

Testimony submitted by the American Physiological Society to the Appropriations Subcommittee on Labor, Health and Human Services, and Education, and Related Agencies on the topic of funding for the National Institutes of Health

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 2016 provided a much needed restoration of resources at a critical time, but great challenges are still before us. In order to continue meeting those challenges, the APS urges you to make every effort to provide the NIH with at least \$35 billion in FY 2017.

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. However, this position of leadership is at risk because other nations have been increasing their investments in research and development while the United States investment has been stagnant.

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.

The \$2 billion increase provided for FY 2016 was an important first step toward correcting the effects of sequestration and several years of declining budgets at the NIH. 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.

The FY 2017 budget request for the NIH highlights 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 will 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: Researchers are already working to understand emerging diseases such as the Zika virus; learning how it spreads, what effects it has on people who become infected, and what sort of threat it poses in the United States. 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. To continue to be able to address these and other challenges, the NIH needs additional resources.

This year the NIH issued the agency's first ever NIH-wide Strategic Plan¹. This document lays out NIH's plans to address the needs of the nation while maximizing scientific opportunity and supporting the biomedical research enterprise. Implementing the plan will require predictable, sustainable funding increases over the next several years. 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 2017.

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.

¹<http://www.nih.gov/sites/default/files/about-nih/strategic-plan-fy2016-2020-508.pdf>