2 patients, 1 cardiologist
The challenges of transitioning from pediatric to adult care

Checking a gorilla’s heart

Ear force – Marion Downs

Altitude Center reaches high
JESSICA STRATMAN-RUSH AND HER 3-YEAR-OLD DAUGHTER DAISY SEE THE SAME CARDIOLOGIST, JOSEPH KAY, MD. KAY’S EXPERTISE STRETCHES FROM PEDIATRIC TO ADULT PATIENTS, WHICH IS ONE SOLUTION TO THE CHALLENGE OF CARING FOR THE GROWING NUMBER OF CHILDREN WHO SURVIVE CONGENITAL ILLNESSES.

On pages 14–18, CU Medicine Today examines the topic of transitioning care and how it plays out on the Anschutz Medical Campus.

Cover photo and photo left by Glenn Asakawa
Reaching a milestone, thinking out of the box

The Class of 2015 has arrived and is taking its place as likely the best class we have ever admitted to the University of Colorado School of Medicine … a distinction that I believe I have only bestowed on the previous 20 classes that I have had the opportunity to welcome here. They are also the most diverse and we have the most out-of-state students ever (nearly 30 percent). It is nice to have them here and take their place in our school’s illustrious history.

Since our last issue of CU Medicine Today, University of Colorado Hospital and Poudre Valley Health System in Fort Collins have signed a letter of intent to form a joint venture to create a health system. It was somewhat of a surprise, but I am optimistic that these outstanding hospitals can work together to support the academic programs of our medical school. The reality is that free standing hospitals are not likely to do very well in the very competitive (some say “predatory”) health care market in Colorado. Poudre and UCH are two of eight such hospitals on the front range corridor. The others are Children’s Hospital Colorado (new name for what used to be The Children's Hospital), Denver Health, National Jewish, Boulder Community, Memorial in Colorado Springs and Parkview in Pueblo. I suspect that there will be more consolidation in future years – which will also create new educational opportunities for branch campuses or AHEC relationships.

At the end of June, Charles McKown, MD, dean and vice president for health affairs for the Marshall University medical school, stepped down from the dean position. Charlie was the longest serving Dean of any medical school in the United States. I had happily been #2 for the last five years. Now there is no one between me and the end of the conveyor belt. That reality has led me to believe it’s time to think “out of the box” a little. Specifically, the question I asked all my chairs and center directors this past spring was: “If we were to start over and had the same facilities, faculty and resources that we have now, how would we organize ourselves?” I find this an interesting question, and as this is a time in which a dozen new medical schools are starting from scratch, there are a lot of emerging models.

None of them is as complex as we are, however. And what makes it more complex is that the way our research, clinical and educational enterprises are evolving, the answer may be different for each of them. So, at a time when all our revenue sources are under downward pressure, it seems to be important to think carefully and thoughtfully about the future of our school. The process we are considering is first to “blue sky” what the optimum structure would be for our research, clinical and educational enterprises, as well as for our student/resident/fellow and faculty professional development by 2016 or so. Phase 2 of this project will focus on how to get there from where we are – and what resources would be needed to make that transition a smooth one that would support, not cannibalize or destroy, what we have spent decades building up.

Have a good winter.

With warm regards,

Richard D. Krugman, MD
Dean, School of Medicine
Vice Chancellor for Health Affairs
University of Colorado
Research reveals attitudes on elderly driving

Researchers studying the driving habits and accident rates among the elderly found that the majority of elderly surveyed supported mandatory retesting of drivers based on age, and said they would hand over their keys if a doctor or loved one said they were no longer fit to drive. “We are now exploring the idea of an advance directive for driving, where someone would be designated to take away your keys at some point,” says Emmy Betz, MD, MPH, at the University of Colorado School of Medicine, who led the study. “It is a very difficult subject. Children don’t want to bring it up, older drivers are afraid to lose their licenses and doctors may feel it is not their job.” The study surveyed 122 elderly people and found 71 percent supported mandatory, age-based driver retesting. Some 89 percent said they might quit driving if their doctor advised it compared to 75 percent who would agree to quit if it was their family’s idea.

For news coverage of the study, go to medschool.ucdenver.edu/CUMedToday/peaks.

Old campus under contract

The old health sciences campus at Ninth Avenue in Denver, where thousands of medical school alumni learned their profession, is under contract. Sembler Atlanta, Inc., wants to purchase the property for $34.8 million to redevelop it for mixed use, including retail and residential space. After expenses, the university will about break even. The health sciences campus completed its move to the University of Colorado Anschutz Medical Campus in Aurora, Colo., in January 2008.

CU scientists halt progression of Parkinson’s disease in mice

Medical school researchers have discovered a drug that stops the progression of Parkinson’s disease in mice, and now they are testing it on humans. Wenbo Zhou, PhD, assistant professor of medicine, and Curt Freed, MD, who heads the division of Clinical Pharmacology and Toxicology at the medical school, found that the drug phenylbutyrate turns on a gene that can protect dopamine neurons in Parkinson’s disease.

Parkinson’s disease is caused by dying midbrain dopamine neurons. The gene, called DJ-1, can increase production of antioxidants like glutathione to reduce the debilitating effects of excess oxygen in brain cells. In addition, activating DJ-1 helps cells eliminate abnormal proteins that otherwise accumulate and kill brain cells. Dopamine neurons are particularly susceptible to too much oxygen and abnormal protein deposits.

The researchers put phenylbutyrate in the drinking water of mice genetically programmed to get Parkinson’s disease as they aged. Mice receiving the drug were able to move normally, had no decline in mental function and did not accumulate the protein that causes Parkinson’s. Older animals that did not get the drug saw a steady decline in their ability to move as their brains were damaged by mutant proteins. To listen to an interview with Freed on Colorado Public Radio, go to medschool.ucdenver.edu/CUMedToday/peaks.

For news coverage of the study, go to medschool.ucdenver.edu/CUMedToday/peaks.
Maternal-fetal program records first birth

June 15 was an important day at the Colorado Institute for Maternal and Fetal Health, a joint venture between University of Colorado Hospital, Children’s Hospital Colorado and the School of Medicine. It was the day of their first delivery.

The delivery took place in the newly constructed Maternal-Fetal Care Unit at Children’s Colorado. The unit focuses on babies who need unique surgical care within 72 hours of birth and offers access to a team of adult and pediatric specialists and resources.

Through the same partnership, the East Tower expansion project at Children’s Colorado is under way, which includes construction of a large, high-risk obstetrical unit to accommodate phased growth. Mary Beth Martin, RN, will lead the new institute. She is responsible for integrating the strategic and operational components of the program within and across organizations, and for business and program development including outreach, operational and clinical performance of respective units, financial management and strategic planning.

Kempe wins national pediatric research award

Allison Kempe, MD, MPH, was named the 2011 winner of the Academic Pediatric Association Research Award. Kempe, a professor of pediatrics at the School of Medicine and director of the Children’s Outcomes Research (COR) Program at Children’s Hospital Colorado, has promoted efforts to improve child health policies in health disparities among underserved populations, state Children’s Health Insurance Program funding, and immunization delivery, policies and practices.

This year she led a national survey of primary care physicians who deliver vaccinations to children. The study found that a majority of physicians think parents’ level of concern about vaccines has greatly or moderately increased in the past five years and that they are spending a significant amount of time at well-child visits discussing vaccine safety with them. Kempe called for better education of families prior to the doctor’s office visit, including use of media and social marketing to counter misinformation. The study was published in April in the American Journal of Preventive Medicine.

Delivering the first baby at the Maternal-Fetal Care Unit.
CU med school in the news

Nationally as well as locally, journalists turn to the School of Medicine for information and expertise. Following are some examples from recent months.

The Wall Street Journal focused on the Pentagon’s work with the Altitude Research Center to predict which soldiers will experience altitude sickness if sent into high-altitude battlefields such as in Afghanistan. The journal wrote, “Accompanying headaches, nausea, dizziness and fatigue can be so debilitating some troops have trouble standing, much less maneuvering in combat.” Eventually there could be civilian benefits for high-altitude activities such as skiing, snowboarding and hiking. For an interview with Altitude Research Center’s Robert Roach, see page 6.

MSNBC reported on how faculty traced bloodstream infections in patients at Children’s Hospital Colorado to contaminated alcohol wipes. The infections, caused by the rare bacteria Bacillus cereus, “just didn’t make sense,” Christine Nyquist, MD, the hospital’s medical director of infection prevention, told the network. The detective work at Children’s Colorado led to a nationwide recall of hundreds of millions of alcohol swabs, wipes and pads.

PBS NewsHour took a look at the recent national recognition Denver Health has received for improving patient safety. The report featured several School of Medicine faculty including Patricia Gabow, MD, Denver Health’s CEO (affiliate faculty) and Mark Earnest, MD (associate professor), who spoke generally about safety improvements. University of Colorado Hospital, meanwhile, again was ranked in the top 10 nationally by the University Health-Systems Consortium for various measures of patient safety and in various specialties.

National Public Radio’s Science Friday asked Robert Eckel, MD, to explain what’s going on with fat. Eckel published a study, which received attention worldwide, showing that fat removed from thighs and hips by liposuction tends to return, but on the belly instead.

Stephen Davies, PhD, continues his breakthrough work in finding ways to repair spinal cord damage. After he published his most recent findings, showing great progress with the use of a certain type of astrocyte, Davies told Colorado Public Radio that there’s potential to begin trying his stem-cell–based solution on humans in approximately three years.
Meet some of the future doctors training at the School of Medicine

Two weeks after Matt Myers was accepted to the medical school, he was diagnosed with Hodgkin's lymphoma. “After the first diagnosis and treatment I thought, ‘I will never think about it again,’” he says. “And then I spent the next five years thinking about it all the time.”

