

SCIENCE PHILANTHROPY ALLIANCE

Advancing basic science—The foundation of our future

2017 Annual Report

The Science Philanthropy Alliance was founded by six foundations in 2012 to address declining public funding for basic science by encouraging private giving. Marc Kastner and Valerie Conn, hired in 2015, conducted market research which informed the strategy of focusing Alliance activities on advising philanthropists. They made significant progress in 2016, building membership from six to 17, and advising philanthropists and foundations, including the Chan Zuckerberg Initiative which launched its science program with a focus on basic science with a \$3 billion commitment over 10 years.

2017 saw continued momentum for the Science Philanthropy Alliance's services and activity. This was reflected in the number of new members joining the Alliance, the increase in inquiries and referrals, and the interest and participation in Alliance events. In 2017, Alliance membership grew from 17 to 22, an indicator of the value we provide and further bolstering the resources that members bring to the Alliance. We also provided advising services to 17 philanthropists and foundations (including some members as well as non-members), supported by additional advising staff.

SUMMARY OF ACCOMPLISHMENTS IN 2017

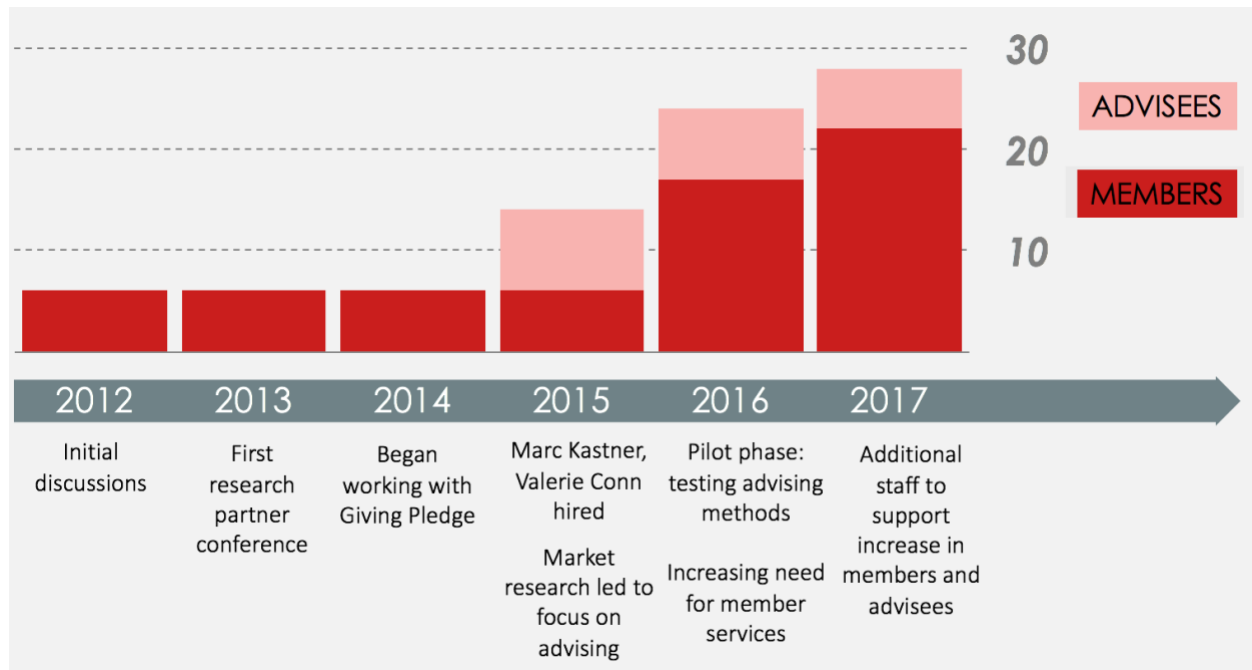
- Added five new associate members, growing membership from 17 at the end of 2016 to 22 in 2017, including the Chan Zuckerberg Initiative, Leon Levy Foundation, the Page family, The Rockefeller Foundation, and an anonymous member.
- Provided advising services to 17 members and advisees, seven of which were new relationships
- Hosted four members' meetings, including two in-person meetings and two meetings via videoconference, with nearly 100 percent of member organizations participating
- Hosted three workshops in response to advisee requests; one on ocean science and another on influenza research, and a small group learning session on basic biomedical science research
- Hosted a conference for 112 research partners and members, an increase of 20+ in attendance
- Promoted Valerie Conn to executive director from vice president
- Hired an additional advisor, Sue Merrilees, to work with members and advisees on customized science philanthropy strategies
- Hired the first Science Philanthropy Alliance fellow, Jason Tung, to begin a training pipeline for scientists to gain experience in science philanthropy
- Conducted the second annual Science Philanthropy Alliance of "Private Funding of Basic Science" survey. In 2016, 42 research institutions in the U.S. received more than \$2.3B

