

A photograph of three people hiking on a trail during sunset. In the foreground, a woman with dark hair in a bun, wearing a red and white plaid shirt over a grey t-shirt and black leggings, is looking off to the side with a smile. Behind her, a woman with curly hair, wearing a light blue button-down shirt and denim shorts, is also looking forward. A third person is partially visible in the background. The scene is bathed in the warm, golden light of the setting sun, with long shadows and a bright sky.

# scistarter

## 2022

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**SCISTARTER**  
CITIZEN SCIENCE  
DIGITAL BADGING  
PROGRAM OVERVIEW





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# scistarter

Science we can do together.



SciStarter is a globally acclaimed, online citizen science hub where millions of people find thousands of projects searchable by location, topic, age level, and more.

**Learn more at [SciStarter.org](https://SciStarter.org)**



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**Connect with our team**

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# About

## The SciStarter Digital Badging Program

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With support from the National Library of Medicine, SciStarter assembled a team with expertise in instructional design, education, inclusive practices, digital design, micro accreditation, and, of course, citizen science to produce a series of tutorials and modules. Training modules for facilitators were co-designed with community-based organizations.



**National Library  
of Medicine**  
*Network of the National  
Library of Medicine*

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Science we can do together.





# What is Citizen Science?

Science is our most reliable system of gaining new knowledge and citizen science is the public involvement in inquiry and discovery of new scientific knowledge.

A citizen science project can involve one person or millions of people collaborating towards a common goal. Typically, public involvement is in data collection, analysis, or reporting.

The fields that citizen science advances are diverse: ecology, astronomy, medicine, computer science, statistics, psychology, genetics, engineering and many more.

The massive collaborations that can occur through citizen science allow investigations at continental and global scales and across decades - leading to discovery that a single scientist could never achieve on their own.

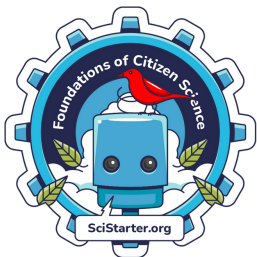




# Overview

## Digital Badging Program at-a-glance

The Foundations of Citizen Science module will help you learn the basics, participate in projects, and make the most of SciStarter. Upon completion of the first module, librarians and library staff are eligible to pursue the second hour of training and in some cases, earn professional development credits.



### Hour 1: Foundations of Citizen Science

This award recognizes citizen scientists who have translated their curiosity into impact through their demonstration of foundational citizen science skills.



### Hour 2: Libraries as Community Hubs for Citizen Science

This award recognizes librarians and library staff who have demonstrated a foundational understanding of citizen science and how to make their library a community hub for citizen science.

**Upon completion of the Foundation of Citizen Science module, librarians can complete this training module to earn professional development credits from the Medical Library Association.**



### Hour 3: Building Data Literacy Through Community and Citizen Science

This award recognizes citizen scientists who have applied their skills in data literacy to citizen science projects and can use their skills to help others engage with citizen science projects.





# Foundations of Citizen Science

The Foundations of Citizen Science badge is awarded to citizen scientists who have translated their curiosity into impact through their demonstration of foundational citizen science skills and their contribution to advancing scientific research on the SciStarter platform.

## Skills and Competencies Recognized

The recipient of this badge has demonstrated all of the following foundational citizen science skills/competencies within the SciStarter platform and obtained a score of 80% or better via traditional assessment:

- Recognize how citizen science can address real-world challenges and questions.
- Elaborate on how participation in citizen science projects benefits the scientific community and society.
- Recognize high-level eligibility requirements for those who can contribute to citizen science projects.
- Identify, explore, and access one or more citizen science projects.
- Articulate the purpose of SciStarter, and how the platform can be used by citizen scientists and research scientists to connect curiosity with impact.
- Register for a SciStarter account.
- Perform the necessary steps to participate in and contribute to one or more citizen science projects.
- Perform the necessary steps to find and bookmark projects on the SciStarter platform.



**Prerequisite**  
Foundations of  
Citizen Science

# Libraries as Community Hubs For Citizen Science



The Libraries as Community Hubs for Citizen Science badge is awarded to librarians and library staff who have demonstrated a commitment to citizen science and the requisite skills necessary for advancing scientific research through community-centered library programming and services.

