

Point of Connection to the College of Liberal Arts and Sciences

VOLUME 2 | ISSUE 1

Message from the Dean

s the new dean of the College of Liberal Arts and Sciences (CLAS), I am pleased to send you the second edition of our award winning alumni magazine, *Pinnacle*. The first edition was a clear success, filled with well-written and compelling features, news items and profiles. More important, it struck the right chord with our alumni—you wrote us to let us know that you appreciated the style and content of the magazine. We hope this second edition receives a similar response.

CLAS is in a state of transition at many levels. With the current economic difficulties of the nation and the world, the value of higher education has become more evident to virtually every member of our society. As a consequence,

enrollment in the college continues to increase. Particularly noteworthy are the large number of first-year students who now enter CLAS, attracted by our urban setting, our relatively small class sizes, our high-quality faculty and staff and the recent consolidation of the Downtown Campus with the Anschutz Medical Campus. CLAS has become a magnet for students in Denver and beyond, especially those interested in training that will prepare them for entrance into health sciences graduate degree programs.

The growth and changing composition of our student body has led to a substantial expansion of our faculty over the past several years. The quality of the faculty members that have been added to the college is truly heartening. CLAS has had its choice of established professors from other universities,

as well as the best recent graduates from the most highprofile graduate programs in the country, all interested in UC Denver, at least in part, because they want to help build a great comprehensive public university in the heart of a great city.

Moreover, they want to join a college that has already managed to produce accomplished alumni and to attract wonderfully talented faculty, staff and students. *Pinnacle* represents an effort to share some of the work and the stories of these groups with you. We hope you find the stories interesting and informative. More important, we hope these stories help renew your connections with CLAS. We need your interest, your involvement and your support to continue moving forward.

With all best wishes,

an Howard

Daniel J. Howard Dean, CLAS



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About the Cover

Bryan Leister, assistant professor in the College of Arts & Media, teaches in the Department of Digital Design on the UC Denver Downtown Campus. His work has been commissioned for the covers of *Time, BusinessWeek, Forbes* and the *Atlantic Monthly*. Leister's illustration presents a metaphor for the self-organizing systems found in ant colonies where there are no leaders but there is a clear structure. Read all about it on page 14.

Faculty Make Top Docs List Each year, the University of Colorado Denver School of Medicine is well represented in the annual 5280 magazine "Top Doctors" issue. The October 2008 edition was no exception, with 110 full-time faculty and dozens of clinical faculty making the cut. Gracing the cover was Jean S. Kutner, MD, MSPH, associate professor of medicine and head of the Division of General Internal Medicine. While doctors such as Ivor S. Douglas (critical care) and Laura Fenton (pediatric radiology) received their first mention, others have been given recognition numerous times, such as JoAnn Lindenfeld, MD, whose extraordinary work in cardiovascular disease has been acknowledged 12 times. These 110 doctors continue to bring prestige to UC Denver and University of Colorado Hospital.



Filling Gaps in Business and Health Care UC Denver continues to serve the region by offering academic programs to serve area needs. In fall 2008, the new Colorado School of Public Health (CSPH) opened its doors on the Anschutz Medical Campus. Collaboratively formed by UC Denver, Colorado State University and University of Northern Colorado, CSPH provides training, innovative research and community service to actively address public health issues, including chronic disease, access to health care, environmental threats, emerging infectious disease and costly injuries.

In January, the Business School's new global energy management program began its first cohort. The program offers a unique, hybrid approach that allows students to work full-time and complete the degree in 18 months. Energy industry experts helped develop the program to fill a gap in management positions from retiring executives.

Auraria Science Building The Auraria Campus continues to make progress on the new science building, scheduled to open in fall 2009. In spite of the recent budget cuts, funding for the project is secure, with the remainder coming from state certificates of participation, which are similar to bonds and based on revenues from federal mineral leases—not the state budget.



Good Grief = Great Opportunity Good Grief, a family drama-comedy, was created by TV writing talent Craig Volk, assistant professor of theatre, film and video production at the UC Denver College of Arts & Media (CAM), along with his students. The original seven-episode television miniseries, shot entirely in the Tivoli on the Auraria Campus during summer 2008, was aired on Rocky Mountain PBS in spring 2009. A portion of the talent that contributed to the miniseries was from within UC Denver—approximately 17 faculty/ staff and 40 CAM students were involved as actors, extras, crew, writers and musicians. Additionally, more than 150 participants from outside the UC Denver community shared their talents to help make Good Grief.

News

Detecting cancer through physics, medicine

For Randy Tagg, associate professor of physics, the statistics are stark and compelling. Oral cancer is the sixth most common form of cancer in the United States with just a 50 percent survival rate five years after treatment.

Nearly four years ago he coauthored a paper with otolaryngologist Arlen Meyers, MD, and colleague Masoud Asadi-Zeydabadi that explored current methods for detecting this virulent strain of cancer. As a result, they wondered whether a noninvasive procedure to determine the elasticity of soft oral tissue ("how firm or squishy the tissue is") might provide some clues about the presence of cancer.

With the help of a grant from the National Collegiate Inventors and Innovators Alliance and a team of enthusiastic students, Tagg set out to see if the idea had any validity.

Tagg first recruited Cherry Creek High School students-Julia Buzan and Joseph

Randy Tagg wondered whether a noninvasive procedure to determine the elasticity of soft oral tissue might provide some clues about the presence of cancer.



Associate Professor Randy Tagg (left) researches new ways to detect oral cancer

Smith—to see if they could produce and measure surface waves on gelatin acting as simulated skin. The students were able to create an award-winning science project that did just that.

Enter Katharine (Kit) Meddles, a fourthyear UC Denver medical student, who assisted Tagg in bumping up the frequency and shortening the wavelengths of the detection technique using a laser. Tagg also recruited physics senior Carlos Romero, who wrote computer modeling software on gel behavior that showed that if there was an abnormality under the surface of the gel, like a tumor, it had a certain effect on the waves in the simulation. Tagg has since enlisted physics senior Matt Riley to conduct a senior

lab project to further develop an optical system for detecting high frequency waves on the gel surface.

"We'll have to get back to the ultrasound delivery method once we've refined our detection method," says Tagg. "I want to do some physics here too, totally separate from the medical application, and just show that our method of exciting the surface waves can generate data that corresponds well to what people have recently published.

"I'm hoping we can get some physics students to explore and refine that and get something published there. At the same time we're trying to pursue the practical aspect of making a useful medical device."

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The number of years the Department of Mathematical and Statistical Sciences has offered a doctoral degree.

Twenty years ago, the Department of Mathematical and Statistical Sciences launched its PhD programthe first PhD program on the UC Denver campus. On Sept. 20, 2008, more than 100 graduates, current students and faculty gathered to celebrate the anniversary. Professor J. Richard Lundgren began developing the PhD program immediately after he joined the department's faculty in 1981.

Colorado History Day— Students bridge research with creative expression

When asked to take over the planning of Colorado History Day, Department of History Instructors Christine Sundberg and Susan Gustin jumped at the opportunity. Colorado History Day is the state-level program for middle- and high-school students to discover and research a topic in history and present it in a creative format.

Formerly run by graduate students at the University of Colorado at Boulder, the competition is now in its second year of being organized by UC Denver. With Sundberg at the helm as state coordinator and Gustin as assistant state coordinator, they facilitate program engagement of more than 650 Colorado students statewide.

The program excites children about history, Gustin explains. Students realize that Colorado and their region have historical importance. They also learn critical thinking and problem solving skills through the use of primary and secondary sources. "It forces them to analyze and think through what's truth, what's not truth and how to represent points of view," says Gustin. "They learn the ability to separate good information from bad information."

While critical thinking is at the core of the program, students must bridge their research skills with creative expression. Students choose from five categories to present their projects: dramatic performances, imaginative exhibits, multimedia documentaries, interactive Web sites or research papers.

And although it's called Colorado History Day, it's really a year-long educational program. "It's not just a contest; it's a curriculum," says Sundberg.

The first- and second-place winners from each category will compete in June at National History Day at the University of Maryland.



Denver School of the Arts students whose 2008 project, "The Determined Fighter," was about William Wilberforce, an English abolitionist





"There hasn't been a huge slipup or out-of-character performance from a candidate in decades, so in the end this debate won't sway most voters' minds. I don't think it will have any impact on the state or national elections."

— Department of Political Science Assistant Professor **Michael Berry**, interviewed by KMGH-TV 7 News on Oct. 15, 2008, about the impact of the third and final presidential election debate.



