Library Programming Made Easy:
A Year of Citizen Science Programming Ideas for Your Library

June 17, 2026

SciStarter
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In chat
Introduce yourself!
Share: What do you like about professional networks?

Agenda

- Citizen Science & SciStarter Refresher
  (<10 minutes)
- Network Update: Libraries as Community Hubs for Citizen Science
- 12 Months of Citizen Science Programming
- Deeper Dive into August and September



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How would you describe citizen science to someone else?

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Citizen Science is Serious Science

A global movement that enables people from all walks of life to contribute to real scientific research in collaboration with scientists.

Anytime, from anywhere.

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Citizen Science can involve....

ACTS OF SCIENCE

Observing	Biodiversity, Night Sky, Health
Monitoring	Wildlife, Pollinator Activity, Bird Migration
Measuring	Water Quality, Light Pollution, Marine Debris
Analyzing	Videos and Images online
Collecting	Photos and Samples



At your library, in a garden, at night, from home, during a walk, on a computer, independently, as a group...

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STEM programs teach science.

Citizen Science ALSO benefits science and society.

Participants AND scientists learn. Science is accelerated.

3

Bird Watching



eBird and iNaturalist are free apps that help volunteers document and identify the birds they see while helping ornithologists and the public track bird populations and migration trends to impact conservation efforts.

4

Gardening



Encourage gardeners to look for pollinators and share observations using printed data sheets or online forms available from the Great Sunflower Project to help scientists and the public track pollinator population changes.

5

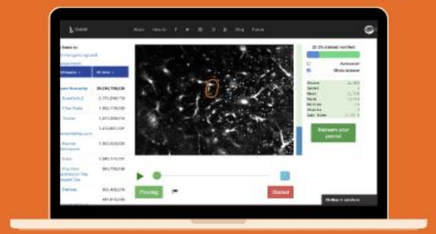
Stargazing



Globe at Night & Loss of the Night provide simple online reporting forms to monitor local light pollution by reporting stars not visible in given constellations. Light pollution impacts stargazing, sleep, species migration, and energy consumption.

6

Afterschool



Introduce students to citizen science by engaging them in gamified project like Stall Catchers, an online game to help advance research on Alzheimer's disease.

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Use SciStarter to:

- Find and save projects (local and global)
- Find an event or promote an event
- Complete free trainings
- Create lists of projects for groups
- Track impact through participation
- Stream real-time virtual, interactive events
- Use templates; build kits; and more!

Create your free account: SciStarter.org/login

Programs for Libraries







Create your free SciStarter account, then, join the Citizen and Community Science Library Network to stay up to date on all three programs!

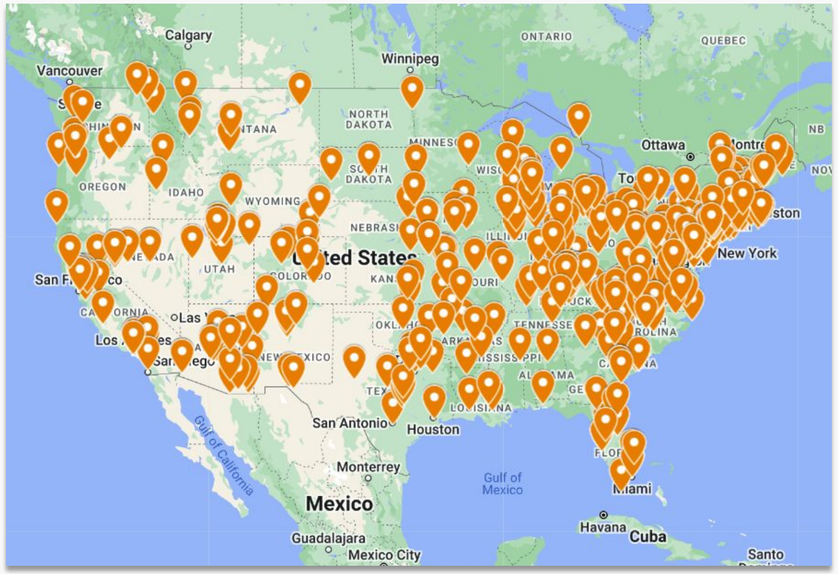
SciStarter.org/go/library-network

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Citizen & Community Science Library Network

1300 strong and counting!

- ❑ Free, online training tutorials for library staff and volunteers.
- ❑ Guides to plan events and build/circulate citizen science kits.
- ❑ Virtual professional development events.
- ❑ Turnkey and customizable resources.
- ❑ Peer-to-peer network.
- ❑ Technical, programming and promotional support.



Create your free SciStarter account, then join the Network!

