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What We Learned From Citizen Science Month

July 7, 2020 2 PM ET

CitizenScienceMonth.org

View this recording on YouTube:
bit.ly/CitSciMonthWrapUpRecording

Evaluation questions?

Get in touch with Kristi Eustice:
Kristi.Eustice@asu.edu

What we learned from...



Live Poll!

Are you ...

- A citizen scientist
- A project leader
- A researcher
- A practitioner
- A teacher, educator, troop leader
- A librarian or part of a library staff
- None of these

CitizenScienceMonth.org

Live Poll!

Did you tune into an event during
Citizen Science Month (April 2020)?

- Yes
- No
- Not sure

CitizenScienceMonth.org

Live Poll!

Did you plan or facilitate an event during Citizen Science Month?

- Yes
- No
- Not sure

CitizenScienceMonth.org

Live Poll!

The in-person event I planned for Citizen Science Month (CSM)...

- Was canceled (not transitioned to a virtual event)
- Was postponed (not transitioned to a virtual event)
- Was transitioned to a virtual event
- Was changed to an alternative virtual event due to not being able to transition the original event (select even if the original event is postponed for now)
- Not listed above; please specify.

CitizenScienceMonth.org



**The future
of health
begins
with you**



Crowdsourcing and Citizen Science: A National Library of Medicine Priority

Introduction to Citizen Science



 What it is

 How to join

 Who can do it

 Why participate

**Open Source
Online Tutorial**



**Increase Diversity
in Participation**



**Curated Citizen
Science Projects**

From CitSciDay to CitSciMonth

- First Citizen Science Day: April 2016
- Events at the USA Science and Engineering Festival in collaboration with the National Park Service, City Nature Challenge, SciStarter, and the Federal Community of Practice
- Citizen Science Association: CitSciDay Working Group
- Stall Catchers Megathon in 2019: 1,500 citizen scientists completed 3.5 months of research in one weekend



Citizen Science Month

“Informing and engaging the **public** on the core principles and practices of **citizen science** and amplifying opportunities to participate through public **libraries** during **Citizen Science Month**.”

CitizenScienceMonth.org



CITIZEN SCIENCE
ASSOCIATION

Online:

- Programs
- Projects
- Events
- Materials

Pivot
Prepare
Produce
Participate



citizen



at home!

A woman with dark, curly hair is sitting at a desk, looking at a laptop. She is wearing an orange button-down shirt over a white top. The background shows a window and some indoor plants.

**CITIZEN
SCIENCE**
MONTH APRIL 2020

Join from anywhere!

#CitSciMonth

CitizenScienceMonth.org



CITIZEN SCIENCE

APRIL 2020

MONTH

Partners:

scistarterTM
Science we can do together.

ASU School for the
Future of Innovation
in Society
Arizona State University

 CITIZEN SCIENCE
ASSOCIATION

All of Us | **NIH** **NLM** **NNLM**
RESEARCH PROGRAM Training and Education Center

NATIONAL
GEOGRAPHIC

science
FRIDAY

CitizenScienceMonth.org/Resources



Social media tiles



Posters and fliers



Bookmarks



Buttons and stickers

EVERYTHING FOR YOUR ONLINE EVENT!



Citizen Science Month offers thousands of opportunities for you to turn your curiosity into impact. There's something for everyone, everywhere! Join a project or event from wherever you are to help scientists answer questions they cannot answer without you.

Check out our featured projects below, which are perfect for beginners. You can also browse the featured events to join a virtual citizen science project. Together, we can move the world forward.

LEARN MORE

- [Find an online event](#)
- [About Citizen Science Month](#)
- [Citizen Science Month Themed Days](#)
- [What is Citizen Science?](#)

FOR FACILITATORS

- [Register your online event](#)
- [Download resources for online events](#)
- [Sign up for planning updates](#)
- [Frequently Asked Questions](#)

APRIL 2020

SciStarter.org/citscimonthcalendar

Search the calendar, add your event, and connect directly with projects

WHAT IS CITIZEN SCIENCE?

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. Participating is easy! Often, you can use your mobile phone or the internet to collect and submit observations and to see results.

THEMED DAYS AND WEEKS FOR CITIZEN SCIENCE MONTH














Hopefully these themed days and weeks inspire you to plan your own event during Citizen Science Month!

On SciStarter.org/citscimonthcalendar, you'll find featured citizen science projects and materials for each of these days and weeks.

Perhaps you'll be inspired to invite people to your library to participate in one of the featured citizen science projects during National Library Week. Once you decide the date and time, you can add that event to SciStarter.org/events. It's that easy!

Find more resources for Citizen Science Month at CitizenScienceMonth.org.

scistarter
Science we can do together.

SUN	MON	TUE	WED	THU	FRI	SAT
	CITIZEN SCIENCE MONTH 		1 World Sourdough Day	2 Signs of Spring	3 Accessibility Day 	4 Citizen Science Games
5 Socially Distant BioBlitz	6 	7 Nigeria and CitSciMonth	8 Air Quality Day	9 Citizen Science While Stargazing	10 What's in Your Water? 	11 Get Outside!
12 	13 Tell a Citizen Science Story 	14 Beginning of Dark Skies Week	15 WeDigBio Lite	16 Chasing Steve Q&A	17 	18 
End of Dark Skies Week Beginning of National Library Week	20 	21 	22 50th Anniversary of Earth Day	23	Beginning of City Nature Challenge Citizen Science in Libraries Day	25 
26 	27 End of City Nature Challenge	28 Citizen Science & Cultural Institutions	29 Citizen Science & Phenology	30 Citizen Science Education Day		



The Library & Community Guide to Citizen Science

Understanding, planning, and sustaining ongoing engagement in
citizen science at your library.

scistarter™
Science we can do together.

