

**UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS**

COMMONWEALTH OF
MASSACHUSETTS; et al.,

Plaintiffs,

v.

ROBERT F. KENNEDY, JR., et al.,

Defendants.

No. 1:25-cv-_____

SECOND SUPPLEMENTAL 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. 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.

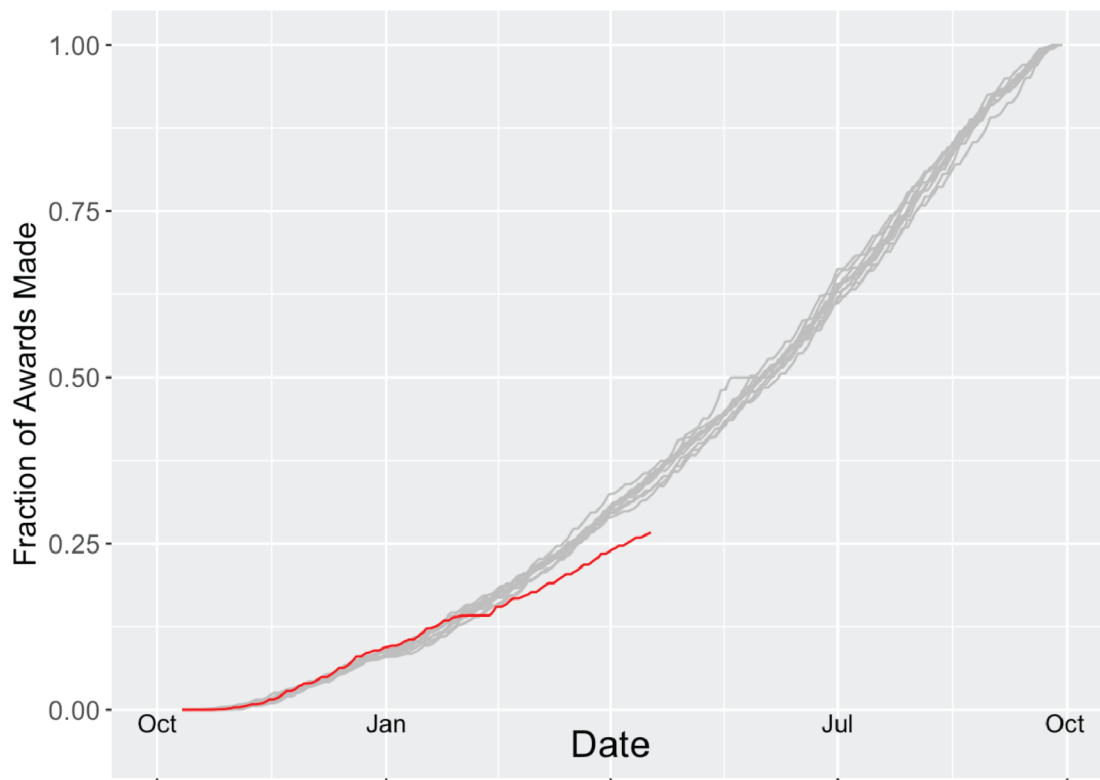
3. In 2011, I left NIH in 2011 to come to the University of Pittsburgh with my wife, a leading breast cancer screening expert who was recruited to this institution. Here, I have continued to conduct some NIH-funded research in the area of computational biology and also have helped to manage a range of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

4. 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. The net result of these disruptions has been substantially slower commitment of appropriated funds compared to at least the past decade.

