

An aerial photograph of the University of Colorado Boulder campus. The foreground shows a dense forest of green trees. In the middle ground, the university's campus is visible, featuring numerous buildings with red-tiled roofs and green lawns. In the background, a large, rugged mountain with exposed rock faces rises against a clear blue sky.

CU BOULDER OUTREACH AWARDS

2018–19



Office for Outreach and Engagement
UNIVERSITY OF COLORADO **BOULDER**



A MESSAGE FROM THE VICE PROVOST

CU Boulder public outreach and community engagement projects and programs have connected with more than 500,000 Coloradans, a very visible way our world-class faculty are positively impacting humanity.

Through the highly competitive CU Boulder Outreach Awards, our campus places a priority on research, teaching and creative work that partners with communities throughout Colorado and beyond. Since 1999, \$5.5 million has been awarded to 774 projects.

This year, the CU Boulder Outreach Committee received 61 outstanding proposals. I am very pleased to announce that for 2018–19 the Office of the Chancellor, Office of the Provost and Division of Continuing Education will provide \$460,000 in funding for 34 projects representing every college and school.

These projects are essential and add value to higher education, exemplifying CU Boulder's role as a comprehensive public research university. They also align with the Division of Continuing Education's mission of providing high-quality, innovative, lifelong learning opportunities to diverse populations by extending the educational resources of the university.

I invite you to read more about how these exemplary programs engage with individuals and communities throughout Colorado, our region and the world.

Sincerely,

Sara Thompson

*Vice Provost for Outreach and Engagement
Dean of Continuing Education*

OUTREACH AND ENGAGEMENT DEFINED

At CU Boulder, we define outreach and engagement as the ways faculty, staff and students collaborate with external groups in mutually beneficial partnerships that are grounded in scholarship and consistent with our role and mission as a comprehensive, public research university.

For faculty, outreach rooted in scholarship enhances teaching, research, creative work and service while addressing larger societal issues. For students and staff, community engagement and service projects link campus teaching and learning to civic responsibility and community well-being. For communities, partnering with CU Boulder increases the capacity to address important social, economic and cultural issues. At their best, outreach and engagement activities provide significant learning and growth opportunities to faculty, students, staff and partnering communities.

Whether through research projects, teaching activities, civic engagement or service learning, the reciprocal nature of outreach and engagement enriches both our academic mission and the communities we serve.

Endorsed by the CU Boulder Council of Deans, February 2010

CU BOULDER OUTREACH AWARDS

The CU Boulder Outreach Awards fund faculty-led outreach and engagement projects that connect faculty research, teaching and creative work with public needs. Staff as well as graduate and undergraduate students play crucial roles in advancing these projects. Award support has been used to leverage additional funding from other sources.

The CU Boulder Outreach Committee, which is composed of faculty and staff from many disciplines, selects the projects that receive outreach awards based on the following criteria:

- Aligns with campus definition of outreach and engagement
- Responds to a direct request made by a school or community group
- Establishes a long-term relationship with a group or community
- Serves a community with limited access to CU Boulder programs
- Makes the work of CU Boulder's faculty accessible to the public

The Office for Outreach and Engagement, a unit within Continuing Education, helps to ensure that projects are of the highest quality by consulting with potential awardees and managing the application process.

For more information on how to apply for an outreach award, visit **colorado.edu/outreach/ooe/outreach-awards**

CU BOULDER OUTREACH COMMITTEE

Professor Bud Coleman
Committee Chair

Department of Theatre & Dance

Professor Jaelyn Eberle

*Department of Geological Sciences
Director of Museum and Field Studies Program
and Curator of Vertebrate Paleontology,
University of Colorado Museum of Natural History*

Associate Professor Jennifer Hayghe

College of Music

Senior Instructor Veronica House

Associate Director, Program for Writing and Rhetoric

Associate Professor A. Susan Jurow

School of Education

Associate Professor Jill Litt

Environmental Studies Program

Alice Madden

*Executive Director, Getches-Wilkinson Center for Natural
Resources Energy and the EnvironmentColorado Law*


