

Art + Science Partnerships Cohort

Interested in partnering with artists and communities to design and implement projects that impact social and environmental issues?

The Art + Science Partnerships “Creative Strategists” program helps artists and arts leaders become facilitators of interdisciplinary partnerships that impact critical environmental and social issues within communities. Artists and arts leaders who want to participate in a learning community of other students, scientists, artists and community members, and address issues of power, equity and inclusion in community-engaged scholarship are encouraged to apply for the program. This is a great opportunity to learn how to work with communities and scientists in order to turn your art into action.

We will accept up to 6 artists/arts leaders in the cohort. [Applications are due Jan. 15, 2021](#) and notifications will be sent by early February 2021. Cohorts will be determined by a committee from Boulder County Arts Alliance, which includes Art + Science advisory members from CU Boulder.

[Apply now](#)

Key Cohort Objectives

- Develop and facilitate collaborative projects that utilize a set of guidelines for art + science partnerships to interrelated social and environmental community issues.
- Participate in a cohort and interdisciplinary community of learners.
- Learn how to maximize the public impact of your art
- Learn how to meaningfully collaborate with scientists, community members and other artists.
- Learn how to navigate issues of power and status in partnerships.

Participant Benefits

- Have the opportunity to apply for small grants from BCAA for enacting collaborative projects in summer 2021.
- Learn how to facilitate interdisciplinary endeavors and engage communities in the co-design of community-engaged projects that partner the arts and sciences.

- Collaborate with scientists to partner science with your artistic and community-engaged practice.
- Grow your social impact through your art practice. Art products or documentation of project activities will be displayed together at local arts venues in fall 2021.
- Broaden your networks and receive guidance from scientists, nonprofits, leaders, other academics and community members.

Overview of Program Activity

What will we do?

Cohort members will attend an orientation, a series of workshops in spring 2021 (see dates below), a summer 2021 follow-up and planning meeting, and fall 2021 exhibition and reflection meeting. Participation focuses on building a community of practice, developing a project proposal and completing aspects of the proposed project by Sept 1, 2021 in order to have material to present in a shared cohort exhibit.

Who will we work with?

Through their participation in the workshop series, cohort members will collaboratively develop a team of scientists, community members and possibly other artists/arts organization leaders, for a project that they will facilitate. The BCAA Art + Science Creative Strategists cohort will attend the program workshops side-by-side with CU Boulder graduate students in the Natural Sciences who comprise another Art + Science cohort. **These different cohorts will have the opportunity to learn from each other and are encouraged to collaborate.** In addition, as participants develop their partnerships, we encourage cohort members to invite those partners to attend the workshops with the cohort.

Importantly, each project group will receive advising and support from a science advisor and a community-engaged scholarship advising team on their community-engaged, art + science project work.

What kind of project will we do?

Art + Science projects may take many artistic forms, including but not limited to fine art, performance, music and learning materials as long as they are co-produced between scientists, artists and community members.

Science topics (and the expertise of science advisory members) might focus on, but are not limited to the following content areas:

- Water in the West
- Local / Western US climate impacts and resilience
- Urban Wild Interface / Restoration ecology
- Fire in the West (local, CO-wide etc.)
- Energy (renewable and non renewable in context of Colorado, Western US)

Projects should address equity, diversity, inclusion and social justice regardless of science content area.

Please see the example projects section below for more. Project artifacts or documentation of project activities will be exhibited together at local arts venues in fall 2021 and cohort participants should be committed to participating in the gallery exhibition.

Eligibility

- Applicants must be artists or arts organization leaders/members in Boulder County and available for the timeframe of the cohort, e.g. spring 2021 through fall 2021.
- Prospective participants must either have a community-engaged component of their current work OR be willing to work on a project focused on “Water in Steamboat Springs” or “Climate in Boulder.”
- Prospective cohort members are **not** required to already know how to connect the arts and sciences; this is what they will learn in the program.
- Applicants must commit to:
 - Participating in a cohort who will learn how to bring art and science, artists and scientists, and university and community together to address interrelated social and environmental issues within communities.
 - Fulfilling all of the requirements of the program.
 - Addressing issues of power, equity and inclusion in community-engaged scholarship.
 - Receiving mentorship and advising on their work.

