



Ambassadors, Champions, Fellows, and More

What defines success in scientific community Advocacy Programs?

Rebecca Aicher, Melanie Binder, Heidi Laješić, Stephanie O'Donnell, Allen Pope, Gabrielle Rabinowitz, Rosanna Volchok, and Lou Woodley

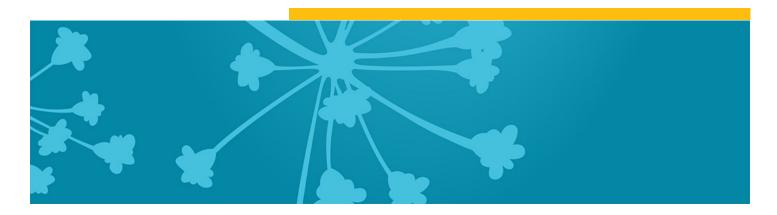


Table of Contents

About the Authors	2
Acknowledgements	3
Recommended citation	3
Executive Summary	4
Advocacy Programs: Overview/Definition & Program Landscape	5
a) Goals of Our Survey	5
b) Methodology	6
c) Caveats and Research Limitations	6
Characteristics of Programs Surveyed	7
a) Overall Community & Membership Characteristics	7
b) Objectives	8
c) Size	9
d) Budget and Staff	10
e) Timeframe	11
f) Selection	12
g) Nomenclature	14
h) Responsibilities and Tracking	15
i) Resources and Incentives	16
j) Measuring Success	17
Key Observations	20
a) Age: Just a Number?	20
b) Space: Not Really the Final Frontier	20
c) Budget? What Budget?	21
d) Size Isn't Everything Or is it?	21
e) What's in a Name?	22
Conclusion	23

About the Authors

REBECCA AICHER

Rebecca is a project director at the Center for Scientific Evidence in Public Issues at AAAS. Rebecca is interested in solving challenging problems that include from environmental issues, science policy, and STEM education. Before joining AAAS in 2016, Rebecca worked on invasive species research and policy, climate change policy, and Clean Water Act issues.

MELANIE BINDER

Melanie is the Community Engagement Manager at the American Society of Plant Biologists (ASPB) for Plantae, a global community and knowledge hub for plant scientists, students and related professionals to connect and share relevant resources. As a community manager, she oversees a seminar & podcast series, facilitates a Plantae Fellows program, and collaborates on resources with the global plant science community.

HEIDI LAJESIC

Heidi is the Technical and Professional Activities Administrator and co-lead for online communities at the Society of Petroleum Engineers (SPE). Heidi works with over 160k members of SPE and the upstream oil and gas industry. Her role largely involves supporting SPE's online communities but also includes facilitating online technical and professional development for petroleum engineers. Learn more at https://www.spe.org/en/ and @SPEtweets.

STEPHANIE O'DONNELL

Stephanie is the community manager at WILDLABS.NET. Stephanie's background is a combination of field experience researching endangered species and monitoring biodiversity and digital experience in communications and design. Her goal for her community is to build bridges between tech and conservation, in order to translate technological innovation for the benefit of our natural world. You can find out more at https://www.wildlabs.net/.

ALLEN POPE

Allen was the Executive Secretary of the International Arctic Science Committee during CEFP 2017. Based in northern Iceland, he helped facilitate research collaborations in Arctic science across both national and disciplinary boundaries. More at http://iasc.info and http://about.me/allenpope.

GABRIELLE RABINOWITZ

Gabrielle is the Lead Teacher for the BridgeUP: STEM program at the American Museum of Natural History where she develops informal computational science programs for high school girls and middle school students from around New York City. She was formerly a community manager for Trellis at AAAS, helping members of the scientific community connect and collaborate online.

