REPORT

Identifying Best Practices for Communications Workforce at Science Philanthropies

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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>EXECUTIVE SUMMARY</td>
<td>3</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td>5</td>
</tr>
<tr>
<td>KEY INSIGHTS</td>
<td>6</td>
</tr>
<tr>
<td>PRIMARY RECOMMENDATIONS</td>
<td>13</td>
</tr>
<tr>
<td>ADDITIONAL RECOMMENDATIONS</td>
<td>16</td>
</tr>
<tr>
<td>APPENDIX</td>
<td>17</td>
</tr>
</tbody>
</table>
EXECUTIVE SUMMARY

Science philanthropies have an essential role in advocating for and funding scientific research in the United States. The support provided by philanthropic organizations accelerates the pace of discovery and the evolution of scientific fields, and it drives important conversations about science and society. They do so, however, in an increasingly challenging environment. As science philanthropies communicate with key stakeholders to empower scientific innovation, they require a range of talented strategic communicators in order to navigate changes in the environment and advance their essential work.

To further understand the unique characteristics and needs surrounding communications staffing at science philanthropies, the Rita Allen, Albert and Mary Lasker, and John Templeton Foundations sought and supported landscape research aimed at identifying current practices; helping science funders understand what communications strategies they might consider in order to more effectively advance their efforts; and exploring specific skills needed for communications staff at science philanthropies. The project expands on the research teams’ recent work, funded by foundations as well as the National Science Foundation, to help clarify how scientists and communication trainers approach communication.

The landscape analysis is based on phone interviews with 19 key professionals working at U.S.-based science philanthropies, over a three-month period (August-October 2018). The interviews were designed to enable qualitative insights and lay the groundwork for further research, while providing science philanthropies with actionable steps they can take to advance their own communications.
Key Findings

Science philanthropy leaders now recognize communications as an integral path to reaching organizational goals.

- While communications staff tend to approach their work strategically, within foundations, communications is sometimes seen as a retrospective service and not central to the foundation’s strategic approach and theory of change.

- Communications staff at science philanthropies have a solid understanding of strategic communications and the importance of audience identification and messaging approaches. However, respondents noted their need to increase understanding of the best communications channels for specific audiences and goals.

- Many science funders are focused on scientists who might apply for funding as a primary audience, but are less clear about how to communicate with secondary audiences, including the public or decision-makers.

- Approaches to evaluating communication effectiveness within science philanthropies are diverse and many acknowledge room for improvement.

- Diversify the staff on communications teams. Every interviewee said they see value in increasing diversity within their foundation and communications team, even those who view their foundation as already being relatively diverse. Diversity is especially valued when it comes to enabling improved engagement across foundations’ key stakeholders.

- Diversify the skillsets in communications teams, focusing not only on technical skills such as writing and science interpretation, but also on marketing, evaluation, and public relations. Funders might consider seeking staff with greater experience in developing strategic frameworks for reaching non-grantee audiences and creating unique ways to engage them; developing systematic, multi-level processes to monitor the effectiveness of communications efforts; and researching messaging through pre-testing, etc.

- Increase partnerships, including with science communication trainers and with social scientists. Connecting research with practice can help funders communicate more effectively, support effective communication among the scientists and organizations they support, and inform future research agendas to address high-priority questions.

- Prioritize better professional development. Many interviewees mentioned their difficulties trying to sift through the “sea of information” about science communication, noting how hard it can be to identify quality information that is relevant to their specific needs. Others noted how challenging it can be to stay current given the rapid development of communication technology.

- Increase shared learning among foundations. Interviewees were generally eager for more opportunities to learn and collaborate, share skills and develop their knowledge base with colleagues from other science foundations.
INTRODUCTION

Science philanthropies have an essential role in advocating for and funding scientific research in the United States. The support provided by philanthropic organizations accelerates the pace of discovery and the evolution of scientific fields, and it drives important conversations about science and society. As science in the United States advances rapidly, it does so against the backdrop of a dramatically evolving media ecosystem. The erosion of legacy media, the emergence of new media technologies and explosion of content and science information (both high- and low-quality) point to the challenges that communications staff at science philanthropies face. Perhaps more than ever, those committed to advancing scientific progress must enact increasingly sophisticated communication strategies to ensure their messages are heard by the right people at the right time. Science philanthropies must carefully consider their ability to effectively identify and communicate with key stakeholders to continue empowering scientific innovation.

