The Endocrine Society thanks the Subcommittee for the opportunity to submit the following testimony regarding Fiscal Year (FY) 2018 federal appropriations for biomedical research. To support necessary advances in biomedical research to improve health, the Endocrine Society recommends that the NIH receive a funding increase for FY 2018 of least $2 billion above the FY 2017 final appropriated amount. The Endocrine Society is the largest and most active professional organization of endocrinologists representing more than 18,000 members worldwide. Our organization is dedicated to promoting excellence in research, education, and clinical practice in the field of endocrinology. The Society’s membership includes basic and clinical scientists who receive federal support from the NIH to fund endocrine-related research focusing on, among other challenges, diabetes, cancer,
fertility, aging, obesity and bone disease. Our membership also includes clinicians who depend on new scientific advances to better treat and cure their patients’ diseases.

**Endocrine Research Improves Public Health**

Sustained investment by the United States federal government in biomedical research has dramatically advanced the health and improved the lives of the American people. The United States’ NIH-supported scientists represent the vanguard of researchers making fundamental biological discoveries and developing applied therapies that advance our understanding of, and ability to treat human disease. Their research has led to new medical treatments for both prevalent and rare diseases, saved innumerable lives, reduced human suffering, and launched entire new industries.

Endocrine scientists are a vital component of our nation’s biomedical research enterprise and integral to the healthcare infrastructure in the United States. Our members also play a central role in researching and treating two current public health crises: diabetes and obesity. Endocrine Society members study how hormones contribute to the overall function of the body, and how the glands and organs of the endocrine system work together to keep us healthy. Consequently, endocrinologists have a unique approach to and understanding of how the various systems of the human body communicate and interact to maintain health. The areas governed by the endocrine system are broad and essential to overall wellbeing; endocrine functions include reproduction, the body’s response to stress and injury, sexual development, energy balance and metabolism, bone and muscle strength, and others. Endocrinologists study glands such as the adrenal glands, pancreas, thyroid, and specific sections of the brain, such as the hypothalamus, that
control these glands. Endocrinologists also study interrelated systems, for example how hormones produced by fat can influence the development of bone disease.

**Flat Funding and Appropriations Gridlock Threaten Scientific Momentum**

The Endocrine Society was encouraged by the $2 billion increase for NIH in the FY 2016 Omnibus Appropriations bill. We also appreciated the proposed increase of $1.25 billion in the draft FY 2017 House LHHS funding bill. However, the NIH and other federal agencies continue to operate under a continuing resolution (CR) currently in place through April 28. The CR threatens to derail the significant progress gained through the FY 16 NIH funding increases. Without a final appropriation, the NIH cannot make decisions on many worthwhile grant applications, and the overall pace of scientific discovery is severely diminished by the ongoing fiscal uncertainty. Well-regarded research projects seeking cures for diseases are therefore left waiting for confirmation of the status of their grant application, and highly-qualified research staff are unable to put their expertise to productive use. Or worse, research labs are facing budget cuts and are forced to reduce staff, putting longstanding research programs in jeopardy.

We strongly urge the Congress to pass appropriations for the remainder of FY 2017; a full-year CR, in contrast, will cut many necessary programs and projects that are already stretched thin.

For example, gestational diabetes mellitus (GDM) is a major complication that occurs in nearly 7% of pregnancies in the United States each year. GDM significantly increases the risk of adverse pregnancy outcomes, and the research community needs new insights on
effective treatment approaches that could be provided through large clinical trials\(^1\). Because of budgetary restrictions, clinical trials on GDM are underfunded and will continue to be a critical research gap in FY 18 unless NIH sees significant increases in funding.

**Type-1 Diabetes Research & Type-2 Diabetes Prevention is Threatened in FY 2017**

The Endocrine Society is particularly concerned about the future of the Special Diabetes Program (SDP) administered by the National Institute of Diabetes and Digestive and Kidney Disease. The SDP was created in 1997 to advance research for type 1 diabetes and to address the disproportionate burden of type 2 diabetes on American Indians and Alaska Natives. Research funded by the SDP has made outstanding contributions to our understanding of, and ability to treat diabetes in the United States. The SDP has advanced research in islet cell transplantation, beta cell therapy, treatment for diabetic retinopathy, and the development of an artificial pancreas\(^2\). Without reauthorization, the SDP is set to expire in 2017. We urge the congress to renew the SDP for an additional two years and the appropriations committee to provide $150 million for FY 2018. We also recommend that the National Diabetes Prevention Program (NDPP) receive an FY 2018 appropriation of $25


million. NIH research has shown that lifestyle interventions offered through NDPP are very effective in reducing the risk of developing type 2 diabetes.

**FY 2018 NIH Funding Request**

The Endocrine Society recommends that the Subcommittee provide at least a $2 billion increase in funding for NIH in the FY 2018 Labor-HHS-Education Appropriations bill over the FY 2017 amount. This funding recommendation represents the minimum investment necessary to avoid further loss of promising research and at the same time allows the NIH’s budget to keep pace with biomedical inflation. We fully understand that the Appropriations Committee faces challenging decisions in FY 2018; however, we believe additional cuts to the NIH and other nondefense discretionary programs is not the way to solve the budgetary issues facing the United States.

The Endocrine Society remains deeply concerned about the future of biomedical research in the United States without sustained support from the federal government. Flat funding levels in 2017 and 2018 would imperil the nation’s world-class scientific enterprise. The biomedical research community requires steady, sustainable increases in funding to ensure that the promise of scientific discovery can efficiently be translated into new cures. NIH grant success rates are predicted to remain at historically low averages, meaning that highly skilled scientists will continue to spend more time writing highly meritorious grants that will not be funded. Young scientists will also continue to be driven out of biomedical research careers due to the lack of funding.

The Society strongly supports increased federal funding for biomedical research to provide the additional resources needed to enable American scientists to address scientific
opportunities and maintain the country’s status as the world’s preeminent research engine. We would greatly appreciate your continued support.