ROSANNA VOLCHOK

Rosanna is the Associate Director of Membership and Network Engagement at the New York Academy of Sciences. Here, she builds community and connectivity within a global membership of

20,000+ scientists, engineers, educators, and students through the design, launch, and refinement of services, products, and programs. A researcher and strategist, her academic and professional background have centered on the intersection of science, service design, and social justice. More at www.rosannavolchok.com and www.nvas.org.

LOU WOODLEY

Lou is the Director of the Center for Scientific Collaboration and Community Engagement (CSCCE), whose activities include the Community Engagement Fellows Program. Lou is a trained molecular biologist with over a decade of experience in scientific community-building and event coordination including at organizations such as Nature Publishing Group, Open Knowledge Foundation, AAAS, and CSCCE.

Acknowledgements

This report is an output of the Advocacy Ninjas project team that formed during the 2017 Community Engagement Fellows Program (CEFP). The program was originally hosted at the American Association for the Advancement of Science (AAAS) and is now a program of the Center for Scientific Collaboration and Community Engagement (CSCCE).

Thank you to CSCCE and AAAS (in particular Dana Burns for help creating the survey and Lou Woodley, Katie Pratt, and the whole 2017 CEFP team) for help with formatting the survey, collating the data, laying out the report and seeing it through to end.

Thank you to the people and organizations who filled out the survey for your contributions. Thank you to the whole 2017 CEFP cohort for your discussions, feedback, and support.

Recommended citation

"Ambassadors, Champions, Fellows, and More: What defines success in scientific community Advocacy Programs?" by Rebecca Aicher, Melanie Binder, Heidi Laješić, Stephanie O'Donnell, Allen Pope, Gabrielle Rabinowitz, Rosanna Volchok, and Lou Woodley is licensed under a Creative Commons Attribution 4.0 (CC BY-NC-ND 4.0) license.

Cite as: Center for Scientific Collaboration and Community Engagement (2020) <u>Ambassadors, Champions, Fellows, and More: What defines success in scientific community Advocacy Programs?</u>
Aicher, Binder, Laješić, O'Donnell, Pope, Rabinowitz, Volchok, and Woodley doi: 10.5281/zenodo.4012370

Contact the CSCCE for other permissions by emailing info@cscce.org. The CSCCE logo is a trademark of CSCCE. It and other images in this guide are not licensed under these terms and may only be used when you use "Ambassadors, Champions, Fellows, and More: What defines success in scientific community Advocacy Programs?" in its original form.

Executive Summary

Formal structures (i.e. Advocacy Programs) for a subset of a community's most dedicated members (i.e. advocates) can enable a community engagement manager to empower these members to take certain actions on behalf of their community, either online, offline, or both. A scientific community manager is an individual who cultivates member engagement and collaborative relationships within scientific associations, research collaborations and other communities of scientists. However, to date, little work has been done to investigate the scope and characteristics of such programs or their possible effects on their various communities. With a wide range of Advocacy Program use cases and characteristics as a starting point, the CEFP Advocacy Program Project Team created the 2017 Scientific Advocacy & Ambassador Programs Survey with the goal of answering these two questions:

- 1. What are the commonalities and differences across Advocacy Programs in science and technology?
- 2. What makes these Advocacy Programs successful?

In order to begin to map this landscape, we surveyed 37 scientific community managers for academic, non-profit, industry, and government sector organizations, among others. Our survey consisted of 22 questions arranged according to five broad themes:

- 1. Overall Community and Membership Characteristics
- 2. Advocacy Program Characteristics
- 3. Recruitment for Advocacy Program
- 4. Incentives and Support for Advocacy Program
- 5. Success Metrics for Advocacy Program

The data we collected suggest a few broad trends and indicate possible avenues for future study:

- Older programs had the biggest budgets while newer programs offered more incentives for involvement. Does the age of a program have an impact on resourcing, activities, and reported success metrics?
- Supplies and tools provided to participants differ depending on program space. Are there significant differences in the nature of participation online vs in-person?
- Some program characteristics hold similar across various budget sizes, while low budget programs tend to represent smaller communities with fewer internal resources. Is budget associated with any aspects of a scientific community or with any particular program characteristics?
- Program size, community size, and resources may be correlated. What is the influence of size on advocacy programs?
- Out of the more generic names, Fellows stand out as the most distinctive type of program, but each name has slight distinctions. Do the names assigned to program participants indicate different types of programs?

