EXHIBIT 26

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

AMERICAN PUBLIC HEALTH ASSOCIATION, et al., *Plaintiffs,* v. NATIONAL INSTITUES OF HEALTH, et al., *Defendants.*	Case No. 1:25-cv-10787-BEM

DECLARATION OF JEREMY M. BERG, PH.D.

I, Jeremy M. Berg, declare as follows:

Background

1. I am a former director of the National Institute of General Medical Sciences (NIGMS), one of the twenty-seven National Institutes of Health (NIH). I served as director of NIGMS from 2003 to 2011. The purpose of NIGMS is to support research and training of scientists across a wide range of areas, including biochemistry, cell biology, genetics, computational biology, bioinformatics, anesthesiology, wound healing, and burn and trauma research. The United States' ability to effectively treat, diagnose, manage, and ultimately cure diseases requires an understanding of their underlying mechanisms and biology. NIGMS' investments in fundamental basic research have supported 90 Nobel prizes and improvements in treatments for diseases including heart disease, cancer, neurological diseases associated with aging, sepsis, and many others.

2. NIGMS was organized into four programmatic divisions and a center: Cell Biology and Biophysics; Genetics and Developmental Biology; Pharmacology, Physiology and Biological

Chemistry, Minority Opportunities in Research, and the Center for Computational Biology. In addition, it has a Grant Management Office, an Office for Scientific Review, an Evaluation Office, an Office of Extramural Activities, an Office of Communications, a Budget Office, and the Office of the Director. There was also a training committee that consisted of POs from the various scientific divisions who oversaw the different institutional programs.

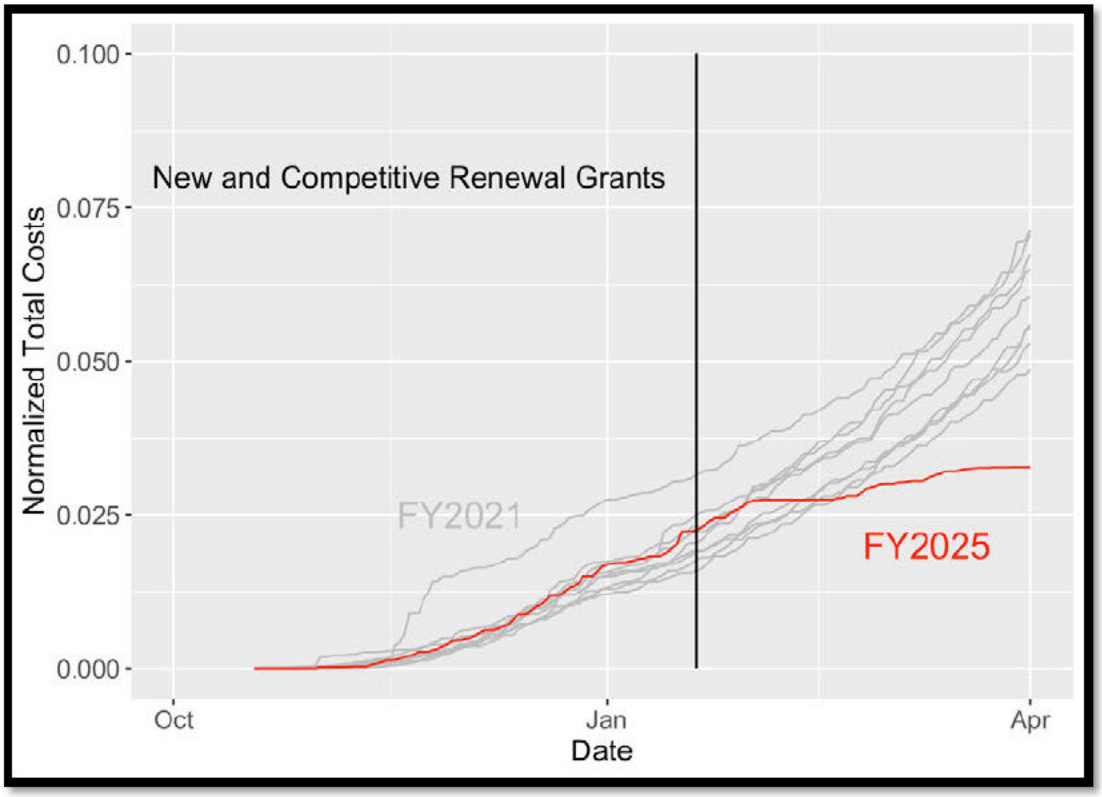
3. My responsibilities as director of NIGMS included staying information about, planning and participating in, and, in some cases, leading activities across the NIH. The ICs directors met together with the NIH director and other leaders typically monthly.

