With sandwiches and smiles
Chris Urbina shapes community health

From medical school to astronaut training
People, science and Bill Arend’s big breakthrough
RAW VEGETABLES, COMMUNITY ROOTS

CHRIS URBINA, MD, BRINGS A PERSONAL TOUCH TO COMMUNITY HEALTH. 20-21

The Director of the Denver Public Health Department, a graduate of the University of Colorado School of Medicine, participates in a project to teach people to eat healthier. It’s typical of his hands-on style and community connections.

Cover photo and photo left by Glenn Asakawa
A lot accomplished, big challenges ahead

We had a luncheon in February that honored some of the many people and organizations that have sponsored scholarships for our medical students. The event underscored yet again how much our students appreciate these awards, which reduce the amount of money they need to borrow. At that lunch, a member of the Class of 1956 asked me, now that we’ve completed the move to the Anschutz Medical Campus and put a new curriculum in place, “What is left to do?” The answer, of course, is, “Quite a lot!” -- especially with several new challenges that must be addressed for us to fulfill our potential.

The first, to the surprise of none of you I am sure, is our steadily declining state support, which may well get worse in the next state fiscal year (we never really know until the legislative session is over). We have raised tuition again -- the Board of Regents recently approved a 6.5 percent increase for in-state students -- and that underscores our need to boost money for scholarships. (By the way, you can donate to scholarships and other causes at http://www.cufund.org/). We are making cuts in our programs. When Bill Maniatis, MD, Class of 1965, stepped down as our associate dean for alumni affairs in January, we had to freeze the position. We also will close the Given Institute in Aspen after this summer season.

It’s important to say that we continue to push to improve on the good things we already do here. We provide state-of-the-art care that’s nationally recognized, but we will need to further emphasize safety and quality of care, and be even more accessible to patients than we are now. They need us and we need to be there for them.

Given the state funding picture, I believe that to sustain our academic, medical and research missions -- and to better serve the community -- we must significantly expand our clinical practice. Clinical revenue has become an increasingly important part of our budget, now nearly 40 percent of our roughly $1 billion. University of Colorado Hospital and The Children’s Hospital, which have been full since they opened on the Anschutz Medical Campus two years ago, each plan a new inpatient tower that will increase the number of beds on campus to just over 1,000. That’s not including the VA, which will be here in 2013.

So our new campus will see even more changes. Moving here and creating a new curriculum were complex, important steps but they’re hardly the end of the “to-do” list for the School of Medicine … or for me.

With warm regards,

Richard D. Krugman, MD
Dean, School of Medicine
Vice Chancellor for Health Affairs
University of Colorado Denver
Remembering Thomas Petty, “Father of Modern Pulmonary Medicine”

Thomas Petty, MD, an internationally known pioneer in treating respiratory diseases, died Dec. 12, 2009, at age 76. Dr. Petty was a School of Medicine graduate and respected faculty member. One of his admirers at SOM wrote in a note to colleagues, “Arguably, no other individual from the Department of Medicine has had a greater impact on medical practice in the last 30 years of the 20th century than Thomas Petty.”

In 2007, the American College of Chest Physicians honored Dr. Petty in a ceremony in which he was called "The Father of Modern Pulmonary Medicine." He created the division of pulmonary and critical-care medicine at the University of Colorado Health Sciences Center. The Aspen Lung Conference was named for him a decade ago.

In its obituary for Dr. Petty, The New York Times wrote, “through clinical experiments, Dr. Petty, a pulmonologist, helped demonstrate that providing supplemental oxygen outside the hospital to patients with severe disease improved their energy levels and extended their lives.” The Denver Post obituary noted that Dr. Petty wrote more than 30 books and an estimated 850 articles. He served as head of the Division of Pulmonary and Critical Care Medicine and of the Webb-Waring Lung Institute.

Go to medschool.ucdenver.edu/CUMedToday to read his obituary in the Denver Post and the New York Times, and for a link to his website.

Pioneer Elisabeth Pauline Pickett

Pioneering physician Elisabeth Pauline Pickett, a 1944 School of Medicine graduate, died in February. In 1955 she became the first female general surgeon to complete a fellowship in urological oncology. In 1962, she became the first board-certified female urologist in the United States. In the 1970s she went to Afghanistan for seven months to treat patients and train doctors. For fun, she climbed mountains, including most of the Alps. Her trailblazing efforts live on through the Elisabeth Pickett Research Award, created by The Society of Women in Urology. In an interview, she summed things up this way: “I enjoyed every bit of my life. It was exciting and crazy.”

To read her obituary in the Boulder Daily Camera, go to medschool.ucdenver.edu/CUMedToday
Check out our new look!

Check out the new and improved School of Medicine Web site at [www.medschool.ucdenver.edu](http://www.medschool.ucdenver.edu), which launched Jan. 25. It offers you more information, easier navigation and a great new look! The site also features full and updated contact information, a greeting from Dean Richard Krugman and many great photos. Behind the scenes, the site is easier to update, meaning you can check in frequently for the latest SOM news and information. And, of course, we'll post the CU Medicine Today articles there as well.

While we’re proud of what’s already been accomplished with the site, it’s still a work in progress and will be completed in the upcoming months.

Want to make suggestions? On the home page you’ll find a link called Send Us Your Feedback. We hope you will.

Save a tree, save money, get your CU Medicine Today online

Starting with this edition, CU Medicine Today will be available on the School of Medicine web site in a format designed for the web. Take a look at [medschool.ucdenver.edu](http://medschool.ucdenver.edu) and click the CU Medicine Today link. You’ll get all the printed material plus links and extra information. This will save money and deliver the information in a way some of you prefer. Plus it’s “green.” If you want to drop the print edition or just tell us what you think, send us an email at CUMedToday@ucdenver.edu. Don’t worry, if you still want a printed version of the magazine we’ll make sure you get one.

MISSION STATEMENT

CU Medicine Today will keep alumni knowledgeable about and connected with the School of Medicine and the University of Colorado Denver by writing truthful and relevant articles highlighting university news, both positive and challenging, and providing a forum for news and comments from alumni.

All rights reserved. The contents of this magazine may not be reproduced without permission. We are usually able to extend such permission. Please contact the Office of Integrated University Communications at 303-315-3719.
Talented Colorado high school students can reserve a seat in medical school

Ten Colorado high school students have been accepted into a new program in which they will attend the University of Colorado Denver’s College of Liberal Arts and Sciences. Students who do well academically will go on to the School of Medicine. The BA-BS/MD program reaches out to high school seniors from diverse backgrounds who are strong in the classroom and committed to their community. “Allowing Colorado students to chart a direct course to medical school when they enter UC Denver as undergraduates will ensure that our students have a chance to attend a top-notch school in their own backyards and the state of Colorado can receive the high quality, diverse medical workforce it so desperately needs,” said UC Denver Chancellor M. Roy Wilson, MD, MS. There’s more information about the program on the web at medschool.ucdenver.edu/CUMedToday

New Program Advances School of Medicine’s Educational Mission

The Academy of Medical Educators is a new initiative in the School of Medicine, headed by Dr. Eva Aagaard, vice chair for education, Internal Medicine. The primary goal of the Academy is to create and sustain highly trained teachers. The Academy will offer workshops for educators at affiliate sites, develop online modules for faculty development and help lead the Teaching Scholars Program. Additionally, the Academy will promote and reward educational excellence for exceptional teachers, mentors, educational leaders and medical-education researchers. The program is sponsored by the Dean’s Academic Enrichment Fund, the Office of Graduate Medical Education and private donors. More information about the Academy of Medical Educators can be found online at medschool.ucdenver.edu/CUMedToday

Academy of Medical Educators

Hard-headed about helmets

In January, NBC ran a report on how helmets reduce injuries from skiing and snowboarding. Bruce Evans, MD, an assistant professor in the School of Medicine, was interviewed and identified as a “big advocate for helmet safety.” On the program, Evans, who is senior medical director of Emergency Services at the University of Colorado Hospital, said that “for bicycling, motorcycling, skiing and snowboarding,” when you wear a helmet, “every category of injury is reduced.” Evans worked in partnership with Vail Resorts to provide educational seminars to their employees about helmet use for skiing and snowboarding. The 2009–2010 season is the first in which Vail Resorts has required helmets for all children 12 and under who take lessons and for all of its employees when they’re on the mountain. The NBC video can be seen online at medschool.ucdenver.edu/CUMedToday.
New Leadership

The School of Medicine is pleased to announce new Cancer Center director Dan Theodorescu, MD, PhD, effective July 1; a new Emergency Medicine department with interim chair Benjamin Honigman, MD; and several new faculty chairs: Gerald “Chip” Dodd, MD, radiology; Mark Johnston, PhD, biochemistry and molecular genetics; Wendy Macklin, cell and developmental biology; Nanette Santoro, MD, obstetrics and gynecology; and Ken Tyler, MD, neurology.

