

7TH ANNUAL
VIVIAN W. PINN
SYMPOSIUM

Menopause and Optimizing Midlife
Health of Women

May 16, 2023



Overview

7TH ANNUAL VIVIAN W. PINN SYMPOSIUM:
Menopause and Optimizing Midlife
Health of Women

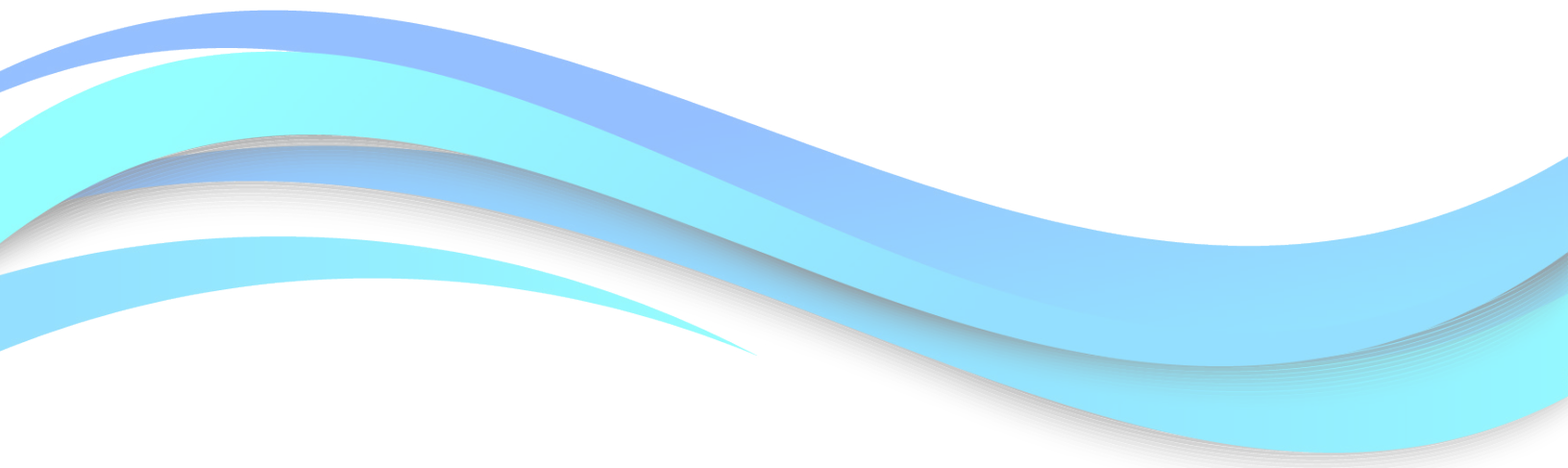
The Vivian W. Pinn Symposium honors the first full-time Director of the National Institutes of Health (NIH) Office of Research on Women's Health (ORWH), Dr. Vivian Pinn, and is held every year during National Women's Health Week. This event serves as a critical forum for experts across sectors to communicate and collaborate for the advancement of women's health.

The title of this year's symposium is "Menopause and Optimizing Midlife Health of Women." The symposium will discuss the menopausal transition, the accumulation of morbidity after menopause, menopause in special populations, the influence of social determinants of health on the experience of menopause, the use of menopausal hormonal therapy, and interventions to promote healthy aging.

Providing the keynote address, "Menopausal Hormone Therapy: 30 Years of Lessons from the Women's Health Initiative," is JoAnn Manson, M.D., M.P.H., Dr.P.H., MACP, Professor of Medicine and the Bell Professor of Women's Health, Harvard Medical School, Chief of Preventive Medicine, Brigham and Women's Hospital, Boston. A patient advocacy panel will discuss the patient perspective of menopause.

The objectives of the symposium are to:

- Familiarize attendees with state of the science related to our understanding of risk factors and mechanisms that lead to reproductive aging.
- Understand women's unique morbidity and multimorbidity burden to identify points of intervention.
- Identify the needs of populations at risk for iatrogenic menopause (e.g., patients with germline inherited cancer risk) and early or complex menopausal symptoms (e.g., patients living with HIV, chronic conditions, and cancer).
- Identify priorities to address the influence of environmental, social, and other exposures as they relate to menopausal transition and symptoms in diverse populations of women.
- Understand current recommendations on menopausal hormone therapy prescribing, including doses, formulations, and durations of use.





About

Vivian W. Pinn, M.D.

Founding Director (Retired), ORWH
Senior Scientist Emerita, Fogarty International Center, NIH

Dr. Vivian W. Pinn was the inaugural full-time Director of ORWH, from 1991 until her retirement in 2011. Dr. Pinn was also NIH's Associate Director for Research on Women's Health from 1994 until her retirement. Under her leadership, this new office led the implementation of NIH inclusion policies for women and minorities in clinical research, developed the first and several subsequent national strategic plans for women's health research, and established many new research funding initiatives and career development programs, including interdisciplinary initiatives, in collaboration with NIH Institutes and Centers. During that time, she also established and co-chaired the NIH Working Group on Women in Biomedical Careers with the NIH Director. She has since been named a Senior Scientist Emerita at NIH's Fogarty International Center. She has presented her perceptions of women's health and sex/gender research, health disparities, and challenges in biomedical careers for women and people of color to national and international audiences and has served as a mentor to hundreds of young women and men of all races. A special tribute by Senator Olympia Snowe on Dr. Pinn's retirement was published in the *Congressional Record* in November 2011. Senator Snowe commended Dr. Pinn's contributions during her NIH tenure. At the time of Dr. Pinn's retirement, the Association of American Medical Colleges honored her with a Special Recognition Award for exceptional leadership over a 40-year career.

Dr. Pinn received the Alumna Achievement Award from Wellesley College and was an Alumna Trustee there. She earned her M.D. in 1967 from the University of Virginia School of Medicine, the only woman and only minority in her class. She completed her postgraduate training in pathology at Harvard University's Massachusetts General Hospital.

