

Reframing Midlife Women's Health: Challenges and Opportunities

Agenda:

September 15, 8:30 am – 5:00 pm (ET)

Midlife is a critical phase in women's health, spanning approximately ages 35 to 65 and encompassing the late reproductive years, menopause transition, and postmenopause. This period is characterized by complex and interacting biological, hormonal, environmental, and psychosocial changes that shape long-term health trajectories, quality of life, and risk for chronic disease. While menopause is often the focal point, midlife health reflects a broader interplay between reproductive aging, somatic aging, life course exposures, and cultural, social, and environmental factors.

Despite growing attention, research in this area remains fragmented and disparate outcomes and experiences exist. Key gaps persist in how midlife is defined and studied; how symptoms and outcomes—such as sleep, musculoskeletal health, brain health, and functional status—are measured; and how to distinguish the effects of reproductive aging from those of chronological aging. Limitations in study design, population representation, cultural context, and longitudinal data further constrain progress, even as new tools such as artificial intelligence and digital health technologies offer both opportunities and challenges. At the same time, critical clinical questions remain unresolved, particularly regarding the timing, duration, and role of interventions across the midlife transition, and prevention strategies are inconsistently applied. Misinformation and inconsistent communication continue to shape understanding and decision-making for both patients and clinicians.

In response to these challenges, the National Academy of Medicine, in collaboration with the National Academies and the NIH Office of Research on Women's Health, will convene a one-day public workshop to assess the state of the science, identify key gaps in evidence and methodology, and explore opportunities to advance a more integrated, coordinated, and actionable research agenda for midlife women's health.

Workshop Objectives

- Define midlife as a critical window for women's health and clarify the interplay between reproductive aging, somatic aging, and long-term disease risk.
 - Examine biological mechanisms and life course factors that shape midlife health and influence trajectories of chronic disease.
 - Identify key methodological challenges, including defining and characterizing perimenopause, distinguishing aging processes, improving inclusion, and leveraging emerging analytic tools.
 - Explore opportunities to strengthen prevention and population health strategies, including the timing of interventions and approaches to earlier risk identification and reduction.
 - Assess challenges in communication, education, and decision-making, including clinical uncertainty, evolving evidence, and the impact of misinformation.
 - Explore how cultural beliefs, perceptions, and expectations influence the menopausal and perimenopausal experience, including women's willingness to engage with and accept recommended interventions.
 - Identify priorities for action, including interdisciplinary research, stakeholder coordination, and policy and financing opportunities to advance a more integrated and impactful research agenda.
-

- 9:00 am WELCOME AND MEETING OVERVIEW**
- Elizabeth Eide, National Academies of Sciences, Engineering, and Medicine
 - Janine Clayton, NIH Office of Research on Women's Health
- 9:30 am REFRAMING MIDLIFE AS A CRITICAL WINDOW FOR WOMEN'S HEALTH (KEYNOTE)**
- Session Objectives:*
- Frame midlife as a distinct and heterogeneous phase of women's health.
 - Establish midlife as a critical window for long-term health and research.
 - Discuss the relationship between reproductive aging, chronological aging, and disease risk.
 - Surface priority questions for research, clinical care, and action.
- Speakers:*
- Nanette Santoro, University of Colorado (*video remarks*)
 - JoAnn Pinkerton, University of Virginia
- 10:15 am PANEL I: BIOLOGY AND THE LIFE COURSE – MECHANISMS AND RISK TRAJECTORIES**
- Session Objectives:*
- Examine biological mechanisms underlying midlife health, including reproductive aging, chronological aging, and genetic or chromosomal influences.
 - Explore perimenopause as a window of biological change and risk emergence.
 - Assess how life course factors, including reproductive history and timing of menopause, influence symptom experience and disease risk.
 - Clarify pathways linking midlife biological changes to chronic disease outcomes.
 - Identify gaps related to timing, critical windows, and population heterogeneity.
- Moderator:* Genevieve Neal-Perry, University of North Carolina Chapel Hill
- Speakers:*
- Jane Cauley, University of Pittsburgh
 - Samar El Khoudary, Virginia Commonwealth University
 - Sherita Golden, Johns Hopkins University
 - Pauline Maki, University of Illinois
 - Nick Panay, Imperial College London (*virtual*)
- 11:30 am LUNCH BREAK (30 mins)**
- 12:00 pm PANEL II: STRENGTHENING METHODS AND MEASUREMENT IN MIDLIFE WOMEN'S HEALTH**
- Session Objectives:*
- Identify methodological barriers that limit progress in midlife research.
 - Consider how to strengthen approaches to defining, characterizing, and measuring perimenopause and midlife health.
 - Assess gaps in study design, population representation, longitudinal data, and outcome measurement.
 - Explore how emerging tools and data sources which may serve to better capture heterogeneity and change over time.

Moderator: Crystal Schiller, University of North Carolina

Speakers:

- Yamnia Cortés, University of Iowa
- Sybil Crawford, University of Massachusetts
- Andrea LaCroix, University of California San Diego (*virtual*)
- Rebecca Thurston, University of Pittsburgh

1:15 pm

PANEL III: ADVANCING PREVENTION AND TREATMENT IN MIDLIFE

Session Objectives:

- Assess opportunities to shift midlife care from late-stage treatment to earlier risk identification and prevention.
- Evaluate evidence for lifestyle, behavioral, hormonal, nonhormonal, and emerging interventions for symptom management and risk reduction.
- Identify key uncertainties related to timing, duration, effectiveness, and appropriate use of interventions across the midlife transition.
- Examine barriers to consistent, equitable, and evidence-based care.
- Explore scalable models to improve prevention, treatment, and long-term health outcomes.

Moderator: Stephanie Faubion, Mayo Clinic

Speakers:

- Chika Anekwe, Massachusetts General Hospital (*virtual*)
- Alison Huang, University of California San Francisco
- Roger Lobo, Columbia University (*virtual*)
- Claudio Soares, Queen's University

2:30 pm

BREAK (15 mins)

2:45 pm

PANEL IV: COMMUNICATION, MISINFORMATION, AND DECISION-MAKING IN MIDLIFE HEALTH

Session Objectives:

- Examine how evidence on midlife health is communicated and interpreted.
- Identify how misinformation, fragmented narratives, and direct-to-consumer messaging shape patient expectations and decisions.
- Assess challenges in communicating uncertainty, risks, benefits, and individualized treatment decisions.
- Address gaps in clinician education, patient education, and decision support.
- Explore strategies to strengthen trusted guidance and shared decision-making.

Moderator: Lisa Larkin, Ms. Medicine

Speakers:

- Joy D. Calloway, Black Women's Health Imperative
- Suzanne C. Makarem, Virginia Commonwealth University
- Rachel Novik, Cleveland Clinic

- Lauren Streicher, Northwestern University
- Makeba Williams, University of Illinois

4:00 pm FIRESIDE DISCUSSION: WHAT'S NEXT? PRIORITIES AND PATHWAYS FOR IMPACT

Session Objectives:

- Identify near-, medium-, and long-term priorities for advancing midlife health.
- Highlight cross-cutting gaps requiring coordinated, interdisciplinary action.
- Define stakeholders roles across research, care, education, policy, and financing.
- Explore opportunities for partnerships, investment, and implementation.
- Clarify next steps to strengthen the evidence base and improve care.

Moderator: Anita Ravi, PurpLE Health Foundation

Speaker:

- Paula Schneider, Institute Advancing Women's Health

4:50 pm CLOSING REMARKS

- Kathryn Schubert, Society for Women's Health Research

5:00 pm ADJOURN MEETING