With this context in mind, to further understand the unique characteristics and needs surrounding communications staffing at science philanthropies, the Rita Allen, Albert and Mary Lasker, and John Templeton Foundations sought and supported this landscape research in order to identify current practices at top science philanthropies; help science funders understand what communications strategies they might consider in order to more effectively advance their efforts; and explore specific skills needed for communications staff at science philanthropies. The project expands on the research teams’ recent National Science Foundation- and foundation-funded work that has helped clarify how scientists and communication trainers approach communication.

For this report, we conducted semi-structured phone interviews with 19 key professionals working at U.S.-based science philanthropies, over a three-month period (August-October 2018). See appendix for further details about respondents. The interviews were designed to enable qualitative insights. These questions focused on:

1. Respondents’ perspectives about what counts as “effective communication” and what communication goals their foundations prioritize;

2. How the foundations seek to tailor communication to different stakeholder groups (scientists, media, policymakers, general public, etc.) and how this impacts communications staffing choices;

3. Specific challenges of advancing effective communications strategies within science philanthropies;

4. The extent of and interest in interacting with other foundations to increase shared learning; and

5. Information about foundations’ internal communication staff, including details about their training and degrees, job responsibilities for staff positions, desired experiences/skills for communication staff positions, salary ranges, communications budgets, etc.
KEY INSIGHTS

Strategy Is Essential

Communications staff we interviewed at science philanthropies exhibit a solid understanding of strategic communications and consistently view their work within a strategic framework in terms of audience awareness and message development. This offers a positive contrast to our research on more than 10,000 scientists, which demonstrates that scientists’ communication efforts are rarely strategic. When sharing information about their work, scientists typically do not (1) identify clear communications goals and objectives, (2) for a clear target audience, (3) and then choose tactics (i.e., behaviors, messages, messengers, channels, tone, etc.) that increase the likelihood of achieving the audience-specific short-term objectives and the long-term goals. Instead, they commonly seek to convey information with the hope that it will have a “pro-science” outcome (often that people will become more scientifically literate). This approach, which falls broadly under what has been called the “deficit model” of science communication, rests on the incorrect assumption that lack of support for, or understanding of, science rests primarily on a lack of information. As detailed in a recent report from the National Academies of Sciences, Engineering, and Medicine, Communicating Science Effectively: A Research Agenda, the deficit model often falls short given that people’s beliefs about science are deeply connected to their larger beliefs about the world and their political and social identities.

Fortunately, most communications staff that we interviewed at science philanthropies consistently discussed their communications approaches in ways that dovetail with our aforementioned description of strategic communication. Respondents did, however, note their need to increase understanding of the best communications channels for specific audiences and goals.

(*Interview excerpts have been edited for clarity.)

- Start with strategy; start with audience. I’m not bragging in any way because this is not original and it’s not rocket science. ... I’ve hammered it into the team: Who are you trying to reach, what do you want them to do, what content are you creating to make that happen, and how are you going to measure whether you did it or not? (Interview 12)

- Making sure you have a goal—a north star—that you are following and that everybody organizationally knows and can communicate in their own way is our secret sauce. (Interview 11)

- Whatever projects I’m going to do, I need to know who I’m doing them for, so I define the audience and then define the exact message, because we should have one core message that everything reflects back to. If we’re too diffuse, people won’t understand what we’re doing. Depending on the audience, I’ll try to pick the best tools available, whether it’s social media or video or web page content or whatever other ideas we can come up with. (Interview 13)
Many interviewees also noted how simply creating more and more content devoid of strategy is often wasted effort.

- We live in a really noisy information environment and everywhere you turn organizations are just pumping out content—just tons of content—and most people don’t care. One thing we have done recently, which sounds counterintuitive, is to put the brakes on storytelling for storytelling’s sake and really question the value of any piece of content that we create. (Interview 12)

- It is very tempting to produce [more media content from the foundation] in the absence of demand, and that is a risk for failure. (Interview 14)

Some interviewees discussed how communication channels are chosen without enough reliance on strategy.