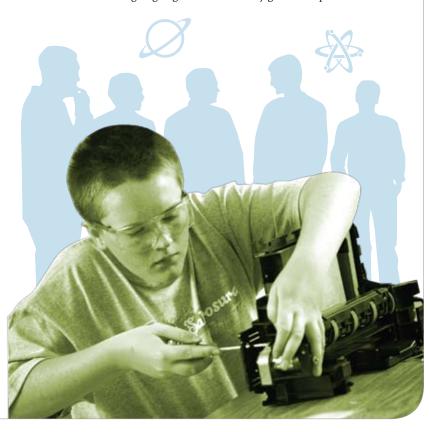
Science, technology and math come alive at STEMapalooza

The inflatable Skylab planetarium summed up the mission and goals of STEMapalooza: the sky is the limit in science, technology, engineering and mathematics (STEM). The first STEMapalooza expo, hosted by UC Denver at the Colorado Convention Center on Oct. 24-25, inspired more than 6,000 participants from around the state, 2,500 of which were students from elementaryto college-aged.

The event supported connections across science, technology, engineering and math and aimed to excite Colorado's students about careers in these fields—which often go to workers from out-of-state. The event showcased more than 100 exhibitors, including faculty and students from the chemistry, biology and math departments, informal education organizations and large and small businesses and industries.

In addition to the Skylab planetarium, exhibit highlights included First Robotics where children learned to operate kidsize robots, National Renewable Energy Laboratory's trailer of information and activities and hundreds of other math and science activities for kids.

The expo also featured a luncheon with guest speakers Tom Cech, CU-Boulder Nobel Laureate, and Colorado Governor Bill Ritter. Highlighting STEMapalooza's purpose, Gov. Ritter addressed the educational gap in Colorado: "We have to be committed to science, technology, engineering and math because that's what's going to give us 21st-century global competitiveness."





A leader on campus; an advocate for change

Underachiever is not a word in Lia Peckman's vocabulary. She is currently pursuing two bachelor's degrees from the University of Colorado Denver—one in Spanish and one in biology-and plans to attend graduate school to pursue a degree in environmental health science. A Colorado Regions scholarship recipient, she's already given back more to the university than she's received.

Peckman is a participant in the Chancellor's Scholars and Leaders program and cites it as a big influence on her involvement on campus and in the community. "It really changed my perspective on leadership and what it means to be a leader."

Currently, she serves as chair of the Student Advisory Committee to the Auraria Board (SACAB) and as chair of the Sustainable Campus Program. "I take a lot of pride in the state of our campus," says Peckman. "Being involved with SACAB and student government has really allowed me to take ownership in the campus, and become a strong leader."

In 2007, she helped get the sustainable campus fee passed, which gradually increases funds allocated to making the UC Denver campus sustainable.

Peckman's passion for the environment grew largely out of her nomination for the Morris K. Udall Scholarship, an award given to students interested in careers related to the environment. Her hope is to eventually work in the field of global health.

Written by Kevin Carroll, a senior majoring in professional writing.



Dedicated professor pushes students to recognize potential

In late August 2008, the global economy was headed for a historic slide and the United States was in the midst of a contentious presidential campaign. For a teacher who thrives on discussing real-world events, the timing was perfect.

"I'd come into class with news clippings and say 'Why do you think this happened?'" says Kyle Hurst, economics instructor. "When asked who I favored for president, I presented the candidates' plans for solving the economic crisis and said: 'What will the long- and short-term effects be?'"

This interactive, accessible approach has helped earn Hurst tremendous respect from students since joining the economics department in 2001. In 2007, he was awarded the college- and university-level Excellence in Teaching Awards.

"We have been exceptionally lucky to have an instructor so dedicated to his students," says Laura Argys, former chair of the economics department and associate dean for research and creative activities.

Hurst has developed a new course and built relationships with organizations that offer students internships. He is a demanding yet dedicated teacher who is repeatedly mentioned as a 'professor of influence' by senior economics majors.

"Early in my teaching career I learned that the better job a teacher does of building relationships with students, the better the students will perform in the classroom," says Hurst.

"Students see me as someone who will push them to do their best. I believe that if students are equipped with the proper tools and training, they can amaze themselves with their ability to learn and grasp difficult concepts."

Team explores society's influence on pregnant women's health

Armed with a \$400,000, three-year grant from the National Institutes of Health, a diverse group of students and a professor have teamed up to study premature births. The study examines "how higher stress and lower social support during pregnancy affect moms' immune systems in a way that may make them more likely to have premature babies or other complications of pregnancy," says Mary Coussons-Read, professor of psychology.

Her team consists of two graduate and four undergraduate students. "They bring expertise in biology, psychology, immunology and recruitment of bilingual and Spanish-speaking patients," she says. A well-rounded team is important because the study incorporates many variables.

"To understand the effects of behavior on health, we have to look at the connections between emotion, psychology, personality and physiology," explains Coussons-Read. "There is a bi-directional relationship between health and behavior, such that changes in one can affect the other."

Marianne Kreither, a master's student in clinical psychology, is from Chile. She says the study allows her to draw upon her academic knowledge and her ability to speak both Spanish and English as she recruits study participants. "It's very interesting to work in a team that combines psychology and biology," says Kreither. "It has opened another door to me for interdisciplinary research."

Jazmin Garcia, a bachelor's student in psychology, serves as Kreither's research assistant. She is also taking biology classes for a pre-nursing certificate and says the study may open future doors for her, as well. "This will look very good when I apply to medical professional schools," she says.

Coussons-Read says that, while this is a tremendous opportunity for student growth, the team is fundamentally driven by the essence of the study. "Despite the fact that more and more women use prenatal care in this country, we still have a high rate of prematurity, and we do not know why," she says. "This and other studies addressing the reasons for prematurity can help moms and babies have healthier lives."



>> Brooke Dorsey

PhD student uses NIH grant to research health disparities

tanding amid a crowd of soldiers in a dusty army base in Bagram, Afghanistan, **Brooke Dorsey** could hardly believe her ears—President George W. Bush had just declared war on Iraq. For Dorsey, a small-town Kansas woman who had just three months earlier been cramming for college finals, the moment was surreal.

"It really hadn't sunk in yet," recalls Dorsey, who had joined the U.S. Army National Guard in 2000 to help pay for her undergraduate education. "I thought it was going to be one weekend a month, but after Sept. II everything changed. Here I was in Afghanistan and there was a war going on."

Today, Dorsey, a 28-year-old PhD candidate, recalls her 18-month stint as a soldier in Afghanistan as a true "test of will." Living conditions were rough and at times she was frightened. "But it definitely opened my mind up, and made me stronger and more tolerant," she says. "I feel like I can work with anyone and listen to different ideas and collaborate with a variety of different people."

Those attributes have served Dorsey well as she's pursued a career as an academic researcher, focusing first on forensic psychology, and now on health disparities among different socioeconomic populations. She graduated in 2005 from North Carolina Central University, earned her Spanish Language Certificate in Cuernavaca, Mexico, in 2005 and received her master's in forensic psychology from the University of Denver in 2007. Later that year she came to UC Denver to pursue a doctorate in health and behavioral sciences. In August, the National Institutes of Health granted her a \$75,000, two-year minority research grant to work with Associate Professor **Richard Miech** in exploring trends in illegal drug use among different socioeconomic populations.

"The goal is to look at the different trends that have been happening so far, so that we can make predictions about future drug use and possibly recommendations about intervention," says Dorsey.

She is particularly interested in the fact that Denver's drug overdose rates have continued to climb as other cities' rates decline or level off. She also plans to explore why drug overdose is so common among people who have recently been released from prison.

"Coroners are noticing that within something like 48 hours of people being released from prison, many are overdosing," she says. "It could be that once they get out they go back and try to use the same amount they used before and their body just can't handle that."

Ultimately, Dorsey wants to dig deeper into the controversial, yet commonly held belief among African Americans that alcohol and illegal drugs have historically been used to suppress minority populations. "I don't know that there is a whole lot of truth to it, but I do know that a lot of people in the African-American community believe that these things have been pushed into their communities over the years to try to kill them off," she says.

She also hopes to continue research she started this year in Ecuador, looking at both the negative and positive health impacts that ecotourism has on communities in developing countries. "I'm interested in looking at health disparities of all types and how they come about," she says. "I have had so many opportunities here and all the ideas I have come up with have been supported. The faculty have been great."