for basic science research from private sources. Survey participation increased from 27 to 42.

- Continued as a resource about science philanthropy by communicating to key stakeholders the role of philanthropy in funding basic science in comparison to the role of federal funding

MEMBERS AND ADVISEES

To substantially increase philanthropic support for basic research in science, the Alliance is building a community of funders who are champions for and donors to basic research. When joining the Alliance as a member, philanthropists take on the responsibility of supporting basic science and sharing their experiences with other philanthropists, contributing to a peer learning environment. The following chart shows the growth of members and advisees served from 2012 to 2017.



New members

The Science Philanthropy Alliance’s membership continued to grow at a rapid pace in 2017. We surpassed our goal by adding five new associate members, growing total membership from 17 to 22, including the following new associate members: the Chan Zuckerberg Initiative, Leon Levy Foundation, the Page Family, The Rockefeller Foundation, and an anonymous member.

With the additional new members:

- the combined sum of the endowments of all members (for those that have a traditional endowment-based foundation) is \$123 billion.
- combined years of experience giving to science totals more than 648 years.
- Alliance members include eight signers of the Giving Pledge.

| Category | 2015 Final | 2016 Final | 2017 Goal | 2017 Final |
|-------------------|------------|------------|-----------|------------|
| Members | 6 | 7 | 7 | 7 |
| Associate Members | 2 | 10 | 11 | 15 |
| Advisees | 8 | 7 | 7 | 6 |