Capitol congratulations

In January the Colorado Legislature passed a resolution honoring contributions the Anschutz Medical Campus, School of Medicine, University of Colorado Cancer Center and University of Colorado Hospital make to the economic and physical well-being of Colorado. Sen. Rollie Heath, who was treated for cancer at the hospital, introduced the resolution and credited Norio Fukami, MD, assistant professor of medicine (gastroenterology), with saving his life.

Heath was diagnosed with Stage I esophageal cancer last summer. Dr. Fukami, also a therapeutic endoscopist, performed a minimally invasive endotheraphy using an endoscope to cut out just the tumor and surrounding tissue, leaving the esophagus in place. The operation is new to the United States, and Dr. Fukami is conducting research to show the procedure can be safe and effective.

Other legislators in the Senate and House, including Rep. Dianne Primavera and Rep. Michael Merrifield, recounted their own “life-saving” experiences with cancer treatment. Professors William Robinson, MD, medical oncology, and David Raben, MD, radiation oncology, provided treatment to Primavera and Merrifield, respectively.

Primary Care on CNN

Richard Krugman, MD, above left, was interviewed on CNN as part of a report on the shortage of doctors in the United States. The interview with John King noted that, on Krugman’s watch as Dean the University of Colorado School of Medicine graduates primary care doctors at twice the national rate. “They have primary-care experience for three years—a half day a week from the first month of medical school until the end of the third year,” Krugman says in the interview. “Most schools stop at the end of the second [year]. We keep it going.” The report also featured Taghrid Altoos, MD, right, who went to the School of Medicine and is a first-year resident at Exempla St. Joseph Hospital.

The interview can be seen online at medschool.ucdenver.edu/CUMedToday
In early 2006 Dr. Wilson Pace, a longtime family physician-turned-researcher at the University of Colorado School of Medicine, popped into the office of his friend and fellow researcher, David West, and posed the question that had been simmering in his head for some time:

What if someone could find a way to cull the medical records of millions of people to truly compare treatment plans and see what works best for individual patients?

Little did either know in that first, brief conversation that they were about to embark on a mission of comparative effectiveness that could ultimately help change the way medical research and patient care is accomplished in this country.

The timing was good. The bureaucrats in Washington were clamoring for reform in the nation’s healthcare system. The old way of testing treatments and drugs through randomized clinical trials was expensive, took too long and was not inclusive enough. “Policymakers want actionable results now,” says West, who holds a doctorate degree in medical sociology and is the interim director of the Colorado Health Outcomes program.

Doctors, too, were growing frustrated with the status quo. Without really knowing the best drug or therapy for a patient, they often relied on marketing information provided by drug companies or their own experiences with other patients who displayed similar symptoms. “We had nothing that compares [treatments] head to head,” Pace says, “I always knew I was going to do something, but do I do A, B or C?”

It left him with the nagging thought: “We can do better than this.”

The two men, friends for two decades whose children had gone to preschool together, were well matched for the groundbreaking project they envisioned. While both describe themselves as “pointy-headed researchers,” they each brought different focuses to the table. Pace’s interest centered on the physician and patient side, while West, once Colorado’s Medicaid director, was good at seeing the big picture and policy implications.

The notion of comparative effectiveness was already underway by researchers in some quarters who were studying treatments in large populations by analyzing insurance data. But West and Pace thought that only told part of the story because it only looked at what was paid for—not whether something else would have worked better.

What Pace and West wanted to do was create a collection of computer databases called DARTNet (Distributed Ambulatory Research and Therapeutics Network) that would anonymously tap patient records from medical practices—both big and small—to get a broader base for comparative analysis. By digging deeper into actual patient records instead of relying on insurance claims they would be able to know the severity of the ailment, the medical background of the patient, the length and type of treatment used and, of course, the outcome.

With that kind of information they could compare treatment options based on much more specific criteria. For example, if they wanted to test the effectiveness of a diabetes drug for people over 50 with a history of heart disease and who may also be taking medication for depression, they could find patients who fit all of the parameters to study the drug’s results and compare them to other therapies. Doctors, then, would be in a better position to prescribe more individualized treatment plans with the best possible outcomes for future patients.
Today the Colorado project has emerged as a model for others around the country. But even as their idea was taking shape in theory, the more practical obstacle of financing their research loomed. Again, timing was on their side.

In 2007 the federal Agency for Healthcare Research and Quality called for proposals to fund more efficient ways of medical testing and record gathering. The same year the Congressional Budget Office issued a policy paper calling for the exact same thing. The Colorado team was awarded a $1.3 million grant initially and then given another $1.6 million grant 18 months later.

DARTNet was becoming a reality. Today it is one of only two systems of its kind in the country. The other system, operated out of Harvard University Medical School, is similar but culls its data from a managed care network rather than the broader base of medical practices used by DARTNet. The Colorado system is able to collect data from 345 medical practices in 10 states from the records of 4 million patients.

Today the Colorado project has emerged as a model for others around the country.

The concept is not without controversy. In the heated climate surrounding the health-care debate, some critics remain deeply suspicious of any system that dives directly into patient files. There is a fear that this could somehow violate privacy or that the information could fall into the wrong hands.

Some also worry that the comparative analysis will be used solely as a cost-saving measure by number crunchers looking for the cheapest drug or treatment rather than the best plan for individual patients.

Pace understands the fears but thinks they are misplaced. On the privacy issue he says DARTNet will actually provide more anonymity and safety than past methods because when a search is performed the system only looks for small, relevant details that make it virtually impossible to reconstruct the identity of an individual patient.

He is also confident that in the long run it will save significant money because it helps identify treatment plans for individual patient populations; there will be fewer dollars spent on trial and error.

“What comparative effectiveness is really about is understanding the nuances of care,” Pace says. “It gives doctors better information to make decisions.”

One of the first DARTNet projects looked at the safety and effectiveness of different oral medications for certain diabetic patients. The finding showed that all of the medications were basically equal including those that cost much less than the leading ones. In addition they discovered that one of the medications was associated with liver disease in some patients.

Both men say there is an enormous need in this country to unlock and disseminate medical information. At the same time the Obama administration has placed a priority on creating better efficiency in medical treatment. DARTNet has the potential to solve both problems.

“This has the ability to save the country money. It also has the ability to redesign systems of care and to change the health of entire populations,” West says. “Physicians love this.”
When Dr. Debbie Carter’s psychiatry residents try to help a child, they don’t work alone. They partner with families, social workers, school officials and probation officers in a novel—and illuminating—treatment for troubled youth.

Carter, an associate professor in psychiatry for the University of Colorado School of Medicine, says multi-systemic therapy, or MST, is a teamwork approach that allows newly minted doctors to apply their training alongside other professionals, increasing their confidence and ensuring that their patients are moving in the right direction.

“We didn’t create multi-systemic therapy,” Carter says. “But we are using that … therapy both as an academic teaching tool and for our research residents—to really help them get a good sense of what an end product might be.”

Making actual house calls, therapists “have an opportunity to bring mental-health treatment right where the youth and family are,” typically gleaning valuable insight in experiencing the patients’ world, she says.

The social and financial strains facing teens and their families, for example, become evident—perhaps manifested in drug use or truancy—and that information helps the team develop treatments.

Therapists and juvenile-justice officials work hand-in-hand with schools and social workers to help the troubled youths modify their behavior and find productive outlets for their energy.

The group approach helps ensure that the patients get what they need from a wide range of professionals, whether it’s developing an individualized education plan at school or teaching tactics their parents can use to discourage drug use. And it comes with an added benefit: reinforcing the education of young doctors.

“I’ve had some residents say that it’s really interesting to have that co-therapy relationship because they really feel like there’s a lot of support around their part of the treatment program,” Carter says. “I think it’s more enjoyable because it really gives the residents a road map.”

Mike Rollin, MD, a child-psychiatry fellow in his fourth year of residency, credits Carter and the MST program with easing the transition from student to physician and erasing his initial doubts.

“They always say the hardest day of your professional career is your first day out of residency,” he says, noting that Carter taught him to use “so many tools in your tool box and … flexibility in thinking about different situations.”