Copper Nickel celebrates five years; continues to grow

It's been an action-packed year for UC Denver's literary journal, Copper Nickel. October 2008 marked the release of the 10th edition—the largest issue to date—and the fifth-year anniversary of the journal.

The 10th edition took almost a year to complete and featured a cast of all women writers and artists; it was released in conjunction with the Women Writing West symposium. Copper Nickel 11 was released on March 13.

On February 11-14, Copper Nickel attended the 2009 AWP (Association of Writers and Writing Programs) Conference in Chicago and participated in the AWP book fair, which is one of the largest for literary journals and publishers. This enabled them to compare Copper Nickel to other publications, increase subscriptions and build journal awareness.

In 2010, the AWP conference will be in Denver, where Copper Nickel hopes to have a large, visible presence.

For more information, visit www.copper-nickel.org

The number of generations found in a typical present-day workplace.

Associate Professor Candan Duran-Aydintug, Department of Sociology, is researching issues that may arise from four distinct generations—traditionalists, baby boomers, generation x'ers and millennials—collaborating in the workplace. Some challenges, according to Duran-Aydintug, are the collision of different values, ideas and communication formats; the changing roles and rules in the workplace; and age discrimination.

Women writers' symposium asserts a newer, contemporary West

What does the West look like through the eves of women? From October 15 to 17, eight women writers shared their perspectives at the Women Writing West symposium, which brought together more than 500 students and community participants.

The writers, Alyson Hagy, Pam Houston, Teresa Jordan, Page Lambert, Dierdre

McNamer, Maria Melendez, Lee Ann Roripaugh and Karen Volkman, reflected the experience of novelists, short-story and nonfiction writers and poets alike. These women share professional success and the fact that they all have something to say about the Western experience.

"Newer literature about the region is reflecting new voices and challenging archetypes of rugged, masculine individuals," says Jennifer Davis, assistant professor of English and symposium co-coordinator. "Increasing urbanization is a part of that too. Even the Denver of 10 years ago is not the same Denver as today."

While the three days of readings and open discussions appealed to both genders, the relationships of women to the West struck a particular chord. Approximately 80 percent of CLAS' creative writing population is female, and the symposium offered strong, respectful role models.

"I think our students felt validated," says Davis. "Their input was accepted into the literary process of discovering the West, reflecting their various backgrounds, personal experiences and writing styles."

Several participants from the community were also writers. "We were hard-pressed to select these eight," says Jake Adam York, associate professor of English who also coordinated the event. "We could have benefited from additional contributions at a larger event."

The symposium was held alongside the release of the 10th edition of the CLAS literary journal, Copper Nickel, which publishes students and professional writers.

Getting philosophical about daily life

For many people, philosophy is an abstract area of study that deals with esoteric discussions about ultimate truth and the meaning of life. But David Hildebrand, associate professor of philosophy, is working hard and writing more to dispel that simplistic notion.

Hildebrand, who recently published Dewey - A Beginner's Guide (Oneworld Publications), says the philosophical underpinnings of today's debates on public policy are often overlooked.

"I think philosophy is already a vital part of what the average person thinks about every day," says Hildebrand. "If they're following the news-watching Wall Street get a bailout and lawmakers struggling with a bailout for the auto industry—they're wondering 'What is justice?' 'What's fair?' All these issues are fundamentally philosophical ones."

Hildebrand has written exensively for his peers, including an academic monograph on pragmatists and neopragmatists. But he believes his recent beginner's guide on pragmatist John Dewey provides valuable insight for many who watch economic and political upheavals unfold daily.

"Pragmatists" explains Hildebrand, "believe you have to let go of this ancient instinct of ours to have one final truth. We live in



David Hildebrand

a changing world, we're constantly facing new situations and no theory, principle or strategy is going to last forever."

While he'll continue writing for his peers, he says something that's caught his attention recently is communication in today's increasingly fast-paced world and the tidal wave of information that swamps people every day. Does this deluge of information have an impact on our ability to have in-depth discussions on important public policy issues? Does that, in turn, affect our ability as a society to reach consensus on long-term goals?

Hildebrand is still forming the questions. "I guess," he says. "I'm going to have to see where the ideas lead me."



Putting a new perspective on political science

Garima Dasgupta has a passion for politics. Originally from Calcutta, India, living in the United States gives her a unique perspective. "In relation to foreign policy, America holds very important power" she says.

Dasgupta is a master's student in political science interested in Mexican immigration and refugees from around the world. She is currently involved in a research project that deals with antipoverty in the United States.

UC Denver was her initial choice of American universities because "the faculty out here is amazing...and they provide very good guidance." She heard about the political science faculty through her sister, who also attends UC Denver.

Since Dasgupta entered the program, her writing has improved considerably, and she expects to publish her findings on antipoverty in the United States later this year.

After she completes her master's in political science, Dasgupta plans to study at the doctoral level in the UC Denver School of Public Affairs. She also holds three degrees from the University of Calcutta—a bachelor's in political science, a master's in history and a master's in philosophy. She eventually wants to conduct research and possibly teach in her native India.

In the meantime she continues to learn—in and out of the classroom. Dasgupta is a policy intern at the Colorado state Capitol and has recently taken up skiing as a sport.

Written by Senen Coleto, a student in the College of Liberal Arts and Sciences.



Interaction, organization and karma—all are just part of the job

Challenges, problem solving and the opportunity to grow—these are some of the reasons that **Gay Freebern** loves her job in the Department of Psychology. As program assistant, she works closely with students, faculty and staff on everything from communications and scheduling to funding and budgets.

"I am on the front lines of the department, and people usually come to me for answers, solutions and assistance," says Freebern. "I've become very resourceful in responding to whatever comes my way. If I'm willing to go out of my way to help someone, then that person becomes an ally. I often need help from others, and I believe in karma."

Freebern's involvement spans beyond keeping the department running smoothly. She's taken three psychology courses since joining the staff, interacting with students as their peer. She's also been an example to students—but not in the way one may think.

"One instructor asked me to join her class and pretend to have a psychological disorder. I was asked to demonstrate abnormal behavior and then storm out of the room so that the class could discuss my actions. It was a 'real life' way for the students to encounter some of the behaviors they had been studying."

These interactions with students, faculty and staff, and the bigger purpose of her role keep Freebern excited about her job. "I believe education is extremely important. I am proud to be part of a greater mission and to make a difference."

A tale of two cities: UC Denver students in Berlin

Comparing mass transit of Denver and Berlin was particularly interesting for **Matt Wolf**. "Denver's trolley system from almost a century ago is returning now as the light rail," he says. "But

Berlin has always relied on a rail system that affords great mobility. This is one reason Berlin residents own autos at only half the rate found in most developed nations."

Wolf, a graduate student in political science, joined nine other UC Denver students last May on a trip to Berlin to compare the social, political, environmental and cultural aspects of the urban



Christoph Stefes

landscapes. Political science professors **Christoph Stefes** and **Tony Robinson** organized the intensive two-week study course, which included having the students work alongside native students at Berlin's Humboldt University. Lectures, discussions and tours provided opportunities to explore Berlin's complexities. "Its background is especially intriguing," says Stefes.

An area called Potsdamer Platz in the middle of the once-divided city, he explains, emerged as a corporate office center after the Berlin Wall came down. But its history made development slow and uncertain. The students discussed their findings daily—often recounting observations about homelessness and green architecture. Back in Denver, each wrote a theory-based paper.

And last September, students from Humboldt University visited Denver for a similar comparative experience. "This is a younger city and structured differently," observes **Christine Lumpe**, a Humboldt student. "American cities have parallel streets and a downtown while Berlin streets are crisscrossed with medieval and newer buildings and different centers."

Every city, it seems, has a story.



One professor's quest to bring Ibero-American cinema to Denver

"Argentineans express profound universal truths in simple anecdotes. It gives their storytelling tremendous impact," says Andrés Lema-Hincapié, assistant professor of contemporary Spanish-American literatures and cultures. He is working to integrate films from Ibero-America, countries in the Americas that were formerly colonies of Spain or Portugal, into this year's Starz Denver Film Festival.

Such films are noticeably absent at events across the United States, says Lema-Hincapié. When he broached the idea to Howie Movshovitz, the Starz Film Center's education director, he was told to start small. Supported by the Department of Modern

Languages, Lema-Hincapié coordinated the university's first Ibero-American Film Series last fall, screening four Argentinean films and drawing student audiences who may otherwise never have such exposure to that culture. The series continued through the spring.