SciStarter.org/go/library-network

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Benefits of Participation



CITIZEN SCIENCE:
THEORY AND PRACTICE

Embedding Citizen Science in Libraries: A SciStarter and Arizona State University Case Study of Adoption, Scaling, and Sustaining Participation

COLLECTION:
GLAM

CASE STUDIES:
APPLICATION AND INTEGRATION

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ABSTRACT

Public access to citizen science remains uneven, with many communities underrepresented in participatory research opportunities. Public libraries, as trusted community institutions, hold the potential to bridge these gaps by serving as hubs for lifelong learning and civic engagement. This case study examines the strategies, theoretical grounding, and outcomes that supported the adoption, scaling, and sustainability of Libraries as Community Hubs for Citizen Science, a multi-phase initiative led by Arizona State University and SciStarter. Designed to embed citizen science innovations within public library systems, the initiative progressed through three phases—an Arizona pilot (2017–2019), a scale-up pilot (2020–2021), and an ongoing national expansion (2021–2024+)—that collectively tested, refined, and demonstrated a replicable model for institutionalizing participatory science in libraries.

Drawing on mixed-method evaluation data and informed by a theory of change based in educational scaling (Coburn 2003), adult learning (Knowles et al. 2015), and the role of libraries as facilitator organizations and conduits for lifelong learning (Falk and Dierking 2010; Lankes 2016), the analysis identifies key mechanisms that supported adoption and sustained engagement of citizen science in libraries. These included staff capacity-building, collaboration with local communities, and national outreach through professional learning communities and library networks.

Findings demonstrate that libraries can serve as durable civic infrastructures for public participation in science—expanding equitable access, fostering ongoing engagement in citizen science, and connecting communities to research. We conclude by distilling essential elements and transferable lessons for other GLAM (Galleries, Libraries, Archives, and Museums) institutions, both in the United States (US) and globally, offering a conceptual framework for embedding participatory science into GLAM organizational practices to advance long-term public engagement with research.

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libraries; community hubs; facilitation; scaling; broadening participation

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Alignment with library purpose (29 librarians, 2023 Survey)

- Fulfills educational and recreational needs; promotes lifelong learning
- Brings resources to patrons and engages them in community
- Enriches scientific literacy and provides family-oriented opportunities
- Aligns with STEM/STEAM programming and environmental initiatives
- Engages historically underrepresented populations in science

Confidence gains (N=199. 2021-2023 post-webinar survey results)

- 80–100% felt confident discussing citizen science with patrons/community
- 86–100% could direct patrons to SciStarter resources

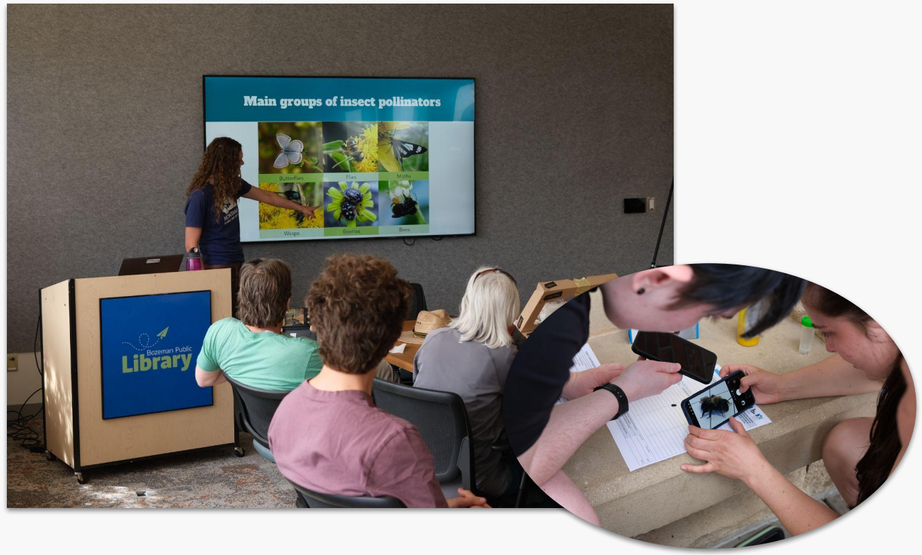
Skills development

- 54–75% increased confidence in building, cataloging, and promoting kits
- 60–96% reported enhanced skills in planning, hosting, and tailoring programs

Interest and engagement

- 74–100% reported increased interest in citizen science
- 68–89% gained knowledge of participation opportunities (e.g., Pollinator Palooza)

