ENDOCRINE SOCIETY
Hormone Science to Health

Endocrine Society comments in response to "NICHD Strategic Plan 2025". Response was informed by members of the Research Affairs Core Committee (RACC).

Comments were submitted by email to NICHDStrategicPlan@nih.gov on September 23, 2024.

Diana W. Bianchi, M.D.
Director, Eunice Kennedy Shriver National Institute of Child Health and Human Development
Building 31, Room 2A03
31 Center Drive
Bethesda, MD 20892

September 23, 2024

Dear Dr. Bianchi,

The Endocrine Society appreciates the opportunity to comment on the request for information (RFI) to shape the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD) Strategic Plan for FY2025-FY2029.

Founded in 1916, the Endocrine Society is the world's oldest, largest, and most active organization devoted to research on hormones and the clinical practice of endocrinology. Our membership consists of over 18,000 scientists, physicians, educators, nurses, and students from more than 120 countries. Many of our members conduct research supported by NICHD, including on topics related to reproductive health, developmental biology, and other areas relevant to NICHD's mission that are driven or impacted by hormones.

Upon our review of the current plan, our members identified several opportunities that if adopted would advance our shared research objectives. These include specific research opportunities and broader recommendations that encompass NICHD's overall portfolio.

<u>Research Goals</u>
Research Goal #2: Promoting Gynecologic, Andrologic, and Reproductive Health

2055 L Street NW
Suite 600
Washington, DC
20036

T. 202.971.3636
F. 202.736.9705

endocrine.org

Our members report that infertility and subfertility remain critical areas of study, and we appreciate the incorporation of these topics into this research goal. Recent advancements have shown that new ex vivo technologies to restore or generate gametes are promising avenues to develop solutions for patients suffering from these conditions. We recommend that infertility and subfertility continue to be emphasized in the next iteration of the plan, and that NICHD prioritize research towards developing new technologies for restoring or generating gametes ex vivo.

Research Goal #4: Improving Child and Adolescent Health and the Transition to Adulthood

We commend NICHD for supporting research on developmental biology from infancy through adulthood. These studies remain essential for ensuring the health and well-being of infants and children as they transition through life stages. While we appreciate the importance of gonadal hormones for development throughout life, other hormones and pathways influence developmental trajectories in complex ways and with impacts on a variety of diseases. We therefore recommend that NICHD also explicitly incorporate research on gonadal and non-gonadal hormone biology and signaling within this research goal. We also suggest that the strategic plan include research on long-term outcomes of hormonal therapies for adolescent patients; this would encompass hormonal therapies for pubertal disorders as well as for transgender individuals.

<u>Cross-cutting theme: Research Training</u>

Our members agree that research training should incorporate relevant themes that influence questions across fields and disciplines. Training programs should reflect developments in emerging research areas and important questions, as well as new policies that improve outcomes across the biomedical research enterprise, such as the NIH policy on Sex as a Biological Variable in Research. Training programs should therefore incorporate e.g., methodologies focused on investigating sex differences, so that the next generation of researchers is prepared to more efficiently identify sex differences in research topics within the NICHD mission and develop more effective interventions for men and women.

<u>Other General Recommendations:</u> The following are some additional research priorities that we recommend NICHD consider for inclusion in the strategic plan:

- Gonadal Hormone Replacement Therapy (HRT) promotes bone health, prevents sarcopenia, and mitigates risk factors for cardiovascular disease. We recommend that research on hormone replacement in aging men and women be elevated as a

research priority to better understand the mechanisms by which HRT achieves these and other benefits.

- We recommend that research to identify sex differences, including chromosomal, anatomical, and hormonal factors, be supported to assist in identifying molecular targets for the development of novel therapeutics for the treatment of diseases and disorders.
- The effects of gonadal hormones are critical to development and general wellbeing. We recommend that the strategic plan prioritize research that aims to understand the effects of gonadal hormones on overall wellness. Furthermore, additional research should be conducted to develop new technologies for restoring or administering gonadal hormones.

The Endocrine Society commends NICHD for the thoughtful development of this strategic plan and appreciates the ability to provide input to shape updates to the strategic plan moving forward. Thank you for considering our suggestions. If we can be of further assistance, please contact Sophia Kaska, PhD, Manager of Science Policy and Research Affairs at skaska@endocrine.org.

Sincerely,

John Newell-Price, MD, PhD, FRCP
President
Endocrine Society