Lema-Hincapié says Argentina's thriving cinema makes its films powerful candidates for November's film festival. In both his native Colombia and the United States, he suggests, audiences without choices cannot appreciate the cultural nuances of different regions. Films from Spain, for instance, could offer audiences a deeper understanding of that single country's complexities. He is excited about making his case to the incoming executive director of



the Starz Denver Film Festival through his acquaintance with Movshovitz.

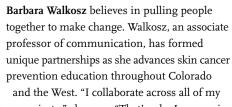
Lema-Hincapié believes it would be inspirational to bring Argentinean filmmakers, actors and critics to speak with audiences in Denver. This ambitious project may take time, but he's begun to lay the groundwork.

\$16M

The current amount of sponsored project funding for the College of Liberal Arts and Sciences.

The College of Liberal Arts and Sciences receives more than \$16 million in support of active, multi-year projects. CLAS faculty members are directing projects that involve research, training/education and service sponsored by government, foundation and industry organizations that include the National Science Foundation and the National Institutes of Health.

Communication plays key role in skin cancer prevention



projects," she says. "That's why I engage in interdisciplinary work for what I do."

Affiliated with the university since 1997, Walkosz has spent much of her career researching ways to communicate the importance of skin cancer prevention. Nearly 10 years ago, she received a grant from the National Cancer Institute to start Go Sun Smart, a project designed to test the effectiveness of a skin cancer prevention program for outdoor workers in the North American ski industry. The goal was to help ski resort employees and guests protect themselves from the potentially harmful UV rays of the sun.

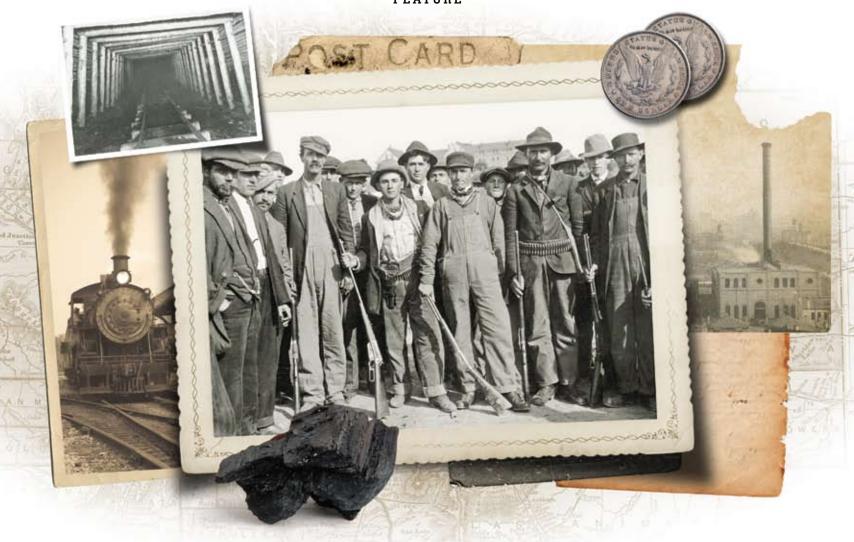
Walkosz and her colleagues partnered with 26 ski resorts to provide information about how to protect skin from the sun. "Over three years, with employees, we were able to reduce the risk of sunburn, which is a primary risk-factor for melanoma," says Walkosz, adding that ski employees also increased their sun protection practices over the duration of the study. With a second grant designed to test dissemination strategies, the program expanded to 325 resorts affiliated with the National Ski Area Association.

In 2006, Walkosz and her colleagues started a second program, Sun Safe Colorado, funded by the Colorado Department of Public Health and Environment via the Colorado Cardiovascular Cancer and Pulmonary Disease Prevention Program. The program has provided skin cancer prevention information to worksites, schools and medical clinics statewide.

"The kind of projects I'm working on wouldn't have been possible without this interdisciplinary approach," Walkosz says. "That's why they've been implemented, funded and successful."







Killing for Coal

A journey into the tumultuous energy history of the West

Editor's note: Thomas Andrews, assistant professor of history, shares firsthand his current research about the history of fossil fuel production in Colorado.

ook at present-day Colorado and it is almost impossible not to note some of the far-reaching impacts of fossil-fuel production and consumption on our state. Automobiles, highways, gas stations, the refineries of Commerce City—all attest to petroleum's centrality in our daily lives. Flip a light switch, watch coal trains haul their dusty black cargo from mine to power plant, boot up your computer and behold our dependence upon the coal seams buried underneath the Rockies' flanks. Coloradans may once have enjoyed the luxury of overlooking the manifold ways in which fossil fuels shape our world. But our complacence has been eroded in recent decades by urban air pollution, periodic energy crises

and a host of other environmental and economic troubles.

When I began my PhD dissertation in the late 1990s, I was surprised to learn that U.S. historians had paid only scant attention to the nation's energy history. This was especially true of western historians. What literature did exist on energy in our region concentrated either on the Old West—on the opportunities and constraints confronted by various native peoples, for instance—or on the New West—on urban sprawl in the post-World War II Sunbelt and the nuclear boom on the Colorado Plateau.

And so I embarked on almost a decade-long exploration of the energy history of what I call the Middle West—not the geographic region, but instead the crucial time period spanning roughly from 1890 to 1940. Because of my intense interest in my native Colorado, I started with the utopian visions of industrialist William Jackson Palmer, the

Quaker general who founded the Denver and Rio Grande Railway, the Colorado Coal and Iron Company, the city of Colorado Springs and many other Colorado industries and towns. I concluded my project with the infamous Ludlow Massacre and coalfield war of 1913-1914.

The end result: I recently published *Killing for Coal: America's Deadliest Labor War* (Harvard University Press, 2008), an accessible account of coal's role in shaping economic growth, environmental change and social conflict in late-19th and early-20th-century Colorado.

Who consumed coal? By the 1890s, pretty much everyone. Locomotive smoke in the sky announced the arrival of a mineral-based economy powered by stores of energy excavated from below the earth. Starting around 1870, enormous quantities of power began coursing through a world long restricted by low precipitation and limited biological productivity. This created a spiral of radical, uneven transformations. With startling speed, the combined might of railroads and coal mines first eroded, and then destroyed, the isolation and economic stagnation that had so vexed inhabitants of frontier Colorado.

In gold and silver districts, coal and coke made daily life more comfortable and spared mountain forests from total devastation. Coal-burning steam engines, compressors, drills and other machinery facilitated deep extraction, while coke-burning smelters made it possible for precious metals to be mined for cents instead of dollars.

But there was a dark side, too. Coal-powered machines deskilled hardrock miners and exacerbated chronic hazards underground. Labor wars at Leadville, Cripple Creek, Telluride and elsewhere joined a political economy dominated by financiers and industrialists as harbingers that beneath the glitter of gold and silver lay the grime of coal.

Coal proved particularly crucial to the development of Denver and Pueblo. Smoke-belching smelters, mills and factories enabled these cities to grow outward and upward with astonishing speed; in the process, some parts were healthy and pleasant, others sickly and squalid. As coal-burning industries pushed well-heeled Coloradans away from the polluted, congested manufacturing districts, coal-powered transit technologies, such as electric streetcars, pulled the well-to-do and their middle-class emulators toward healthier, more spacious suburban abodes.

In city and country alike, Coloradans used fossil fuels to break the bounds that had long constrained natural ecologies and human economies in the region. Coal gave people newfound power—to transcend bodily limitations, transform matter and haul unprecedented quantities of goods, information and people farther, faster and more cheaply than ever before.

Every ton of coal provided clear economic gain and a store of additional power that people could use to change their world. With every passing year, Westerners demanded more heat, light, food, gold, steel and electricity—and hence more coal. By the early 20th century, fossil fuel was in

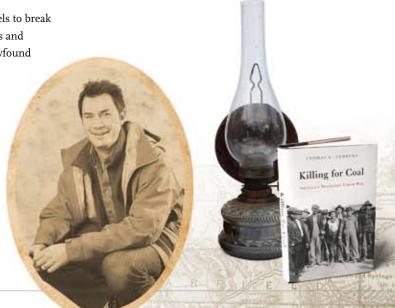
enormous demand for industry and homes alike. Less conspicuously, coal was the crucial component that produced and delivered the foods Westerners ate, the goods they bought and the tools they used. It helped determine the work they performed and the places they called home; it was present in the very air they breathed.

