Comparing Foundations to Federal Government Research Support

Private foundations play a critical role in the discovery of new treatments and cures for serious and often fatal diseases by providing supplemental funding for federally funded research conducted at research universities and nonprofit research institutions. Observers often seek to draw comparisons between federal and foundation support for research – particularly reimbursement for facilities and administrative (F&A) or "indirect costs." For example, the Administration's FY 2018 budget request for the National Institutes of Health (NIH) proposes that F&A reimbursement be "*capped at 10 percent of total research"* in an attempt to *"bring NIH's reimbursement rate for indirect costs more in line with the reimbursement rate used by private foundations, such as the Gates Foundation, for biomedical research conducted at U.S. universities*." **However, such analogies must consider inherent differences between these federal and non-federal funding models:**

Foundations have greater flexibility in accounting for F&A expenses as "direct" costs, unlike the federal government. The chart on the following page depicts the differences in budget methodologies between an NIH R01 award and an award from a private foundation. The NIH R01 represents a sample project to develop a cure for an infectious disease, with the research conducted at an NIH-funded laboratory. The private foundation example assumes the study of the same disease, but with more work concentrated in the foreign country where the disease is most prevalent. The private foundation example incorporates characteristics of the Gates Foundation model; however, it is important to note that each foundation has its own unique funding model.

Private foundation grants represent a relatively small fraction of overall research and development (R&D) funding. According to National Science Foundation (NSF) data, private foundation funding represents 6% of academic R&D funding in the U.S., while the federal government and research institutions account for 55% and 24%, respectively.

Foundations often have a research focus that differs from the federal government, which can make direct comparisons misleading. Most private foundations focus on a specific disease or condition (e.g., Alzheimer's, blindness, juvenile diabetes, etc.). In the case of the Gates Foundation, the primary focus is to address critical problems affecting the world's poor and disadvantaged. Much of their work is based in Africa and developing countries, with a component of lab-based funding. The NIH, on the other hand, is highly focused on traditional lab-based biomedical research. Comparing cost reimbursement methods and applicable F&A rates across very different types of research (i.e., the cost of doing research in Malawi versus that in the U.S.) is problematic in that foundation-funded research often does not require the kinds of infrastructure investments in F&A that NIH-funded research requires.

Once these differences are considered, a more accurate comparison of federal and non-federal support becomes possible, as illustrated in the example on the following page. While the NIH example applies a 50% F&A rate and the foundation example applies a 10% rate, **reimbursement for what the federal government categorizes as F&A expenses represents a similar percentage of the total funding in both instances** (25.7% for NIH and 21.7% for the foundation). Because non-federal methodologies vary by grant and by funder, the actual percentage may be higher or lower on a case-by-case basis.

As stated by a Gates Foundation spokesperson in a recent *Science Insider* article: The Trump proposal "*does not reflect [the foundation's] process for determining direct or indirect costs*."

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Research Budget and Application of F&A (NIH compared to a private foundation*)

Research Budget	**NIH R01 (Lab-based)**	**Private Foundation (Lab-based and Foreign)**
Personnel		
Principal Investigator (MTDC)	50,000	50,000
Lab Techs / Scientists (MTDC)	300,000	150,000
PostDocs / Grad Students (MTDC)	250,000	125,000
Project Manager	0	65,000[1]
Supplies (MTDC)	90,000	45,000
Travel (MTDC)	5,000	30,000
Grad Student Tuition	20,000	10,000
Equipment	75,000	75,000
Subaward (Foreign component)	250,000	600,000
Facilities and Lab charge	0	60,000[1]
Data/IT charge	0	50,000[1]
SUB-TOTAL	**1,040,000**	**1,260,000**
NIH R01 F&A (50% applicable to MTDC)	360,000[2]	
FOUNDATION F&A (10% applicable to TOTAL)		126,000[3]
TOTAL RESEARCH BUDGET	**1,400,000**	**1,386,000**
F&A and Similar Costs		
Project Manager	0	65,000
Facilities and Lab charge	0	60,000
Data/IT charge	0	50,000
F&A	360,000	126,000
SUB-TOTAL: F&A AND SIMILAR COSTS	**360,000**	**301,000**
TOTAL RESEARCH BUDGET	1,400,000	1,386,000
F&A AND SIMILAR AS % OF TOTAL	**25.7%**	**21.7%**

**Based on an analysis of the Bill and Melinda Gates Foundation Indirect Cost Policy: https://docs.gatesfoundation.org/Documents/Indirect_Cost_Policy.pdf compared to OMB F&A rules: 2 CFR Part 200 - Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Award.*

[1] Project manager ($65,000), facilities and lab charge ($60,000), and data/IT charge ($50,000) normally are not allowed as direct charges to an NIH award. However, these costs often are allowable charges to a private foundation award. For example, the Gates Foundation Indirect Cost Policy (effective February 1, 2017), is informative. Per FAQ 1, Appendix B: "*While the maximum indirect cost rate percentages have not changed, we have adjusted the costs that can be considered direct to better reflect the cost of achieving project outcomes, specifically in the areas of facilities and project support.*" And per the Gates example of allowable direct costs: "*Allocable facilities, utilities and communications expenses that are required to execute the project, such as field clinics, laboratories, project office costs.*"

[2] An institution's F&A rate is applied to modified total direct costs (MTDC). In this example, personnel ($600,000), supplies ($90,000), travel ($5,000), and a portion of the subaward (only the first $25,000 is allowable). Therefore, the 50% F&A rate is applicable to the sum of these cost items ($720,000), resulting in an F&A amount of $360,000.

[3] The private foundation limits the F&A rate to 10%. However, the rate is applicable to the sub-total amount of $1,260,000, which includes both the MTDC items, as well as those items not eligible for F&A on an NIH award (e.g., equipment and the entire amount of the subaward).