- You need to not only know what your message is but who’s the audience and who the messenger is, so stepping back until you figure out your market is extremely important. People quite often forget some elements of that. (Interview 17)

- I think up to now we’ve had social media channels and we put out good content, but who’s watching? I’m a firm believer that not only do you need content, content, content, but you need to get in front of the audience you want to reach. (Interview 7)

There was a clear understanding among interviewees that audiences are not simply waiting around to engage with foundations’ messages. To wit, one interviewee stated:

- What you want to say is of only passing relevance. How it is being heard is what matters. (Interview 18)

In sum, the vast majority of communications personnel at science philanthropies exhibit advanced strategic thinking skills that often reflect best practices from communication research. There may be, however, opportunities for these strategic thinking skills to be more concretely enacted as strategic behaviors. We noted inconsistencies between the strategic way an interviewee thinks about communication with how the interviewee described actual communication practices and his/her philanthropy. For example, acknowledgements about the importance of evaluating communication efforts were rarely connected with descriptions of systematic evaluation practices. Further, interviewees commonly prioritized hiring communication colleagues with advanced technical skills (e.g., writing, social media management) instead of broader marketing or public relations skills (e.g., understanding target audiences and creating unique ways to engage them; developing systematic, multi-level processes to monitor the effectiveness of communication effort impacts). The ubiquity of strategic thinking is impressive, but in many cases it may be underutilized.
Communication Is Foundational (But Sometimes Gets Built Last)

Despite the strategic orientation of the communications staff, many interviewees acknowledged a struggle to overcome colleagues’ assumptions that communication can be done as an ad hoc, retrospective service and not something that should be central to a foundation’s mission and theory of change.

- It’s very easy to think of communications at the end of your project when you need a logo, ad or you need a press release instead of thinking of it at the beginning of your project. The integration of communications at the grant and program level and institutional level, and involving us from the beginning or in the conception is always a challenge. (Interview 15)

Interviewees commonly mentioned a “tendency toward siloing” (Interview 7) that has separated communication staff from the grant-making and broader strategic thinking.

- In the way that most foundations are structured, their communications people are in a totally different part of the building from the public engagement folks, for example. Even if they have programs that support science communications they’re actually different than the people that do internal and external communication. (Interview 7)

- People don’t know the benefits of including [communications] in either decision making or having you around when decisions are made, incorporating you in the higher-level discussions. At some point they want communication services or they want something to go well, and you’re really hamstrung in your ability to be responsive quickly and with knowledge if you haven’t been integrated much earlier. (Interview 16)

Encouragingly, some interviewees perceive that these challenges—at least with their specific foundation—are being addressed.

- The hardest part was convincing people that communication is more than that [e.g., flashy logos, generating publicity, etc.] and I think we’re now at a place where there’s a greater sense of the value of communication. (Interview 9)

- I think it’s the culture and the mindset that we need to change. It takes time, but we’re on the good path. (Interview 8)

This theme highlights a noteworthy pressure among some communications personnel at science philanthropies: they must be adept at the tactical responsibilities of their work and be equally adept at explaining the value of their skillset and communication strategy to their own colleagues.

Despite the professionalism with which the interviewees discussed this issue, it highlights the real need for foundations to carefully consider the symbolic and pragmatic ways they may be (de)valuing communication.
Audiences

Two clear themes emerged from our conversations about target audiences. Science funders we spoke with consider their primary audience to be scientists who are potential grantees (as well as those associated with such scientists), and their secondary audience to be a variety of additional stakeholders. Beyond grantees and potential grantees, interviewees commonly discussed their communication efforts focused on internal audiences (e.g., co-workers, board members, program officers, etc.) and then on other philanthropies, academic leaders, and thought leaders and decision-makers.

