CU BOULDER OUTREACH AWARDS 2017–18



Office for Outreach and Engagement



A MESSAGE FROM THE VICE PROVOST

The CU Boulder Outreach Awards support projects that exemplify scholarly rigor, entrepreneurial spirit, and commitment to public outreach and community engagement. These projects led by CU Boulder's world-class faculty help to address the diverse needs of communities throughout Colorado and beyond.

This year, the CU Boulder Outreach Committee received outstanding proposals from across all the university's divisions. I am excited to report that the Office of the Chancellor, Office of the Provost and Division of Continuing Education together are able to fund 40 projects for 2017–18, totalling \$460,000.

The projects that received funding this year bring together community knowhow and engaged scholarship in a way that supports CU Boulder's role as a comprehensive public research university. They also align with Continuing Education's mission of providing high-quality, innovative, lifelong learning opportunities to diverse populations by extending the educational resources of the university.

As dean of Continuing Education and vice provost for Outreach and Engagement, I am pleased to administer these awards through the Office for Outreach and Engagement, which is located in our division and serves the whole campus.

We are thrilled with the impact these programs have and will continue to have on individuals and communities throughout Colorado, our region and the world.

Sincerely,

Sar Thompson

Sara Thompson Vice Provost for Outreach and Engagement Dean of Continuing Education

2017–18 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 undergraduate and graduate students play a crucial role 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. These projects must meet at least one of the following criteria:

- Respond to a direct request made by a school or community group
- Establish a long-term relationship with a group or community
- Serve a community with limited access to CU Boulder programs
- Make the work of CU Boulder's faculty accessible to the public
- Involve CU Boulder undergraduate and graduate students in project development, implementation and/or evaluation

This year, the committee selected 40 projects that totaled \$460,000. Since 1999, more than 740 projects totaling nearly \$5 million have been funded through the Office of the Chancellor, Office of the Provost and the Division of Continuing Education.

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.

CU BOULDER OUTREACH COMMITTEE

Professor Bud Coleman Committee Chair

Department of Theatre & Dance

Associate Professor Jaelyn Eberle

Department of Geological Sciences Curator, 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 David Meens Director, Office for Outreach and Engagement

Professor Joe Ryan Department of Civil, Environmental and Architectural Engineering

Professor James White

Interim Dean, College of Arts and Sciences Department of Geological Sciences Environmental Studies Program Institute of Arctic and Alpine Research (INSTAAR)

COLLEGE OF ARTS AND SCIENCES

Attention, Behavior, and Learning Clinic: Affordable Childhood Evaluations

Associate Professor Erik Willcutt and Research Associate Nomita Chhabildas Department of Psychology and Neuroscience

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

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 clinic, Richardson and her graduate students provide the homeless with free neuropsychological evaluations, which can be used to access disability benefits.



Brain Behavior Clinic and Boulder County Homelessness

Bringing Better Geology to Death Valley National Park

Professor Karl Mueller Department of Geological Sciences

Professor Mueller will teach earthquake and flash flood geology to interpretive rangers in Death Valley National Park through lectures and field trips. Park rangers will receive teaching resources and geology guides to use for talks at the visitor center and to lead outdoor adventure hikes that will introduce the general public to Death Valley's extraordinary geology.

Colorado Classics Day 2017

Associate Professor Jackie Elliott Department of Classics

This program is for middle and high school students from across the state with an interest in ancient Greece and Rome. In September, the classics department hosts Colorado Classics Day, which is designed to broaden students' understanding of classical language and culture and their relevance today.

Computation-Based Education Curricula for PISEC

Professor Noah Finkelstein, *Department of Physics* Director Michael Bennett, *Educational Outreach and Research, JILA (Joint Institute for Laboratory Astrophysics)*

The Partnerships for Informal Science Education in the Community (PISEC) program works with local schools to help underrepresented students learn about physics. PISEC will develop and implement curricula designed to help middle and high school students learn computational skills.

