# CUBOULDER OURREAGE AWARDS 2021-22



Office for Outreach and Engagement



# A MESSAGE FROM THE VICE PROVOST

As we move through the current issues facing our world, the role of outreach and engagement has never been more crucial. In the upcoming year, the university will continue its commitment to supporting public outreach and community engagement projects that connect university research, teaching and creative work with communities in Colorado and beyond.

The CU Boulder Outreach Awards Committee received 40 outstanding Outreach Award proposals this year. We are very pleased to announce that for 2021–22 the Office of the Chancellor, Office of the Provost and Division of Continuing Education will fund 27 projects that collaborate with communities to address complex societal challenges.

During the 2021–22 academic year, project teams will reach beyond the university to partner with nonprofits, schools, government agencies, businesses and more. This important work embodies both CU Boulder's role as a comprehensive public research university and the Division of Continuing Education's mission of providing lifelong learning opportunities for diverse populations across our state.

We invite you to read how this year's funded projects are building community and making a positive difference throughout our state, region and world.

Sincerely,

Sar Thompson

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 16, 2010

# **CU BOULDER OUTREACH AWARDS**

The CU Boulder Outreach Awards fund faculty-led outreach and engagement projects that connect 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 Awards 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
- Focuses on inclusive, diverse and equitable programming
- Fosters and sustains mutually beneficial campus-community relationships
- Shows evidence of public need or responds to a direct request
- Establishes a long-term relationship with a group or community
- Serves a community with limited access to CU Boulder programs

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 AWARDS COMMITTEE**

Professor Joseph Ryan Committee Chair Department of Civil, Environmental, and Architectural Engineering College of Engineering and Applied Science

Associate Professor Bruce Bergner Department of Theatre & Dance College of Arts and Sciences

**Professor Jaelyn Eberle** Department of Geological Sciences College of Arts and Sciences University of Colorado Museum of Natural History

**Associate Professor Jennifer Hayghe** Department of Piano and Keyboard College of Music

Associate Professor Jill Litt Environmental Studies Program College of Arts and Sciences **Associate Professor Kelty Logan** Department of Advertising, Public Relations and Media Design College of Media, Communication and Information

**Associate Professor Enrique López** Department of STEM Education School of Education

Alice Madden Executive Director, Getches-Wilkinson Center for Natural Resources, Energy, and the Environment Colorado Law

#### **David Meens**

Director, Office for Outreach and Engagement Faculty Affiliate, School of Education

**Senior Instructor Don Oest** Department of Social Responsibility and Sustainability Leeds School of Business

## THIS YEAR'S AWARDS BY THE NUMBERS



# COLLEGE OF ARTS AND SCIENCES

#### Attention, Behavior, and Learning Clinic: Affordable Childhood Evaluations Nomita Chhabildas, Research Associate Erik Willcutt, Professor

## Department of Psychology and Neuroscience

The clinic provides comprehensive evaluations for children who are experiencing academic, behavioral and emotional difficulties, while offering graduate students valuable educational experience. To accommodate family preferences, evaluations are provided in person or through tele-assessment. The clinic operates on a sliding scale that allows low-income families to access these services at low to no cost.

#### **CU Contemporary Dance Works Residency Tour** Helanius Wilkins, Assistant Professor Ondine Geary, Production, Outreach & Engagement Liaison Department of Theatre & Dance

This graduate student touring company is working with teens and senior citizens in Paonia, CO to foster relationships through community-building virtual engagements. The graduate students mentor the teens in the creation of their own community dances made in collaboration with the seniors. The performances will be shared with the community during the touring company's weeklong residency in May 2022.



During this weeklong residency each spring, this graduate student touring company brings dance to communities across the state that are underserved by the arts. *Photo by Ondine Geary, CU Boulder* 

#### **Literacy Practicum**

Kira Hall, Professor Department of Linguistics

**Raichle Farrelly, Senior Instructor** *Department of Linguistics*, **Program Director** *TESOL* As part of undergraduate linguistics courses, this program partners with literacy organizations in Boulder, the Emily Griffith Technical College and Colorado Mountain College. CU Boulder students work with children and adults to help them improve reading and writing skills, applying targeted teaching strategies and gaining valuable educational and personal experience.