David Meens

Director, Office for Outreach and Engagement


Professor Joe Ryan

*Department of Civil, Environmental
and Architectural Engineering*

THIS YEAR'S AWARDS IMPACT

1,983
 STUDENTS

 **176**
FACULTY AND STAFF

19,500
COLORADANS 

3,100+
 PEOPLE
outside of
Colorado

774
PROJECTS have received
nearly **\$5.5 MILLION**
since **1999**

34 
PROJECTS
totaling **\$460,000**

2018–19 AWARDS

COLLEGE OF ARTS AND SCIENCES

Attention, Behavior, and Learning Clinic: Affordable Childhood Evaluations

Professor Erik Willcutt and Research Associate Nomita Chhabildas

Department of Psychology and Neuroscience

The clinic provides comprehensive evaluations for children who experience academic, behavioral and emotional difficulties while offering participating graduate students valuable educational experience. The on-campus clinic operates on a sliding scale that allows many low-income families to access these services at low to no cost.

Located 
on campus

Started in
2004

Provides **50**
evaluations per year

Brain Behavior Clinic and Boulder County Homelessness

Associate Clinical Professor Emily Richardson

Department of Psychology and Neuroscience

This partnership with the Boulder County Shelter for the Homeless works to identify and document people with cognitive disabilities as part of Boulder County’s 10-Year Plan to Address Homelessness. Through the on-campus clinic, Richardson and her graduate students provide homeless people with free neuropsychological evaluations, which can be used to access disability benefits.

Co-Designing an Early Education Program for Children Birth to Three

Associate Professor Eliana Colunga, *Department of Psychology and Neuroscience*

By the time they are 3 years old, middle-income children have twice the vocabulary of low-income children. This project works with Boulder Housing Partners to close the so-called “30 million word gap” by empowering parents to build on their knowledge through a culturally sensitive, parent-based early education program.



Toddlers and caregivers participate in an early education program. Photo by Ricarose Roque, CU Boulder

PROGRAM IN FOCUS

CU Contemporary Dance Works Residency Tour

Professor Nada Diachenko, Professor Michelle Ellsworth, Assistant Professor Helanius Wilkins, Community Engagement Coordinator Peg Posnick

Department of Theatre & Dance

During a weeklong residency each spring, this graduate student touring company brings dance to communities across the state that are underserved by the arts. This year, the students will head to Garfield County on the Western Slope to offer classes, workshops and performances at schools and community centers.

Supports
dance
outreach statewide

Served
51
communities statewide

Total impact:
20,000
Coloradans

Program began in
1991



"I have the greatest respect for the Outreach Committee and its mission, and tremendous gratitude for the support that has enabled us to successfully bring dance to so many communities around the state."

—Professor Nada Diachenko



Dance graduate students practice for their outreach tour in Paonia. Photo by Ellen Reynerson, CU Boulder



CU-STARs bring science and astronomy programs to students across the state. Photo by Jenny Briggs, CU Boulder

CU-STARs: CU Science, Technology and Astronomy Recruits
Associate Professor Erica Ellingson

Department of Astrophysical and Planetary Sciences

This program builds a community of undergraduate science majors from diverse backgrounds with an interest in science, technology and astronomy. The CU-STARs students visit middle and high schools in urban and rural areas across Colorado to lead hands-on science classes, informal demonstrations and evening “star parties” for the whole community.

Educating Prisoners in an Era of Mass Incarceration
Professor Joanne Belknap

Department of Ethnic Studies

Through this project, undergraduate students take an ethnic studies class with inmates from the Colorado Correctional Facility in Golden. The project is part of the national Inside Out Prison Exchange Program where “inside” (inmate) and “outside” (undergraduate) students take a class together. The program seeks to break down stereotypes between inmates and undergraduates.

Located in 
Golden, Colorado

Started in
2017

 Works to
break down
stereotypes



CU Boulder psychology and neuroscience students with children at Children's Museum of Denver. Photo by Shadi Sharif, CU Boulder

Empowering Families Through Museum Exhibits on Child Development **Professor Yuko Munakata**

Department of Psychology and Neuroscience

This partnership with the Children's Museum of Denver at Marsico Campus is based on the National Living Laboratory model that educates the public about child development through interactive science activities. Undergraduate and graduate students offer hands-on activities for caregivers and children visiting the museum and assess impact.