4. I left NIH in 2011 to come to the University of Pittsburgh with my wife, a leading breast cancer screening expert who was recruited to this institution. Here, I have continued to conduct some NIH-funded research in the area of computational biology and also have helped to manage a range of programs that receive NIH funding.

5. Since January 20, 2025, delays and terminations in NIH funding have dramatically disrupted the work of advancing biomedical research and training the next generation of scientists. Steps that have contributed to these disruptions have included the "pausing" of grant-making processes at NIH, the extremely slow release of continuing awards for multi-year grants, the disruption of the regularly scheduled national Advisory Committee meetings required to approve grant applications prior to funding, the disruption of the peer review "study section" meetings required for grant application evaluation and prioritization, and other steps. More recently, these have included direct terminations of specific grants based not on lack of performance or any other irregularities, but claims that the aims of these grants no longer aligned with NIH's priorities.

6. Based on my personal analysis of publicly available data (through the NIH Reporter website), over $3.3 billion of NIH funding that would typically have been disbursed through NIH's

grant making and grants management process by this point in the year has not been. The funding of new and competitive renewal (covering the continuation of projects that are nonetheless fully peer reviewed) grants is strikingly different starting shortly after January 20, 2025, compared to the preceding decade. In the image, below, the relatively flat line (red) for fiscal year 2025, after the first week of the current Trump administration reveals behavior that is completely distinct from that in previous years.



7. Through April 7th, more than $1.6 billion is missing from the funding that would be anticipated from continuation awards for multi-year grants. In addition, more than $500 million is missing in new grant funding from grant applications that undergo the highly competitive scientific peer review, based on comparison with the level of new grants awards from this same period from previous fiscal years.

8. If these estimates were broken down on a week-to-week basis (i.e., weeks in 2024 compared to weeks in 2025), the estimated difference is stark. In Weeks 4-11 of 2024 (i.e., January 20, 2024, through March 14, 2024), NIH awarded a total of $4.08 billion with 8,071 awards. For comparison, in Weeks 4-11 of 2025 (i.e., January 20, 2025 through March 14, 2025), NIH awarded a total of $2.45 billion with 4,961 awards. This represents a reduction of approximately 40%.

9. Narrowing the focus to new awards (and competitive renewal awards) that require study section and advisory council review prior to the award, in those same weeks, NIH awarded $740 million in 1,756 awards in 2024 but only $360 million in 781 awards in 2025. Focusing further still just on Weeks 6-11 (February 3rd to March 14th), the comparison is even more striking: 1,342 awards for $576 million in 2024, compared with 395 awards for $180 million in 2025, a reduction of approximately 69%.

10. In a recent analysis, which includes awards with April 1st budget start dates, the estimated difference for Weeks 12-13 (i.e., the period from March 14, 2025 to April 1, 2025) is $1.04 billion. Of this, $780 million is due to non-competitive renewal awards that were anticipatable during this period—since many grants were due for renewal by April 1, 2025. In addition, based on the new and competitive renewal awards made during this same period in 2023 and 2024, I estimate that there is a $260 million reduction in anticipatable new and competitive renewal awards in 2025.