Economic growth in frontier Colorado had generally been slow, hard-won and ephemeral. In contrast, the mineral-intensive industrial economy that took root after 1870 grew in a manner that one historian likens to the suddenness, scale and unpredictability of mutation. A defining characteristic of mutation is its irrevocability, and by the early 20th century, life without coal seemed unimaginable. Per capita annual coal consumption in Colorado approached 12 tons in 1910—a remarkable figure since coal consumption for Britons was fewer than four tons per capita when the industrial revolution matured in the 1850s and in today's United States, per capita coal consumption is 3.5 tons. The Denver Chamber of Commerce summed up the region's fossil-fuel dependency when it declared of coal: "We cannot exist without it."

Coal miners attempted to use this dependence as a weapon by launching a massive strike in the late summer of 1913. This sparked a chain of events that culminated in the massacre of 19 men, women and children and a workers' uprising, the Ten Days' War, which left more than 30 strikebreakers, mine guards and state militiamen dead.

Today the violent consequences of our ongoing dependence on fossil fuels are most evident in the Middle East, the Niger Delta and other distant locales. My hope is that *Killing for Coal* can help draw the attention of Coloradans, historians and other readers to the complex and troubling relationships between energy, prosperity and conflict.

Andrews' book, Killing for Coal, was chosen for the 2009 Bancroft Prize by Columbia University, one of the most coveted honors in the field of history. Andrews' work has also been featured in The New York Times and The Denver Post.



Thomas Andrews, assistant professor of history and author of Killing for Coal

Michael Greene

Applying the mechanics of ant colonies to modern engineering and science

ew would envy a day in the life of Professor Michael Greene. In the summer, he rises at 4 a.m., slips on latex gloves and head-to-toe protective clothing, and heads out to a 120-degree swath of parched earth in the Arizona desert to spend the day playing voyeur to a colony of venomous red harvester ants.

During the school year, when he isn't teaching, he scours campus sidewalks for pavement ants and takes them back to his lab where he and his graduate students stage wars between enemy colonies.

The work, to some, may seem tedious. But Greene sees it differently. "What's not fascinating about ants?" asks Greene, an assistant professor of biology and one of the nation's leading ant researchers. With more than 12,000 species among them and more than 150 million years of evolution behind them, "ants are quite successful as an evolutionary group and incredibly abundant."

It's worthwhile, he says, "to try to figure out how ants work." In recent years, ants have been of particular interest to scientists who believe that understanding their "swarm intelligence" could provide clues about other complex self-organizing systems in computer science, artificial intelligence, neurology and transportation planning. And on a more practical level, Greene says, understanding ants could enable us to better manage them without using pesticides.

For eight years, he has focused primarily on the complex communication systems that allow ants to forage for food, build elaborate highways, keep their nests clean, identify enemies and protect their queen. Their success, he notes, depends on how they operate as a team:

"The truth is, if you watch individual ants it's amazing they survive at all...But when you put them all together, the society is very responsive to changes in their environment."

While film depictions show ant colonies that rely on an ant-in-chief shouting orders to subordinates, in reality, ants are nonhierarchical. "The biggest thing that has come out of ant research is the fact that all of those 20,000 or so workers are able to exist without a boss."

Previous researchers have discovered that different ants have different jobs, typically based upon age. A newborn ant will likely have a job closer to the queen, while an adolescent ant may be a maintenance worker, hauling debris out of the nest. Older ants play patrollers, who scout out food and predators. Then come the oldest—the foragers—who are responsible for retrieving that food.

But how do the foragers know the coast is clear? The key lies in their remarkable sense of smell.

In collaboration with Stanford biologist **Deborah Gordon**, Greene has demonstrated that not only do ants with different jobs have different odors, those odors subtly incite different actions.

For instance, once a patroller returns from the nest to foragers waiting to go to work, the patroller's distinct odor (arising from the unique combination of hydrocarbons that coat its body) will signal the forager to head out. If the patroller never returns—perhaps it was blown away in a fierce wind storm or devoured by a hungry lizard—the waiting foragers know to hang tight.

Greene tested the theory at the Southwestern Research Station in the Arizona desert using an ingenious system. He woke at dawn and kidnapped patrollers from nine colonies of red harvester ants before they had a chance to return to the nest. Then he began to drop glass beads coated with various ant scents into the nest. When beads that smelled like other foragers or maintenance workers

were dropped in, the foragers did nothing. When beads that smelled like patrollers were dropped in, the foragers took the cue and headed out.

But it wasn't quite so simple. Greene's follow-up research took the idea a step further, showing that if he dropped one scented bead into the nest every ten seconds, a flood of foragers would exit. If he only dropped one every three minutes, fewer ants left the nest.

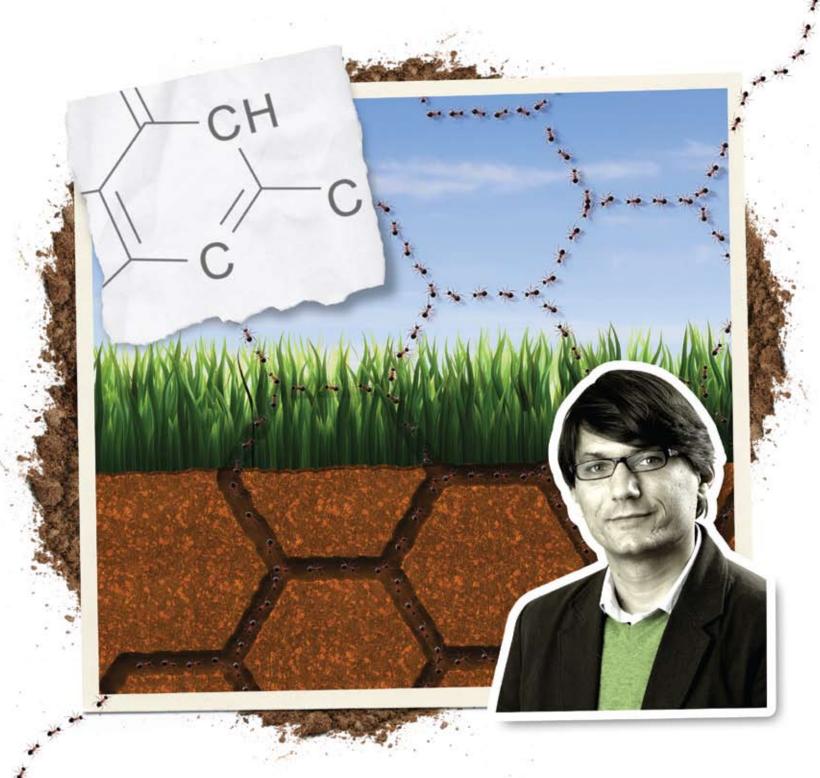
In essence: the forager ants had to smell the right smell at the right interval in order to go to work; a subtle, but precise cue repeated over and over between individual ants kept the whole complex system in motion.

"Some of the biggest gains we are going to see in science and engineering will come from learning how nonhierarchical, self-organizing systems are organized and regulated," says Greene, whose work has been published in the journals *Nature* and *Behavioral Ecology*, and featured on ABC News and in *National Geographic* magazine. "What we learn from an ant colony could at least help us frame questions about these other systems."

Ant wars on campus

Job title aside, an ant's unique scent or "hydrocarbon profile" can also identify it as friend or foe to sister ants in a colony—a fact that Greene believes could be of great use to farmers trying to control colonies chewing through their crops.

In summer 2007, using a \$100,000 grant from the U.S. Department of Agriculture, Greene began working with students to explore which hydrocarbons elicit a recognition response. The ultimate aim: to develop a bait which could alter an ant's chemical mixture. "We are trying to manipulate the expression of hydrocarbons in a way that will interfere with colony communications, increase aggression between



sisters and decrease colony growth," says Nate Bannon, a second-year master's candidate who is working with Greene on the project.

Greene and Bannon have been collecting pavement ants from colonies on campus, bringing them back to the lab, measuring their hydrocarbon profiles and staging and photographing "ant wars" in petri dishes.

"As a student you sometimes feel like you put in your two or three years but you don't ever really get to be involved in the actual solution or the major finding. With this I feel like I could actually be involved

in something bigger," says Bannon, noting that he was drawn to Greene for his humility and accessibility.

In the end, Greene says, the joy of teaching and of better understanding ants is reward enough.

But if his work someday enables neurologists to better understand how neurons communicate to create memory in the human brain, or helps airlines devise a better system for organizing flights, all those sweltering days in the desert will have really paid off.

