

# A Celebration of Faculty Achievement

Fall 2018



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#### ONE OF THE GREATEST PROFESSIONAL

**ACHIEVEMENTS** any of us can receive is when our colleagues recognize our teaching and scholarly work as being of the highest quality. Across the various colleges, departments, fields, theoretical frameworks and generations, we seek the approval of our peers within the academy. The faculty colleagues named in this publication not only have expanded our collective understanding of how the world operates, but have done so in ways that will continue to be impactful for years or decades.

As faculty, two of our primary duties are the creation and dissemination of new knowledge. To do this properly, we must be afforded the

opportunity to ask questions and seek answers. Often, these questions may challenge the status quo, require us to rethink the way we've always operated or even push society into

uncomfortable situations. That said, it is my firm belief that not asking those questions and allowing potential solutions to remain unknown is more dangerous than pursuing difficult areas of inquiry.

If we were to list the academic achievements of all of our faculty members at CU Boulder, it would fill volumes while still omitting the daily work we all do to improve the lives of individual students and our community. Only a small portion of our faculty are named in this specific publication, but we all should be proud of the work described. Because while we all may not have spent hours looking through microscopes, writing and rewriting chapters, creating and perfecting new

# National and International CU Faculty Recognition

- 5 Nobel laureates
- 5 National Medal of Science winners
- 9 MacArthur fellows
- 28 members of the National Academy of Engineering
- 33 members of the American Academy of Arts and Sciences
- 36 members of the National Academy of Sciences

performances or artistic expressions, coding and analyzing data or developing novel scientific techniques, we all can celebrate the work of our peers.

I want to congratulate everyone named in this publication. Whether you earned tenure or promotion to the rank of full professor, received fellowships or academic prizes, have been designated as CU Boulder Distinguished Faculty or have been recognized as a member of national academic societies, you are vital contributors to the university, the state of Colorado and the nation. Thank you and congratulations.

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Russell Moore

Provost and Executive Vice Chancellor for Academic Affairs

#### FACULTY TENURE AND PROMOTION

**Tenure Recipients** 

(effective August 2018)

Joanna Arch, Psychology and Neuroscience

Michela Ardizzoni, French & Italian

Reece Auguiste, Critical Media Practices

Aaron Clauset, Computer Science

J. Anthony Cookson, Leeds School of Business

Tanja Cuk, Chemistry and Biochemistry

**Shideh Dashti,** Civil, Environmental and Architectural Engineering

Nancy Emery, Ecology and Evolutionary Biology

**Andrew Goodwin,** Chemical and Biological Engineering

Leila Heil, College of Music

Karl Hill, Psychology and Neuroscience

Susan Walsh Hopewell, School of Education

Shaun Kane, Computer Science

Kristopher Karnauskas, Atmospheric and Oceanic Sciences

Sascha Kempf, Physics

Jin-Hyuk Kim, Economics

Chris Link, Integrative Physiology

Alexia Brunet Marks, University of Colorado Law School

Austin Okigbo, College of Music

David A. Rickels, College of Music

Elias Sacks, Religious Studies

Leah Sprain, Communications

Katherine Stange, Mathematics

Gabrielle Wiersma, University Libraries

Xiaobo Yin, Mechanical Engineering

Promotions to Full Professor

(effective August 2018)

Andreas Becker, Physics

Margaret Berg, College of Music

**Deborah J. Cantrell**, University of Colorado Law School

Alejandro Cremaschi, College of Music

Sona Dimidjian, Psychology and Neuroscience

Noah Fierer, Ecology and Evolutionary Biology

Eric Frew, Aerospace Engineering Sciences

Erin Marie Furtak, School of Education

**Michael Gooseff,** Civil, Environmental and Architectural Engineering

Kira Hall, Linguistics

Richard Han, Computer Science

Mike Hannigan, Mechanical Engineering

Karl Hill, Psychology and Neuroscience

James Humbert, Mechanical Engineering

Pieter Johnson, Ecology and Evolutionary Biology

Dan Thomas Kaffine, Economics

Daniel Kellogg, College of Music

**Seow Ting Lee,** Advertising, Public Relations and Media Design

Todd Murray, Mechanical Engineering

Susan Nevelow Mart, University Libraries

Amy Palmer, Chemistry and Biochemistry

Jeanne Quinn, Art and Art History

Mark Rast, Astrophysical and Planetary Sciences

**Jason Ren,** Civil, Environmental and Architectural Engineering

Dylan Taatjes, Chemistry and Biochemistry

Tony Wenfeng Tong, Leeds School of Business

Sarah L.C. Zechman, Leeds School of Business

Dan Zhang, Leeds School of Business

Wei Zhang, Chemistry and Biochemistry

# CU BOULDER DISTINGUISHED PROFESSORS

The University of Colorado extends the title Distinguished Professor to recognize the outstanding contributions of CU faculty members to their academic disciplines. Candidates nominated for a distinguished professorship must demonstrate accomplishments in accordance with universitywide criteria.

**Peter H. Molnar**Professor, Geological Sciences: Cooperative Institute for Research and Environmental Sciences



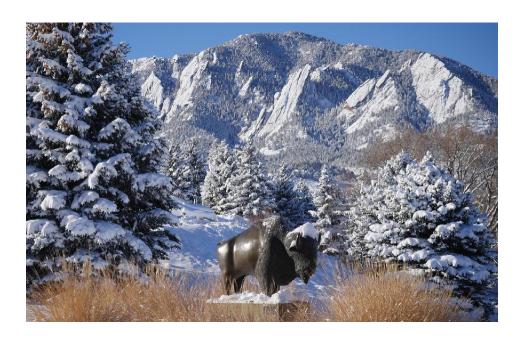
Peter H. Molnar's contribution to the field of geological sciences has advanced our understanding of global tectonics, particularly the causes of mountain range formation and the deformation of continents. His inventive and interdisciplinary approach to research combined geological, geophysical and satellite modeling methods to further the field of global tectonics.

Upon receiving his PhD in geology from Columbia University, Molnar researched mountain range formations in Asia, focusing on the Himalayas and the Tibetan Plateau. A pioneer in seismology, Molnar began his career analyzing the relationship between

earthquakes and plate movement, discovering that the sinking of oceanic crusts was a driving force in tectonic plate movement.

In 2014, Molnar was awarded the Crafoord Prize in Geosciences by the Royal Swedish Academy of Sciences for his contribution and discoveries in global tectonics. As a member of the American Geophysical Union, an international nonprofit organization that shares interdisciplinary and international findings in geophysics, Molnar helps advance the field of geology across the globe.

A CIRES fellow and active researcher, Molnar offers an innovative approach to the study of geological sciences. His current focus involves studying how the Earth's crust, mantle, mountain ranges and ocean currents influence climate at various geological time scales. His work also provides insight on the risks of earthquakes in densely populated areas.



#### CU BOULDER DISTINGUISHED PROFESSORS

**Douglas R. Seals**Professor, Integrative Physiology



Douglas R. Seals' area of research—human aging—is relevant to all. He studies how biology and lifestyle affect physiological and pathophysiological aging with a focus on cardiovascular aging.

Seals is the senior professor of CU Boulder's aging laboratory, where he works with postdoctoral fellows and students of all educational levels to determine how aging changes physiological function and how interventions can lead to adverse functional changes. Seals' recent work includes assessing how aging decreases motor and cognitive function. By examining interventions that

could potentially lead to longer healthspans, Seals is exploring ways to reduce age-associated decline in motor and cognitive performance.

As co-founder of The Healthy Aging Project, Seals addresses issues with health and health care. The project provides accessible, evidence-based best practices people can adopt for healthy aging.

Seals was educated at the University of Wisconsin-Madison. He has served as editor of *Exercise and Sport Sciences Reviews* and *Journal of Applied Physiology*. He has received numerous awards for his research in aging, including the Herbert H. deVries Award for Distinguished Research in the Field of Aging; NIH, National Institute on Aging MERIT Award; CU Boulder's College of Arts and Sciences Professor of Distinction award; and the Edward F. Adolph Distinguished Lecturer from the American Physiological Society, among others.

Thomas T. Veblen
Professor, Geography



Thomas T. Veblen has dedicated his work to understanding how human activity and natural disturbances affect forest ecology and vegetation. By studying tree rings, Veblen observes how past disturbances, such as natural disasters and wildlife, affected the surrounding ecology. His initial research began in the southern Andes of Chile and Argentina, where his pioneering study focused on disturbance ecology in beech forests. During this time, Veblen also explored how tectonic events direct the dynamics of southern Andean forests. Veblen has also conducted research here in the Rocky Mountains, examining how fire, blowdown and bark beetle

outbreaks affect our state's ecology.

Early in his career, Veblen held a postdoctoral fellowship with the Forest Research Institute of New Zealand, which allowed him to further his research on disturbance ecology and how mammals affect tree death and regeneration. While Veblen's focus remains in both hemispheres, he also investigates the combined effect of fluctuating climatic influences with mass movements, blowdown, fires and introduced animals.

Veblen holds a PhD from the University of California, Berkeley and has earned a John Simon Guggenheim Memorial Fellowship, James J. Parsons Distinguished Career Award from the Association of American Geographers and the Award for Excellence in Research by the Boulder Faculty Assembly, among others.

## CU BOULDER DISTINGUISHED PROFESSORS

#### **Active Distinguished Professors**

**Bernard Amadei**, Civil Environmental and Architectural Engineering

Robert S. Anderson, Geological Sciences; Institute of Arctic and Alpine Research

Kristi S. Anseth, Chemical and Biological Engineering

**Daniel N. Baker**, Astrophysical and Planetary Sciences; Laboratory for Atmospheric and Space Physics

**Christopher Bowman**, Chemical and Biological Engineering

Marvin H. Caruthers, Chemistry and Biochemistry

Thomas R. Cech, Chemistry and Biochemistry

James T. Hynes, Chemistry and Biochemistry

**Leslie Anne Leinwand,** Molecular, Cellular and Developmental Biology

**William Carl Lineberger**, Chemistry and Biochemistry

Steven F. Maier, Psychology and Neuroscience

Jane A. Menken, Sociology; Institute of Behavioral Sciences

Margaret Murnane, Physics

**Zoya Popovic,** Electrical, Computer and Energy Engineering

Daniel J. Scheeres, Aerospace Engineering Sciences

Pierre J. Schlag, University of Colorado Law School

Lorrie Shepard, School of Education

Margaret A. Tolbert, Chemistry and Biochemistry; Cooperative Institute for Research in Environmental Sciences

Linda R. Watkins, Psychology and Neuroscience

Carl E. Wieman, Physics; JILA

#### Retired Distinguished Professors

Frank Stephenson Barnes, Electrical, Computer and Energy Engineering

Roger G. Barry, Geography; Cooperative Institute for Research in Environmental Sciences

