

Science Action Club Collaborative Request for Applications

Program Overview

Science Action Club (SAC) is a nationwide STEM program for middle school youth in out-of-school time. Through games, projects, and hands-on activities, youth in SAC investigate nature, document their discoveries, connect with scientists, and design strategies to protect our planet.

Kits and Guidebooks

Participating programs implement two (2) environmental science units per year. Each unit includes an activity guidebook with lesson plans for 12 one-hour club sessions, and a teaching kit that contains tools and supplies for 20 youth.

Curriculum Units

Bug Safari explores small creatures with big environmental impacts. On local field expeditions, youth search for bugs, collect specimens, and post photographs to iNaturalist—a citizen science project and online social network for nature research. Working with scientists and other students, youth identify arthropod species and document habitat conditions that influence our planet's health.

Birds Scouts explores feathers, flight, and the features that make birds unique. Using tools and technology, youth identify local species and investigate environmental changes that impact bird behavior. The checklists youth submit to eBird—a citizen science project from the Cornell Lab of Ornithology—help scientists track changes in bird distribution and abundance across the globe.

Cloud Quest explores the impact of clouds on weather and climate. Using the GLOBE Observer citizen science platform, youth identify sky conditions and report their discoveries to NASA. Researchers map these observations against satellite image data to study how clouds influence the flow of energy through Earth's atmosphere.

Training

SAC provides professional development training on kits and guidebooks, as well as strategies for teaching and learning science in out-of-school time. SAC educators complete an online training, and then attend a hands-on workshop. Designed to be interactive, relevant, and fun, SAC trainings build communities of practice, clarify expectations, and engage participants in citizen science and nature investigations.

SAC Training and the National Girls Collaborative History

In 2016-2017, the California Academy of Sciences partnered with the National Girls Collaborative (NGC) to bring citizen science professional development experiences to youth development educators and organizations. Through the generous support of the Pisces and Bechtel Foundations, this partnership will continue and expand to more states in 2017-2018.

Benefits of Being an Official Science Action Club Collaborative

- Developing a citizen science network in your Collaborative
- Lead efforts to support environmental literacy and youth development through citizen science
- Travel and lodging provided for Trainers from each selected Collaborative to attend the ToT
- Trainer handbook, ALT manual, curriculum guidebook, and teaching kit for each Trainer
- One Activity Leader handbook, curriculum guidebook, and teaching kit for each participating club
- Ongoing access to the SAC Educator Portal for all Trainers and Activity Leaders
- Ongoing professional development through monthly Community Meetings/Trainer Support Calls
- Stipend (\$800) for each Trainer's commitment to leading two (2) trainings in 2017-2018
- Small amount of funding to support expenses associated with the Activity Leader Trainings







Trainer Responsibilities

One Trainer from each Collaborative will be selected to take part in this project. Trainers will commit to implementing two Science Action Club environmental science units during the 2017-2018 academic year. For each unit, trainers will complete an online training, attend an in-person Training of Trainers workshop (ToT), and participate in monthly web-based Community Meetings.

Each Trainer is responsible for recruiting and onboarding at least 15 clubs per ALT, and will serve as a regional contact for the SAC team. Trainers will encourage and support Activity Leaders as they become active in this community of practice for citizen science. The Trainer will also assist with data collection and evaluation efforts, including Attendance and Feedback after each session plus one mid-course youth survey per topic.

The California Academy of Sciences will provide lesson plans, science materials for hands-on activities, digital resources for extension, and will attend Monthly Community Meetings to provide curriculum and implementation support.

Requirements of being a Science Action Club Collaborative

To participate, we ask your Collaborative to identify one (1) Trainer who will:

- Attend the Cloud Quest ToT on August 3-4, 2017 at California Academy of Sciences in San Francisco, CA
- Attend at least one (1) additional ToT on November 16-17, 2017 and/or February 8-9, 2018 at California Academy of Sciences in San Francisco, CA
- Lead two (2) Activity Leader Trainings for at least 15 clubs each.
 - Trainers will lead trainings using the Activity Leader Training Manual provided by Science Action Club and/or make light modifications to address local needs.
 - Trainers will follow up with Activity Leaders about implementation timeline and completion of the Attendance and Feedback forms and youth surveys.
- Recruit and select at least 15 clubs using an online application provided by the SAC-NGCP team.