## **PROGRAM IN FOCUS**

#### Brain Behavior Clinic and Boulder County Homelessness

**Emily Richardson, Associate Clinical Professor** *Department of Psychology and Neuroscience* People who chronically experience homelessness have high rates of undiagnosed cognitive disabilities. The partnerships with Boulder County homeless services, Mental Health Partners, Clinica and other centers help to identify and support those who have cognitive deficits. Through the clinic, Richardson and her graduate students provide neuropsychological evaluations that can be used to access disability benefits and/or guide treatment planning.



Trained 50+ CU Boulder students Served 300 community members



"Outreach funding has been instrumental over the past decade in supporting the dual mission of the clinic to train students and provide sliding scale assessments to community members. Because of outreach support, trainees have benefited from working with diverse individuals at the greatest need in our community, helping them connect with resources and services to improve their quality of life."

-Emily Richardson, Associate Clinical Professor



Graduate student Rachel Thayer provides cognitive testing at CU Boulder's Brain Behavior Clinic for a client experiencing homelessness. Photo by Ellen Reynerson, CU Boulder

# SCHOOL OF EDUCATION

#### **2021 Children's Book Festival**

Bridget Dalton, Associate Professor Program in Literacy Studies Jacalyn Colt, Chair Development Advisory Board

This partnership with the Boulder Book Store brings together families, teachers and community members to celebrate literacy and allows CU Boulder students to learn how to develop a community event. The virtual festival will allow K-12 students from three local schools to engage with award-winning authors. The author panel and Q&A will also be live-streamed to a broader online audience.

#### Aquetza: Youth Education, Leadership, and Community Empowerment Program Enrique Lopez, Associate Professor *Program in STEM Education, CU Engage*

The adverse impacts of COVID-19 are especially amplified among children from low-income and historically underserved communities. Aquetza is directly responding to this pandemic and educational crisis by extending access to rigorous summer virtual learning opportunities for Colorado high school youth. CU undergraduate students will design and implement the online educational program.



Students participating in the Aquetza program, which develops skills to become leaders in their communities. Photo by Glenn Asakawa, CU Boulder

## Public Achievement: Building Equity with First-Generation Immigrant Youth

Roudy Hildreth, Instructor, Executive Director Soraya Latiff, Assistant Director Charla Agnoletti, Program Director CU Engage, Public Achievement

This program fosters civic engagement and educational achievement for primarily Latinx and first-generation college-bound students. CU Boulder undergraduate students work as experiential educators with middle and high school students to design and carry out civic action projects. The K-12 students develop critical thinking, inquiry skills, and civic capacity through addressing complex public problems.



Fall 2018 Public Achievement campus visit at CU Boulder. Photo by Jennifer Ciplet, CU Boulder

## **GRADUATE SCHOOL**

#### **Colombia Infrastructure: Upgrading for Displaced Communities**

Jota Samper, Assistant Professor Program in Environmental Design

Through a six-week summer course, environmental design students study and work in an unplanned settlement near Medellin, Colombia, which was formed when people fled the city because of violence. The 10,400 residents have created infrastructure, businesses and community centers from the ground up. Students collaborate with residents to address critical needs including paving pathways, updating gathering spaces, and expanding the potable water network.

# COLORADO LAW

#### **The Acequia Project: Helping San Luis Valley Farmers** Sarah Krakoff, Moses Lasky Professor

This project provides free legal assistance to low-income and predominantly 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), so they can take advantage of Colorado laws and protect the traditional ways acequias operate. These ditches capture runoff from mountain snowmelt.



An Acequia outside of San Luis, CO starts flowing in late spring as agriculturalists of the San Luis Valley prepare for the upcoming growing season. Photo by Kelly MacGregor.

## **PROGRAM IN FOCUS**

#### **Constitutional Literacy in Colorado High Schools**

Suzette Malveaux, Provost Professor, Director Byron R. White Center for the Study of American Constitutional Law Colene Robinson, Clinical Professor, Co-director Juvenile and Family Law Program Matthew Cushing, Director Executive and Community Learning Programs

Jennifer Sullivan, Senior Assistant Dean Program Development

This project through the Byron R. White Center in Colorado Law is designed to give Colorado high school students deeper knowledge of the Constitution so they can better advocate for constitutional rights in their communities. Law students work with schools statewide through a Constitution Day program in September and a yearlong program that prepares students for a moot court competition on campus and in Washington, D.C.

Served

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Started in 1999

Involved K-12 students **CU Boulder students** 



"Outreach Award funding enables us to keep this program accessible to all students in our community. I love that we can educate and empower students from all over the state. Having this funding means we can reduce or waive any programming fees so that everyone can participate."

