

Darlene F. Cavalier
SciStarter
Arizona State University
School for the Future of Innovation in Society
Consortium for Science, Policy and Outcomes (CSPO)

(a) Professional Preparation

Temple University, Philadelphia, PA
University of Pennsylvania, Philadelphia, PA

Mass Communications B.S., 1991
MLA, 2005

(b) Appointments

PI, IMLS, Citizen Science Ambassadors: Libraries as Community Hubs for Citizen Science 4.0.
Organization: ASU LG-254823-OLS-23 9/2023- 8/2025 \$249,425

PI, Gordon and Betty Moore Foundation: Libraries as Community Hubs for Citizen Science 4.0.
Organization: ASU G11328-300 \$300,000 9/2023-8/2025

PI: IMLS LG-246428-OLS-20, “Scaling, Supporting, Sustaining Libraries as Community Hubs for Citizen Science.” \$481,377. 9/20-8/24

PI: Moore Foundation, “Scaling Supporting, Sustaining Libraries as Community Hubs for Citizen Science.” \$600,000. 9/20-8/24

PI, NASA, “Expanding Citizen Science through NASA GLOBE.” \$65,000 (2019-2024)

PI: National Library of Medicine through UCLA, “Citizen Science Month.” \$270,000. 9/20-4/21

PI: National Network of the Library of Medicine, “Foundations of Citizen Science” and “Libraries as Community Hubs for Citizen Science” training modules. \$79,000. 1/21-4/21

PI: National Library of Medicine via UCLA, “Citizen Science Month.” \$250,000. 9/19-4/20

PI: UCLA, “Citizen Science Day.” \$49,000. 9/18-4/19

PI: IMLS # “Libraries as Community Hubs for Citizen Science.” \$449,983. 11/17-11/20

coPI: NSF AISL #1906998 “The Circuit: A Platform for Increasing Access to, Deepening and Researching Patterns of Family and Adult Participation in Informal Science.” \$2,900,000. 9/19-8/24.
Location of project: Oregon State University

Subawardee: NOAA, “Citizen Science, Civics, and Resilient Communities.” \$94,941. 10/18-9/21
Subawardee: NASA and Citizen Science Association, “CitSciCon.” \$31,000. 5/21

PI, National Institutes of Health, National Network of Libraries of Medicine, 15 UG4 LM012341-03.
“Citizen Science Day in Libraries.” \$72,314 (2019)

PI, Schmidt Futures, “Making Citizen Science Tools Accessible.” \$180,000 (2017-2019)

PI, National Science Foundation, #1845241. “Practitioner Workshop for Deploying SciStarter Affiliate Tools To Support Strategic STEM Learning.” \$74,990 (2019)

- 2018-2020 Advisor, Fellow, National Geographic
- 2022-current, advisor, NSF RCN-UBE: The Undergraduate Student Experiences with Citizen Science (USE Cit Sci) Network to transform learning and broaden participation in science
- 2015-current, Advisor, Federal Community of Practice: Citizen Science and Crowdsourcing
- 2014-current, Advisory Board NSF-funded Twin Cities Public TV’s “SciGirls”

- 2014-current, Professor of Practice, School for the Future of Innovation in Society at Arizona State University; Consortium for Science, Policy and Outcomes
- 2010-current, Founder, SciStarter (“Amazon.com for Citizen Science,” Carl Zimmer/The New York Times), a website and start up that connects people with real science they can do
- 2010-current, coFounder, Expert and Citizen Assessment of Science and Technology (ECAST)
- 2008-current, Founder, Science Cheerleaders, 501c3 organization of 300 current and former pro cheerleaders pursuing STEM careers
- 2018-2019, Advisor, Nature TV SpringLive
- 2017-2019, Committee, National Academy of Sciences, Designing Citizen Science to Enhance Science Learning
- 2016-2019, appointed, EPA National Advisory Council for Environmental Policy and Technology
- 2015-2019, Chair, American Institute of Physics New Media Science Communications Award
- 2016-2017, Advisor, PBS Crowd and Cloud television and web series
- 2015-2018, Founding Board Member, Citizen Science Association
- 2002-2017 Senior Advisor, Special Projects Director, Kalmbach Publishing (Discover Magazine, Astronomy Magazine and Drones 360)
- 1994-2002 Executive Director and Senior Manager of Global Business Development, Walt Disney Publishing Worldwide. Led Disney Publishing’s largest signature program, The Discover Magazine Technology Awards

Grant and article reviewer for federal agencies, publishers and professional organizations.