She came to NIH from the Howard University College of Medicine, where she had been Professor and Chair of the Department of Pathology since 1982, the third woman in the United States to hold such an appointment and the first African American woman to do so. Dr. Pinn also previously held teaching appointments in pathology at Harvard Medical School and Tufts University, where she was also Assistant Dean for Student Affairs. Her professional area of focus in pathology was immunopathology, specifically renal and autoimmune diseases, and transplant pathology. She now holds the position of Professor at the University of South Florida's Institute for Advanced Discovery & Innovation.

She is a fellow of the American Academy of Arts and Sciences and was elected to the Institute of Medicine (now the National Academy of Medicine) in 1995. She served several terms on the National Academies' Committee on Women in Science, Engineering, and Medicine and was a member of the National Academies committee that prepared the 2020 report titled *Promising Practices for Addressing the Underrepresentation of Women in Science, Engineering, and Medicine: Opening Doors*. She is also a member of the National Academies' Roundtable on Black Men and Black Women in Science, Engineering, and Medicine. Dr. Pinn has written over 200 scientific publications and book chapters, including forewords, and has given more than 500 keynote speeches, lectures, and presentations since 1991.

A native of Lynchburg, Virginia, and educated in segregated public schools, Dr. Pinn has received 17 honorary degrees of science, law, and medicine. The University of Virginia School of Medicine named one of its four advisory medical student colleges the Pinn College in her honor. In 2011, the Tufts University School of Medicine announced the Vivian W. Pinn Office of Student Affairs, and her former medical students dedicated a scholarship in her name, the Vivian W. Pinn Scholarship Fund, to give needy students an opportunity to study medicine at Tufts. She has held leadership positions in many professional organizations, including as the 88th President of the National Medical Association (NMA), and is currently Chair of the NMA Past Presidents Council. Dr. Pinn serves on the boards of trustees/advisors of Thomas Jefferson University, the Sidney Kimmel Cancer Center at Jefferson Health, the Tufts University School of Medicine, and the KGI School of Medicine.

Dr. Pinn has received more than 300 honors and awards. She was elected to Modern Healthcare's Hall of Fame, the first African American woman to be so honored, and was also a recipient of the New York Academy of Medicine Medal for Distinguished Contributions in Health Policy. Honors she has received include a special lifetime achievement award from the Drexel University College of Medicine's Institute for Women's Health in 2017, and she also served as the 2017–18 Leader-in-Residence at the Jepson School of Leadership Studies of the University of Richmond. In 2019, she was presented with the John D. Thompson Distinguished Visiting Fellow Award by the Yale University School of Public Health.

She more recently received the 2020 American Medical Association's Distinguished Service Award for her leadership in women's health, as well as the 2020 Alma Dea Morani Award from the Women in Medicine Legacy Foundation and the New York Academy of Medicine. She also was awarded the 2021 Distinguished Service Award from the Association of Pathology Chairs and was elected a 2021 Fellow of the American Association for the Advancement of Science. She was also included in Hearst's "Lift Every Voice" project, a celebration of Black lives.

Research!America awarded her the Outstanding Achievement in Public Health Award as one of its 2022 Advocacy Awards honorees. Tufts University honored her for her efforts as a faculty member at the medical school by selecting her as one of eight influential Black leaders at Tufts for its 2022 project called "Leading While Black: A Legacy of Transformational Black Leadership at Tufts University."

Lectures in women's health named for her have been established at NIH, the National Women's Health Congress, and the National Medical Association. One of her greatest honors has been the announcement by the University of Virginia in the fall of 2016 that the medical research and education building was renamed Pinn Hall for her. And in December 2016, the University of Virginia School of Medicine also announced the inaugural Pinn Scholars program to support and recognize midlevel faculty members for their efforts to take their research in novel directions. Her oral history is included in the National Library of Medicine's exhibit on women physicians, "Changing the Face of Medicine"; in the University of Virginia's project called "Explorations in Black Leadership," conducted by Julian Bond; and in the HistoryMakers collection, which is now housed in the Library of Congress.

Agenda – Virtual Event

[Virtual Event Page](#)

10:00–10:15 a.m.	Introduction	Sarah Temkin, M.D. <i>Associate Director for Clinical Research, ORWH</i> Janine Clayton, M.D., FARVO <i>Director, ORWH</i>
10:15–10:50 a.m.	Opening Keynote: “Menopausal Hormone Therapy: 30 Years of Lessons from the Women’s Health Initiative”	JoAnn Manson, M.D., M.P.H., Dr.P.H., MACP <i>Professor of Medicine and the Bell Professor of Women’s Health, Harvard Medical School</i> <i>Chief of Preventive Medicine, Brigham and Women’s Hospital, Boston</i>
10:50–11:00 a.m.	Q&A with Dr. Manson <i>Moderator: Hadine Joffe, M.D., M.Sc.</i> <i>Paula A. Johnson Endowed Professor of Psychiatry in the Field of Women’s Health, Harvard Medical School at Brigham and Women’s Hospital</i>	
11:00–11:40 a.m.	Understanding the Menopausal Transition	
	“The Menopause Transition: Definitions, Health Implications, Future Directions”	Gail Greendale, M.D. <i>Professor of Medicine and Obstetrics and Gynecology; David Geffen School of Medicine; University of California, Los Angeles</i>
	“It’s Hot in Here! Understanding the Basic Biology of the Menopause Transition”	Genevieve Neal-Perry, M.D., Ph.D. <i>Robert A. Ross Distinguished Professor and Chair, Department of Obstetrics and Gynecology, University of North Carolina at Chapel Hill</i>
11:40 a.m.–12:20 p.m.	The Accumulation of Morbidity After Menopause	
	“Premature or Early Menopause and Accelerated Accumulation of Multi-Morbidity”	Walter Rocca, M.D., M.P.H. <i>Professor of Epidemiology and Neurology, Mayo Clinic College of Medicine and Science</i>

Agenda (Continued)