How Libraries are Participating



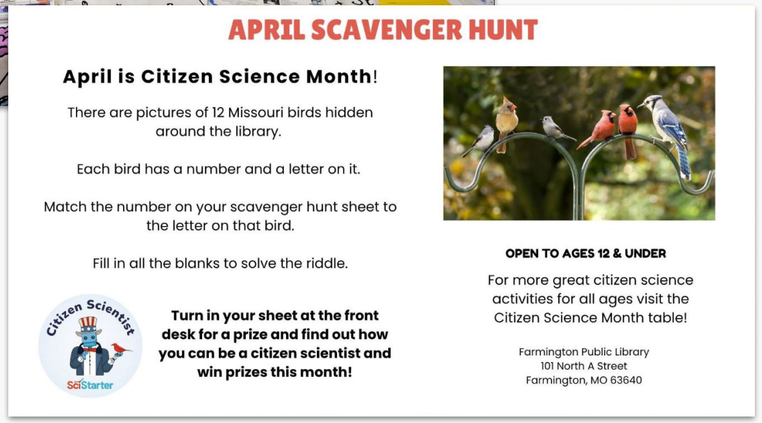
Interactive Workshops & Hand-on Citizen Science

Photo credit: Bozeman Public Library

Displays & Passive Programming

Photo credit: Farmington Public Library





APRIL SCAVENGER HUNT

April is Citizen Science Month!

There are pictures of 12 Missouri birds hidden around the library.

Each bird has a number and a letter on it.

Match the number on your scavenger hunt sheet to the letter on that bird.

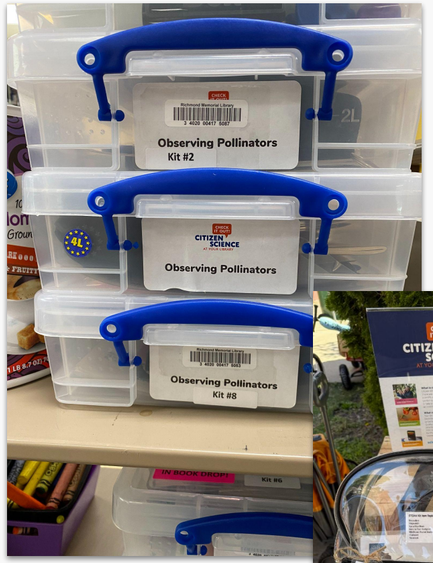
Fill in all the blanks to solve the riddle.

Turn in your sheet at the front desk for a prize and find out how you can be a citizen scientist and win prizes this month!

OPEN TO AGES 12 & UNDER

For more great citizen science activities for all ages visit the Citizen Science Month table!