(c)Publications and Presentations:

Haley E. Smith, Caren B. Cooper, K.C. Busch, Suzanne Harper, Amy Muslim, Kaleigh McKenna & Darlene Cavalier. (2023) Facilitator organizations enhance learning and action through citizen science: a case study of Girl Scouts’ Think Like a Citizen Scientist journey on SciStarter, Environmental Education Research.

Sara E Futch, Lincoln R Larson, Caren B Cooper, Bethany B Cutts, Bradley Allf, Maria V Sharova, Darlene Cavalier, Cathlyn Davis.(2022, November 18). Exploring connections among projects across the citizen science landscape: A social network analysis. PeerJ.

Futch, S., Larson, L., Cooper, C., Cutts, B., Allf, B., Sharova, M., Cavalier, D., Davis, C. (2022, November 18). [Exploring connections among projects across the citizen science landscape: A social network analysis](#). PeerJ.

Ben Zaken, D., Segal, A., Cavalier, D., Shani, G., & Gal, K. (2022). [Generating Recommendations with Post-Hoc Explanations for Citizen Science](#). Proceedings of the 30th ACM Conference on User Modeling, Adaptation and Personalization, 69–78.

Allf, B., Cooper, C., Larson, L., Dunn, R., Futch, S., Sharova, M., Cavalier, D., [Citizen Science as an Ecosystem of Engagement: Implications for Learning and Broadening Participation](#), BioScience, Volume 72, Issue 7, July 2022, Pages 651–663.

Smith, H., Cooper, C., Busch, K.C., Muslim, A., Harper, S., McKenna, K., Teris, L., Nickerson, C., Arbuckle, D. & Cavalier, D. (2022, May 23-26). [Facilitator Organizations Enhance Environmental Citizen Science Outcomes: A Case Study of the Girl Scouts' "Think Like a Citizen Scientist" Journey](#). [Collaborative Poster Virtual Session]. Citizen Science Association 2022 C*Sci Conference.

Cavalier, D., Early, E., National Girls Collaborative, SciStarter, Salthouse, R., Ash, D., & Arizona State University. (2022, April 28). [Libraries as Community Hubs for Citizen Science](#). CSA Connect.

- Allf BC, Cooper CB, Larson LR, Dunn RR, Futch SE, Sharova M, Cavalier D. (2022, May 23-26). [New Horizons for Citizen Science Participation: Multiproject Volunteers](#) [Virtual Presentation]. C*Sci: Conference of the Citizen Science Association.
- Cavalier D, Nickerson C, Cooper CB, Allf BC. (2022, February 17-20). [Citizen Science Resources: Leveraging SciStarter for Participatory Research](#). [Virtual Workshop]. American Association for the Advancement of Science Annual Meeting.
- Cooper, C. B., Hawn, C. L., Larson, L. R., Parrish, J. K., Bowser, G., Cavalier, D., Dunn, R. R., Haklay, M. (Muki), Gupta, K. K., Jelks, N. O., Johnson, V. A., Katti, M., Leggett, Z., Wilson, O. R., & Wilson, S. (2021). [Inclusion in citizen science: The conundrum of rebranding](#). *Science*, 372(6549), 1386–1388.
- Allf BC, Cooper CB, Larson LR, Cavalier D, Spiers H, Futch SE, Sharova M, Dayan N, Gal K. (2020, September 6-11). [SciStarter: The impact of a 3rd party platform on volunteer communities](#). [Virtual Workshop]. ECSA: European Citizen Science Association Conference. Trieste, Italy.
- Cavalier, D. (2021, May 7). [Libraries are Quickly Becoming Community Hubs for Citizen Science](#). Discover Magazine.
- Ignat, T., Cavalier, D., & Nickerson, C. Citizen Science and Libraries: Waltzing towards a collaboration. Communications of the Association of Austrian Librarians 72(2). 2019. <https://doi.org/10.31263/voebm.v72i2.3047>
- Auerbach, J., Barthelmess, E. L., Cavalier, D., Cooper, C. B., Fenyk, H., Haklay, M., Hulbert, J. M., Kyba, C. C. M., Larson, L. R., Lewandowski, E., & Shanley, L. (2019). [The problem with delineating narrow criteria for citizen science](#).
- Allf, B., Cooper, C., Cavalier, D., & Larson, L. (2020, May 5-12). [Citizen science for all](#) [Online Video]. In NSF STEM for All Video Showcase.
- Parrish, J. K., Jones, T., Burgess, H. K., He, Y., Fortson, L., & Cavalier, D. (2019). [Hoping for optimality or designing for inclusion: Persistence, learning, and the social network of citizen science](#). Proceedings of the National Academy of Sciences, 116(6), 1894–1901.
- Prange, E., Lande, M. & Cavalier, D. (2018). [Citizen Science Maker Summit Report: Learning Outcomes and Next Steps](#). Arizona State University White Paper. Tempe, AZ.
- Contributor, Proceedings of the National Academy of Sciences, (2021-06-25) 116(31), 15336–15337. Inclusion in citizen science: The conundrum of rebranding. SCIENCE Journal article DOI: [10.1126/science.abi6487](https://doi.org/10.1126/science.abi6487)
- Cooper, Caren & Hawn, Chris & Larson, Lincoln & Parrish, Julia & Bowser, Gillian & Cavalier, Darlene et al (2021). Inclusion in citizen science: The conundrum of rebranding. *Science*. 372. 1386-1388. [10.1126/science.abi6487](https://doi.org/10.1126/science.abi6487).
- Neches RY, Lang JM, Jospin G, Brown WE, Cavalier D, Hampton-Marcell J, Gilbert JA, Eisen JA. (2020) Bacterial communities associated with cell phones and shoes. *PeerJ*8:e9235
- Cavalier, D., Hoffman, C., Cooper, C., (2020) “Field Guide to Citizen Science”. Timber Press.
- Neches RY, Lang JM, Jospin G, Brown WE, Cavalier D, Hampton-Marcell J, Gilbert JA, Eisen JA. (2020) Bacterial communities associated with cell phones and shoes. *PeerJ*8:e9235
- AAAS Conference Panelist: “Designing Citizen Science to Enhance Science Learning,” sharing outcomes from a National Academies’ Report. February 2020