ASU School for the
Future of
Innovation
Arizona State University

Featured projects: SciStarter.org/NLM



GLOBE AT NIGHT

Help gather light pollution data.



FLU NEAR YOU

Spread the word. Not the flu.



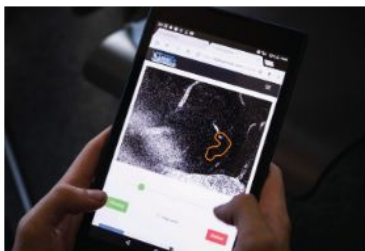
DEBRIS TRACKER

Submit sightings of litter where you are.



ISEECHANGE

Document change in weather and climate in your community.



STALL CATCHERS

Accelerate Alzheimer's research by playing an online game.



CROWD THE TAP

As a first step towards safe drinking water, help create a national inventory of tap water pipes.

Introduction to Citizen Science



**What
it is**



**Who
can do it**



**How
to join**



**Why
participate**



SciStarter.org/Citizen-Science-Videos

Deeper Dive videos from recent SciStarter partner events

These longer-form videos will introduce you to the people moving citizen science forward and help you understand the goals, tasks and intended outcomes of projects and programs.



WEBINAR RECORDING:

Become a Citizen Scientist to Protect the Planet!



WEBINAR RECORDING:

Fight COVID-19...from home.



WEBINAR RECORDING:

Host or facilitate remote, live-streamed citizen science events.



WEBINAR RECORDING:

Citizen science while stargazing with Astronomy Mag and SciStarter.



WEBINAR RECORDING:

Digital Accessibility: Best Practices for Creating User-friendly Presentations and Content.



WEBINAR RECORDING:

Citizen Science Online with Princeton Libraries!



WEBINAR RECORDING:

National Library Week Virtual Storytime and Resources Event



WEBINAR RECORDING:

AQ IQ: Air Quality Basics



WEBINAR RECORDING:

Arizona State University (ASU) Does CitSci!

Resources: By the Numbers

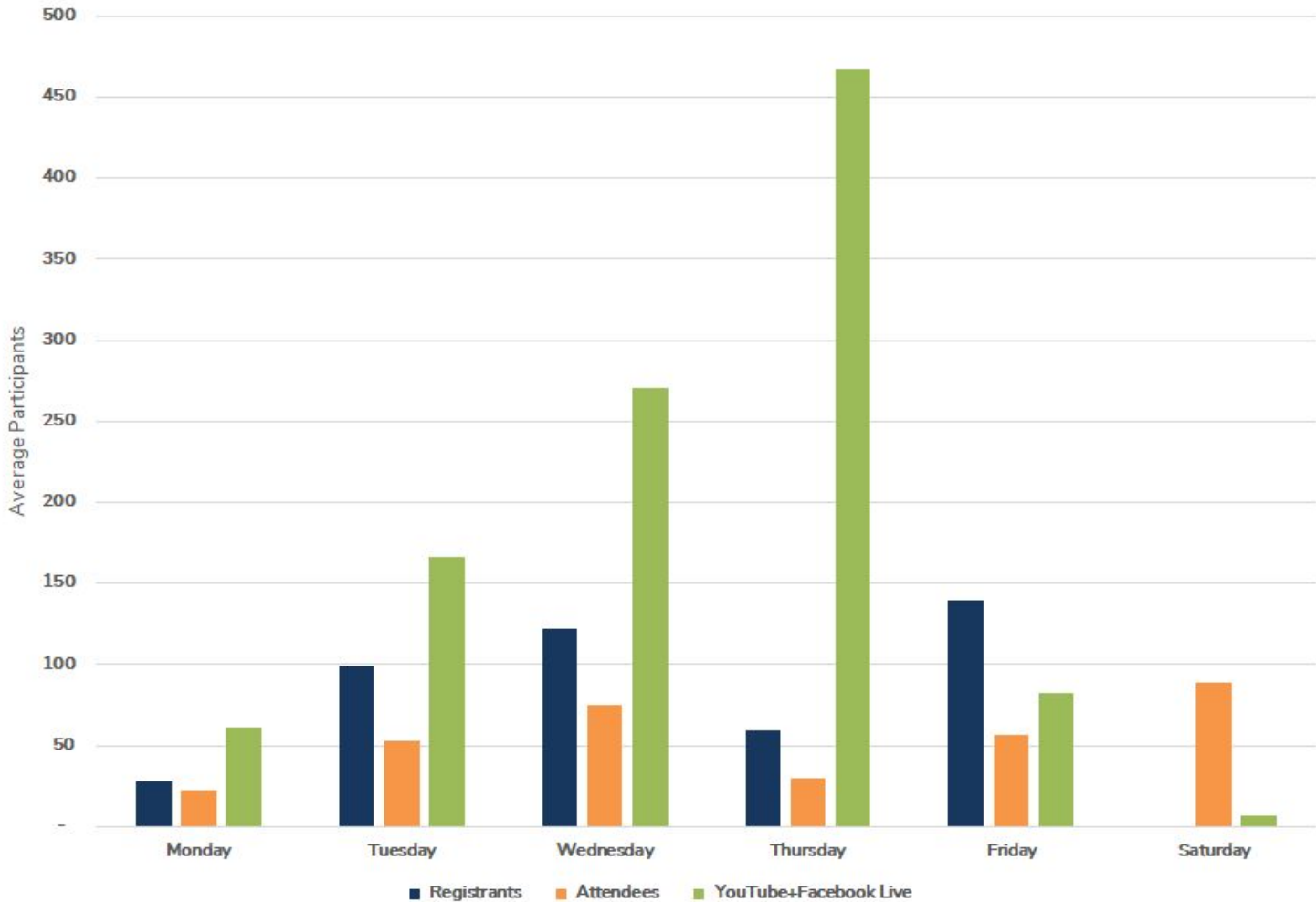
- Unique visits to CitizenScienceMonth.org: 43,622
- Unique visits to the NLM Featured Projects Page: 22,047
- Contributions to NLM Featured Projects: 51,313
- Downloads of CitSciMonth and Library Resources: 6,312
- Engagement in the Intro to CitSci Tutorial: 3,235