11. Similarly, scientific colleagues have received grant terminations that have completely upended the work of their research labs, staff, and students. For example, all the awards for the Antiviral Drug Discovery (AViDD) Centers for Pathogens of Pandemic Potential have apparently been terminated. This program is intended to do preparatory work for viruses and other pathogens that might cause pandemics in the future; and again went through a competitive award

process. These awards were terminated on the grounds that the COVID pandemic is over and, therefore, this research is no longer needed. It is hard for me to understand the logic of the termination of these forward-looking looking grants when the risk of a pandemic from COVID and other viruses persist.

12. As further described below, these disruptions and terminations are completely contrary to my previous experience both at and with the National Institutes of Health.

Role of NIH in Biomedical Research at Universities

13. Since the 1930s, the NIH and its predecessor agencies have supported the advancement of the United States' understanding of human disease and disability by funding training and research. In 1944, Congress formally created the NIH as part of the Public Health Service in order to encourage scientific institutions, other public institutions, and scientists in the conduct of research and demonstrations related to the causes, diagnosis, treatment, control, and prevention of physical and mental illnesses and disability. Congress specifically authorized support of research through grants to universities, hospitals, laboratories, and other public or private institutions for research projects after review by the NIH institutes' national advisory councils. Similarly, Congressional funding for training and fellowships dates back more than 50 years.

14. Since the 1930s, Congress has also added new institutes and centers focusing on different diseases, organ systems, life stages, or other aspects of biomedical research. For example, Congress specifically created NIGMS in 1962 to cover biomedical research of interest to two or more existing institutes or that are not covered by other institutes. Today, there are 27 institutes and centers as well as the Office of the Director within NIH. With the exceptions of the Center(s) for Scientific Review, the Center for Information Technology, and the NIH Clinical Center, the

individual institutions, centers and the Director have the authority to issue grants to researchers through their organizations.

15. Today, Congress appropriates more than $47 billion to the NIH's institutes and centers to advance biomedical research, including through grants to extramural researchers and institutions. Over 85 percent of NIH's annual funding to advance biomedical research powers the more than 38,000 principal researchers, research projects, and trainees in external organizations across the United States. This funding may cover everything from a principal investigator or junior researchers' salaries and benefits to research supplies, as well as real research costs that are not readily attributed to specific projects, often referred to as indirect costs.

16. NIH grants are typically awarded for an average of four years because the advancement of biomedical research benefits significantly from stable funding across a number of years. Very few research projects of any scientific significance can be completed in less than two years. Generally, grants are not fully funded all at once. An initial award in one fiscal year is followed by continuation (or non-competitive renewal) awards in subsequent years pending submission of an acceptable scientific and financial progress report. Thus, at any given point in time, about 80 percent of NIH's external funding is committed to existing research, support for the NIH intramural research program, or other costs such as NIH operations. The remaining 15 percent is available for new grant applications and the competitive renewal of long-term research projects. Stability is important to scientific investigation, particularly to encourage researchers to pursue innovation and risk in biomedical research. NIGMS has developed a variety of methods to provide stable funding for researchers so that productive or promising projects are not interrupted.

17. The stability of these grants also furthers the building of research capacity and the training of both graduate students and early-career scientists. A large proportion of pre- and

postdoctoral scientists are supported during some or all of their training periods via research project grants rather than training awards. This situation exists because many members of research teams funded by NIH research project grants include graduate students and postdoctoral researchers who engage in research as a key component of their training activities.

18. Through the Ruth L. Kirschstein National Research Service Awards and other programs, Congress has historically directed funding to public and private institutions specifically for the pre-doctoral and post-doctoral training of individuals to undertake biomedical research. Since 1972, such funding has included explicit provisions directed toward increasing the percentage of women and individuals from disadvantaged backgrounds (including racial and ethnic minorities) into fields of biomedical research. This is particularly important since project selection and other aspects of research related to health can depend on the life experiences of those engaging in research.

19. Institutional training grants (T32s) can be used to cover the costs of predoctoral or postdoctoral students. Individual grants, typically classified as F-series ("Fellowship") or K-series ("Career Development") grants can be used to provide stipends to researchers at all stages of their career, cover tuition and costs, and fund other expenses.