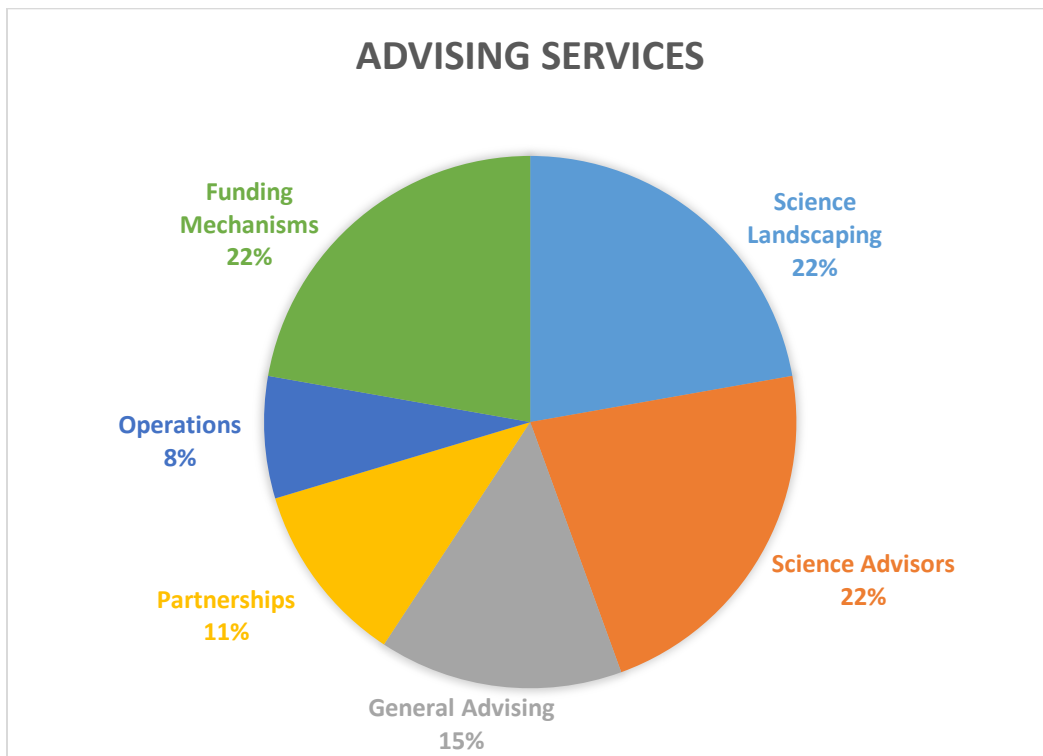
Advisees

Advising continues to be the Alliance’s primary strategy and focus. In 2017, Alliance staff and consultants advised 17 high-net-worth individuals and foundations (including 11 members and 6 non-members), providing the following support:

- *Funding mechanisms.* Provided introductions to the Alliance network and information on different funding mechanisms, such as funding people, projects, institutions, or institutes.
- *Establishing science advisors.* The Alliance is currently advising several members and advisees about scientific advisory boards. In addition, the Alliance has generated a roadmap to describe the overall process, as well as other documents, to aid in the early scoping of an organization’s science advisory needs.
- *Science landscaping and assistance in the development of strategies for new areas of funding.* The Alliance provides support to advisees in stated areas of interest, such as ocean science and influenza research (see Events).
- *Partnership opportunities.* Following a member’s request at an Alliance members’ meeting, three members (Howard Hughes Medical Institute, Rita Allen Foundation, and Research Corporation for Science Advancement) offered partnership opportunities. To date, these opportunities are being explored among 14 members and advisees.
- *Communications.* The Alliance has provided information to advisees about launching their science programs, and supported those seeking information about science communications.

- *Operations*. Some advisees have asked for assistance on finance infrastructure, grant management infrastructure, hiring, and program operations.

The chart below reflects the breakdown of type of advising-related projects (out of a total of 27 projects) the Alliance is currently engaged in.



Another important measurement is the amount of net new private funding to basic research. Beginning in 2016, the goal was to influence and inspire net new private funding by \$200M per year. This goal was met in 2016 due to the work of the Alliance with one notable advisee, the Chan Zuckerberg Initiative and its announcement of \$3B to basic science over the next 10 years. In 2017, with our advising help, we influenced over \$100M (to be spent over multiple years) in new private funding to basic research from our members and advisees.

COMMUNICATIONS

The communications program supports our advisees, members, and research institutions, and works to communicate the case for private funding to basic science research.

To support our advising work, we launched a new series of science philanthropy success stories with the publication of a story about the Alfred P. Sloan Foundation’s Sloan Digital Sky Survey

program. We also developed a new member practice document on indirect costs and updated our existing member practice documents about funding mechanism practices and scientific advisory boards with information from our new members.

To support our members, we developed a members' only web page that includes a members' directory, upcoming events, and a platform for sharing measurement and evaluation documents. The latter includes documents collected by the Gordon and Betty Moore Foundation as part of its three-part series of measurement and evaluation workshops organized exclusively for Alliance members. We also organized a one-day communicators' meeting in New York, hosted by the Simons Foundation, which was attended by 19 participants from 13 member organizations.

We continued to make the case for the value of basic science by publishing a "Why Basic Science" six-story series, and a series of five videos titled "Curiosity Matters" featuring scientists talking about the importance of basic science. Both series were published on the Alliance website and on *Nautil.us*.

We educated the media about the role of philanthropy and responded to many media inquiries and requests for comment about science philanthropy. An opinion piece by Marc Kastner discussing the role of philanthropy compared with government funding was published in the *San Jose Mercury News* in the spring. In the fall of 2017, we organized a science philanthropy panel at the World Conference for Science Journalists to educate over 100 journalists about science philanthropy. Panelists included Alliance consultant Robert Tjian, Chonnetia Jones from the Wellcome Trust, Cyndi Atherton from Heising-Simons Foundation, and Aaron Horvath from Stanford University. Tate Williams from *Inside Philanthropy* moderated the panel.