Andrzej Ehrenfeucht, Computer Science

Margaret A. Eisenhart, School of Education

**Delbert S. Elliott,** Sociology; Institute of Behavioral Science

Barbara Alpern Engel, History

Fred W. Glover, Leeds School of Business

Kris Gutiérrez, School of Education

**Richard Jessor,** Psychology and Neuroscience; Institute of Behavioral Science

James R. Markusen, Economics

**Richard McCray**, Astrophysical and Planetary Sciences

J. Richard McIntosh, Molecular, Cellular and Developmental Biology

Marjorie K. McIntosh, History

Allan McMurray, College of Music

Norman R. Pace, Molecular, Cellular and Developmental Biology

Wolfgang Schmidt, Mathematics

Charles F. Wilkinson, University of Colorado Law School

William B. Wood, Molecular, Cellular and Developmental Biology

#### **Deceased Distinguished Professors**

Hazel E. Barnes, Philosophy

George Born, Aerospace Engineering Sciences

Kenneth Boulding, Economics

James S. (Stan) Brakhage, Film Studies

Stuart Cook, Psychology and Neuroscience; Institute of Behavioral Science

Stanley Cristol, Chemistry and Biochemistry

Stephen Fischer-Galati, History

David Hawkins, Philosophy

Robert L. Linn, School of Education

**Keith R. Porter,** Molecular, Cellular and Developmental Biology

**David Prescott,** Molecular, Cellular and Developmental Biology

Gilbert White, Geography

#### PRESIDENT'S TEACHING SCHOLARS AT CU BOULDER

This program, established in 1989 as a University of Colorado presidential initiative, honors faculty members who have excelled in teaching and scholarship, creative work or research, and who promote teaching excellence throughout the university. President's Teaching Scholars are chosen for their capacity to improve education and increase its possibilities across the university. They serve as ambassadors for teaching, as well as for research focused on improving teaching and learning.

David R. Grant
Professor. Mathematics



At a young age David R. Grant developed a fondness for math, spending high school summer breaks at Hampshire College exploring the subject. This fascination continued well into higher education, where he obtained degrees from Princeton and MIT and began his research studying arithmetic geometry, a branch of number theory related to algebraic geometry.

After winning the NSF Interdisciplinary Grant in Mathematical Sciences, Grant worked with a CU Boulder colleague in the Department of Electrical, Computer and Energy Engineering to develop coding theory that could benefit national security. This collaboration allowed him to establish and teach coding and

cryptography courses within the Department of Mathematics.

Grant's passion for math is a key component to his career approach, integrating his enthusiasm into his research and teaching. He brings mathematical concepts to life through excitement, inspiring future generations of mathematicians to adopt a similar admiration of the topic. With the goal of sparking passion in youth, he spends summers teaching math to local middle school students as a part of the MathPath summer program.

In 1997, Grant helped develop the Actuarial Studies Program, an interdisciplinary approach to applicable, analytical problem solving. He served as the Department of Mathematics chair from 2013 to 2016 and has been awarded the Excellence in Teaching Award from the Boulder Faculty Assembly.

## PRESIDENT'S TEACHING SCHOLARS AT CUBOULDER

**Active Scholars** 

Brian Argrow, Aerospace Engineering Sciences

Daniel Barth, Psychology and Neuroscience

Martin Bickman, English

Elizabeth Bradley, Computer Science

Lee V. Chambers, History

Diane Atnally Conlin, Art and Art History; Classics

Alexander Cruz, Ecology and Evolutionary Biology

James H. Curry, Applied Mathematics

Scot Douglass, Engineering; Herbst Humanities

Elspeth Dusinberre, Classics

Michael Eisenberg, Computer Science

John L. Falconer, Chemical and Biological Engineering

Noah Finkelstein, Physics

Matthew Ryan Hallowell, Civil, Environmental and Architectural Engineering

David Klaus, Aerospace Engineering Sciences

Clayton Lewis, Computer Science

Andrew Martin, Ecology and Evolutionary Biology

Roseanna Neupauer, Civil, Environmental and Architectural Engineering

Helen Norton, University of Colorado Law School

Valerie Otero, School of Education

Steven J. Pollock, Physics

Harihar Rajaram, Civil, Environmental and Architectural Engineering

Ed Rivers, English

Harvey Segur, Applied Mathematics

J. Michael Shull, Astrophysical and Planetary Sciences

Diane Sieber, Herbst Humanities

Eric Stade, Mathematics

Linda R. Watkins, Psychology and Neuroscience

Carl Wieman, Physics

**Retired Scholars** 

Douglas Burger, English

Anne Costain, Political Science

Stanley A. Deetz, Communication

Michael Grant, Ecology and Evolutionary Biology

Jack Kelso, Anthropology

William Krantz, Chemical Engineering

Ronald Melicher, Leeds School of Business

Dale Meyer, Leeds School of Business

Wesley Morriston, Philosophy

James Palmer, Film Studies

Norton Steuben, University of Colorado Law School

James Symons, Theatre and Dance

John R. Taylor, Physics

Dennis Van Gerven, Anthropology

Marianne Wesson, University of Colorado Law School

**Deceased Scholars** 

Nancy K. Hill, Humanities

Robert Pois, History

**David M. Prescott,** Molecular, Cellular and Developmental Biology

Klaus Timmerhaus, Chemical Engineering

Shelby Wolf, School of Education

#### 2018 Provost's Faculty Achievement Awards

These annual awards are presented to faculty members who have recently offered significant publications or creative contributions in their academic fields. Awardees receive a research grant and a plaque recognizing their achievement.

#### Pre-tenure

Philip Fernbach, Leeds School of Business

Jody Jahn, Communication

Jennifer Kay, Atmospheric and Oceanic Sciences

#### **Tenured**

Susan Jurow, School of Education

Heather Lewandowski, Physics

Xiaodong Liu, Economics

Antje Richter, Asian Languages and Civilizations

Harry Surden, University of Colorado Law School

Edward Van Wesep, Leeds School of Business

# College of Arts and Sciences Professor of Distinction

The honorary title Professor of Distinction is reserved for scholars and artists of national and international distinction who are recognized by their peers as teachers and colleagues of exceptional talent. Appointments to this title are made from those holding the rank of professor in the College of Arts and Sciences.

# Christopher Braider Professor, French and Italian



Christopher Braider's career began at Trinity College in Dublin, where he studied English, French and French literature. After 10 years as a professor at Harvard University, Braider joined CU Boulder's Department of French and Italian in 1992. He filled many roles in the university, including transitional dean of the College of Media, Communication and Information; helping to establish and then co-directing the Center for Humanities and the Arts; and practicing an interdisciplinary spirit as professor and previous chair of two academic departments: French and Italian, and Comparative Literature and Humanities.

Braider's research interests lie in 17th-century French literature, philosophy and literary theory. The author of many publications, his *The Matter of Mind: Reason and Experience in the Age of Descartes* was awarded the MLA's Aldo and Jeanne Scaglione Prize for French and Francophone Studies. This notable monograph gained acclaim for challenging René Descartes' advanced theory of French culture in the 17th century. Braider's book offers a paradigm shift to 17th-century canonical readings of French culture, including theology, art and philosophy.

Braider's involvement in the humanities outside of campus includes his term as the Modern Language Associations' 17th-Century French Literature chair. Notable honors for Braider include the Excellence in Service and Excellence in Research awards from the Boulder Faculty Assembly, as well as the Best Should Teach Gold Award.

Janet L. Jacobs
Professor, Women and Gender Studies



Janet L. Jacobs is a professor of women and gender studies as well as sociology who specializes in religion and gender. Her research covers women, social psychology, religious violence, mass trauma and genocide.

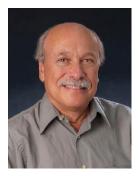
During her career at the University of Colorado Boulder, Jacobs has won the Hazel Barnes Prize—the most prestigious of faculty awards for teaching and research—and the BFA Award for Excellence in Teaching. But before Jacobs began life at CU Boulder as a professor, she was a student here. She arrived as an

undergraduate in 1970 and completed her doctorate in sociology at CU Boulder in 1985.

In 2017, Jacobs published her seventh book, in which she explored how the trauma of the Holocaust impacts its survivors' descendants. Her research in *The Holocaust Across Generations: Trauma and its Inheritance Among Descendants of Survivors* explains how the suffering from the Holocaust became intergenerational and how gender factors into historical trauma.

One of her other books—*Hidden Heritage: The Legacy of the Crypto-Jens*—won the Distinguished Book Award from the Society for the Scientific Study of Religion in 2003. Jacobs has also written more than 20 journal articles during the past 33 years covering topics from genocide and collective memory in Bosnia-Herzegovina to teenage pregnancy.

Mitchell C. Begelman
Professor, Astrophysical and Planetary Sciences



Mitchell C. Begelman researches theoretical and high-energy astrophysics, with a particular focus on the formation and growth of supermassive black holes. He performs analytic and computational studies of the hydrodynamics of accretion flows around black holes and studies the role of feedback from active galactic nuclei (AGN) on galaxies and clusters.

A fellow of JILA (formerly the Joint Institute for Laboratory Astrophysics), he has taught widely, lecturing and holding titles in France, Germany, Japan, Poland, Spain, Sweden and the United Kingdom. He is author of two popular books, *Gravity's* 

Fatal Attraction: Black Holes in the Universe (with Martin Rees, now in a second revised edition), and Turn Right at Orion, in which he takes readers to the center of the Milky Way to witness the births and deaths of stars and planets, and to experience the crushing forces at the perimeter of a black hole.

Recipient of the BFA Award for Excellence in Research, Scholarly and Creative Work at CU Boulder, Begelman has also received honors from the School of Natural Science, Thomson Reuters and the American Institute of Physics.

#### Distinguished Research Lectureship

The Distinguished Research Lectureship is among the highest honors bestowed by the faculty upon its members at CU Boulder. It honors tenured faculty members widely recognized for a distinguished body of academic or creative achievement as well as for contributions to the educational and service missions of CU Boulder. Each awardee receives an honorarium and presents a lecture on his or her research to the wider university community. More than 100 CU Boulder faculty members have been selected for this honor.

Kristine M. Larson
Professor Emeritus, Aerospace Engineering Sciences



After earning her doctorate in geophysics from the University of California, San Diego in 1990, Kristine M. Larson began her first professoriate at the University of Colorado Boulder. This year she signed her retirement contract, but we thank her for the 28 years she has researched and taught in the Department Aerospace Engineering Sciences.

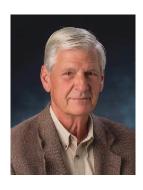
Her work focused on remote sensing, satellite navigation and the uses of the Global Positioning System. In 2014, Larson and her team won the Prince Sultan Bin Abdulaziz International Creativity Prize for Water after they used undesirable GPS signal

noise to determine the water content of an area near the GPS devices' antenna. This use of GPS signals is called GPS interferometric reflectometry, and it helps produce environmental data on an area by using existing GPS infrastructure.