A CLAS Act

American president to visit the People's Republic of China. Don McLean's "American Pie" topped the charts. In a former trolley-car barn in downtown Denver—the Denver Tramway Company Building—trouble brewed among the high-spirited faculty, staff and students of University of Colorado Denver Center. Word had spread that CU President Fred Thieme had reached an agreement with Metropolitan State College of Denver to phase out freshman enrollment. The close-knit community at the Denver Center was infuriated. Jim Wolf, professor emeritus of history, served as chairman of the Faculty Assembly at the time. He remembers students, faculty and staff banding together to appeal to the Board of Regents.





The regents met in March to vote on the fate of undergraduate education at the University of Colorado extension in Denver. "Had the vote been three-to-three," Wolf recalls, "the president would have voted for the resolution. But the regent from Greeley changed his vote and voted to sustain arts and sciences in Denver. It was amazing. It was a dramatic thing."

By fall, a measure was put to voters as to whether CU's Denver and Colorado Springs campuses should be considered independent institutions. The ballot passed.

The story of the University of Colorado Denver, to a large degree, is the story of the College of Liberal Arts and Sciences. The college is responsible for the general education of every undergraduate at UC Denver, providing the foundation of the undergraduate curriculum. Every degree-seeking undergraduate spends at least a third of his or her time in CLAS courses. The college generates 55 percent of the university's credit hours and is its largest degree-granting entity.

Officially established in 1971 as the College of Undergraduate Studies, the college was renamed in 1975 to encompass its solid liberal arts and sciences orientation where research, creative activities and hands-on faculty interaction were central to the student experience.

Faculty and students from the early days remember less-thanluxurious facilities that were a stark contrast to the scholarship of CLAS. Camaraderie was born of shared purpose and close quarters. A faculty lounge was out of the question, so the young professoriate met for planning sessions at the old Frontier Hotel bar across the street.

Professor of history Tom Noel earned his teaching certificate and rediscovered his love of history in the Tramway Building in the late '6os. Students, he says, hung out at Collins Finer Foods, famous more for its 10-cent beers than its cuisine. Should a student want to confer with a faculty member, he says, "We could all go over to the Frontier and talk to our professors."

"You could park for free if you timed it right," remembers Jean Skaggs, BA '73. "I would get there just as the meter lady was coming through and get out to move my car just as she was coming back." Skaggs was a young mother when she attended UC Denver in the late '60s and early '70s.

"Everybody, whether they were in English or chemistry, lined up in a couple of halls," says Bob Damrauer, a professor of chemistry and special assistant to the provost. "We all knew each other and it made it possible for us to interact with people in completely different disciplines."

The growing status of the university created opportunities for female faculty members to make inroads. Processes were flexible, so professors could often follow their hearts and their areas of interest when designing courses.

"It was wonderful," observes Myra Rich, chair of the history department, who started as adjunct faculty when her husband came to work there. "It allowed people to play to their strengths. I was told I could teach any time I wanted to and never felt embarrassed to say that my kids were in preschool so that's when I could come."

The college moved from the Tramway Company Building in 1976 to the Auraria Higher Education Center, which was built to house UC Denver, Metropolitan State College of Denver and the Community College of Denver. The Tramway Building became home to Hotel Teatro and the Denver Center for Performing Arts.

Assistant Vice Chancellor for Undergraduate Experiences John Lanning came to the college in 1974. He observes that the college—and the university—has struggled to carve

"Research and creative activities have always been important components of the mission of CLAS. but will become even more so in the near and long-term future."



- Dean Daniel J. Howard

an identity separate from the other institutions with which it shares a campus. The 2004 merger with the CU Health Sciences Center adds new challenges and opportunities. "We are very much meeting the university-level needs of the region," he says. "There is a flavor of quality and a commitment to students that is the underpinning of what we're doing."

Today, the college offers 20 bachelor's degrees, 16 master's and three PhDs-along with a smattering of certificates, minors and interdisciplinary signature areas. More than 5,000 undergraduate and 600 graduate students are enrolled in its programs. Students at the graduate and undergraduate level benefit from working closely with professors on scholarly projects.

"Research and creative activities have always been important components of the mission of CLAS, but will become even more so in the near and long-term future," says Dean Daniel J. Howard. "Indeed, students will find that experiential and inquiry-based learning opportunities are expanded in a college in which faculty are more actively engaged in extending the boundaries of knowledge."



Then and Now

Reenactment of historical Lincoln-Douglas debate draws parallels to 2008 presidential campaign

he Democratic National
Convention brought a flood of
political celebrities to Denver in
August. In early October, two
more showed up: Abraham Lincoln and
Stephen Douglas.

They appeared as guests of the CLAS Colorado Center for Public Humanities, which staged a reenactment of the famous Lincoln-Douglas debates before a packed house at the Tivoli. Following the 30-minute debate (in which an actor and a CLAS professor played the politicians), a trio of UC Denver professors held an hour-long discussion comparing those debates to the presidential campaign of 2008, which was in the midst of its own debate cycle.

"We had a couple of different objectives," says communication associate professor and department chair **Stephen Hartnett**, who played Stephen Douglas and sat on the post-debate panel. "We very much wanted to raise the level of discourse regarding the 2008 election. And the second point is that we wanted to demythologize past elections, to show what the tenor and feel of politics might have looked like 150 years ago."

"There's a tendency to view contemporary politics as deeply partisan and bitter," adds English Assistant Professor Gillian Silverman, who joined Hartnett on the discussion panel. "The Lincoln-Douglas debates are sometimes held up as examples of lofty civility. But those debates were deeply partisan too, and there were a lot of antics that went on, a lot of heckling and cheering. They were at least as contentious as our politics today."

Indeed, the 1858 Lincoln-Douglas debates took place on the eve of the most divisive event in U.S. history—the Civil War. That subject lay at the heart of their debates; the seventh debate, in particular, delved into the issues dividing North from South. That debate served as the model for the center's reenactment.

"The question wasn't whether there should or shouldn't be slavery in the United States," explains Silverman. "No one except the most radical abolitionists imagined that we could eliminate slavery altogether. It was really about whether there should be slavery in the territories, and how that decision should be made—should it be made by Congress, or should each territory decide for itself?"

"Douglas was the recognized champion of the states' rights philosophy," Hartnett says. "Lincoln said to Douglas, in essence, 'States' rights is a farce. It's a bald-faced lie. It is really just de facto support for slavery."

Although Lincoln and Douglas were rival

candidates for the presidency in 1860, their debates took place two years earlier, when the Illinoisans faced each other in a race for the U.S. Senate—an election Douglas won. That campaign bore a number of parallels to the McCain-Obama race of 2008, Hartnett notes.

"Stephen Douglas had been working at the highest echelons of power for a long time, much like John McCain," he says. And Lincoln, like Obama, was this young guy with very little in the way of a track record. So the question of experience was central to the debates."

The Colorado Center for Public Humanities strives to create opportunities for scholars to engage with the public on current issues. The reenactment achieved that purpose, drawing a large crowd and generating some media coverage.

"We were very pleased with the turnout," Hartnett says. "People think of American history as stuffy and dead. It's actually alive and well."





A global perspective on energy and the environment

Chemistry Professor Larry Anderson teaches his students to look at the big picture when it comes to research about energy and the environment. In a career that's taken him from industry to academics and Colorado to Kazakhstan, what is seen as a potential solution may end up causing more problems.

"It's a very complicated process," says Anderson, who has been a professor with the university since 1982. "Science has almost no impact on public policy. Public policy is politically driven." Yet research is vitally important in determining if policies are effective. For Anderson, research is the best way his chemistry students learn.

"The goal is to get the students to think critically," he says. "It isn't just science. We're trying to deal with real life. We need to evaluate the potential problems and look to the bigger picture."

Anderson's work has varied over the years. Since the late '80s, Anderson's research has focused on air-quality issues in the Denver metropolitan area. His research team has experimented with techniques to measure hazardous air pollutants in Denver and other sites.

For the past four years, Anderson also has worked with the University of Thailand helping explore the use of biofuels in an effort to help the country reduce its dependence on petroleum and to decrease greenhouse gases. Last year as a Fulbright senior specialist in Kazakhstan, Anderson worked with the university there to help them establish a doctoral program in environmental studies.

Kazakhstan is rich in petroleum, natural gas and minerals, but has developed little of these valuable natural resources. The country has very few environmental regulations, and the graduate students Anderson met had limited access to scientific literature on environmental studies.

"It was clear to me they need people who understand environmental issues, because it won't be too long before other countries sweep in, take their resources and leave them with environmental problems," says Anderson, adding that he hopes to return to Kazakhstan next year to continue his work.

