SCIENCE PHILANTHROPY ALLIANCE

Supporting the Basics of Science: A Framework for Decision Making

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Considering the recent efforts to dismantle the scientific research enterprise in both biomedical and physical sciences, foundations and private funders are justifiably concerned and wondering how to respond. Ongoing legal challenges mean most of the cuts threatened are still in limbo, making it difficult to know where funds are actually needed. Some science philanthropists are taking action, issuing statements and reaching out to their grantees, while many others are still on the sidelines due to uncertainty. But this doesn't mean scenario planning can't begin.

While there are a few ways a foundation can respond to a crisis, providing funding, either new or additional, is primary. At the Science Philanthropy Alliance (Alliance), we advise science funders on investing in basic science, also known as discovery science, which we define broadly as blue sky, use-inspired, and/or involving technology development. We also focus on underfunded areas and those that will have the greatest impact. The Alliance was founded in the wake of federal sequestration in 2013, to encourage private investment into "high risk, high reward" work, recognizing the continued shift in resources from basic to applied science..

LESSONS LEARNED FROM THE PANDEMIC

While the scope of this year's financial threat is unprecedented, in 2020, science funders faced a similar crisis, the COVID-19 pandemic, and were able to adapt quickly and respond in ways that mitigated the societal damage. Many funders extended grant proposal and reporting deadlines or offered unrestricted support and multi-year funding. Funders also increased support for their ongoing priorities and grantees, and new funders entered the infectious disease space.

The Alliance's response to the pandemic mirrored our mission and methods. With support from the Kavli and Simons Foundations, the Alliance commissioned a series of COVID-19 Discovery

Science Prequels, which identified the scientific discoveries laying the groundwork for the breakthroughs that were ultimately central to the global response.

The Alliance also convened an Infectious Disease Science Group, with 19 basic scientists and public health experts tasked with identifying short-term basic research priorities. We then presented these priorities at a convening for both active and interested infectious disease funders, after ranking them using a framework familiar to discovery science supporters; high risk/high reward, cross-disciplinary, collaborative and underfunded for the extent of the problem or for the potential impact. And these funders responded, committing millions of dollars to countering infectious disease, reflecting the trend of independent foundations doubling donations in 2020, according to a report from Candid.

Unfortunately, human nature being what it is, funding to infectious diseases declined once a vaccine had been developed, distribution began, and feelings of urgency faded. This decline demonstrated the familiar panic and neglect response to crises, despite, in this case, a continued need for surveillance and vaccine development. New demands on attention span aside, while philanthropists can pivot to respond quickly and generously to disasters such as hurricanes or wildfire damage, in many cases they simply do not have the financial resources to sustain necessary long-term investment and maintenance.

Another important lesson concerned the time lost compiling and posting the hundreds of proposals sent to the Alliance in the first nine months of 2020. Although some involved basic science research—our area of expertise, and that of our network—many did not. Knowledge, bandwidth, and urgency meant we could do only nominal vetting before uploading all to a hastily designed database on our website. Not surprisingly, uptake was minimal. Not only was staff and grant applicant time wasted, but this process also raised unrealistic hopes in a difficult and uncertain time. Although our ‘dollars influenced” increased substantially that year, it was primarily attributed to adhering to our standard practice of sourcing and selecting relevant funding opportunities, applying due diligence, and presenting a bespoke menu to our advisees, tailored to their interests.

MANAGING EXPECTATIONS

While philanthropic giving plays an important role in the research enterprise, its totals are dwarfed by government funding. A study by the Johnson Center found that in 2024, federal expenditures amounted to a total of $6.75 trillion, and then compared that figure to all assets held by private and community foundations in the U.S. ($1.466 trillion). Liquidating these assets would only cover 79 days of the federal budget. Private funders are well aware of this ratio and that there are always more fund-worthy projects than there are funds available.

Whatever the eventual extent of the proposed cuts, philanthropies will have difficult decisions to make in 2025 and future years. Additionally, foundations are also facing threats of higher taxes on endowments, tax-status challenges, mandated increases in annual payouts, and stock market turmoil. When confronted with a situation that could arguably be described as existential, how can science supporters triage their giving for the greatest impact?

PRESERVING THE RESEARCH ENTERPRISE: A FRAMEWORK

In the first quarter of this year, the Alliance consulted its network of scientific experts who identified fundamental priorities—critical for the research enterprise to survive—that were potentially at risk. Those priorities included:

- ✓ Data sets
- ✓ Longitudinal studies
- ✓ "Last mile" research projects
- ✓ The research staffing pipeline (particularly early career researchers)

For the majority of these priorities, continued investment prevents the waste of dollars and time already invested, and preserves knowledge already acquired. Other priorities identified as being "specifically targeted" included infectious disease and vaccine research, DEI or DEI-adjacent projects, and climate change research. Projects that fit one or more of these criteria should be given serious consideration for support, especially if they align with a favored research or institution.