- I think [grantees] are a primary audience for almost everything. (Interview 1)
- Our main audience is scientists. It’s always been and always will be, and we want the scientists to know about our programs so that the best ones can apply for funding. (Interview 16)
- Our primary audience at this point is the [scientific discipline] research community. Those are PIs, PhD-level researchers, post-docs—basically the group of people we may want to be funding and whose work we want to know about, and who we really want to make sure know about us. (Interview 11)
- The primary audience is the scientific community, the community of research scientists, and that’s because we’re a grant-making institution. The success of being able to advance our mission involves the brightest minds bringing us their best ideas. (Interview 15)
- We’re always trying to communicate our presence to deans and provosts and presidents at universities. (Interview 6)

While funders interviewed were clear about their primary audiences, their focus on communicating with other external audiences seems to be growing, despite the challenges the group identified, particularly around engaging with the public.

Lack of Consensus about Communicating with the Public

The challenge that interviewees raised when describing their strategy for communicating with external audiences is not unique to foundations. Communication with scientists and university leaders is simplified by the clear and immediate goal of attracting strong research proposals. In contrast, the impact that foundations can expect to have on audiences such as government decision-makers, press, and citizens is less clear. In addition, the skills needed to identify opportunities for communications impact are not typically developed in foundation, research, or other academic settings.

Specialized advertising, research, media planning/buying, and public relations industries have expanded in recent decades to provide these services to specific types of companies and other large organizations. Some science-based organizations (including universities) use these services for some communications tasks, but there appear to be few organizations specifically focused on advancing science communications in a strategic way. As funders consider how much to communicate with non-scientific audiences about science, their work and the importance of science in society, several interviewees highlighted the challenges foundations face when determining their public-focused communication strategies.
Beyond scientists and immediate stakeholders, interviewees mentioned a range of potential external audiences that they sometimes seek to reach outside of the scientific enterprise itself. These tended to vary as a function of the philanthropies’ willingness to advocate on behalf of science and scientists.

Laypersons (i.e., average citizens, the “public”) seem the least clearly conceptualized group among the target audiences. Many interviewees mentioned them frequently, but with more apprehension or ambivalence than other audiences. Overall, interviewees seem to have clear behavioral goals associated with their primary target audiences (e.g., communicating with potential grantees to ensure that exceptional science/scientists are identified and funded), but this clarity was not as evident when discussing external audiences.

In this regard, interviewees shared a wide range of opinions about whether to engage the public, and had a more difficult time explaining the strategic reasons associated with efforts to communicate with the general public.

> We’re trying to show people that basic research on some kind of a frog or something that you’ve never heard of creates a cure or an improvement in human life. We’re trying to make that connection between research and the benefit to the community. (Interview 13)

> We’re less comfortable with going beyond the evidence than many science foundations are. We are allergic to anything even remotely resembling political activism, even activism on behalf of the scientific community, in favor of the scientific community. There’s a lot of internal worry and concern about even the appearance of entrance into a political issue. (Interview 15)

> If you’re talking about advancing science or if you’re talking about bringing our society generally into a more scientific point of view, I really think that the science philanthropies ought to develop a unified voice to talk to the ignorance that’s in our society and that’s in our Congress. I think we’ve been far too passive and far too wrapped up in our own little worlds. I think we need to go on the attack at this point. The situations we’re facing here are just—well, they’re absurd for a rational species. (Interview 6)

Interviewees also commonly mentioned challenges associated with achieving consistent communication across the different scientific programs within foundations.

> Each of the programs is quite separate. The strategies are developed by program directors, and I have input, but it’s ultimately the call of the program director, and they’re not required to have a particular communications strategy. There hasn’t been an attempt to harmonize and
make sure that our individual programs feel like they’re all programs at the same institution and have the same kind of branding or messaging that runs through them. (Interview 15)

A handful of interviewees noted the importance of effectively communicating with media professionals and opinion leaders. Again, however, the discussion often focused on an audience without making specific reference to how that audience would help achieve a specific goal.

