

# Testimony Submitted on Behalf of the American Physiological Society, Dennis Brown, Ph.D., President. Prepared for the Subcommittee on Labor, Health and Human Services, and Education, and Related Agencies.

The American Physiological Society (APS) thanks the subcommittee for its ongoing support of the National Institutes of Health (NIH). The \$2 billion funding boost you provided in FY 2017, following on the \$2 billion increase you provided in FY 2016, have put the NIH on a path toward sustainable budget growth. These much-needed increases will help NIH address critical health problems and emerging challenges through cutting-edge research. The APS urges you to sustain this critical effort by increasing the NIH budget to at least \$35 billion in FY 2018.

Federal investment in research is critically important because breakthroughs in basic and translational research are the foundation for new drugs and therapies that help patients, fuel our economy, and provide jobs. Moreover, the federal government is the primary funding source for discovery research through competitive grants awarded by the NIH. The private sector may develop new treatments, but it relies upon federally-funded research to identify where innovation opportunities can be found. This system of public-private partnership has been critical to U.S. leadership in the biomedical sciences.

Federal research dollars also have a significant impact at the local level: Approximately 84% of the NIH budget is awarded throughout the country to some 35,000 researchers. They in turn use these grant funds to pay research and administrative staff, purchase supplies and equipment, and cover other costs associated with their research. According to a 2016 report, NIH research funding in FY 2015 supported more than 350,000 jobs nationwide, generating more than \$60 billion in new economic activity.<sup>1</sup>

The \$2 billion increases Congress provided NIH in FY 2016 and 2017 are important steps toward correcting the effects of sequestration and years of declining budgets. To set the agency on a more sustainable path forward, we urge you to provide predictable annual budget increases that will allow the scientific enterprise to keep up with the rate of inflation and move in new directions.

In recent years, the NIH has embarked upon important initiatives for the agency, including the National Cancer Moonshot, the Precision Medicine Initiative and the Brain Research through Advancing Innovative Neurotechnologies (BRAIN) Initiative. These initiatives focus resources

on critical areas of scientific opportunity that are ripe for innovation, but it is important to bear in mind that these projects are only possible because of decades of basic research. NIH must continue to invest in creative investigator-initiated research to advance our knowledge and create future opportunities for innovation.

Over the past several decades, NIH has used a merit-based peer review system to identify and fund the best research proposals. As a result, Americans can expect to live longer and healthier lives. However, significant challenges still loom for our nation: An aging population will continue to strain an already stressed system of health care in the US. As the baby boom generation continues to age, we can expect to see increases in diseases that affect an aging population including diabetes, heart disease, and cancer. Developing better ways to detect and treat these diseases will reduce disease burden and ultimately help manage the strain that will be placed on the American health care system. New and emerging infectious diseases such as the Zika virus have highlighted the need to have a strong research infrastructure in place and a cadre of highly trained researchers ready to respond to an epidemic; using the results of decades of basic research to quickly learn about how infectious diseases spread and make people sick. To continue to be able to address these and other challenges on the horizon, the NIH needs additional resources.

The APS joins the Federation of American Societies for Experimental Biology (FASEB) in urging that NIH be provided with no less than \$35 billion in FY 2018.

*The American Physiological Society is a professional society dedicated to fostering research and education as well as the dissemination of scientific knowledge concerning how the organs and systems of the body work. The Society was founded in 1887 and now has more than 10,000 member physiologists. APS members conduct NIH-supported research at colleges, universities, medical schools, and other public and private research institutions across the U.S.*

<sup>1</sup> <http://www.unitedformedicalresearch.com/wp-content/uploads/2016/05/NIH-Role-in-the-Economy-FY15-FINAL-5.23.16.pdf>