Literacy Practicum

Associate Professor Kira Hall

Department of Linguistics

This program partners with Boulder community literacy programs to provide a service-learning component for an undergraduate course. CU Boulder students work with at-risk children and adults to improve reading and writing skills by applying targeted teaching strategies and information taught during the campus course.

RDS Center: Reaching Out to People with Bipolar

Senior Research Associate Alisha Brosse and Adjunct Professor David Miklowitz

Department of Psychology and Neuroscience

The Robert D. Sutherland (RDS) Center for the Evaluation and Treatment of Bipolar Disorder provides comprehensive treatment to people with bipolar disorder, many of whom can't afford treatment. This community-based clinic also trains graduate students in clinical psychology and offers public seminars, talks and workshops.

**Working with Culturally and Linguistically Diverse
Children with Communication Disorders**

Associate Professor Pui Fong Kan
Clinical Assistant Professor Amy Thrasher
Department of Speech, Language, and Hearing Sciences

This partnership with Boulder Community Health, Imagine!/Dayspring and Scarlet Larkin Inc. provides training for speech-language pathologists who work with culturally and linguistically diverse children with communication disorders, focusing in particular on immigrant children who are starting to learn English in school. This early intervention program works closely with families who are traditionally reluctant to seek professional services.

LEEDS SCHOOL OF BUSINESS

CU Boulder Volunteer Income Tax Assistance

Senior Instructor and Teaching Professor Susan Morley

This IRS-sponsored program offers free income tax return preparation services to taxpayers with household income of \$54,000 or less, people with disabilities, the elderly and limited English speakers. CU Boulder business students and community volunteers prepare and file 450 tax returns, and obtain about \$525,000 in income tax refunds and \$155,000 in refundable earned income tax credits each year.



Located in
Boulder, CO



Prepare and file
450 tax returns



National program

GRADUATE SCHOOL

Collaborative Community Resilience for Heat Mitigation Through Trees

Research Associate Alana Wilson and Lecturer Mehdi Heris

Program in Environmental Design

Heat is often referred to as the silent killer. Working with health-vulnerable residents at the Mapleton and Ponderosa manufactured home parks, this project will monitor the exposure of residents to high heat levels, develop heat mitigation strategies, identify ways to increase shade through vegetation or shade canopies, and provide subsidized cooling systems as necessary.

Colombian Displaced Communities: Planning and Urban Design Seminar

Assistant Professor Jota Samper

Program in Environmental Design

Environmental design students will continue their work with an unplanned settlement near Medellin, Colombia, which was formed when people fled the city because of violence. The residents have created infrastructure, businesses and community centers from the ground up. Students work closely with residents on community projects and also with local academic researchers.



Located in
Medellin, Colombia



Hands-on
planning studio

5-WEEK
abroad program



Community members gather at a settlement near Medellin, Colombia. *Photo by Ryan Catalani, Mobility Movilidad*

PROGRAM IN FOCUS

The Acequia Project: Helping San Luis Valley Farmers

Professor Sarah Krakoff

This project provides free legal assistance to low-income and predominately Hispanic farmers in the San Luis Valley whose water rights are at risk. CU Boulder law students, attorneys and community partners work closely with local farmers or irrigators to draft bylaws for their irrigation ditches (acequias) that capture runoff from mountain snowmelt, so they can take advantage of Colorado laws and protect the traditional ways that acequias operate.

Area served: **San Luis Valley,**
Colorado

Total impact:
300
farmers and irrigators

Program began in
2013



"This award makes all the difference for our work. My students, their supervising attorneys and I do all of the work on the Acequia Project for free, as a public service to the wonderful community in the San Luis Valley. Award funding allows us to pay for travel, lodging and other ancillary costs."

—Professor Sarah Krakoff



Farmers show a CU Boulder law student an acequia in the San Luis Valley. Photo by John Sittler, CU Boulder

SCHOOL OF LAW

Constitutional Literacy in Colorado High Schools

Professor Melissa Hart

This program offers two ways for Colorado high school students to learn about the Constitution. As part of Colorado Constitution Day, law students and alumni provide an interactive presentation on constitutional topics. The Marshall-Brennan Project offers social studies lessons in underserved metro-area high schools, where law students coach high schoolers for moot court competitions on campus and in Washington, D.C.