*Resource promotional campaign
began in February 2020*

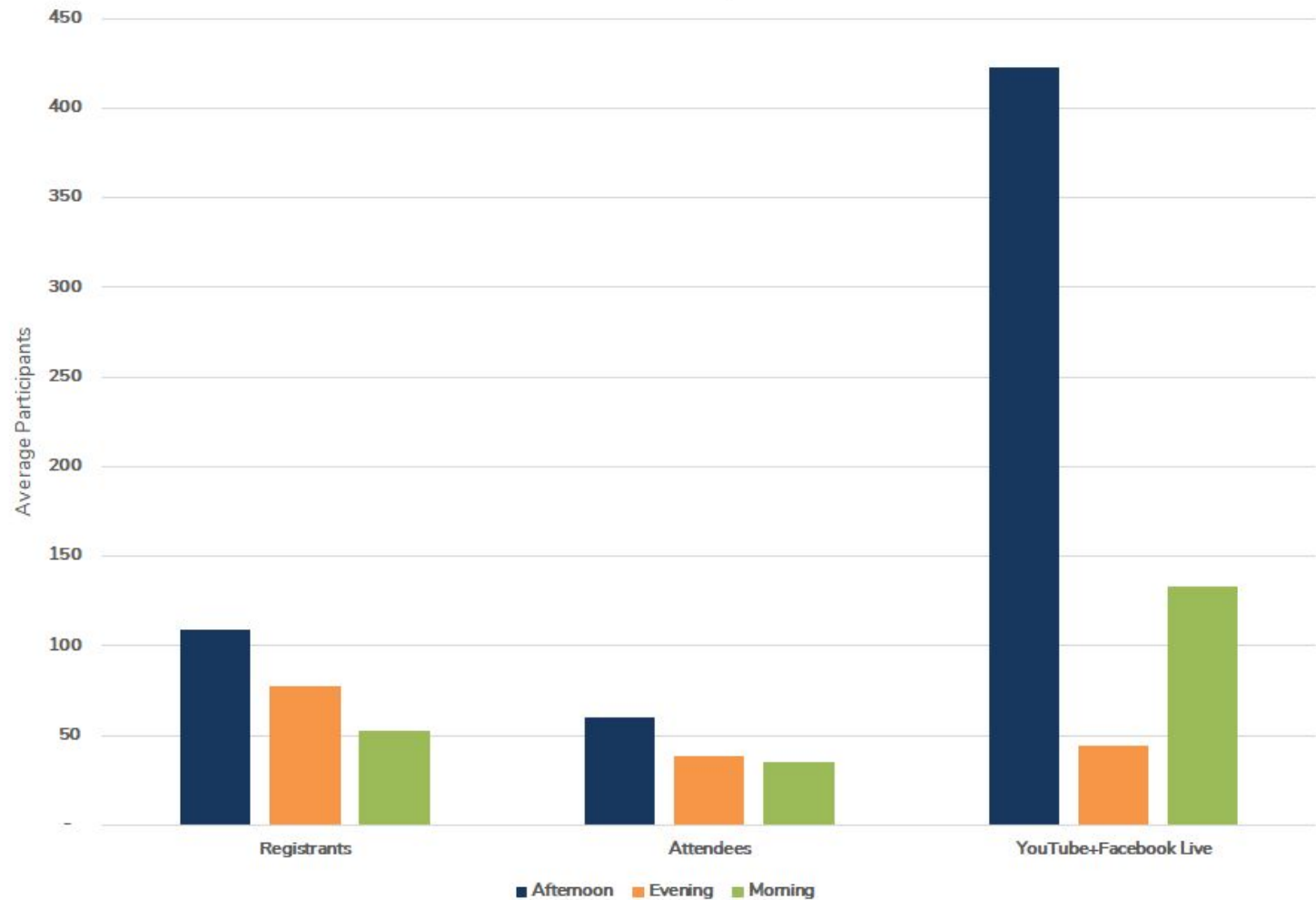
Events: By the Numbers

- Postponed or cancelled: 59
- New virtual events added to SciStarter: 121
- Collaborative events produced with SciStarter: 68
- Weekly, open calls: 90+