Larson, an American Geophysical Union fellow, recently won the Humboldt Foundation Research Prize and the Governor's Award for High Impact Research. She has also received the Christiaan Huygens Medal from the International European Geosciences Union, CU Boulder's Faculty Assembly Research Award and the AGU Geodesy Section Award.

Though the majority of her work was completed at CU Boulder, Larson also researched at USGS Hawaii Volcano Observatory and taught at Stanford University as a visiting associate professor of geophysics in 1998.

William M. Lewis
Professor, Ecology and Evolutionary Biology; Cooperative Institute for Research in Environmental Sciences

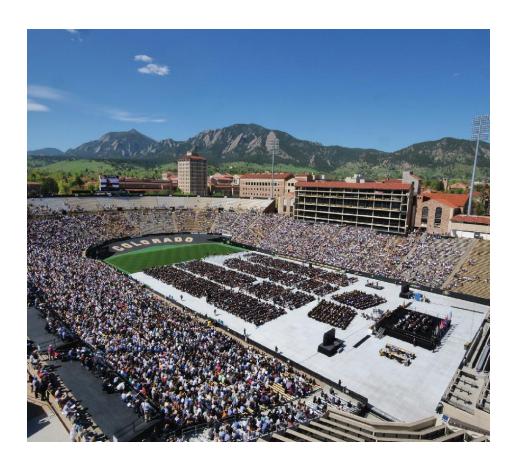


William M. Lewis began his career in 1974 at the University of Georgia, but he left his alma mater that year to teach biology at the University of Colorado Boulder. During the past 44 years, Lewis has specialized in limnology and taught for the Department of Ecology and Evolutionary Biology.

Lewis researches the biochemistry of nitrogen, food webs and biological production while serving as the associate director of the Cooperative Institute for Research in Environmental Sciences and the director of the CIRES Center for Limnology. His current work focuses on environmental cycling of nitrogen in freshwater

ecosystems in Colorado. With the help of his students, Lewis' studies on the South Platte River show that the river has high quantities of denitrification, a process that converts nitrate to nitrogen gas. Since large amounts of nitrate from wastewater promotes the growth of algae and aquatic plants, this process is environmentally beneficial. He also studies the ecology of plankton and the trophic ecology of lakes.

Lewis has held fellowships with the American Association for the Advancement of Science and John Simon Guggenheim Memorial Foundation. He has won the Baldi Award from the International Society for Limnology and a Certificate of Appreciation for Outstanding Services from the National Research Council's Water Science and Technology Board.



## CU SYSTEM FACULTY AWARDS

#### **Hazel Barnes Prize**

The \$20,000 Hazel Barnes Prize is the most prestigious honor awarded to a faculty member by the university, and it recognizes the enriching relationship between teaching and research. It was established in 1991 by former chancellor James Corbridge in honor of CU Boulder philosophy professor emerita Hazel Barnes, who taught at CU Boulder from 1943 to 1986 and was noted for her interpretations of the works of French philosopher Jean-Paul Sartre. Nominees are tenured faculty members who not only are outstanding teachers but who also have distinguished records in research and scholarship.

**Sarah A. Krakoff**Professor, University of Colorado School of Law



Sarah A. Krakoff, the Raphael J. Moses Professor of Law, specializes in American Indian law, environmental justice law, and natural resources and public land law. Her passion for civil rights and low-income communities began while she earned her Juris Doctorate at the University of California, Berkeley.

This passion led Krakoff to win an Equal Justice Works Fellowship while she worked at DNA-Peoples Legal Services on the Navajo Nation. She first practiced American Indian law in Tuba City, Arizona.

Krakoff founded the American Indian Law Clinic after joining the faculty at the University of Colorado Boulder in 1996. After she acquired permanent funding for the clinic from the university in 1999, Krakoff stepped down as its director and pursued tenure.

She currently teaches the Law of the River course that ends with a two-week rafting trip down the Colorado River in the Grand Canyon. She also leads the Acequia Project, in which students, professors and practicing lawyers provide free services for low-income farmers with water rights issues in the San Luis Valley of Colorado.

Krakoff is the co-author of American Indian Law: Cases and Commentary and Tribes, Land, and Environment. Her work has also appeared in Harvard Environmental Law Review, Stanford Law Review and the California Law Review.

## Kayden Book Award

Named for Eugene M. Kayden, a 1912 CU Boulder alumnus who went on to a distinguished career as a scholar and teacher of economics, this award is open to faculty members in the humanities. Awardees receive a research stipend, and their departments receive grants to organize a one-day, author-meets-critics symposium on their award-winning books.

**Brian A. Catlos**Professor, Religious Studies



In 2010, Brian A. Catlos joined the Department of Religious Studies at the University of Colorado Boulder, where he is now a professor and chair. He has traveled to Canada, Israel, Italy, Spain and many more countries in pursuit of his work of Muslim-Christian-Jewish interactions in the Pre-Modern Mediterranean.

Catlos is the undergraduate director for religious studies, the director of the CU Mediterranean Studies Group and the co-director of The Mediterranean Seminar, an international effort to increase interest and academic research in Mediterranean studies.

Catlos has won close to 100 awards and honors, including the Charles Homer Medal, the Governor-General of Canada's Gold Medal for Academic Achievement and two fellowships for university teachers from the National Endowment for the Humanities.

The first of his eight books, *The Victors and the Vanquished*, won two prizes from the American Historical Association, and this year his book *Muslims of Latin Christendom* won its third award. Catlos has won the Kayden Book Award, the Charles Homer Haskins Medal, and in 2014 the Middle East Studies Association awarded it the Albert Hourani Book Prize for best book on Middle Eastern and Islamic history.

Aside from his scholarly books, Catlos also educates and inspires travelers as a freelance travel writer who specializes in the Languedoc-Roussillon area of southern France.

#### CU SYSTEM FACULTY AWARDS

#### Kayden Book Award, continued

# Fredy Gonzalez Assistant Professor, History



Fredy Gonzalez teaches Latin American history to the students of the University of Colorado Boulder, but he specializes in the history of Chinese immigrants who lived in Latin America during the 20th century. He also researches Chinese immigrants who lived in secret societies from the 19th century through the 1930s.

His book, *Paisanos Chinos: Transpacific Politics among Chinese Immi-grants in Mexico*, won the Kayden Book Award this year. This book chronicles how Chinese Mexicans confronted Mexico's anti-Chinese movement of 1931 by bolstering their ties to China. The Western History Association awarded both of Gonzalez's articles.

"Chinese Dragon and Eagle of Anáhuac: The Local, National, and International Implications of the Ensenada Anti-Chinese Campaign of 1934" won the Bert Fireman Award, and "Chinese Braceros? Chinese Mexican Workers in the United States during World War II" won the Oscar O. Winther Award. In 2016, Gonzalez was awarded a Fulbright U.S. Scholar grant to Taipei, Taiwan. He is one of approximately 370,000 Fulbright students and scholars, who have studied and taught in 160 countries around the world.

Gonzalez earned a doctorate in history from Yale University in 2013. His dissertation, "Won't Be Bullied Anymore: Chinese-Mexican Relations and the Chinese Community in Mexico, 1931-1971," won him the Arthur and Mary Wright Prize for outstanding dissertation.



## Elizabeth D. Gee Memorial Lectureship Award

This award honors an outstanding faculty member for efforts to advance women in academia, interdisciplinary scholarly contributions and distinguished teaching. Instituted in 1992, the award is named for Elizabeth Gee, a faculty member in the Health Sciences Center School of Nursing and the late wife of former CU President Gordon Gee. The Gee Award is the only award in the CU system that specifically recognizes outstanding work on women's issues and efforts to advance women in the academy.

Jan Whitt
Professor, Journalism



Jan Whitt began her career at *The Dallas Morning News* in Dallas, Texas. She is now a professor of journalism and literature and media studies who also teaches in the Department of Women and Gender Studies.

Many of her books and articles examine diversity in literature and the media. Whitt researches and leads courses about the women who shaped today's media, depictions of women in culture and LGBTQ issues.

Her book Women in American Journalism: A New History was a finalist for the Frank Luther Mott Award. Whitt is also known for Allegory and the Modern Southern Novel and Burning Crosses and Activist Journalism: Hazel Brannon Smith and the Mississippi Civil Rights Movement.

Since Whitt began teaching at CU Boulder, the Boulder Faculty Assembly awarded her the Award for Excellence in Research, Scholarly and Creative Work and the Award for Excellence in Teaching. She has also received the Payden Award for Faculty Excellence and the MaryAnn Yodelis Smith Research Award from the Association for Journalism and Mass Communication.

Her articles have appeared in Journalism and Mass Communication Quarterly, Society of Environmental Journalists Journal, Journal of the Gilded Age and Progressive Era, Women's Studies, Journal of Broadcasting and Electronic Media, Journal of Popular Film and Television, Journal of the West and the Journal of Homosexuality.

#### CU SYSTEM FACULTY AWARDS

#### President's Diversity Award

Given by the president of the University of Colorado statewide system, this award can be presented to faculty, students, staff, and academic or administrative units that have contributed to maintaining CU as a diverse scholarly community, and one that is welcoming and nurturing to myriad perspectives. There may be up to four awards per year.

# Violeta Raquel Chapin

Clinical Professor, University of Colorado School of Law



Because Violeta Raquel Chapin grew up in a Central American community that did not have easily accessible legal representation, she has a passion for helping low-income people navigate the legal system of the United States.

When Chapin earned her Juris Doctorate at New York University in 2002, the university awarded her the Black, Latino, Asian Pacific American Law Alumni Association Public Service Scholarship Award, which acknowledges students who want to go into public service.

As a clinical professor she tries to pass on her desire for public service through the Deferred Action Project, a clinic in which students work with clients who qualified for Deferred Action for Childhood Arrivals when they arrived in the United States. Through this partnership the students receive experience in criminal and immigration law, and examine racial biases within Colorado's justice system. Chapin hopes her law clinics help her students value what their law degrees can do to change the world. When she was a law student she took a Death Penalty Clinic and represented a client on death row in Alabama. She said the work of the clinic and the students extended her client's life, and the weight of her efforts hasn't left her.

## **Excellence in Leadership and Service**

# Arturo Aldama Associate Professor. Ethnic Studies



Arturo Aldama began his academic career at Arizona State University in 1996 in the Department of Chicana and Chicano Studies. He left Tucson, Arizona, for the University of Colorado Boulder in 2003 to become an associate professor in ethnic studies. Aldama specializes in Chicana and Chicano culture, literature, music and film. He helped create an exhibit on Mexican-American history throughout the Southwest at CU Boulder's Norlin Library.

Aldama, now the associate chair of the Department of Ethnic Studies, also examines decolonial theories of race and gender, and

transnational border controversies.