20. At the direction of Congress, NIH and institutes like NIGMS have also increased their funding in specific research areas. For example, this is true for research related to HIV/AIDS which has been coordinated through the NIH Office of AIDS Research. When I was a department chair at Johns Hopkins School of Medicine in the 1990s, there were serious discussions about where non-AIDS patients were going to be treated as beds at Johns Hopkins Hospital filled with AIDS patients. But with the support of NIH, the United States developed an understanding of basic biochemistry and virology of the HIV virus, identified a variety of drug targets and, subsequently,

developed drugs that have turned HIV infection from a death sentence into a treatable chronic condition. For some patients, the newest research has achieved a true cure to their HIV infection. Considering continued outbreaks and deaths from HIV/AIDS, the potential to reduce this public health risk in vulnerable communities and internationally is profoundly important.

NIH Funding Priorities Based on Congressional Direction & Scientific Assessment

21. In addition to Congressionally directed funding, the Director of the NIH and each institute and center engages with its advisory council, policy makers, scientific and professional societies, and other public stakeholders to identify agency funding priorities. Congress has directed the NIH to assemble accurate data to assess research priorities including information to evaluate scientific opportunities and public health disease burdens, including progress in reducing health disparities. NIH publicizes the data on the study populations of clinical research funding by its institutes and centers on its website. NIH also considers disease burden in the United States and the potential for return on investment to the United States; rare diseases and conditions; and the biological, social, and other determinants of health contribution to health disparities in identifying research priorities. These priorities are reported to Congress and publicized on its website via the NIH strategic plan.

22. At NIGMS, the institute specifically engaged in scientifically based strategic planning on a five-year basis. While I was NIGMS director, we developed the first formal NIGMS strategic plan, NIGMS Strategic Plan 2008-2012: Investing in the Future.[1] This plan was developed through extensive interactions with stakeholders from different communities around the country and staff across NIGMS and NIH.

[1] NAT'L INST. GEN. MEDICAL SCIENCES, INVESTING IN DISCOVERY (2007), https://www.nigms.nih.gov/sites/nigms/files/migrated/NIGMS-strategic-plan-2008-2012.pdf

23. We also developed a strategic plan specific for research training.[2] The four themes of this plan are Theme I: Research training is a responsibility shared by NIH, academic institutions, faculty and trainees; Theme II: Research training focuses on student development, not simply selection of talent; Theme III: Breadth and flexibility enable research training to keep pace with the opportunities and demands of contemporary science and provide the foundation for a scientific career paths; and Theme IV: Diversity is an indispensable component of research training excellence, and it must be advanced across the entire research enterprise.

24. Once agency priorities have been identified, each institute and center issues notices of funding opportunities (NOFOs) for specific grant mechanisms, some of which are targeted to specific areas and some are open-ended invitations to investigators to propose problems of interest and specific approaches that fall within the given NIH institute or center's mission.

25. As further described below, when reviewing applications for NIH funding, both the institute and its advisory council explicitly consider whether an application is consistent with its mission and scientific priorities identified in its strategic plan.

Review of External Funding at NIH Based on Scientific Merit and Strategic Plan

26. The NIH receives approximately 50,000 grant applications per year. NIGMS alone awards and manages more than 4,500 grants on average and reviews nearly 1,000 grant applications (in addition to those reviewed by study sections at the NIH's Center for Scientific Review) received in response to NOFOs. As part of the NIH mission to advance biomedical research, all applications submitted to the NIH in support of biomedical and behavioral research are evaluated for scientific and technical merit through the NIH peer review system.

[2] https://www.nigms.nih.gov/sites/nigms/files/migrated/NIGMS-Strategic-Training-Plan.pdf

27. Notices of funding opportunities explicitly incorporate the criteria used to assess scientific and technical merit of each grant application. Criteria can include the scientific significance of the proposed project, including the strength of the scientific premises of the grant; the investigators' expertise and resources; the potential innovative impact of the proposed research; and whether there is a rigorous and feasible approach to address the aims of the project. Other criteria include justification of the proposed budget and duration in relation to the proposed research. For clinical research, patients need to be protected from research risks including the risk of needing to stop the research and the application also needs to address the appropriateness of the proposed study population.