Delays in NIH Grant Making and Funding

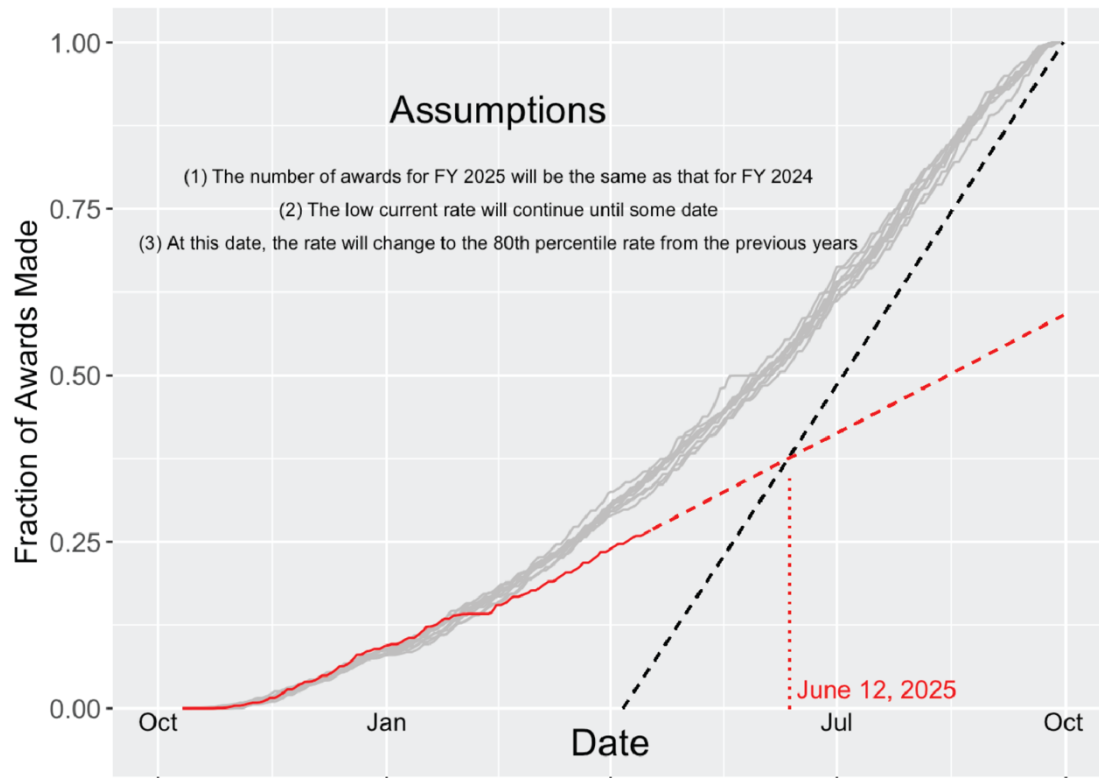
5. On April 2, 2025, I submitted a declaration based on my personal analysis of publicly available data (through the NIH Reporter website). On April 14, 2025, I submitted a supplementary declaration updating my previous analysis.

6. In order to better understand the pace at which NIH makes grant awards, I examined the rate of the issuance of all types, including continuing awards and new awards, for fiscal years 2015 through 2024 and compared this with the results to date for fiscal year 2025.



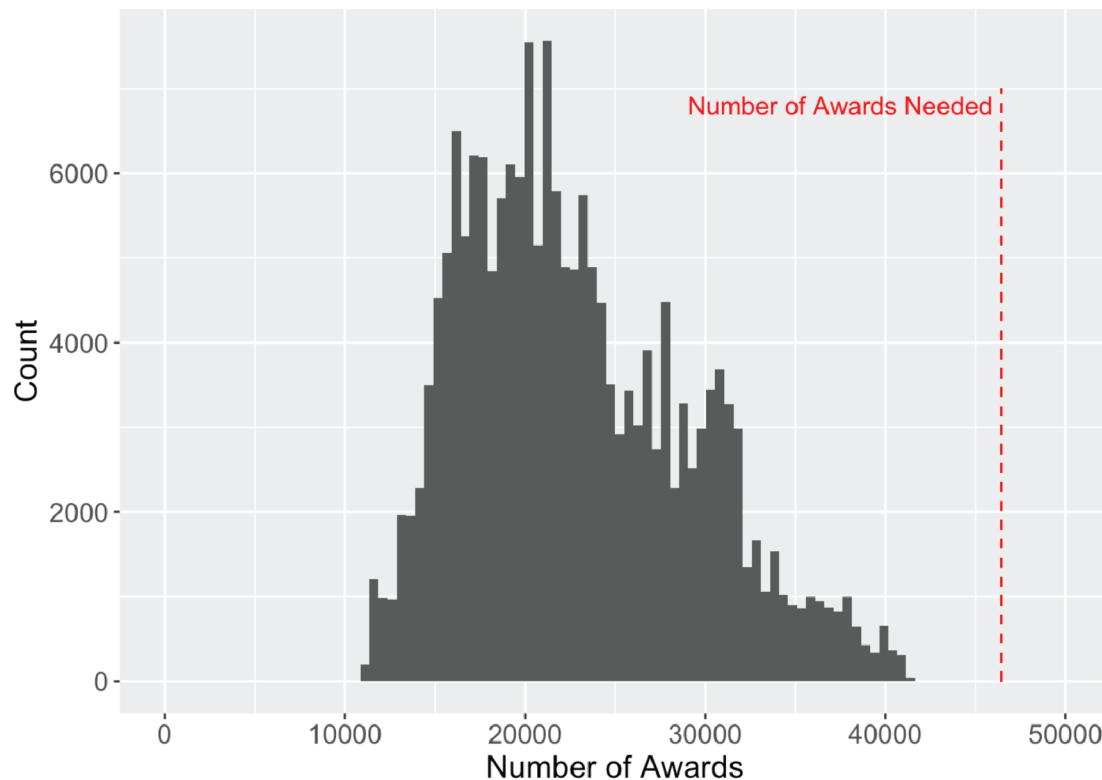
The fraction of NIH Grant Awards as a function of time for fiscal years 2015-2024 with the results to date for fiscal year 2025 (red) revealing the widening gap.