For any country, examining both the pros and cons of potential energy policies is important before policymakers decide on how to proceed. U.S. politicians may tout the use of ethanol as an alternative energy source, but they also need to continually collect and analyze data that allows programs to evolve without causing serious problems, says Anderson.

"I think much of the world will go to biofuels, but we need to do it with materials that are waste, not crops," he says. "Using corn to make ethanol would be absurd." The use of excess corn for ethanol would work to a limited extent, but once it becomes more profitable to make fuel out of it instead of animal feed or food, "we've grossly changed the economics of food production in ways we don't want to," he adds.

Anderson, who spent an early part of his career working on environmental air quality issues for General Motors, brings that practicality to the classroom.

"As students get a better understanding of how scientific discoveries impact reality, they start thinking a little more broadly about what one is doing and what they should be doing," he says. Anderson plans to take a group of UC Denver students to Thailand next year to the Renewable Energy Congress.

"Energy and the environment are global in scope," Anderson says. "My hope is our students will gain valuable international perspective as they study these issues."

CLAS Notes

70s

Lori A. Barnes, BA Spanish 1979, was selected as the director of the Vail Public Library, effective May 2007. She recently built a home in Colorado Springs where her four daughters and five grandchildren live.

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Daniel Gilbert, BA psychology 1981, earned his PhD from Princeton in 1985 and went on to win the American Psychological Association's Distinguished Scientific Award for an Early Career Contribution to Psychology in 1992. He was elected a member of the American Academy of Arts and Sciences in 2008. He has an outstanding national and international reputation in the field of psychology. As the Harvard College Professor of Psychology at Harvard University, he recently had a book published entitled Stumbling on Happiness (Random House), which spent six months on The New York Times bestseller list and won the Royal Society General Book Prize in 2007.

200

Andrew Kirk, MA history 1992, is now an associate professor of history at the University of Nevada Las Vegas after earning his PhD from the University of New Mexico. He is the author of a new book, Counterculture Green: The Whole Earth Catalog and American Environmentalism (2008), and Collecting Nature: The Environmental Movement and the Conservation Library (2001).

Stephen K. Stein, MA history 1992, earned his doctorate in military history from The Ohio State University in 1999. An assistant professor at the University of Memphis, he was recently named to direct its new online degree program. He is also an adjunct professor for the U.S. Naval War College (College of Distance Education) for which he teaches courses in military strategy. A specialist in naval history and the history of technology, he recently published his first book, From Torpedoes to Aviation: Washington Irving Chambers and Technological Innovation in the New Navy, 1877-1913 (University of Alabama Press, 2007). His article "The Greely Relief Expedition and the New Navy," in International Journal of Naval History 5 (December 2006) won the Rear Admiral Ernest M. Eller Prize in Naval History.

Michαel Goldstein, BA psychology 1993, earned a PhD in developmental psychology and animal behavior at Indiana University and is now an assistant professor in the Department of Psychology and the director of the Eleanor J. Gibson Laboratory in Developmental Psychology at Cornell University.

Danielle Rocheleau Salaz, BA individually structured major 1996, earned her MA in Japanese language and civilization from the University of Colorado at Boulder in 2000. She gave birth in June 2007 to a son, Evan Victor Salaz. Salaz is currently the assistant director of the Center for Asian Studies at the University of Colorado at Boulder.

Bill Convery, MA history 1998, is finishing his PhD at the University of New Mexico and has been teaching for the UC Denver Department of History. He was the state coordinator for Colorado History Day until he was appointed state historian for Colorado on March 1, 2008. He is located at the Colorado Historical Society where he works with their museum exhibits, educational outreach and many other activities.

NNs

Kulan Batbayar, MA biology 2001, earned his PhD at Albert Einstein College of Medicine, New York last September. Now he's working as a research associate at the Department of Pathology at the University of Cambridge in the United Kingdom.

Farrah Field, BA English 2001, earned her MFA from Columbia University, and her first book of poems, *Rising*, is forthcoming from Four Way Books in April 2009. Her work has been published in *Chelsea*, *Harpur Palate*, *Margie*, *The Massachusetts Review*, *Mississippi Review* and *Pool*. Field lives in Brooklyn and is currently working on a novel.

Ashton Hαrrison, MA political science 2001, is currently the county administrator of Montezuma County, Colo., a position he has held since May 2006.

Paul Lopez, BA political science 2002, is the youngest city councilman on record for the City and County of Denver, Colo. for Council District 3.

Everett Mαrtinez, BA psychology, political science 2002, worked in the Washington D.C. office of Senator Ken Salazar in 2005 while attending law school at Harvard. After earning his juris doctorate in 2007, he began working as a public finance attorney at Kutak Rock LLP in Denver. On the side, he writes for the English/Spanish newspaper *La Voz* in Denver.

Shane Hale, MA political science 2003, was hired by the Town of Grand Lake, Colo., as the town manager in 2004. He sits on regional and statewide boards and committees, and his experiences with the mountain pine beetle and its devastating effects on the Lodgepole pine forests have led to interviews with many media organizations, including National Public Radio and *The New York Times*.

Mike Bleakley, BA political science 2005, recently passed his Series 7 Registered Representative's Exam and is now a financial planner and tax accountant at Towers Wealth Management in Parker, Colo. He is also vice president of the homeowner's association for his community in Southeast Denver.

Melissa (Cavanagh) McPike, BA political science 2005 and UC Denver 2004 Udall Scholar, is working on her second master's degree at the Yale School of Forestry and Environmental Studies. At Yale, McPike is focusing on global change science and policy. Last year, she earned an MS in environmental law at Vermont Law School. In addition to working in Antarctica and Australia, McPike has held positions at the Colorado, Texas and Vermont state legislatures. She credits her first legislative internship through "CU at the Capitol" for launching her policy career. After graduating from Yale next year, McPike plans to pursue a juris doctorate.

Lindα Olson Brooker, MA political science 2006, is currently assistant dean for the Business School at the University of Colorado Denver. Her promotion was a result of her graduate degree in which she focused her research on leadership and public policy. Brooker has put into practice her leadership research by teaching a class on managing individuals and teams. Brooker and her husband Lucius live in Lone Tree, Colo. Both her daughter, Kate, and son, Alex, are also graduates of CLAS programs.

Kelly Hαrp, MA political science 2006, was the communications director for the state Senate Republicans until summer 2006 when he moved to Japan. While in Asia, he took the opportunity to travel to six different countries. When he returned in February 2008, he became the communications director for Amendment 47, the right to work ballot issue for the November 2008 election.

Jesse Rozelle, BA geography 2007, Sean McNabb, BA geography 2008, and Jennifer Goldsmith, BA geography 2003, are now employed with the Federal Emergency Management Agency (FEMA) as risk analysis/GIS specialists. They were part of the Geospatial Intelligence Unit during the response and recovery missions for Hurricane Ike, Hurricane Gustav and the Midwest flooding in Iowa. Rozelle is currently finishing her masters of integrated science degree, with a graduate certificate in environmental health from UC Denver.

Beth Lamberson Warren, MA political science 2007, is the executive director of KSUT-Four Corners Public Radio in Ignacio, Colo. She was named Broadcast Citizen of the Year in 2007 by the Colorado Broadcasters Association and was appointed by Governor Bill Ritter to serve on the board of the Colorado Educational and Cultural Facilities Authority, which helps nonprofits access low-cost capital financing for educational and cultural facilities such as museums, charter schools, private schools, public radio and more. Warren is also a host and deejay at KSUT and has produced recent interviews with NPR's Cokie Roberts, musician Emmylou Harris and cowboy poet Baxter Black. Her daughter, Katherine, will graduate from CU-Boulder this May with a degree in journalism. Her son, Chris, will be an incoming freshman at CU-Boulder for fall 2009, majoring in film and media design.

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Alum raises awareness of American Indian genocide

Every legislative session, the Colorado legislature passes a resolution commemorating the Holocaust, Hitler's systematic extermination of European Jews. Since 2002 the legislature also annually remembers the killing of 1.5 million Armenians during and after World War I.

But another genocide—some of which took place in Colorado—remained forgotten by the legislature, and Simon Moya-Smith, political science '07, wondered why.

"Maybe the genocide of the American Indians hits too close to home," says Moya-Smith. "We're not that far away from it. I think that makes it harder for people to acknowledge."

In 2008 Colorado legislators finally recognized the loss of tens of millions of Indian lives in North America by passing Senate Joint Resolution 08-031, "Remembrance of American Indian Genocide." Moya-Smith, an Oglalla Sioux, helped make it happen.