It was not easy. “In their free time they’d say, ‘let’s go skiing,’” Myers says of classmates and friends. “I’d think, ‘let’s go get chemo.’” Myers graduated last spring.

Another recent graduate, Kelsey Hurley Walker, was the fourth generation in her family to graduate from the medical school. “It was kind of nice to see pictures of my dad, grandfather and great-grandfather when I walked down the hall,” she says.

You can read these stories and the profiles of other current students and recent graduates, as well as watch a video about Myers, on our website. Go to medschool.ucdenver.edu.CUMedToday or scan the QR code.

Poetry, prose, photos and art beckon as humanities and medicine combine

Each spring, the Arts and Humanities in Healthcare Program from the Center for Bioethics and Humanities releases a collection of works by students and faculty. The Human Touch was founded by Henry N. Claman, MD, from the Division of Allergy and Clinical Immunology, and is edited mainly by medical students.

The photo shown here is “Jokia’s Other Blind Eye,” by Sara Warzecka. To see all of The Human Touch, Volume 4, or to learn more about arts and humanities at the medical school, go to medschool.ucdenver.edu.CUMedToday or scan the QR CODE.
Who gets altitude sickness and why?

Altitude Research Center focuses on key questions with big implications

By Dan Meyers

Two new Department of Defense grants highlight the work of the Altitude Research Center at the CU medical school. One of the grants, for $2.5 million, focuses on how to predict through gene expression how someone will react to high altitude. The other, $1.5 million, will examine how people acclimatize to high altitude. The director of the Altitude Research Center, Robert Roach, PhD, talks about these projects and what they might mean to the military, other diseases and a state where a quarter of the visitors to the mountains get altitude sickness.

Q: In the previous experiment, what differentiated those who got sick from those who didn’t?
A: We’re talking about six genes. Three don’t have a name, just a number. When we find all six, that’s predictive. It’s more like a fingerprint than a mechanism. We don’t know that the gene expression causes the problem. But those six genes predict who gets sick and who doesn’t, even if we don’t know exactly how it works.

Q: This is about gene expression, not genome?
A: Yes. In the genomic sense the people may be indistinguishable but they have different patterns of gene expression, the day-to-day way their genes work.

Q: Why is the defense department so interested?
A: Everybody knows that Afghanistan is high. But so, for example, is the Iranian border. Generally, the potential for future conflict at altitude is fairly high. Yet right now we have zero ability to predict who will get mountain sickness and who won’t. Now, if you’re really skeptical you say, “You’re spending that much money to predict a headache?” But if soldiers get sick they can at least experience poor performance and at worst be incapacitated.

Q: How would the military put that information to use?
A: They could choose people who do not get sick to serve at high altitude or they could give medication to prevent altitude sickness to the soldiers who would get sick.

Q: Couldn’t they just treat everyone?
A: Yes but that would be inefficient and, remember, there are no risk-free drugs.
Q: What about the other military grant, to study how people acclimate?
A: We’re going to take “lowland” natives to high altitude for three weeks. We’ll measure what happens with their genes and what happens with their blood. We want to figure out the cellular mechanisms of how this happens. The first study is very practical. This one is a complete discovery process.

Q: Where will you do this?
A: Bolivia, at a lab at 17,000 feet, next summer.

Q: And again, why is the military interested?
A: The only way for me to be 100 percent sure you don’t get acute mountain sickness is if you are well acclimatized. If you spend two weeks at 12,000 feet I am confident that if you go back to altitude soon after you will not get sick. Now, imagine if we can discover the mechanism that allows people to acclimatize and can develop a pill that artificially makes you acclimatized. That’s the hook for broad interest in that study.

Q: So this is not just a matter of fitness?
A: No. But if you’ve been up a lot of peaks over the summer, you will be much less impacted by altitude at the end of summer than the beginning. That’s the body adjusting to altitude. If you have a marathon runner and his office mate who is a slug, be careful who you bet on to do well. The marathon runner might overexert, while the slug might take it easy and do just fine.

Q: The altitude center started in 2002 under a different name. What are its big accomplishments?
A: We’ve had NIH funding that allowed us to discover the mechanism the brain uses to adjust to low oxygen. We identified chemicals that may protect against hypoxia, and that led to preliminary research that was the basis for these new grants. The defense department grants themselves represent a real breakthrough. They’ve raised our profile nationally and internationally. This is a dream of my career, to have the opportunity to discover the basic mechanisms of how humans adjust to hypoxia.

Q: Will this reach beyond the military?
A: If we can figure out how the body responds to hypoxia there are implications for cancer, heart, lung and blood disease. It could have enormous reach.

Q: And I suppose this work could matter in a state like Colorado where a lot of people come to go hiking and skiing?
A: Absolutely, although unfortunately some of the industries here don’t want to acknowledge that a large percentage of visitors will deal with acute mountain sickness. We’ve tried to get the ski industry to get proactive but we had the door slammed in our face.

Q: Finally, what about that altitude chamber in your building? Where’d it come from and how “high” can you go in there?
A: It was a donation from the Air Force, passed along from Metro State to CU. We can go above the height of Mount Everest but it isn’t safe for most people to go above 16,000 feet.

Q: And how high have you been in it?
A: (Laughs). Well, higher than that.

To read about research into acute mountain sickness, and to see a slide show of work at the Altitude Research Center, go to medschool.ucdenver.edu/CUMed-Today/features.
A gene called Six1 plays a vital role in human development, directing an embryo’s cells to divide and migrate to form organs and limbs. Once it has done its job, it is supposed to lie largely dormant.

However, this powerful gene doesn’t always stay slumbering. Reawakened in adult tissue, it becomes a killer.

Six1 is present in 90 percent of all metastasized breast cancers, and is linked to the most lethal forms of ovarian, prostate, colon and brain cancers as well as the pediatric tumor rhabdomyosarcoma.

For 15 years, Heide Ford, PhD, an associate professor of obstetrics and gynecology at the University of Colorado School of Medicine, has been on the trail of Six1.

Ford, co-director of the hormone-related malignancies program at the University of Colorado Cancer Center, discovered its role in breast cancer. Then in a paper published in June, she explained how Six1 depends on an enzyme to play its deadly role in cancer development and metastasis. And now she may be closing in on a way to stop it.

“Finding this treatment could help half of all breast cancer patients and 90 percent of those with the most virulent form of breast cancer,” says Ford, 44. “This master regulator in the embryonic process turns out to be a master regulator in cancer as well.”

In 1998, Ford was the first to identify that Six1 is present in breast cancer cells. A decade later, her lab published two seminal papers showing that when Six1 was present in mouse mammary glands, it not only caused the growth of mammary tumors but it also induced an epithelial to mesenchymal transition (EMT), which is associated with aggressive tumor formation and metastasis.

When she implanted human cancer cells with Six1 into mice, she found that this gene dramatically enhanced movement of the tumor cells into the lymphatics as well as distant metastasis. Ford has more recently found that Six1 acts in the growth of primary tumors and also at both early and later stages of metastasis in different ways.

These studies “define a central role for Six1 in the development of diverse tumor types, provide insight into the role of Six1-induced EMT in tumor development, and point toward avenues of research with considerable potential,” Derek Radisky, PhD, a researcher of cancer biology at the Mayo Clinic in Jacksonville, Fla., wrote in a commentary accompanying the 2009 studies in *The Journal of Clinical Investigation*.

Six1 is an ideal therapeutic target in many ways, Ford explains. Because the gene is largely absent in normal adult tissue, inhibiting it should have limited side effects. What’s more, Six1 is now thought to be responsible for promoting tumor-initiating cells that are believed to be at the root of cancer but resistant to traditional cytotoxic agents. Stop Six1 and you’ll cut off the initial orders that start the cancer process, the thought goes.

Ford and research partner Rui Zhao, PhD, believe they may have finally found a key to stopping Six1. In a study released online June 27 by *Oncoogene*, the team reported that Six1’s role in cancer metastasis is dependent upon the presence of a partner called Eya2, which is an enzyme.

When the two genes are expressed together in breast tumors, the cancer is much quicker to metastasize and patients have a much lower survival rate. Because enzymes are typically easier to target than transcription factors such
as Six1, the researchers believe interfering with Eya2 is the key to making Six1 impotent. The goal is to find a therapeutic that can either inhibit the enzymatic activity of Eya2 or its ability to interact with Six1.

“Because both Six1 and Eya2 are embryonic genes with little expression in normal adult tissues, their interaction may be a valuable future therapeutic target whose inhibition would be expected to impair breast cancer progression while conferring limited side effects,” Ford says.

After eight years of work, the researchers believe they are within reach of determining the crystal structure of the Six1/Eya2 complex. “The structure will provide rich details of the interaction between Six1 and Eya2,” says Zhao, an associate professor of biochemistry and molecular genetics at the School of Medicine. “These details are invaluable resources that will enable us to rationally design small molecule inhibitors through virtual screening on a computer to disrupt the interaction between Six1 and Eya2.”

Funded by two National Institute of Health R03 grants, Ford and Zhao recently used a high throughput screening to identify a class of drugs that appears to inhibit Eya’s enzymatic activity and disrupt cell proliferation. In April, they received one of only two 2011 Grants for Translational Breast Cancer Research from the Breast Cancer Research Foundation and the American Association for Cancer Research to fund further work into finding a therapeutic to inhibit Six1.

They are now talking with a pharmaceutical company about a potential partnership that would allow them to screen billions of compounds to find others. “If we are able to partner with a pharmaceutical company, we’re hopeful that we could be in Phase 1 clinical trials with a compound that will disarm the Six1/Eya2 interaction within three years,” Ford says.

To read more about Ford’s work on Six1 and get a list of published studies, please go to medschool.ucdenver.edu/CUMedToday/features.

Finding this treatment could help half of all breast cancer patients and 90 percent of those with the most virulent form of breast cancer.
It was 9 p.m. on a winter night in 1992 when Dr. Fran Hickey’s career as a young pediatrician specializing in children with disabilities became intertwined with his personal life.