Timeline & Requirements

- Application deadline: Jan. 15, 2021
- Applicants notified of acceptance: Early February 2021
- Applicants accept cohort membership: Within three days of cohort acceptance notification

Spring 2021 required attendance dates

- **Feb. 17 • 4:45-6:45 p.m.** Cohort orientation and overview, initial team building and project brainstorming
- Art-science partnerships online workshop series on the following dates from **4:45 - 6:45 p.m.** (via zoom)
 - **Wed. Feb. 24** (Exploring a shared point of wonder)
 - **Wed. March 17** (3rd Wed) (Defining a project and plan)
 - **Wed. April 21** (3rd Wed) (Project creation)
 - **Wed. May 19** (3rd Wed) (Reflection and evaluation)

During each workshop, cohorts will define the partners, resources, and processes necessary to be successful in each project stage. Cohort members will be responsible for sharing their notes with group members and for presenting them at the next workshop during an allocated check-in period.

Monthly Workshop Assignments

“Guided templates” to address the different stages of art-science guidelines and the final project proposal

Each workshop session covers a portion of the guidelines for art-science partnerships.

During each workshop, cohort members will be responsible for utilizing templates we will share to track progress and build each component of the final proposal. Templates will guide cohort members to describe how their group is addressing specific aspects of the art-science guidelines being presented in a particular session. Completing these assignments will necessitate communication with partners (artists, scientists, community members).

Deadlines: Completed templates will be due one week after each monthly meeting (e.g. the following Wed: March 3, March 24, April 28 and May 26 at 11:59 p.m.). Importantly, this work will feed into the development of the art + science partnership community project proposal.

Art + Science Partnership Group Project Advisory Meetings

Science Advisor Meetings (45-60 minutes per meeting, online)

Two meetings with your group’s science advisor two times: once during stage 2 (in March) and once during stages 3-4 (May)

Community-Engaged Scholarship Advisory Meeting (45-60 minutes per meeting, online)

- One meeting before rough draft is due (April)
- One meeting before final draft is due (May)

Final Project Proposal Deadlines

Wed. May 5. Rough draft due (albeit final component will not be completed)

Wed. June 2. Final draft due

Wed. Sept 1. a portion of the project must be completed before September 1st (to have material exhibited on the project in the cohort Fall 2021 exhibition).

Summer and Fall Meetings and Exhibit

Summer Meeting 2021

Exhibit planning and reflection August 2021 (exact date TBD by cohort)

Fall Meeting and Gallery Exhibit 2021

Gallery Exhibit of projects and post-reflection meeting (date TBD).

In this meeting, groups will exhibit a product or a record of project activity (e.g. performance, community event) at a community arts venue and then stay afterwards to reflect together on their experience.

Application Requirements

Please have the following information ready before you begin the [online application](#). Be sure and complete all sections of the application. Incomplete applications will not be considered.

Section One

- Personal contact information.
- For the work that I am interested in doing as part of this cohort, I am best categorized as:
 - an artist (all disciplines)
 - an arts organization leader (e.g. curator of museum, director of theatre company, etc.)
 - both an artist and an arts organization leader
- Organization (if applicable)
- Title
- Type of art practice that you do or support
- Please add any additional relevant information about your current capacity to undertake community-engaged work and participate in the cohort.
- Your CV (to give us a general idea of your background)
- Any social media / personal websites.
- Contact information (email and phone) for two colleagues who could serve as references. Indicate your relationship to the reference that you list (employer, collaborator, co-worker etc.).

Section Two

Commitment to attendance for key dates (**these dates are critical to the development of this cohort program and eligibility to remain in the program and eligibility to apply for project funds**). Activities will be online through at least August 2021.

- I can attend an orientation of 2/17/21 4:45-6:45 p.m.
- I can attend the four facilitator workshops (4:45-6:45 p.m. on 2/24, 3/17, 4/21 and 5/19) where I will learn how to facilitate art-science partnerships and participate in a community of learners (artists, scientists and more).
- I can attend one cohort meeting in August 2021 (exact time and date TBD).
- I can attend one cohort exhibition and final meeting in Fall 2021 (date/time TBD).

