The Role of Facilities and Administrative Costs in Supporting NIH-Funded Research

Testimony of

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Good morning Chairman Cole, Ranking Member DeLauro, members and staff of this esteemed subcommittee. I am Keith Yamamoto, Vice Chancellor for Science Policy & Strategy, and an NIH-funded molecular biologist, at the University of California, San Francisco.

The topic today, "The Role of Facilities and Administrative (F&A) Costs in Supporting NIH-Funded Research", bears centrally on a remarkable compact between the federal government and the academic research community that has produced the world's largest, strongest and most productive research engine, and whose proud history merits brief recounting.

The compact was established over 70 years ago when President Roosevelt asked his Director of Scientific Research and Development, Vannevar Bush, to advise him about future relationship of the federal government to the scientific research enterprise, following the crucial and successful ties developed during World War II. In his remarkable report, "Science, The Endless Frontier", Bush urged the federal government to *greatly expand* its ties with scientists. He addressed science broadly, but singled out the "war against disease", noting that "the Government should extend financial support to basic medical research in the medical schools and in universities."

What has evolved is a federal-academic cost-sharing grant-in-aid agreement. By awarding my lab an NIH grant, the government helps to pay for my proposed experiments, and a portion of infrastructure, the F&A, needed for those experiments.

This partnership benefits both government and academia, especially compared to another concept under consideration at the time, which envisioned a vast network of federal laboratories constructed, maintained and populated at government expense. Instead, the present system provides for genuine cost *sharing* (universities and research institutes are the second largest funders of biomedical research, behind only NIH), while crucial research and the training are carried out predominantly in academia environments, producing the next generation of outstanding researchers, and discoveries profoundly important for understanding health and treating disease.

Now let us consider three specific points about F&A costs:

- *First, separation of research costs into Direct and F&A categories is a rational accounting strategy.* Direct funding partially covers the experiments in my lab, whereas F&A, often referred to as indirect funding, helps to support the resources at UCSF without which those experiments could not be done: lights, water, information technology, the sophisticated building housing my lab, security, staff to ensure responsible stewardship of the grant funds and compliance with federal regulations and guidelines, and the like. Such costs are more efficiently accounted for in *aggregate*, covering all the NIH-funded research at UCSF, compared, for example, to placing separate water and electricity meters in every lab and research office. But those aggregated F&A costs are every bit as essential to my research as are the directs costs of the experiments.

- *Second, the F&A rate determination is rigorous and institution-specific, and thus very complex.* Decisions to provide federal support for direct costs are made by expert peer review

panels that rigorously evaluate the scientific merit of the >80,000 proposals submitted annually to NIH. Only one proposal in five is eventually awarded funds. Based on those decisions, partial F&A support is awarded based on the percentage of direct support negotiated by each research institution. That is, unlike other Federal government contractors, universities and research institutes cannot claim the full cost of F&A expenses necessary to support each grant awarded for direct costs. Instead, each institution enters every few years into exacting negotiations with its cognizant agency (HHS in the case of UCSF) to agree upon an institutional F&A costs rate. In addition, the government places pre-defined caps on F&A for certain types of grants, and for administrative costs. All of this complexity produces complicated outcomes: different F&A reimbursement rates for different institutions, albeit always well below actual costs, with few stakeholders truly *understanding* the complexities, including even some members of congress who are strong NIH advocates, as well as faculty (I used to be among them), who believe that F&A should be reimbursed directly to them, as they competed successfully for the funds in the first place.

- *Third, the rate basis for F&A reimbursement differs between the federal government and various philanthropic institutions, so the rates are not directly comparable.* The concern here is that private foundations typically offer lower F&A reimbursement rates than does the federal government, NIH in particular. Notably, foundations may look upon their F&A contributions as appropriate and effective leveraging of the historic compact between the federal government and the research enterprise. Perhaps more significantly, foundations and NIH categorize direct and indirect costs differently. For example, the Bill and Melinda Gates Foundation counts facilities, utilities and communications as direct costs, whereas NIH does not. A recent study from the Association of American Universities showed that if criteria for defining direct and F&A costs are aligned, the federal government and philanthropic organization F&A rates would be similar. At UCSF, we recalculated F&A costs, using NIH criteria, for the $138 million in Gates funding were awarded in the 2013-2017 period, and found that the recalculated rate approximates that for federal grants.

Like all complicated policies, the F&A reimbursement process is not perfect, and merits periodic evaluation. For example, congress could choose to request a detailed analysis and assessment by the National Research Council (National Academies of Sciences, Engineering and Medicine). The academic research community would cooperate fully in such an oversight exercise.

However, draconian cuts or caps, instead of careful, evidence-based evaluation, would damage research, researchers, research outcomes, and American health and competitiveness. If the federal government were to suddenly cap F&A reimbursement, as proposed in the 2018 OMB budget, our large enterprise at UCSF would suddenly be short over $120M, with no way to make up the deficit. Supplemental funding from the state of California is not an option, and a large hike in tuition would be unfair and punitive on general campuses and virtually certain to be rejected by the University of California Board of Regents, and in any case ineffective at UCSF, which has no undergraduates. Instead, we would be forced to make hard choices about which exciting research and health programs to terminate, which training programs to shrink, which research facilities to close. Notably, the consequences would be even more dire for

smaller institutions that are vigorously building up their biomedical research endeavors, likely leading to total shutdown of efforts so vital in their regions and congressional districts.

Clearly, NIH F&A is an important matter with big ramifications, so let me thank the Subcommittee for dedicating time to learn about it and evaluate its merits and impacts.

This concludes my testimony. I would be happy to respond to your questions.