Carter, who has been Rollin’s professional mentor for the past four years and now serves as his training director, has an uncanny ability to see the big picture as a therapist, an instructor and an administrator, he says.

“She’s the one person … who has the best handle on utilizing all your tools and all the ways to think about things,” Rollin says. “She teaches by explicit instruction but also by example, as a really phenomenal clinician.”

A member the medical school faculty since 1995, Carter earned her medical degree at Jefferson Medical College and completed her residency and child-psychiatry training at Thomas Jefferson University, both in Philadelphia.

Her father was an internist and her mother was a psychiatric nurse, so Carter knew from age 4 that she wanted to be a doctor. During a stint as an Indian Health Service psychiatrist on a Navajo reservation, Carter honed her passion for community psychiatry and cross-cultural care.

In addition to teaching and her work as medical director for the MST program, the seemingly tireless Carter serves in numerous other roles: She is the medical director of the Kempe Therapeutic School for abused and neglected young children, she maintains a clinical practice focusing on addictive women and she is one of three training directors for a program that grooms future faculty members interested in academic research in juvenile and adolescent psychiatry.

In the latter program, third-year residents serve on the MST team as therapist or physician, through which they can “translate research therapy into real practice,” Carter says, once again embracing a holistic approach in which the sum exceeds the parts.

“I love being in child psychiatry, and the clinical activities capture all of my passions for working with at-risk populations,” she says. “It gives you a chance to use your brain to help another brain. I think it’s fascinating that you can change another human being just by talking.”
Federal Grant Helps Train Rural Doctors

By Brooke Parsons

The Rural Track at the School of Medicine has landed federal financial backing that dramatically changes its financial picture.

The program is headed by Dr. Mark Deutchman. It has been funded for six years by grants from the Colorado Trust, the Kaiser Foundation and the School of Medicine. The School of Medicine recently received the news that President Barack Obama’s spending bill of last December included $575,000 to support rural training including the Rural Track and other programs, including those at the Area Health Education Center headed by Dr. Jack Westfall.

This federal grant will help expand the program beyond the Rural Track itself. The money will also help enhance the teaching skills of the rural doctors who host students doing rotations at their sites. Dr. Deutchman says, “When you get an infusion of money like this, it’s a big deal, acknowledging the importance of the rural medical workforce.”

School of Medicine students have an opportunity to join various tracks to enhance their undergraduate medical experience. One of those is the Rural Track, an effort to address both the growing shortage of family physicians and other primary care physicians, and to help students understand that they can practice excellent medicine in a rural environment.

Colorado and the rest of the nation are facing severe shortages of doctors in rural areas. The American Medical News reports that a while 20% of the population lives in rural areas, a mere 9% of doctors practice there.

Medical students today face a hefty debt load, which often makes them feel like they have to go into a highly-paid specialty in a large city to pay down their debt. According to the American Association of Medical Colleges, the median public medical school tuition has increased 133 percent in the 20 years between 1984 and 2004. In 2009 the average medical student graduated with $156,456 in educational debt. The University of Colorado School of Medicine’s student debt is among the highest in the nation for public institutions. State support is 78th out of the 80 publicly funded medical schools in the country (Reference: Denver Post, December 7, 2009).

Dr. Deutchman works through the program to dispel negative myths about rural medicine saying, “If you look at the data on what primary-care physicians earn in the city versus in a rural area, they’re often better off in a rural area.” The cost of living is often much lower in a rural area, they’re often better off in a rural area. Doctors have a huge impact on their communities and often their professional life is much richer, allowing for a deeper relationship with patients.

The Rural Track creates a unique cohort of students, many of whom are from rural areas. While all students do a rural clerkship during their third year, Rural Track students have the opportunity to start early, doing a rural rotation between their first and second year of medical school. Students also meet for seminars regularly to bring a rural focus on what they’re learning in the classroom.

Interest in the Rural Track is growing. In 2006 there were 62 applicants to the program. For the entering class of 2010, there were 190 applicants. Some of the 12 to 20 students who are accepted into the program each year will eventually go into rural medicine, and some will not. Dr. Deutchman says that those who don’t will “have a better appreciation for rural medicine. If they become consultants, they’ll be better consultants to patients and physicians from rural areas.”

Dr. Deutchman explains that being a rural doctor is a lifestyle that people choose. Rural doctors have a huge impact on their communities and often their professional life is much richer, allowing for a deeper relationship with patients.

Scenes from the rural track, in which medical students learn about medicine in clinical skills labs away from the big city. Many of the students are from rural areas.
Dual drives lead to breakthrough

Bill Arend’s work on inflammatory diseases “like raising a child”

By Lisa Marshall

As a young rheumatologist in Washington state in the ’70s, Bill Arend often found motivation in his frustration.

By day he would visit patients riddled with arthritic pain and deformities of their joints, some so severe they were confined to wheelchairs or couldn’t use their hands. He had some medications—such as injections of gold salts or steroids—to ease their suffering, but they often treated only the symptoms rather than the root cause and came with a host of unintended consequences.

So when Arend wasn’t seeing patients or teaching classes at the University of Washington School of Medicine, he would retreat to the lab in search of a better answer.

“We were stuck between a rock and a hard place, between trying to make them feel better and knowing they were going to suffer severe side effects,” he recalls. “As a physician, I took care of so many sick people and was so frustrated when I couldn’t help them. As a researcher, I had a deep curiosity about the science.”

Those dual drives have served Arend well. His discovery of an anti-inflammatory protein called interleukin-1 receptor antagonist (IL-1Ra) in the 1980s led not only to a new commercial drug used to treat arthritis and other diseases, but also to a better understanding of autoimmune and inflammatory diseases as a whole, from diabetes to heart attack and stroke.

Since his arrival at the University of Colorado School of Medicine in 1983, he has earned a reputation as not only a groundbreaking researcher, but also as an outstanding clinician and a motivating professor. Recently retired from the active faculty, he continues to see patients two half-days a week—something he has prided himself on throughout his 40-plus-year career. In recognition of his achievements, he was named a Distinguished Professor of the University of Colorado in 2009.

“In spite of the international and national recognition that his discovery has brought him, Bill has remained a modest, thoughtful, unselfish, and conscientious participant in this academic community,” wrote colleague Richard Johnston, MD, a professor of pediatrics and associate dean for research development at the School of Medicine.

One of three boys raised on a farm in upstate New York, Arend knew as a teen that he was destined for a career in medicine. He loved people and science, and saw the field of medicine as a great way to combine the two passions. Arend saw himself following in the footsteps of his grandfather, a family doctor.

After graduating from Columbia University School of Physicians and Surgeons in New York City in 1964, he headed to Seattle where he would complete his post-graduate training in medicine and rheumatology and serve on the faculty for 10 years. He became deeply curious about how inflammatory joint diseases develop.

At the time, little was known about the mechanism behind arthritis and other rheumatic diseases, which impact the joints, skin, lungs and other organs. Some thought they were fueled by hormone imbalances; others assumed they were caused by infectious agents.

“We knew that, essentially, the joint was being attacked by the lining tissue. The next step was to try to figure out what was stimulating cells to produce IL-1 in excess?”

But what they did know was this: The tissue lining the joints of rheumatoid arthritis sufferers was riddled with inflammatory cells that would invade the cartilage and bone, wreaking havoc on the body.

The likely culprit, Arend and others would come to realize, was an excess of cytokines—molecules that are mobilized in the body to fight infection but, if made in excess, can cause inflammation and release tissue-destroying enzymes. One called interleukin-1 (IL-1) was particularly abundant in the synovial tissue lining the joints of RA patients.
“We knew that, essentially, the joint was being attacked by the lining tissue,” Arend says. “The next step was to try to figure out what was stimulating cells to produce IL-1 in excess?”

It was in the pursuit of that question in the early 1980s that took Arend to England on a sabbatical. As he tried to coax cells in the lab into generating the troublesome molecule, he observed something entirely different: a protein that appeared to keep IL-1 effects in check by acting as a receptor blocker.

“He had discovered a counter-regulatory mechanism that the body used to turn off inflammation,” explains Gary Firestein, MD, chief of the Division of Rheumatology at University of California San Diego School of Medicine. “It was an entirely new concept and it provided an important clue in understanding how inflammation is regulated in the body.”

Arend’s discovery, which would be dubbed “interleukin-1 receptor antagonist” (IL-1Ra), marked the first time anyone had described a natural inhibitor to any member of the cytokine family. And, while it would take years, its impact would be felt by patients with a broad spectrum of diseases.