-Suzette Malveaux, Provost Professor



A Colorado high school student argues in front of judges during moot court competition held at Colorado Law. Photo by Patrick Campbell, CU Boulder

# COLLEGE OF MUSIC

## **RESEARCH INSTITUTES**

#### Colorado Lullaby Project: Nurturing Social Connection Through Song Jeffrey Nytch, Associate Professor, Director Entrepreneurship Center for Music

The COVID-19 pandemic has increased stress on the mental health of pregnant and postpartum women. This project seeks to address this issue by pairing new parents at partnering hospital birth centers with student musicians to strengthen parent-child bonds through customized original lullables. Each family receives a recording of their lullaby and selected lullables will be arranged for a larger ensemble to be presented during a public concert.



A mother and her child listen to a lullaby at a convening in New York City. Photo credit: Carnegie Hall Lullaby Project

#### **Emerging Composer Project for Area High Schools**

Carter Pann, Associate Professor Department of Music Composition

Students from Skyline High School in Longmont, CO are provided with the opportunity to create original works of music aimed to inspire them to consider further pursuits in the musical arts. The students work closely in mentorship with graduate students in the field of music composition. The newly-created musical works will be featured in a public performance by members of the Boulder Philharmonic Orchestra.

#### **Craniate: Superpowered Learning for Underserved Students** Shaz Zamore, Instructor *ATLAS Institute*

Craniate provides educational tools and researches the efficacy of modern methods of STEM learning through visual storytelling and project-based learning. Middle school students in the Boulder Valley School District who are underrepresented in STEM fields will receive an experiment kit and copies of the "The AXON Squad" comic that uses a story of superpowered kids to teach concepts central to interdisciplinary STEM fields.

## Expanding Representation and Access: Colorado Archaeology in Classrooms

Samantha Fladd, Assistant Professor Department of Anthropology, Curator CU Museum of Natural History William Taylor, Assistant Professor Department of Anthropology, CU Museum of Natural History James Hakala, Senior Educator CU Museum of Natural History Patrick Cruz, PhD Candidate Department of Anthropology

Over the past seven years, this project has provided hands-on learning kits that share CU Boulder archaeological research with 4th grade classes across the state. In addition to the creation of 15 new kits this year, the project will incorporate perspectives of Colorado's past by descendant community members through the development of robust online resources to augment the classroom learning experience.



The Colorado Archaeology in the Classroom project, in partnership with Mesa Verde National Park, provides high quality hands-on materials to classrooms throughout Colorado. *Photo by James Hakala, CU Boulder* 

#### **Researcher-Practitioner Collaborations for Rural Community Wildfire Risk Reduction**

#### Hannah Brenkert-Smith, Associate Research Professor Institute of Behavioral Science

This project uses collaborative research to support local programs in their efforts to conduct wildfire outreach and education, and to aid fire-prone communities in their efforts to become more fire-adapted. Data collected through household surveys will inform the West Region Wildfire Council how to tailor wildfire mitigation programs that address local needs and values for communities in the western region of the state.



Burland Firewise Saws & Slaws Fire Mitigation program leader, Jack Roberts, flags a tree for removal on the homeowner's property. Photo by Patrick Campbell, CU Boulder

#### Supporting Tribal Language Initiatives, Sovereignty with Visual Learning

Jennifer Shannon, Associate Professor Department of Anthropology, Curator CU Museum of Natural History The maintenance and revitalization of the Mandan Hidatsa Arikara (MHA) Nation languages is vital for tribal identity and native sovereignty. In response to a request from the MHA Nation's Culture and Language Department, this project combines dual-language instructional materials and visual art into comics to create culturally appropriate and locally relevant Indigenous language learning resources.



At a comics workshop hosted by Tony Lone Fight, participants review each other's comics at the Mandan Hidatsa Arikara Nation in North Dakota. Photo by Jen Shannon, CU Boulder

## FACULTY GROUP AWARDS

#### A Collaborative Project at the Texas-Tamaulipas Border

Bernard Amadei, Distinguished Professor Department of Civil, Environmental, & Architectural Engineering Christina Sue, Associate Professor Department of Sociology David Cook-Martín, Professor Department of Sociology

This multifaceted project brings community members in Matamoros and Reynosa two cities in Tamaulipas, Mexico—together with CU Boulder faculty and students to address urgent needs in migrant shelters and for unhoused migrant populations through community meetings, infrastructure projects, STEM-focused educational programming, and a sanitation and hygiene campaign.