CU Contemporary Dance Works Residency Tour

Professor Nada Diachenko, Professor Michelle Ellsworth, Assistant Professor Donna Mejia, Assistant Professor Gesel Mason, Dance Outreach 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. The students will head to Delta and Garfield counties on the Western Slope for the fifth year, offering classes, workshops and performances at local schools and community centers.



CU Contemporary Dance Works Residency Tour

Photo by Vivian Kim, CU Boulder

CU Department of Theatre & Dance Theatre Tour

Assistant Professor Kevin Rich and Dance Outreach Coordinator Peg Posnick Department of Theatre & Dance

The theatre tour celebrates literacy, live theatre and the imaginations of young people in the community through writing and performing their stories. Faculty and graduate students will work with students from local schools to write modern-day fairy tales, which will be developed into plays and performed along the Front Range.

The CU/Pojoaque Youth Culture Camp

Assistant Professor Scott Ortman Department of Anthropology

The anthropology department and the Pueblo of Pojoaque, a native tribe, developed the culture camp as part of the department's archaeological field school. The camp aims to increase awareness of ancestral sites among pueblo youth, tell the tribe's story using archaeological, historical and traditional knowledge, and encourage pueblo youths to pursue STEM careers.



CU/Pojoaque Youth Camp

Photo by Scott Ortman, 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.

Dance Outreach Projects

Senior Instructor Nii Armah Sowah, Assistant Professor Gesel Mason, Assistant Professor Donna Mejia, Assistant Professor Helanius Wilkins and Dance Outreach Coordinator Peg Posnick *Department of Theatre & Dance*

The dance outreach program brings dance faculty and students to diverse communities and K–12 students across Colorado. Interactive programs include performances, lectures, demonstrations and classes that encourage people of all ages and backgrounds to express creativity through dance and explore various approaches to dance.



Dance Outreach

Photo by Glenn Asakawa, CU Boulder

Educating Inmates in an Era of Mass Incarceration

Professor Joanne Belknap Department of Ethnic Studies

Through this project, undergraduate students will take an ethnic studies class with inmates from the Denver County Jail. 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.

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

The Department of Linguistics 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 course.



Literacy Practicum

Photo by Jay Dedrick, CU Boulder

Philosophy Outreach Program of Colorado (POPCO)

Senior Instructor Daniel Sturgis and Professor David Boonin Department of Philosophy

Through POPCO, philosophy graduate students and faculty work with local high school teachers to create a curriculum focused on key philosophical questions and also organize an annual high school ethics bowl competition. This year, the program will reach out to senior centers, nonprofits and other groups that have limited access to university resources.

RDS Center: Reaching Out to People with Bipolar Research

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.

Walking in Another's Shoes: Archaeology and Ancient Sandals

Professor Elspeth Dusinberre and Lecturer Erin Baxter Department of Classics

Ancient sandals tell a rich story about culture and class, and this experimental archaeological research project seeks to uncover that story. Classics and anthropology faculty and students, local handweavers and running clubs will study the methods, materials and types of sandals made 1,800 years ago, weave replicas of prehistoric sandals and test them on local trails.

SCHOOL OF EDUCATION

Aquetza: Youth Education, Leadership and Community Empowerment Program

Assistant Professor Enrique Lopez

This residential summer program for Colorado Chican@/Latin@ students provides an academic enrichment experience that examines the history, literature, health science, and relevant social and political issues surrounding their cultural communities. CU Boulder undergraduates receive training during the academic year to help lead the program each summer.



Aquetza: Youth Education, Leadership and Community Empowerment Program

Building LGBTQ-Inclusive Capacity Through University-District Partnership

Research Associate Sara Staley and Research Associate Bethy Leonardi

The School of Education's A Queer Endeavor initiative works to create affirming school communities for lesbian, gay, bisexual, transgender, queer and questioning (LGBTQ) youths, families and staff. This year, the initiative is working with Boulder Valley School District emerging experts to create "train-the-trainer" professional learning models and programs.

College Readiness: Supporting Diverse High School Students in Boulder

Assistant Professor Terrenda White

The School of Education is collaborating with Pathways 2 Teaching (P2T), a college readiness program that encourages 11th- and 12th-grade students to explore teaching as a career while examining educational justice issues. P2T serves hundreds of low-income and first-generation students in Denver, and has expanded to Centaurus and Boulder high schools.