Farmington Public Library
101 North A Street
Farmington, MO 63640





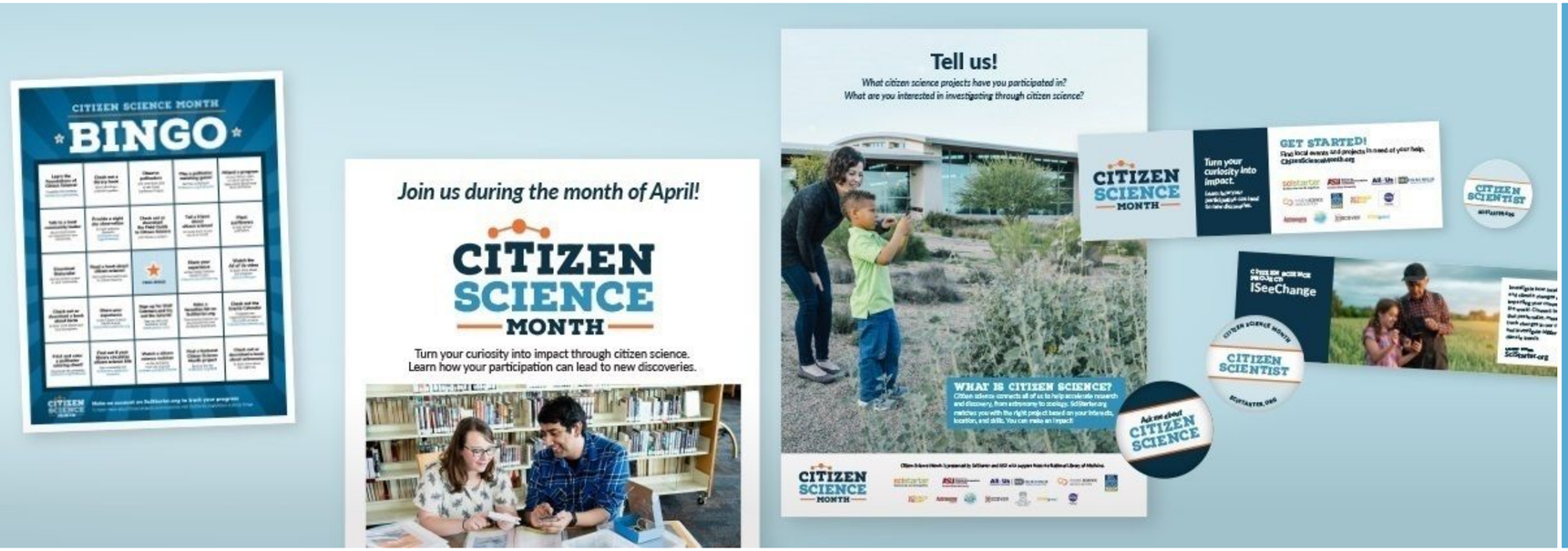
Citizen Science Kits

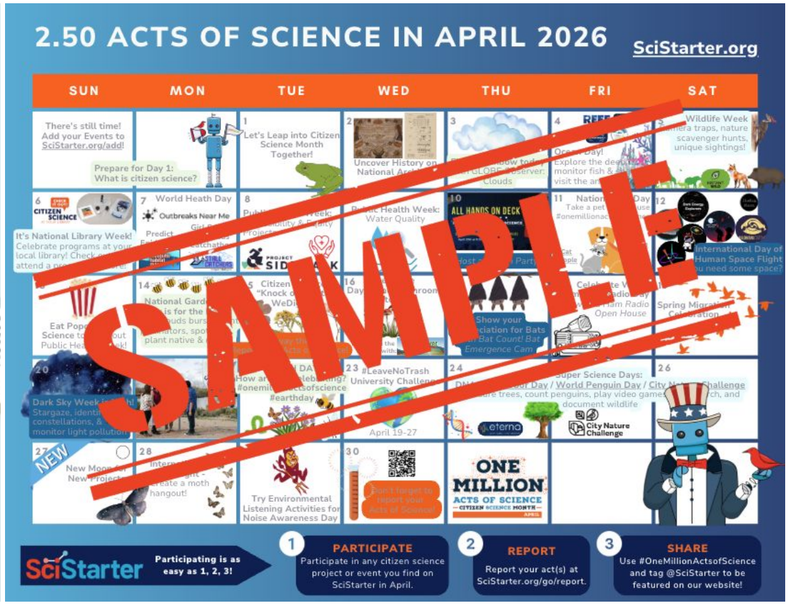
Photo credit: Batavia Library

SciStarter.org/library-resources

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Year-round resources for libraries





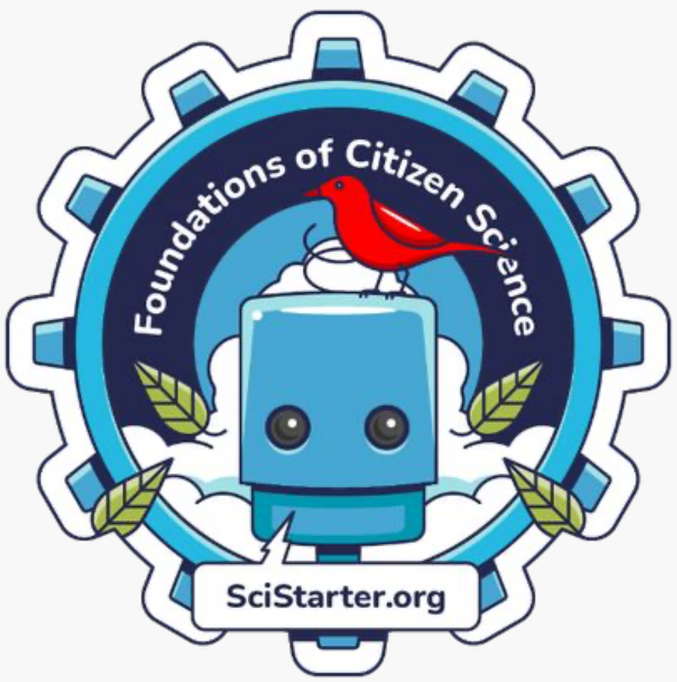
- Promotional Toolkit
- Flyers, Posters, Bookmarks, Sticker Designs
- Free online trainings
- Program planning guides,
- Event Calendars

- Workshops and Webinars on Zoom
- Access to volunteers/Ambassadors
- Plug and Play events & programs
- DIY Citizen Science Kits for Circulation
- Project Finder Widget

SciStarter.org/library-resources

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Online, Self-Guided Trainings






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CERTIFICATE OF COMPLETION

Citizen Science Champion

Recipient has demonstrated proficiencies in introducing SciStarter and citizen science.