We also began to create and disseminate content that may be useful to research institutions that are working to raise funding for basic science. This summer, based on content shared at our research partners' conference, we developed a series of blog posts offering tips for universities and other research institutions. These blogs were posted on our website as well as disseminated via our Twitter and Facebook channels and through our quarterly newsletter.

Of special note is the second Science Philanthropy Alliance "Private Funding of Basic Science" survey, which was conducted by the Council for Aid to Education and provides an important measurement of progress for the philanthropic and scientific community on private funding for basic science research. The results, distributed in spring 2017, indicated that the 42 responding research institutions in the U.S. received more than \$2.3B for basic science research from foundations, philanthropists, corporations, and charities in 2016. According to this survey, private funding for basic science research is a fraction of the total private funding (\$41B in 2016) that higher education institutions receive annually. In addition, a comparison of institutions that responded in both years showed that private funding for basic science at these institutions increased by about 30% from 2015–2016, indicating some forward progress in private funding for basic science.

The survey results provided an important proof point to the message that private funding cannot replace federal funding. The survey data was included in Marc Kastner's *San Jose Mercury News* opinion piece mentioned above, and throughout 2017, Marc and Valerie Conn presented this information to foundations, decision-makers in Washington, D.C., and research institutions. Robert Kirshner, chief program officer of the Gordon and Betty Moore Foundation, shared this point in his opinion piece in *Scientific American*. The survey results were also covered in *Philanthropy News Digest* and *Inside Philanthropy*.

EVENTS

It is important for the Alliance to convene events that build a community of basic science philanthropists, encourage giving to basic science, and provide philanthropists with in-person opportunities to learn about the excitement and mechanics of giving from their peers.

As in previous years, the Alliance organized four **members' meetings** in 2017: two videoconferences and two in-person meetings, the first at the Simons Foundation in New York, and the second in Washington D.C. hosted by The Kavli Foundation at the National Academies of Science.

- The first in-person members' meeting featured speakers including Nobelist Phil Sharp from MIT, Jim and Marilyn Simons of the Simons Foundation, Bob Conn and Miyoung Chun of The Kavli Foundation, and Stephanie Cuskley, Garabet Yeretssian, and Gina Agiostratidou from the Helmsley Charitable Trust. Marilyn Simons facilitated a panel discussion about science philanthropy practices with Harvey Fineberg of the Gordon and Betty Moore Foundation and Shelby White of the Leon Levy Foundation. Mary Sue Coleman, president of the Association of American Universities, provided an update on policy developments and Robert Birgeneau, chancellor emeritus of the University of California, Berkeley, and an Alliance consultant, discussed the issue of covering universities' indirect costs.
- A second in-person meeting was held on December 14–15 in Washington, D.C. While we do not engage in lobbying, the Alliance board decided to hold the meeting in Washington, D.C., to help facilitate conversations with policymakers and influencers, given the important policy developments that took place in 2017 and that will continue to take place in future. The Kavli Foundation led the outreach to invite policy participants. Senator Chris Coons and U.S. Representative John Culberson attended the members' dinner, and leaders of the National Academy of Sciences (NAS), Association of American Universities (AAU), Association of Public and Land-grant Universities (APLU), and the American Association for the Advancement of Science (AAAS), staffers from Senate and House science committees, and science funding agencies National Science Foundation (NSF), National Institutes of Health (NIH), and the Office of Science and Technology Policy (OSTP) participated in panel discussions at the Alliance members' meeting. This was an important meeting that our members found useful.

In response to advisees' requests, the Alliance also organized two workshops in the first half of 2017. The **Ocean Science Workshop** for funders, co-hosted by the Science Philanthropy Alliance and the Gordon and Betty Moore Foundation, was attended by 15 organizations, including six foundation principals. The goal of the workshop was for attendees to get to know each other's work and to discuss potential collaborations in the field of ocean science. Dr. Rick Murray, director of the National Science Foundation's ocean sciences division, gave the keynote presentation.