Korey Wise with his lawyer and directors of the Innocence Project. Photo by Glenn Asakawa, CU Boulder

The Korey Wise Innocence Project

Professor Ann England

Director Kristy Martinez, *The Korey Wise Innocence Project*

This project—the only one of its kind in Colorado—seeks to identify and exonerate people in Colorado who have been wrongfully convicted. Colorado Law students and professors partner with lawyers around the state through the newly created Conviction Integrity Unit to examine wrongful conviction cases, research the root causes of these convictions and share this research with law enforcement.

COLLEGE OF MUSIC

Middle School Ensembles Program

Assistant Professor David Rickels, Assistant Professor Leila Heil and Associate Professor Margaret Berg

This partnership among band and orchestra teachers in Boulder Valley School District, the Boulder Children's Chorale, and College of Music faculty and students provides another musical opportunity for local middle school students. Through the program, undergraduates hone their teaching skills, and high school interns learn about teaching music as a career.



CU Boulder undergraduates teach as part of the Middle School Ensemble Program.

Piano for Dreamers

Professor Alejandro Cremaschi

Through this partnership with the "I Have a Dream" Foundation of Boulder County, graduate and undergraduate students provide free introductory piano classes to fourth- and fifth-graders who cannot afford lessons. The elementary school students learn to read and interpret music notation and symbols, perform simple songs and compose pieces.

RESEARCH INSTITUTES

Building Science Communication Skills Through Improvisational Theater

Research Associate Megan Littrell-Baez and Director Anne Gold, *CIRES Education and Outreach*

In coordination with CU Boulder's Department of Theatre & Dance and the Boulder Valley School District, this project uses improvisational theater to inspire conversations about environmental science. Through immersive workshops, middle school, high school and college students will work together to discover new ways to communicate about science.

Girls at the Museum Exploring Science (GAMES)

Assistant Professor Jingchun Li, *CU Museum of Natural History and Department of Ecology and Evolutionary Biology*

Education Coordinator Cathy Regan, *CU Museum of Natural History*

GAMES encourages fourth- through eighth-grade girls who are low-income or Latina to pursue their interest in science. Weekly after-school visits to the CU museum allow the students to explore archaeology, botany, entomology, paleontology and zoology through hands-on activities and direct interaction with scientists and museum professionals.



Girls explore science at the CU Museum of Natural History. *Photo by Casey Cass, CU Boulder*



Getting a closer look at life around CU Boulder's Mountain Research Station. Photo by Alexandra Rose, CU Boulder

Interpretive Nature Trails at the Mountain Research Station

Professor William Bowman, *Department of Ecology and Evolutionary Biology and Director, Institute of Arctic and Alpine Research (INSTAAR) Mountain Research Station*

Education and Outreach Coordinator Alexandra Rose, *INSTAAR and CU Science Discovery Station Manager Kris Hess*, *INSTAAR Mountain Research Station*

INSTAAR's Mountain Research Station near Nederland provides research and educational opportunities for scientists, students and the public. This year, the station is designing and adding new outdoor interpretive walks and displays that focus on plant and animal ecology, hydrology, geomorphology, forestry and atmospheric science as a way to increase K-12 interest.

Restoration Ecology: A Youth and Inclusiveness Outreach Activity

Professor Tim Seastedt, *Department of Ecology and Evolutionary Biology and Institute of Arctic and Alpine Research (INSTAAR)*

This partnership with K-12 educators along the Front Range and Wildlands Restoration Volunteers youth program seeks to combine learning with hands-on restoration of landscapes. This program for underserved youth helps to introduce them to ecological restoration, environmental science careers and ways to improve air and water quality.