Advocacy Programs: Overview/Definition & Program Landscape

An "Advocacy Program" is an organizational mechanism designed to empower community members to become more active in moving forward a community's mission. Advocacy Programs can go by many names: Fellowships, Ambassador Programs, Champion Programs, and more.

The use of "Advocacy" in and of itself can have different implications depending upon the field and context in which the term is used. For the purposes of this report the term "Advocacy Program" is used to describe a tool employed by community engagement managers with the goal of creating meaningful relationships with their community's most dedicated members. By creating formal structures (i.e. programs) for a subset of the community's most dedicated members (i.e. advocates), a community engagement manager can hope to empower these members to take certain actions on behalf of their community, either online, offline, or both.

A scientific community manager is an individual who cultivates member engagement and collaborative relationships within scientific associations, research collaborations and other communities of scientists. Scientific communities, or networks of interacting scientists, are found around the world, and may vary greatly in size, scope, and activity as these communities exist across a broad range of scientific disciplines and institutions.

There are many reasons why a scientific community (manager) might launch an Advocacy Program. Though far from comprehensive, the use cases below illustrate the different ways in which Advocacy Programs are central to many scientific communities:

- To broaden and deepen engagement with scientific community members
- To get in touch with scientific community members directly
- To produce new content from unique points of view
- To amplify the reach of an organization's activities
- To provide training to scientific community members
- To empower community members
- To pilot organizational initiatives
- To solicit volunteers

a) Goals of Our Survey

With the wide range of Advocacy Program use cases and characteristics as a starting point, the CEFP Advocacy Program Project Team created the 2017 Scientific Advocacy & Ambassador Programs Survey with the goal of answering the following two questions:

1. What are the commonalities and differences across Advocacy Programs in science and technology? 2. What makes these Advocacy Programs successful?

b) Methodology

The data published in this report (Woodley et al. 2018) were collected via the "Scientific Advocacy/Ambassador Programs Survey" (the Survey). The Survey included 22 questions and was designed to take about ten minutes to complete. The Survey was organized into the following five themes:

- 1. Overall Community & Membership Characteristics
- 2. Advocacy Program Characteristics
- 3. Recruitment for Advocacy Program
- 4. Incentives and Support for Advocacy Program
- 5. Success Metrics for Advocacy Program

The Survey was created using Survey Monkey online survey software and was distributed to individuals within the CEFP network as well as to scientific community managers outside of the CEFP network via "cold" emails. The Survey was also advertised via social media, AAAS' inward-facing digital communication and collaboration platform (Trellis), and the outward-facing Trellis blog. Individual response data are kept confidential. Responses from 37 scientific community managers were collected over a period of 6 weeks (August 28, 2017 through October 6, 2017).

c) Caveats and Research Limitations

<u>Sample Size Limitation</u>: With an overall sample size of 37 respondents, we cannot assume statistically significant relationships within the data. This makes it difficult to draw the conclusion that the data collected is representative of the larger scientific Advocacy Programs population.

<u>Sampling and Self-Selection Bias</u>: The sample of Advocacy Program managers surveyed was drawn largely from the CEFP cohort's own networks. Moreover, each individual within the sample was given the opportunity to select themselves into the group of participants. As a result, the study may reflect a biased sample due to the self-selection of its participants.