28. When a scientist submits a grant application through their organization, the NIH assigns the application to a study section at the Center for Scientific Review for peer review or to study sections at a specific NIH institute or center for more scientifically specialized topics. Study sections are composed of 20-30 independent researchers from the scientific community who have the expertise to assess topics such as Basic Mechanisms of Diabetes and Metabolism or Chemical Biology and Probes. There are approximately 250 standing study sections that meet at least three times a year on specified topics. Special emphasis panels or study sections also meet to review applications for more specialized programs or for projects that fall outside an existing study section.

29. The study section meets, reviews, and scores an application for scientific and technical merit. The review is time intensive and done on a mostly voluntary basis. Each reviewer on a study section is assigned between 4-10 applications. Each application has two primary reviewers and an additional reader who present the application for discussion at one-to-two-day meetings. Scores can significantly shift as key features or flaws are noted. Scores from different

study sections are normalized so that scores from different study sections can be compared. Fewer than half of applications make it through this part of the process with a significant chance of being selected for funding.

30. I served as a study section member and study section chair just prior to my appointment as NIGMS director. For applications for which one had primary responsibility, each reviewer writes a critique and assigned numerical scores. I found that I spent approximately five hours per application reading and writing these critiques. This is in addition to one's normal job and personal responsibilities. At study section meetings, each application is presented and discussed. Each application is presented by two primary reviewers, briefly describing the subject of the proposal and the approach and outlining major strengths and weaknesses. An additional reader provides further comments, and the application is discussed by the study section committee. After the discussion, the primary reviewers give their final numerical scores, and each member of the study section provides a score in secret although members are encouraged to announce if they are voting outside of the range of the primary reviewers as an indication that they are weighing their own judgements or certain arguments by the primary reviewers strongly.

31. Advisory councils from each institute or center then meet and review the grant critiques (called summary statements) with NIH staff to ensure that the first level of peer review appears to have proceeded appropriately and to assess alignment of the application with the institutes' funding priorities. Advisory councils are committees of 10-12 academic scientists and other experts (e.g., patient advocates, economists) who typically serve four-year terms and are appointed by the Secretary of Health and Human Services. Advisory councils provide oversight of the first stage of peer review and make recommendations about applications that should be given higher or lower priority given the state of science in a given institute or center's field, and the

mission and extant portfolio of said institute. Advisory councils typically meet three times a year with meetings scheduled years in advance. These meetings align with the normal funding cycles for grant review process.

32. Finally, each institute and center's director make funding decisions with the advice of program officers and senior leaders in the institute or center. Funding decisions are largely based on peer review scores, but also with consideration regarding the existing grant portfolio, a center's publicized priorities, or recommendations of staff. Budgets are adjusted based on peer review, staff recommendations, and the availability of Congressionally appropriated funds. Grants are then awarded to each researcher's institution. Successful applicants receive Notices of Award ("NOAs"). The NOA identifies the institutional grantee, one or more principal investigators, and specifies the amount of the award, its duration, and all other terms and conditions with which the grantee must comply.

33. Before this year, I have never observed nearly all study sections and advisory councils canceled for a funding cycle. On January 21, the Acting Secretary of Health and Human Services informed NIH that all notices in the Federal Register would need to be approved by a Presidential appointee. This is important because study sections and advisory councils are committees subject to the Federal Advisory Committee Act (FACA), a transparency statute enacted in 1972. My understanding is that this law was intended to prevent the federal government from receiving advice in secret. Here, it was being used to block normal grant-making processes. Approval of grant applications and peer review is required in order for an application to be eligible for funding.

34. NIH application submission, study section review, advisory council consideration, and funding decision and notice of award generation normally occur on a regular schedule with

three cycles per year.[3] In my experience, institutions and investigators are quite familiar with and anticipate these scheduled dates. Many investigators know upcoming application due dates off the top of their heads and upcoming advisory council meetings dates are selected and publicized in institute web pages a year or more in advance.