- I think our secondary audience would be the influencers in science and science communication, so that would be reporters, influential people on social media, certainly influential scientists. We want to make sure that they have the right narrative to write and the right sort of messaging points to reference. (Interview 11)

**Evaluation May Need Evaluation**

Evaluating communication efforts, in particular, seems to be conducted unevenly across science philanthropies. Although commonly valued, the expertise, costs, and time associated with doing effective evaluation can be challenging. Meeting this challenge could result from more frequent interactions among science philanthropy communication personnel (something interviewees strongly desire) and with social scientists. Exploring opportunities to partner with social scientists and science communication trainers would also likely help address challenges interviewees commonly mention about nurturing their own professional development and understanding how best to meaningfully engage with external audiences (as opposed to their grantees).

Overall, interviewees approach the issue of evaluating communication efforts thoughtfully. However, approaches to judging communication effectiveness within science philanthropies seem diverse and many acknowledge room for improvement. The depth of the evaluation discussed did not seem consistent with the acknowledged central role that evaluation should play in testing a strategy’s effectiveness in achieving goals. The evaluation methods discussed vary from highly quantitative (e.g., monitoring website analytics) to highly qualitative (e.g., this effort made my foundation’s president smile) and everything in between.

Classic strategic communication feedback, like earned media, is still coveted and commonly used as a signpost for communication success.

- You get some kind of idea of success of a press release just by noticing how many hits you get and knowing if it got to a good place or not. Sometimes we get a high-profile placement, either through my effort or just a chance, and those are the things where I feel successful. (Interview 16)

A handful of interviewees highlighted intra-organization communication as a key metric of their success.

- One way of measuring is, ‘How often are my program directors coming to me with things and what kinds of things they’re coming to me with?’ That’s a more immediate show of communications value to the people who are responsible for making grants which is, after all, our primary business. (Interview 15)

On the quantitative side, numerous interviewees mentioned their use of web site analytics and it seems
Increasingly commonplace for foundations to be working with (or thinking about working with) social media tracking companies. Many interviewees, however, also seem aware of the limitations of social media metrics.

- You might have some quick wins, but influence is a long game. I am not a big believer in metrics or media hits or Twitter this or Facebook that. I’m a much bigger believer in quality over quantity. I would rather get the information to the right five people who can do something with it than to 5,000 who can’t. (Interview 5)

Other methods for capturing primary quantitative data were mentioned (e.g., A/B testing, etc.), but relatively infrequently. A few interviewees discussed the value of conducting their own surveys of target audiences (and valuable secondary data like that contained within the Center for Effective Philanthropy’s Grantee Perception Report). Others discussed plans to start collecting primary data. Common methods for collecting primary data (e.g., interviews, focus groups, etc.) were not mentioned. While we focus here on evaluation, there appears to be an even larger dearth of focus on formative research aimed at pre-testing potential messages or other communication tactics. Interviewees also did not mention enlisting social scientists to help.

Almost all interviewees expressed a desire for communications evaluation to become more rigorous and systematic. One interviewee discussed an initiative to develop clearer institutional knowledge about evaluation to help circumvent challenges associated with staff changes and onboarding.

- One thing we’re doing is we’re creating a campaign playbook for the team. For a long time the best of the communications how-to was locked in the heads of various communications team members. What we really want to do is capture knowledge, share knowledge, and maintain knowledge for the team, to sustain the success of the team over time. (Interview 12)

- If the [science funder] community in general was a little bit more proficient across the board on those things [measuring communication impact], then the conversations could start to change. With data of what worked and what didn’t, I could accelerate my learnings by 3-6 months. I can learn from something that [foundation A] did or [foundation B] did and have the data to come back to say, “This is why I think we should do X Y Z.” (Interview 11)

In sum, the evaluation of communication efforts is uneven across science philanthropies. While the majority acknowledge its importance, it seems that only a handful focus on it. Collecting valid primary data about communication impacts (i.e., conducting surveys, interviews, focus groups, A/B testing, etc.) requires expertise and can be time consuming and expensive. This topic also represents a natural opportunity to form partnerships with social scientists.
PRIMARY RECOMMENDATIONS

We asked interviewees about the greatest challenges they face, the types of skills needed to do their work successfully, and the opportunities for growth they see. Drawing from their responses, several areas of consensus emerged about ways that science foundation communications efforts can be better supported and improved.

