



Beyond government grants: Widening your funding net

Nicole Achee

“Don’t put all your eggs in one basket” is sound financial advice for both investors and researchers. Supplementing government grants with support from foundations, industry partners, and crowdfunding means that scientists must learn to navigate new fundraising systems. But they may also gain connections to broader, science-related communities. **By Chris Tachibana**

“**S**ingle-origin”—referring to a product that comes from one specific location, crop, or supplier—is now a trend for coffee and chocolate, but science funding is moving toward diversification. The reason? The proportion of U.S. R&D supported by federal funds fell from nearly 70% in 1973 to below 60% in 2016, according to a U.S. National Science Foundation report (1). Nonprofit and private organizations such as the Bill & Melinda Gates Foundation fill the funding gap for some researchers, while others explore options such as direct pitches to industry partners, investors, and crowdfunding donors.

Financial security is just one reason to diversify funding. Small awards from institutional sources, foundations, or crowdfunding can replace money lost to budget cuts. Supplemental funding can also support preliminary data collection for a larger proposal. Additionally, industry or investor partners may provide both funding and business mentoring for a scientist whose project has commercial potential. Or researchers can endorse open science while raising money on crowdfunding and science-challenge platforms. This article explores alternative funding resources that supplement or replace traditional government mechanisms.

Broadening your funding base

Nicole Achee, research associate professor in biological sciences, University of Notre Dame, Indiana, has a compelling reason to vary her funding sources. Her research goes “from lab to field,” using laboratory assays to evaluate methods to control insects that carry diseases, then testing the effectiveness of those methods where disease occurs. In addition to support from the U.S. Department of Defense, the U.S. Agency for International Development, the U.S. National Institutes of Health,

and industry, Achee’s team is receiving about USD 14 million from the Bill & Melinda Gates Foundation for work on *Aedes*-borne viruses such as dengue and Zika.

“The more diversified your funding,” Achee says, “the more you have to be aware about what is due and when.” Government funding is often timed to the fiscal year, she says, but foundations may have completely different schedules. A competent program manager to track paperwork and deadlines is critical.

To broaden a funding base, Achee advises following news from organizations that specialize in your field and regularly searching for novel funders that fit your research. Work with your institution’s development and grants office to find opportunities with industry partners, private foundations, and nongovernmental organizations. Companies such as Instrument1 provide this service for a fee.

Once you have money from a donor organization, Achee says, you may be asked to serve on their committees and panels. “Say yes,” she advises. “You’ll be part of discussions that shape the research agenda, and you’ll hear about upcoming funding calls.” People you meet through these activities can lead to further connections. “It opens the door to larger networks of funding opportunities,” she adds.

Researchers can also network through their own teams. A multidisciplinary, international group ensures diverse expertise and perspectives—and possibly funding as well, notes Achee. Some foundations give awards only to researchers based in certain countries, but these scientists can participate in global collaborations.

Thinking creatively about potential funders can pay off. An agricultural or brewing industry association might fund fungal genomics or chemical analysis of water or soil, for instance. The American Chemical Society (ACS) Petroleum Research Fund supports **Manny Curotto**, professor and chair of chemistry and physics at Arcadia University in Pennsylvania, in his fundamental research on quantum methods, a field that is relevant to energy storage.

The fund gives nearly 200 grants a year, totaling USD 17 million in 2017, and is part of a larger ACS program **cont. >**