Date:

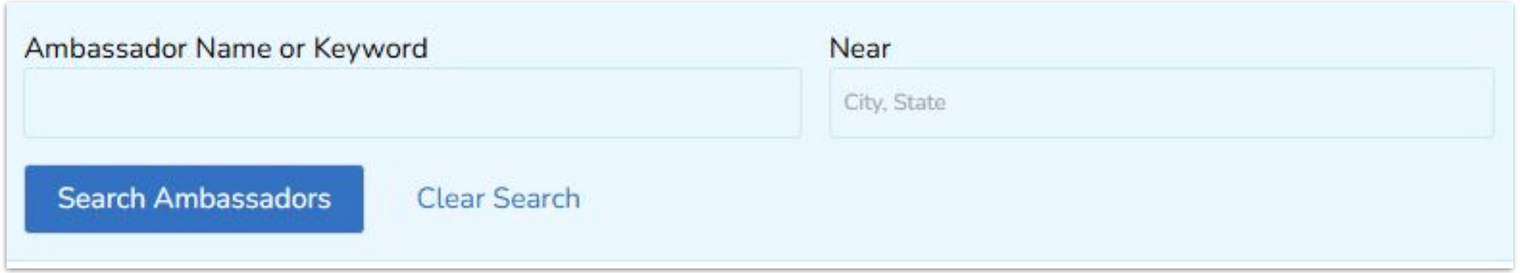
Darlene Cavalier
Founder, SciStarter

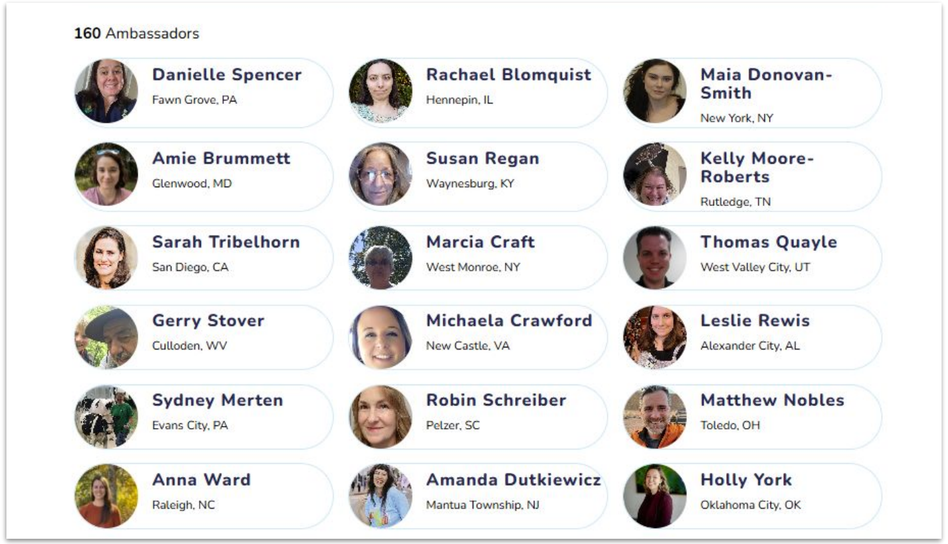
The Foundations of Citizen Science → **Libraries as Community Hubs for Citizen Science** → **Citizen Science Champion (for staff & volunteers!)**

SciStarter.org/Training

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SciStarter Ambassadors





- Search for Ambassadors in your area
- Reach out for programming advice and support!

SciStarter.org/Ambassador-Directory

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12 Months of Citizen Science Programming

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Year Round Citizen Science

January Help Advance NASA Research	**February** Improve the Path	**March** Seek Signs of Spring	**April** *Acts of Science: Connected*
May Mindful Moment with the Night Sky	**June** Celebrate National Pollinator Week	**July** Night Shift Naturalists	**August** Citizen Science 101
September Alzheimer's Awareness Month	**October** Fall into Birding	**November** Help Advance NASA Research	**December** Forecasting the Holiday





Pages.SciStarter.org/library-program-resources/12-months-of-programs

Monthly Deep Dive

August & September

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August:
Host a Foundations of Citizen Science Workshop



Host a “Citizen Science 101” workshop for your library audience.

- Use the provided slides and facilitator guide **OR** open the Foundations training and guide participants through! They do not need devices or accounts.
- Customize the slide deck with projects relevant to your community
- Print and give them each attendee a certificate of completion!