He provided the bill's author, state Senator Suzanne Williams (D-Aurora), with research documenting the military attacks, forced marches, deliberate smallpox introductions and other acts that constituted the genocide. He also drafted some of the resolution's language, as well as Williams' speech from the senate floor. Moya-Smith initially became acquainted with Williams during his senior year, when he interned for her through the CU at the Capitol program.

Although the bill passed 59-4 in the house, the resolution drew significant opposition in the senate.

"This wasn't controversial," Moya-Smith says. "There's no repeal of a holiday. It was just important to recognize what happened to Indians. European Americans glorify and valorize their ancestors. American Indians should be valorized as well."

A little confidence goes a long way

Marianne Gordon, BA political science '00, wanted to set an example for her daughters. So when they reached school age, she began thinking about going to college. One afternoon on a whim, she stopped by the admission office at the University of Colorado Denver. Feeling out of place, her intention was to quickly grab a brochure. But an admissions counselor asked her, "Are you starting in January?"

"No," Gordon said, flustered. "Maybe next fall." Recognizing the dodge, the counselor countered: "Get it done. You'll be fine."

Seven-and-a-half years later, Gordon had a bachelor's degree from UC Denver, a juris doctorate from University of Denver and was a member of the Colorado Bar Association.

"If she hadn't pushed me, I probably wouldn't have done it," Gordon says. "Something would have come up."

Gordon, a former rock-band vocalist, travel industry professional and stay-at-home-mom, is an attorney in private practice, specializing in family law. Her oldest daughter just graduated from New York University; her youngest is a junior at the University of Oregon.

"Once I started it was full steam ahead," she says. "My goal was to do the four years and maybe get a little part-time job. But I became so confident and saw so many doors open up to me...I decided, I'm going to apply to law school."

A lifetime politics and foreign affairs junkie, Gordon majored in political science at UC Denver. A chance class assignment to volunteer at The Gathering Place, a day-time drop-in center for women in crisis, grew into a three-year commitment and proved pivotal to her future. There Gordon witnessed women struggling with landlords, exes and the social services system. "A lot of women were in need of legal assistance and I thought I could be of help."

Since Gordon passed the bar in 2007, her solo practice has been busy; the bulk of her cases revolve around divorces and estate planning, but she makes time every year for pro bono work to assist women who can't afford representation.

"My daughters don't remember a time when I wasn't in school," she says. "They saw me work hard and study, and now they don't see any boundaries."

"If she hadn't pushed me, I probably wouldn't have done it," Gordon says. "Something would have come up."



A beacon of hope for thousands

Cathy Phelps, MA medical anthropology '90, is one tough lady. As executive director of the Denver Center for Crime Victims, she leads an agency that is a beacon of hope for thousands.

"Crime victimization is not sexy," Phelps explains with a quiet certitude. "It's not 'if it bleeds, it leads.' It's the other people, those who don't make the front of the newspaper that are impacted. There are the primary victims, and then there's everyone else."

By everyone else, she means the innocent bystanders people who may have witnessed a crime or came to the rescue of children at the scene of a crime, or those who may have gotten knocked to the ground while a crime was being perpetrated. The Denver community may be surprised to learn how many people "everyone else" really is.

Since opening in 1987, the Denver Center for Crime Victims has served 130,000. The public agency handles, on average, 5,000 calls per month, working in collaboration with other local agencies and members of the clergy.

"One out of every five people in Denver is going to be the victim of something at some point—burglary, assault—it's not just sexual violence we're dealing with," says Phelps. "The center is a resource 24/7, a safe, comfortable, confidential place to come—a place to call in times of need."

Call they do, and often not in English. The center offers help in 41 languages and has 79 clients from 22 different countries. The staff must continually find ways to respond creatively, treating everyone from toddlers to seniors. Parents concerned about kids acting out can attend monthly workshops on substance abuse, gangs, custody or topics targeted to seniors raising grandchildren.

Emphasis is placed on wellness, and Phelps sets the example. The center's full-time employees are required to create annual self-care plans, through which they outline steps to improve their physical, emotional, spiritual and intellectual selves. Such goals may seem to have little connection with counseling crime victims, yet Phelps says, "There are lots of tools and strategies that go into building that kind of resilience. Sometimes we need to buy what we sell."

Under Phelps' leadership, the center has received many awards, including the Martin Luther King Jr. Business Social Responsibility Award in 2002 and the Colorado Ethics in Business Award in 2005. Phelps was honored in 2005 with a Living Portraits of African American Women Award from the Denver section of the National Council on Negro Women.

In 2006, the center was featured on the Oprah Winfrey show when Heather Callahan, a client of the center, was in the audience. Oprah gave each audience member \$1,000 to "pay it forward." With help from the center, Callahan connected with Martha Clark, another victim, and presented her with a check. When Oprah's viewers heard about this, calls and e-mails began pouring in to the center.

Phelps welcomed the support, reminding the public that the Denver Center for Crime Victims is the only public health agency in the country where there is no cost to the victim, ever. "There's not another center in the whole country that offers the kind of specialization that we offer right here in Denver County."

New scholarship established through life insurance policy

Steve Eslary, BA '96, MA '01, and his wife Lorraine (Lori) are people of modest income, yet they have taken steps to fund the George and Mary Hermosillo Memorial Scholarship Fund, a scholarship in honor of Lori's parents.

It was all Steve's idea, and when he told Lori, she was overwhelmed.

"I'm one of nine children, including two sets of twins," says Lori. "My father worked two jobs to keep food on the table



and a roof over our heads. And they always encouraged us to get a quality education."

Steve says that setting up a scholarship was easier than it sounds. "In our case, we decided to set up a memorial endowment with life insurance," he explains. "We took out a policy and if any one of the three of us passes, then the CU Foundation receives a \$25,000 cash settlement."

The Eslary's daughter, Regina Eslary-Buena, is also named in the policy.

Upon its funding, The George and Mary Hermosillo Memorial Scholarship will provide \$500 per semester to students in the Department of Ethnic Studies. The Eslarys chose that department because Steve had worked and retired from there, and because of its focus on American heritage and cultures of diverse peoples.

"If you think about the wonderful things that people have done in this world, many of them have great means like Bill Gates and Warren Buffett," says Steve. "But it does not necessarily take that kind of means to send a message to society that you care about something besides yourself."

Math alumna establishes travel fund, honors faculty member

Twenty years ago, the Department of Mathematical and Statistical Sciences launched its PhD program, the first on the UC Denver campus. On September 20, 2008, more than 100 graduates, current students and faculty gathered to celebrate the milestone and to honor one of its champions: J. Richard Lundgren.

Lundgren joined the department's faculty in 1981 and immediately began creating a PhD program.

"Since we had a nearly nonexistent graduate program at the time, we had a



long way to go," Lundgren recalls. "When I came in, we had six active students and we built that to 50 in three years."

The first PhD graduate of the program, Kim A. S. (Hefner) Factor, received the degree in 1988 after also receiving her bachelor's and master's degrees from the same department. Factor was on-hand at the 20th anniversary celebration.

At the event, Factor talked about Lundgren's commitment to graduate student travel and announced the new JR Lundgren Graduate Student Travel Fund. Over the years, Lundgren had secured grants and gifts for graduate students to attend conferences because he felt it was important to their careers and to the department.

"When you have a career in academics, networking is just about everything," says Factor. "The people who know you and your research are the people who support you, and you meet them at conferences."

Lundgren adds, "I think travel opportunities have had a very positive impact on our students. I feel good that this fund will continue it on."



Contribute There are many ways you can contribute to the mission of UC Denver and to the College of Liberal Arts and Sciences. Volunteer your time,

whether you are working events, helping with fundraising or building relationships with students, faculty and fellow alumni. To learn more, contact Katy Brown at katy.brown@ucdenver.edu or 303-556-6663.

In addition, the University of Colorado Foundation has established many opportunities to contribute to the college and the university, a tax-exempt, charitable organization. From bequests, cash and real estate to retirement funds and life insurance policies, there are alternatives for everyone. Visit www.cufund.org for more information, or contact Lora Adams at lora.adams@cufund.org or 303-315-2029.

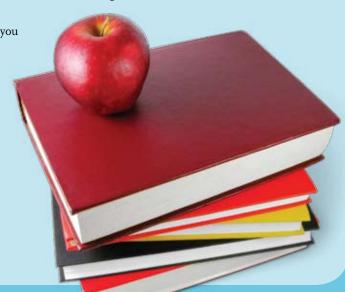
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