That’s when Hickey’s fourth child was born. “The moment I saw James’ face I knew he had Down syndrome,” says Hickey, now 55. He settled his wife, Kris, and newborn in at home and buried himself in every article he could get his hands on to get a sense of what was in store for the newest member of his family. “Frankly, the literature was pretty weak and it wasn’t happy reading,” he says. So he set out to change that.

Since then, Hickey—the newly appointed medical director of the Linda Crnic Institute for Down Syndrome’s clinical care center at Children’s Hospital Colorado—has dedicated his life to improving the care of children with this diagnosis.

He has served as pediatrician to hundreds of families who say he understands them like no other, spearheaded research in a funding-starved field and volunteered so much time fighting for the rights of his patients that in Cincinnati an annual child advocacy award was created in his name.

Since 1997, when he discovered James is also autistic, he has become one of the few professionals in the nation to study the confounding, oft-overlooked dual diagnosis, which impacts 7 percent of children with Down syndrome. And at a time when much media attention and funding is going toward prenatal testing to screen for Down syndrome and give mothers-to-be the option to terminate, the outspoken Boston-born family man is focused on a very different goal: To raise awareness about what Down syndrome is really like, and make life better for those who have it.

“To me, it isn’t even like working,” he says as he rushes to his next appointment, clad in a pinstriped shirt, stethoscope and loud Charlie Brown tie. “I do it all for James and other kids with Down syndrome.”

According to the Centers for Disease Control, one in 691 babies is born with Down syndrome, which occurs when an individual has three copies of the 21st chromosome. People with Down syndrome have an increased risk of congenital heart defects, Alzheimer’s disease, childhood leukemia, sleep apnea, celiac disease, thyroid conditions and respiratory, vision and hearing problems. Life expectancy has increased dramatically, from 25 in 1983 to 60 today, largely due to more widespread cardiac surgery at birth, access to medical care and deinstitutionalization. Still, medical and cognitive problems persist for those living with Down syndrome.

Yet, while it is the most common birth defect in the country, funding for Down syndrome has lagged its prevalence, with $22 million in 2011, down from $29 million in 2001. “Most of the stuff being funded is around prenatal testing,” according to Hickey, an associate professor in the medical school’s Department of Pediatrics.

In 2008, the Linda Crnic Institute at the University of Colorado medical school was founded to “change the paradigm of how people with Down syndrome are perceived by society” and to provide the first global insti-
tute to encompass both research and patient care. In November 2010, Hickey was the first hire for the institute's clinical care center, the Anna and John J. Sie Center for Down syndrome at Children's Colorado.

“We are delivering on the promise of a dream team of Down syndrome-specific experts,” said Edward R.B. McCabe, MD, the Crnic Institute director. “Fran’s dedication to research is essential.”

Growing up in the blue collar, Irish Catholic neighborhood of Dorchester, Mass., Hickey learned the meaning of hard work early on. His father ran a laundry in the local Veterans Affairs hospital. Hickey’s mother, his hero, raised three rough-and-tumble boys. And “there was no such thing as a day off,” Hickey recalls in his thick Boston accent.

Hickey graduated cum laude from Harvard with a degree in biology before heading to the University of Cincinnati College of Medicine. In his residency at Cincinnati Children’s Hospital, he took a keen interest in neonatology and early intervention to ease the developmental delays that so often accompany premature birth. Soon after his fellowship at Boston Children’s Hospital and Harvard, he opened his first practice in rural Batesville, Ind., and developed a reputation as someone with expertise working with children with special needs.

Then James came along.

“I became the pediatrician who has a child with Down syndrome,” Hickey says.

A typical pediatrician might see a few patients per year with Down syndrome. Hickey ended up with 80 in his patient population in Cincinnati, where he moved in 1993 and stayed for 17 years.

“Everyone wanted Dr. Hickey,” says Marina Vina, whose daughter Natalia Garcia, now 16, was a patient. “Having a pediatrician with a child who has Down syndrome is just a completely different world. He not only understands the medical side of things, but also the parent side.”

Hickey learned early on that his fellow physicians tended to engage in “diagnostic overshadowing”—overlooking associated conditions like sleep apnea or hypothyroidism and autism, writing them off as simply “due to Down syndrome.”

To address this, he delivered to pediatricians 150 copies of the American Academy of Pediatrics guidelines on supervising children with Down syndrome. He has since helped modify those guidelines, created an online checklist and lectured to hundreds of clinicians on the topic.

“I always say ‘listen to the parents.’ If they have concerns and you don’t address them, you may miss something. Autism is a perfect example.”

James was a healthy outgoing kid and an avid reader when, at age 5, he stopped speaking and making eye contact.

“He just disappeared,” Hickey recalls. “It was heartbreaking.”

Once he and Kris, an anatomy and physiology professor at University of Cincinnati, heard James’ diagnosis of autism, Kris organized and coordinated an in-home program that zeroed in on the unique problems associated with autism: loss of play skills, expressive language and social interaction. This has enabled James to regain some of his sociability.

“He is the greatest person ever to be with, even if there are challenging moments,” Hickey says. “We go for walks and swims. He just wants to be with you. He is a giving kid.”

But he realizes not everyone does so well. To date, there have been fewer than 10 studies involving patients with Down syndrome and autism, and Hickey suspects many cases go undiagnosed. To remedy this, he has authored numerous articles and a textbook chapter about dual diagnoses, and intends to expand upon the research at CU.

Hickey says it was tough to leave a practice he loved and uproot James and Kris. But he saw the Sie Center as a unique place with a host of opportunities for him to do good.

He’s already begun collaborating with subspecialists in endocrinology, sleep medicine, immunology and other areas to boost what he still sees as a “dearth of research” on the prevalence of various conditions in people with Down syndrome and how to ease them. And he hopes to turn CU into an epicenter of a national Down syndrome database.

Meanwhile, as headlines herald a noninvasive prenatal blood test which will soon enable women to screen for Down syndrome as early as nine weeks into a pregnancy, he’s determined to better educate genetic counselors, pediatricians and parents-to-be.

“I believe there is a misperception out there that having a child with Down syndrome is the worst thing in the world,” he says. “Ironically, some things that certain people think are so dreadful can end up being the best parts of your life.”

For information about the Linda Crnic Center, go to medschool.ucdenver.edu/CUMedToday/profiles.
Listening to Marion Downs
What she said about children's hearing changed the world
By Tonia Twichell

It would be difficult to overstate Marion Downs' impact on the world.

Hundreds of thousands of people are living normal, productive lives thanks to Downs' firm belief and dogged determination that children should be tested for hearing loss at birth so they can begin to learn language early, preventing communication and cognitive problems as adults.

Once that was a radical notion. Now nearly all infants in the United States are hearing tested at birth, a policy initiated by Downs, who became CU School of Medicine's first director of audiology in 1959 and now is distinguished professor emerita.

"Even in states without laws, it is best practice at hospitals," according to Sandra Abbott Gabbard, PhD, co-director of the Marion Downs Hearing Center. "But we like to claim the fame—we were the first hospital to test all babies for hearing loss."

At a recent luncheon in Downs' honor, a man who'd been born with a hearing disability approached her and said "I want to thank you for my life," Downs' partner, Richard Gray, remembers.

Encounters like that one, Downs says, "make me feel like I validated my parking ticket."

Now 97 years old, Downs remains in close touch with the staff of the Marion Downs Hearing Center at University of Colorado Hospital, which was created to honor her legacy.

Long before her ideas were widely accepted, Downs was leaning over University of Colorado Hospital nursery cribs, ringing bells, blowing horns and shaking noisemakers to try to determine what sounds infants could—and should—hear.

"It took years for technology to catch up with her," says Gabbard. Downs published her first paper advocating early testing in 1964. "Some people were fascinated, others were skeptical," she says. A few were downright hostile to the idea.

Downs and her coworkers had been putting hearing aids on children as young as 1 and 2 years old in the 1960s when she went to a national conference and heard a leading expert give a speech saying that "putting hearing aids on young kids was criminal because their brains hadn't matured yet. He said we were damaging them.

"That disturbed me, of course. That night I went to the leading physiologist in the field and said 'Is this true? Will we destroy the neurons in the brains of these children?'

"He thought for a long time and then he said, 'It will not hurt them.'"

She had a difficult decision to make.

"I was with two leaders in the field and one said we couldn't do this and the other said we could. I went with the one who said we could."

Downs began traveling, giving talks and performing tests. She was willing to go anywhere, which sometimes put her in danger. She survived a Continental Airlines plane crash in New Orleans. Another time her equipment was blown up in a grenade attack while she was visiting South Vietnam during the war. "I was five minutes from being in that car," she says. "Everyone in it was killed."

Marion Downs, distinguished professor emerita, with a young patient. Millions of children benefited from her push to test hearing. Photo by Patrick Kelley.
Finally, in 1997, a study by CU Boulder researcher Christine Yoshinaga-Itano, PhD, backed up the premise that early testing helps children develop language normally. And suddenly Downs’ radical notions became acceptable.

The international accolades made Downs’ pragmatic entry into the field of audiology all the more ironic.

It was 1947 and her three children were growing older so she decided to run over to the University of Denver one afternoon and sign up for some classes. She arrived on campus and found line upon line filled with returning GIs from World War II. Knowing she had to be home when her kids returned from school, she selected the shortest line: the new field of audiology.

“I had never heard of audiology,” says Downs, who says she’d given some thought to becoming a lawyer. “But it sounded interesting. It didn’t matter what I did. I needed to stop washing dishes.”

“Marion was unusual,” says Gabbard, who came to CU in the 1980s specifically to study with “the famous Marion Downs.” The field was dominated by men, and Downs often volunteered to bring coffee to meetings to gain entry. But being a woman also gave her an edge over her male colleagues when it came to dealing with young patients.