Pages.SciStarter.org/Library-Program-August/

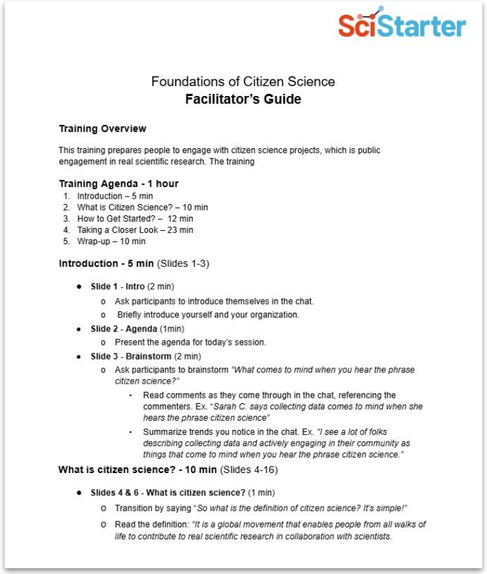
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Resources



Customizable slide deck–Add your own flare!

Facilitator guide



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Foundations of Citizen Science
Facilitator's Guide

Training Overview

This training prepares people to engage with citizen science projects, which is public engagement in real scientific research. The training

Training Agenda - 1 hour

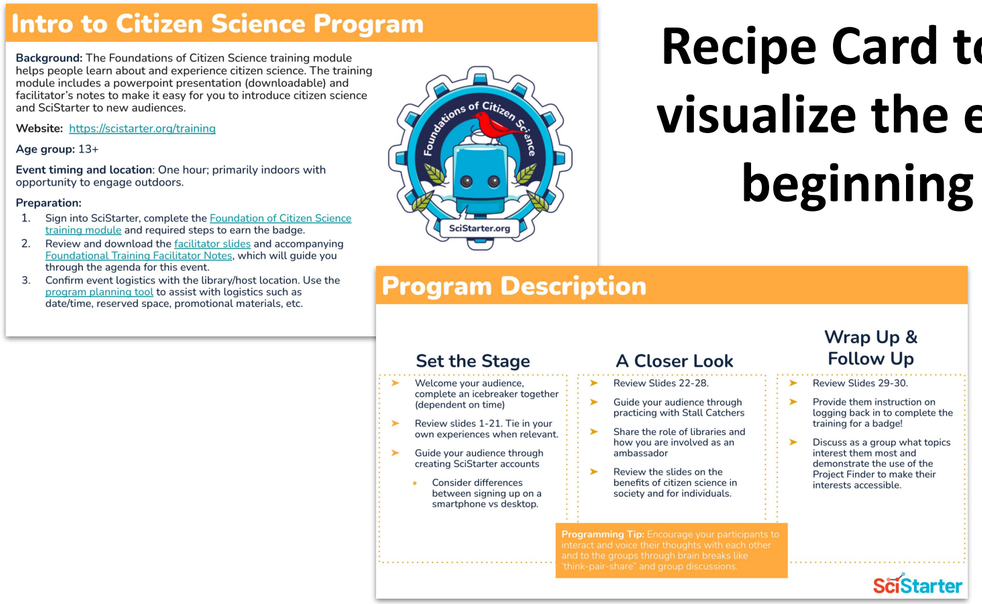
1. Introduction – 5 min
2. What is Citizen Science? – 10 min
3. How to Get Started? – 12 min
4. Taking a Closer Look – 23 min
5. Wrap-up – 10 min

Introduction - 5 min (Slides 1-3)

- **Slide 1 - Intro** (2 min)
  - Ask participants to introduce themselves in the chat.
  - Briefly introduce yourself and your organization.
- **Slide 2 - Agenda** (1min)
  - Present the agenda for today's session.
- **Slide 3 - Brainstorm** (2 min)
  - Ask participants to brainstorm *"What comes to mind when you hear the phrase citizen science?"*
    - Read comments as they come through in the chat, referencing the commenters. Ex. *"Sarah C. says collecting data comes to mind when she hears the phrase citizen science"*
    - Summarize trends you notice in the chat. Ex. *"I see a lot of folks describing collecting data and actively engaging in their community as things that come to mind when you hear the phrase citizen science."*

What is citizen science? - 10 min (Slides 4-16)

- **Slides 4 & 6 - What is citizen science?** (1 min)
  - Transition by saying *"So what is the definition of citizen science? It's simple!"*
  - Read the definition: *"It is a global movement that enables people from all walks of life to contribute to real scientific research in collaboration with scientists.*



Intro to Citizen Science Program

Background: The Foundations of Citizen Science training module helps people learn about and experience citizen science. The training module includes a powerpoint presentation (downloadable) and facilitator's notes to make it easy for you to introduce citizen science and SciStarter to new audiences.