	<p>“To E or Not to E: Metabolic Actions of Estrogens”</p>	<p>Wendy Kohrt, Ph.D. <i>Distinguished Professor of Medicine, Division of Geriatric Medicine, University of Colorado Anschutz Medical Campus</i></p>
12:20–12:35 p.m.	<p>Panel Discussion, Q&A</p> <p><u>Moderator:</u> Hadine Joffe, M.D., M.Sc. <i>Paula A. Johnson Endowed Professor of Psychiatry in the Field of Women’s Health, Harvard Medical School at Brigham and Women’s Hospital</i></p>	
12:35–1:05 p.m.	<p>Lunch Break</p>	
1:05–1:45 p.m.	<p>Special Populations</p>	
	<p>“Menopause and the High-Risk Patient”</p>	<p>Barbara S. Norquist, M.D. <i>Associate Professor, Department of Obstetrics and Gynecology, University of Washington</i></p>
	<p>“Menopause in Women with HIV: Emerging Knowledge & Special Considerations”</p>	<p>Sara Looby, Ph.D., ANP-BC, FAAN <i>Assistant Professor of Medicine, Harvard Medical School</i></p>
1:45–2:25 p.m.	<p>Social Determinants of Health</p>	
	<p>“Social Determinants of Disparities in Menopause and Midlife Health: Considerations for Future Research”</p>	<p>Siobán D. Harlow, Ph.D. <i>Professor Emerita of Epidemiology, Global Public Health, and Obstetrics and Gynecology; University of Michigan</i></p>
	<p>“Un Cambio de Vida: Experiences and Social Determinants of Menopause Among Latinas”</p>	<p>Yamnia I. Cortés, Ph.D., M.P.H., FNP-BC, FAHA <i>Assistant Professor, University of North Carolina at Chapel Hill School of Nursing</i></p>
2:25–2:45 p.m.	<p>Patient Advocacy Perspective</p>	<p>Susan Friedman, D.V.M. <i>Executive Director, Facing Our Risk of Cancer Empowered (FORCE)</i> Dorcas Baker, RN, B.S.N., ACRN, M.A. <i>Co-Founder, Older Women Embracing Life (OWEL)</i></p>

Agenda (Continued)

2:45–3:00 p.m.	Panel Discussion, Q&A	
	<i>Moderator:</i> Rebecca Thurston, Ph.D., FABMR, FAPS <i>Pittsburgh Foundation Chair in Women's Health and Dementia, University of Pittsburgh</i>	
3:00–3:10 p.m.	Afternoon Break	
3:10–3:50 p.m.	The Who, When, and What of Menopausal Hormone Therapy	
	"The Science Behind Personalizing Hormone Treatments"	Virginia Miller, M.B.A., Ph.D. <i>Professor Emerita of Surgery and Physiology, Mayo Clinic</i>
	"Systemic Hormone Therapy for Symptom Management in Menopausal Women: Balancing Evidence with Clinical Judgment"	Andrew M. Kaunitz, M.D., FACOG, NCMP <i>Professor and Associate Chairman, Department of Obstetrics and Gynecology, University of Florida</i>
3:50–4:30 p.m.	Interventions to Promote Healthy Aging	
	"The Key Ingredients for Traversing a Healthy Menopause"	Andrea Z. LaCroix, Ph.D. <i>Distinguished Professor of Epidemiology; Herbert Wertheim School of Public Health and Human Longevity Science; University of California, San Diego</i>
	"ORWH Research Agenda: Where We Are and Where We Need to Be"	Robert A. Wild, M.D., Ph.D., M.P.H. <i>Professor of Obstetrics and Gynecology and Vice Chair for Research and Development, Department Obstetrics and Gynecology, University of Oklahoma Health Sciences Center</i>
4:30–4:45 p.m.	Panel Discussion, Q&A	
	<i>Moderator:</i> Nanette Santoro, M.D. <i>E. Stewart Taylor Chair of Obstetrics and Gynecology, University of Colorado School of Medicine</i>	
4:45–5:00 p.m.	Concluding Remarks	Vivian W. Pinn, M.D. <i>Senior Scientist Emerita, Fogarty International Center, NIH</i> <i>Founding Director (Retired), ORWH</i>

Introduction



Janine Austin Clayton, M.D., FARVO

Associate Director for Research on Women's Health
Director, ORWH, NIH

Dr. Janine Clayton was appointed Associate Director for Research on Women's Health and Director of the ORWH at NIH in 2012. Dr. Clayton has strengthened NIH support for research on diseases, disorders, and conditions that affect women. She is the architect of the NIH policy requiring scientists to consider sex as a biological variable across the research spectrum, a part of NIH's initiative to enhance reproducibility, rigor, and transparency. As Co-Chair of the NIH Working Group on Women in Biomedical Careers with NIH Acting Director Dr. Lawrence Tabak, Dr. Clayton also leads NIH's efforts to advance women in scientific careers. In 2021, Dr. Clayton was elected to the Board of Directors of the American Association for the Advancement of Science. Dr. Clayton was previously the Deputy Clinical Director of the National Eye Institute (NEI). As a board-certified ophthalmologist, Dr. Clayton has interest in research on autoimmune ocular diseases and the role of sex and gender in health and disease. Dr. Clayton has a particular interest in ocular surface disease and discovered a novel form of disease associated with premature ovarian insufficiency that affects young women, setting the stage for her commitment to rigorous, thoughtful exploration of the role of sex and gender in health and disease. She is the author of more than 120 scientific publications, journal articles, and book chapters. Her clinical research has ranged from randomized controlled trials of novel therapies for immune-mediated ocular diseases to studies on the development of digital imaging techniques for the anterior segment.

Dr. Clayton, a native Washingtonian, received her undergraduate degree with honors from Johns Hopkins University and her medical degree from the Howard University College of Medicine. She completed a residency in ophthalmology at the Medical College of Virginia. Dr. Clayton completed fellowship training in cornea and external disease at the Wilmer Eye Institute at Johns Hopkins Hospital and in uveitis and ocular immunology at NEI.