In 2001, Boulder biotech company Amgen marketed a recombinant, or cloned, version of IL-1Ra called anakinra, or Kineret®, for use in the treatment of rheumatoid arthritis. To date, worldwide sales have amounted to $600 million. Some of the royalties went to the University of Colorado and were used to fund an endowed chair in rheumatology research.

But the story did not end there. With a new tool for blocking the effects of the cytokine IL-1, researchers around the globe were able to forge ahead toward a greater understanding of the inflammatory process.

“It turned out to be a marvelous agent for use in animal models of disease and in cell culture studies. Now we had a way of inhibiting IL-1 to explore its relative role in disease processes,” says Arend, seated next to eight file cabinets packed with research that emerged out of his discovery. “It’s been like raising a child and sending it out into the world where it develops its own life.”

In the end, Arend says, other emerging medications—such as tumor-necrosis factor inhibitors—proved to be more effective than Kineret for treating rheumatoid arthritis. However, Kineret ended up having even broader applications for a host of other diseases.

Kineret and now other IL-1-blocking drugs have proven to be excellent therapies for an array of immune and inflammatory disorders in which excess IL-1 is believed to play a role. These diseases include a form of arthritis in children or adults called systemic onset juvenile arthritis, or Still’s disease, and a mysterious group of auto-inflammatory diseases in children.

Kineret is also effective in the treatment of gout and ongoing trials are exploring the role of IL-1Ra in the treatment of diabetes, coronary artery disease and even stroke.

“In the beginning it opened up a whole new therapeutic area for a small number of patients. But that was just a tip of the iceberg,” says Firestein. “There are many diseases that work this way.”

With his “child” grown and gone, Arend has moved away from IL-1Ra research in recent years, shifting his focus back to a subject that first interested him in those post-doctoral days in Washington: the role of immune complexes and complement in inflammation.

Meanwhile he continues to edit textbooks and pursue academic interests while spending more time with his family, traveling the globe and looking back on his career with deep satisfaction.

“It is the dream of every clinical investigator to work on something that will lead to a treatment that helps patients,” he says. “I am one of the few to have seen that dream realized, and in ways that no one ever anticipated. It’s been fun to watch the story develop.”
By Dan Meyers

In fourth grade, a precocious Chicago girl named Vernesha Williams figured out her future.

It was career day in Sister Shiela Flemeng’s class. The mother of one of the other students at St. Catherine-St. Lucy Elementary School was speaking. “You can be all you can be,” the woman said, not just in the Army, which used that slogan then, but in any job. She named several career paths. When she said “doctor,” Vernesha heard the call.

“Yes!” she remembers saying to herself. “That is what I can do.”

And she did. Vernesha Montgomery—she’s married now—graduated from the Loyola University Chicago Stritch School of Medicine. Today, Dr. Montgomery is in her first year of residency with the University of Colorado School of Medicine.

As a resident she’s worked at The Children’s Hospital, Swedish Medical Center in Englewood and Denver Health. In her second year she plans on serving in rural communities. She’s focusing on family medicine, with plans to practice in medically underserved urban areas.

Montgomery is the first member of her family to attend college. She grew up on Chicago’s West Side in a family that wasn’t always together and wasn’t always employed. “We were modest,” says her sister, Wakesha Williams.

Montgomery rode buses 45 minutes to and from a “magnet” high school on the north side. She also participated in the Black Student Union and pep squad; she taught piano and sang in a gospel choir that met before school at 7 a.m.

“Motivated,” Wakesha says of Montgomery. “From early on, she wanted to be something great. She would try to figure things out and make them work.”

Wakesha remembers that her sister always made honor roll for good grades. Then, horrors, she got a B in something.

“She was so down on herself!” Wakesha says with a laugh. “I said, ‘Hey, you’re still on the honor roll!’ But she had such a drive to succeed.”

Wakesha, Montgomery was the first member of her family to attend college. She grew up on Chicago’s West Side in a family that wasn’t always together and wasn’t always employed. “We were modest,” says her sister, Wakesha Williams.

Montgomery rode buses 45 minutes to and from a “magnet” high school on the north side. She also participated in the Black Student Union and pep squad; she taught piano and sang in a gospel choir that met before school at 7 a.m.

“Motivated,” Wakesha says of Montgomery. “From early on, she wanted to be something great. She would try to figure things out and make them work.”

Motivated
“This has always been my dream”

by Dan Meyers

In fourth grade, a precocious Chicago girl named Vernesha Williams figured out her future.

It was career day in Sister Shiela Flemeng’s class. The mother of one of the other students at St. Catherine-St. Lucy Elementary School was speaking. “You can be all you can be,” the woman said, not just in the Army, which used that slogan then, but in any job. She named several career paths. When she said “doctor,” Vernesha heard the call.

“Yes!” she remembers saying to herself. “That is what I can do.”

And she did. Vernesha Montgomery—she’s married now—graduated from the Loyola University Chicago Stritch School of Medicine. Today, Dr. Montgomery is in her first year of residency with the University of Colorado School of Medicine.

As a resident she’s worked at The Children’s Hospital, Swedish Medical Center in Englewood and Denver Health. In her second year she plans on serving in rural communities. She’s focusing on family medicine, with plans to practice in medically underserved urban areas.

Montgomery is the first member of her family to attend college. She grew up on Chicago’s West Side in a family that wasn’t always together and wasn’t always employed. “We were modest,” says her sister, Wakesha Williams.

Montgomery rode buses 45 minutes to and from a “magnet” high school on the north side. She also participated in the Black Student Union and pep squad; she taught piano and sang in a gospel choir that met before school at 7 a.m.

“Motivated,” Wakesha says of Montgomery. “From early on, she wanted to be something great. She would try to figure things out and make them work.”
A new lens on life
Photography draws Robert Anderson to New York

by Dan Meyers

Look, down there by the railroad tracks along Aurora’s Smith Road. In the slanting rays of the early morning sun, a spry fellow is darting around with a camera. He stops, photographs some words on the side of a parked boxcar, then moves on to another and another.

Finally, the man climbs into his own car and drives the short distance to the University of Colorado School of Medicine. There, he slips into his white coat—and into his other world, the one where he sees patients and teaches students. The one where he’s Robert Anderson, MD, chairman of the Department of Medicine.

But he won’t be for long; Anderson is retiring soon, after serving 41 years at the medical school. The search is on for his replacement.

Anderson, 66, is conducting a search of his own—for a space in Manhattan where he can set up a photography gallery featuring his own award-winning work and that of others. The hope is to break even in two years. New York, he says, is the place to be for galleries—and for photographing street scenes.

It will surprise nobody who knows Anderson that he intends to prowl the big city just as he did the mountains of the West and the rail-yards of Denver, looking for that special photograph. It might also be unsurprising that Anderson didn’t want this article to focus on his medical career.

“I never felt like I had a job,” is about all he’ll offer. “It’s been rewarding, interesting and fun.”

Anderson has had passions beyond medicine and photography. For 35 years, he raced bicycles. Once he joined a group that was riding part of the Tour de France route. He still can name the landmarks along the way.

And photography? There was no “aha” moment. He saw some books of Great Depression photographs, got interested and started packing a camera everywhere he went. He read about technique and lighting, attended workshops, studied how artists composed paintings.

Photography fits a part of him that enjoys solitude.

“Relaxing,” he says, describing photography’s appeal. “Peaceful, non-destructive, quiet.”

He camped out at 20 below zero to get an early morning mountain shot. He roamed city streets at night, turning photos of neon signs and glowing buildings into a book called Denver After Dark. He’s spent three years photographing those boxcars where people—drifters, probably—had written messages. The sentiments range from “Happy Mother’s Day” to “Torture, as American as apple pie.”

Anderson says being a doctor made him a better photographer and being a photographer made him a better doctor. They’re both about observation.

“When I was doing primary care, I could walk into a room and tell if life was good for that patient or not. It’s the Gestalt you had after five seconds of observation.”

With photography, too, you have to pay attention.

“There is always something there,” he says, talking about photography but perhaps also describing something approaching a life philosophy. “You can always find something.”

Do you have a memory of Robert Anderson from his four decades at the medical school? Send them to CUMedToday@ucdenver.edu and check online at http://medschool.ucdenver.edu/CUMedToday to see what others have shared.