“She was comfortable with children,” Gabbard says. “She was a Girl Scout leader and a mother. She understood childhood development.”

The stories about Downs’ unique ability to work with children are legion.

“I remember we had a difficult-to-test child here; he was running around and the mother was apologizing to us. We did some very crude tests, shaking rattles and making noises. When we left the room, Marion says to me, ’I think this child has a mild unilateral hearing loss in his left ear.’ And, you know, after all the testing was done, it turned out she was right. That’s exactly what he had.”

Downs says she had to learn to diagnose hearing problems herself, because the technology to do so developed later in her career.

“I could listen to a child who was crying or making noises in the waiting room and know exactly what the hearing loss would be,” she says.

Her ability to work with parents is just as well known. Downs didn’t just diagnose—she gave parents hope.

“I felt a fellowship with the parents,” Downs said. “I found that what you have to do is tell them what it is and then listen to them. We think we know what they should do, but it’s important to listen to them. Find out how they feel about this and then find a way to help them.”

“The elimination of discouragement” is how LaFawn Biddle describes Downs’ approach.

Downs diagnosed Biddle’s two daughters and three of her grandchildren with hearing loss. Her daughters, now in their 50s, were tested late by today’s standards—at 3 ½ years for the first daughter, 11 months for the second. By contrast, her grandchildren arrived at a time when infant testing was de rigueur. All were tested immediately after birth and were fitted with hearing aids within the first year.

The difference, Biddle says, is dramatic.

Her grandchildren “learned faster, they think on their feet, they respond to spoken language. They matured early and lead very normal full lives. No, not normal—outstanding lives.”

Of Downs’ more than two dozen great-grandchildren, one was born with a hearing loss. Her granddaughter told the audiologist that her grandmother wanted to talk about the test results.

“Not the Marion Downs!” was the audiologist’s reply when she learned the grandmother’s name.

“That doesn’t surprise the people who know Downs well, her modesty and habit of sharing credit for her successes also is well known.

“I’ve had some ideas that weren’t good, believe me,” Downs says, deflecting the praise that she often hears. “But I’m an optimist. That’s my problem. All my life I thought just around the corner something wonderful is going to happen. And it always did.”

The Marion Downs Hearing Center is home to a world-class blend of professional expertise and community engagement. But programs and clinical work are fragmented on campus, making it difficult for the practitioners and staff to collaborate.

The center is in the process of raising funds to build a center to join these programs geographically on the Anschutz Medical Campus. The new building will allow the center to expand clinical space and offer a wider variety of services including genetic counseling. It will also offer surgical training, improve research and reach out to children and adults in the community.

For more information, please contact Rebecca Novinger at 720-848-3043 or rebecca.novinger@uch.edu.

To see photos of the proposed building, please go to Medschool.UCDenver.Edu/CUMedicineToday/profiles.
When she was two months old, Jessica Stratman-Rush’s parents brought her to Children’s Hospital Colorado. Her hands and feet were blue.

The problem was her heart. She was diagnosed with two rare conditions: a hypoplastic left ventricle and a double outlet right ventricle. Both can cause blue skin, called cyanosis.

That was 28 years ago. Good timing, according to her cardiologist, Joseph Kay, MD. “Jessica, if she’d been born before the 1970s, would have died,” Kay says.

Instead, she was in the first generation of patients to receive surgery (a Fontan procedure) for her conditions. Today, she’s a snowboarder who went skydiving the day before she met her husband. Although her conditions can make pregnancy difficult, she is a mom whose 3-year-old daughter Daisy induces another cardiac condition, this one welcome.

“She melts my heart.”

“Sometimes I feel nervous,” Stratman-Rush says of her medical situation. “But I have faith that God is on my side and I am confident in the care I’m getting.”

Advances in medical care allow children—like Stratman-Rush not so long ago—to survive congenital illnesses in increasing numbers. There are now more adults than children with congenital heart disease. With cancer, cystic fibrosis, sickle cell disease, Down syndrome, spina bifida and other conditions, the trend is similar.

But that also means health care providers and insurers have a new pool of patients and problems.

“The fact that children with these medical issues are surviving much longer is a wonderful challenge to have, and it is a challenge because children’s hospitals and adult general hospitals have different ways of organizing their programs,” says Richard D. Krugman, MD, a pediatrician and the dean of the University of Colorado School of Medicine, who launched a discussion on the topic in February involving the key players at the Anschutz Medical Campus.

“With Children’s Hospital Colorado and University of Colorado Hospital co-located on the Anschutz Medical Campus we have a great opportunity and a lot of work to do to make sure we can provide the patient-centered care these individuals need. That will mean change—changing how we as faculty provide care and how we teach our future physicians. It won’t be easy, but change for the better is what we do here all the time.”

The issue of how to transition patients to adult care has national sweep.

Continued on page 16.
Complex care needed for CF survivors

Coordinating care for cystic fibrosis patients represents a special challenge.

The patients themselves have many needs as they battle a disease that clogs the lungs with mucus and that also can wreak havoc with the GI tract because it affects pancreatic enzymes. There are psychological dimensions to this progressive killer as well.

But thanks to medical advances, many patients who might have died in their teens now live into their 30s and 40s. This realm of care is an example of how improved medicine allows people with congenital conditions to live longer.

But with Cystic Fibrosis (CF), there are outpatient needs and intense inpatient demands.

In the Denver area the network of care might look like this: A child with CF is treated at Children’s Hospital Colorado. He or she then graduates to outpatient care at National Jewish Health. But for inpatient treatment, the patient likely would go to University of Colorado Hospital, Colorado’s only source of adult specialized CF inpatient care.

So, three hospitals (and CU medical school faculty who work there) have to work together on behalf of people with CF.

“The first cystic fibrosis patient I cared for in the 1980s died at the age of 8,” Allen Wentworth, director of respiratory therapy and pulmonary diagnostics at UCH, recalls. “Now, many survive longer.”

What changed? Better medications to deal with the lack of pancreatic enzymes. Improved ways to clear the mucus, such as a vest that thumps the mucus loose. Lung transplants to extend life. Superior ways to fight infections.

This progress creates new demands on UCH, where the average number of CF patients has more than doubled in five years. In Wentworth’s unit, other patients might require 15 minutes of therapy while a growing number of CF patients might need two hours’ worth—for several weeks.

UCH recently delegated a respiratory therapist to work with National Jewish. One of her key missions will be coordinating the scheduling of interventions so the hospital can ensure enough staff is on hand to provide the intense care CF patients often need.

Wentworth says relationships with Children’s Colorado are good but he wants to explore ways to make the care discussions more formal.

“We communicate a lot,” he says. “But we can collaborate better. We just need to make it happen.”

- by Dan Meyers
“The recognition of the chasm between pediatric and adult care has grown rapidly in the last five or six years,” says Carl Cooley, MD, a New Hampshire pediatrician who heads the National Health Care Transition Center. “People are looking for tools, solutions and guidance on how to change the system.”

As more patients survive longer with congenital conditions, a unique set of challenges has surfaced:

• Some patients simply drop off the charts when they leave pediatric care, and therefore are more likely to develop secondary problems or require urgent care.

• Pediatricians and other doctors are starting to see conditions their training may not have covered.

• As they get older, some of these former pediatric patients lack health insurance. They may have disqualifying pre-existing conditions, have used up their benefit, or they simply don’t seek insurance as adults.

“Unfortunately, the advances of medical science have not been matched by advances in the organization, financing and delivery of care for these young adults,” according to the introductory article in a 2011 special edition of the *International Journal of Child and Adolescent Health*.

The University of Colorado School of Medicine, sitting on a campus with University of Colorado Hospital and Children’s Hospital Colorado, may be well positioned to take action.

The meeting called by Krugman in February has launched lots of conversations, according to Stephen Daniels, MD, chairman of the medical school’s Department of Pediatrics.

“There was general agreement that transition of care is a problem, and agreement that, given our new campus’ configuration, we should be in a position to solve or improve those transitions,” Daniels, a professor of pediatrics, says.

Daniels adds that success in this realm will help prepare the hospitals and medical school for the emphasis by health care reform funding on efficiency and quality.

“One of the things that is really top of mind is creating a better pediatric health care system where care is more coordinated, evidence-based, delivered in a family-centered way and provides highest value. I think it is that work that will prepare us to survive in whatever the system looks like.”

There already are examples of cross-campus collaboration so that patients are continuously cared for as they age out of a pure pediatric setting. One is the Thriving After Cancer Treatment is Complete (TACTIC) clinic. (See accompanying article, page 18.) Another is...
the Adult Congenital Heart Disease Program, which Kay directs.

Through the adult program, Kay continues the care he began with Stratman-Rush at Children’s Colorado. She moved out of pediatric care when she was 23.

“I was glad I got to keep the same doctor,” she says.

The situation is rewarding for Kay, too.

“You get attached, you’ve seen them grow,” he says. “You get to know the family. You get invited to their graduations, you see their milestones. I can see them as children, as adolescents and then I bring them to University of Colorado Hospital and see them in the adult world.”

Kay’s reach is generational as well. One of his newer patients is Daisy Rush, Jessica’s heartmelting daughter, who has the condition tetralogy of Fallot.

The key to continuity of care, Kay says, is to link the two hospitals in decision-making. Doctors, and sometimes surgical leaders, huddle and figure out where the hospitals’ strengths lie and what the patients need, Kay says.

“To do this at just one of the two, I feel, would be a failure,” Kay says. “This needs to be a joint effort. It’s sometimes been a roller coaster but I hope over time there will be fewer peaks and valleys and even more cooperation.”

For a medical school, one of the fundamental questions becomes how to teach about this rapidly evolving realm. It comes up in some coursework, such as the digestive, endocrine and metabolic systems block. Preceptors may help train students in continuity of care.