Dr. Clayton has received several awards and has been recognized as a leader by her peers. She received the Senior Achievement Award from the Board of Trustees of the American Academy of Ophthalmology in 2008, was selected as a 2010 Silver Fellow by the Association for Research in Vision and Ophthalmology, and won the European Uveitis Patient Interest Association Clinical Uveitis Research Award in 2010. In 2015, she was awarded the American Medical Women's Association's Lila A. Wallis Women's Health Award and the Wenger Award for Excellence in Public Service. Dr. Clayton was granted the Bernadine Healy Award for Visionary Leadership in Women's Health in 2016. She was also selected as an honoree for the Woman's Day Red Dress Awards and the American Medical Association's Dr. Nathan Davis Awards for Outstanding Government Service in 2017.

Opening Keynote



JoAnn Manson, M.D., M.P.H., Dr.P.H., MACP

Professor of Medicine and the Bell Professor of Women's Health,
Harvard Medical School

Chief of Preventive Medicine, Brigham and Women's Hospital, Boston

Dr. JoAnn Manson is a Professor of Medicine and the Michael and Lee Bell Professor of Women's Health at Harvard Medical School, a Professor in the Department of Epidemiology at the Harvard T.H. Chan School of Public Health, and Chief of the Division of Preventive Medicine at Brigham and Women's Hospital. Dr. Manson is a physician epidemiologist, endocrinologist, and principal investigator (PI) or co-PI of several research studies, including the Women's Health Initiative Clinical Center in Boston, the cardiovascular component of the Nurses' Health Study, the VITamin D and Omega-3 Trial (VITAL), the COcoa Supplement and Multivitamin Outcomes Study (COSMOS), and the Vitamin D for COVID-19 (VIVID) trial. Her primary research interests include randomized clinical prevention trials of nutritional and lifestyle factors related to heart disease, diabetes, and cancer; the role of endogenous and exogenous estrogens as determinants of chronic disease; life course–related risk factors for cardiovascular disease (CVD) in women; and biomarker predictors of CVD.

Dr. Manson has received numerous honors, including the American Heart Association's (AHA) Population Research Prize; AHA's Distinguished Scientist Award; AHA's Research Achievement Award; being elected to the Institute of Medicine (now the National Academy of Medicine); being a member of the Association of American Physicians; being a Fellow of the American Association for the Advancement of Science (AAAS); the Bernadine Healy Award for visionary leadership in women's health; the Alma Dea Morani, MD Renaissance Women Award; the James D. Bruce Memorial Award from the American College of Physicians (ACP); and being elected a Master of ACP. Dr. Manson has published more than 1,200 peer-reviewed articles in the medical literature, is the author or editor of several books and textbooks, serves as Editor-in-Chief of *Contemporary Clinical Trials*, and is a Past President of the North American Menopause Society. She is one of the most highly cited researchers in the world and was one of the physicians featured in the National Library of Medicine's exhibition called "Changing the Face of Medicine."

Biographies



Dorcas C. Baker, RN, B.S.N., ACRN, M.A.

Co-Founder, Older Women Embracing Life (OWEL)

Dorcas Baker has been a registered nurse for 48 years and is currently employed by the Johns Hopkins University School of Nursing's Center for Infectious Disease and Nursing Innovations as the Regional Coordinator for the MidAtlantic AIDS Education and Training Center. She oversees and assists with needs assessments and provides tailored training, consultation, and technical assistance to build capacity at the local level for HIV providers to increase skills and knowledge. She has worked in the field of HIV for 31 years.

Dorcas was a research nurse for 14 years (1992–2005) with Johns Hopkins University's AIDS Clinical Trials Group. She coordinated the first CME-approved HIV Over Fifty conference at Johns Hopkins University in 2002, which became the annual Graying of HIV Symposium sponsored by Johns Hopkins University Regional Partner AIDS Education & Training Center in 2005.

She participates on the Scientific Committee for the International Workshop on HIV and Aging and serves as a member of the Association of Nurses in AIDS Care's expert panel on HIV and aging. Dorcas participated as an invited panelist for the White House meeting on HIV and aging, sponsored by the Office of National AIDS Policy, in October 2010.

She is the Co-founder of Older Women Embracing Life (OWEL) which started in 2004 and is known as a phenomenal support group of women aging and thriving with HIV. She is also the co-founder and coordinator of the Maryland Coalition on HIV and Aging, which focuses on addressing and advocating for the emerging and long-standing needs of a growing population of persons aging and thriving with HIV.

She is a member of the Maryland HIV Planning Group and the Baltimore City HIV Planning Group and a member of the National Black Nurses Association. Dorcas is also a Dementia Friends Champion through Dementia Friendly Baltimore County and a Certified Dementia Practitioner.



Yamnia I. Cortés, Ph.D., M.P.H., FNP-BC, FAHA

Assistant Professor, University of North Carolina at Chapel Hill, School of Nursing

Dr. Yamnia I. Cortés is an Assistant Professor in the School of Nursing at the University of North Carolina at Chapel Hill and is an affiliate faculty member of the Carolina Center for Population Aging and Health. She directs the CortésMenoLab, which promotes the health of women in midlife and beyond through science, community mobilization, education, and policy.

Dr. Cortés leads an interdisciplinary research program focused on understanding the sociocultural, environmental, behavioral, and biological factors that impact midlife women's cardiovascular health. Additionally, she designs interventions to improve menopause-related symptoms and reduce CVD risk in midlife women, particularly Latinas. With support from the National Institute on Minority Health and Health Disparities (K23MD014767), Dr. Cortés is pilot testing a community-engaged, multi-component intervention to reduce CVD risk among Latinas during the menopause transition. As part of the Betty Irene Moore Fellowship for Nurse Leaders and Innovators, Dr. Cortés is working on a project to identify CVD risk factors related to biomarkers of Alzheimer's disease neuropathology in midlife Latino men and women. In 2019, she received a New Investigator Award from the North American Menopause Society. She is an Associate Investigator in the Study of Women's Health Across the Nation (SWAN), Associate Editor of *Frontiers in Reproductive Health - Menopause*, and a member of the women's health scientific interest group of the Hispanic Community Health Study/Study of Latinos.