Characteristics of Programs Surveyed

a) Overall Community & Membership Characteristics

Who are the 37 community managers who completed the Survey? They are individuals who represent scientific Advocacy Programs for communities operating within a variety of sectors. (*Disclaimer: These are some of the organizations that participated in the survey, they do not necessarily support or endorse any findings or conclusions in this report.*)



Figure 1:
Some of the organizations that participated in the survey

Of the communities represented, the majority operate within the Non-Profit (57%) and Academic (24%) sectors.

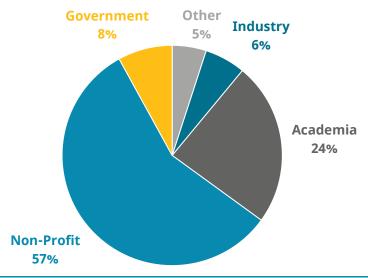


Figure 2: Organizations that participated in the survey by sector

b) Objectives

The community managers surveyed ranked a list of Advocacy Program objectives by importance for their community. The majority of respondents ranked "disseminating knowledge and resources" (88%) and cultivating community culture (63%) as "Extremely Important" objectives for their communities' Advocacy Programs.

How important are the following objectives to your program?

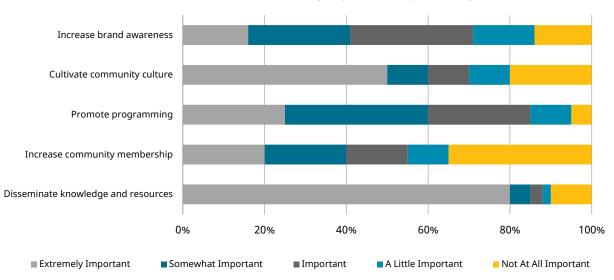


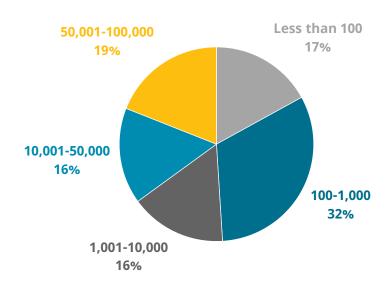
Figure 3: Advocacy Program objectives by importance per community

c) Size

The communities represented have a wide variety of membership size. Thirty-two percent of communities surveyed have between 100 and 1,000 community members, however, the size of communities represented range from less than 100 members to greater than 100,000 members.

The community managers surveyed indicated that the Advocacy Programs they manage range in size, with nearly half consisting of 200 or more participants.

Size of Community Membership



Survey Respondents by Advocacy Program Size

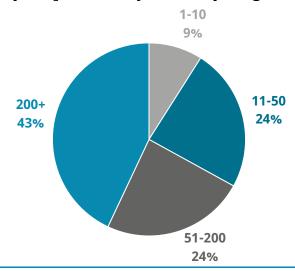
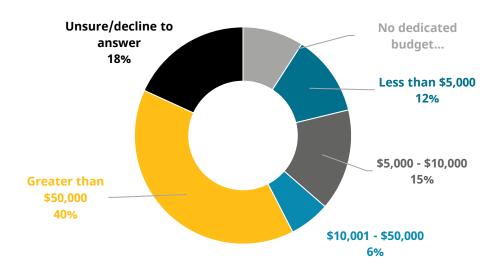


Figure 4:
Size of community membership (top panel) compared to size of the communities' advocacy programs (bottom panel)

d) Budget and Staff

The Advocacy Programs represented range from having no dedicated budget to having a dedicated budget of greater than \$50,000 (not including staff salaries). They also range widely in their staffing structures. Some are managed solely by volunteers whereas some are staffed by more than one full-time employee who spends all their time managing their programs.