Dr. Anderson didn’t want a traditional photograph of himself to accompany this article, so we’ve included his photograph of the Chrysler Building. For more of his work, please turn the page.
We asked Robert Anderson to pick out some of his photographs and tell us what went into them. Here are four of them.

Peyrat Le Chateau (left)—Everyone likes to create memories of vacations and I am no exception. This early morning image is from a small village (population 150) in south central France where I had spent the night at a bed-and-breakfast. The peace and tranquility was interrupted only by two young boys who were quietly fishing at this very spot. They had just departed on their bikes, the proud bearers of a 7-inch perch. The image demonstrates that you don’t need great equipment to capture a pleasant scene. A hand-held, point-and-shoot camera produced a sharp image even when enlarged up to 2 feet by 3 feet.

Last Dollar Road (lower left)—Colorado has one of the nation’s largest aspen forests. Unfortunately, over the past few years, about 15 percent of this aspen forest has disappeared due to a poorly understood phenomenon termed “sudden aspen decline.” One of the great pleasures of living in Colorado is the ability to
observe, up close and personal, one of the great annual spectacles of nature as the aspen leaves turn golden. This view is from a tunnel of aspen that cover a portion of Last Dollar Road in Southwestern Colorado. Here the aspen are enhanced by the warm light of the last rays of a setting sun. The view looked like a spectacular “oven” of gold that no photograph could completely capture.

Voorhies Colonnade/Denver City and County Building (right)—Trying to find a unique view of a commonly photographed iconic scene is always a challenge. The Denver City and County Building, decorated for the Christmas holidays, represents a striking display of colorful lights and is a magnet for photographers. Almost any evening while the display is ongoing, you will find a handful of serious photographers (arbitrarily defined as those with a tripod) and a large number of less serious photographers trying to capture the scene. This view of the City and County Building was taken on a bitterly cold January night a few years ago. I framed the building by the Voorhies Colonnade in an attempt to come up with a unique image that showcases two of Denver’s nicest views.

Ties (below)—Photographing from the street is what I really like to do. Getting a good street image requires a combination of luck and preparation. I was walking down Wall Street in New York City where there are often a variety of street hawkers selling their wares. I observed a knot of brokers gathered around a table on the sidewalk ahead. I got the camera ready, waded through the crowd and found an amazing display of ties for sale. Timing was key for this shot because the ties were selling fast. Most of my images were filled with arms and hands, either grabbing for tie boxes or handing over some cash. This is one of the few clean shots I was able to capture. You never know when a photo op will present itself!
A bachelor’s degree in biology from the Air Force Academy wasn’t enough for Lindgren to feel prepared to chase a lifelong dream of riding a rocket into space—neither was a master’s in cardiovascular physiology from Colorado State University. Hundreds of parachute jumps as a team member and jumpmaster with the Air Force Academy Parachute team? Nope. Even a 2002 medical doctor’s diploma from the University of Colorado School of Medicine didn’t convince Lindgren that he knew enough to be an astronaut.

So then came a residency in emergency medicine at Hennepin County Medical Center in Minneapolis, Minn. And a master’s in health informatics from the University of Minnesota, which helped him apply information theory to the practice of clinical medicine. And then he earned a master’s of public health from the University of Texas Medical Branch at Galveston (UTMB). Finally, he landed a residency in aerospace medicine at UTMB followed by work as a flight surgeon, supporting medical operations and space-station training at NASA’s Johnson Space Center in Houston. That role got him working with astronaut crewmembers in the U.S. and in Star City, Russia.

At last, he felt he was ready to apply to be an astronaut.

He started early. At age 11 Lindgren says, he decided that the best way to achieve his goal was to go to the Air Force Academy. He wrote asking for an application, but the Academy apparently thought that 11 was a bit too young; he never got a reply.

Author Tom Wolfe might not have found Kjell Lindgren as colorful as the original NASA astronauts he profiled in his famous book, but there is little doubt that Lindgren has The Right Stuff.

To get into the two-year training program that will likely make him the School of Medicine’s first alumnus astronaut, Lindgren competed with 3,565 initial applicants. Only 113—roughly one in 25—even got an initial interview. Of those, only 48 became finalists. And from those 48, NASA allowed just nine to enroll in training.

Lindgren credits medical school in Colorado not only with training him to be a physician, but also with showing him how to be a professional.

Just as he’s prepared in many ways for his role, Lindgren also has many reasons for wanting to do this.

“I’m inspired by the opportunity to explore—to experience the Earth and moon from a unique perspective,” he says. “I’m excited about conducting science. The International Space Station is nearing completion and it’s going to be an amazing research platform. Ultimately I’m excited to be a part of a team that is extending our presence and capabilities in low-Earth orbit and beyond.”
By the way, Lindgren did read *The Right Stuff* but while he found it interesting it was no more inspiring than many other biographical and historical books on space flight. (If you’re considering a second career, here’s what is on Lindgren’s “so-you-want-to-be-an-astronaut” reading list: *Carrying the Fire*, by Michael Collins; *Flight: My Life in Mission Control*, by Chris Kraft; *Deke!*, by Deke Slayton; and *A Man on the Moon*, by Andrew Chaikin).

Lindgren’s preparation paid off when it came time for NASA to pick from among thousands of talented astronaut applicants.

“I think I had a versatile background with emergency medicine and military experience in an operational setting,” Lindgren says of his selection. “I was used to decision-making under high pressure in a team environment”—not a bad thing if you’re going to spend six months in the cramped quarters of a capsule and a space station.

In fact, teamwork has been a hallmark of Lindgren’s journey so far. He says his parents, sister, wife and kids, teachers, mentors and colleagues all got him where he is today.

“It took a team effort for me to achieve this goal,” Lindgren says.

For Lindgren, on track to be the University of Colorado system’s 18th astronaut, the honor comes fraught with “a certain amount of risk.” He’s well aware of past tragedies, including the space shuttle Challenger disintegrating shortly after takeoff, the Columbia shuttle breaking apart as it headed for a landing and the fatal fire inside the Apollo 1 capsule on the launch pad.

He’ll take the chance in exchange for the opportunity to accomplish what almost no one on Earth gets to do. He confesses to a “thrill of exploration” and says he is “just plain excited about riding a rocket into space.”

“My family has been incredibly supportive,” Lindgren says. “My wife knew I had a passion for this when we got married.”

It’s unclear when Lindgren might get that rocket ride he’s dreamed of since he was a boy. He’s not officially an astronaut yet, just an astronaut in training at the Johnson Space Center.

Lindgren has exercised himself into excellent physical condition. He possesses remarkable tolerance for multiples of the force of gravity called Gs. His spatial orientation qualifies as great, as does his vision.

“The analogy I would make is to medical school,” he says. “You’re not a doctor yet, but you’re learning the skills. They do what they can to get you through, and most people who are selected make it through.”

Astronauts who make it through must “wait in line” to get a ride on the space shuttle or whatever craft succeeds it, Lindgren says. Meanwhile, astronauts work in space-related endeavors, such as capsule design, communications, mission control or robotics. But no one signs up just to do those tasks. They are merely placeholders until the dream of space travel comes true.

Kjell Lindgren isn’t worried, though. He’s already proved that he can wait until the time is right.
At some point in their labor or delivery, most of Don Bennallack’s patients heard these words: “You’re going to meet somebody today that you’ve never met before that you will love as much as anyone you’ve ever loved in your life.”

Dr. Bennallack’s summation of parenthood was uncanny given that he never fathered any children. At the same time, the retired obstetrician, who graduated from the University of Colorado School of Medicine in 1950, felt a kinship with every baby he delivered.

All 3,366 of them.

Bennallack also practiced gynecology for 36 years. But in his words, “I liked delivering babies more than taking out people’s uteri. I was transfixed by two little cells making an individual.”

Collectively, those individuals turned out to be the family he never had. So did one particular colleague.


Mathie met Bennallack in 1984, when he began referring the babies he delivered to her medical practice. Mathie calls Bennallack “Dr. B,” but thinks of him as a stepfather.

“He’s kind and considerate,” Mathie says, “dear and endearing. His patients were No. 1 in his life.”

Bennallack was so dedicated that Mathie says he delivered “some second-generation babies”—children of the children he delivered decades earlier.

“Every baby was a pleasure,” he says. “I love being part of people’s lives.”

Bennallack lives where he has for the past half century—in the Rockies 10 miles above Black Hawk. There was an old family cabin that he eventually razed and replaced with a large mountain chalet. But he kept a duplex in Denver, where he stayed if he had a patient in labor.