And once a month, Laura Pickler, MD, through the JFK Partners program at Children’s Colorado, holds seminars for students interested in disabilities across the lifespan. Speakers include caregivers, parents and patients, as well as experts from the School of Medicine faculty. It’s not part of the curriculum but Pickler coordinates with what the students are learning, and draws a big crowd to the sessions.

Pickler, an assistant professor in family medicine, pediatrics and otolaryngology, also works with state organizations and national organizations that promote the medical home approach, including continuity of care.

“We have had lots of discussion. Now it is time to get organized around this,” Pickler says. “This campus has the opportunity to be cutting-edge.”

To read studies on “aging out” issues and to learn more about programs run by School of Medicine faculty, go to medschool.ucdenver.edu/CUMedToday/features.
Until about 40 years ago, cancer was a death sentence for most children. Today, about 80 percent of children diagnosed with cancer will be alive five years later, and some will live for decades.

But there’s a catch. They have survived only to face what are called late effects: stroke, heart problems, infertility issues, secondary cancers and more. The National Cancer Institute estimates there are 270,000 survivors of childhood cancer alive in the United States.

“Survivors of childhood cancer have unique health care needs,” says Kerry Moss, MD, a pediatric oncologist now in Connecticut who helped create the University of Colorado Cancer Center’s clinic for survivors of childhood cancers. “Many people who had cancer as a child don’t remember it, or if they do, may not consider it important to their health today. After all, they survived, right? Or, they may simply not know where to turn for follow-up care.”

In the spring of 2007, Moss was looking for a project to finish her pediatric oncology fellowship at CU. She had been working in the Children’s Hospital Colorado HOPE Clinic for young adult survivors of pediatric cancers, one of the oldest cancer survivorship clinics in the nation. There she noticed that a lot of people were coming in who were in their 30s and 40s, and there even was a 60-year-old.

“The HOPE Clinic is staffed by people who know about the late effects of pediatric cancer treatment, but no one who is an expert in a 50-year-old’s heart problems,” Moss says. “Our network usually extends to other pediatric specialists who also don’t have expertise in adult medicine.”

She and her mentor, Brian Greffe, MD, a pediatrics professor of hematology and oncology, saw a need for something different. Moss put out a call for internists and others at the university who were interested in adult survivors of childhood cancers.

Responding were Dr. Alison Jones, director of the CU Cancer Center’s LIVESTRONG Cancer Survivorship Center of Excellence, and Linda Overholser, MD, assistant professor of internal medicine with the CU medical school and an internist at University of Colorado Hospital. Greffe and CU Denver’s section head of internal medicine, Jean Kutner, MD, joined the team to cement the vision of a clinic for adult survivors of pediatric cancers. The result is a collaboration between the cancer center, a children’s hospital and an adult hospital, called the Thriving After Cancer Treatment is Complete, or TACTIC, clinic.

The planning team decided that patients would see one of two pediatric oncologists, an internist, a cancer psychologist and a nurse educator. If they needed help with nutrition or community resources, those experts were on hand at the Cancer Center. The team sees up to four patients each month.

TACTIC is unusual in that it’s set in an adult care primary-care environment rather than a pediatric oncology clinic.

“That’s because we are dealing with adults here—adults who had cancer as children, but adults nonetheless,” Overholser says.

Many patients don’t know what effects specific childhood treatments may have on them, according to Overholser.

“For example,” she says, “girls who are treated with chest radiation for Hodgkin’s lymphoma have a much higher risk of breast cancer and may need to start having mammograms at age 25, depending on when they finished treatment, and they might also want to consider having children earlier because of a risk of early menopause related to having received chemotherapy.”

Kristin Kilbourn, PhD, a health psychologist, finds that pediatric oncology survivors often report traumatic memories associated with their cancer treatment:

“Often they’re feeling guilty about the burden they placed on their family, the sacrifices made by their parents, as well as the lack of attention that their siblings received when they were sick. Sometimes you see survivor guilt, especially if they were treated in settings where they knew other children who didn’t make it.”
Nearly two decades ago in California, a 6-year-old inexplicably started to lag behind his classmates. Last year in a remote region of Nigeria, hundreds of children began to die, while scores of others suffered neurological damage. Two medical mysteries, worlds apart. In each case, a soft-spoken, amiable Colorado doctor named Michael Kosnett stepped in to help address the problem.

The California child’s father, it turned out, worked in a plant recycling lead batteries for forklifts and golf carts. He brought traces of lead dust home on his clothes, slowly and accidentally poisoning his child. The lead level in the child was 10 times higher than normal while the father’s was 20 times higher.

In Africa, when gold was discovered in the region and impoverished farmers began to dig for the ore, they ground rocks with dangerously high levels of lead with the same tools they used to grind corn.

Kosnett, a member of the CU medical school’s clinical faculty, is a medical detective of sorts. His rare specialty, which combines occupational medicine with toxicology, has catapulted him onto the world stage, making him a go-to expert in lead and other heavy-metal poisoning.

He also has helped the U.S. government respond to the lead found recently in toys from China and serves on the Centers for Disease Control advisory committee on childhood lead poisoning prevention.

“As a medical toxicologist I feel it is not enough to treat patients once they get poisoned but rather take an active role in preventing hazardous exposure,” he says.

His mission is rooted in the 1960s when he was a boy in the New Jersey suburbs and was warned away from a stream near his house because it was polluted. By age 16 he was reading environmental impact statements and working to block a highway project that would have cut through a nature park.

After graduating from Yale University with a degree in molecular biophysics and biochemistry, he was at a crossroads. He could have become an environmental scientist but ultimately was pulled toward the idea of looking at toxins in the environment and workplace through internal medicine.

Charles Becker, MD, now retired from the University of California, San Francisco, School of Medicine, remembers Kosnett as a driven student with a rare grasp of exactly what he wanted to become. Where many doctors tend to look for answers and solutions based on previous experience, Becker says Kosnett always wants to dig deeper.

“It’s not your typical medical practice,” Kosnett admits, adding that there are only a couple hundred specialists like him in the country.

The effects of heavy metals such as mercury, lead or arsenic on the body do not fit neatly into any one discipline. Some patients are acutely ill in the emergency room while others are chronically ill from low-dose exposure over decades. Still, the implications are huge. While lead exposure has been greatly decreased since the 1970s, it is still a problem. In fact, Kosnett says regulations haven’t kept up with research. Scientists now know that exposure levels once thought to be acceptable are potentially dangerous.

Because his work impacts not only patients but also advocacy groups, industry and policy makers, he is careful to let science, not politics, drive his decisions. One day he can get a consultation call from the Sierra Club, the next day from Chevron. He also sees some patients.

Some cases stick with him, such as when he advised a low-income North Denver community group on its efforts to get decades of lead and arsenic contamination in their neighborhood cleaned up.

“When we went into negotiations with the EPA we came out very well. We were armed with knowledge,” remembers Anthony Thomas, who credits Kosnett for their victory at what later became known as the Vasquez Boulevard/Interstate 70 Superfund site.

Kosnett counts himself lucky to be doing exactly what he wants to do. And he believes his vision for a healthier planet is contagious.

“It has faith in people,” he says. “When given the right information people will always support a healthy environment.”
Excited, yet aware of the uneasy feeling in the pit of my stomach, I arrive at the apartment of a patient. The word patient sounds dry and void of the emotion that this person stirs in me. He was the first person I cared for on the wards, and will therefore always be a part of me.

I have noticed that certain people fade from memory as they transiently pass through my care. Others manage to become part of who I am. I can feel them, see their faces when I close my eyes and remember what their hands feel like in mine.

I’m not sure why that is. But this man is, and will always be, that way.

It may have been his daily joking with me that brought us together, his stories that kept me in the hospital hours past when I should have gone. Or the fact that, although I did not want to accept it, I knew that his cancer only granted him nine more months of life. Something may also be said for the fact that medical school is a traumatic experience at times and, although it is no comparison to the difficulties that face those we care for, the struggling promotes powerful bonds.

Whatever the reason, something about our experience together moves me, and I know that here, at his home, the place he lives, I will lose the protection the hospital offers.

The hospital allows us, as health care providers, to imagine people’s lives in an idealized fashion. We hear of their hardships and feel like we attempt to address what they face on discharge, but it is impossible to truly understand what daily life is like for a person without experiencing it. Here the line will be crossed. I will see, feel, taste, smell and touch his world.

A wave of sadness washes over me as I face the apartment complex head on. This lifeless brick structure with narrow hallways and low ceilings is his home. He deserves so much more. The moment I enter the apartment, however, my anxiety subsides and I am happy to be surrounded by photo frames, decorations and even the giant stuffed animal that was surely won at a fair. Outside the confines of the hospital, I am slipping comfortably into the reality of his world and gaining an understanding of who this man truly is.

The most shocking of all moments is when, near the end of my stay, he asks me to feel his neck mass to see how it compares to when he was in the hospital. I am abruptly and uncomfortably taken out of the role of guest and thrown back into my white coat, which hangs in my closet miles away.

Feelings of inadequacy swell up inside my throat as I palpate his neck. I can thankfully say the mass is shrinking, but I remain hopelessly clueless about what that means. How dare my incomplete knowledge be sufficient? Maybe it is because we both know it is the best I have. We both know I always give him the best I have.

As I leave, I know I may never see him again. To this day those thoughts are the hardest.

How many people will I fall in love with? How many hands will I hold during difficult decisions, and then let go? How many will look to me as their “doc” and then lose me to this unstable whirlwind of training? Will each loss of a human life, not necessarily to death but to the unknown, leave me with this same uneasy feeling that I will never feel sufficient closure?

These people stay with me; this man stays with me. Most difficult is the realization that our interaction, although powerful, is but a moment of millions of moments that is shaping the doctor I am becoming and will be.

