Advances in biomedical and biological research have improved the health of our citizens, generated new treatments for life threatening diseases, and enhanced our quality of life. The opportunities for additional progress are enormous. The United States is the world leader in this crucial area of research, but our future success requires sustained and predictable growth in the federal investment in the nation’s research enterprise. This report presents FASEB’s fiscal year (FY) 2018 funding recommendations for the following federal agencies:

- National Institutes of Health (NIH)
- National Science Foundation (NSF)
- Veterans Affairs Medical and Prosthetic Research Program (VA)
- United States Department of Agriculture (USDA)
- Department of Energy Office of Science (DOE SC)

FASEB recommends at least $35.0 billion for NIH in FY 2018, which is an increase of $2.1 billion over the current funding level of $32.9 billion in FY 2017. This funding level would allow NIH to continue the effort to establish a pattern of increases for NIH and Human Services appropriations bill. We encourage Congress to build on the momentum from the funding increases provided in FY 2016 and through the 21st Century Cures Act, FASEB recommends at least $35.0 billion for NIH in FY 2018.

To enhance the nation’s capacity for biomedical research, and to keep pace with rising costs. These funds could also enable NIH to accelerate clinical trials for new therapies and take advantage of improvements in technology to further develop novel research methods and techniques. The $500 million already authorized through the 21st Century Cures Act would provide additional support in FY 2018 for research in four areas: cancer, precision medicine, neuroscience, and regenerative medicine. But there are other areas in urgent need of additional resources.

The funding level of $35.0 billion reflects the growth recommended in the bipartisan FY 2017 Senate Labor, Health and Human Services appropriations bill. We encourage Congress to continue the effort to establish a pattern of increases for NIH as there are excellent proposals for outstanding legacy.

Any questions or comments about this report should be directed to Teresa C. Yee, FASEB Director of Government Relations, at tyee@faseb.org. FASEB encourages everyone to follow us on Twitter @FASEBopa.
The federal government must renew its commitment to support fundamental, discovery-based science. Providing support for training of thousands of young scientists and engineers, ensuring the growth of a technical and scientific workforce capable of leading the world in the dynamic industries of the future. Our economy and quality of life are dependent upon our scientific and engineering prowess. We need to be at the forefront of research so that we can lead the world in innovation and harness the technologies of the future. The breadth and diversity of NSF’s portfolio enables the Foundation to capitalize on emerging research, foster interdisciplinary collaboration, and undertake bold, new scientific opportunities. However, despite its position as a cornerstone of America’s research enterprise, the budget for NSF has not grown in recent years. The interdisciplinary research portfolio of USDA brings cutting-edge science to bear on complex agricultural challenges.\(^9\) Great investments in agricultural research are needed to address global food demand, sustainably, and to keep the United States at the forefront of innovation in agricultural science.\(^6\) To address critical needs in agricultural science, AFRI should be funded at its full authorization level of $700 million ($350 million above current appropriations), which would support approximately 500 additional research grants.

FASER recommends at least $713 million for the VA Medical and Prosthetic Research Program (MVP) in FY 2018 in order to maintain purchasing power, support research on conditions common among service members returning from recent conflicts, and address the chronic care needs of the aging veteran population. In addition, there are several areas of VA research that remain critically underfunded including post-deployment mental health issues, substance abuse among veterans, and the long-term effects of exposure to hazardous materials.

A significant infusion of funds is also required to ensure that the VA can continue to support the Million Veterans Program (MVP) without reducing resources available for other departmental priorities. The MVP is a multi-year effort to collect genetic samples and general health information from a diverse group of veterans to understand how genes affect health in order to improve care.

FASER recommends at least $713 million for the VA Medical and Prosthetic Research Program in FY 2018 to maintain current service levels, sustain the MVP, and support emerging research areas that lack sufficient funding.

FASER recommends a budget of at least $8.0 billion in FY 2018 for NSF as a first step towards predictable, sustainable growth for our nation’s basic research enterprise.

The Department of Veterans Affairs (VA) Medical and Prosthetic Research Program improves the lives of veterans through innovations in basic, translational, clinical, health services, and rehabilitation research. Although VA research primarily focuses on health issues that affect veterans, the entire nation benefits from discoveries supported by the Medical and Prosthetic Research Program. The VA’s collaboration with university partners, nonprofit organizations, and private industry is a model for the development of innovative research to advance health care and prevention strategies. The research program also enables the VA to recruit and retain a cadre of outstanding physician scientists to care for our nation’s veterans.

The VA Medical and Prosthetic Research Program will need a budget of $713 million (an increase of $38 million) in FY 2018 in order to maintain purchasing power, support research on conditions common among service members returning from recent conflicts, and address the chronic care needs of the aging veteran population. In addition, there are several areas of VA research that remain critically underfunded including post-deployment mental health issues, substance abuse among veterans, and the long-term effects of exposure to hazardous materials.

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FASER recommends a budget of at least $5.9 billion for DOE SC in FY 2018. This increase represents a commitment to the critical research supported by the Department and would bolster the capacity of our National Laboratories and user facilities.

The Department of Energy Office of Science (DOE SC) is the single largest funder of basic physical sciences research in the nation, awarding competitive, merit-based grants to researchers at universities and research institutions across the country. A multitude of inventions and technologies that have transformed our lives can be traced back to DOE SC research, including nuclear energy, radiocarbon dating, superconductors, and lithium-ion batteries.\(^10\)

This capacity for discovery comes in large part from DOE SC National Laboratories that house state-of-the-art scientific instrumentation and computing facilities that cannot be duplicated in any other academic or industrial institution could construct or manage on its own. The laboratory facilities provide researchers with unique equipment that allows them to expand the frontiers of knowledge and translate discoveries into new inventions that drive the economy and improve our quality of life. In all, more than 31,000 scientists and engineers from academic institutions and private companies use the DOE labs to advance research and development.

Additional support for DOE SC in the years ahead is necessary to maintain facilities, invest in new instrumentation and equipment, and build new scientific infrastructure at the National Laboratories. An investment of $5.8 billion (approximately $450 million above currently appropriated funding) in DOE SC would allow DOE SC to make critical investments in its laboratories and user facilities. This recommendation is consistent with the growth trajectory proposed by the Senate Energy and Natural Resources Committee in its efforts to reauthorize DOE SC.\(^11\)

DEPARTMENT OF ENERGY OFFICE OF SCIENCE

1 https://www.nsf.gov/about

5 https://www.ars.usda.gov/about


11 FASER makes a recommendation to the Senate Committee on Appropriations in the Energy and Water Development Appropriations Act, FY 2018.