Website: https://scistarter.org/training

Age group: 13+

Event timing and location: One hour; primarily indoors with opportunity to engage outdoors.

Preparation:

1. Sign into SciStarter, complete the Foundation of Citizen Science training module and required steps to earn the badge.
2. Review and download the facilitator slides and accompanying Foundational Training Facilitator Notes, which will guide you through the agenda for this event.
3. Confirm event logistics with the library/host location. Use the program planning tool to assist with logistics such as date/time, reserved space, promotional materials, etc.

Program Description

Set the Stage	A Closer Look	Wrap Up & Follow Up
Welcome your audience, complete an icebreaker together (dependent on time)	Review Slides 22-28.	Review Slides 29-30.
Review slides 1-21. Tie in your own experiences when relevant.	Guide your audience through practicing with Stall Catchers	Provide them instruction on logging back in to complete the training for a badge!
Guide your audience through creating SciStarter accounts	Share the role of libraries and how you are involved as an ambassador	Discuss as a group what topics interest them most and demonstrate the use of the Project Finder to make their interests accessible.
Consider differences between signing up on a smartphone vs desktop.	Review the slides on the benefits of citizen science in society and for individuals.	

Programming Tip: Encourage your participants to interact and voice their thoughts with each other and to the groups through brain breaks like "think-pair-share" and group discussions.

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Recipe Card to help you visualize the event from beginning to end



CERTIFICATE

OF PARTICIPATION

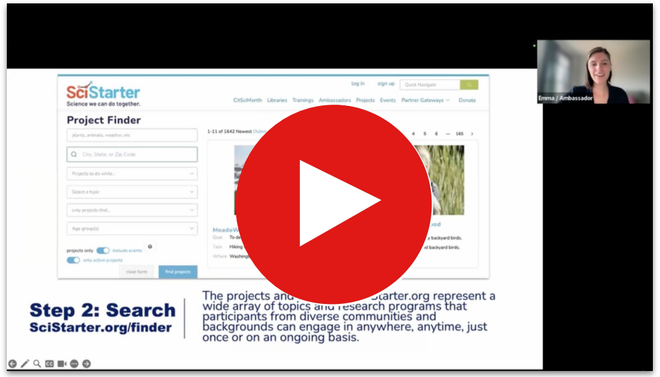
IS PRESENTED TO :

For their participation in the citizen science project(s):

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FACILITATOR

Printable participation Certificates



New! Video Demo with mock audience questions.

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September:
Stall Catchers for Alzheimer's Awareness Month

Host a Friendly "Catchathon" with Stall Catchers in honor of Alzheimer's Awareness Month in your computer lab!

- Great for teens and intergenerational groups!
- Participants analyze short videos of blood vessels in mouse brains to identify "stalls" through an easy-to-learn, gamified site.

As the Facilitator, you will:

- Help participants create or log in to their accounts *(Tip: create ghost accounts!)*.
- Answer basic questions and guide them through their first classifications.
- Bring the fun! Display the team leaderboard and encourage friendly competition.



Pages.SciStarter.org/Library-Program-September/

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Resources



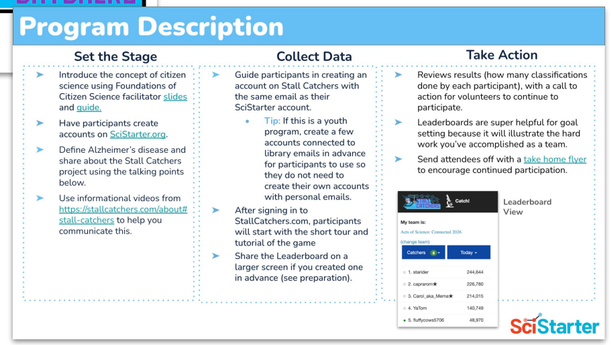
Stall Catchers Catch-a-Thon

Background: A "Catchathon" is a catching marathon of the Stall Catchers citizen science game. Anyone can hold one in their local pub, school, library, hackerspace or anywhere else! The Stall Catchers project was designed by researchers at Cornell University to advance Alzheimer's solutions. You can help by playing a simple game: view short videos from the brains of mice and "catch" stalls. We will teach you how to score blood vessels as "flowing" or "stalled." Even the most powerful computer technologies can't do this accurately enough yet, but your keen eyes can help us process decades worth of data.

This is an especially great project for competitions because you can create teams to compete against each other and request a custom leaderboard for your event.

Preparation:

1. Review the project protocol on SciStarter: https://scistarter.org/Affiliates/stall-catchers-Affiliates.
2. Visit StallCatchers.com to **create an account** and **create a team** for your event.
3. Contact info@stallcatchers.com to inquire about a personalized leaderboard.



