrington, MD ’52, was honored with the Distinguished Service Award for outstanding service to the Medical Alumni Association. Farrington is a past president of the MAA board and has been active in the organization since the early 1960s. Through his dedication and leadership, he has continually engaged alumni and encouraged support for the School of Medicine.

Leadership has been a constant in Farrington’s career, in which he practiced internal medicine in Boulder for 31 years. He has been the president of the Colorado Medical Society Education Foundation, president of the Colorado Medical Society, president of the American Society of Internal Medicine and a professor emeritus and master of the American College of Physicians. His former colleague, Bill Maniatis, says, “I don’t know anyone who doesn’t think the world of John Farrington. In anything he’s done, he’s been a leader.”

E. Chester “Chip” Ridgway, MD, MACP, ’68, was presented with the Silver & Gold Award, the highest honor the Medical Alumni Association bestows. It recognizes excellence in humanitarianism, citizenship and professionalism.

Ridgway graduated magna cum laude from the School of Medicine and completed his internal medicine internship and residency at Massachusetts General Hospital in Boston, followed by clinical and research fellowships at Harvard Medical School. He joined the faculty of Harvard Medical School and the Massachusetts General Hospital in 1972 and served as Head of the MGH Thyroid Unit from 1980–1985. He was recruited back to the University of Colorado to lead the endocrinology, metabolism and diabetes division at the School of Medicine in 1985, and remained in that position until 2007. Ridgway continues to show his leadership as a senior associate dean in the school. Dean Richard Krugman credits him with being instrumental in overseeing the school’s move from Denver to the Anschutz Medical Campus in Aurora.

When people talk about Ridgway, some common themes emerge: support, mentoring, training the best in the field and being an internationally recognized expert in thyroid medicine. Virginia Sarapura recalls, “Dr. Ridgway has been my mentor since I started my fellowship 23 years ago. I cannot think of anyone who has been more supportive, encouraging, fair and generous, and who made such an incredible impact not only in mine, but in the careers of so many now prominent endocrinologists.”

Call for Nominations

Silver & Gold Award—outstanding service to the community and contributions to the art and science of medicine

Distinguished Achievement Award—outstanding achievements benefiting the community, the practice of medicine or the provision of health care

Distinguished Service Award—outstanding service to the MAA and the School of Medicine

For more information or to make a nomination, please visit www.ucdenver.edu/alumni/medicine.
President’s message

Dear alumni and friends,

Of all the many functions of an alumni association, the support of students, the institution and our alumni is what offers us ample opportunities for meaningful activity.

Support of students continues to increase and has taken many forms. The presentation of stethoscopes to the incoming first-year students, career exploration events for students later in their training, clinical teaching by CU alumni and informal coffee/breakfast events are only a few examples of how our students are getting involved. Their dedication and competence are steadfast, and our direct efforts in supporting and encouraging them may well be our most important function.

Support of the institution takes many forms as well. In a time of decreasing dollars from the state of Colorado, I don’t think all of us together have a big enough checking account to really dent the tremendous debt burden current students are incurring. But we can, at every opportunity, provide a steady voice about how very special the University of Colorado School of Medicine is, especially in regard to its history as an institution, the collective accomplishments of its alumni and the beauty and function of the current campus. If you haven’t had a chance lately, drop by and just walk around; see how far our institution has come even in the last 10 years.

Support of alumni takes its most visible form in the milestone reunions—especially for 10-, 20-, 25- and 50-year reunions. These are great times to reflect and celebrate, and to treasure the unique bond that comes from shared experience and subsequent accomplishment. Support of alumni can also take place at conferences, scientific meetings and conventions. Perhaps the most encouraging form of alumni support is that surprise note or phone call to the “study buddy,” dissection partner or fellow classmate of the third row, left side.

The Medical Alumni Association is excited to announce a new membership initiative that moves away from collecting dues and instead includes all alumni as members of the association. We are working closely with the School of Medicine to develop this more inclusive structure that offers incentives for alumni donors to the school and alumni association. We are still in the development stages of this program and will share more details in the months to come. Stay tuned!

I hope in the years to come we can widen our gaze on areas where we can help the students, as they are the personification of our institution and our most important alumni.

Sincerely,

Gary Grasmick, MD ‘98

MEDICAL ALUMNI ASSOCIATION DONATION FORM

Please consider donating to the Medical Alumni Association using the form below. Your contribution helps support student and alumni programs and activities, including the stethoscopes given to first year medical students.

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$______ School of Medicine Alumni Fund (02-21609)
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$______ Stethoscope Fund (02-22041)
Supports creation of an endowment to fund the gift of a stethoscope to each incoming medical student.

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Supports medical students by providing scholarships given out by the Medical Alumni Association.