1. Recognize and support the strategic role of communications in achieving the mission of science philanthropy. As discussed above, communications leaders at science philanthropies approach their work strategically, seeing communications pieces as a route to achieving organizational goals through their influence on target audiences. However, communications’ strategic potential is not always recognized in philanthropic culture and systems on an organizational level, where communication is at times viewed as a retrospective service rather than incorporated in decision making from the beginning of planning initiatives. Foundation leadership should collaborate with communications staff to address the following questions in the early stages of programs and throughout their development:

   - What are our goals and objectives?
   - Who is our audience?
   - What communications tactics may increase the likelihood of achieving short-term and long-term objectives with this audience?

Greater organizational commitment to incorporating communications fully in strategic decision-making will also support communications teams in fully realizing the execution of strategic communications, including investing in audience research and incorporating systematic evaluation in communications efforts.

2. Diversify the skillsets and the staff on communications teams, focusing not only on technical skills such as writing and science interpretation, but also on marketing, evaluation, public relations, professional development and talent retention. Clarify the specific purpose of connecting with wider audiences (i.e. press, thought leaders, other foundations, members of the public) and clearly articulate what skills are needed for those activities. Consider seeking staff with greater experience in developing strategic frameworks for reaching non-grantee audiences and creating distinctive ways to engage them; developing systematic, multi-level processes to monitor the effectiveness of communications efforts; and researching messaging through pre-testing, etc. Consider involving communications staff in solving broader, strategic challenges, and provide regular opportunities for communications staff to convene with communications teams both inside and outside of private philanthropy.

Diversifying Staff

   - For me, it’s a priority, as we hire, to seize every opportunity we can to bring some diversity. It’s obvious that if part of what you want in your communications office in particular is to communicate with a wide variety of audiences, you need insight into the experiences that those audiences are going to bring to your communication. (Interview 18)
Retaining Talent
- I feel like this idea of ‘intrapreneurs,’ people who within organizations can start to really innovate and set their own sort of strategies as far as their program areas go, I think that’s really, really important. (Interview 11)

Prioritizing Professional Development
- I feel underdeveloped … and so I’m constantly looking for opportunities to broaden my horizons, but I don’t think that I’m particularly great at that. It’s very easy to back-burner that stuff [because] I’ve got a zillion things to do today. (Interview 15)

- I always say, ‘Oh, I’m going to go on there and read the white paper on such and such,’ but frankly, I just keep doing my job, and that’s how my time gets used. I’m no example of off-the-record learning. (Interview 16)

3. Increase shared learning among communications staff as a means for professional development and collaboration. Regardless of years-of-professional experience, the interviewees said they were generally eager for more opportunities to learn and collaborate with other foundations. The majority of interviewees indicated that organized interaction among science philanthropies has traditionally been sparse but that this seems to be changing. The annual Communications Network meeting was commonly mentioned as providing a key opportunity for interaction among philanthropy communication professionals. Meetings of the Science Philanthropy Alliance communications professionals were also highlighted as key to enabling more interaction, skill sharing, and knowledge development.

- Every time we [foundations communication professionals] talk, there’s a lot of enthusiasm about what we can do; we should be doing even more of this. (Interview 15)

- I think it’s incredibly important to [realize] we’re all players on the same team, for the same objectives, and to the extent that we can share any of our learnings and failures, I would be absolutely thrilled to do that. (Interview 11)

- The Science Philanthropy Alliance creates greater awareness among these foundations on what each other is doing and where there might be opportunities for collaboration among foundations, which has not happened before. (Interview 19)

- There are lots of lessons to be learned, lots of challenges that you could address by looking at what others did before you. By combining forces, we can make things happen much faster, efficiently—we can be proactive. (Interview 6)
Shared learning groups can also facilitate potential partnerships, especially around grantee communications training, evaluation methods, implementing social science research, etc.

**Key questions might include:**

- What role(s) should external science communication trainers or other organizations (e.g. communication consultants) be playing in this process?

- What types of partnerships can be made between science philanthropies and these trainers or other supporting players that could maximize communication support for grantees? How can/should these partnerships be evaluated?