Contributor, National Academies of Sciences, Engineering, and Medicine. (2018) Learning Through Citizen Science: Enhancing Opportunities by Design. Washington, DC. The National Academies Press. <https://doi.org/10.1722625183>

Parrish, J., Jones, T., Burgess, H., He, Y., Fortson, L., Cavalier, D. (2018) “*Hoping for optimality or designing for inclusion: Persistence, learning, and the social network of citizen science.*” PNAS.

Information to Action: Strengthening EPA Citizen Science Partnerships for Environmental Protection. EPA National Advisory Council for Environmental Policy and Technology (NACEPT). 2018.

Hoffman, C., Cooper, C., Cavalier, D., Kennedy, E., Farooque, M. (2016) Analyzing the Role of Citizen Science in Modern Research. A book edited by 1000001 Labs Ceccaroni, L, Piera, J, (Editors).

Cavalier, D., Kennedy, E., (2016) “The Rightful Place of Citizen Science,” The Rightful Place of Science is a book series published by Arizona State University's Consortium for Science, Policy & Outcomes, and edited by G. Pascal Zachary.

(d) Other Significant

Recipient: 2022 Arizona State University President's Medal for Social Embeddedness

October 2022 Ukrainian Library Conference, Ukraine Ministry of Science, 2nd place, “Crowd Favorite,” presentation, “Libraries as Community Hubs for Citizen Science

Arizona State University, ASU Now, “ASU Researchers Shine at World's Largest Science Meeting,” (February 2020)

Served on Data and Metadata Working Group: Citizen Science Association. Organized initial CSA workshop on data and metadata in citizen science. Board member.

Frequent Speaker: AAAS Annual Conference, Online Learning Consortium annual conference, Association of Public Land Grant Universities annual conference, dozens of others.

Director of programs that connect public engagement in science with Verizon corporate volunteers, Girl Scouts, K-12 and college, Osher Lifelong Learning (55+), 4H, and others facilitating community development among broader audiences.

Develop web tools for research and practice. Led the creation of globally-adopted tools to aggregate and share metadata on citizen science projects and embed them in media sources.

Contribute to the science of learning. Coauthored report from the National Academy of Sciences on Designing Citizen Science for Science Learning.

Broaden participation of girls and other underrepresented groups in science via Science Cheerleaders.. Created, in partnership with the Girl Scouts of USA, a national Think Like a Citizen Scientist journey through SciStarter in which girl scouts earn official badges.

Recent talks:

6/8/22 LIBER Annual Conference 2022 in Odense, Denmark (keynote)

4/17/22 AUN-EEC Workshop: Citizen Science for Addressing UN SDGs in SEA (keynote)

2/28/22 Panelist: American Association of Geographers annual conference: “Citizen science as a tool for conducting research on landscape and landform change”

2/24/22 Presenter: American Association for the Advancement of Science annual conference: Citizen Science Resources: Leveraging SciStarter for Participatory Research