Melissa DeLoughry is a third-year student at the University of Colorado School of Medicine.
Community

Medical students volunteer from Aurora to Peru

By Tonia Twichell

Lindsey Chao started volunteering when she was 12 years old, so by the time she entered medical school, the habit was well established.

Now the second-year CU medical student is leading the community gardens portion of Bridging Research and Aurora Neighborhoods for Community Health (BRANCH), a student organization that recently started a farmer’s market serving Anschutz Medical Campus and the surrounding Aurora community.

“I worked at a hospital with ALS patients—I still work with patients—and I volunteered with a special needs soccer team,” she says. “I really enjoy being able to do that.”

Chao is typical of many CU medical students who donate several thousand hours each year to help people locally and around the world.

Volunteering experience is not a requirement for acceptance to medical school, but Director of Admissions Dimple Patel says many applicants are veteran volunteers upon beginning the admissions process.

In the search for well-rounded candidates, Patel says “Sometimes you’ll see that a student hasn’t developed a certain set of skills when they apply, and you realize that they could have developed that through volunteering.”

Once accepted, students are expected to continue developing their skills. “We want to see them extend themselves while they’re students into the surrounding community.”

Some of the well-known volunteer efforts include Warren Village, which helps formerly homeless single parent families; Stout Street Clinic, which serves the homeless; Broadway Soup Kitchen, which provides multiple services to the poor; and Health Action Conference, which encourages advocacy in the community.

One of the more far-reaching student volunteer efforts, CU Peru, takes place in the isolated Loreto region of Peru along the Amazon and Napo rivers.

This nongovernmental organization, established by three CU med students in partnership with a local nonprofit group, is dedicated to improving the health of Peru’s local communities.

In the first year, health sciences students created a GPS map of health care facilities in the region. Since then, students have returned each summer since 2008 to treat residents and teach basic medical skills to health promoters, many of whom have no training at all.

This year, students from the School of Medicine, including both medical and physician assistant students and one pharmacy student, had three goals for their stay:

1. Treat patients for basic health problems including respiratory issues, diabetes, dehydration, fevers and parasites.

2. Train local health promoters to recognize and treat common health complaints by bringing them together for classes. (The students were in charge of all aspects of the training, from transporting the health promoters of remote villages to organizing their housing, food and education.)

3. Travel to remote villages for several days of follow-up, individualized training.

“It was brilliant to see them in action,” says Global Health Associate Director Karen Gieseker, PhD, MS.

Through it all, the goal is to respect the local culture, including local healing techniques, beliefs and remedies.

Meanwhile, back home, BRANCH is working to promote good health and nutrition.

“The goal is to connect the Anschutz community with the surrounding city,” Chao says. “We’re in the middle of Aurora, and a lot of people are intimidated by it.”

Across the street from the medical campus at North Middle School, students have been helping build garden beds. At Hinkley High School, the environmental club started a garden.

“They did a ton of work and did a good job organizing,” Chao says. “I’ve never seen a garden so successful. Students have volunteered to water and weed the garden to keep it going.”

Like CU Peru, BRANCH involves students from all health sciences disciplines at Anschutz.

“I always had an interest in nutrition and community health, and this was a great way to be involved, especially with the other schools on campus,” Chao says. “We have pharmacy students, public health—we have some in dentistry. Just to meet them has been neat.”
Echo probe ... lubricant ... peanuts
Secrets of scanning a heart that's almost human
By Dan Meyers

The patient is ready for his echocardiogram. He stands and sticks out his chest. With her right hand, the person holding the echo probe moves it up and down over the glistening lubricant, seeking the right place for a good image.

With her left hand she feeds the patient a constant stream of unsalted Spanish peanuts.

So it goes when a gorilla at the Denver Zoo gets a heart checkup.

For a decade now, a team from the CU School of Medicine, University of Colorado Hospital (UCH) and other institutions has gone to the zoo once or twice a year to see if its male gorillas suffer from cardiovascular conditions that sometimes afflict primates in zoos. (The extent of heart disease in wild gorillas is unknown.) It's part of the nationwide Gorilla Health Project.

The team also looks at orangutans, which, like the gorillas in the Denver Zoo, generally check out fine on their tests. The group also has helped with cases such as a surgery on Sally, an orangutan who had a fibroid growth in her uterus.

"It's just amazing to be with these majestic animals," says Lawrence Hergott, MD, the CU cardiology professor who organizes the team of doctors, a nurse practitioner and others. "It's almost indescribable."

In the past, the exams were performed after the animals had been given an anesthetic. But the ketamine can raise heart rate and blood pressure.

So an awake gorilla seemed like a good thing. The challenge was to train a 400-pound creature who can crush a padlock to offer its chest, get lubricant spread on it and remain still as someone moved a probe around.

The zoo chose two smart adolescent males, Charlie and Curtis, known as "the boys."

"The jelly was the hardest part of the training," according to Jody Hodges, the head gorilla keeper. "They didn't like it at first. They'd rub it off. But eventually they got used to it."

It took three months for Hodges to train the boys. She'd press a mock probe made of PVC pipe to their chests to simulate the procedure. Charlie acclimated to the fake laptop and the extra people brought in to replicate exam conditions. The humans also were trained—to look submissive, with eyes down and shoulders hunched.

On the big day last May, Hodges put the lubricant on Curtis. Behind her, UCH's lead sonographer, Doris Peterson, helped Hodges position the device. Hergott was there, and would analyse the results later. Then came Charlie.

“It was pretty intense,” Hodges says. “But they did excellent. You could tell they were really proud.”

Next up? Training the boys to stick their arms into a gorilla-sized blood-pressure cuff.

The health care providers know that they, like the zoo staff, have to be careful. Once, Hergott was next to an anesthetized gorilla when it twitched.

“If he moved again,” Hergott says, “I was ready to be half way across town.”

The health care crew cares deeply about these patients. Peterson can name them. Hergott talks wistfully about rummaging around in an anesthetized gorilla’s mouth to coax pus out of an abscess.

“There’s a connection,” Hergott says. “It’s way more than just a fun thing to do at the zoo.” But it is cool.

“My 5-year-old granddaughter says, ‘I’m jealous, you get to do all the fun things,’” Peterson says.

It makes sense that MDs perform the medical exams. Gorillas and orangutans are in the family of great apes—just like humans.

Hergott sometimes shows gorilla echocardiograms at conferences. The other cardiologists might notice a mild leakage of the tricuspid valve, Hergott says, but never the species. For good reason.

“A gorilla heart,” Hergott says, “looks exactly like a human heart.”

For more information, photos and videos, go to medschool.ucdenver.edu/CUMedToday/features. To watch video of the gorilla exam on your smart phone, scan the QR code right.
The Haven helps drug-addicted mothers and their kids

Program is part of medical school’s Addiction Research and Treatment Services
By Tonia Twichell

When she first became director of The Haven, Julie Krow knew there was little she could do to help some of the pregnant women she talked with at local jails and prisons.

“They’d walk up to me with their bellies out to here and say ‘I’m on your waiting list. Social Services is going to take my baby if I can’t get in.’ I’m a mom myself, and it would break my heart because I knew there was no way they were getting into the program.”

At the time, there was room for just six women with babies at The Haven, which treats severely drug-addicted women as part of CU School of Medicine’s Addiction Research and Treatment Services (ARTS), a program under the Department of Psychiatry.

With the opening of the Baby Haven Therapeutic Early Childhood Education Center this spring (paid for entirely through donations and grants), the program now has beds for 30 women and their babies and is the only childcare center in Colorado specifically for drug-exposed infants and young children.

When Krow first took over in 2004 “childcare was sort of an afterthought.” But she saw that children could be a motivator for addicted women. Normaelia, who at 25 had been doing meth for seven years, says the hope of raising her children together is a driving force.

“I’m tired of not having my kids with me,” she says. Her first daughter was taken from her when she was 2 months old. Her second daughter, Amaree, is with her at The Haven.

“I’ve made so many mistakes, but I want my kids to have a mommy.”

Of women who enter The Haven, a remarkable 90.1 percent remain drug-, alcohol- and crime-free two years after they leave.

The program operates at Fort Logan in southwest Denver, a pretty spot with big trees, a large park and brick officers’ quarters built in 1888. As grand as the exteriors are, the interior where the former nursery was located was dingy despite attempts to dress it up with stenciling and animal paintings. Although capacity had slowly expanded over the years, “when a new baby came in, the oldest child had to leave because we could not fit more in our daycare,” says Krow, MA, LPC, who until recently was deputy executive director of ARTS.

“That didn’t work very well.”

Daycare providers sometimes called Social Services when they found out the mother was in treatment for substance abuse. “One baby ended up in foster care for a weekend before we could get things straightened out,” Krow says.

It was hard on the babies, who are “100 percent drug and alcohol exposed,” Krow says. Many suffer from attachment disorders and developmental delays and need a consistent environment.

Haven programs house about 90 women in various stages of recovery.

“They’ve had multiple long-term drug addictions that started when they were as young as 12 or 13.”

The women get vocational education including culinary arts training. They can acquire a GED and learn such basic skills as resume writing, interview skills and even table manners.

“I have learned a lot about myself,” says Shay, 24, watching over 11-month-old daughter Sahyah. “I’ve learned to be a better mother, how to cope with stress without drinking or getting high or committing crimes.”

The first order of business is meeting basic health needs, setting a daily schedule and establishing expectations of honesty, punctuality and integrity.

“The average drug of choice is methamphetamine, so they have infections, sores, bad teeth, no prenatal care, mental health issues, PTSD,” says Krow, who now works for the Colorado Department of Human Services.

“They often have bipolar disorder and suffer from depression. They are used to staying up all night partying and sleeping all day.”

Candy, 32, a veteran of three prison stints and eight rehab programs, is surprised by how she has adapted.