Section Three

Your Work and Interests

1. What are your current goals for your work as an artist or arts organization leader? (max 150 words)
2. Why are you interested in this program and what are your goals for your participation? (max 200 words)
3. Prior Experience (not required, but helps us understand and form the cohort)
4. What types of interrelated environmental and social issues within the community are you interested in addressing? How might your skillset, arts practice, experience and context etc. support this work? *Please view the example projects section of the web page for additional information (max 250 words).
5. This program intends to train facilitators to partner the arts and sciences to address interrelated environmental and social issues within communities. How do you attend to issues of power and privilege / equity and inclusion in your role as an artist (max 200 words)
6. Please explain your ideas for the the project you would be interested in developing in this cohort *
7. Interest in committing to completing a portion of the project by Sept 1, and having some aspect of the project to exhibit with the cohorts in a Fall 2021 Art + Science Exhibition yes / no / maybe / other
8. Program participants will all develop project proposals during the course of the workshops. Please indicate how you envision utilizing the proposal work:
 - Will apply for competitive grant from BCAA (~\$1000) to enact the project (or portions of it) by Sept 1, 2021
 - Will apply for other funding before Sept 1, 2021
 - Will consider applying for funding at a later date
 - To develop a project for which we do not need external funding
 - To develop a project for which I already have funding

9. Projects that are developed involve partners and community participants. Please let us know more about your possible partners and participants (check all that apply): *

- I have community partners with whom I already work (e.g. organizations or collaborator)
- I would want/need support in connecting with community partners
- I have artists or arts organization partners with whom I already work
- I would want/need support in connecting with artists or arts organization partners
- I have scientist partners with whom I already work,
- I am interested in partnering with the science graduate students who are participating in the Art + Science cohort
- I would want/need support in connecting with science partners (the program provides
- Other:

10. Who will your audience or participants be and how do you intend to reach them?

11. Please let us know more about the choice(s) you selected in Question #7 above. If you have specific partners or audiences that you would work with please indicate who they are (including their location). If you selected other options briefly explain why you made that choice. (max 200 words). *

12. What questions or additional information do you have for us? (max 200 words). Feel free to also contact Charlotte LaSasso with questions.

Example Projects and Partners

Projects may take many artistic forms, including but not limited to fine art, performance, music and learning materials as long as they are co-produced between scientists, artists and community members. The examples below are intended to give an idea of the shape and breadth of possible projects.

Science topics (and the expertise of science advisory members) might focus on, but are not limited to the following content areas:

- Water in the West
- Local / Western US climate impacts and resilience
- Urban Wild Interface / Restoration ecology
- Fire in the West (local, CO-wide etc.)
- Energy (renewable and non renewable in context of Colorado, Western US)

Projects should address issues of equity, diversity, inclusion and social justice regardless of science content area.

Example Projects at CU Boulder

[The Luminous Science Project: A Science-Art-Computation Nexus](#)

Traditionally, people hold disciplines apart from one another; in art class you learn about art, in science you learn about science, and usually one particular type. The Luminous Science Project takes an approach that integrates traditionally distinct topics, such as art, biology and computer science. The luminous science project explores how connecting the disciplines can enhance each of the subjects beyond what they would be individually, creating spaces where broader ways of thinking and learning are valued.

This CU Boulder Laboratory of Playful Computation project began with the creation of a nine-foot prototype lantern and a hydroponic garden. Project facilitators used art and technology to create new representations of scientific phenomena, including a traditional form of Japanese lantern making, Nebuta, used to create dynamic illuminations in the lantern that are indicators of biological, chemical, and/or physical phenomena of a system. The scientist-artist explored the familiar and flexible craft materials used in Nebuta style lanterns, but combined it with networked sensors in the garden to create dynamic illuminations of biochemical phenomena in the plants, such as photosynthesis and transpiration.

Project facilitators have developed resources for K-12 and youth and parents and built luminous science lanterns in workshops with families and teachers in the Denver Metro area. They have also implemented the project across middle and high school classrooms spanning art, computation, and science classes. The research team examines the affordances and challenges of making and using non-traditional representations in the sciences and how new representations, including luminous science lanterns, can be used to teach, communicate, and discuss scientific phenomena through collaborations with K-12 students and educators, and through projects with graduate level scientists in and out of classrooms.

[Theatre Arts: Co-produced Creative Climate Change Curriculum](#)

Current teaching practices and lessons do not support embodied participatory learning that enhances retention and understanding. Beth Osnes (CU Boulder, Theatre), Carl Simpson (CU Museum of Natural History), Jim Hakala (CU Museum of Natural History) and Patrick Chandler (CU Boulder Environmental Studies doctoral student) co-produced a “Creative Climate Change Curriculum” with a diverse set of schools in Jefferson County focused on the embodied, theatrical exploration of fossils, energy and climate for fourth and fifth grade students in Colorado.