Fieldwork in Matamoros at the Texas-Tamaulipas Border. Photo by Bertha Bermúdez, CU Boulder

#### A Community-Led Musical Ethnography of Pueblo, CO

Susan Thomas, Professor College of Music, Director American Music Research Center Austin Okigbo, Associate Professor, Chair Department of Musicology Arturo Aldama, Associate Professor, Chair Department of Ethnic Studies Natalie Mendoza Gutierrez, Assistant Professor Department of History Patty Limerick, Professor, Director Center of the American West Jason Romero, Director Latino History Project

**Xochitl Chavez, Assistant Professor** *Department of Ethnomusicology, University of California, Riverside* In collaboration with communities traditionally underrepresented in music studies, this initiative aims to document and preserve unique stories and sounds from Pueblo, CO. This project examines the city's social and labor history, as experienced through music and sound, and also follows musicians and their music into the present as the city transitions into a post-industrial future.



The riverwalk in Pueblo, Colorado. Photo by Pradeep Diska

Building Early Language and Math Together Eliana Colunga, Associate Professor Lei Yuan, Assistant Professor Department of Psychology & Neuroscience

Young children and their families from underserved communities in the Boulder and Carbondale areas will engage in fun, hands-on activities that foster early language and mathematical development. This research-practice partnership will incorporate diverse cultural and familial perspectives by incorporating parents' feedback and suggestions in designing activities and providing a space for the parents to connect with one another virtually.

#### **CU Restoration Ecology Experiential Learning Program**

Timothy Seastedt, Professor Emeritus and Senior Fellow

Department of Ecology and Evolutionary Biology, Institute of Arctic and Alpine Research (INSTAAR) Sharon Collinge, Professor Environmental Studies Program Katherine Lininger, Assistant Professor Department of Geography Tracy Halward, Instructor Department of Ecology and Evolutionary Biology

**Kristin Lopez, Academic Services Associate Director** *Department of Molecular, Cellular and Developmental Biology* In partnership with Nature Kids/Jovenes de la Naturaleza, the Wildlands Restoration Volunteers youth program and area high schools, this project seeks to combine learning with handson restoration of landscapes. CU Boulder undergraduate and graduate students work with underserved youth in the community and together explore ecological restoration, environmental science careers, and ways to improve air and water quality.

### Engaging Underserved Students with CU's Cutting-edge Space Research

Carolyn Crow, Assistant Professor Department of Geological Sciences

Paul Hayne, Assistant Professor Department of Astrophysical and Planetary Sciences

John Keller, Senior Instructor, Planetarium Director Department of Astrophysical and Planetary Sciences Through a collaboration with Ad Astra Academy, underserved middle and high school students are provided with opportunities to learn about the stars, planets and cosmos through hands-on activities based on CU Boulder's cutting-edge space research. The program includes immersive field trips, self-directed research projects and participation on the front lines of interplanetary exploration aimed to spark inspiration and nurture curiosity.

# Empowering Economically Disadvantaged Adolescents with Complex Communication Needs

Sherri Tennant, Clinical Scholar in Residence

#### Christine Brennan, Assistant Professor, Coordinator of Undergraduate Studies

Department of Speech, Language, and Hearing Sciences

CU Boulder faculty and graduate students provide virtual and in-person training for speech pathologists, educators and other staff at the Denver School of Science and Technology (DSST). The training helps DSST professionals more effectively support middle and high school students, as well as their families, with complex communication needs due to autism, cerebral palsy and other medical conditions.

#### **Empowering Marginalized Girls in STEM through Symbiosis Modeling**

**Jingchun Li, Assistant Professor** *Department of Ecology and Evolutionary Biology*, **Curator of Invertebrates** *Museum and Field Studies Program* 

Mike Gil, Chancellor's Postdoctoral Fellow Department of Ecology and Evolutionary Biology John Keller, Senior Instructor, Planetarium Director Department of Astrophysical and Planetary Sciences Carl Simpson, Assistant Professor Department of Geological Sciences, Curator of Invertebrate Paleontology CU Museum of Natural History

## Gianna Sullivan, Science Program Coordinator CU Museum of Natural History

This project is part of the Girls At the Museum Exploring Science (GAMES) program, which encourages fourth-through eighth-grade girls to pursue their interest in science. During weekly school visits to the museum, students explore the theme of symbiosis—different forms of life persisting together in close unison—through hands-on activities and direct interaction with scientists and museum professionals.