Dr. Cortés obtained her B.A. in biology and a concentration in Latino/a studies at Williams College. She completed her M.P.H. in the Department of Sociomedical Sciences at Columbia University, where she also received her B.S. and M.S. in nursing. In 2015, she received her Ph.D. from the Columbia University School of Nursing, and subsequently completed postdoctoral training in cardiovascular epidemiology at the University of Pittsburgh's Graduate School of Public Health.



Susan Friedman, D.V.M.

Executive Director, Facing Our Risk of Cancer Empowered (FORCE)

Dr. Susan Friedman was a practicing small-animal veterinarian when she was diagnosed with breast cancer at age 33. Afterward, she learned she carried an inherited BRCA2 mutation. After treatment, she founded the nonprofit organization Facing Our Risk of Cancer Empowered, or FORCE, in 1999 to help people and families facing hereditary cancer find support and credible, evidence-based, relevant information and research in plain language. As Executive Director, Sue has 24 years of experience directing FORCE's education, research, and advocacy programs. As an advocate, Sue has a passion for facilitating informed decision-making, improving health communication between patients and their health care teams, and increasing health literacy in society as a whole.



Gail Greendale, M.D.

Professor of Medicine and Obstetrics and Gynecology; David Geffen School of Medicine; University of California, Los Angeles (UCLA)

Dr. Gail Greendale is an internist, geriatrician, and clinical epidemiologist with over three decades of experience conducting and analyzing large observational and interventional studies. Major emphases of her work include menopause and osteoporosis. She is a founding PI of SWAN, the longest-running cohort study of midlife and the menopause transition. Her other major work includes studies of mammographic density (a breast cancer risk factor), trabecular bone score (a bone strength marker), body composition, cognitive function, and the impact of breast cancer on menopause symptoms and quality of life. Dr. Greendale has been on the faculty at the David Geffen School of Medicine at UCLA since 1989.



Siobán D. Harlow, Ph.D.

Professor Emerita of Epidemiology, Global Public Health, and Obstetrics and Gynecology; University of Michigan

Dr. Siobán D. Harlow is Professor Emerita of Epidemiology, Global Public Health, and Obstetrics and Gynecology at the University of Michigan, where she also serves as Director of the Center for Midlife Science. She was PI of the Michigan site of SWAN (2011–2021) and PI of the SWAN Repository (2012–2018). She led the ReSTAGE Collaboration, a multi-study effort to empirically evaluate recommendations for staging reproductive aging, and chaired the 2011 STRAW+10 consensus conference, which defined an empirically based model for reproductive aging. She has served on the Scientific and Technical Advisory Group of the World Health Organization's Department of Reproductive Health and Research (2003–2009). Her research focuses on understanding patterns of menstrual function and gynecological morbidity across the lifespan, including leadership in studies of the natural history of ovarian aging and of the interface between ovarian aging and chronic disease. Internationally, she has worked extensively on the impact of global trade and export production on women's and children's health and on the health impacts of gender-based violence, most recently focusing on conflict-related gender-based violence in the Democratic Republic of the Congo, where she was a Fulbright scholar in 2017–2018.



Hadine Joffe, M.D., M.Sc.

Paula A. Johnson Endowed Professor of Psychiatry in the Field of Women's Health, Harvard Medical School at Brigham and Women's Hospital

Dr. Hadine Joffe is the Paula A. Johnson Professor of Psychiatry in the Field of Women's Health at Harvard Medical School, Executive Vice Chair for Academic and Faculty Affairs in the Department of Psychiatry at Brigham and Women's Hospital (BWH), and Executive Director of the Connors Center for Women's Health & Gender Biology at BWH, where she directs the Women's Hormones and Aging Research Program.

Dr. Joffe is an experienced clinician and clinical reproductive neuroscientist whose research focus is on menopause symptoms and midlife women's brain health. Her research examines the mechanisms (neural, hormonal, stress, autonomic), course, downstream consequences (body fat gain), and treatment of neuropsychological symptoms (depression, insomnia thermoregulatory disturbance, fatigue) in healthy midlife women and breast cancer survivors.

Dr. Joffe has been continuously funded by NIH to study menopause for the past 23 years, including as PI of three R01s and a U54 center grant and as co-PI on SWAN and Menopause Strategies: Finding Lasting Answers for Symptoms and Health Trials (MsFLASH), among other grants. Dr. Joffe is currently PI of the Brigham/Harvard Center for Reproductive Outcomes of Stress and Aging (ROSA), which is part of ORWH's Specialized Centers of Research Excellence on Sex Differences (SCORE) program and focuses on the neural processes through which stress is transmitted to influence menopause-related vasomotor symptoms (VMS) and associated sleep disturbance, and an R01 that examines mechanisms underlying the effect of the neurosteroid allopregnanolone on perimenopausal depression. Her research on menopause research has demonstrated that (1) both low estradiol and nocturnal VMS interrupt sleep, (2) that variability in estradiol, low progesterone, nocturnal VMS, and related sleep interruption all reduce mood, and (3) that VMS-related sleep interruption adversely promotes adiposity.

As the Director of the BWH Connors Center, Dr. Joffe oversees a comprehensive cross-departmental research program for the hospital with two thematic priorities: (1) equity in the development of novel therapeutics for diseases that affect women exclusively, predominately and differentially, and (2) the impact of stress and adversity on the health of women.



Andrew M. Kaunitz, M.D., FACOG, NCMP

Professor and Associate Chairman, Department of Obstetrics and Gynecology, University of Florida

A tenured University of Florida (UF) Professor and Associate Chairman of Obstetrics and Gynecology, Dr. Andrew Kaunitz serves as Medical Director at UF Health Women's Specialists – Emerson. He has worked at UF College of Medicine – Jacksonville since 1984. He received his college degree from Brown University. His medical degree is from Columbia University's Vagelos College of Physicians and Surgeons. He completed his residency in obstetrics and gynecology at Northwestern Memorial Hospital. He served as an Epidemic Intelligence Officer in the Centers for Disease Control and Prevention's (CDC) Division of Reproductive Health.