Delta County students test air quality with a hand-held monitor designed at CU Boulder. Photo by Brian Amstutz, Western Slope Conservation Center

INTERDISCIPLINARY AND FACULTY GROUP AWARDS

AQIQ: Air Quality Inquiry Projects in Rural Schools

Program Assessment and Research Associate Daniel Knight and
Associate Professor Michael Hannigan, *Department of Mechanical Engineering*
Associate Dean Joseph Polman, *School of Education*

This partnership provides high school students in Delta and Weld counties with the opportunity to do air quality research. The high schoolers work closely with their teachers and CU Boulder faculty, staff and students to design projects that investigate local air quality issues, collecting samples using low-cost air quality monitors designed by Hannigan’s research group.

**Building Post-Disaster Resilience:
ICT-Enabled Mental Health Support Service**

Instructor Mustafa Naseem, *ATLAS Institute*
Professor Bernard Amadei, *Department of Civil, Environmental and Architectural Engineering*

Puerto Rico is facing a potential mental health crisis because of the hurricanes in 2017, with much of the population experiencing post-traumatic stress. This project allows hurricane survivors to communicate with a remote support network, reducing the burden on local mental health services and directing people to expert care as needed.

Communities Code: Engaging Underrepresented Youth in Creative Computing

Associate Professor Eliana Colunga, *Department of Psychology and Neuroscience*

Assistant Professor Ricarose Roque, *College of Media, Communication and Information*

Director Stacey Forsyth, *CU Science Discovery*

Through this program, faculty, staff and students join with the Boulder Valley School District, Boulder Housing Partners, Partners Bridging the Digital Divide, rural schools and public libraries to offer technology-focused classes to K–8 students and training for teachers. Classes are designed for girls, students of color and other underrepresented students to increase interest and confidence in computer science.

Community-Building Facilitated Dialogues with Boulder Manufactured Home Communities

Senior Instructor and Program Director Karen Ramirez, *CU Dialogues*

Professor Michele S. Moses, *School of Education*

Community Partnerships Director Manuela Sifuentes, *CU Engage*

Research Associate Ashmi Desai and Assistant Director for Coordination and Outreach Pilar Prostko, *CU Dialogues*

This project seeks to build a stronger community between English and Spanish speakers in Vista Village and Boulder Meadows manufactured home parks. Undergraduate and graduate students help facilitate bilingual dialogues on key topics in order to clarify misconceptions that residents may have about each other and highlight shared human experiences.

Empowering Neighboring Communities to Mitigate I-70 Construction Impacts

Professor Shivakant Mishra, *Department of Computer Science*

Professor Shelly Miller, *Department of Mechanical Engineering and Environmental Engineering Program*

This partnership with residents who live near a project to widen a 10-mile stretch of Interstate 70 through northeast Denver will measure noise and air pollution, travel disruptions and other impacts. The Elyria-Swansea community, which is mostly Hispanic and low-income, has been continually exposed to traffic-related pollution because of close proximity to two major interstates.

Expanding Multicultural Awareness in Colorado Classrooms

Distinguished Professor Emerita Marjorie McIntosh, *Department of History*

Senior Instructor Kent Willmann, *School of Education*

Associate Professor Arturo Aldama, *Department of Ethnic Studies*

An outgrowth of the Boulder County Latino History Project, this project promotes greater inclusion of Latinos and other people of color into K–12 Colorado classrooms. This year, teachers from Boulder Valley, St. Vrain and Adams 12 school districts as well as Pueblo, Alamosa and Trinidad will learn how to create inclusive curricula through regional workshops, ongoing professional development and a summer teacher workshop.

Working
across the state



Started in
2012



Telling the untold story
of **Colorado Latinos**

PROGRAM IN FOCUS

Make 3D Books with Locals for Families Worldwide

Assistant Professor Tom Yeh, *Department of Computer Science*

Associate Professor Bridget Dalton, *School of Education*

Director Stacey Forsyth, *CU Science Discovery*

As part of the CU Boulder-based Build a Better Book Project, faculty, staff and students create 3D books and learning materials for visually impaired children worldwide. The project recruits underrepresented undergraduate students from the Engineering GoldShirt program and the School of Education, and works with local libraries and schools to design materials.

Partners with local
**libraries &
schools**

Total impact:
200
families

Serves
children
around the world

Program began in
2013



“This support is more than just funding; it means being part of a community of scholars. Through the Office for Outreach and Engagement’s orientations and activities, I have been able to learn a lot and make good connections with other CU Boulder colleagues, and, more importantly, get inspired to do even more outreach work!”