## Fostering Inquiry-Based K-12 Science Teaching with Authentic Data

Erika Lynne Harden, Education & Outreach Associate Cooperative Institute for Research in Environmental Sciences Melissa Braaten, Assistant Professor School of Education

Kerri Wingert, Research Associate Institute of Cognitive Science

Jonathan Griffith, Education & Outreach Associate Cooperative Institute for Research in Environmental Sciences Anne Gold, Director of CIRES Education & Outreach Cooperative Institute for Research in Environmental Sciences Working directly with teachers in rural, underserved Colorado school districts, as well as Denver Public Schools, this project brings authentic science data into middle and high school classrooms. Together, teachers and researchers co-design activities based on an innovative inquiry-based framework called Data Puzzles which aligns closely with new K-12 Next Generation Science Standards.



Scientists collect sea ice cores in the Arctic during the 2019–20 MOSAiC research expedition to better understand the Arctic climate system. *Photo by Anne Gold, CU Boulder* 

## **PROGRAM IN FOCUS**

#### **SCENIC Expansion: Developing Outreach Pathways in Rural Colorado**

Daniel Knight, Research Associate Department of Mechanical Engineering Mike Hannigan, Professor, Chair Department of Mechanical Engineering Joseph Polman, Professor, Associate Dean for Research Program in Learning Sciences and Human Development Greg Whiting, Associate Professor Department of Mechanical Engineering

Science-Engineering Inquiry Collaborative In Rural Colorado (SCENIC) fills the need for ongoing CU Boulder engineering outreach in the area of science, technology, engineering and math (STEM) education by connecting faculty and students with rural Colorado high schools to develop student-driven, inquiry-based science projects. Currently in its seventh year, the program has recently expanded in partnership with Colorado Mesa University.

Began in **2014** 

Total impact: 2,422+ K-12 students

Reaching out to Colorado counties



"Support from the CU Boulder Outreach Awards has been crucial for expanding our program beyond our two original counties to bring environmental engineering inquiry and monitoring to a broader range of rural Colorado schools. In addition, the funding was instrumental in developing a partnership between the College of Engineering and Applied Science and the School of Education to investigate and integrate research findings on the impacts of the program on these often underrepresented, low-socioeconomic status, first generation students."

-Daniel Knight, Research Associate



Students from Union Colony Preparatory School present the results of their investigations at the end-of-year symposium. Photo by Oksana Schuppan

#### **Shakespeare and Violence Prevention in Schools**

Beverly Kingston, Senior Research Associate, Director Center for the Study and Prevention of Violence
Kevin Rich, Associate Professor, Associate Chair Department of Theatre & Dance
Tamara Meneghini, Associate Professor Department of Theatre & Dance
Amanda Giguere, Director of Outreach Colorado Shakespeare Festival
Heidi Schmidt, Outreach Specialist Colorado Shakespeare Festival
Laurie Keith, Research Assistant Center for the Study and Prevention of Violence
This collaboration seeks to reduce bullying and violence in Colorado schools. Using the latest anti-bullying research, Shakespeare performances and workshops help spark conversations

about violence, school safety and how to speak out against bullying. Classroom workshops, conducted in person or remotely, include performances and recordings of *Julius Caesar* for sixth through 12th grades, and *Twelfth Night* for third through fifth grades.



The Colorado Shakespeare Festival performs *The Tempest* as part of their violence prevention school tour program in 2019-20. *Photo by Patrick Campbell, CU Boulder.* 

#### School of Education-University Hill Partnership for Equity

Andrea Dyrness, Associate Professor School of Education Deborah Palmer, Professor School of Education

Enrique Sepúlveda, Assistant Professor Department of Ethnic Studies

The partnership between the CU Boulder School of Education and University Hill Elementary supports educational equity through professional development and after-school programs. By developing and nurturing spaces for critical inquiry and dialogue, CU Boulder researchers partner with school leaders, teachers and families to engage racially and linguistically marginalized students with culturally appropriate resources.



Fifth grade University Hill students and their CU Boulder mentors sitting in a circle on the grass, in the Education Building Courtyard. *Photo by Deb Palmer, CU Boulder* 

## **BROCHURE TEAM**

Writing and Editing Jeanne McDonald and David Meens

#### **Graphic Design and Production**

Emily Musumecci

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

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