

Janine Clayton, MD
Director, Office of Research on Women's Health
6707 Democracy Boulevard
Bethesda, MD 20817

September 29, 2022

Dear Dr. Clayton,

The Endocrine Society appreciates the opportunity to make recommendations to inform the National Institutes of Health (NIH) Strategic Plan for Women's Health Research for the period of 2023 to 2028. 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. Today, our membership of over 18,000 includes researchers committed to basic and clinical research in support of women's health, and practitioners dedicated to women's health issues. In our comments, we identify new areas of scientific opportunity and cross-cutting themes that we believe should be included in the new Strategic Plan.

Research opportunities in the NIH Strategic Plan that should be modified to account for recent scientific advances

Research accomplished in the context of the previous Strategic Plan has advanced our understanding of important topics that should be maintained in future iterations of the plan, including pregnancy and related medical conditions such as hypertension, preeclampsia, diabetes, miscarriage, and maternal mortality. We also recognize that improved knowledge of sex and gender differences in health and disease, as well as the important role of race/ethnicity in women's health, have generated new opportunities in many fields, encompassing basic and clinical research, to better understand sex as a biological variable and the influence of hormones and gender identity in health. For example, basic research could help us better understand the role of androgens, including 11-ketotestosterone as a major androgen in women.

We note and support ORWH's focus on diseases that only or disproportionately affect women, such as breast and ovarian cancer, PCOS, and endometriosis; as well as diseases that have differential effects in women than men, such as thyroid, autoimmune, or gastrointestinal disorders. We also support additional research on menopause, including a focus on medical therapies to alleviate the symptoms of menopause. However, less common/rare forms of these diseases (e.g., metaplastic breast cancer or ovarian sarcoma) remain relatively under-supported. We urge ORWH to work across NIH to identify and support research on rare forms of diseases that disproportionately or only affect women.



Emerging research needs and opportunities

ORWH should consider the role of the environment in all aspect of women’s health, including many of the specific disease areas mentioned above. We encourage ORWH to collaborate with other Institutes and Centers in the context of their respective missions on novel research topics in women’s health. For example, ORWH should collaborate with NIEHS, NIA, NICHD, and others to advance knowledge on the effects of endocrine-disrupting chemicals (EDCs) and other environmental exposures, including climate change, on timing of puberty and reproductive aging. Such studies should incorporate basic mechanistic research as well as population-level studies.

ORWH should also collaborate with NICHD on contraception research programs to better understand factors that affect the accessibility of contraceptive methods such as Plan B and other forms of birth control. It will be important to monitor accessibility to contraception and reproductive care in different regions of the United States following legislative and judicial developments which may have consequences on access to contraception. Additionally, ORWH should work with other agencies across the government to implement mechanisms to promote the understanding of birth control in medically underserved communities.

We also note the urgent clinical challenges and research questions for transgender populations, such as the safety of continued use of hormone therapy in transgender women throughout aging and the impact of gender minority stress on health disparities. We urge ORWH to explicitly include research questions for people taking feminizing gender-affirming hormones in goals and objectives throughout the plan. More broadly, research on feminizing and masculinizing gender-affirming treatment and effects on brain, bone, metabolism, and cardiovascular risk would clarify risks of treatment and advance our understanding of hormonal treatments in all people regardless of gender identity.

Cross Cutting Themes

In addition to the specific areas identified above, we identify several cross-cutting themes and approaches below:

- Research should advance the application of basic and clinical research findings; objectives should be updated to reflect the need to enhance the ability of existing resources and data and create novel approaches to achieve clinical impact - e.g., in clinical practice guidelines.
- We urge ORWH to explicitly include pediatric and geriatric populations in goals and objectives throughout the plan. For example, studies devoted to both typical and abnormal growth and development in pediatric populations should be supported.



- We strongly support the continuation of the Specialized Centers for the Study of Sex Differences (SCORE) and the BIRCWH program. As the NIH policy to consider sex as a biological variable in research continues to be implemented, ORWH should explore opportunities to expand and enhance the integration of the centers with other institutional research activities to ensure that researchers across disciplines are engaged and able to investigate sex-specific effects.

As we learn more about the challenges facing women in research and the educational needs of researchers throughout their careers, new solutions to help build a well-trained, diverse, and vigorous women's health research workforce should be identified, pursued and implemented. For example, mentoring and educational efforts need to be matched with the needs of scientists and clinicians at all educational and career stages, from primary school through establishment of a stable professional career in research and/or clinical practice. Researchers have different needs at different career stages, and mentors will need different expertise to assist, for example, an undergraduate seeking a career in science or an early-stage investigator seeking promotion. Finally, to further advance the science of women's health research, educational programs need to recognize the study of women's health and sex differences prior to advanced professional training.

Conclusion

Research findings consistent with the goals in the Strategic Plan for Women's Health Research have advanced our knowledge of sex differences and created opportunities to further improve the health of women. Moreover, progress towards the goals of the strategic plan will increase understanding of the unique health challenges facing women and how this increased knowledge of sex differences will improve the health of all citizens. The Endocrine Society stands ready to partner with the Office of Research in Women's Health in support of the strategic plan. Our members can advance the goals of the plan not only through their research leadership, but also through our international reach and high-impact programs. Thank you for considering the Endocrine Society's comments. If we can be of any further assistance, please contact Alyssa Scott, PhD, Manager of Science Policy and Research Affairs at ascott@endocrine.org.

Sincerely,

Ursula B Kaiser, MD
President, Endocrine Society