Until 2007, he was also the director of the Center for Studies of Ethnicity and Race in the Américas at CU Boulder. The university awarded Aldama the Eugene Kayden Award and the Outreach Grant in 2009.

Some of his most recent books are Performing the US Latina and Latino Borderlands; Comparative Indigeneities of the Américas: Toward a Hemispheric Approach; Enduring Legacies: Ethnic Histories and Cultures of Colorado; and Violence and the Body: Race, Gender and the State. His publications appear in Western Historical Quarterly, Latino Studies and Arizona Journal of Hispanic Cultural Studies.

James C. Green
Professor, Astrophysical and Planetary Sciences



James C. Green specializes in the creation of space instrumentation for astrophysical research. He also studies the theoretical cosmology of the early universe, hot stars and the intergalactic medium—the hot gas between galaxies.

Green began his work at the University of Colorado Boulder as a research associate for the Center for Astrophysics and Space Astronomy. He has also worked as the principal investigator for the Ultraviolet Sounding Rocket program, the Cosmic Origins Spectrograph—a Hubble Space Telescope instrument used during Mission 4 in 2009—and the spectrograph portion of the Far

Ultraviolet Spectroscopic Explorer. Green designed and built the spectrograph optical design for FUSE.

His work with NASA earned him the NASA Exceptional Public Service Medal and the NASA Group Achievement Award, as well as the Robert H. Goddard Exceptional Achievement: Engineering—Teams for their work on Hubble instrument development. He has served as chair of the Department of Astrophysical and Planetary Sciences, director of the Center for Astrophysics and Space Astronomy and co-chair of the first Wide Field Infrared Survey Telescope Science Definition Team with NASA.

# Matthew McQueen Associate Professor, Integrative Physiology



Matthew McQueen joined the faculty at the University of Colorado Boulder in the Department of Psychology—the same university and department from which he received his bachelor's degree in 1996.

McQueen researches and teaches in the integrative physiology and epidemiology departments. His work focuses on the genetic markers for complex diseases, such as psychiatric, behavioral and neurological disorders. His interest in psychiatric disorders dates back to his doctoral research of bipolar disorder.

Recently, McQueen has been developing statistical and epidemiological methods that analyze genetic samples from families and populations. Through his research at the Institute for Behavior Genetics at CU Boulder, he started studying addiction, impulsivity and disinhibition. He also directs the Public Health Program and Epidemiology Laboratory.

In 2010, McQueen won the David Clough Faculty Award. While he was still a graduate student, the Harvard School of Public Health awarded him the Certificate of Distinction in Teaching.

His articles have appeared in PLOS One, Clinical Science, American Journal of Epidemiology, Alcohol, Nature Communications, Psychosomatic Medicine, Aging, BMC Genomics, Orthopaedic Journal of Sports Medicine and the Journal of the American Heart Association.

Karen E. Ramirez
Senior Instructor, Miramontes Arts & Sciences Program



Since Karen E. Ramirez began working at the University of Colorado Boulder in 2000, she has taught in eight departments and academic centers across campus, including the Department of Women and Gender Studies and the Center of the American West.

Ramirez is also assistant director of Arts, Humanities, and Social Science Education for the Miramontes Arts and Sciences Program, and co-director of the CU-Dialogues Program. Because of Ramirez's efforts, these programs have received almost \$400,000 in grants since 2009. She also served as associate director of the Sewall Residential Academic Program and held multiple

leadership positions within the Western Literature Association.

In 2010, Ramirez began using dialogism and narrative to examine conversations and learn about cross-cultural experiences and dialogism's role in advancing inclusive pedagogy. She has also published on narrative mappings of place in 19th- and 20th-century western American literature, and described how these narrative mappings correlate with present-day public memory.

Her book, Reading Helen Hunt Jackson's Ramona, dissects the 1884 novel's composition, and the academic and public analyses of the novel. Her other publications appear in Academic Exchange Quarterly, Great Plain Quarterly and Chemical Engineering Education.

#### **Excellence in Research, Scholarly and Creative Work**

**Donna M. Goldstein**Professor, Anthropology



Donna M. Goldstein, a professor of anthropology and media studies, researches gender, race, poverty and violence in Brazil. Her current focus is in medical anthropology, as she examines pharmaceutical politics, neoliberalism, regulation and bioethics in Argentina and the United States. She is also working on a project about the history of genetics, the health of populations, Cold War science and the future of nuclear energy in Brazil. Through her partnership with the Getúlio Vargas Foundation, Goldstein researches the health of communities living near the Angra nuclear complex in Brazil.

She is one of the founders and the current director of the Latin American Studies Center at the University of Colorado Boulder and served as the director of the Center to Advance Research and Teaching in the Social Sciences until 2016. Throughout her career, she has served as chair of the Department of Anthropology, and she has been awarded the Rockefeller Fellowship in the Humanities at the State University at Campinas in São Paulo.

Since joining the the CU Boulder faculty in 1994, Goldstein has received the Outstanding Graduate Student Mentor Faculty Award, the Eaton Faculty Award and the Dorothy Martin Faculty Award. She has won the Residence Life Academic Teaching Award twice. Among her other awards was the Margaret Mead Award from the Society for Applied Anthropology and American Anthropological Association for her book Langhter Out of Place: Race, Class, Violence, and Sexuality.

**David Shneer** Professor, History



David Shneer researches Russian Jewish history, Yiddish culture, diaspora studies, Jews and sexuality, and Holocaust studies. His focus is on 20th-century Jewish, European and Russian history.

Shneer is working on a project titled *Not On Their Last Road*, which examines how a Dutch-Jewish Yiddish-singing cabaret performer's life exemplifies the part that Yiddish musical culture played during the collision of fascism and Communism. One of his other projects, *Grief: A History of the World's First Holocaust Liberation Photograph*, recounts the impact of first well-known Holocaust liberation photos from southern Russia in 1942. His latest book,

Through Soviet Jewish Eyes: Photography, War, and the Holocaust, won the Association for Jewish Studies Jordan Schnitzer Prize, and it was his second book to be a finalist for the National Jewish Book Award. His book *Queer Jews* was a finalist for the Lambda Literary Award.

Shneer is a professor of history, religious studies and Jewish studies, as well as the Louis P. Singer Endowed Chair for the Department of Jewish History and chair of the Department of Religious Studies. He is also the co-editor-in-chief of *East European Jewish Affairs*. Over his career, Shneer has had various distinguished fellowships, such as the Hadassah Brandeis Institute Fellowship for Research on Women and Gender and the Social Science Research Council Research Fellowship.

#### Excellence in Research, Scholarly and Creative Work, continued

#### **Katharine Suding**

Professor, Institute of Arctic and Alpine Research



Katharine Suding is a plant community ecologist who researches ecosystems, landscapes and population biology. In her work with the Department of Ecology and Evolutionary Biology, she focuses on land restoration, invasion biology and environmental change. Suding's research helps create solutions to ecological issues, such as how species affect ecosystem processes and plant-soil feedbacks. Her work is conducted in close partnership with conservation groups, land managers and governmental agencies, providing ecology solutions toward biodiversity and human well-being.

Suding joined the University of Colorado Boulder as a research scientist for the Institute for Arctic and Alpine Research, eventually transitioning into her current fellowship role with the institute. She has been awarded renowned honors for her research and work, including the Highly Cited Researcher award from ISI Web of Science, Young Investigator Research Award from the Andrew W.Mellon Foundation and the Promising Scientist in Natural Resources award. Over the course of her career, Suding has won prestigious fellowships from institutions such as the Ecological Society of America and Centre National de la Recherché Scientifique France.

**Kenneth P. Wright**Professor, Integrative Physiology



Kenneth P. Wright has devoted his research to the study of sleep and neurological behaviors. His initial work began at the University of Arizona's Sleep and Cognition Unit, providing a foundation for his study of sleep patterns and medicine. In 2002 he joined the faculty at the University of Colorado Boulder in the Department of Kinesiology and Applied Physiology.

Wright's pioneering research of the human circadian clock has led to a deep understanding of the sleep-wake balance that can impact fatigue, memory, mood, learning and alertness. His current research focuses on how insufficient sleep affects human

health and safety, as well as offering insight into how people can re-establish their misaligned circadian rhythms. His work has been published in notable publications, including *Metabolism, Journal of Sleep Research, Sleep Medicine Reviews, Current Biology, Obesity Reviews* and *Neurobiology of Sleep and Circadian Rhythms*.

Notable honors for Wright include the Provost's Faculty Achievement Award from CU Boulder, the Distinguished Service Award and the J. Christian Gillin, M.D., Research Award from the Sleep Research Society.

# Paul Youngquist Professor, English



Paul Youngquist's research interests lie at the intersection of British literature; cultural studies; literary theory; popular culture, film and digital media; and romanticism. An expert in British Romanticism, he researches the relationship between European and African cultures in the West Indies during the 18th century. Youngquist focuses on how displaced Africans impacted the economic and cultural development of English-speaking communities in the late 1700s.

His latest work, A Pure Solar World: Sun Ra and the Birth of Afrofuturism, was a finalist for the Marfield Prize for Arts Writing and

the Colorado Book Award. He also won an honorable mention for the Prose Award for Music and the Performing Arts. Youngquist uses fiction to examine culture and explores the intersection of contemporary science fiction and cultural critique.

Youngquist has been a significant member of the CU Boulder community, first obtaining his undergraduate degree at the university and then joining the faculty in 1980. He has been honored with awards for teaching and has earned grants from CU Boulder, Penn State University, *Victorians Institute Journal* and the University of Virginia.

#### **Excellence in Teaching**

Nichole Barger
Associate Professor, Ecology and Evolutionary Biology



Nichole Barger researches how climate change and land use affect soil resources and plant communities in dryland ecosystems. She strives to understand the resilience of the land after human and natural disturbances influence aridlandscapes.

Barger joined CU Boulder in 2003 as a postdoctoral research scientist in the Institute of Arctic and Alpine Research and added teaching to her résumé in 2007. She partners with U.S. governmental agencies to work on land degradation and restoration problems, such as the environmental risks of fire mitigation treatments; forest decline and regeneration; and the reclamation of dryland

ecosystems. She has also researched conservation and management issues in Inner Mongolia, Venezuela, the Namib Desert in Namibia and the Cape Floristic region of South Africa. Her work appears in many journals, including *Ecography, Plant and Soil, Rangeland Ecology and Management, Ecosphere, Applied and Environmental Microbiology* and *Global Change Biology*.

Barger's notable honors include the Chancellor's Excellence in STEM Education Award for graduate instruction in STEM fields, the National Parks Ecological Research Fellowship and the Canon National Parks Science Scholars Fellowship.

#### Excellence in Teaching, continued

#### Jeanne Nielsen Clelland

Professor, Mathematics



Jeanne Nielsen Clelland specializes in differential geometry, a form of mathematics that approaches the geometric aspects of curves and surfaces with calculus. She studies partial differential equations, as well as differential equations that occur naturally in differential geometry. This research focus allows her to apply mathematical theory to conservation laws, intermediate equations, Backlund transformations and sub-Finsler geometry with applications to control theory.