After serving in the military, he opened his Denver practice in 1959; Bennallack waited six weeks to see his first patient. She turned out to be a referral from the Colorado Medical Society. Earlier, a fellow ob-gyn had informed him curtly that Denver already had more than enough doctors with his specialty.

“I did flight physicals at Lowry Air Force Base for $4 an hour,” Bennallack says. “I gave the CU School of Nursing lecture on sex education.”

Bennallack was used to doing whatever it took to make ends meet. The military put him through part of undergraduate school. He paid for the rest—and all of medical school— carrying mortar to brick masons on construction sites, working as an orderly in a psychiatric hospital and running the camp clinic near a salmon plant in Alaska. “I had to fix a finger that had been cut off,” he says. “I had to pull teeth and pull dislocated bones back into sockets. You know, the simple stuff, because I wasn’t a doctor yet.”

He retired in 1995.

The debt that today’s medical students bear inspired Bennallack to donate his estate to the CU Foundation.

“When I buy the farm,” he says, “what I have is going to help medical students.”

He already helped pay the way through medical school for the son of a friend. There are others who “would make good doctors if they got some help,” he says.

Bennallack knows what it takes to be a good doctor. His sister, Pat, 16 years his senior, ran his office and joined every exam. “I always believed that when you are a male obstetrician and gynecologist, you should have another female in the room when you examine patients,” Bennallack explains.
Bennallack liked his sister so much that he waited until she died in 1988 to grow the long hair and goatee he’d always wanted. Today, at 85, his ponytail and beard are white. He was diagnosed with skin cancer in 1996, forcing surgery and chemotherapy. Now, as an octogenarian, he wants to live out his life in peace. “I feel good,” Bennallack says. “I’ll go to the doctor when I don’t feel good.”

For now, he chooses to travel the world with friends, play an antique organ and try to outdo his unofficial stepdaughter in birthday celebrations. For his 70th birthday, Mathie flew Bennallack on a helicopter to a surprise party of patients, colleagues, and former residents from Rose Hospital. A few years later for her birthday, Bennallack climbed out of bed a few days after having cancer surgery on his forehead to fete his friend.

“He eyes were still black and blue from the operation,” Mathie says. “But as I would do a wonderful party for him, he did one for me.”

These days, Bennallack wraps himself in the spiritual intimacy of his mountain property, with lovely memories.

“I feel the house takes me in its arms and protects me from the outside world,” Bennallack says. He savors the views and entertains occasional visitors who stay in a guesthouse decorated with a museum’s worth of Marilyn Monroe memorabilia. Life-size cutouts, photos, posters, calendars, wine bottles, bobble heads, magazine covers, newspaper articles, even a telephone that reprises Marilyn’s famous skirt-blowing incident cover the guesthouse party room.

The Marilyn Monroe craziness began when Bennallack accompanied one of his employees, Kim Kerr, to a costume party in the mid-1980s. Kerr went as Marilyn, Bennallack as Joe DiMaggio. From then on, when Bennallack would have medical residents he mentored over to his mountain home to celebrate the end of their service, they would bring Monroe memorabilia. Then, his neighbors and friends got in on the gag.

Bennallack isn’t sure what will happen to this collection when he “buys the farm,” but if it’s worth anything, he knows the students at his alma mater will benefit from it.

Don Bennallack is at ease in his mountain home, above. The retired doctor has donated his estate to the CU Foundation. Part of that estate: a collection of Marilyn Monroe memorabilia.
Raw vegetables, community roots

Chris Urbina finds many ways to help

By Jenny Deam

At a lunchtime party at Denver Health Medical Center, the center table is laden with plates of raw vegetables and a pyramid of bite-sized, low-fat Subway sandwiches. Dr. Chris Urbina huddles conspiratorially with a group of women to trade tales from the scales:

“Did you lose weight?” Urbina, 55, asks. For nearly an hour his easy smile and friendly tone have not wavered as he works the room to celebrate the results of a hospital initiative to encourage hospital employees and members of the community to eat healthy through the calorie-laden holiday season.

“I gained a pound,” confesses one woman, bracing for a scolding.

“I gained five,” Urbina whispers back. In truth he gained five and lost four between Thanksgiving and New Year’s but empathy seems more important than detail at this moment. The woman returns a relieved grin.

On another day in another part of the hospital, Urbina peeks in on a middle-aged patient, a mother of four who has been complaining of body pains and extreme fatigue. Urbina speaks to her in Spanish and tells her the tests have come back normal. “How are things at home?”

How is your stress level?” he asks, probing for the true cause of the woman’s medical problem.

The woman begins to cry softly. She has had to work extra hours to help provide for her family. She feels overwhelmed but is reluctant to ask for help. Urbina gently encourages her to ask her family to pitch in a little more. She could be his own mother. He knows the culture of working-class Latino families well because those are his own roots.

In 2004, Urbina, a 1980 graduate of the University of Colorado School of Medicine, was named director of the Denver Public Health Department, which is part of Denver Health. With him came a long-held philosophy that individual medical practice and the larger role of community health are intertwined.

“There are enough providers who can help individual patients,” he says. “I’ve chosen to do both. I’ve chosen to work in public health to impact entire populations.”

From the start, Urbina threw himself into his new role with the zeal of a politician canvassing the neighborhoods. Which, in many ways, he was.

Urbina would walk the West Denver streets talking to restaurant owners, shopkeepers, church leaders and mothers pushing strollers. He was always listening, learning, respecting the way people lived and trying to find common ground. Many felt marginalized and ignored. Urbina knew they would simply tune out someone who lectured them about making good health choices.

“It’s all about relationships and establishing trust,” he says. Without such trust how can he and his team tackle the bigger health issues facing the public such as obesity, sexually transmitted diseases, smoking and, most recently, the H1N1 flu virus?

Urbina grew up the middle of three children in a working-class family in a Latino neighborhood of Pueblo, Colo. Racial bigotry

Relationships and trust are key to health care, says Chris Urbina, left, a University of Colorado School of medicine graduate who heads the Denver Public Health Department. Urbina, above right, chats with two other participants in a program to help people control calories during the holiday season.
was never far from the surface. He says he still remembers the “Whites Only” signs.

His father was a mail carrier who dropped out of high school to help support his parents. His mother was a clerical worker who later became a nurse. Veronica Urbina, 80, says her son was always driven, even as a young boy. When his older brother entered school, Urbina went with him, enrolling at age four.

She cannot remember a time he was not interested in helping others less fortunate. There was a desire to right an unfair world, she says, which later evolved into activism. After high school he applied and was accepted to Stanford University where he graduated with a degree in biology. From Pueblo to Palo Alto was a culture shock. But it honed an important skill to, as Urbina’s future mentor Dr. Arthur Kaufman called it, “live on both sides of the road.”

From there he returned to Colorado for medical school. While in school he worked to bring medical service to migrant farm workers who had none. As a part of a team of students he helped provide immunizations, checkups, education and basic medical care for the poor in the evenings after they returned from the fields. He then traveled to the University of New Mexico for his residency in family medicine. His first job was Public Health Director in Las Cruces, N.M., where he worked with the Spanish-speaking population near the Mexican border and immersed himself in the delicate balance between medicine and culture.

He left New Mexico to earn a master’s in public health from Johns Hopkins University before being recruited to return to the University of New Mexico Medical School to teach.

“He embodied everything that was important to us,” says Kaufman, a professor and former chairman of the University of New Mexico Department of Family and Community Medicine. “When you see patients you don’t just see the individual, you see the whole community through that patient’s eyes. Chris did that. His first inclination was always to help others.”

As Urbina’s 1960s change-the-world generation grows into late middle age, the activism he embraced has not waned but simply evolved: “Instead of wearing blue jeans and a T-shirt with a logo on it, now we wear a suit and tie.”

Deeply modest, Urbina prefers to deflect attention for accomplishments to others. He says any progress comes from group efforts and reaching out to the community for collaboration.

Urbina has been married for 27 years and is the father of two children. “I have a very rich life,” Urbina says, “I’m really glad to be back in Denver. I get to do the things that I really enjoy, which is working with a variety of people and trying to improve the health of an entire community.”

“IT’S ALL ABOUT RELATIONSHIPS AND ESTABLISHING TRUST.”
Dear alumni,

Dean Krugman has made it obvious that he would like to strengthen the bonds between the past and the present. His support is strong.

With the new campus has come new enthusiasm. The reputation of our school is excellent, and its history rich. We have approximately 12,000 living individuals who have had a relationship with our institution but, sadly, the numbers who continue to keep in contact with us are far fewer.