Dr. Kaunitz advises the CDC, the American College of Obstetricians and Gynecologists (ACOG), and the North American Menopause Society (NAMS) regarding contraception and menopause. He produces monthly videoblogs for Medscape Ob/Gyn & Women's Health. He serves on the editorial boards of *Contraception*, *Menopause*, and *OBG Management*. He has made presentations to the U.S. Food and Drug Administration advisory committees and NIH regarding contraception and menopause.

He has authored or co-authored numerous chapters, including 11 current sections in UpToDate.

He has published over 270 articles in peer-reviewed journals, including *The New England Journal of Medicine*, *JAMA*, and leading obstetrics and gynecology, contraception, and menopause. He is certified as a Menopause Practitioner by NAMS and received the 2020 NAMS/Leon Speroff Outstanding Educator Award. In 2021, Dr. Kaunitz received the ACOG Distinguished Service Award.



Wendy M. Kohrt, Ph.D.

Distinguished Professor of Medicine, Division of Geriatric Medicine; Nancy Anschutz Endowed Chair in Women's Health Research; University of Colorado Anschutz Medical Campus

Dr. Wendy M. Kohrt is a Distinguished Professor of Medicine in the Division of Geriatric Medicine and the Nancy Anschutz Endowed Chair in Women's Health Research at the University of Colorado Anschutz Medical Campus. She is the Director of Research for Geriatric Medicine; Associate Director of the Ludeman Family Center for Women's Health Research; Acting Director of the U.S. Department of Veterans Affairs' (VA) Eastern Colorado Geriatric Research, Education and Clinical Center; Director of the Energy Balance Assessment Core for the Colorado Nutrition Obesity Research Center; and Associate Director of the Colorado Clinical and Translational Sciences Institute. Her research is focused on the metabolic actions of estrogens and novel factors that influence the musculoskeletal adaptations to exercise. She has received continuous funding from NIH as a PI since 1991 and has more than 280 research publications. Dr. Kohrt is currently the PI of a VA Merit Review and two NIH center grants, including one in the SCORE program co-sponsored by the National Institute on Aging (NIA) and ORWH. She serves as Chair of the Steering Committee for the NIH Common Fund Molecular Transducers of Physical Activity Consortium.



Andrea Z. LaCroix, Ph.D.

Distinguished Professor of Epidemiology; Herbert Wertheim School of Public Health and Human Longevity Science; University of California, San Diego

Dr. Andrea LaCroix is Distinguished Professor of Epidemiology in the Herbert Wertheim School of Public Health and Human Longevity Science at the University of California, San Diego (UCSD). She is also the Director of the Women's Health and Reproductive Justice Research Program at UCSD and a Faculty Director in the UC San Diego Health Sciences Office of Faculty Affairs. She is an expert in healthy aging and women's health who has provided leadership to numerous large women's health and aging research programs, including the Women's Health Initiative, MsFLASH, and the Adult Changes in Thought (ACT) cohort. Dr. LaCroix received her doctoral degree in epidemiology from the University of North Carolina at Chapel Hill. She served as an epidemiologist for the National Center for Health Statistics and NIA before becoming Professor of Epidemiology. She now serves on the Board of Scientific Counselors for NIA. She has authored over 500 scientific publications, is a Thomson Reuters and Clarivate Highly Cited Researcher, and was recently named by Research.com as being among the top 1,000 women scientists worldwide.



Sara E. Looby, Ph.D., ANP-BC, FAAN

Assistant Professor of Medicine, Harvard Medical School

Dr. Sara Looby is an NIH-funded researcher at Massachusetts General Hospital (MGH) and an Assistant Professor of Medicine at Harvard Medical School. For over 20 years, Dr. Looby has been a member of an esteemed interdisciplinary research team that investigates endocrine and cardiometabolic indices associated with HIV within the Metabolism Unit at MGH. Dr. Looby's program of research focuses on menopause symptoms, the experience of menopause in women with HIV, and CVD in relation to reproductive aging. Dr. Looby is also a researcher at the Yvonne L. Munn Center for Nursing Research at MGH and the Director of the Connell Postdoctoral Fellowship in Nursing Research there. Dr. Looby presents her research nationally and internationally among interprofessional researchers with an interest in menopause and to women with HIV in community settings.



Virginia M. Miller, M.B.A., Ph.D.

Professor Emerita of Surgery and Physiology, Mayo Clinic

Dr. Virginia M. Miller is Professor Emerita of Surgery and Physiology at the Mayo Clinic. She received a B.S. from Slippery Rock University (1970), an M.B.A. from the University of Minnesota (2003), and a Ph.D. from the University of Missouri (1976). Her research has included work with experimental animals and clinical studies focused on how sex steroids and conditions unique to women—that is, pregnancy and menopause—affect cardiovascular health and cognition. She served as PI of the Mayo Clinic program that is part of ORWH’s Building Interdisciplinary Careers in Women’s Health (BIRCWH) program, PI of the Mayo Clinic site in ORWH’s SCORE program, and Director of the Mayo Clinic Women’s Health Research Center from 2010 to 2020. She has authored over 300 original publications and reviews. Her awards include the Bernadine Healy Award for visionary leadership in women’s health (2014), *Woman’s Day* magazine’s Red Dress Award (2015), the Paul M. Vanhoutte Lectureship in Vascular Pharmacology (2018), and the Walter B. Cannon Award Lecture from the American Physiological Society (2021). Her professional service has included being on various grant review panels and editorial boards, being Councilor for the American Physiological Society (2002–2005), and being President of the Organization for the Study of Sex Differences (2010–2012).



Genevieve Neal-Perry, M.D., Ph.D.

Robert A. Ross Distinguished Professor and Chair, Department of Obstetrics and Gynecology, University of North Carolina School of Medicine

Dr. Genevieve Neal-Perry was born and raised in New Jersey. She earned her bachelor's degree from Dartmouth College, obtained her M.D. from the University of Medicine and Dentistry of New Jersey, and obtained her Ph.D. in neuropharmacology from Robert Wood Johnson Medical School.