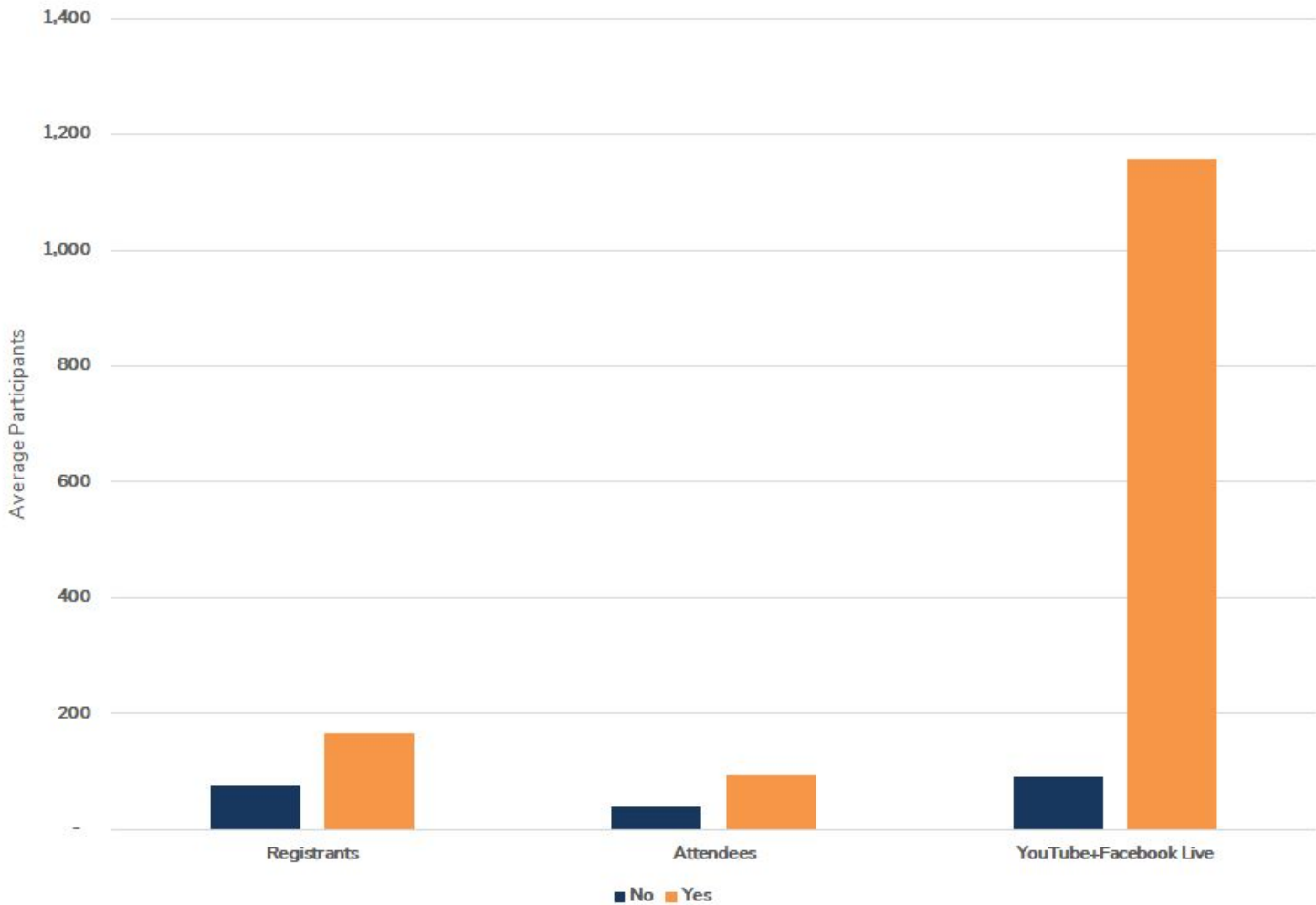
Day of Week

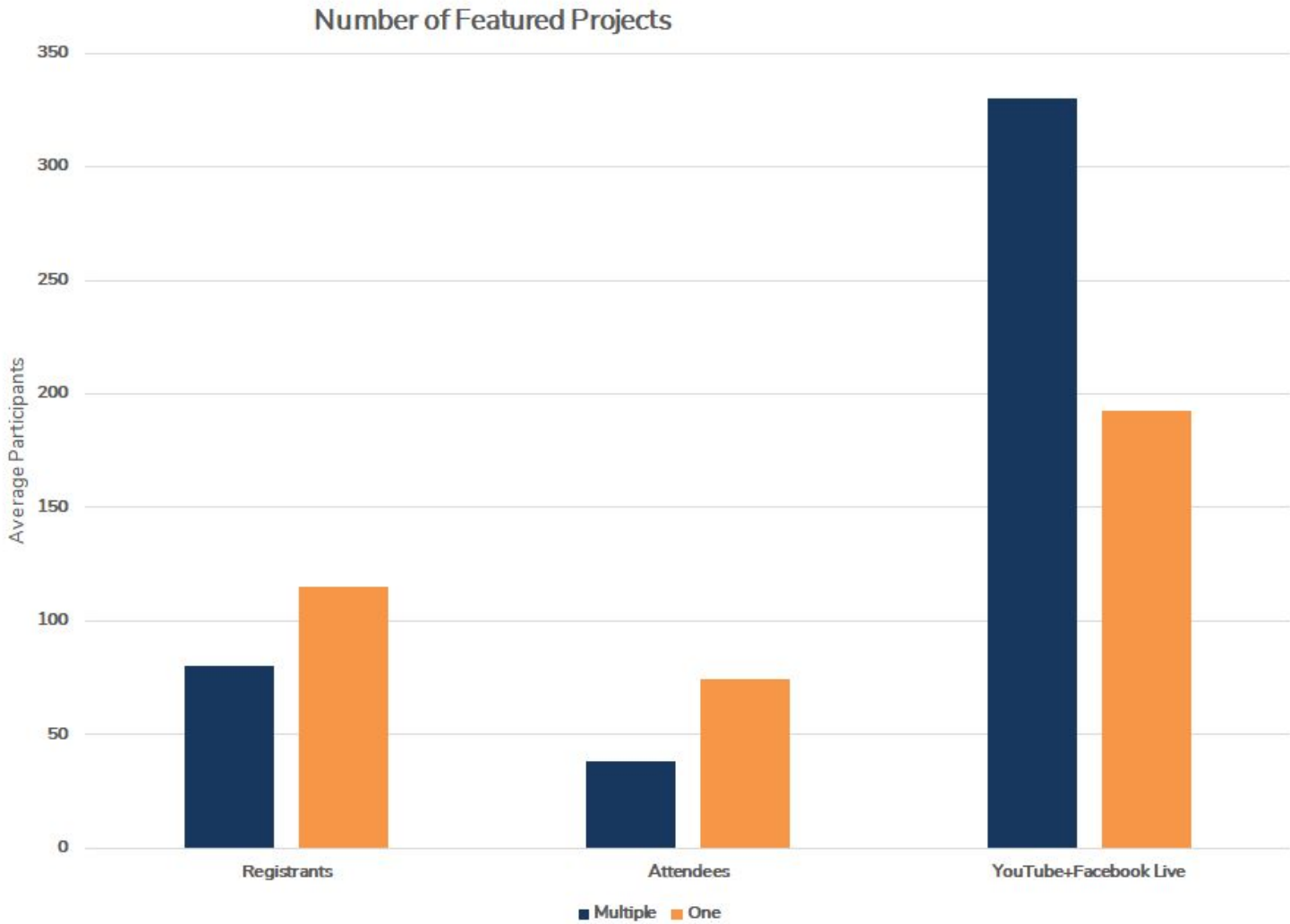


Time of Day

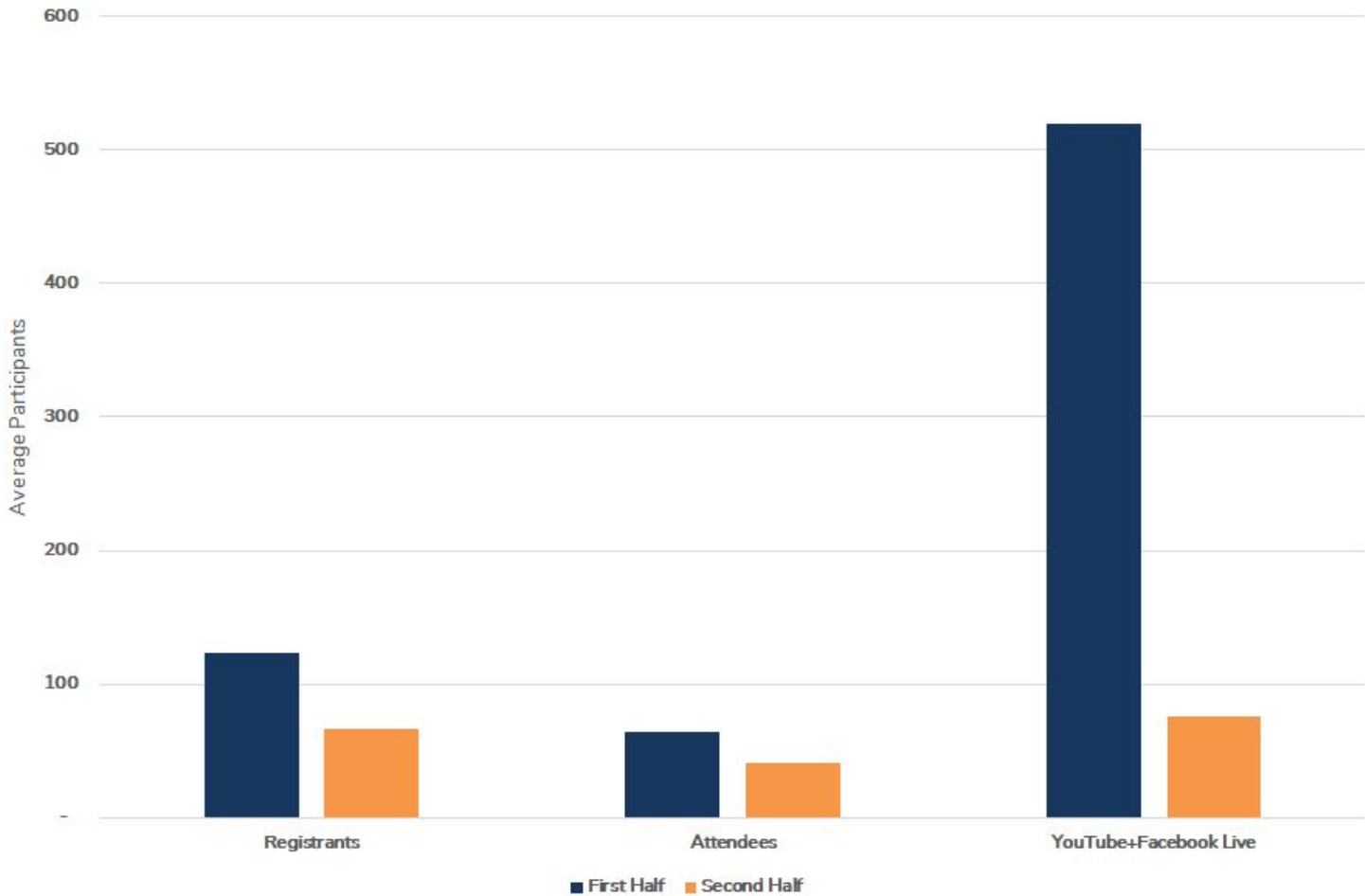


Media Partner





First Half versus Second Half of CitSciMonth



CitSciMonth Social Media: By the Numbers

- #CitSciMonth Tweets or retweets: **1,695 times** (an average of **22 times a day**)
- @CitSciMonth social media takeovers: **20+**
- @CitSciMonth Twitter Account: **365,218 impressions**
- @CitSciMonth Instagram Account: **13,384 impressions**

*Social media takeovers
began in January 2020*



Swipe to learn about easy
citizen science projects
you can do from home!

Insights: Participants

- In April 2020, there was a 375% increase (compared to April 2019) in the number of people who JOINED citizen science projects on SciStarter!
- Thousands of people — from the United States, Ireland, Nigeria, Canada, Hong Kong, Bangladesh, Australia, and more — tuned-in to the events through Zoom, YouTube livestreams, and Facebook.