“I’m so happy,” she says on her 368th day at The Haven, with 10-month-old daughter, Lily, playing nearby. “The women here make it possible. When you walk in you feel the love and the bonds between the women.”
The national Nu Sigma Nu medical fraternity has been gone from the CU medical school for nearly four decades. But its legacy as a gathering place for education and fun continued for many years, and now it is returning.

The return comes in the form of a roof. But not just any roof. It's a “green roof”—an ecologically sensitive gathering place atop theAnschutz Health and Wellness Center that's being built at the new campus. The roof is being paid for largely by a $650,000 contribution from the legal successors to the fraternity. Students will have free use of the area for events.

“The roof will provide a needed focal point for the students on the campus, just as Nu Sigma Nu did,” says Bruce Waring, MD (Class of 1987). “That’s what resonated with this project.”

The roof also represents a nice bit of medical school history that several thousand alumni know firsthand.

The story goes back to the creation of the national fraternal organization Nu Sigma Nu in Michigan in 1882. Years later in Colorado, one of its enthusiastic supporters was James J. Waring, MD, who served as chairman of the Department of Medicine and founded the Webb-Waring Lung Institute.

In the 1920s, the first fraternity house stood on Cook Street near the 8th and Colorado Boulevard health sciences campus in Denver. It was supplanted by an art deco building at 8th and Ash, across from the former pharmacy building. The building was sold in 1973, a financial victim of zoning changes and of the lading interest in fraternities in general that also caused the demise of Nu Sigma Nu as a national organization. (Chapters remain today only in Michigan, Minnesota and Pennsylvania).

The national organization was gone but many CU students and grads wanted to retain the tradition of medical student housing and camaraderie. Acting as the Beta Xi Alumni Chapter of Nu Sigma Nu, a 501c(7) organization, alumni purchased three houses on nearby Harrison Street. The residences were donated to the university, then leased back inexpensively.

“So from 1975 until the move to the new campus they provided low-cost student housing for med students, maybe 500 students over the years,” says Bruce Waring (no relation to James), who recalls paying $75 a month for a spartan room from 1984 until he graduated three years later.

The houses are remembered as social gathering places for volleyball or television-watching. There was an annual “casino” fundraiser and rumors persist that a slot machine was buried in the basement of the original frat house. Some of the key players over the years, Waring says, were Henry Toll, Ben Miyahara, Gatewood Milligan, Lee Bolling, Steve Castellano, Frank Baumgartner and Archibald Cox.

“It was a unique living experience,” Waring says. “We were right across the street from the hospital. Older students were there with younger students. People enjoyed it. It was fun.”

The move to the Anschutz Medical Campus, while offering many advantages, ended the run of Nu Sigma Nu and its medical student housing. Now the fraternity has staked a claim for students on the new campus.

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With the move to the Anschutz Medical Campus, two of the Harrison buildings were sold. The third was purchased by CU for its original price. Together, that netted about $650,000. A fund was established to handle the financial legacy of Nu Sigma Nu.

The money was set aside for the right moment. That came when the CU Foundation proposed that the Nu Sigma Nu funds pay for the green roof. Waring and fellow trustee Al Lembitz talked it over and decided to support the project, designed to be a campus gathering place for medical students and others in health care professions.

Total cost of the roof is estimated at $700,000, so the foundation will try to raise the rest to support the students.

The legacy will live on in another way as well. Part of the facility will include an archival exhibit, plaque and signage, preserving the story of Nu Sigma Nu.

For information about donations and a visual tour of the Health and Wellness Center, go to medschool.ucdenver.edu/CUMedToday/features.
A surveying team was working on a glorious October afternoon in 1970 near what would eventually become the Eisenhower Tunnel in Colorado's Rocky Mountains. Suddenly, a twin-engine propeller plane roared low overhead, then slammed into the trees.

A young man named Darrell Kirch started running toward the burning wreckage. As Kirch pulled bodies from the mangled plane that was carrying the Wichita State University football team, the beginnings of a life calling began to take shape. Thirty-one of the 40 onboard died. Most were about Kirch's age.

“The horror of that experience and the feeling of helplessness was a very focusing event,” Kirch says today. “It made me realize that life is serious and fragile. We should all do our very best in everything we do, and we should do something meaningful.”

Kirch, who had been taking a break from college, returned to the University of Colorado, shifting his gaze ultimately to medicine and earning his degree from the CU School of Medicine.

Forty-one years later, Kirch has become one of the most respected and influential medical voices in the nation. Now 62, he has built a dizzying resume, culminating in his current position as president and chief executive officer of the Association of American Medical Colleges (AAMC), which represents all 135 accredited U.S. and 17 Canadian medical schools, and hundreds of teaching hospitals, health systems, and academic and scientific societies.

Leading the AAMC, where he can mold education and help shepherd the country's medical future, is a dream job, he says. The AAMC will hold its 2011 national conference in Colorado, where Kirch vacations often and where he plans to retire.

Previously, Kirch was dean of the medical college and CEO of the Milton S. Hershey Medical Center at Pennsylvania State University. He also served in leadership roles at the Medical College of Georgia and at the National Institutes of Health.

Kirch's expertise is in psychiatry and neuroscience; his passion is in the world of ideas.

The latter, he says, comes from his parents, especially his father. With only an eighth-grade education, the elder Kirch instilled in his three sons a deep curiosity, a strong work ethic and the ambition to aim high.

“We understood that education was the key to opportunity,” Kirch says. He worries that higher education is under assault not only from those who devalue it by calling it elitist, but also by what he sees as a governmental abandonment of its financial commitment. Families of modest means, as his was, may no longer be able to help launch their children's dreams because college has become unaffordable.

The person who knows Kirch best—his wife of 27 years, Deborah Kirch, with whom he has two daughters—says her husband is mindful of others' feelings, but is unafraid to gently push the boundaries of conventional wisdom and the safety of consensus.

“He is one of the most honest people I have ever known. His work ethic is unbelievable,” Deborah Kirch says.

These traits have come into play as Kirch has become a leading voice in the national health care reform debate.

“What we have in the U.S., sadly, is fundamentally unjust,” he says. “We have created a nation of haves and have-nots.”

Richard D. Krugman, MD, dean of the CU School of Medicine, has followed Kirch's career. That Kirch has emerged as a calm, reasoned figure in the sometimes heated health care debate does not surprise him.

“He has done a good job of articulating the high ground of what the future should look like,” Krugman says.

What especially impresses Krugman is Kirch's ability to strip away politics and punditry and stay focused on the moral obligation to provide the highest quality patient care.

As for Kirch, it's clear that the young man who sprinted toward a burning airplane many years ago has brought the lessons he learned that day to bear in his work.

“Failure,” Kirch says, “is to not do our very best.”
POLYLITHIC — AND BETTER FOR IT

As alumni, we can be very proud of the visible outpost of our institution at the Anschutz Medical Campus. Education, research and patient care are currently housed in efficient, functional, beautiful surroundings.

In some ways, however, there is an even more impressive dimension to the location of the University of Colorado School of Medicine. All over the state, students are engaged in clinical rotations in all sorts of places away from the main campus. Some of the rural rotations take our students to places quite far from the Front Range. (Yes, even to the not-so-famous city of Cheyenne Wells.) Students are stationed in Grand Junction, the urban hospitals of Denver, sites in the mountains, Colorado Springs ... the School of Medicine is everywhere, and students are engaged in patient care and learning.

One of the challenges of the clinical years, and also in residency, is that just when you learn how things operate in a given place—the daily routine, how the software works, where the coffee is, whom to seek for help with questions—it's time to move on, to a different place, a different rotation.

For many of us the experience is the same with the change of location and practice. Just when you figure out your favorite set of consultants and how to really get things done at the hospital, it's time to move.

Through all these changes, it might be nice to proclaim, “In midst of change and upheaval, look to the unchanging nature of our school and our campus.” Oops ... lots of changes there, too.

Instead, the reach and presence of the School of Medicine is far and wide, with every day offering places of learning and teaching that aren't bound by geography or limited by system.

Your support and involvement as alumni can also take that variety of form. The school is served by support and donations to central causes (stethoscopes for first year students, support for the Mini Med School and for student events) and by contributions of support and time to the further reaches of the school: preceptorship, helping with traveling residents and recruiting promising students from all areas and communities of the state.

Generally, we're not very fond of monolithic things—big, immovable, fixed stones. I suppose we could quite properly call the University of Colorado School of Medicine *polyolithic*—with the strength of rock, but dispersed to where we are needed most.

Thank you for your ongoing support and involvement,

— Gary Grasmick, MD

MEDICAL ALUMNI ASSOCIATION

Membership Structure for 2011-2012

Beginning in 2010, a new membership structure for the School of Medicine (SOM) Medical Alumni Association (MAA) was created to acknowledge alumni donors for their generous contributions. We've done away with dues. Instead, all alumni of the School of Medicine will be considered members of the Alumni Association.

Instead of a dues-based membership, Dean Richard Krugman has dedicated $58,000 this year to the Medical Alumni Association for student and alumni programs and events. The Medical Alumni Association will provide various benefits to alumni based on their current and continuous donations to any combination of certain School of Medicine and Medical Alumni Association related funds such as the School of Medicine Diversity Scholarships #0222251, Medical Alumni Association Stethoscope Fund #02220+1, and various class funds. For a complete list of funds related to the new membership initiative, please visit medschool.ucdenver.edu/alumnimembership

There will be various membership types based on a monetary giving scale in the current year. The tiered levels and their associated benefits are:

<table>
<thead>
<tr>
<th>Membership Type</th>
<th>Donation Level</th>
<th>Membership Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Student</td>
<td>$0 (students only)</td>
<td>Membership benefits packet distributed at orientation and invitations to participate in alumni sponsored student events and programs</td>
</tr>
<tr>
<td>White Coat Member</td>
<td>$0–$99</td>
<td>CU Medicine Today</td>
</tr>
<tr>
<td>Stethoscope Society</td>
<td>$100–$249</td>
<td>Above, plus a AMC Tour Cocktail Reception (CAPE &amp; Visible Human Lab)</td>
</tr>
<tr>
<td>Century Club</td>
<td>$250–$499</td>
<td>Above, plus 2 tickets to the Century Club cocktail reception</td>
</tr>
<tr>
<td>Faculty Circle</td>
<td>$500–$999</td>
<td>Above, plus a CU Football Game Event</td>
</tr>
<tr>
<td>Dean’s Circle</td>
<td>$1000+</td>
<td>Above, plus Dean’s Scholars Dinner, and 2 tickets to the Silver &amp; Gold Banquet</td>
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</tbody>
</table>

One goal of this membership model is to support the medical school and the MAA by encouraging alumni to begin or continue donating, and to reward them in new ways for their gifts. This approach also seeks to strengthen connections among alumni, the association and the medical school.

