FY 2025 SENATE APPROPRIATIONS COMMITTEE WRITTEN TESTIMONY SUBMITTED BY THE ENDOCRINE SOCIETY FOR THE SUBCOMMITTEEE ON LABOR, HEALTH, & HUMAN SERVICES, EDUCATION, AND RELATED AGENCIES ADDRESSING THE NATIONAL INSTITUTES OF HEALTH, CENTERS FOR DISEASE CONTROL AND PREVENTION, AND TITLE X

May 20, 2024

The Endocrine Society thanks the Subcommittee for the opportunity to submit the following testimony regarding Fiscal Year (FY) 2025 federal appropriations for biomedical research and public health programs. The Endocrine Society is the world's oldest and largest professional organization of scientists devoted to hormone research and physicians who care for people with hormone-related conditions. The Society's membership includes basic and clinical scientists who receive support from the National Institutes of Health (NIH) for research on endocrine diseases that affect millions of Americans, such as diabetes, thyroid disorders, cancer, infertility, aging, obesity, and bone disease. Our membership also includes clinicians who depend on new scientific advances to better treat and cure these diseases and who value federal prevention and treatment programs. To support necessary advances in biomedical research to improve health, the Endocrine Society recommends the following FY 2025 appropriations:

- NIH- \$51.303 billion exclusive of additional funds to the Advanced Research Projects Agency for Health (ARPA-H)
- Centers for Disease Control and Prevention (CDC)- \$11.58 billion
- Title X program- \$512 million

<u>Investment in NIH is Essential</u>- We urge the Congress to provide at least \$51.303 billion to continue its bipartisan support for NIH, ensure consistent increases across all Institutes and Centers (ICs), and protect investigator-initiated research.

Endocrine Research Improves Public Health and Saves Money

NIH-supported scientists are making fundamental biomedical discoveries that lead to the development of applied therapies and advance our ability to treat diseases, often at a fraction of the cost of managing these conditions. Our members' research has led to the development of new medical treatments, saved millions of lives, improved overall quality of life, and contributed billions of dollars to the US economy. NIH-funded research also provides opportunities to reduce healthcare costs. For example, osteoporosis, which is an endocrine-related disease disproportionately affecting women, costs the U.S. \$17 billion annually in direct care¹. NIH-funded research has identified that one of the best predictors of osteoporosis in post-menopausal women is bone mineral density of the hip. Discovering predictive measures like bone mineral density can lead to improved diagnosis, savings in healthcare costs, and improved quality of life.

¹ Tran O, Silverman S, Xu X, Bonafede M, Fox K, McDermott M, Gandra S. Long-term direct and indirect economic burden associated with osteoporotic fracture in US postmenopausal women. Osteoporos Int. 2021 Jun;32(6):1195-1205. doi: 10.1007/s00198-020-05769-3. Epub 2021 Jan 7. Erratum in: Osteoporos Int. 2022 Aug;33(8):1835. PMID: 33411007; PMCID: PMC8128807.

Despite many successes, however, NIH funding is not keeping pace with inflation and has not achieved considerable growth in real terms relative to FY 2003 funding levels².

Effective Progress Requires Consistent Support Across NIH

The endocrine system affects all areas of human health. Consequently, our members are funded through at least 18 different Institutes and Centers (ICs) across NIH. For example:

- National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK) researchers are developing technologies such as a "bionic pancreas", which uses next-generation technology to automatically deliver insulin to those with Type 1 Diabetes.³
- Endocrinologists funded by the National Institute of Environmental Health Sciences (NIEHS) and National Institute for Child Health and Human Development (NICHD) are aiming to improve our understanding of how climate change will impact fertility⁴, and how endocrine disrupting chemicals and other environmental toxicants like Per- and Polyfluoroalkyl Substances (PFAS) affect bone health in children⁵.
- Endocrine oncologists supported by the National Cancer Institute (NCI) and NIEHS are contributing knowledge of how drugs and consumer products can contribute to cancer risk^{6,7}.
- Endocrine researchers funded by the National Institute of Mental Health (NIMH) and Office of Research on Women's Health are helping us better address gaps in understanding of how sex differences contribute to mental illness⁸.