Assessments:

- Analytics (Web, Social Media, Project Contributions)
- Tutorial Survey
- Participant Survey
- Facilitator Survey
- Facilitator Focus Groups & Project Scientist Interviews

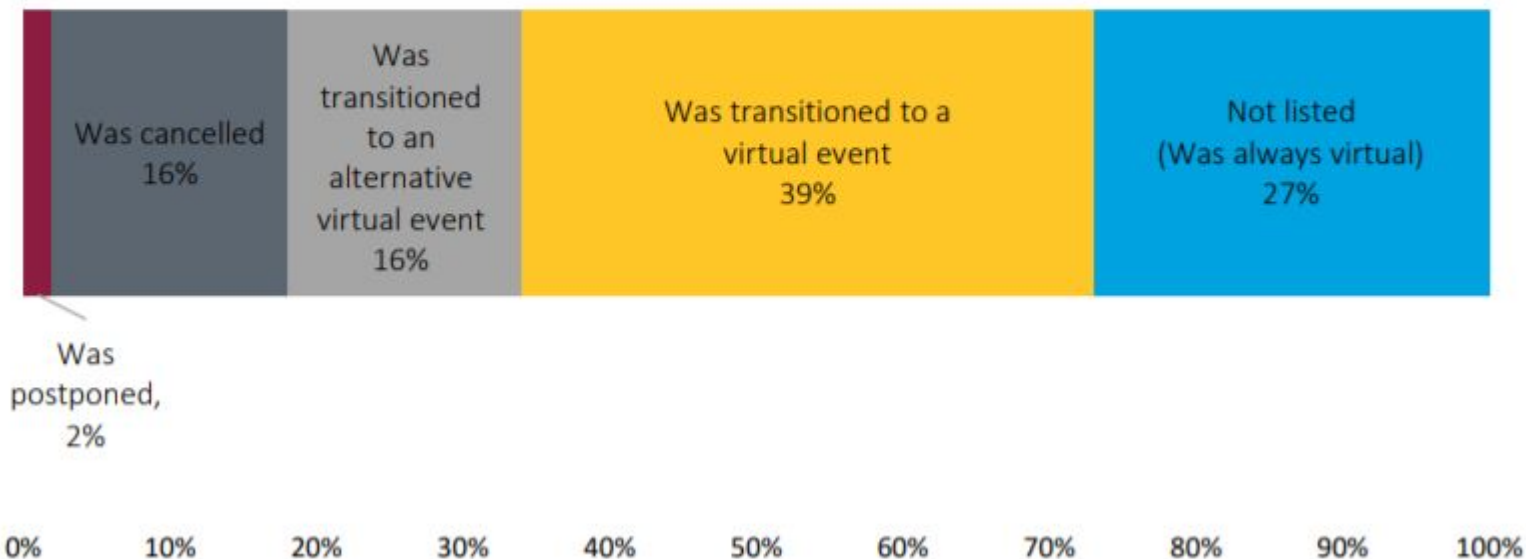
Insights: Tutorial Survey

Overall, users of the “Introduction to Citizen Science” tutorial who completed the evaluation survey reported **gains** in awareness, interest, understanding and comfort around **Citizen Science** as a result of completing the tutorial.

Similarly, all users indicated being either “**Moderately**,” “**Very**,” or “**Completely**” likely to participate in Citizen Science **again** in the future and enroll in the All of Us Research Program.

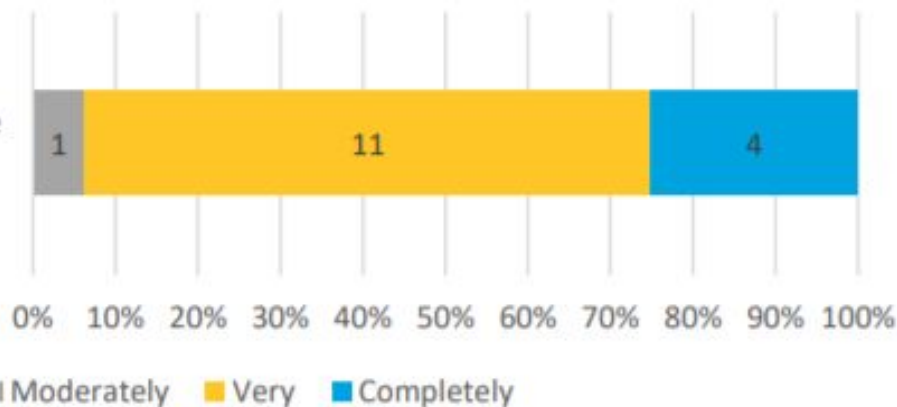
Insights: Facilitator Survey

The in-person event I planned for Citizen Science Month...
($n = 44$)



Insights: Facilitator Survey

Based on your experience, how likely are you to facilitate virtual Citizen Science events in the future? (n = 16)



Insights: Facilitator Survey

When asked how transitioning to a virtual event impacted the ability of the intended audience to participate, many facilitators wrote about the transition having a **negative** impact on **underrepresented** in biomedical research (UBR) populations.

Specifically, the most common theme was related to their audiences **not having access to technology or the internet**. For example, one individual wrote, “Audience[s] that did not have access to a computer, iPad, or smartphone would not be able to access the program or use the apps or websites that were presented.”

Insights: Facilitator Survey

- “We were incredibly fortunate to have **one-on-one coordination** with SciStarter staff during the planning, promotion, and execution of our event. Nothing beats this personal attention and collaboration! Otherwise, we were very grateful to use Scistarter's Zoom account to run the event itself.”
- “The Zoom account with 100-person access allowed us to reach a large audience; also, Caroline's assistance was invaluable **walking us through this process** and how to run a successful seminar.”