Clelland's current research focuses on Backlund transformations for hyperbolic partial differential equations, isometric immersion

of Riemannian manifolds, and geometric structures associated to control systems that are linear or affine linear in the control variables.

She published her first book, From Frenet to Cartan: The Method of Moring Frames, in 2017. Her other published works appear in Differential Geometry and its Applications, Proceedings of the American Mathematical Society, the Journal of Differential Equations, the Asian Journal of Mathematics and the Journal of Geometry and Physics, among others. In addition to this year's award for excellence, Clelland has been honored as a School of Mathematics Member by the Institute for Advanced Study.

Elizabeth Dutro
Professor, School of Education



Elizabeth Dutro studies gender, class and race in relation to literacy. Her research focuses on literacy education in schools in high-poverty neighborhoods, and the duty to provide equal reading and writing education to all.

Dutro's interest in the intersections of gender, race and class with literacy education began when she worked in elementary education. She saw how her students used literacy skills to socially and academically navigate within schools, encouraging Dutro to further research her experience. She has examined children's literary experiences within and outside of the classroom with social theo-

ries such as poststructural and feminist literary criticisms.

Dutro's current research is focused on how children's responses to traumatic experiences influence their learning abilities at school. She's also interested in the consequences of different responses to difficult situations, and the role of education and schools to meet the needs of effective learning centers in young students' lives.

She is recipient of the Best Should Teach Gold Award and the Provost Faculty Achievement Award from CU Boulder. Additional awards include the Frank Pajares Award from Theory of Practice, and the Alan C. Purves Award and the Promising Researcher Award from the National Council of Teachers of English.

# Andrea Feldman Senior Instructor, Program for Writing and Rhetoric



Andrea Feldman studies global literacy and second language writing. She has conducted work across the globe in countries including China, Ecuador, Egypt, Iceland, India, Iran, Kuwait and South Korea.

Feldman's work encompasses service learning and civic engagement with regard to immigrant integration. She has set up workshops and conferences at CU Boulder to connect workers, students and faculty, helping to welcome immigrants and international students into the community. As coordinator of International Student Services, she is one of the main faculty members responsible

for increasing enrollment among international students, and she helps instruct fellow educators on how to teach English as a second language.

Her current area of research focuses on cross-cultural rhetoric, exploring how people gain reading and writing skills digitally. She has taught writing and communication workshops at the National Center for Atmospheric Research, Seattle Pacific University, and within the Department of Linguistics and East Asian Languages at CU Boulder.

Marcia A. Yonemoto
Professor, History



Marcia A. Yonemoto's work integrates her background in Japanese history with women's and family history, historical methodology, and global history. Her research interests include international adoption, particularly adoption within Japan since the 1600s.

Yonemoto's latest book, *The Problem of Women in Early Modern Japan*, details the history of gender and women in early modern Japan. In 2003 she published her first book, *Mapping Early Modern Japan: Space, Place, and Culture in the Tokugawa Period, 1603-1868*, which discusses the role maps, travel writing, popular fiction, poetry and encyclopedias had in geographically orienting Japanese

people of all economic classes during that era.

Yonemoto's work has appeared in many journals, including the *Journal of Japanese Studies*, the *Journal of the Economic and Social History of the Orient*, the *U.S.-Japan Women's Journal*, the *Journal of Asian Studies* and the *Geographical Review*. She was awarded the Association for Asian Studies Northeast Asia Council Japan Studies Grant, as well as the Summer Stipends Award by the National Endowment for the Humanities.

Each year, faculty members at CU Boulder receive many honors and recognitions from beyond campus. They range from the local to the international and honor the work of faculty in teaching, research and service. The following are some of the most prestigious awards. They serve as a sample of the much larger list of recognitions garnered by our faculty.

#### American Academy of Arts and Sciences

Founded in 1780, the American Academy of Arts and Sciences is an international learned society composed of the world's leading scientists, scholars, artists, business people and public leaders. The academy is renowned for providing reasoned commentary on matters of public policy, governance and education.

Natalie Ahn
Professor, Chemistry and Biochemistry



Natalie Ahn is a Professor of Distinction in the Department of Chemistry and Biochemistry as well as the associate director of the BioFrontiers Institute. Her areas of expertise are cell signaling, molecular biophysics, and informatics and proteomics, and she specializes in enzymatic and cellular mechanisms underlying cell signal transduction.

Ahn has used mass spectrometry to investigate how cells communicate with each other and their surroundings. Her work has been critical to the discovery of mitogen-activated protein kinase cascade, and she identified MAP kinase as important targets

for anti-cancer therapies. Ahn also developed the use of functional proteomics and mass spectrometry for signal transduction research. Because of her research regarding cell growth and division, fellow scientists can better understand the characteristics of cancerous cells and their ability to multiply.

In 2018, Ahn was named a fellow in the American Academy of Arts and Sciences. Additionally, she is a member of the prestigious National Academy of Sciences due to her notable and original research. She also has won the Eli Lilly Biochemistry Academic Award, the Searle Scholarship Award and the Merck Fellowship Award.

Her scholarly work appears in many publications, including *Molecular and Cellular Proteomics*, Science, Cell Regulation, Scientific Reports, eLife, Molecular and Cellular Biology and the Journal of the American Society for Mass Spectrometry.

#### Henry C. Kapteyn Professor, Physics



Henry C. Kapteyn's innovative research has greatly influenced modern laser technology, and the more intense, ultrafast laser sources he's developed can impact the future research of atoms and molecules. Kapteyn's work includes creating methods to produce coherent X-rays using tabletop-scale laser technology. Kapteyn and his research team created a tabletop X-ray laser source that can generate short bursts for the first time, used to further investigate dynamic processes in atoms and molecules.

Kapteyn's renowned research has earned him multiple honors, including the R.W. Wood Prize from the Optical Society of

America, the National Science Foundation Young Investigator award and the 2013 Inventor of the Year for the Office of Technology Transfer, as well as fellowships from JILA, the American Association for the Advancement of Science, the American Academy of Arts and Sciences and the Alfred P. Sloan Foundation, among many others.

He has published hundreds of scholarly research articles, which have appeared in publications such as *Ultramicroscopy*, *Optica*, *Nature Photonics*, *Optics Express* and the *Proceedings of the National Academy of Sciences*.

#### **Active Members**

**Thomas Blumenthal,** Molecular, Cellular and Developmental Biology (2010)

Marvin H. Caruthers, Chemistry and Biochemistry (1994)

Thomas R. Cech, Chemistry and Biochemistry (1988)

Robert Colwell, University of Colorado Museum of Natural History (2011)

Eric Cornell, Physics; JILA (2005)

**Lawrence Gold,** Molecular, Cellular and Developmental Biology (1993)

James T. Hynes, Chemistry and Biochemistry (2008)

Alison M. Jaggar, Women and Gender Studies (2017)

**Leslie Anne Leinwand,** Molecular, Cellular and Developmental Biology (2014)

William Carl Lineberger, Chemistry and Biochemistry; JILA (1995)

Jane A. Menken, Sociology; Institute of Behavioral Science (1990)

Josef Michl, Chemistry and Biochemistry (1999)

Margaret Murnane, Physics (2006)

**David Nesbitt**, Chemistry and Biochemistry; Physics (2014)

Roy Robert Parker, Chemistry and Biochemistry (2010)

Veronica Vaida, Chemistry and Biochemistry (2012)

Carl E. Wieman, Center for Science Education (1998)

David Wineland, Physics (2014)

#### **Retired Members**

J. Richard McIntosh, Molecular, Cellular and Developmental Biology (1999)

**Robert F. Nagel**, University of Colorado Law School (2003)

Norman R. Pace, Molecular, Cellular and Developmental Biology (1991)

Wolfgang Schmidt, Mathematics (1994)

**Noboru Sueoka,** Molecular, Cellular and Developmental Biology (1969)

William B. Wood, Molecular, Cellular and Developmental Biology (1976)

#### **Deceased Members**

Linda S. Cordell, Anthropology (2008)

Charles H. DePuy, Chemistry and Biochemistry (2003)

**Deborah Jin,** Physics; JILA; National Institute of Standards and Technology (2007)

David M. Prescott, Molecular, Cellular and Developmental Biology (1970)

Walter Orr Roberts, Astro-geophysics (1960)

Gilbert White, Geography (1969)

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Founded in 1848, the American Association for the Advancement of Science is the world's largest general scientific society and publisher of the journal *Science*. Fellows of the association are elected by their peers in recognition of their scientifically or socially distinguished efforts to advance science or its applications.

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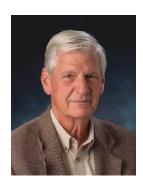


Marvin H. Caruthers is a Distinguished Professor and has been a part of the CU Boulder community since 1973, researching DNA synthesis, nucleic acid chemistry and biochemistry. His pioneering research involved developing techniques used to chemically synthesize DNA that were inevitably used in "gene machines." This work allowed Caruthers and his team to synthesize DNA onto glass chips, inspiring the development of instruments used to synthesize a length of DNA as long as the human genome. In the future, Caruthers and his team hope to triple the length of synthesizable DNA.

Caruthers has advanced the fields of chemistry and biochemistry, and has been a leader in the biotechnology industry. He helped found and invest in many industry companies in the past 20 years, and in 2007 he was a large contributor to the development of the biotechnology building at CU Boulder, which is named after Caruthers' late wife and former adjunct professor in the chemistry and biochemistry department, Jennie Smoly Caruthers.

This year, Caruthers was elected into the National Inventors Hall of Fame, and he was awarded membership into the American Association for the Advancement of Science. He's also won a Guggenheim Fellowship and the National Academy of Science Award in Chemical Sciences. In 2006, President George W. Bush's administration awarded him the National Medal of Science. Caruthers is a fellow of the American Academy of Arts and Sciences and the National Academy of Sciences.

William M. Lewis
Professor, Cooperative Institute for Research and in Environmental Sciences

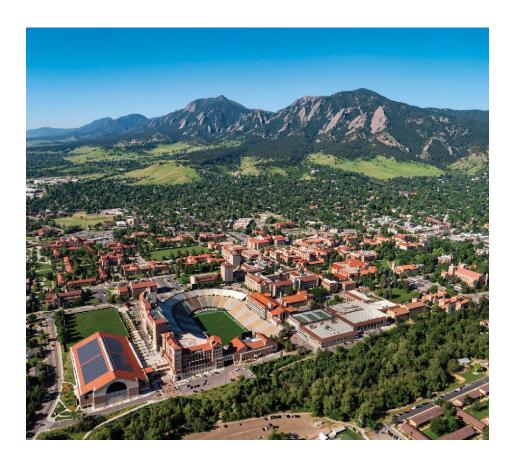


William M. Lewis is the associate director of the Cooperative Institute for Research in Environmental Sciences and the director of CIRES Center for Limnology, where he conducts research on streams, lakes, rivers and wetlands throughout Colorado and the tropics of the Western Hemisphere. His research also examines food webs and communities that live in aquatic habitats, the chemistry of atmospheric deposition, and the ecology of plankton, particularly phytoplankton.

