

ASBMB STATEMENT ON PRESIDENT TRUMP'S NATIONAL ADDRESS

This evening, President Donald Trump took to the airwaves to make the case for building a wall on the nation's southern border. The wall comes with a \$5 billion price tag, to be paid for by the American taxpayers. Border security is important, but immigration experts from across the political spectrum argue there is not a crisis that requires this level of investment.

If the president is looking for ways to invest \$5 billion that will make a difference to all Americans, might we suggest, first, ending the government shutdown that has stopped the National Science Foundation – for example – from investing in American scientists from coast to coast. Between Jan. 1 and Jan. 8, 2018, the NSF had funded 108 research grants valued at \$42 million. During that period this year, the NSF has issued no grants. So let's end the science shutdown. And if the president is still looking to spend \$5 billion in new investments, we have some suggestions.

The president could support the American scientific enterprise by:

- **Funding 10,364 new research grants at the National Institutes of Health.** R01 and R01-equivalent research grants are the lifeblood of the biomedical research enterprise in America. These are scientist-initiated, peer-reviewed research grants that lead to breakthroughs and cures for diseases. The average grant is worth \$482,395 over five years¹. Each grant funds on average six scientists and trainees and has marked effects on job creation and economic growth².
- **Funding 9,653 new three-year research grants at the National Science Foundation.** The NSF funds 359,000 scientists across the country on research on every topic — among them cybersecurity, agriculture, environmental issues and life sciences³ — and is the original source of funding behind the development of the laser, Google, and the gene-editing technique known as CRISPR.

Or, the president could support the next generation of scientists by:

- **Creating 36,231 new NSF graduate research fellowships.** The NSF program supports the training of outstanding STEM graduate students. The fellowship allows awardees increased independence from their research labs to explore innovative ideas and conduct research abroad to strengthen international collaboration. The program funded 2,000 fellowships in 2018⁴, with

¹ <https://nexus.od.nih.gov/all/2018/03/07/fy-2017-by-the-numbers/>

² <https://www.nih.gov/about-nih/what-we-do/impact-nih-research/our-society>

³ <https://nsf.gov/about/congress/reports/transforming2018.pdf>

⁴ https://www.nsf.gov/news/news_summ.jsp?cntn_id=245024&org=NSF

each awardee receiving a \$34,000 annual stipend for three years. The program has funded more than 50,000 graduate students since its inception in 1952⁵.

- **Creating 14,733 new training grants at the NIH.** NIH training awards are the agency's main funding mechanism for supporting the biomedical research workforce. These grants provide funding for undergraduate, graduate and postdoctoral trainees through individual fellowships and institutional grants toward careers in health-related fields⁶.
- **Creating 13,888 new Research Experiences for Undergraduates (REU) awards at NSF.** The REU program provides undergraduates with hands-on experiences in labs that conduct research on scientific topics funded by the NSF across the United States. Each student receives a stipend, housing, meals, and travel expenses for up to 10 weeks at a REU site. REU supplements are also provided to allow new and renewing NSF grants to incorporate student training opportunities in exciting new scientific research projects⁷.

Border security is important. But so is supporting the American scientist. President Trump needs to end this political charade over funding for a border wall, negotiate in good faith and work with Congress to reopen the government so that scientists can go back to helping build a stronger, safer, healthier and more prosperous America.

⁵ https://www.nsfgrfp.org/general_resources/about

⁶ <https://researchtraining.nih.gov/programs/training-grants?CFID=822601855&CFTOKEN=d92f021e7dcd82fd-D72AFCBE-5056-9439-7E8A7C8B81A54675>

⁷ https://www.nsf.gov/funding/pgm_summ.jsp?pims_id=5517