The Alliance also hosted a **"Rethinking Influenza" Workshop** to help inform philanthropists exploring where the gaps in knowledge and funding are, and making recommendations where private funding could be beneficial. The event was chaired by Alliance consultant and Nobelist Dr. David Baltimore and included a presentation by Dr. Tony Fauci, director of the National Institute of Allergy and Infectious Diseases. The workshop convened 16 experts, including pre-eminent flu researchers, scientists outside of traditional flu fields, and representatives of pharma and the National Institutes of Health. Five funders participated, including the Bill and Melinda Gates Foundation. The workshop advanced funders' knowledge of the roadblocks to success of developing a universal influenza vaccine, and the need for important basic research to accelerate the development of such a vaccine.

The Alliance also piloted a half-day topic-specific **small group learning session** for members and advisees. Late in the fall, the first small group learning session, with family office representatives attending, was led by Robert Tjian, Alliance consultant and former HHMI president. The goal was to promote funding of basic biomedical science research by providing philanthropists with approaches for identifying and funding basic science that can better lead to downstream translational success.

The Alliance also hosted a **research partners' conference** at Columbia University attended by 112 research institution representatives and members (a 20% increase from the previous year's conference). Presenters included senior representatives from the Simons Foundation, the Sloan Foundation, and the Chan Zuckerberg Initiative, as well as both science and development representatives from research institutions including Columbia University, Yale, University of Washington, Stanford University, and the University of Chicago. Alan Alda and his staff from The Alan Alda Center for Communicating Science at Stony Brook University conducted a workshop on communicating science. The post-event survey indicated that the attendees found the conference to be a valuable opportunity to interact with both our members and their peers. We also received positive feedback from our members who found the research partners' conference an efficient way to touch base with many institutions in a short period of time.

OPERATIONS

The Science Philanthropy Alliance announced the promotion of Valerie Conn to executive director, effective July 1, 2017, with Marc Kastner continuing in his role as president.

To meet the market demand for scientifically-trained experts who are also well-versed in science philanthropy, the Science Philanthropy Alliance created a 1–2 year advising fellowship and hired its first fellow, Jason Tung. Jason worked as a life sciences strategy consultant at Navigant before joining the Alliance. During his postdoctoral fellowship at the University of California, San Francisco, he conducted basic science research in tissue engineering, regenerative medicine, and stem cell biology. He received his Ph.D. in bioengineering at the University of Washington, Seattle, and completed undergraduate studies in bioengineering at the University of California, Berkeley. Jason works with senior staff and Alliance consultants to provide support and information to members, advisees, and other stakeholders. The Alliance plans to hire a second fellow in early 2018.

In the summer of 2017, the Alliance also hired Sue Merrilees, a full-time advisor, to work with members and advisees on customized science philanthropy strategies, with the goal of increasing private funding to basic science. Sue brings than 25 years of development experience in institutions across the U.S. and abroad, including participation in successful billion- and multi-million-dollar campaigns at Barnard College, Stanford University, the University of California, San Francisco (UCSF), and the University of Sydney. At UCSF, Sue led teams focused on fundraising initiatives for the neurosciences, global health and infectious diseases, and quantitative biosciences, as well as numerous capital projects that created the Mission Bay campus.

To fine tune the Alliance’s strategy and ensure efficient use of resources for 2018 and beyond, the Alliance staff conducted internal strategy sessions based on the theory of change and logic model approach. We identified the following desired outcomes:

1. New and existing philanthropists in the U.S. and U.K. increase giving to basic science
2. Board and members have high satisfaction with Alliance services and activities and continue their high level of engagement to support the Alliance mission
3. Research institutions are more successful in increasing private funding for basic science to their institutions

These desired outcomes and accompanying metrics will provide guidance for Alliance activities in 2018.

The Alliance continues to make improvements to its Salesforce database to track the above desired outcomes and support its mission. For instance, the Alliance has tracked all gifts to basic science that are \$10 million and more by new and existing philanthropists in 2016 and

2017, including gifts influenced by the Alliance. Other tools for Salesforce have been added to automate the grant and membership renewal and grant reporting processes.

The Alliance accomplished its activities within budget in 2017; as in previous years, personnel costs accounted for the bulk of the budget. Moving forward, with one more hire (a second fellow), we believe we will be adequately staffed to undertake activities to support our mission, and that our budget requirements will be similar to the 2017 budget.