Review and Award Cycles

	Cycle I	Cycle II	Cycle III
Application Due Dates	January 25 - May 7	May 25 - September 7	September 25 - January 7
Scientific Merit Review	June - July	October - November	February - March
Advisory Council Round	August or October *	January	May
Earliest Project Start Date	September or December *	April	July

Continued Funding at NIH Based on Scientific Merit & Performance

35. NIH staff, such as grant management officers and scientific review officers, are also assigned to manage the more than 59,000 grants that NIH manages in a year. In 2023, these grants supported 38,000 principal investigators and more than 300,000 researchers at more than 2,500 institutions across the country.

36. Due to the nature of funding scientifically significant but innovative and sometimes risky nature of biomedical research, investigators have the flexibility to adjust their research efforts depending on ongoing discoveries or other developments in the scientific field. But the NIH's staff still review annual progress reports to assess whether or not the researcher has continued to make progress on the project appropriate for what was in their grant application.

[3] https://grants.nih.gov/grants-process/submit/submission-policies/standard-due-dates.

37. NIH program officers and grants management specialists must review these reports and approve a new year of funding through an administrative review without the involvement of study sections and advisory councils. As mentioned above, due to the importance of funding stability in advancing scientific investigation—absent scientific misconduct or other significant events—these funding streams are almost always approved in a timely manner as grants come up for review based on their start date.

Rarity of Grant Terminations

38. The NIH rarely terminates grants. I do not recall any instances of such terminations by NIGMS during my nearly eight years as director. Prior to 2025, I am only aware of two such terminations in subsequent years. One involved an aging investigator who was not longer able to conduct the research (and who died shortly thereafter) and another involved an investigator who separated from his university following investigations into sexual harassment involving younger scientists.[4]

39. Otherwise, in instance of concerns about performance of the grant, rather than terminating a grant, the NIH has generally discussed with the grantee or with others at the grantee organization to pursue corrective action prior to making any additional awards.

40. Finally, in instances of scientific misconduct, the NIH still seeks to preserve the results of the research if possible. Scientific misconduct includes, but is not limited to, fabrication of the data and results from a scientific study or plagiarism of another person's processes and results without giving appropriate credit.[5] Under many circumstances, misconduct investigations,

[4] *See* Amy Harmon, *Chicago Professor Resigns Amid Sexual Misconduct Investigation*, N.Y.TIMES (Feb. 2, 2016), https://www.nytimes.com/2016/02/03/us/chicago-professor-resigns-amid-sexual-misconduct-investigation.html

[5] Office Res. Integrity, *Definition of Research Misconduct*, DEP'T HEALTH & HUMAN SERVS., https://ori.hhs.gov/definition-research-misconduct (last visited on Apr. 2, 2025).

conducted by the grantee organization or their designee, identify problematic scientific publications and push for correction or retractions for impacted publications. But in other instances, publications are cleared by the investigation with no evidence of influence on the publication due to the inappropriate behavior.

41. This stands in sharp contrast to what is occurring during the present administration. Large number of grants are being terminated, allegedly because the award "no longer effectuates the program goals or agency priorities" or for other reasons. Some many grants are being terminated that NIH has added a field to the NIH Reporter database to designate terminated grants. This did not exist prior to April 2025. The Department of Health and Human Services (HHS) now posts a link to a spreadsheet of terminated grants on its TAGGS database landing page.[6]

42. I have been examining the terminated grants lists on a regular basis. For the week from April 11, 2025 through April 18, 2025 only a single new grant (a supplement to an existing grant) was added. However, data from NIH Reporter over the same period indicated that more than 20 awards were terminated over this period. This inconsistency adds further confusion about the nature of ongoing terminations.