Photo by Hannah Fletcher, CU Boulder

College Readiness: Supporting Diverse High School Students in Boulder

Community-Building Dialogues with Mobile Home Park Residents

Instructor and Director Karen Ramirez, *CU Dialogues* Director Manuela Sifuentes, *Community Partnerships, CU Engage*

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

Cultivating Campus and Community Leaders Through Public Achievement

Associate Director Roudy Hildreth, *CU Engage* Director Charla Agnoletti, *Public Achievement*

Since 2008, this youth-led civic engagement program has promoted student voice and transformative change for individuals and communities. Undergraduates coach K–12 students in Boulder and Lafayette as they participate in academic programs, discuss school- and community-based social justice issues, and work with community partners on service-learning projects.

Families and Educators Together: A Partnership with Boulder Valley School District

Research Associate Kristen Davidson

Through this project, school leaders, a community liaison, teachers and parents develop academic and nonacademic goals as well as strategies to advance these goals through family engagement. This type of research-practice partnership helps researchers and practitioners to learn from each other and jointly advance student learning and equity.

Starting a Worker-Owned Cooperative on Black Mesa

Professor Ben Kirshner, *CU Engage* Program Director Sabrina Sideris, *INVST Community Studies*

The INVST Community Studies program has worked with the Navajo Nation near Piñon, Arizona, since 1998 and is now working with the nation's Black Mesa Water Coalition to develop a worker-owned women's wool buying co-op. Each summer, CU Boulder students work in the agricultural community and learn about justice and sustainability.



Starting a Worker-Owned Cooperative on Black Mesa

Supporting Aurora's Culturally and Linguistically Diverse Students

Research Associate Simoara Valladeres

This partnership with Aurora community-based organizing groups is researching how the Aurora schools can become more responsive to culturally and linguistically diverse students. Researchers will work with parents, students and community groups to analyze public and school district data and connect this data to existing education research.

COLLEGE OF ENGINEERING

Expanding STEAM Kits for Children in Hospital Settings

Research Associate Daniel Knight and Associate Professor Michael Hannigan, Department of Mechanical Engineering Faculty Director Daria Kotys-Schwartz, Idea Forge Summer STEM Programs Director Brian Jernigan, CU Science Discovery

Faculty, staff and students are teaming up with the Children's Hospital of Denver to develop science, technology, engineering, art and math (STEAM) kits for patients in long-term care. Mechanical engineering design teams and students are creating and testing the kits, which include hands-on activities that meet strict hospital guidelines.



Photo by Glenn Asakawa, CU Boulder

Expanding STEAM Kits for Children in Hospital Settings

GRADUATE SCHOOL

Colombian Displaced Communities: Planning and Urban Design Seminar

Assistant Professor Jota Samper Program in Environmental Design

Environmental design students will study 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 will work closely with residents on community projects and also with local academic researchers.

Metrolab CU-City Design Workshop: Hill and Broadway Corridor

Associate Professor Brian Muller, Assistant Professor Shawhin Roudbari and Assistant Professor Jota Samper, *Program in Environmental Design* Associate Professor Joel Hartter, *Environmental Studies Program* Associate Professor Beth Osnes, *Department of Theatre & Dance* Program Director Mara Mintzer, *Growing Up Boulder*

This initiative of the CU Boulder-city Metrolab network seeks to include faculty, staff and students in city planning. The network will focus on ways to revitalize the Hill commercial district and central Broadway area, including plans for the adjoining residential areas, design of a hotel and convention center, and further expansion of the city's major transportation corridor.

SCHOOL OF LAW

Constitutional Literacy in Colorado High Schools

Professor Melissa Hart

Professor Hart has developed two programs for Colorado high school students. 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.

COLLEGE OF MUSIC

Piano for Dreamers

Associate 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.

Middle School Ensembles as a Community Partnership

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

This partnership among public school band and orchestra teachers, the Boulder Children's Chorale, and College of Music faculty and students provides an additional musical opportunity for local middle school students. Through the program, undergraduates are able to hone their teaching skills, and high school interns learn about teaching music as a career.