- Should support be at the level of grantees, or is there a way to build communication projects that cut across grantees?

- How can social science be made more readily available and digestible to communications personnel at science foundations?

- What types of win-win partnerships between these personnel and social scientists could be developed?

- How can communications staff help social scientists identify salient, “real world” challenges to study?

- How can social scientists most easily feed their learnings back to the funding community?

- How can science foundations most effectively transition their strategic thinking to strategic behavior?

- What types of conversations could help de-silo communication?

- What types of conversations or other forms of support could make communication more foundational to more science philanthropies?
ADDITIONAL RECOMMENDATIONS

1. Partner with science communication trainers to support effective science communications among grantees, helping them advance important messages about science effectively and authentically, and improve the quality of training. With a few exceptions, most of the philanthropies interviewed focused on communicating to achieve their organizational goals rather than on providing direct or indirect support (i.e., teaching grantees communication skills) to help grantees develop and achieve their goals. A handful of foundations seem to be providing professional development opportunities to their grantees, namely by contracting external science communication training organizations. However, connecting trainers with their grantees still appears relatively uncommon and, of those who do, there can be natural concerns about the quality of the training commissioned.

Philanthropies, in this regard, could have essential roles in supporting current efforts to refine the training landscape. Supporting efforts to establish better ways to evaluate the impacts of training, for example, would improve the training ecosystem and simultaneously give philanthropies clearer insights about the trainers who are best suited to successfully work with their grantees.

I don’t understand how to talk about social science … We need to figure out what kind of support we can get from or we should be able to expect from social science to help us understand how to tackle our [communication] problems. (Interview 3)

2. Increase partnerships with social scientists and apply their research to communications efforts. Connecting research with practice is essential in order to implement effective work in-house, as well as with grantees. Working with trainers (see above) should be deeply connected to the latest in social science research around effective science communications. Only two interviewees implied that social science insights are key inputs to their communication efforts, with the concepts of framing and cultural cognition receiving specific mention.

I don’t understand how to talk about social science … We need to figure out what kind of support we can get from or we should be able to expect from social science to help us understand how to tackle our [communication] problems. (Interview 3)

Science philanthropies face unique challenges in communicating their work, determining appropriate audiences and media channels, and finding talent capable of engaging with a wide array of actors about complex information. As many science funders grapple with how and how much to connect with non-grantee audiences, central considerations may include connecting with one another to improve shared learning, utilizing social science research, using science communications training for their grantees and, most importantly, diversifying their staffs and the skillsets among their communications staff.
APPENDIX

Interviewee background information

Prior to the interviews, we obtained informed consent and background information through an online questionnaire. Nineteen individuals were interviewed. Fifteen of the respondents provided demographic information.

In terms of demographics, slightly more than half of the responding interviewees identified as male (n = 8/15). The age range was between about forty and less than seventy. Both the average and the median was about fifty years of age. Almost all (n =14/15) identified as white and non-Hispanic, Latino or Spanish in origin.

A third (n = 5/15) said they spent most of their time on science communication. Another third (n = 5/15) said they spent a good portion of their time on communication but also had substantial other responsibilities. The remainder said they spent most (n = 3/15), or almost all of their time (n = 2/15) on non-communication tasks.

In terms of educational background, slightly more than half (n = 8/15) said they identify highly with the biological or medical sciences, and a similar number said they identify highly with physics or astronomy (n = 8/15). The next highest proportion (a third) was the social sciences and policy (n = 5/15). This was followed by the humanities (n = 3/15) with 1 or 2 respondents choosing chemistry, engineering, and computer science/math, or law. Many respondents chose more than one field. Most had a doctoral degree (n = 11/15, including JDS).

When asked to briefly describe their background in an open-ended question, about half (n = 8) mentioned professional experience in some aspect of communication or policy, with most of the remainder highlighting academic and/or administrative backgrounds. Just more than half (n = 8/15) said their organization had an annual communication budget over $200K USD (not including staff salary) and a similar number (n = 9/15) had a senior communication staff member who earned more than $150K USD. About half (9/15) had about two or fewer communication staff. With one exception, the reminder had less than six.