In his current research, Lewis and his team of students are examining the environmental cycle of nitrogen in different

aquatic ecosystems in Colorado. They've discovered that the South Platte River has very high levels of denitrification—a process that converts nitrates to nitrogen gas. This means the river is naturally disposing of excess nitrates from wastewater that could have led to unwanted algae or aquatic vascular plants in the South Platte River.

For his extraordinary work in advancing the field of limnology, Lewis has been honored as an American Association for the Advancement of Science fellow, Guggenheim fellow and a recipient of the Baldi Award from the International Society for Limnology. Other organizations, such as the American Fisheries Society, and the Board of Environmental Studies and Toxicology out of the National Research Council, have also celebrated Lewis' work.



#### American Council of Learned Societies Fellows

The American Council of Learned Societies is the leading private institution supporting scholars in the humanities and related social sciences at the doctoral and postdoctoral levels. In the 2017–18 competition year, the ACLS awarded more than \$24 million in fellowships and grants to individual scholars for excellence in research in the humanities and related social sciences.

#### Previous CU Boulder ACLS Fellows

Virginia DeJohn Anderson, History (1999)

Thomas G. Andrews, History (2007)

Andrew Cowell, Linguistics; French and Italian (2009)

Elspeth Dusinberre, Classics (2006)

Elizabeth Anne Fenn, History (2005)

David S. Ferris, Humanities (2002)

Paul Gordon, Humanities (1994)

Gerardo Gutiérrez, Anthropology (2016)

Myron Gutmann, Institute of Behavior Science (1983)

Jill Lindsey Harrison, Sociology (2017)

Arthur A. Joyce, Anthropology (2005)

Miriam L. Kadia, History (2014)

**Terry F. Kleeman**, Asian Languages and Civilization (2009)

Paul W. Kroll, Asian Languages and Civilization (1979, 1985, 1996)

**Steve Lekson**, University of Colorado Museum of Natural History (2003)

Anne E. Lester, History (2011)

Patricia N. Limerick, History (1989)

Rebecca Maloy, Musicology (2016)

Mithi Mukherjee, History (2016)

Robert C. Pasnau, Philosophy (2003)

Mark A. Pittenger, History (1994)

Erin Shay, Linguistics (2012)

William Wei, History (1979)

Timothy B. Weston, History (2005)

Phoebe S.K. Young, History (2009)

#### Retired

Marilyn Ruth Brown, Art and Art History (1988)

Deborah J. Haynes, Art and Art History (2002)

C. Nicholas Lee, Germanic and Slavic Languages (1975)

Marjorie K. McIntosh, History (1972)

Edward G. Ruestow, History (1977)

Rodney Leon Taylor, Religious Studies (1976)

Michael E. Zimmerman, Philosophy (1999)

#### American Philosophical Society

An internationally esteemed scholarly organization, the American Philosophical Society promotes the creation of useful knowledge in the sciences and humanities, encouraging excellence in scholarly research by supporting professional meetings and publications, and by providing library resources and opportunities for community outreach. The country's first learned society, the APS has played an important role in American cultural and intellectual life for over 250 years.

Paul W. Kroll
Professor, Asian Languages and Civilizations



A professor of Chinese, Paul W. Kroll examines language, history, Chinese literature and religion in the late Han through Tang periods, specializing in ancient and medieval Chinese texts from the Wei-Jin-Nanbeichao and Tang periods (approximately the third to 10th centuries A.D.). He was the founding chair of CU Boulder's Department of Oriental Languages and Literature (now the Department of Asian Languages and Civilizations). During his time as chair, he heavily invested in developing the department's Chinese program for graduate students.

In 2014, Kroll's groundbreaking work titled A Student's Dictionary of Classical and Medieval Chinese became the first Chinese-English dictionary for written Chinese circa A.D. 1000. Other notable publications include Reading Medieval Chinese Poetry: Text, Context, Culture and Dharma Bell and Dharani Pillar: Li Po's Buddhist Inscriptions.

Kroll's extraordinary work earned him membership into the American Philosophical Society. He is CU Boulder's first faculty member within the humanities to join the society. He has also won a Guggenheim Fellowship, a National Endowment for the Humanities Fellowship and a fellowship in China Studies through the American Council of Learned Societies.

#### **Active Members**

Thomas R. Cech, Chemistry and Biochemistry

Margaret Murnane, Physics

#### **Deceased Members**

Kenneth Boulding, Economics

Gilbert White, Geography

#### **Fulbright Fellows**

The Fulbright program sends 800 U.S. faculty members and professionals abroad each year and is intended for candidates who wish to conduct research, teach or undertake a combination of both at an academic institution of their choice in a host country. Fellows lecture and conduct research in a wide variety of academic and professional fields. CU Boulder has had more than 100 Fulbright fellows since 1982.

**Douglas R. Johnson**Senior Research Associate, Physics

This is the second time Douglas R. Johnson has won a Fulbright Fellowship. Johnson's work in the High Energy Physics Group includes management of the CMS Tier-3 site, the T2K computing cluster and USCMS Tier 3 support. His primary interest is system optimization for high throughput computing. "Throughput" refers to how much data can be transferred between locations in a given amount of time and is used to measure the performance of hard drives and RAM as well as internet and network connections.

Johnson serves on the board of directors of the Americas Association for the Care of Children and was president of the board from 2006 to 2010. During that time, he oversaw the construction of a primary school in Jalapa, Nicaragua. He has also worked with children living in the Managua landfill, La Chureca. Teaching public service announcement production to teens, he introduced the children to using computers. Their announcements were aired on the largest radio station in Managua. In 2014 he was awarded his first Fulbright appointment and worked for Language and Culture Studies in Taktse, Bhutan. He has volunteered his service to a number of computing departments at colleges in Bhutan.

In 2018 he studied out of An-Najah National University and researched throughout the Palestine territories. His project was titled "Techniques, Tools, Design and Implementation of High Throughput Computing for a Palestinian West Bank Science Network." Johnson's scholarly articles have appeared in *Physics Letters B, Physical Review D, Physical Review Letters* and *Nuclear Instruments and Methods in Physics Research Section A: Accelerators, Spectrometers, Detectors and Associated Equipment.* 

Margot E. Kaminski
Associate Professor, University of Colorado Law School



Margot E. Kaminski's 2018 Fulbright Scholarship research focused on privacy issues presented by sensor surveillance—drones, robots and technologies that can exchange data—and she compared surveillance regulations in the United States to those throughout the European Union. She also assessed how policies and technology connect these governmental bodies. Kaminski conducted her research at the Institute for Information Law in the University of Amsterdam, Netherlands, and in Pisa, Italy, at the DIRPOLIS Institute of the Scuola Superiore Sant'Anna.

Generally, her research focuses on the law and technology, with an emphasis on privacy, online civil liberties and speech. She is also interested in international intellectual property law and the legal issues that surround artificial intelligence and robotic technologies, including drones.

Kaminski received her Juris Doctorate at Yale University, where she co-founded the Media Freedom and Information Access Clinic. This law school clinic fights for government transparency, defends a journalist's right to gather news and protects people's freedom of expression. While earning her degree she was executive director of the Information Society Project, which looks into how new technology affects the law and society.

She is recipient of the Privacy Law Scholars Conference Junior Scholar Award from the Center for Democracy and Technology and has written articles for the *University of California Davis Law Review, Maryland Law Review, Boston University Law Review* and *Law Review*, among others.

Matthew A. Koschmann
Associate Professor, Communication



From January to May 2018, Matthew A. Koschmann studied and compared instances of civil society collaboration in the Philippines as a Fulbright Scholar. He was based out of Ateneo de Manila University in Manila, Philippines.

Koschmann's research addresses organizational communication and inter- and intra-organizational partnerships, and he specializes in collaboration within the nonprofit and civil society sectors. Over his career, his projects have focused on affordable housing, human trafficking, prisoner re-entry and disaster recovery. Current main interests are stakeholder representation, communication

constitution and the tensions behind organizing.

In 2013 Koschmann won an Outstanding Teacher for Technology in Teaching: Arts & Sciences Support of Education through Technology Award from CU Boulder. Over the past 11 years, his scholarly articles have earned him six awards. His work can be found in the Electronic Journal of Communication, Journal of Communication, Communication Quarterly, Western Journal of Communication, and Construction Management and Economics, among others.

#### **CU Boulder Fulbright Fellows Since 2006**

Len Ackland, College of Media, Communication and Information (2008)

Marie Banich, Institute of Cognitive Science (2006)

**Alton C. Byers,** Institute of Arctic and Alpine Research (2015)

Bud E. Coleman, Theatre and Dance (2009)

Richard B. Collins, University of Colorado Law School (2007)

Herbert H. Covert, Anthropology (2008)

Emmanuel A. David, Women and Gender Studies (2012)

**Laura M. DeLuca,** Residential Academic Program (2011, 2013)

Elizabeth Dunn, Geography (2008)

Clarence Ellis, Computer Science (2013)

William J. Emery, Aerospace Engineering Sciences (2014)

Paul M. Erhard, College of Music (2013)

Claire Joan Farago, Art and Art History (2011)

Jennifer L. Fitzgerald, Political Science (2007)

Fredy Gonzalez, History (2016)

Nan Goodman, English (2013)

Eugene H. Hayworth, University Libraries (2009)

Douglas R. Johnson, Physics (2014)

Keith Kearnes, Mathematics (2010)

Alphonse Keasley, Diversity and Equity (2012)

John Jay Kineman, Cooperative Institute for Research in Environmental Sciences (2008)

John Patrick Kociolek, University of Colorado Museum of Natural History (2015)

**Kim L. Kreutzer**, Office of International Education (2010)

Kevin J. Krizek, Environmental Design (2013)

**Kristine M. Larson**, Aerospace Engineering Sciences (2013)

Rachel Lehr, Geography (2016)

Thea L. Lindquist, University Libraries (2011)

Lauri McNown, Political Science (2013)

Robert F. McNown, Economics (2006, 2013)

Josef Michl, Chemistry and Biochemistry (2006)

Vijay Mittal, Psychology and Neurosciences, (2013)

Stephen J. Mojzsis, Geological Sciences (2007)

**Keith Robert Molenaar**, Civil, Environmental and Architectural Engineering (2006)

Lupita Del Carmen Montoya, Civil, Environmental and Architectural Engineering (2011, 2013)

Michele S. Moses, School of Education (2011)

**Megan Elizabeth Mulligan,** College of Media, Communication and Information (2013)

Roseanna Marie Neupauer, Civil, Environmental and Architectural Engineering (2015)

Astrid Elisabeth Ogilvie, Institute of Arctic and Alpine Research (2009)

Cecilia J. Pang, Libby Arts RAP (2009)

Richard A. Regueiro, Civil, Environmental and Architectural Engineering (2014)

George F. Rivera, Art and Art History (2013)

Brenda M. Romero, College of Music (2010)

Andrew A. Schwartz, School of Law (2016)

Elisabeth Ann Sheffield, English (2013)

Jaroslav Tir, Political Science (2007)

Paul S. Voakes, Journalism (2011)

Mark W. Williams, Geography: Institute of Arctic and Alpine Research (2013)

James Daniel Winkler, Chemical and Biological Engineering (2015)

### **Guggenheim Fellows**

Guggenheim Fellowships are prestigious grants that provide fellows with blocks of time to pursue important scholarly work with as much creative freedom as possible. No special conditions are attached to these fellowships, and fellows may spend their grant funds in any manner they deem necessary to their work. Since 1949, more than 70 CU Boulder faculty members have been named Guggenheim fellows.