7. To examine whether this widening gap in awards made could be addressed, I examined the historical rates of grant making over one-month periods. This analysis led to the conclusion that substantial action would have to be taken within a month or committing all of the appropriate funds would not be possible. Specifically, the NIH award rate would need to significantly accelerate likely by mid-June 2025. Absent substantial action, the NIH at the current award rate will not disburse all of its appropriated funds.



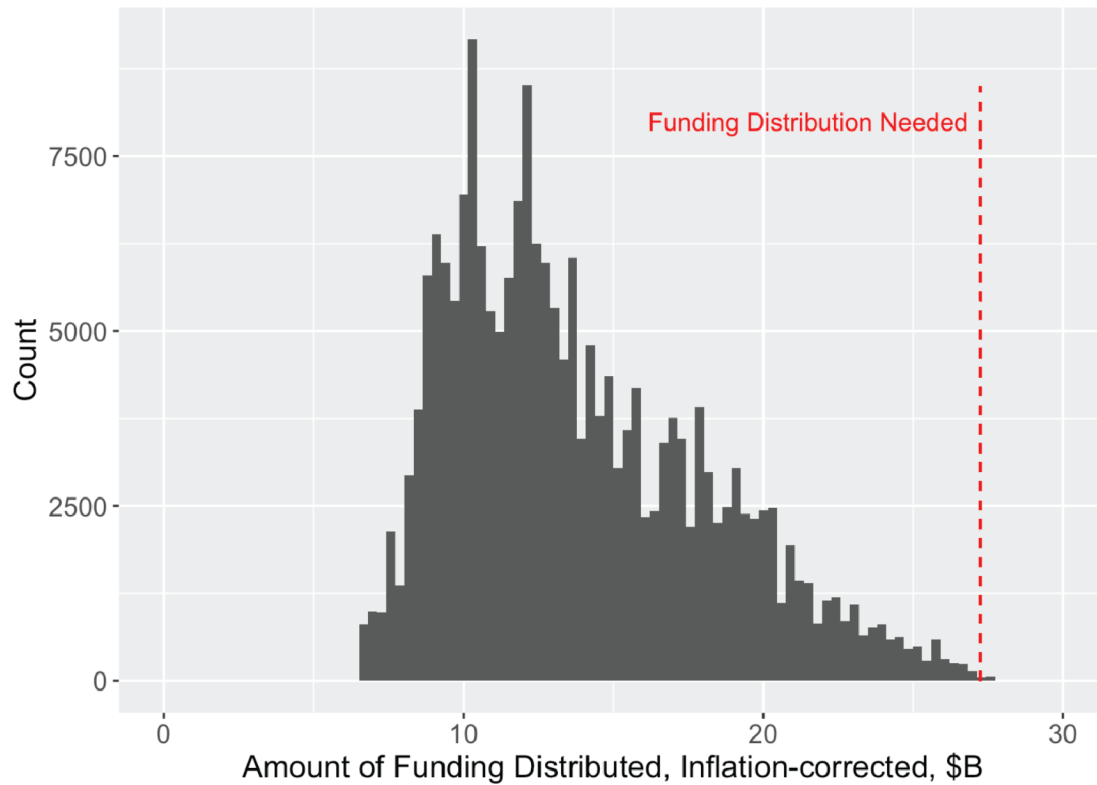
Extrapolation of ongoing behavior reveals that immediate action is needed to make sufficient awards before the end of the fiscal year.

8. I extended this analysis to look at 5-month windows (corresponding to the period from May 1st, 2025 to September 30, 2025). I first examined the number of awards that need to be made. To match the results for fiscal year 2024, an additional 46,444 awards would need to be made at or after May 1st. Notably, we are already into the month of May in 2025. This rate of grants awards is completely unprecedented.



A histogram of the number of awards made over all 152 day periods from fiscal years 2015-2024. The number of awards needed to be made from May 1st to September 30th is completely unprecedented.

9. I also completed the same analysis using the total amount of funding (in inflation-corrected dollars) needed from May 1st through September 30th. A total of \$27.25 billion must be committed over this period. The amount of total funding that needs to be distributed in the remainder of fiscal year has only been achieved five times in a 5-month window over all fiscal years considered.

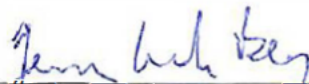


A histogram of the amount of funded distributed over all 152 day periods from fiscal years 2015-2024. The amount of funding needed for 2025 lies at the extreme edge of this distribution.

10. Note that I have not considered the impact of ongoing grant terminations in the above analyses. These will increase, perhaps substantially, the amount of funding that needed to be distributed.

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

Executed on this 5th day of May 2025, in Gibsonia, PA.

A handwritten signature in blue ink, appearing to read "Jeremy M. Berg", is written over a horizontal line.

Jeremy M. Berg, Ph.D.

Former Director (2003-2011)

National Institute of General Medical Sciences

National Institutes of Health