Middle School Ensembles as a Community Partnership

RESEARCH INSTITUTES

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- and fifth-grade girls' interest in science, and this year expands to middle school students. 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 at the Museum Exploring Science (GAMES)

Photo by CU Museum of Natural History

Sustaining the Success Colorado Archaeology in the Classroom

Professor Stephen Lekson, *CU Museum of Natural History and Department of Anthropology* Professor Cathy Cameron, *Department of Anthropology* Senior Educator Jim S. Hakala, *CU Museum of Natural History*

The CU museum continues to expand this program so that more elementary students and teachers in classrooms and communities across the state can discover the science, history and geography of Colorado through archaeological materials. Participating schools receive teaching kits containing artifacts, maps, tools, lessons and teacher guides.

INTERDISCIPLINARY AND FACULTY GROUP AWARDS

Boulder Affordable Housing Research Initiative

Associate Professor Jennifer Fluri, *Department of Geography* Instructor Abby Hickcox, *Honors Program*

In its third year, this initiative collects and shares data on affordable housing in Boulder with affordable housing organizations and local residents. The project uses qualitative and quantitative research methods that incorporate various perspectives and synthesizes disparate efforts, opportunities and initiatives related to access to affordable housing in Boulder.

Building Capacity for Youth Organizing Through Data Use

Professor Ben Kirshner and Research Associate Siomara Valladares School of Education Assistant Professor Ben Shapiro, *Alliance for Technology, Learning and Society* (*ATLAS*) and Department of Computer Science

This project partners with Padres y Jóvenes Unidos (PJU), a community organizing group in Denver, to design and build a mobile-friendly, web-based platform that will assist youth participatory action research. Undergraduate computer science students will learn how to design socially useful products that facilitate community building and networking.

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 Boulder Valley School District, Boulder Housing Partners, 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.

Custom 3D Books for 50 Families Worldwide

Assistant Professor Tom Yeh, *Department of Computer Science* Associate Professor Bridget Dalton, *School of Education* Director Stacey Forsyth, *CU Science Discovery*

The CU Boulder-based Tactile Picture Books Project creates 3D books for visually impaired children with ideas from their families. This year, faculty, staff and students will create books for 50 families, and will involve underrepresented undergraduate students from the Engineering GoldShirt program and the School of Education.



Custom 3D Books for 50 Families Worldwide

Community Dialogues about "Opting Out" of State Assessments

Assistant Professor Terri S. Wilson, Professor Michele Moses, Instructor Karen Ramirez, *School of Education*

This research project examines how five Colorado school districts make sense of emerging movements to opt students out of standardized testing. Through community forums and dialogues, researchers will explore attitudes about standards, accountability and assessment in public education. In addition, faculty and staff will offer resources and guidance to schools as requested.

Highlighting People of Color in Colorado Classrooms

Instructor Kent Willmann, *School of Education* Distinguished Professor Emerita Marjorie McIntosh, *Department of History* Associate Professor Arturo Aldama, *Department of Ethnic Studies* Professor Marcia Yonemoto, *Department of History*

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, local teachers and teachers from southern Colorado will receive training around how to create inclusive curricula through regional workshops as well as a summer teacher workshop.

Learning and Teaching Computer Science at EPIC

Associate Professor A. Susan Jurow, School of Education Assistant Professor Ben Shapiro, Alliance for Technology, Learning and Society (ATLAS) and Department of Computer Science

This partnership between Sanchez Elementary School in Lafayette and the School of Education seeks to improve academic learning for low-income children and give CU Boulder students and pre-service teachers hands-on experience through an after-school program. This year, the focus is on helping the school design and implement a robust computer science curriculum.



Learning and Teaching Computer Science at EPIC

Photo by Peter Caughey, CU Boulder

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 Managing Director Wendy Franz, *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.



Shakespeare and Violence Prevention

Photo by Sue Postema Scheeres, CU Boulder

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 16, 2010

colorado.edu/outreach/ooe/outreach awards outreach@colorado.edu



University of Colorado Boulder