Through conversations, it has become known that our past traditions and culture are a problem. It will take time to change them.

During the past year we have started to change the experience for past graduates, and we are working diligently to rejuvenate our Medical School Alumni Association; past president John Farrington and present president Clara Winter are inspiring leaders who can accomplish this goal.

For present students, we are promoting alumni connections through events like the white coat and stethoscope ceremony at first-year matriculation. Additionally, I made our case at the phase I–IV class town hall meetings this year. One-on-one meetings with students for suggestions have also been rewarding.

The continued plan of listening to students has unlimited potential, and their participation on the Medical Alumni Board is invaluable. We are also developing an online community for continued two-way communication post-graduation.

Furthermore, I have met with the House Staff Association, Faculty Senate and leadership to encourage them to become more involved.

Finally, we want to continue hearing from you. Our alumni staff is willing to hear and implement any suggestion.

Because of family reasons, I will be stepping down from my position as associate dean of alumni affairs. I am most thankful to the alumni, alumni staff, CU Foundation members and School of Medicine staff for their support. It has been an honor to be in this position, as I feel I owe my entire professional career to CU.

I plan to stay active as a volunteer. There is no question that we are moving in a new direction.

Best regards,

William Maniatis, MD ’65
Associate Dean for Alumni Affairs, School of Medicine

“Fond farewell”

President's message

Dear alumni and friends,

As I departed recently from Building 500 on the Anschutz Medical Campus, I absolutely marveled at the sight of this stunning campus. I wish all of you who graduated from the School of Medicine could witness how much has been done here in the last ten years. State-of-the-art educational and research buildings, a new library, University Hospital and The Children's Hospital are but a few buildings that dot the landscape. Older buildings such as Building 500, the Red Cross Building, the chapel and a few "temporary" buildings still remain, serving as reminders of what once was.

Some of us started our medical school experience in the Anatomy Lecture Room on the Ninth Avenue Campus. Our introduction to the clinical years began in the old Colorado General Hospital with its 16- (or was it 24) bed wards where privacy was a word, not a reality. During my junior year the move to the new University Hospital and clinics occurred; there, patient care and education was provided for more than 40 years.

Those times have changed for the better. Curriculum has been modified, introducing students to clinical medicine earlier in their medical school career. Interest groups with physician speakers discuss their specialties with students. Students also participate in outreach services to the Stout Medical Clinic, evening pediatric clinics at Warren Village, the Buff Buddies and Camp Wapiti programs and more.

Your Medical Alumni Association (MAA) continues to support alumni and student activities and encourage interaction between both. We are truly empathetic to the increasing cost of a medical education and raise funds for the MAA scholarship to help well-deserving students each year. The stethoscope fund is another way alumni can support the entering class.

One goal of the MAA over the last several years has been to increase the number of dues-paying members so that we can increase funds available to support and interact with current students. We encourage you to join with us, support our various programs and activities, and visit the new Anschutz Medical Campus, where Dean Krugman will personally escort you on a tour.

Please keep in touch and come see all the changes that have occurred to the medical school and its campus since you and I were students.

All my best,

Clara L. Winter, MD ’66
President, Medical Alumni Association
Vaccinating boys for STDs?

TV ads promoting Merck’s human papillomavirus (HPV) vaccine have faded from prominence in recent months – it’s been a while since we’ve heard the mantra “I want to be one less .. one less.”

But the silence does not reflect the progress made in the fight against the nation’s most prevalent sexually transmitted disease. In the last few months, the Food and Drug Administration approved the use of Merck’s Gardasil in males ages 9 through 26, and granted competitor GlaxoSmithKline approval for Cervarix, their version of the HPV vaccine, but only for use in girls and women ages 10 through 25 years.

The drug has proved to be highly effective in the prevention of HPV-related cervical disease for girls and young women. But why vaccinate boys? There are some compelling reasons:

- Vaccinated males could no longer infect their female partners.
- The risk of anal and penile cancer would drop among the homosexual male community.
- The vaccine reduces genital warts and pre-cancerous lesions by 90 percent.
- The risk of anal cancer would be lower in all-boys schools.
- The risk of cervical cancer would be lower in all-boys schools.
- The risk of oral cancer would be lower in all-boys schools.
- The risk of skin cancer would be lower in all-boys schools.
- The risk of bone cancer would be lower in all-boys schools.
- The risk of liver cancer would be lower in all-boys schools.
- The risk of kidney cancer would be lower in all-boys schools.
- The risk of heart disease would be lower in all-boys schools.
- The risk of stroke would be lower in all-boys schools.
- The risk of diabetes would be lower in all-boys schools.
- The risk of obesity would be lower in all-boys schools.
- The risk of cancer would be lower in all-boys schools.
- The risk of death would be lower in all-boys schools.

Up until now, adolescent girls and young women have been the priority for vaccination against a virus spread by intimate contact, but whether the drug crosses the gender line is still up in the air. For example, will it be added to the list of required vaccinations for pre-adolescent girls or will boys be added?

Cost could be one inhibitor.

According to a recent article in the British Medical Journal, vaccinating boys and girls would not be cost-effective when compared to vaccinating girls only. Yet, the Hepatitis B vaccination is mandatory for both boys and girls although the incidence of Hepatitis B infection is much higher in males than females. That virus can also be spread through sexual contact.

There is no doubt that the vaccine is highly effective in the prevention of HPV-related cervical disease for girls and young women. But instead of a universal recommendation to vaccinate every school-age girl, perhaps we should start thinking about vaccinating our boys as well. Considering that HPV affects 6.2 million people each year, a gender equitable approach may be the best strategy and provide longer term direct and indirect health benefits for both males and females.

Elizabeth Greenwell, Sc.D., received her doctorate from Harvard School of Public Health in maternal and child health. She is a postdoctoral fellow at the University of Colorado Denver. Her research interests include the impact of pregnancy and perinatal risk factors on adverse neonatal outcome and early childhood health and development.

Planning can prevent suffering

The patient was a man I cared for in the intensive care unit. He had suffered an illness several years prior that left him unable to speak or swallow properly.

Over time, he became so weak that food would go into his lungs instead of his stomach, making him susceptible to pneumonia.

Treatment proved painful for him, and he would push his nurse’s hands away as she tried to help him.

It was clear that the patient did not want to continue life-sustaining treatment and that he was suffering as a result of our interventions. But he could not communicate and had not completed an Advance Directive, a document that would have guided our decisions for his care.

Normally, “all interested parties” would convene and decide what they think the patient would want. However, none of his family wanted to be his decision-maker, so the court had appointed a legal guardian.

Nevertheless, his adult children visited him daily and grew concerned that their father may not want to proceed with aggressive treatment. However, legally, we could only respond to directives from his guardian who had not been to visit.

Time was of the essence. He was clearly suffering. I called his guardian and explained, “He is struggling to breathe and will not live unless he is put back on a ventilator. But we feel that he is resisting our aggressive interventions. We need you to sign a ‘Do Not Resuscitate’ order.”

“I think that he wants to be resuscitated,” she replied. “And the family hasn’t been involved with him at all in the last year.”

“That may be the case, but they’re here now and are very concerned that he’s suffering. I’m not comfortable pursuing aggressive care since he appears to be refusing it.”

“I’m not making him a ‘Do Not Resuscitate,’” she replied.

“Could you please come in to see him?” I asked. “I think you would change your mind if you saw how much he’s suffering.”

“I can’t right now,” she responded, ending the conversation.

Many guardians are dedicated and caring, but these types of discussions are not uncommon even if dealing with a family member.

But end of life decisions don’t need to happen at the end of life. People can make these choices for themselves before they’re sick. Advance Directives are available online and are simple to complete. They allow us to specify what type of care we want to receive in specific situations. And they ensure our wishes will be respected.

Eventually, my patient’s guardian came to the hospital and agreed that additional care was futile and that we should focus on keeping him comfortable. So much suffering could have been avoided had he made known his wishes in advance.

Jess Bartley, MD, has graduated from the School of Medicine and now works at Kaiser Permanente in Internal Medicine.
Greetings from the graduating class! This was an exciting and nerve-wracking time for us all as we completed our clinical rotations and awaited the big Match Day. We have all worked hard to prepare for residency and finally got to know where we will be doing the next 3-7+ years of training. Over the past six months, the class has been scattered about the country on away rotations, interviews, and vacations. Several classmates have gotten married and several others have had babies this year. The fourth year of medical school is really a wonderful time and a much-needed break before the start of residency. We reconvened in March for some sessions on preparing for internship and managing medical school debt. Aside from these sessions, most students were finished with their requirements for graduation. The final months were all about going through the Match, enjoying Colorado’s beautiful Spring weather, graduating, and moving to the next stage of training. Thank you all for your support along the way.