Program (Club) Eligibility

To participate in Science Action Club, programs must:

- Ensure 1-2 staff complete all online and in-person trainings
- Recruit 15-20 youth in grades 5-8 and maintain high attendance
- Designate indoor and outdoor space for citizen science and nature investigations
- Provide reliable Internet access and at least one mobile device; projectors and speakers are strongly recommended
- Track attendance and submit feedback to the California Academy of Sciences
- Implement all 12 one-hour activities through the 2017-2018 academic year.
- Be active participants in a SAC Educator Community (via the SAC Educator Portal and SAC Facebook group), facilitated by the Trainers.
- Complete Attendance and Feedback surveys after each SAC Activity.
- Administer one mid-course youth survey.
- Add program information to The Connectory.







2017	
June 8, 2017	Science Action Club Informational Webinar
June 21, 2017	Collaborative applications DUE
June 23, 2017	Science Action Club Collaboratives announced
June 28, 2017	Welcome to Science Action Club! Trainer Support Call/Preparation for ToT
July 15, 2017	Trainers access the SAC Educator Portal and begin online training Collaboratives begin to recruit clubs for 2017-2018 participation
August 3-4, 2017 San Francisco, CA	Training of Trainers (ToT) • Cloud Quest
August 2017 – January 2018	Trainers lead ALTs
August 2017 – June 2018	Clubs implement SAC
August 8, 2017	Monthly Trainer Support Call
September 12, 2017	Monthly Trainer Support Call
October 10, 2017	Monthly Trainer Support Call
November 14, 2017	Monthly Trainer Support Call
November 16-17, 2017 San Francisco, CA	Training of Trainers (ToT) • TBD (<i>Bird Scouts</i> or <i>Bug Safari</i>)
December 12, 2017	Monthly Trainer Support Call
2018	
January 9, 2018	Monthly Trainer Support Call
February 8-9, 2018 San Francisco, CA	Training of Trainers (ToT) • TBD (<i>Bird Scouts</i> or <i>Bug Safari</i>)
February 13, 2018	Monthly Trainer Support Call
March 13, 2018	Monthly Trainer Support Call
April 10, 2018	Monthly Trainer Support Call
May 8, 2018	Monthly Trainer Support Call
May 30, 2018	SAC-NGCP Showcase
June 1, 2018	Last day for all 2017-2018 programming
June 12, 2018	Final Monthly Trainer Support Call







How to Apply

Collaborative Lead will identify someone to serve as the Collaborative SAC Trainer.

Collaborative Leads should write a **Letter of Intent** including:

- o Name and organization of the Trainer identified by the Collaborative.
- Explanation of workshop facilities, including technology and Internet access. Note: This project comes with limited funding to support Activity Leader Trainings. Funding may not support ALL project expenses. We would like you to leverage partnerships, use registration fees, and other resources to cover the costs associated with the project. Please keep that in mind when answering the following questions.
- How will the Collaborative fund the Activity Leader Trainings, including: space, food, supplies, etc.?
 (For example: through registration fees for Activity Leader Trainings, partnerships and/or other resources.)
- How will the Collaborative meet the enrollment expectation of 15-20 clubs per Activity Leader Training?

Submit the trainer's **current resume**.

Submit a <u>brief statement</u> from the Trainer describing their interest in Science Action Club, how it aligns with the goals of their network, and how it will serve educators/youth in their community.

A <u>Letter of Support</u> from the Trainer's supervisor outlining the commitment and capacity to complete the project deliverables.

All items outlined above should be submitted to Casi Herrera at cherrera@ngcproject.org by June 19, 2017.