Dr. Neal-Perry completed residency and fellowship training in reproductive endocrinology and infertility at Beth Israel Deaconess Medical Center and Montefiore Medical Center, respectively. Upon completion of her fellowship, she joined the faculty at the Albert Einstein College of Medicine, where she rose to the rank of Associate Professor in Obstetrics and Gynecology and Neuroscience. While at Einstein, she served as the Division of Reproductive Endocrinology and Infertility Division's Director of Research and Fellowship, as well as the Associate Dean for Diversity and Mentoring.

In 2015, Dr. Neal-Perry joined the Department of Obstetrics & Gynecology at the University of Washington, where she was recruited to be the Director of the Division of Reproductive Endocrinology and Infertility. While at the University of Washington, she also led the creation and opening of the Cancer and Reproduction Clinic at the Seattle Cancer Care Alliance, and she was instrumental in developing the inaugural employee discount program for fertility service for the University of Washington's faculty members, students, and employees.

In April 2020, Dr. Neal-Perry was appointed as Chair with tenure of the University of North Carolina School of Medicine's Department of Obstetrics and Gynecology.

Dr. Neal-Perry's research program has focused on menopause and the impact of nutrition on reproductive and fertility outcomes. She has published a wide range of original research manuscripts, reviews, and book chapters in the field of reproductive science. Additionally, Dr. Neal-Perry is a national leader in women's health research and reproductive endocrinology. Her leadership roles have included serving as a member of NIH's Integrative and Clinical Endocrinology and Reproduction Study Section and the Chair of the Reproductive, Andrology, and Gynecology Study Section. She has also served as a member of the American Board of Obstetrics and Gynecology's Division of Reproductive Endocrinology and Infertility and Basic Science Vice President for the Endocrine Society. She is an Associate Editor for *The Journal of Clinical Endocrinology & Metabolism* and a scientific adviser for *Endocrinology*.

Dr. Neal-Perry's clinical interest and expertise include general infertility, cancer and reproductive health, polycystic ovary syndrome, in vitro fertilization, third-party reproduction, single- and same-sex reproduction, nutrition and fertility, premature ovarian insufficiency, ovarian aging, menopause and perimenopause complaints, and menstrual cycle dysfunction. She specializes in minimally invasive surgical procedures intended to restore fertility, including ovarian cyst removal, tubal reconstruction, and uterine polyp and fibroid management.



Barbara S. Norquist, M.D.

Associate Professor, Department of Obstetrics and Gynecology, University of Washington

Dr. Barbara Norquist is a board-certified gynecologic oncologist and Associate Professor at the University of Washington. She is the Associate Chair of Research for the Department of Obstetrics and Gynecology, is the Medical Director of the University of Washington/Fred Hutchinson Cancer Center's Breast and Ovarian Cancer Prevention Clinic, and is part of the National Comprehensive Cancer Network's Genetic/Familial High-Risk Assessment: Breast and Ovarian panel. Her clinical duties include the care of women at increased risk of ovarian cancer due to genetic susceptibility, as well as caring for those with known or suspected gynecologic malignancies. Her research interests are focused on inherited ovarian cancer, the role of genes other than BRCA1 and BRCA2 in ovarian cancer risk, molecular strategies for early detection, and improving access to genetic testing. Her goals are to identify improved strategies for the prevention and treatment of ovarian cancer through genetic biomarkers.



Walter A. Rocca, M.D., M.P.H.

Professor of Epidemiology and Neurology, Mayo Clinic College of Medicine and Science

Dr. Walter A. Rocca is Professor of Epidemiology and Neurology and the Ralph S. and Beverley E. Caulkins Professor of Neurodegenerative Diseases Research at the Mayo Clinic College of Medicine and Science. He is Co-Director of the Rochester Epidemiology Project, a medical records linkage system; Associate Director of the Mayo Clinic site in ORWH's SCORE program; and a member of the Steering Group for the Mayo Clinic Women's Health Research Center. He has been member of the Science Committee of the American Academy of Neurology (AAN) and has served as Chair of the Clinical Research Subcommittee of AAN (2007–2014).

Dr. Rocca has recently focused his research on the effects of surgical menopause and estrogen on brain aging in women and on multimorbidity as a clinical marker of accelerated aging. He is also contributing to the emerging fields of dimorphic neurology and dimorphic medicine (the impact of sex and gender on health and diseases).



Nanette Santoro, M.D.

E. Stewart Taylor Chair, Department of Obstetrics and Gynecology, University of Colorado School of Medicine

Dr. Nanette Santoro is the E. Stewart Taylor Chair of Obstetrics and Gynecology at the University of Colorado School of Medicine, where she has served for 13 years. She has been continuously funded by NIH since 1989 for research in female reproduction. Her work has covered the processes of the pubertal and menopausal transitions, as well as clinical trials in reproduction and menopause. She has headed studies of women with premature and age-appropriate menopause, such as the Women's Health Initiative, the Kronos Early Estrogen Prevention Study (KEEPS), and SWAN. She has held numerous leadership positions in local and national organizations. She is Immediate Past President of the Society for Reproductive Investigation. In 2018, Dr. Santoro was elected to the National Academy of Medicine.



Sarah Temkin, M.D.

Associate Director for Clinical Research, ORWH

Dr. Sarah Temkin is the Associate Director for Clinical Research at ORWH. Dr. Temkin provides clinical expertise on issues related to the health of women, specifically cancer control, supportive care for cancer, therapeutics for female-specific malignancies, surgical care, and gynecologic disorders. Her clinical research team oversees the U3 Administrative Supplement Program—which funds research to address health disparities among groups of women in the U.S. that are understudied, underrepresented, and underreported (U3) in biomedical research—as well as the office’s interprofessional development program.

