

Review/Submit

Cool Science Hands-on STEM

You MUST click SUBMIT to successfully submit your application. If you have already submitted your application, you can PRINT a copy for your records by clicking REVIEW/PRINT instead.

General Information

GIVING PORTFOLIO Youth Opportunity

REQUEST TYPE General Support

PROJECT TITLE Cool Science Hands-on STEM

IS THIS A RENEWAL REQUEST? No

LOCATION OF PROGRAMMING Colorado Springs, CO

PLEASE SELECT THE RESPONSE THAT BEST DESCRIBES THE SERVICE AREA FOR THIS GRANT? City-wide

SERVICE AREA COMMENTS

UPLOAD BOARD MEMBER LIST

Sr. Number	File Name	-	Created Date
1	BoardList-Cool Science 2022 Board of Directors.pdf		06/26/22

ARE YOU BEING FISCALLY SPONSORED? No

FISCAL SPONSOR LEGAL ORGANIZATION NAME

FISCAL SPONSOR EIN

FISCAL SPONSOR FULL ADDRESS

NAME OF FISCAL SPONSOR PRIMARY CONTACT PERSON

FISCAL SPONSOR CONTACT EMAIL ADDRESS

FISCAL SPONSOR AGREEMENT

Sr. Number	File Name	-	Created Date
No Attachments			

FISCAL SPONSOR NOTIFIED?

Organization Overview

UPLOAD PROPOSAL

Sr. Number	File Name	-	Created Date
1	Recent Proposal-Cool Science FestivalPacket_Western Digital (for TRPF).pdf		06/26/22

Please describe what your organization believes are the underlying causes that have led to the challenges in the area in which you work. If you are a returning grant applicant, please describe how the underlying causes may have shifted or changed since your last grant submission.

At a time when the United States is facing critical shortages of scientists, engineers, and technically savvy workers, studies have shown that we’re also falling behind the rest of the industrialized world in educating our children with the science, technology, engineering, and math (STEM) skills necessary to fill those shortages. A major cause of this problem lies with long standing budget cuts to K-12th education, which has led to many schools, particularly at the elementary level, offering little or no hands-on STEM programs at all. Making matters worse, schools are currently facing significant staffing issues (largely due to the recent pandemic), and many K-5th teachers in particular have inadequate science background and are intimidated by teaching STEM concepts. Without this exposure at such a critical time in their development, many students innate curiosity is not encouraged and they will be much less likely to choose the courses in high school that are necessary to prepare them for college and ultimately STEM careers.

Cool Science is a home-grown, grassroots organization that is building community, leveraging locally based talent and resources, and targeting an increasingly critical national problem. In our 20-year history, we’ve seeded and continue to cultivate a growing network of community partnerships and collaborations. We have developed strong relationships with our local colleges, tapping into and engaging the University of Colorado- Colorado Springs (UCCS), the U.S. Air Force Academy (USAFA), Colorado College (CC), Colorado Technical University (CTU) and Pikes Peak Community College (PPCC) students and faculty for help with our planning and programming, including the development of virtual programs when school were closed during the recent pandemic. Several years ago we also established a Cool Science (outreach) Club at CC

Please tell us how your organization leverages assets to create positive change (e.g. partnerships, your organization's experience and strengths, other resources, etc.). How does this approach improve your service or offering? If you are a returning grant applicant, you are welcome to share any new insights, practices, or partners since your last grant submission.

which functions autonomously (though we work together on many events). We also recruit outstanding high school students to volunteer in our programs, providing role models for younger students.

In addition to those academic organizations we recognize and leverage the deep wealth of professional science and engineering talent that resides in our region, providing local businesses and their employees opportunities to give back to the community. Finding this talent and presenting the right opportunities is crucial. Over the years Cool Science has teamed with several companies (Intel, Agilent, Keysight, Northrop Grumman, T. Rowe Price, STS, CS Utilities and others) to establish community- involvement programs through which their employees can connect with local kids, mentor them, and perhaps inspire these youth to follow in their footsteps.

Cool Science also partners with many other local organizations such as the Challenger Learning Center, the National Space Science & Technology Institute (including its Mobile Earth & Space Observatory), the Space Foundation Discovery Center, Catamount Institute, the Colorado Springs Astronomical Society, Imagination Celebration, Concrete Couch, the Pikes Peak Children's Museum, the Pikes Peak Library District, the Rocky Mountain Dinosaur Resource Center, the Pueblo Zoo, the Pikes Peak YMCA, Boys and Girls Clubs of the Pikes Peak Region and many others. Through these relationships, we are playing an active role in giving back and strengthening the Colorado Springs community.

These connections to other organizations and STEM professionals in our community are vital for a small, volunteer-based non-profit like Cool Science to make the impact that we do. It effectively increases our volunteer base and reach exponentially. Indeed, it would be impossible to present our annual Colorado Springs Cool Science Festival and Carnival Day without these important community assets.

As with any organization, the experience we gain each year (we've been doing this for 20 years now) inevitably makes us better at what we do. Engaging regularly with college/university educators and their students, as well as other local organizations and STEM professionals, continually injects fresh ideas- and people- into our ever growing portfolio of offerings. We also participate in- and through our annual Colorado Springs Cool Science Festival- lead a growing community of science outreach groups and special events, sharing ideas, success stories and challenges. Because we're "on the ground" providing hands-on STEM programs in schools and libraries, we're able to customize our approach to fit their particular needs and receive immediate feedback to improve. This was especially important during the last two years when schools were forced to close, and we were able to quickly develop very successful and popular live-streamed and hybrid programs. We see first-hand what excites and inspires teachers, parents and students about science, which in turn excites and inspires us. We have as much fun as the kids, and that makes it easy to do more and reach an ever larger audience each year.