## Skills and Competencies Recognized

The recipient of this badge has demonstrated all of the following skills associated with utilizing libraries as community hubs and obtained a score of 80% or better via traditional assessment:

- Recognize why engaging the public in citizen science is a critical component of library life-long learning efforts.
- Identify the benefits of turning your library into a community hub for citizen science.
- Identify strategies and tools for selecting and aligning the right citizen science programs with your community's interests or concerns.
- Identify resources (including health and medical resources) to introduce, supplement, and support citizen science efforts in your community.
- Identify resources and strategies to train staff to recruit and sustain patron engagement in citizen science.





**Prerequisite**  
Foundations of  
Citizen Science



# Building Data Literacy

## Through Community and Citizen Science

The "Building Data Literacy Through Community and Citizen Science" badge is awarded to citizen scientists who applied their skills in data literacy to citizen science projects and can use their skills to help others engage with citizen science projects.

## Skills and Competencies Recognized

The recipient of this badge has demonstrated all of the following skills associated with applying their knowledge of data literacy to citizen science projects:

- Articulate how citizen science benefits science and society.
- Describe data literacy and how it can help you make better decisions.
- Differentiate the types of data collected and used by scientists and citizen science participants.
- Critically interpret data-rich graphs and charts.
- Explain how data quality impacts the credibility of scientific conclusions.



# Frequently Asked Questions

## What are digital badges?

Badgr allows users to issue and manage a standardized type of digital badges called Open Badges. A digital badge is a visual symbol of accomplishment. They can be awarded for any definable achievement and earned in many learning environments, games, or workplaces. An Open Badge is a specialized type of digital badge that contains verifiable metadata about achievements according to a common data format, the Open Badges specification. Because they follow an open standard, recipients can combine badges from many different sources into collections. When shared, these badges can be instantly verified by any compatible system to ensure that they are trustworthy representations of their earner's experiences.

→ [Learn more about Open Badges](#)

## Why would I want to earn a digital badge?

A digital badge is a digital token representing skills and achievements that you demonstrate on the SciStarter platform. While engaging in citizen science projects, learners unlock digital badges by engaging with citizen science projects. When shared online, digital badges can be securely shared to websites or included in portfolios as certificates. Each award is private, secure, verifiable, and embedded with data making them uniquely yours. Digital badges also help you discover new opportunities for recognition as they become available by the SciStarter team or tens of thousands of other digital badge issuers across the world using Badgr.

→ [Learn more about Digital Badges](#)

## How do I earn the SciStarter badges?

To earn a SciStarter badge, engage with the SciStarter platform, and once you have met the criteria for the foundations of citizen science badge, it will be automatically awarded to you through the platform. To claim your badge, check the email account associated with your citizen science account. Once the badge is awarded, you will have the option to keep your award in a free digital backpack that can be used to collect, organize, and share your digital awards. To explore other SciStarter awards, check the Citizen Science Badge landing page to learn more about other digital credentialing opportunities.

[Visit SciStarter.org to learn more!](#)

→





### What is Badgr?

Organizations around the world use Badgr to create branded learning ecosystems that reward their communities with skill-aligned digital credentials, stackable learning pathways, and portable learner records that recognize every achievement. We wrote the book on digital badging; please visit the Badgr website for more information about how you can get started!

→ **[Learn more about Badgr \(Canvas Credentials\)](#)**

### How do I log into my Badgr Account?

Your Foundations of Citizen Science badge and any other achievement awarded to you from SciStarter will be accessible, viewable, and sharable via your SciStarter dashboard. Each of the badge awards is issued by SciStarter and backed by the Badgr platform - a private and secure network of digital awards that includes SciStarter and tens of thousands of other verified badge issuers around the world. After you are awarded your first badge, you will have the option to claim a free Badgr account that will give you the ability to organize, manage, and share any badge award that you earn, including those from SciStarter. To create a free account or log in to an existing account that you've already created, visit [Badgr.com](https://badgr.com) to get started. Or, you may optionally use the Get Started link included in your congratulatory email.