APPLYING THE FRAMEWORK

To apply the above framework, a funder reviews their current portfolio and identifies a vaccine research project in its last year of funding that has shown promising results to date. Its completion is jeopardized as a post-doc working on the project departed late in 2024 and the research institution recently implemented a hiring freeze unless funding for at least two years is committed. This project would check two of the framework's criteria, "last mile research" and support of early-career researchers, as well as shoring up a trusted previous grantee's capacity. It would also include two specifically targeted areas, although the three noted above are not a comprehensive, nor final, list, given ongoing litigation.

Another funder may choose to expand their interest areas, and using the framework, identify a federal dataset crucial to tracking and monitoring climate fluctuations, and decide to

underwrite its preservation and maintenance on an external server. This data also informs several longitudinal studies, and its continuation is key to that work. Some of the data gathering is conducted by communities particularly affected by climate change in an inclusive effort to encourage engagement in science. This example also includes two criterium (data sets, longitudinal studies) and three specifically targeted areas.

The Alliance staff are available to assist with analyzing current portfolios using the framework and sourcing new science funding opportunities, particularly those considered discovery research.

It's important to note that there are many more needs than support available, even after applying this framework, and there are really no bad choices. Once a funder has arrived at this stage, we encourage them to exercise preference and choose what resonates most strongly with their values and goals. It will be a more satisfying experience and likely promote continued engagement.

INVOLVING GRANTEES

Exploring possible funding scenarios should not be done in a vacuum. Even if a funder does not involve current or prospective grantees in applying the framework to their projects, realistic communication with grantees can help maintain community. Acknowledging the uncertainty and fear to which we are all subject to shows recognition of this difficult time, and that careful consideration is being taken regarding future actions. The Center for Effective Philanthropic conducted a survey of nonprofit leaders in February that found that two thirds said that none or just a few of their foundation funders had communicated about these policy shifts through blogs, mass emails, newsletters, or other similar public means. The lack of communication directly contrasts with the longing expressed for such outreach, as more than three quarters of nonprofit leaders indicate they would like to learn how their funds and their funders might be impacted. A funder does not have to have all the answers, although being realistic and managing expectations is important.

Sample Questions for Grantee Outreach

Have your operations already been impacted? How? Do you anticipate other impacts?
What are you prioritizing right now?
Have you engaged with others in your network to discuss possible strategies going forward?
Are there specific plans or contingencies you're developing?
What is your biggest concern?

THE RAINY DAY IS NOW

For established foundations with strict charters, shifting a portfolio or increasing the annual payout may not be possible. Board members should take the opportunity to examine missions, bylaws and policies to determine if there is any room to maneuver to better meet this moment.

New or beginning funders, with principals still active, have more flexibility to change practices to better meet the moment. Acknowledging the danger of solutions becoming increasingly more challenging (prevention being easier than fixing), funders should seriously consider the idea of a limited-life foundation, with the "sunset" deadline built into its establishment. So many philanthropists are concerned about mission drift once the last generation known to the founders is gone yet still create their foundations to last in perpetuity.

Certainly, there are outliers, notably Bill Gates and Warren Buffet, all monies to be distributed after the founders are deceased (20 and 10 years, respectively), and Chuck Feeney, whose Atlantic Philanthropies spent down $8B in its 38 years of existence. And there is recent survey (2025 Trends) from the National Center on Family Philanthropy finding that in the past five years, the number of family foundations in active spend-down rose from 9% to 13% and that more than 28% were considering it. This trend, along with the "great" intergenerational wealth transfer currently building momentum, is promising news for not-for-profits. Cerulli Associates estimates that recipients of this transfer will inherit $124 trillion in assets by around 2048, with $105 trillion going directly to heirs and $18 trillion going to charity.

Despite many public and private statements pledging the bulk of one's wealth to philanthropy, billionaires and millionaires are wealthier than ever, with fortunes growing faster than they can be distributed. In 2024, there were 247 more billionaires on the Forbes 500 list than in 2023. And their assets increased as well as their numbers, now worth $16.1 trillion in total, an increase of nearly $2 trillion over 2024.

Philanthropists who previously hesitated to make gifts at scale now have myriad opportunities to support essential, vetted, high-ticket scientific projects to choose from. And for the two-thirds of the world's billionaires who are not philanthropic, perhaps this situation may motivate them to join the community and discover the joy, meaning and satisfaction of giving back, especially to preserve America's innovation engine and the societal benefits flowing from it.

About the Science Philanthropy Alliance

The Science Philanthropy Alliance aims to increase philanthropic support for basic scientific research. Drawing on the expertise of its advising team, its distinguished external science advisors and a membership base of leading science funders across the globe, the Alliance provides advising services and learning opportunities to help philanthropists expand the world's knowledge and lay the scientific groundwork for lifesaving, economy changing breakthroughs. Learn more at www.sciphil.org.