Dedicated Annual Budget (USD; without salaries)



Program Staffing

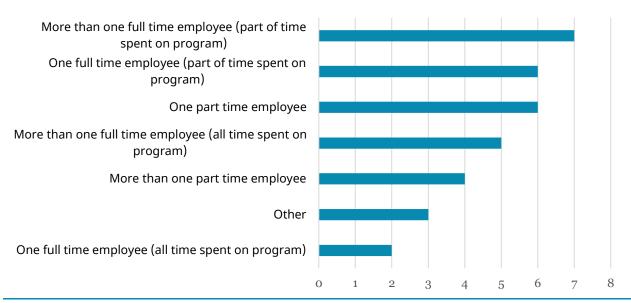
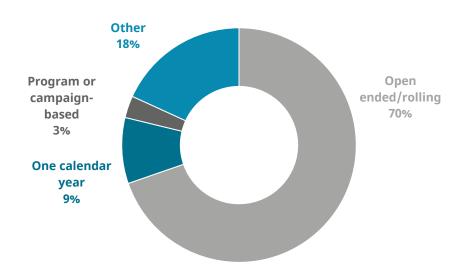


Figure 5:
Dedicated annual budget for advocacy programs (top panel) compared to the staff support for each program (bottom panel).

e) Timeframe

The majority of Advocacy Programs represented in the survey ask participants to agree to a commitment on an open ended, rolling basis (70%) and have been in existence for a period of 1 to 5 years (45%).

Length of Advocacy Program Committment



Program Age

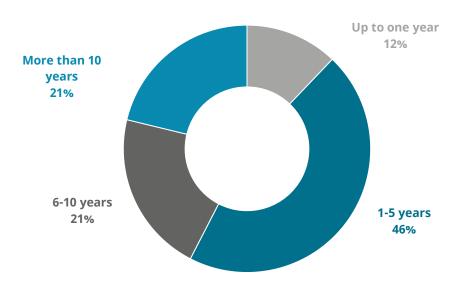
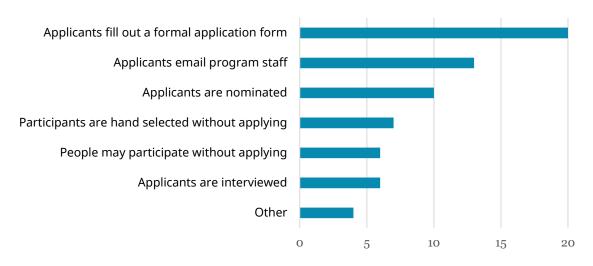


Figure 6: Length of advocacy program commitment (top panel) compared to the age of programs surveyed (bottom panel).

f) Selection

The majority of programs surveyed collect applications through a formal application form or through email communication with program staff. Respondents indicated various levels of selectivity, tending towards not or mildly selective.

Participant Application / Recruitment Process



Program Selectivity

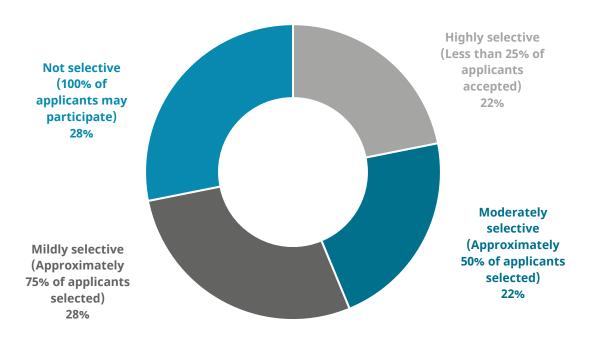


Figure 7:
Top panel shows that various application and recruitment processes are enlisted by the programs surveyed. Bottom panel shows how selective program managers believe their advocacy programs are.

When asked about qualities used in the ambassador selection process, respondents indicated that **research**, **skills**, **interest**, **enthusiasm**, **and science experience** were among their top criteria.



Figure 8: Word cloud generated from the short answer responses to a question asking about participant selection criteria

g) Nomenclature

More than a third of the respondents indicated that they called their program participants "ambassadors," followed by a fifth who call their participants "champions."