Membership benefit packets will be sent to alumni donors on a quarterly basis following receipt of donation and will be good for one year. If you have made a donation of $100 or more to any of the listed funds since July 2011 you should be receiving your membership letter and card soon. More information on the new membership structure can be found at medschool.ucdenver.edu/alumnimembership or by contacting the Office of Alumni Relations at (303) 724-2518 or healthalumni@ucdenver.edu.
Siver & Gold Awards

The CU Medical Alumni Association this year honored Stephen M. Nicholas, a 1981 graduate who pioneered care for HIV-infected children and has worked as an advocate for the medically underserved, with the group’s highest honor, the Silver & Gold Award.

Also recognized in the May, 2011 ceremony were William Maniatis, MD, a urologist who has helped increase alumni engagement for the School of Medicine, and John DeLauro, former two-time president of the Alumni Association.

The Silver & Gold Award is presented annually for outstanding service to the community and contributions to the science and art of medicine. Nicholas was singled out for his work in New York and the Dominican Republic, where he created community-based health care and education programs for medical and public health students, as well as for resident physicians.

Now the associate dean for Admissions at Columbia University College of Physicians and Surgeons, Nicholas was chief resident at Harlem Hospital Center when it was the country’s epicenter of maternal-child HIV infection.

Nicholas started the pediatric AIDS program at Harlem Hospital in 1985. In 1988, he co-founded the Incarnation Children's Center, a residence and outpatient clinic for HIV-infected children located in Washington Heights. There he served as medical director and then executive director until 2000.

He was the chairman of Pediatrics at Harlem Hospital from 2000 through 2006, during which time he started the Harlem Children’s Zone Asthma Initiative in collaboration with the Robin Hood Foundation, and established initiatives to address injury prevention, obesity, sickle-cell anemia, and other urban health problems.

Nicholas has received numerous awards and honors, including a Governor’s Outstanding Service Award, New York State Department of Health, in 1999 for “outstanding contribution for the care of children with HIV and AIDS.”

“He communicates as well with a high-ranking official as he does with a homeless person addicted to drugs,” says a nurse practitioner who has worked with Nicholas for many years. “He is a truly remarkable physician.”

Other awards presented in the May ceremony include:

Distinguished Service Award – William Maniatis, MD, was recognized for his contributions to increasing alumni engagement.

He has served on numerous boards, including as president of the Medical Alumni Association, the University of Colorado Foundation and the Alumni Advisory Committee to the dean of the School of Medicine. He also was associate dean for alumni affairs.

In addition to his dedication to alumni affairs, Maniatis continues to practice medicine; he has been a urologist in private practice since 1972, and has been a clinical instructor in urology surgery at the School of Medicine. Maniatis was president of Advanced Urology, PC and chief of surgery at Columbia Aurora Hospital.

This award is given to those graduates who have contributed outstanding service to the Alumni Association and to the School of Medicine.

Distinguished Achievement Award – John DeLauro, MD, served twice as president of the Medical Alumni Association. In 1993, he was awarded the Silver & Gold award, and in 2005, the Board of Regents honored him with the University Medal.

Also in 2005, he established the Dr. John E. DeLauro Medical Scholarship Endowment fund. His wife, Nancy, recalls the expense of medical school, so it was important to them to help students with financial needs. Other benefactors of the DeLauros’ generosity include the Cardiac Surgery Research Fund, the Department of Surgery and UCHSC Facilities Fund.

This award is given to those who have made outstanding achievements benefiting their communities, the practice of medicine, the provision of health care, the Alumni Association and/or the School of Medicine.

Call for Nominations

To nominate a School of Medicine alumnus for one of these awards, please visit MedSchool.UCDenver.edu/AlumniAwards. The deadline for submissions is Oct. 27, 2011.
Seeking the edge of your comfort zone
By Michael Weissberg, MD

In a favorite cartoon, a man confesses to a friend, “I get a little tense before everything.” And I was tense as we landed, in the dark, at Quito’s often fog-bound airport. Quito, Ecuador, is long and narrow, the airport at 9,220 feet. Squeezed by Andean Cordillera, the longest mountain range on earth, Quito also occupies the lower flanks of Pichincha Volcano, which last erupted in 1999. Earthquakes are not infrequent here, either. But I wasn’t thinking about fog, earthquakes or volcanoes. It was May 16, 2010, and I wondered what a psychiatrist was doing on a medical brigade. I was nervous because I didn’t know what to expect.

That first week passed quickly, my worry wasted. The experience was so interesting that by midweek I knew I would return, which I have, twice, to Quito and the Amazon basin. I have seen more than 600 patients. It is always a never-boring, non-stop, well-run experience. After breakfast, we load buses, trucks and canoes to arrive at communities sometimes hours later, eager patients already waiting in line. After setting up stations—many of which are manned by college students—for triage, vital signs, urine and hemoglobin determinations, fluoride, toothbrushes and vitamins, each clinician sees 35–45 patients. We then pack up, say goodbye and leave knowing a brigade will return in eight or 10 weeks.

But I also started to wonder if I enjoyed these trips too much. Shouldn’t volunteerism be selfless? Is altruistic pleasure an oxymoron? Does it matter? I return to Colorado energized and, I think, a better physician and teacher. But, exactly why is this experience so pleasurable and useful?

Of course, it isn’t one thing. It is gratifying to work with appreciative patients and their panoply of problems—from diabetes, hypertension, abdominal pain, impetigo and scabies to fungal infections, parasites, URIs, UTIs and children low on growth charts. It is startling to see wounds that were the result of knee-high, tripwire shotgun traps or neuropathy from snakebites.

Learning is continuous, brigades real group practices, colleagues within earshot on the other side of a sheet or blanket, always available for consultation. And pharmacists, our Quito Eterno cultural guides, translators, brigade leaders, Ecuadorian nurses, community workers and students all make real contributions to patient care. No exams, no grades, no angst, no long meetings. What fun.

But brigades are more than fun. In Ecuador, we eat, sleep and work in foreign surroundings, operating at the edges of our comfort zone. Work is so out of the ordinary that it forces assessment of our assumptions, prejudices and limits of knowledge—an examination I might be less likely to have in the U.S. In Ecuador, I am more aware of language and understanding; a lot can get lost in English-to-Spanish-to-Quichua translations.

We also meet patients in their villages, on their own turf—often with their families—not in the anonymous, culturally sterile offices of the U.S. In Ecuador, I can’t overlook the cultural differences that I might fail to see in the U.S. Ecuador is more satisfying and in some ways easier (if less HIPAA compliant). It is as if we do home visits with everyone we see.

So, what is a psychiatrist doing on a brigade? Believe me, last May, I wondered the same thing.

To prepare, I read, saw patients with other physicians and watched videos. I reminded myself that I completed a rotating internship (in the Bronx, speaking of culture), ran an emergency psychiatry service, have a psychiatric practice and am medical director of a sleep center. I do examine patients and can tell when someone is sick. And other providers are within easy reach.

So, for those of you who have not done something like this, give me a call or send me a note. A little tension can be a good thing.

Michael Weissberg, MD, is a professor and the executive vice-chair of the Department of Psychiatry and medical director at the Boulder Community Sleep Disorder Center. He can be reached at michael.weissberg@ucdenver.edu or 303-724-7401.
Check out our videos

As you may have noticed in our last edition, CU Medicine Today now features quick response (QR) codes, a readable barcode for smart phones, iPads and other tablets.* When scanned with these devices, the code takes readers directly online to view videos, photos or additional information. Integrating these QR codes is part of an ongoing effort to bring CU Medicine Today to the Web and improve the online presence of the medical school.

For example, the School of Medicine and the College of Arts & Media at University of Colorado Denver teamed up this year to produce five videos on a range of topics: students caring for the homeless at the Stout Street Clinic, a clinical trial for kids with Type 1 diabetes, a breakthrough in lung cancer treatment, the friendship between a patient and the doctor who saved her life and a medical student who overcame a life-threatening illness.

Featuring original music and motion graphics, the videos illustrate facets of what’s going on at the medical school and are accessible online. You can take a look by scanning the QR code found on this page or by visiting medschool.ucdenver.edu/CUMedToday.

In the last year the online version of the magazine has had more than 17,000 “unique page views,” which are counted each time a new person comes to the magazine site. Online readership has grown with each edition and now readership almost matches that of the 11,000 copies we print twice a year.

I hope you’ll check out our videos and other online offerings and send us your suggestions for future magazine topics.

Thanks,

Dan Meyers
Communications Director
University of Colorado School of Medicine
dan.meyers@ucdenver.edu

*To take advantage of this new feature, first download QR code software from the App Store, Blackberry App World, the Android market place or the Web. Then scan the code found on this page and on pages 5 and 22 to view additional online content.
The dean of the school, Richard D. Krugman, MD, wants donors to know how much they’re appreciated. So if you go to medschool.ucdenver.edu/CUMedToday you will see the names of all those who contributed over the last year to the Alumni Association and School of Medicine funds. Thanks to every single one of you. For more information go to www.ucdenver.edu/alumni.