Insights: Facilitator Focus Groups

Successes:

- The informal nature of virtual programming
- Broader reach to new audiences
- A valuable learning experience

Insights: Facilitator Focus Groups

Challenges:

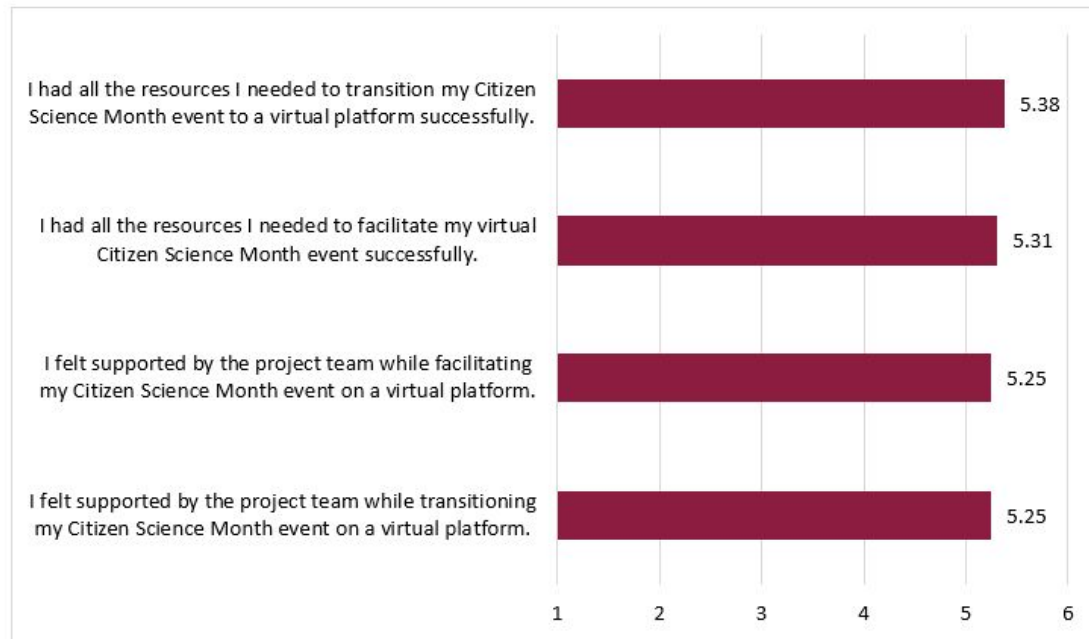
- Loss of hands-on instruction
- Quick transition, little preparation time
- Technology barriers
- COVID-19

Insights: Facilitator Focus Groups

- “The people coming to us from SciStarter are really ready to be **immersed** in Citizen Science. And so, they're the ones really contributing a lot.”
- “These newfound outreach capacities helped to promote project participation among ‘**new audiences**’ across the nation and globe.”
- “[SciStarter was] very, very **helpful** putting together, helping select projects...help[ing] us get all the little pieces together.”
- “SciStarter...really helped **promote the projects**, more so than any organization I've worked with, including my own [informal learning space].”
- Other aspects of the SciStarter collaboration for which respondents expressed gratification included SciStarter’s provision of **background knowledge and resources**, including the webinars, app demonstrations, and a “dashboard concept to help out with smaller projects.”

Insights: Facilitators

Facilitators' Experiences Transitioning and Facilitating a VCSM Event (n = 16)



***Note.** Response options included 1) Strongly disagree; 2) Disagree; 3) Slightly disagree; 4) Slightly agree; 5) Agree; and 6) Strongly agree

Insights: Project Scientist Email to SciStarter

Monday after event: “The events seems to have had an impact on my project. We've had 492 classifications since Thursday, which is **amazing**.”

- Patrick Treuthardt, Spiral Graph

Insights: Participants

- For the sample size, it is notable that UBR groups were represented across numerous categories.
- Participants self-reported average gains in knowledge of science and Citizen Science, confidence in participating in Citizen Science, and motivation to participate again in the future.
- Notably, most participants (19 of 22 respondents) also reported that the event they attended made them feel more connected to others while practicing physical distancing due to the COVID-19 pandemic.
- Moreover, analytics from the SciStarter NLM microsite provide supplemental evidence that Citizen Science interest and engagement peaked during Virtual Citizen Science Month, with most featured projects evidencing participation beyond April.

Insights: Participant Surveys

Improvements recommended by participants:

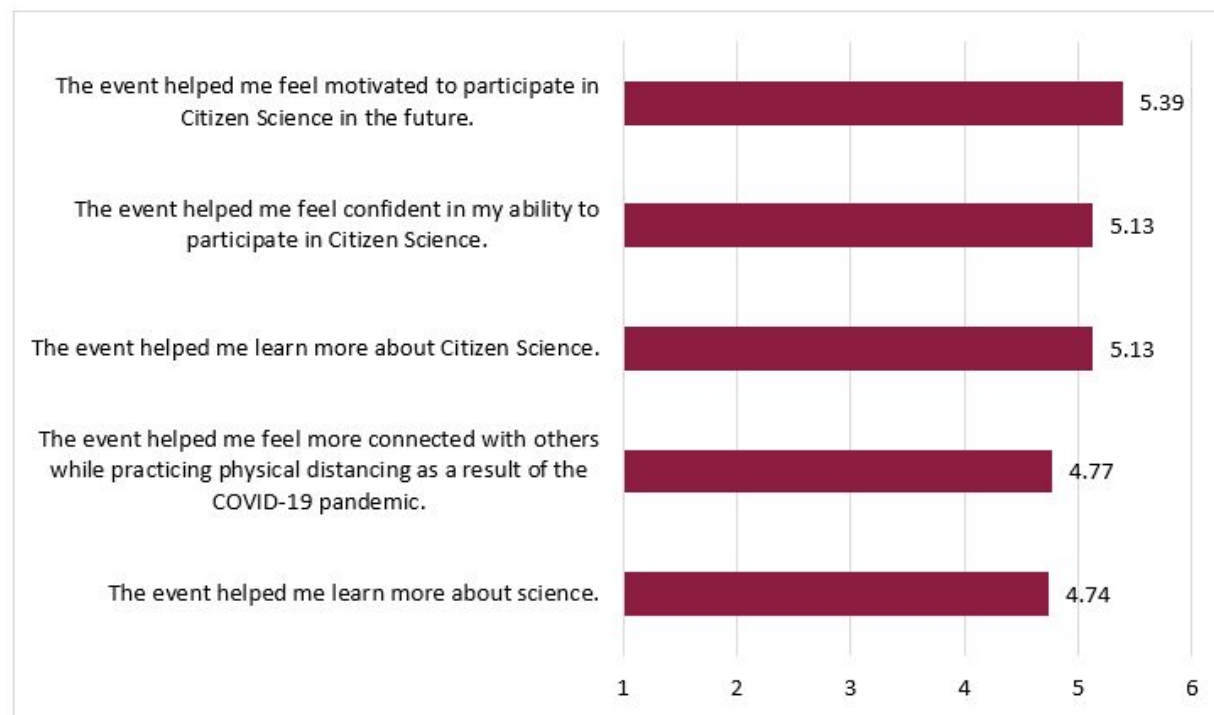
- Shorter events
- More interaction between participants