### CU Boulder Guggenheim Fellows Since 1998

**Len Ackland,** College of Media, Communication and Information (2008)

Fred W. Anderson, History (2001)

Thomas G. Andrews, History (2011)

Mitchell C. Begelman, Astrophysical and Planetary Sciences (1998)

Roger G. Bilham, Cooperative Institute for Researchin Environmental Sciences (1999)

Albert Chong, Art and Art History (1998)

G. Barney Ellison, Chemistry and Biochemistry (1999)

Michelle Ellsworth, Theatre and Dance (2016)

Barbara A. Engel, History (2003)

Steven A. Epstein, History (1998)

Elizabeth Fenn, History (2005)

David Gatten, Film Studies (2005)

Bruce W. Holsinger, English (2004)

Paul W. Kroll, Asian Languages and Civilizations (2007)

Noel E. Lenski, Classics (2009)

Russell Keith Monson, Ecology and Evolutionary Biology (1998)

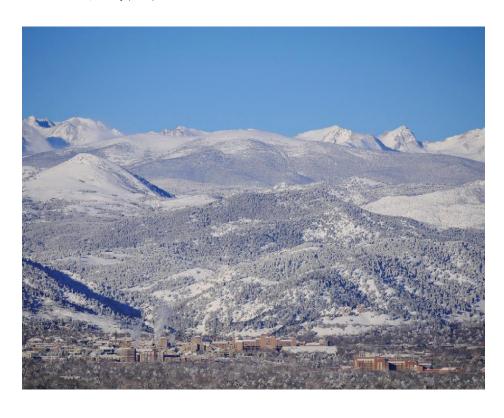
John O'Loughlin, Geography (2004)

Stacey E. Steers, Film Studies (2014)

Margaret A. Tolbert, Cooperative Institute for Research in Environmental Sciences (2005)

Veronica Vaida, Chemistry and Biochemistry (2004)

Mark Winey, Molecular, Cellular and Developmental Biology (2007)



### **Howard Hughes Medical Institute**

The Howard Hughes Medical Institute is a science philanthropy whose mission is to advance biomedical research and science education for the benefit of humanity. HHMI empowers exceptional scientists to pursue fundamental questions about living systems.

#### **Howard Hughes Medical Institute Investigators**

Thomas R. Cech, Distinguished Professor, Chemistry and Biochemistry

Min Han, Professor, Molecular, Cellular and Developmental Biology

Karolin Luger, Professor, Chemistry and Biochemistry

Roy Parker, Professor, Chemistry and Biochemistry

### **Howard Hughes Medical Institute Alumni**

Natalie G. Ahn, Professor, Chemistry and Biochemistry

Kristi S. Anseth, Distinguished Professor and Tony Tisone Chair, Chemical and Biological Engineering

Robert Boswell, Professor, Molecular, Cellular and Developmental Biology; Vice Chancellor, Office of Diversity, Equity and Community Engagement

#### Society of Howard Hughes Medical Institute Professors

Leslie A. Leinwand (2006-present), Distinguished Professor, Molecular, Cellular and Developmental Biology

### **Howard Hughes Medical Institute Faculty Scholar**

Gia Voeltz, Associate Professor, Molecular, Cellular and Developmental Biology

### **Howard Hughes Medical Early Career Scientists**

Joaquin Espinosa, Visiting Associate Professor, SOM Pharmacology



### MacArthur Fellows

The MacArthur Foundation accepts yearly nominations in as broad a range of fields and areas of interest as possible to identify and support talented individuals—writers, scientists, artists, social scientists, humanists, teachers—who have shown extraordinary originality and dedication in creative pursuits, and a marked capacity for self-direction. The MacArthur Fellows Program awards five-year, unrestricted fellowships, sometimes referred to as "genius grants," to individuals who show exceptional merit and promise of continued creative work.

#### **CU Boulder MacArthur Fellows Since 1981**

Charles Archambeau, Physics (1988)

David Hawkins, Philosophy (1981)

Deborah S. Jin, Physics (2003)

Daniel Saul Jurafsky, Linguistics (2002)

Patricia N. Limerick, History (1995)

Margaret Murnane, Physics (2000)

Dimitri Nakassis, Classics (2015)

Norman R. Pace, Molecular, Cellular and Developmental Biology (2001)

Ana Maria Rey, JILA (2013)



### **National Academy of Education**

The National Academy of Education advances the highest-quality education research and its use in policy formulation and practice. It consists of up to 150 U.S. members and 25 foreign associates who are elected on the basis of outstanding scholarship or other outstanding contributions to education. Since its establishment, the academy has sponsored a variety of commissions and study panels that have published influential proceedings and reports.

### **Active Academy Members**

Gene V. Glass, School of Education (2000)

Lorrie A. Shepard, School of Education (1992)

Carl E. Wieman, Center for Science Education (2009)

### **Retired Academy Members**

Margaret A. Eisenhart, School of Education (2004)

Kris Diane Gutiérrez, School of Education (2010)

Walter Kintsch, Institute of Cognitive Science (1992)

### **Deceased Academy Members**

Robert Lee Linn, School of Education (1990)



### **National Academy of Engineering**

The National Academy of Engineering includes more than 2,000 peer-elected senior professionals in business, academia and government who are among the world's most accomplished engineers and who provide leadership and expertise for projects focused on the relationships among engineering, technology and the quality of life.

#### **Active Academy Members**

**Bernard Amadei**, Civil, Environmental and Architectural Engineering (2008)

Kristi S. Anseth, Chemical and Biological Engineering (2009)

**Daniel N. Baker**, Laboratory for Atmospheric and Space Physics (2010)

Robert Braun, Civil, Environmental and Architectural Engineering (2014)

Ross Corotis, Civil, Environmental and Architectural Engineering (2002)

Lawrence L. Kazmerski, Renewable & Sustainable Energy Institute (2005)

Michael Dumont King, Laboratory for Atmospheric and Space Physics (2003)

Margaret Lemone, Atmospheric and Oceanic Sciences (1997)

David Marshall, Mechanical Engineering (2007)

**Diane Marie McKnight,** Institute of Arctic and Alpine Research (2012)

**Daniel J. Scheeres**, Aerospace Engineering Sciences (2017)

### **Retired Academy Members**

Frank Stephenson Barnes, Electrical, Computer and Energy Engineering (2001)

Lewis M. Branscomb, Physics; JILA

**Delores Etter,** Electrical, Computer and Energy Engineering (2000)

Fred Glover, Leeds School of Business (2002)

Martin M. Mikulas, Center for Aerospace Structures (1999)

Jacques I. Pankove, Electrical, Computer and Energy Engineering (1986)

**Richard Strauch,** Electrical, Computer and Energy Engineering (1989)

Valerian Tatarskii, Cooperative Institute for Research in Environmental Sciences (1994)

Kaspar J. Willam, Civil, Environmental and Architectural Engineering (2004)

#### **Deceased Academy Members**

George H. Born, Aerospace Engineering Sciences (2004)

Adolph Busemann, Aerospace Engineering Sciences (1970)

Steven F. Clifford, Cooperative Institute for Research in Environmental Sciences (1997)

**Earl Gossard,** Cooperative Institute for Research in Environmental Sciences (1990)

Don Hearth, Aerospace Engineering Sciences (1989)

Max Peters, Chemical and Biological Engineering (1969)

A. Richard Seebass, Aerospace Engineering Sciences (1985)

Klaus D. Timmerhaus, Aerospace Engineering Sciences (1975)

# **National Academy of Inventors Fellows**

The National Academy of Inventors is a nonprofit member organization that includes U.S. and international universities alongside governmental and nonprofit research institutes. The academy has more than 3,000 individual inventor members and fellows spanning more than 200 institutions. The NAI Fellows program supports 582 fellows worldwide. Collectively, NAI Fellows hold more than 21,000 issued U.S. patents.

**Marvin H. Caruthers**Distinguished Professor, Chemistry and Biochemistry



In the early 1980s, biochemist Marvin H. Caruthers and his team at CU Boulder developed the methods for chemically synthesizing DNA, a breakthrough that dramatically advanced biological research and helped launch the biotechnology industry. Caruthers' work transformed protein and DNA synthesis from highly specialized, basic research into a widely used research, diagnostic and forensic tool.

The ability to synthesize DNA rapidly in the lab enables researchers to learn how certain genetic sequences are formed, as well as locate and isolate genes for selected proteins. Early

clinical studies on drugs stemming from Caruthers' techniques have shown remarkable benefits for patients with severe kidney disease and cancer.

Caruthers' many years of work to improve the reliability of DNA synthesis has resulted in key advances in his field, such as adopting a more stable solid substrate onto which growing molecules can be attached. He also devised methods to manufacture and ship DNA synthesis reagents on a commercial scale. His procedures have been incorporated into "gene machines," automating synthetic DNA production used by biochemists, biologists, molecular biologists and biophysical chemists in multiple research applications. More recently, his procedures have been adapted for use with modified ink-jet printers to synthesize DNA on glass chips.

The co-founder of several successful biotech companies, including Amgen and Applied Biosystems, Caruthers holds 43 U.S. patents and has received numerous awards, including the 2006 U.S. National Medal of Science.

# **Lawrence Gold**Professor, Molecular, Cellular & Developmental Biology



Lawrence Gold is an internationally recognized scientist whose research at CU Boulder has spawned numerous discoveries and commercially successful biotechnology patents.

Gold, who has taught at CU Boulder since 1970 and was chair of the Department of Molecular, Cellular and Developmental Biology from 1988 to 1992, helped to open the MCD Biology Building in 1995. The building, renamed the Gold Biosciences Building in 2013, has been home to groundbreaking discoveries, including innovations by Gold himself, that have led to longer and better lives.