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You may also call (303) 724-2516 to give over the phone. Thank you for supporting the University of Colorado School of Medicine Medical Alumni Association!
Final thoughts

The view from Fiesole
By Lawrence Hergott, MD

In her review of the Francine Prose book The Lives of the Muses, Stacy Schiff mentions the few things of our time she feels serve as muses—things that inspire creativity in the arts and humanities. Being in love is listed, as is suffering. A third muse is the view from Fiesole. Having seen the view from Fiesole, I know precisely why it is included.

Fiesole is a small town in Tuscany, a few miles up a hill from Florence. Florence is a wondrous place, with its magnificent domed cathedral, the Uffizi Gallery and Michelangelo's David. For the minority of travelers who go to Fiesole, another wonder awaits. Standing on the hilltop and looking back, the majesty of Florence is seen resting silent and enchanting in the valley below. It is a scene almost unbearably picturesque, imprinting—and inspiring.

Florence and Fiesole may offer a useful metaphor for physicians. We might consider our daily experiences of medicine as being in Florence: intense, meaningful, at times difficult. We could consider the view from Fiesole as stepping away from those immediate occurrences for a broader perspective—a view beyond the biomedical—of heart or soul experiences as we lead our lives in medicine.

Being in Florence, for example, means my being pleased that the emergency coronary bypass on a physician-patient of mine was successful, saving his life and preserving left ventricular function. The view from Fiesole would be learning later that he silently worried throughout his hospitalization about whether he would have any change in cognitive function or personality and, as an accomplished pianist, whether he would still be able to play Beethoven's Moonlight Sonata from memory. The view from Fiesole would be my understanding the meaning for him of going straight to his grand piano upon returning home and playing the sonata through “by heart.”

Being in Florence would be a cardiothoracic surgeon recognizing his excellence at his craft, and how his hard work was of great service to his patients and provided well for his family. The view from Fiesole would be his reflecting on that practice, recognizing it as a consuming one that stole him from his wife and daughters. The view from Fiesole came years later, after leaving that practice for one that was less remunerative but which allowed him to save his family.

Being in Florence would be any physician recognizing the hardships of practice and feeling discouraged. The view from Fiesole would be seeing the extraneous forces causing those hardships as “the single cloud that eclipses the sun” that Balthasar Gracian mentions in his 15th century book The Art of Worldly Wisdom, and recognizing both the difficulties of practice and the wonders of medicine still. The view from Fiesole would be noting the supportive community that surrounds and sustains us at work and at home. The view from Fiesole would include honoring within ourselves the character it takes to practice well, having gratitude for the individual self and being what physicians are: intrepid, faithful, compassionate, uncompromising in matters of patient care.

As physicians, we must spend our due time in Florence, and spend it well. As difficult as that can be, we—and others—will suffer more if we don’t occasionally take that metaphorical walk up the hill to Fiesole, look back and contemplate the wondrous, heart-and-soul experiences a life in medicine brings. Not to do so would be to make real the words Dr. William Carlos Williams offered in a poem: “It is difficult to get the news from poems, yet men die miserably every day for lack of what is found there.”

Lawrence Hergott is a professor of medicine in the cardiology division. To read more of his writings go to medschool.ucdenver.edu/CUMedToday/Features.

Please submit your essays for future editions to Dan.Meyers@ucdenver.edu.

Portrait photo by Glenn Asakawa. Fiesole Chamber of Commerce provided the view to Florence.
Read all about it ... online

You may have noticed that many of the articles in this edition of CU Medicine Today include a link to more information online. The magazine articles themselves also are available online at medschool.ucdenver.edu/CUMedToday. This lets us provide more information than the printed version of the magazine can hold. For example, in this edition there’s an essay by Lawrence Hergott, MD. Want to read more of his work? It’s there on the website. The magazine profiles Eric McCarty, former CU football player and now the team’s physician. There’s a fuller version, with more photos, on the website. We feature a student and her award-winning writing. You can hear her read one of her poems on the web. There you also can find back editions of this magazine. And while you’re there you can catch up on news about the medical school. The web also lets us expand readership of CU Medicine Today. Already, through the web, last spring’s edition reached about 1,000 more people than before, roughly a 10 percent increase. We’d like to know how you’d prefer to get your CU Medicine Today – paper or web? Please take the survey at the bottom left of the magazine’s home page. Again, that’s medschool.ucdenver.edu/CUMedToday. And if you have suggestions about the magazine please contact me.

Thanks,

Dan Meyers
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Thanks.
The generosity of the Medical Alumni Association and all donors to the CU School of Medicine makes possible everything—from the stethoscopes first-year students receive at the white coat ceremony to the triumph of graduation four years later. Your commitment to this school allows our students to explore their interests, from rural and urban medicine to the most technical specialties to the frontiers of research. When you support the medical school you invest in the future of medicine and in the people who will make that future happen. For that, and all you do, the students, staff and faculty of the School of Medicine thank you.

For more information go to www.ucdenver.edu/alumni/medicine