We also urge you to apply funding increases consistently to all ICs and offices at NIH to effectively advance biomedical research. We are concerned that when funding is applied disproportionally and at the expense of certain ICs, payline disparities increase and gaps in our understanding of important biological pathways emerge.

Funding for Women's Health Research is Critical

The Endocrine Society applauds the White House Executive Order on Women's Health Research and Innovation. Women's health has suffered from a historical underinvestment and persistent bias that favored the study of male research subjects and led to significant gaps in research and

² National Institutes of Health (NIH) Funding: FY 1996-FY 2023. Congressional Research Service. https://sgp.fas.org/crs/misc/R43341.pdf. Updated May 20, 2022. Accessed March 8, 2022.

³ Bionic Pancreas Simplifies Management of Type 1 Diabetes. NIH Research Matters, National Institutes of Health. https://www.nih.gov/news-events/nih-research-matters/bionic-pancreas-simplifies-management-type-1-diabetes. Updated October 18, 2022. Accessed March 10, 2023.

⁴ Gaskins AJ, Mínguez-Alarcón L, VoPham T, Hart JE, Chavarro JE, Schwartz J, Souter I, Laden F. Impact of ambient temperature on ovarian reserve. Fertil Steril. 2021 Oct;116(4):1052-1060. doi: 10.1016/j.fertnstert.2021.05.091. Epub 2021 Jun 9. PMID: 34116830; PMCID: PMC8478715.

⁵ Kirk, A., et al., PFAS and Potential Adverse Effects on Bone and Adipose Tissue Through Interactions With PPARy. Endocrinology. 2021 Dec; 162(12): bqab194.

⁶ https://www.endocrine.org/news-and-advocacy/news-room/featured-science-from-endo-2021/drug-used-during-pregnancy-may-increase-cancer-risk-in-mothers-adult-children

⁷ https://endocrinenews.endocrine.org/edc-exposure-during-pregnancy-may-reduce-breast-cancer-protection/ ⁸ Fish AM, Nadig A, Seidlitz J, Reardon PK, Mankiw C, McDermott CL, Blumenthal JD, Clasen LS, Lalonde F, Lerch JP, Chakravarty MM, Shinohara RT, Raznahan A. Sex-biased trajectories of amygdalo-hippocampal morphology change over human development. Neuroimage. 2020 Jan 1;204:116122. doi: 10.1016/j.neuroimage.2019.116122. Epub 2019 Aug 27. PMID: 31470127; PMCID: PMC7485527.

understanding. It is critical there be adequate funding for this initiative and that funding strategies include research throughout the entire life course, from development *in utero* through advanced age. While we appreciate that a woman's reproductive-age years are a critical window in the contest of public health, to truly impact women's health this initiative must not be limited to only a few diseases affecting women during reproductive years; rather, it needs to study how hormonal status may influence health and disease in myriad ways, including as the fundamental drivers of different disease and treatment outcomes between men and women.

Funding for ARPA-H Must Not Erode Support for Investigator-Initiated Research

The Endocrine Society is enthusiastic about the potential for ARPA-H to advance transformative public health interventions and develop new research platforms that deliver improved care to patients quickly and efficiently. Investments for ARPA-H, however, must not come at the expense of the investigator-initiated research that has been primarily responsible for the numerous NIH-supported public health achievements. While complementary, NIH and ARPA-H have distinct but critical missions and should therefore be budgeted separately. **Funding for ARPA-H should supplement rather than supplant NIH funding.**

NIH Funding is Vital for the Future of Health, Research, and US Competitiveness
NIH provides extramural research funding to all 50 states, supporting investigator-initiated meritorious research that drives scientific discoveries, innovation, and economic competitiveness. While the success rate for receiving new research project grants was 21.3% for FY23 across all NIH Institutes and Centers (ICs)⁹, the payline, or cutoff, for funding at some ICs is incredibly selective. Paylines for FY24 are as low as 9% for research project grants¹⁰. As a result, grants that score highly but do not meet the threshold for an award are not funded. These narrow paylines stifle scientific and medical progress that could benefit millions of Americans. At a minimum, federal funding for NIH must keep pace with inflation to support the biomedical research enterprise. If NIH funding remains stagnant, Institute Directors will be forced to further restrict paylines, resulting in fewer opportunities for investigator-initiated research across the United States and will lead to local and state economic disruptions. Not only will flat funding hinder research progress, it will threaten the future STEM workforce by dissuading future generations from pursuing research careers and cause the U.S. to rapidly lose its global competitiveness and leadership.