Program Participant Names

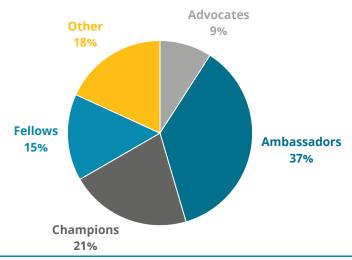
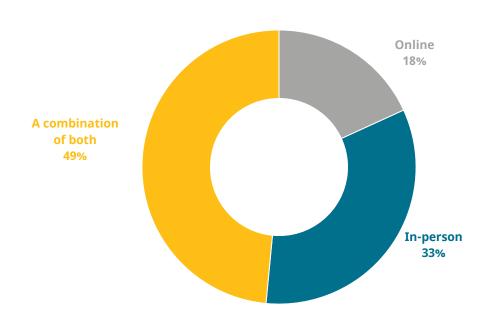


Figure 9: More than a third of programs surveyed call their participants "ambassadors," followed closely by "champions" (21%) and "fellows" (15%).

h) Responsibilities and Tracking

The majority of Advocacy Programs represented in the survey indicate that **participants carry out their tasks both in-person and online (48%)**. Community managers also track Advocacy Program activity and participation through a variety of mechanisms. **The top cited mechanism for tracking participation (66%) is through participant self-report** (e.g., check-in surveys).

Online vs. In-Person Responsibilties



Tracking Participants

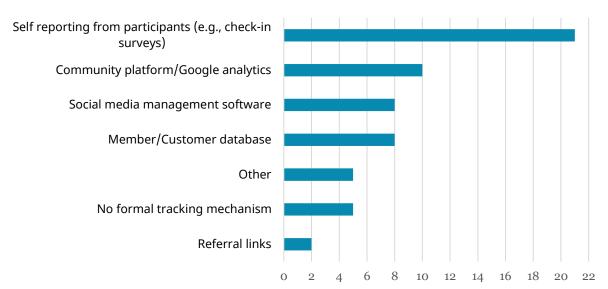


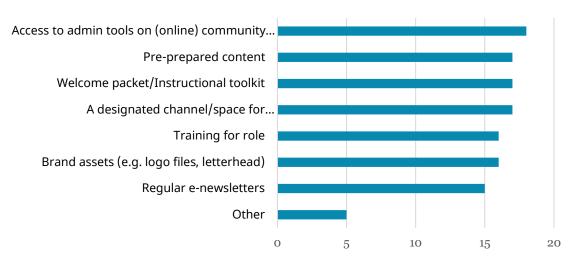
Figure 10:

Percentage of time each program indicated their participants spend involved in program activities online and in person (top panel), including the various ways programs track that participation (bottom panel).

i) Resources and Incentives

Advocacy Program participants are also provided with a number of resources intended to facilitate their work: a designated channel/space for communication between participants, access to admin tools on (online) community platform, welcome packet/instructional toolkit, brand assets, preprepared content, regular e-newsletters, and training for the role. The majority of community managers surveyed responded that the **top cited incentive (79%) for Advocacy Program participation was public recognition.**

Resources Provided to Participants



Participation Incentives

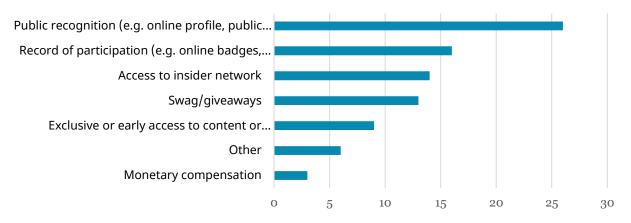


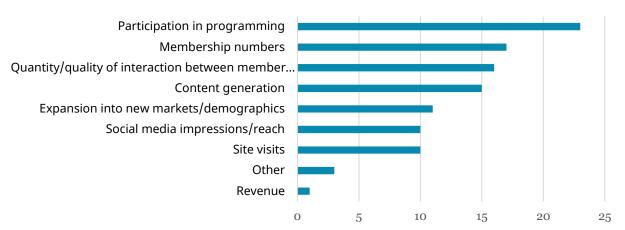
Figure 11:
Various resources provided by the programs surveyed to their participants along with incentives for their participation

j) Measuring Success

Community managers report a wide distribution in the types of metrics that they use to measure success in their Advocacy Programs. **Participation in programming is the most common metric of success**. Revenue, on the other hand is not a highly-valued measure of success for Advocacy Programs.