Program Description

Set the Stage

- Introduce the concept of citizen science using Foundations of Citizen Science facilitator slides and guide.
- Have participants create accounts on SciStarter.org.
- Define Alzheimer's disease and share about the Stall Catchers project using the talking points below.
- Use informational videos from https://stallcatchers.com/about#stall-catchers to help you communicate this.

Collect Data

- Guide participants in creating an account on Stall Catchers with the same email as their SciStarter account.
  - Tip: If this is a youth program, create a few accounts connected to library emails in advance for participants to use so they do not need to create their own accounts with personal emails.
- After signing in to StallCatchers.com, participants will start with the short tour and tutorial of the game
- Share the Leaderboard on a larger screen if you created one in advance (see preparation).

Take Action

- Reviews results (how many classifications done by each participant), with a call to action for volunteers to continue to participate.
- Leaderboards are super helpful for goal setting because it will illustrate the hard work you've accomplished as a team.
- Send attendees off with a take home flyer to encourage continued participation.

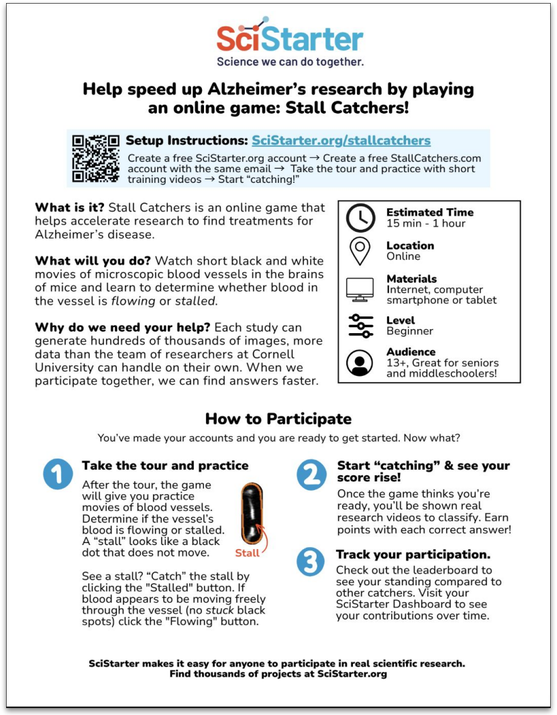
Leaderboard View

SciStarter

Recipe Card to help you visualize the event from beginning to end.



Project Leader Introductory Video & Catchathon Recordings



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Help speed up Alzheimer's research by playing an online game: Stall Catchers!

Setup Instructions: SciStarter.org/stallcatchers
Create a free SciStarter.org account → Create a free StallCatchers.com account with the same email → Take the tour and practice with short training videos → Start "catching!"

What is it? Stall Catchers is an online game that helps accelerate research to find treatments for Alzheimer's disease.

What will you do? Watch short black and white movies of microscopic blood vessels in the brains of mice and learn to determine whether blood in the vessel is *flowing* or *stalled*.

Why do we need your help? Each study can generate hundreds of thousands of images, more data than the team of researchers at Cornell University can handle on their own. When we participate together, we can find answers faster.

Estimated Time
15 min - 1 hour

Location
Online

Materials
Internet, computer smartphone or tablet

Level
Beginner

Audience
13+, Great for seniors and middleschoolers!

How to Participate

You've made your accounts and you are ready to get started. Now what?

1. **Take the tour and practice**
   After the tour, the game will give you practice movies of blood vessels. Determine if the vessel's blood is flowing or stalled. A "stall" looks like a black dot that does not move.

   Stall

   See a stall? "Catch" the stall by clicking the "Stalled" button. If blood appears to be moving freely through the vessel (no *stuck* black spots) click the "Flowing" button.

2. **Start "catching" & see your score rise!**
   Once the game thinks you're ready, you'll be shown real research videos to classify. Earn points with each correct answer!

3. **Track your participation.**
   Check out the leaderboard to see your standing compared to other catchers. Visit your SciStarter Dashboard to see your contributions over time.

SciStarter makes it easy for anyone to participate in real scientific research.
Find thousands of projects at SciStarter.org

Take Home Flyer

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What would you like to see in these monthly programming guides?

Consider what you like about them now and what you think would be useful to include.

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Next Steps

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Next Steps

1. **Join the Library Network so we can notify you when all 12 months are available!**
2. Register for our September 23rd webinar
3. Explore August & September Program Guides
4. Join the Facebook Group and share how your library is getting involved



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Questions?

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