Because we work directly with students and teachers, we receive immediate feedback and input that allows us to modify and improve our programs. We also actively recruit local educators to join our board. For most of our hands-on lab and workshop programs in schools, as well as Science and STEM Nights, we strongly encourage- and rely upon- parents to volunteer as lab and activity assistants. These interactions (we train and then work alongside them) often lead to suggestions which we can implement next time. And of course our own volunteers are an invaluable resource for this same input and feedback as well.

We also host many public events throughout year, including our Colorado Springs Cool Science Festival. This gives us more opportunity to interact with and survey those who attend, as well as the volunteers and professionals from the various organizations that partner with us to provide the various activities. We even present pop-up public "science busking" events in parks and other community venues, such as our popular "Sunday Science on the Street" series each summer, where we often meet visitors from outside our community who bring fresh insights. Finally, our website and social media channels allow us to communicate with an even wider population.

In what ways has your organization shown improvement at creating positive change for the individuals and/or communities you engage with?

Please tell us how the community has a voice in your organization's work. For example, how does the community give input, shape programs, influence decisions, etc.?

Cool Science provides invaluable opportunities for our community to come together and enjoy science, technology, engineering and math. Not just the families who attend our events to watch our shows and play with our cool "toys", but also the dozens of other organizations that help us provide the various activities. We've actually encouraged many of these groups to host their own similar STEM outreach events, where we are always happy to participate. We also provide opportunities for individuals to volunteer, whether they already have valuable STEM experience they wish to share, or just interest and a desire to learn more. Finally, we love to mentor high school and college students whenever possible, training them as science communicators and lab assistants for our programs- as well as role models for younger students.

A science teacher teaches science, but a real scientist or engineer shows a kid how all that "science stuff" actually applies and where it can lead. Our hands-on STEM programs are not intended to replace the teacher or classroom curriculum, but rather add value by exciting and engaging students with the wonders of science. Our volunteer scientists, engineers and educators are passionate about their work and careers, and impart that enthusiasm onto the students (as well as their teachers). Perhaps this will ultimately inspire kids to see themselves in those careers, but even if it doesn't we know they will appreciate science and contribute to a more scientifically literate public.

Please tell us how your community will look different as a result of the work you are doing. How are your efforts specifically responsible for this important change?

Financial Overview

AUDITED FINANCIALS

Sr. Number	File Name	-	Created Date
1	Audited-Financials-21X_COOLSCIENCE_V1_ENTIRE RETURN 2021 Form 990.pdf		06/26/22

OPERATING BUDGET \$114,120.00

OPERATING BUDGET UPLOAD

Sr. Number	File Name	-	Created Date
1	Cool Science Budget 2022.pdf		06/26/22

PROJECT BUDGET \$114,120.00

AMOUNT REQUESTED \$10,000.00

Outcomes And Impact

In this section, please share the expected outcomes that best demonstrate the difference your organization is making. We invite you to enter multiple outcomes, which you can measure via number, percentage, or narrative description.

If your organization receives a grant, you will share the actual results of these target outcomes in your grant report.

Click the **NEW** button to add a new outcome.

Click on the **EDIT** link to edit an exiting outcome.

Type of Impact Outcome	Description of Outcome
Number	Number of schools, libraries and other public venues visited during the 2022-23 academic year (June 2022 - May 2023)
Number	Number of students, teachers and parents served during the 2022-23 academic year (June 2022 - May 2023)
Number	Number of individual hands-on STEAM programs delivered during the 2022-23 academic year (June 2022 - May 2023)
Narrative	Present Colorado Springs Cool Science Festival

Add Team Members

This section allows you to grant others access to edit this form. If you are **collaborating with a colleague** to complete this application, please follow the instructions below to add them as a team member to this application.

If you are **completing this application independently**, please disregard this section and click "Save and Continue" to proceed to the next tab.

INSTRUCTIONS

First, search for an existing contact: Click "+Search/Add Members" and search on the last name.

If found, click the name. This automatically adds them as a "team member." When they log in, they will be able to view and edit the application.

If your collaborator is not listed as a contact: Click the "+ Invite New Members" to add them as a "team member."

Enter the contact info, create a username for them that is **not in the form of an email address** and click "Save." They will receive an email with a link to activate their user and to reset their password. After activating, they will be able to view and edit the application.

Once you have granted a collaborator access to this application by adding them as a "team member," that individual will also have view and edit access to the subsequent grantee report, should the application be approved.

Name	Access Level	Date Access was Given
Marc Straub	Owner	6/21/2022 9:33 PM

Pending Invited Team Members

First Name	Last Name	Email	Status	Role
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Additional Info & Submission Instructions

ADDITIONAL UPLOADS

Sr. Number	File Name	Created Date
1	AdditionalInfo-2021 CS Festival Schedule.pdf	06/28/22
2	AdditionalInfo-2021 CS Carnival Day.pdf	06/28/22
3	AdditionalInfo-Cool Science 2021-22 Program Stats.pdf	06/28/22

DO YOU HAVE ANY COMMENTS OR QUESTIONS? IF YES, PLEASE ENTER THEM HERE