Community managers report that their Advocacy Programs are overwhelmingly successful. This is likely biased, as representatives from unsuccessful Programs may have been less eager to have answered our survey. In addition, success for Advocacy Programs tends to have shifting goal posts requiring a realignment of expectations for success.

Measuring Success



How Successful Are Advocacy Programs?

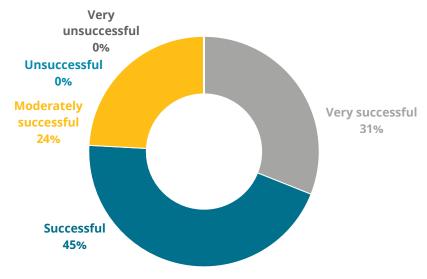


Figure 12: Various ways the survey respondents indicate they measure success in their organizations, as well as their own assessments of the relative overall success of their programs.

When asked to describe what success looks like for their programs, the community managers surveyed indicated they **highly valued community**, **engagement**, **resources**, **events**, **programs**, **and education**.



Figure 13: A word cloud generated from respondents' definitions of success for their individual programs.

When asked what success looked like for their various programs, respondents indicated:

Program Existence / Participation

"Success is actually having champions and having them do anything"

Personal growth from Program Participants

"Helping researchers achieve gains in their research, education, scholarship and/or creative activity..."

• Community enlargement, engagement, or spreading reach of content

"Consistent long-term engagement, volunteers taking on substantial roles, lateral community growth."

Process vs definition:

"[Success is] slow."

"We are trying to identify new success metrics right now."

"The program doesn't have enough resources or time dedicated to it to be able to measure categorical success."

A next step for Advocacy Programs is to design better metrics and ways of identifying, measuring, and tracking success. Ultimately, measuring and defining success is still a challenge for many Advocacy Programs.

Key Observations

a) Age: Just a Number?

Does the age of a program have an impact on resourcing, activities and reported success metrics?

Are more established programs likely to have larger budgets, more stringent application processes, and offer a wider range of support materials and swag to advocates? In this section we explore the implications of program age on other aspects of Advocacy Programs.

- Program objectives, community size, outreach and application procedures, and selectiveness were consistent across program age.
- While the size of an Advocacy Program scientific community is not correlated with age, the size of the Advocacy Program was correlated with program age: Older programs (5+ years) all have over 50 members, with a majority having over 200 members (78%).
- Older programs had the biggest budgets. All programs running for over 10 years and half the programs running for 6-10 years have budgets of over \$50,000; only two programs (out of 19) that have been running less than 5 years have budgets that large.
- Newer programs offered more incentives for involvement. Only three programs offered
 monetary compensation, and these were all in the 1-5 year age bracket. Public recognition was
 consistently offered as an incentive across all age programs.

b) Space: Not Really the Final Frontier

Where will your Advocates perform their responsibilities?

When community managers are planning their Advocacy Programs, an important consideration is **where** their Advocates will be primarily expected to perform their program responsibilities. Survey respondents included programs that are exclusively online, in person, or communities that are a combination of both. In this section we drill into this topic to find out if one space (in-person, online, or both) is preferred over the other and, if so, why.