43. NIH has recently also been making changes to its use of the Payment Management System (PMS). Universities do not receive payment when an NIH grant is awarded, but rather are given the ability to request reimbursement through the PMS. DOGE is apparently introducing additional steps in this process and NIH had, at least for a period, halted all payments through the PMS and, perhaps, was using this system to withhold grant payments to specific institutions.[7]

[6] https://taggs.hhs.gov/

[7] https://www.washingtonpost.com/politics/2025/04/17/doge-trump-grants-hhs-nih-backlog/

Funding Disruptions Devastating, Without Alternatives

44. In the long term, if these disruptions in Congressionally directed funding continue, the biomedical enterprise both in public and private institutions is in danger. As an example of how basic research helps to fuel rapid progress in developing new and safer treatments and prevention strategies, the U.S. Food & Drug Administration recently approved a first-in-class non-opioid medicine for mild to moderate pain (suzetrigine, brandname Journavx).[8] This was based on decades of basic and more applied research in NIH-funded academic and private-sector laboratories. The loss of any of the large amount of information or techniques generated from this research would have made approval of this pain medication impossible. Move over, many of the scientists involved— including those in industry—were trained at the NIH or in academic laboratories supported by the NIH. In the long run, these advancements have the potential both to provide a new alternative to treat post-surgical pain, but also to address the demand side of the opioid public health crisis.

45. There are not alternative sources to replace the NIH's more than $40 billion in biomedical research funding. In 2022, the NIH invested more than 25 more times on grants than the next largest funder, the Wellcome Trust based in the United Kingdom.[9] Combining then the next 25 largest funders of biomedical research would not replace the NIH's annual funding of biomedical research. Moreover, as private or non-US based funders, those funders are unlikely to have the same priorities identified by Congress and by US-based researchers and stakeholders.

[8] Press Release, FDA Approves Novel Non-Opioid Treatment for Moderate to Severe Acute Pain (Jan. 30, 2025), https://www.fda.gov/news-events/press-announcements/fda-approves-novel-non-opioid-treatment-moderate-severe-acute-pain

[9] Nisha Gaind, *How the NIH Dominates the World's Health Research*, 639 NATURE 554 (2025), doi: https://doi.org/10.1038/d41586-025-00754-4

Terminations Will Likely Cause Severe Career Disruption and Harm

46. Throughout my career, I have also helped guide scientists at the beginning of their independent careers as they sought to compete for NIH funding. Prior to coming to NIH, I was Director of the Department of Biophysics and Biophysical Chemistry at the Johns Hopkins University School of Medicine. In this role, I conducted research in partnerships with graduate students including combined MD/PhD students, and postdoctoral fellows with much of this work supported by NIGMS and other NIH institutes.

47. As a department chair, I recruited many faculty starting their independent careers. Obtaining NIH funding was an essential step in developing their careers, both in terms of providing funds for their research and for demonstrating that their ideas and research was sufficient good that it has passed the rigorous bars for NIH funding.

48. At my present institution, it is an unwritten rule that all faculty members need to hold two substantial NIH grants to receive tenure. Again, this reflects both the financial support for their continuing research and the recognition and prestige associated with competing through peer review and the rest of the NIH funding processes.

49. I have never had to deal with a faculty candidate who have had an NIH grant or grants terminated or withdrawn from consideration for reasons of "agency priorities." However, it is difficult for me to imagine such an individual competing for a coveted faculty position against a large pool of qualified candidates. This reflects the substantial likely irreversible personal harm done to individual scientists through this capricious use of NIH funding for political purposes.

50. As an undergraduate, graduate student, and postdoctoral fellow, my training and research were supported through research grants to my research mentors. When I started my independent career, my research projects were funded through a then-new program directed to

beginning faculty members. The continuity of Congress and the American people's investment in biomedical research via the NIH has been vital to my career path. The United States has similarly invested in the training and research of numerous students, early career scientists, and faculty in every state and territory. It is a shame that these interruptions in NIH funding now endanger the advancements and institutions powered by those individual researchers.

I declare under the penalty of perjury that the foregoing is true and correct.

Executed on this 24th day of April 2025, in Gibsonia, PA.

Jeremy M. Berg, Ph.D.
Former Director (2003-2011)
National Institute of General Medical Sciences
National Institutes of Health