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The New Patrons of Research

THE NEWS IS NOT ALL BAD ON THE SCIENCE FUNDING FRONT. DESPITE THE FACT THAT MANY U.S. researchers face increasing competition in chasing after federal support that has not kept pace with inflation (see the News special section on p. 24), private support is on the rise. Of course, such investments are not a new phenomenon: Nobel, Carnegie, and many others attached their names to major gifts to science more than a century ago. Today, a growing number of billionaires are likewise investing in scientific research as their personal philanthropy, choosing areas that reflect their deeply held passions. These patrons of science bring a refreshing new perspective to the projects they support, because they are typically unafraid to take risks, abhor bureaucracy, and nimbly cross disciplinary boundaries. Many are directly involved in the foundations they support, putting their personal imprimatur on the direction and operation of the ventures that bear their names. With all of this good news, it is somewhat surprising that this influx of private money has been viewed with some skepticism.*

One of the biggest concerns is that private funding for science could be viewed as a replacement for federal funding. However, unlike the federal portfolio, private support is not coordinated. Without adequate federal support, gaps of all kinds can develop—in the

balance of exploratory, basic, applied, and translational research; in the support of scientific talent at different levels of training; and in the support of different types of institutions. For example, there are very different long-term impacts on science between a private investment in an institution devoted to basic research and a private investment targeted to globally eradicating a disease, although both are worthy endeavors. Even with new foundations entering the funding scene, the private share remains a small fraction overall and cannot compensate for substantial losses in federal dollars. For these reasons, it is important that scientists and philanthropists make the case to political leadership that private funding does not replace public support for research.



Another drawback is that some private foundations do not honor the federally negotiated overhead rates for academic institutions, because they want all of their funding to go "directly to science." The

result is that only institutions with other sources of private support (such as unrestricted gifts and/or an endowment) that can cover the utilities, maintenance, etc., can accept awards that are restricted to research alone. The upshot is that well-endowed institutions can benefit from private research dollars, whereas those without flexible funds cannot, thus placing even more emphasis on the importance of large capital campaigns. But even well-endowed institutions may have a difficult time soliciting gifts to support the indirect costs of another donor's program. Scientists who serve on advisory bodies for these foundations can help by making the case that indirect costs are also legitimate costs of doing research.

A potentially sticky issue is that private funders want to set their own rules, and given the general frustration all around with the number and inflexibility of rules associated with federal funding, private funders generally choose to be more lenient. Following the more lax rules can be acceptable except when issues such as safety or scientific integrity are involved. For example, scientists should follow the standards of their field in terms of data sharing and other aspects of being a responsible citizen, even if not specifically spelled out by the supporting agent.

Private funding is, and always has been, a huge boon to the scientific enterprise. Universities and researchers have a long history of successfully merging public and private support to profit from the advantages of each funding source, accelerate scientific discovery, and benefit humanity. Given the many causes that could engage the attention of these philanthropists, we are fortunate that so many have chosen to give back to society through science. –Marcia McNutt

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^{*}W. J. Broad, "Billionaires with big ideas are privatizing American science," *New York Times*, 16 March 2014, p. A1.