Feedback on Virtual Events: Participants

- “It was an excellent opportunity to know more about the other project[s] around the world.”
- “I felt extremely hopeful and inspired by listening to the wonderful presenters from the projects on SciStarter. I’d attend more events, in person or virtually, any day.”

Insights: Participants

Impact of Participating in a Citizen Science Event (n = 22-24)



***Note.** Response options included 1) Strongly disagree; 2) Disagree; 3) Slightly disagree; 4) Slightly agree; 5) Agree; 6) Strongly agree

Insights from the University Office of Evaluation and Educational Effectiveness at ASU

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- Overall, facilitators were largely **successful** in transitioning and implementing their CSM events in a **virtual format**.

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- While facilitators noted the **loss of hands-on instruction** and the **limited transition and planning time** as **barriers** to participation, they also reported that the change in format allowed for a **broader reach to audiences** and afforded an important **learning opportunity for facilitating virtual programming** moving forward.

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- Participants echoed facilitators in that they **appreciated** the ability to participate in an event with **people from all over the world**.

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- Participants echoed facilitators in that they appreciated the ability to participate in an event with people from all over the world.
- Some participants also acknowledged the **convenience** and **accessibility** of virtual programming.

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- While facilitators noted the loss of hands-on instruction and the limited transition and planning time as barriers to participation, they also reported that the change in format allowed for a broader reach to audiences and afforded an important learning opportunity for facilitating virtual programming moving forward.
- Participants echoed facilitators in that they appreciated the ability to participate in an event with people from all over the world.
- Some participants also acknowledged the convenience and accessibility of virtual programming.
- Both **facilitators and participants** noted **issues with technology** as barriers or challenges and facilitators suggested the incorporation of **informal education sessions** to get participants comfortable with the technology that will be used.

Evaluation Recommendations

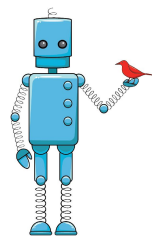
- Ensure **processes** are in place to continue **collaboration** with facilitators.
- Explore ways to help facilitators connect programming to **additional UBR populations**
- Continue soliciting feedback from facilitators to understand their unique experiences and ensure **continuous improvement** of future virtual events
- Limit virtual events to **one hour** and provide an opportunity for participants to **interact** with each other
- Test **technology** and **internet connectivity** ahead of the events

Live Poll!

What are your favorite online event platforms?

Building on the Momentum

- Projects, events, tools, and more for all
- Syndicated blog network and podcast
- Corporate volunteer programs
- Formal and informal education programs (schools, universities, life-long learning groups)
- Museum and library programs
- Community partnerships and outreach



scistarter
People-powered science.

Continued Engagement with Libraries

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Science we can do together.

SciStarter.org/library-resources



[Library Kits](#) » Resources

Welcome!

Resources for Librarians and Facilitators

These resources are designed to help you:

- Learn about and introduce Citizen Science to your communities
- Build your own kits! Download PDFs of project instructions and access supply lists for any tools or materials you need to purchase
- Use and promote your kits: Download promo fliers and kit check out cards

Summer Reading with SciStarter and NNLM



- Thanks to support from the Network of the National Library of Medicine, SciStarter is collaborating with libraries to co-host virtual events to engage patrons in citizen science, to hear first-hand from project leaders, to learn about related programs and recommended reading, and more!
- Sign up at SciStarter.org/NLM

Summer Reading Meets Citizen Science



Globe at Night Q&A with South Butler Library

JULY 9 @ 2 PM ET:

Join us online. Register at
bit.ly/GlobeAtNightLibrary

PA FORWARD 

PENNSYLVANIA
LIBRARIES

scistarter
Science we can do together.


**South Butler
Community Library**
connect · discover · take flight

**All
of Us**
Pennsylvania

CitSciMonth 2021: April

- It's never too early to start planning!
- Sign up for a global social media takeover:
bit.ly/CitSciMonthTakeover
- Join one of the global weekly calls: **Thursdays at 8 AM and 11 AM ET**
- Keep up with facilitator updates:
bit.ly/CitSciMonthFacilitatorUpdates

Thank you!



All*of***Us**
RESEARCH PROGRAM



CITIZEN SCIENCE
ASSOCIATION

science
FRIDAY

NATIONAL
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Questions?



Survey:

bit.ly/CitSciMonthLearning