→ **[Visit Badgr.com to get started for free!](https://badgr.com)**

### What can I do with my digital badges?

Earning a digital badge is the first step to unlocking opportunities beyond that learning experience. Once earned, digital badges are managed, organized, and shared from the Badgr platform to networks of your choosing and can be shared with outside networks, including LinkedIn, Twitter, Facebook, and more! When digital badges are connected to skills taxonomies (like EMSI), digital badges can be used to explore opportunities related to your skill-aligned awards. After earning your digital badges you will also have the opportunity to pursue credentialing pathways that include those awards.

→ **[Learn more about sharing your digital badge](#)**

### Where can I go for support if I'm having trouble with my badge?

We wrote the book on digital badges; if you encounter any challenges associated with your Badgr account, visit our support page to create a ticket or explore our extensive knowledge base. The Badgr team also offers live support to help you on your learning journey; simply use the web tool on any Badgr page on the bottom right-hand corner to speak with a support representative.

→ **[Visit Badgr's Knowledge Base and Support Portal](#)**



### How can I connect my Badgr account to a different email address?

Your lifelong learning journey will likely include collecting digital badges from a variety of learning experiences. All of your digital badges can be managed from your free badgr account on badgr.com. Your Badgr account can include more than one email account; visit our knowledge base article to learn more about making any changes to your Badgr account.

→ **Managing Your Badgr Account**

### How will Badgr use my data?

Badgr takes an active role in taking all precautions necessary to ensure our user data's safety and protection. In addition to our Privacy Shield-certified practices, our regional data centers store user data in compliance with GDPR, CCPA, and other privacy regulations.

→ **Review Badgr's Privacy Shield Certification**

→ **Read Badgr's Terms of Service**

### What does the information in the badge description mean?

The information included in your award is uniquely yours. Every digital badge includes required information, like a branded badge image, badge name, earning criteria, issuer information, a unique badge recipient identifier, and issue date. Badges may also include optional data, like links to evidence, skills, standards alignment, and tags. This information gives those with whom the badge is shared important information about your achievement and the SciStarter program you participated in - increasing its value and currency.

### How can I use the "skills" section of my badge?

Your award is automatically aligned to skills captured in Emsi's extensive skills database. Every skill has a unique page that includes related skills, job posting data, job posting trends, and live job postings. This valuable connection with workforce data provides you and those with whom you share the badge with more information about the skills connected to your learning achievement. Emsi's skills database is dynamically generated from hundreds of millions of job postings, resumes, and online profiles.

→ **Learn more about Emsi Skills**





### How can I print my digital badge as a certificate?

Your learning achievement can be printed and shared as a high-quality print certificate. Print certificates are easy to share, independently verifiable, and communicate your achievement's rigor and value.

→ [Learn more about printing badges as a certificate](#)

### Does it cost me any money to create or maintain my Badgr account?

Your digital badges can be stored, managed, and shared for free - forever. Badgr has partnered with Mozilla to offer industry-leading digital badge storage and management services for the lifetime of the badges you issue at no cost to you or your learners.

→ [Learn more about the Badgr Backpack](#)

# Get Involved

Connect with the SciStarter Digital Badging Program



## For Learners

- Log on and engage in exciting and important citizen science projects.
- Earn digital badges and have your growing skills validated and recognized.
- Share your digital badges online to showcase your contribution to citizen science.
- Use your verified award to qualify for and explore new opportunities.



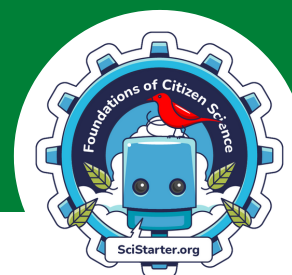
## For Facilitators and Educators

- Develop and lead meaningful citizen programs quickly and seamlessly.
- Bring your learning community up to speed on critical citizen science opportunities.
- Introduce credible, foundational training for your learning community.



## For Organizations

Connect the "Foundations of Citizen Science" badge with your own pathway as a prerequisite or optional inroad to your existing citizen science program.



## For Partners

Create a tailored experience for your own hour 2 program like the National Library of Medicine has done with the "**Libraries as Community Hubs for Citizen Science**" program.







"

**SOMEWHERE,  
SOMETHING  
INCREDIBLE IS  
WAITING TO  
BE KNOWN.**

"

- CARL SAGAN  
ASTRONOMER / EDUCATOR

**VISIT**  
**[SCISTARTER.ORG/TRAINING](https://scistarter.org/training)**  
**TO LEARN MORE**  
**AND GET STARTED**