Gold is a bioscience industry pioneer and entrepreneur who has conducted DNA and RNA research resulting in new drug families. For his contributions to teaching and science, he has won numerous local and national awards, including CU Boulder's Distinguished Research Lectureship award, the highest honor bestowed by faculty on another faculty member. Gold also has won the Merit Award and the Career Development Award, both from the National Institutes of Health, as well as the Lifetime Award and the Chiron Prize for Biotechnology, both from the Colorado BioScience Association.

He has been a member of the American Academy of Arts and Sciences since 1993 and was elected to the National Academy of Sciences in 1995. Valuable and commercially successful patents resulting from Gold's discoveries made at CU Boulder, in combination with his private donations, have brought significant recognition and revenues to the MCDB department and to the university while advancing human health and wellness.



# **National Academy of Sciences**

Founded in 1863 and considered one of the highest honors for an American scientist or engineer, the National Academy of Sciences is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research and dedicated to the furtherance of science and technology and their use for the general welfare.

**Natalie Ahn**Professor, Chemistry and Biochemistry



Natalie Ahn's research is focused on understanding the mechanisms of cell signaling, with a specialty in cancers and phosphorylation (adding phosphates to organic compounds). Early in her career at CU Boulder she began applying the new technology of protein mass spectrometry to address questions in signaling. Her lab's applications of proteomics (proteins) to signal transduction have led to broad discoveries, ranging from new mechanisms for cell regulation to mechanisms for allosteric control of MAP kinases. Ahn and her team of researchers are investigating signaling pathways that are activated in melanoma

and influence cancer progression and cell behavior.

Ahn was a Howard Hughes Medical Institute investigator from 1994 to 2014, and in 2012 was named CU College Professor of Distinction. In 2014 she became part of the Subcellular Pan-Omics for Advanced Rapid Threat Assessment (SPARTA) team, a biochemical project supported by the Defense Advanced Research Projects Agency.

**Karolin Luger**Professor, Chemistry and Biochemistry



Karolin Luger investigates the structural biology of genome organization, or the architecture of an organism's complete DNA, including all of its genes. Her work is focused on understanding the fundamental impact of that architecture on processes such as regulated gene transcription, DNA replication and DNA repair. She is credited with discovery of the three-dimensional structure of chromatin, a complex of macromolecules found in cells, consisting of DNA, protein and RNA. Her research looks at the interaction of nucleosomes with nuclear factors, as well as structural and mechanistic aspects of the cellular machinery that

assembles and disassembles chromatin during transcription, replication and DNA repair. She and her research team have also been studying the genetic cause of Rett syndrome, the gene MECP2, which codes for a protein that binds to methyl groups on chromatin, altering its conformation.

Luger is the Jennie Smoly Caruthers Endowed Chair of Chemistry and Biochemistry.

#### Active Academy Members

Kristi S. Anseth, Chemical and Biological Engineering (2013)

**Marvin H. Caruthers,** Chemistry and Biochemistry (1994)

Thomas R. Cech, Chemistry and Biochemistry (1987)

Noel A. Clark, Physics (2007)

Eric Cornell, Physics (2000)

**Lawrence Gold,** Molecular, Cellular and Developmental Biology (1995)

John L. Hall, JILA (1984)

James T. Hynes, Chemistry and Biochemistry (2011)

Henry C. Kapteyn, Physics (2013)

William Carl Lineberger, Chemistry and Biochemistry; JILA (1983)

Jane A. Menken, Institute of Behavioral Science (1989)

Josef Michl, Chemistry and Biochemistry (1986)

Margaret Murnane, Physics (2004)

Roy Robert Parker, Chemistry and Biochemistry (2012)

Margaret A. Tolbert, Chemistry and Biochemistry (2004)

Carl E. Wieman, Center for Science Education (1995)

David J. Wineland, Physics (1992)

Jun Ye, JILA (2011)

### **Retired Academy Members**

Lewis M. Branscomb, Physics; JILA

Richard A. McCray, JILA (1989)

J. Richard McIntosh, Molecular, Cellularand Developmental Biology (1999)

Norman R. Pace, Molecular, Cellular and Developmental Biology (1991)

William B. Wood, Molecular, Cellular and Developmental Biology (1972)

#### **Deceased Academy Members**

Kenneth Boulding, Economics (1975)

Edward U. Condon, Physics: JILA (1945)

**Linda S. Cordell,** University of Colorado Museum of Natural History (2005)

Stanley Cristol, Chemistry and Biochemistry (1972)

**Charles H. DuPuy**, Chemistry and Biochemistry (1999)

George Gamow, Physics (1953)

Deborah Jin, Physics (2005)

**David M. Prescott,** Molecular, Cellular and Developmental Biology (1974)

Stanislaw M. Ulam, Mathematics (1966)

John Wahr, Physics (2012)

Gilbert White, Institute of Behavioral Science (1973)

### **National Medal of Science**

The National Medal of Science was established by the 86th Congress in 1959 as a Presidential Award to be given to individuals "deserving of special recognition by reason of their outstanding contributions to knowledge in the physical, biological, mathematical or engineering sciences." In 1980, Congress expanded this recognition to include the social and behavioral sciences. National Medals of Science are awarded by the president of the United States to individuals deserving of special recognition by reason of their outstanding cumulative contributions to knowledge in service to the nation.

#### **Previous CU Boulder Medal Winners**

Marvin H. Caruthers, Chemistry and Biochemistry (2006)

Thomas R. Cech, Chemistry and Biochemistry (1995)

Keith R. Porter, Institute of Behavioral Science (1976)

Gilbert F. White, Geography (2000; deceased)

David J. Wineland, Physics (2007)

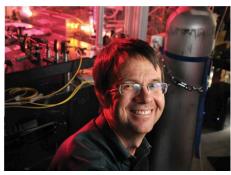


### **Nobel Laureates**

The Nobel Prize is an international award given yearly for achievements in physics, chemistry, economics, medicine, literature and peace. Nomination and selection of winners vary according to the category and prize-awarding institutions.



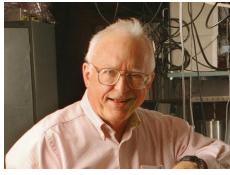
1989
Thomas R. Cech
Chemistry and Biochemistry



2001
Eric Cornell
Physics; JILA



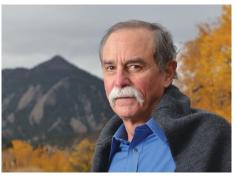
2001
Carl Wieman
Physics; JILA



2005
John Hall
Physics; JILA

### 2007

A group of hundreds of researchers from around the world that included more than a dozen **CU Boulder research faculty members** shared the Nobel Peace Prize with former Vice President Al Gore for their contributions to the international report of the Intergovernmental Panel on Climate Change.



2012

David Wineland

Physics

#### Packard Fellows

Candidates for a Packard Fellowship must be faculty members in the first three years of their careers who are eligible to serve as principal investigators engaged in research in the natural and physical sciences or engineering. Disciplines include physics, chemistry, mathematics, biology, astronomy, computer science, earth science, ocean science and all branches of engineering.

#### **Christoph Keplinger**

Assistant Professor, Mechanical Engineering



Christoph Keplinger joined CU Boulder's faculty in August 2015 with a background in physics, mechanics and chemistry. He now leads a multidisciplinary team performing basic and applied research with a focus on soft robotics, stretchable electronics, functional polymers and bioinspired soft actuators—a new class of soft, electrically activated devices that are capable of mimicking the expansion and contraction of natural muscles. These devices, which can be constructed from a wide range of low-cost materials, are able to sense their movements and self-heal from electrical damage, representing a major advance in soft robotics. Because HASEL (hydraulically amplified self-healing

electrostatic) actuators can grasp delicate objects such as a raspberry or a raw egg as well as lift heavy objects, their versatility may enable artificial muscles for human-like robots and a next generation of prosthetic limbs.

Keplinger also has an interest in sustainable energy generation and energy harvesting for biomedical applications.

#### **CU Boulder Packard Fellows Since 1989**

Anton Vladimirovich Andreev, Physics (1999)

Kristi S. Anseth, Chemical and Biological Engineering (1997)

Elizabeth Bradley, Computer Science (1995)

Barbara Demmig-Adams, Ecology and Evolutionary Biology (1992)

Daniel F. Feldheim, Chemistry and Biochemistry (2000)

Michael Hermele, Physics (2010)

Pieter TJ Johnson, Ecology and Evolutionary Biology (2008)

David Jonas, Chemistry and Biochemistry (1996)

Karla Kirkegaard, Molecular, Cellular & Developmental Biology (1989)

Milos Popovic, Electrical, Computer and Energy Engineering (2012)

John C. Price, Physics (1990)

Leo Radzihovsky, Physics (1998)

Cindy Regal, Physics (2011)

Alexis Templeton, Geological Sciences (2006)

Shijie Zhong, Physics (2011)

### Administrator of the Year

The award for Administrator of the Year is given through the CU system to a CU administrator in recognition of significant contributions to the university, to Faculty Council, and/or to shared and faculty governance.

William H. Kaempfer
Professor, Economics; Academic Affairs



In addition to teaching economics at CU Boulder, William H. Kaempfer was senior vice provost and associate vice chancellor for budget and planning. He was responsible for a variety of initiatives across the campus, including academic prioritization and new degree approval; managing the annual budget process for all schools and colleges; developing new revenue sources; and strategic planning for space management and allocation. He oversaw the reaccreditation of the campus by the North Central Association in 2000 and serves as accreditation liaison officer for the campus's upcoming reaccreditation visit by the Higher Learning Commission in 2019. Kaempfer was chair of the

Department of Economics from 1995 to 1997 and associate chair from 1991 to 1995.

Kaempfer's research focus is in the area of international political economy, especially on the topics of trade policy, international economic sanctions and the transmission of policy influence between nations. He has co-written books on international economic sanctions and South African apartheid, as well as an advanced text in international trade theory. Other topics he has researched include international voter turnout, NAFTA, trade in ivory, congressional regulatory legislation, college football and salary arbitration in Major League Baseball. In total, he has written or co-written more than 85 books, articles, book chapters and book reviews.

In addition to his professional activities, Kaempfer is an avid birdwatcher who has seen more than 430 species of birds in Colorado. He regularly leads field trips for local birdwatching groups. Look for him in a wild area near you with his binoculars around his neck, searching for a recently reported rarity.



The University of Colorado Boulder does not discriminate on the basis of race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression or veteran status in admission and access to and treatment and employment in, its educational programs and activities. The university takes affirmative action to increase ethnic, cultural and gender diversity; to employ qualified disabled individuals; and to provide equal opportunity to all students and employees.

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In accordance with CU Boulder's long-standing commitment to sustainability, this publication has been printed using vegetable-based ink. The paper stock carries two Chain of Custody certifications (FSC, SFI) and contains recycled pulp that is processed chlorine free (PEFC). This program, including the gold foil seal on the cover, is recyclable.

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