<u>Adequate Funding of CDC Programs Is Necessary to Protect the Public's Health –</u> We urge Congress to support the CDC with an appropriation of at least \$11.58 billion and protect the work of the National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). We urge Congress to support \$40 million for the National Diabetes Prevention Program in FY 2025.

⁹ FY 2023 By the Numbers: Extramural Grant Investments in Research. NIH Office of Extramural Research. Updated February 21, 2024. Accessed April 24, 2024. https://nexus.od.nih.gov/all/2024/02/21/fy-2023-by-the-numbers-extramural-grant-investments-in-research/

¹⁰ NIAID Paylines. Updated April 23, 2024. Accessed April 24, 2024. https://www.niaid.nih.gov/grants-contracts/niaid-paylines

Title X Funding Provides Necessary Services and Reduces Healthcare Costs

Title X is an important source of funding for ensuring reproductive health benefits, including both contraceptive and preventive services to low-income individuals and families. Offering affordable access to contraception can have a measurable impact on healthcare costs. For every public dollar invested in contraception, short-term Medicaid expenditures are reduced by \$7.09 for the pregnancy, delivery, and early childhood care related to births from unintended pregnancies, resulting in savings of \$7 billion to federal and state governments¹¹. Title X is the main point of care for low income, under- or un-insured, adults and adolescents for affordable contraception, cancer screenings, sexually transmitted disease testing and treatment, and medically-accurate information on family planning options. However, to provide these services to the over 4 million people who depend on Title X-funded centers, Title X is significantly underfunded. Therefore, we support at least \$512 million for the Title X Program.

Advancing Research on Anti-Obesity Medication- Report Language Opportunity

Given the prevalence and economic toll of obesity in the US, therapies like GLP-1 agonists are of the utmost importance to address the obesity epidemic. While GLP-1 agonists show promise for the treatment of obesity, we recommend the addition of the report language below that calls for additional research on this class of medications to be conducted to explore its full potential.

Benefits and Risks of Obesity Therapies – The advent of a new class of anti-obesity medications, GLP-1 agonists, has given physicians effective new tools to address the obesity epidemic. Combined with preventative measures, these new medicines have transformed the treatment of obesity as a disease and could improve quality of life for individuals with obesity across the country. Emerging research suggests that these drugs may also have a potential benefit for individuals suffering from addiction to alcohol or to other drugs of abuse. The Committee urges the Department to evaluate the work being done across agencies on the risks and benefits of GLP-1 agonists, including new clinical trials and basic research that enhances our understanding of the physiological processes and pathways affected by these drugs, with an appreciation of the potential for sex-specific effects. The Secretary shall provide an update on scientific progress and discoveries, including research opportunities that can be addressed by NIH, FDA, SAMHSA and other agencies as appropriate.

Conclusion

The future of the nation's health and economy depends on robust biomedical research and health funding. We recognize that the current budget process needs to be changed and Congress will need to address major policy issues to be fiscally responsible. We strongly encourage Congress to create a budget that supports the nation's priorities and ensures that non-defense discretionary spending, including health and biomedical research funding, continues to receive increases. Flat funding is a cut and will mean that there will be fewer research grants, Americans will have less access to health and prevention services, and the U.S. will lose its status as a leader in medical research. The Endocrine Society respectfully asks the Subcommittee to support our funding recommendations for the NIH, CDC, and Title X in its FY 2025 appropriations bill.

¹¹ Frost JJ, et al., Publicly Funded Contraceptive Services at U.S. Clinics, 2015, New York: Guttmacher Institute, 2017.