The curriculum is based on Osne’s play, [Shine](#), a mini-musical performance for youth engagement in resilience planning. It weaves together climate science and artistic expression into a funny and powerful story. *Shine* spans 300 million years of geological time to convey how humanity, energy, and climate are interrelated. In addition to introducing elementary classroom teachers and students to *Shine*, the curriculum offers hands-on experiences with real fossils, and enactment of different geologic processes such as dramatizing the death of an ancient plant or animal and the processes that transformed them into a fossil fuel, fossil or soil. It also offers activities on photosynthesis, climate change and geology.

Example Projects and Potential Partners in Colorado

Multimedia and Writing: Love Letters to the River

Love Letters to the River is focused on the Yampa River in and around Steamboat Springs, CO. This project is affiliated with [Love Letters to the Sea](#), an international project which uses art and science to promote statewide river protection/restoration and water conservation and to engage communities in Colorado and globally and has presented their work to the UN Climate Action Summit.

This project is seeking participants to research and compile information offering multiple entry points, to develop prompts, to create lesson plans (inspired by [lesson plans for Love Letters to the Sea](#)) and co-conduct events virtually within schools or communities. Project activities can include persuasive letter writing, songwriting, poetry, drawing/painting, photography, videography, etc.

The information to be compiled and collaboratively integrated into project activity includes:

- Scientific data related to freshwater ecosystems, river and watershed health indicators, and water management in Colorado
- Current threats related to climate change, agricultural, industrial and municipal activities
- Policies in place at the local and regional and state level
- Prompts including actions to take at the individual and community level and decision makers/businesses/corporation to be addressed
- Resources (water organizations, tier stewardship events, water education curriculums, etc.)

Awareness to Action: Climate Change in Boulder County

Plans are underway to co-create arts and climate change partnerships that would use City of Boulder climate goals and data to move citizens from awareness to action. This will be a collaboration with the [City of Boulder Climate Mobilization Action Plan](#), the City's Office of Arts and Culture, the CU Boulder Office for Outreach and Engagement, and the Boulder County Arts Alliance, among others. This project is led by [Marda Kirn](#), a locally based, nationally focused creative strategist and sustainability specialist. If interested in taking part in this collaboration, please contact [Patrick David Chandler](#).

Example Projects Outside of Colorado

[The Fargo Project](#)

The Fargo Project provides opportunities for local government in Fargo, ND to respond and work with the community and identify needs through a participatory process. With water as the vehicle for connecting people to the land, the approach intentionally activates our collective creative agency. Artists, neighbors, engineers, landscape architects, and ecologists, work together to develop a solution to transform a neighborhood stormwater basin that fits their unique needs as a community.

[Seeding the City](#)

Seeding the City is a project that utilizes social networking to site urban interventions in the form of green roof modules. Based on the East Coast, it capitalizes on community building to introduce urban environmental issues and remediation tools. The modules and their accompanying flags and street level signage will track the growth of the network throughout the neighborhood. Online resources will include mapping of the project, tools for tracking local urban heat island effect and resources to recreate the project worldwide.

Cohorts and Advisory Members

Boulder County Arts Alliance Artist/Arts leaders Art + Science Cohort

A small cohort of artists and arts organization leaders from Boulder County will join in the art + science workshop series and learn side-by-side with CU Boulder students in the sciences how to facilitate this work.

Cohort members will be listed in early February (applications are due January 15).

CU Boulder

Please visit [this page](#) on the **CU Boulder Office for Outreach and Engagement website to see these cohorts and advisory members**

- Graduate Student Art + Science Cohort
- Science Advisory
- Community-Engaged Scholarship Advisory

Workshops

Virtual workshops will engage the Art + Science CU Boulder science students and community-based artists and arts organization leaders cohorts.

Cohort workshops are from 4:45 - 6:45pm. After the first workshop on Feb 24, workshops from March through May are the fourth Wednesday of the month.

- Wed. Feb. 24 (Exploring a shared point of wonder)
- Wed. March 17 (3rd Wed) (Defining a project and plan)
- Wed. April 21 (3rd Wed) (Project creation)
- Wed. May 19 (3rd Wed) (Reflection and evaluation)

Cohort workshops will also have a public component from 5:30-6:00 p.m.

In the public portion, artists and scientists will discuss their work, and program leads Patrick Chandler and Emmanuelle Vital will explain a component of art + science guidelines they developed through extensive interviews with expert practitioners.