- Certain program characteristics are largely similar across program spaces: Regardless of program space, program budget, publicity, selectiveness, participation incentive, and program reporting reflect the broader survey demographics.
- Program space is influenced by organization sector: Academic communities perform a
 majority of their activities in person; other sectors do not show a strong preference for program
 space.
- Older Advocacy Programs tend to have an in-person component: Only one out of 14 communities that are 6 years or older are exclusively online. Programs across the age brackets consistently favor a combination of online and offline activities.

• Supplies and tools provided to Advocacy Program participants differ depending upon program space: The majority of in-person Advocacy Programs do not have a dedicated channel or space for communication between participants. Somewhat surprisingly, however, the online-only Advocacy Programs participants are not supplied with branding assets (e.g., logos, letterheads, etc.).

c) Budget? What Budget?

How do budgets shape advocacy programs?

In this section we explore whether size of an Advocacy Program's budget is associated with any aspects of a scientific community or with any particular program characteristics.

- Certain program characteristics are largely similar across budget size: Organizational sector, community benefits, Advocacy Program objectives, participant commitment level, participation incentives, and program reporting reflect the broader survey demographics, regardless of budget size.
- Advocacy Programs with a larger dedicated budget are associated with a wider range of community size: High budget Advocacy Programs represent communities of any size, while low budget Advocacy Programs tend to represent smaller scientific communities.
- Advocacy Programs with larger budgets are able to promote more widely: Programs with greater than 50,000 USD indicate using formal marketing campaigns (which likely requires more allocation of staff time). Programs with no budget tend to use marketing tools that require fewer internal resources, like word of mouth.

d) Size Isn't Everything... Or is it?

How does size shape advocacy programs?

Scientific communities range in size and vary across sectors, as do their Advocacy Programs. In this section we explore the influence of the size of an Advocacy Program.

- Resources, objectives, commitments, recognition and applications are largely similar across the size range of Advocacy Programs.
- **Small programs have unique term commitments:** Only small Advocacy Programs (10 or fewer) have terms of commitment that are program or campaign based.
- Program size, community size, and resources are correlated: Somewhat expectedly, smaller
 Advocacy Programs tend to stem from smaller scientific communities while larger scientific
 communities tend to host larger Advocacy Programs with larger budgets.

e) What's in a Name?

Do names indicate different types of Advocacy Programs?

From "Ambassadors" to "Datanauts," communities and community managers often put a lot of thought into naming their programs. Do names indicate different types of Advocacy Programs? Out of the more generic names, Fellows stand out as the most distinctive type of program, but each name has slight distinctions. In this section, we pull apart a bit of what really is in the name of an Advocacy Program.

- Program goals, selection criteria, and reporting are similar across program names: While
 people may have distinct associations with particular names, the name of an Advocacy Program
 does not really signal distinct program goals, types of participants, or program reporting.
- Names tend to cluster with scientific community sector and size: Ambassador is the most common name used across all community sectors and sizes. Larger, non-profit communities name their participants Fellows. Small communities tend to call their participants Advocates. Academic communities, while using many names, do not call their program participants Champions.
- Names indicate selectivity: Advocates are mildly selective; Ambassadors and Champions are usually less selective; Fellows are highly selective. In addition, Ambassadors and Fellows tend to have a formal application form, while Champions usually only have to contact program staff.
- Fellows are the best supported: Out of a largely homogeneous field, Fellows programs stood
 out as the highest-budget and supported by the most staff. This aligns with Fellows as being the
 most selective.
- Names do have a few quirks to them: Ambassadors tend to have more people participating in the program. Champions skew toward medium-age programs (up to 10 years).

Conclusion

Our survey provided some initial insights into the demographics of a particular group of Advocacy Programs, what makes them unique, and what makes them successful. If you are a community manager currently running an Advocacy Program, take these insights with a grain of salt. If you are in the planning stages of launching an Advocacy Program, these insights are simply some considerations and are by no means prescriptive.

This report is intended to serve as a guide and a starting point. Sampling a small subset of scientific Advocacy Programs, there remains huge scope for expanding this survey and its conclusions.