The end of third year is near for the Class of 2011; it has been intense and enriching. Students have experienced a broad spectrum of medicine, from neurosurgery to the psych wards to the pediatric clinic and more. We have been transformed from students of academics into active members of a health-care team. Our learning has been exponential. At times it has been exhausting, but also a privilege to intimately experience so many sides of medicine.

By the end of April we will have completed three years of required coursework and will enter the unfamiliar territory of schedule flexibility. The time for career decisions is rapidly approaching. During the upcoming summer and fall, students will complete month-long sub-internships as well as electives in areas of their choice. Research projects that began in our first years of school will be resumed. Step 2 of the boards must be tackled. Residency applications are due in the fall.

As we enter our final year of medical school it’s difficult to believe how quickly the last three years have passed. We must take time to appreciate the camaraderie of our classmates and the support of our school—before we disperse across specialties and across the country.

The Class of 2012 finished its final two blocks of second year, Life Cycles and Infectious Disease, in mid-March and then dove straight into a month-long study period for step 1 of the boards. In fact, many students started preparing for step 1 before the beginning of the designated review period, so the first few months of this year proved to be busy and filled with hours of dedicated study. Though step 1 required rigorous preparation, we are all pleased (and relieved!) to have overcome the first big hurdle of our medical careers.

Now, at the end of April, we are just beginning our clinical rotations and are happy to have transitioned from classroom-based learning to time in the wards and clinics with patients. The Class of 2012 dispersed throughout the Denver metro area and various rural sites in Colorado to complete the core clerkships of third year: family and rural medicine, internal medicine, musculoskeletal, neurology, obstetrics and gynecology, pediatrics, psychiatry, surgery, and urgent and emergency care. The blocks vary in length from two to eight weeks.

It is truly gratifying to make this transition to clinical work and switch the focus from our own studies to the optimal care of our patients. Our clinical skills and breadth of knowledge are growing rapidly as each day brings a new set of challenges. In medicine it seems that the more you know, the more you realize you don’t know—a fact that, while daunting, inspires us to do our very best to serve our patients as we continue in this journey.
The Class of 2013 is settling into its second semester of medical school. Orientation in August seems a world away as we were just getting to know each other and growing accustomed to the rigors of the Human Body block. The collegiality of our class was apparent from the beginning; we shared learning resources and study tools that have evolved into a class “wiki.”

As we transitioned into the Molecules to Medicine block we adapted to multiple-choice tests in biochemistry, molecular biology, cell biology, epidemiology and biostatistics. The end of the semester allowed us to start working with our preceptors and gave us the opportunity to spend two days observing hospital teams in action during a clinical interlude. The second semester brought two concurrent blocks: Blood and Lymph, and Disease and Defense.

This semester our wonderful class presidents have set up a program that presents an exciting opportunity for students to accompany and observe transplant teams from University Hospital. As we look forward to the Cardiovascular, Pulmonary and Renal block, we are solidifying our plans for our last summer vacation for the foreseeable future. Many of us will be traveling abroad, participating in research or enjoying the summer here in Colorado. It has been a fantastic year; we are continually delighted in the knowledge we have gained and the friends we have made.
ALUMNI WEEKEND
2010

May 26–29, 2010
Honoring the graduates of the class years ending in 5s and 0s.

The Office of Alumni Relations is planning an exciting week of activities. For more information or to register, call us at 303-724-2518, e-mail us at healthalumni@ucdenver.edu or check our Web site, www.ucdenver.edu/alumni.

SCHEDULE OF EVENTS

WEDNESDAY, MAY 26

2:30 p.m.
Tour of the Anschutz Medical Campus, departure from the front of Building 500, no charge

5 p.m.
Welcome Reception with an introduction by Chancellor M. Roy Wilson, MD, MS, Research Complex 2 Quad, Anschutz Medical Campus, $25 per person

THURSDAY, MAY 27

8 a.m.–noon
All-Class Breakfast and dean's state-of-the-school address, Research Complex 2, Anschutz Medical Campus, $15 per person

12:30 p.m.
Lunch and tour of the Anschutz Medical Campus, departure from the front of Building 500, $15 per person

4 p.m.
Invesco Field Stadium tours, Invesco Field at Mile High, departure from the lobby inside Gate 7, no charge

4:30 p.m.
Honors Convocation, Invesco Field at Mile High, no charge

5:30 p.m.
Silver & Gold Banquet, Invesco Field at Mile High, $75 per person

FRIDAY, MAY 28

10:30 a.m.–12:30 p.m.
Hooding and Oath Ceremony, School of Medicine, Education Quad, Anschutz Medical Campus, no charge

12:30 p.m.–2:30 p.m.
1883 Society luncheon (Classes of 1960 and before) with special guest, former Denver Bronco Steve Foley, Research Complex 2, Anschutz Medical Campus, $35 per person

2 p.m.
Denver Museum of Nature and Science featuring Expedition Health, $10 per person

Individual Class Activities

Class of 1955—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1960—8:30 a.m.
Continental breakfast, Education 1, Anschutz Medical Campus, no charge

Class of 1965—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1970—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1975—5:30 p.m.
Dinner at the Wellshire Inn, $40 per person

SATURDAY, MAY 29

Individual Class Activities

Class of 1960—5:30 p.m.
Dinner at the Wellshire Inn, $40 per person

Class of 1980—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1985—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1990—6 p.m.
Dinner at Maggiano’s Little Italy, Downtown Denver, $55 per person

Class of 1995—noon to 4 p.m.
Picnic at Generals Park, $25 adults/$10 kids

Class of 2000—noon to 4 p.m.
Picnic at Generals Park, $25 adults/$10 kids

Class of 2005—noon to 4 p.m.
Picnic at Generals Park, $25 adults/$10 kids

2010 Medical Alumni Association Awards

Silver and Gold Award—E. Chester Ridgway, MD ’68
Distinguished Service Award—John Farrington, MD ’52
Distinguished Achievement Award—Watson Bowes, MD ’59
Carl Meredith and the reporters who followed his story wait anxiously as his younger brother reads his fate: He'll be heading to Swedish Medical Center.

Jordan Wright, who is headed to Northwestern University in Chicago, his first choice, celebrates with his fiancée, Sara Houy.

Jordan Mendoza and husband Ben Mendoza opened their envelopes at the same time and celebrate getting to stay in the same city. Jordan is headed for University of Colorado Hospital in OBGYN, Ben will be doing his residency at St. Joseph’s.

Katherine Kenerson lifts the envelope that will tell her she’s bound training in pathology at Jackson Memorial Hospital in Miami.

Gillian Noel gets a big hug from her husband after finding out she placed here at the med school in pediatrics.
Have you seen us lately?

Check it out! The School of Medicine has a new web site. It’s easy to use, informative … and we think it looks good too. See it at medschool.ucdenver.edu. It also allows us to do something new. Starting with this edition, we will design this magazine for the web. There’s a link to it on the home page. Some of you prefer to get information online. Also, the online version saves money and trees, and offers easy-access links to more information. If you’d like to drop the print version altogether or just tell us what you think, send an email to CUMedToday@ucdenver.edu. And don’t worry, if you still want a printed version of the magazine we’ll make sure you get one.
To the members of the Medical Alumni Association:

On behalf of the Class of 2013, I would like to thank you for donating a stethoscope to each new medical student. As our orientation week came to a close with the White Coat Ceremony, receiving our stethoscopes was a tangible symbol of the journey on which we were finally embarking. Our coats will grow eight inches and our knowledge base will continually expand, but our stethoscopes will remain our constant companions for decades to come.

In fact, we have already made quite extensive use of our stethoscopes (beyond using them on our families, friends and pets). During the Human Body Block, standardized patients taught us basic physical exam skills, including the cardiovascular and pulmonary exams. Since then, my classmates and I have used our stethoscopes to examine patients at Stout Street Clinic, Warren Village, Clinica Tepeyac, our preceptor clinics and on ambulance ride-alongs.

Thank you again for your generosity and commitment to the School of Medicine. We are sincerely honored that, through us, you have invested in the future of medicine.

With thanks and warmest regards,
Helenka Rowe
Class of 2013 student representative