—Assistant Professor Tom Yeh



A 3D version of a children's book designed for people with impaired vision. *Photo by Sue Postema Scheeres, CU Boulder*



Indigenous Connections at Rocky Mountain National Park

Professor Patricia Limerick and Research Associate Brooke Neely, *Center of the American West*

Assistant Professor Angelica Lawson, *Center for Native American and Indigenous Studies*

Assistant Professor Clint Carroll, *Department of Ethnic Studies and Center for Native American and Indigenous Studies*

Professor Andrew Cowell, *Linguistics and Center for Native American and Indigenous Studies*

This partnership between Rocky Mountain National Park, tribal nations and CU Boulder researchers is helping to deepen and expand the way information is shared about Native Americans who have connections to the region. The park is currently developing a comprehensive plan for how park rangers, exhibits and programs can better represent indigenous histories and ongoing tribal relationships to the area.

Partnership for Action-Oriented Climate Change Education

Associate Professor A. Susan Jurow, *School of Education*

Director of Education and Outreach Anne Gold, *Cooperative Institute for Research in Environmental Sciences (CIRES)*

Instructor Jeffrey Writer, *School of Education and Environmental Engineering Program*

Associate Professor Erin Furtak, *School of Education*

Boulder Valley School District K–12 teachers are interested in strengthening their climate change instruction and helping students learn how to take steps to address this issue. This project will help to connect teachers with scientific and teaching materials related to climate change, and provide ongoing professional development.

A Pilot Colorado-Brazil Program on Sustainable Development Education

Professor Bernard Amadei, *Department of Civil, Environmental and Architectural Engineering*

Dean S. James Anaya, *School of Law*

Assistant Professor Peter Newton, *Environmental Studies Program*

Together with the Acre government and the Federal University of Acre in Brazil, this program will help to establish a forest-based natural resource management education and exchange program. The project will bring together faculty and students from both universities as well as government officials to focus on tropical deforestation, climate change and sustainable development in an area known as the birthplace of Amazonian environmentalism.

Shakespeare and Violence Prevention in Schools

Senior Research Associate Beverly Kingston and Research Assistant Laurie Keith,
Center for the Study and Prevention of Violence

Assistant Professor Kevin Rich and Associate Professor Tamara Meneghini, *Department of Theatre & Dance*
Outreach Director Amanda Giguere and Outreach Coordinator Heidi Schmidt, *Colorado Shakespeare Festival*

This project works to reduce bullying and violence in Colorado schools. Using the latest anti-bullying research, faculty, staff and students have created Shakespeare performances and workshops for students in grades 3–12. The goal of the project is to spark dialogues about violence, school safety and how to speak out against bullying. Plays this year include *Twelfth Night* and *Macbeth*.



Actors perform as part of the Shakespeare and Violence Prevention in Schools program. *Photo by Patrick Campbell, CU Boulder*

Reconnecting the Public to Solar Physics Through Magnetism

Director John Keller, *Fiske Planetarium and Senior Instructor, Department of Astrophysical and Planetary Sciences*

Assistant Professor Adam Kowalski, *Department of Astrophysical and Planetary Sciences and National Solar Observatory*

Lecturer Wayne Seltzer, *ATLAS Institute / College of Engineering and Applied Science*

Education and Public Outreach Specialist Bryan Costanza, *Laboratory for Atmospheric and Space Physics*

This collaboration will develop an interactive exhibit at Fiske Planetarium so that students in grades 4–12, undergraduates and the public can feel and see magnetic fields and interactions. Magnetic fields are a core driver of solar dynamics and play a key role in the understanding of solar physics. It is the first time Fiske has offered this kind of exhibit.



Fiske Planetarium will house an interactive exhibit that introduces students and the public to solar physics. *Photo by Casey A. Cass, CU Boulder*

Discover how CU Boulder faculty, staff and students are reaching out and engaging with communities around the state and beyond.



colorado.edu/outreach/ooe/outreach-awards

Be passionate. Be inspired. Be connected.

Be Boulder.