Dr. Temkin is a gynecologic oncologist who earned her medical degree from Georgetown University, completed her residency in obstetrics and gynecology with the Icahn School of Medicine at Mount Sinai, and completed a fellowship in gynecologic oncology at the SUNY Downstate Medical Center. She has been active in clinical research throughout her career, with a recognized expertise in clinical trials, and has served as an investigator for novel therapeutic and supportive care interventions for women with ovarian, endometrial, and cervical cancers. In addition, Dr. Temkin has thoughtfully contributed to national conversations about cancer prevention and equity in cancer care.



Rebecca C. Thurston, Ph.D., FABMR, FAPS

Pittsburgh Foundation Chair in Women's Health and Dementia, University of Pittsburgh

Dr. Rebecca C. Thurston is Pittsburgh Foundation Chair in Women's Health and Dementia; Professor of Psychiatry, Psychology, Epidemiology, and Clinical and Translational Science; and Director of the Women's Biobehavioral Health Laboratory at the University of Pittsburgh. Dr. Thurston is an expert in midlife women's health, the menopausal transition, and its implications for women's cardiovascular and brain health as they age. Her work has also provided a novel understanding of the role stress, trauma, and sexual violence in women's health. Dr. Thurston is a PI of SWAN, a 25-year longitudinal study that has provided seminal information about the menopause transition among a racially and ethnically diverse cohort of women. She is also PI of the MSHeart and MSBrain studies that leverage wearable technologies to understand the role of menopause and its symptoms in women's cardiovascular health and brain aging.

In addition to her research, Dr. Thurston is a practicing clinical health psychologist who leads the integration of behavioral health into the Midlife Health Center at the University of Pittsburgh Medical Center Magee-Womens Hospital. Further, Dr. Thurston is committed to training the next generation of scholars and is Director of the NIH T32-funded Cardiovascular Behavioral Medicine Research Training Program. In recognition of her work, Dr. Thurston is a recipient of the top award for menopause research internationally, the Henry Burger Award from the International Menopause Society, as well as the Vasomotor Symptoms Award from the NAMS. Dr. Thurston is Past President of NAMS. She is an elected fellow of both the American Psychosomatic Society and the Academy of Behavioral Medicine Research.



Robert A. Wild, M.D., Ph.D., M.P.H.

Professor of Obstetrics and Gynecology, University of Oklahoma Health Sciences Center

Dr. Robert A. Wild is Professor and Vice Chair for Research and Development in the Department of Obstetrics and Gynecology at the University of Oklahoma Health Sciences Center, where he is also Adjunct Professor of Family and Preventive Medicine and Adjunct Professor of Epidemiology and Biostatistics. He is an experienced clinician-investigator, focusing on primary prevention strategies for Women's Health; gynecology and cardiology. He practices and teaches evidence-based practices in obstetrics and gynecology, menopause, reproductive endocrinology, and clinical lipidology regionally and internationally. He is board-certified in each discipline. Dr. Wild is consistently listed in Best Doctors in Oklahoma, Guide to America's Best Obstetricians/Gynecologists, and Best Doctors in America. He has held leadership positions and/or is a member of all of the major societies in his specialties, locally and internationally.

Dr. Wild has served on national committees for the American Society for Reproductive Medicine, the North American Menopause Society, the National Lipid Association, and NIH. He has advised ORWH and the National Heart, Lung, and Blood Institute (NHLBI) at NIH, and the Food and Drug Administration regarding gynecologic and other women's health issues. He is the only gynecologist to have received a seven-year Preventive Cardiology Academic Award from NHLBI. He is published widely (over 200 peer-reviewed articles) in and reviewed by all journals related to women's health. He has served on numerous editorial boards. He is the biostatistics reviewer for *Menopause* (over 2,100 original research articles). His research focuses on lipids and the vascular system, reproductive endocrinology, menopause, sex steroids, lipoproteins, and cardiovascular diseases.

Dr. Wild has been a PI in over 60 grants and contracts from NIH, the Oklahoma Center for the Advancement of Science and Technology, the American Heart Association, the American Diabetes Association, pharmaceutical companies, and foundations. He has been continually funded since joining the University of Oklahoma Health Sciences Center faculty. Currently, he is a *Eunice Kennedy Shriver* National Institute of Child Health and Human Development investigator studying determinants of preeclampsia.

About The NIH Office of Research on Women's Health (ORWH)

The NIH Office of Research on Women's Health (ORWH) serves as the focal point for women's health research at NIH. ORWH was established in September 1990 in response to congressional, scientific, and advocacy concerns that a lack of systemic and consistent inclusion of women in NIH-supported clinical research could result in clinical decisions being made about health care for women based solely on findings from studies of men—without any evidence that they were applicable to women.

ORWH is the first Public Health Service office dedicated specifically to promoting women's health research within, as well as beyond, the NIH scientific community. The office also fosters the recruitment, retention, reentry, and advancement of women in biomedical careers. Through its work and position as an NIH-wide office, and in partnership with the NIH Institutes, Centers, and Offices (ICOs), ORWH has been able to:

TRANSFORM the term “women's health,” including “women's health research,” from a small and narrow conceptualization focused only on reproductive health to a broader and more expansive definition. Today, “women's health” is considered everything that affects a woman from head to toe, including internal and external factors across the life course, which is a view referred to as the multidimensional framework.

ACCELERATE research that supports the expanded view of women's health by funding innovative mechanisms such as the *Specialized Centers of Research Excellence on Sex Differences* (SCORE) program and the *Building Interdisciplinary Research Careers in Women's Health* (BIRCWH, pronounced “birch”) program.

ENHANCE biomedical research by issuing *supplemental funding* to account for sex and gender influences in established and new research studies.

CREATE resources to help scientists more efficiently and effectively recruit and retain women participants in clinical studies. Now, over half of participants in NIH clinical trials are women, and we can examine inclusion data by disease categories.

ISSUE A CALL TO ACTION on maternal morbidity and mortality (MMM) through enhanced research, which is a critical determinant of the health of women and future generations. ORWH is galvanizing Federal and non-Federal stakeholders to review current data and programming related to MMM and has also developed the *NIH Maternal Morbidity and Mortality Web Portal* as a valuable resource.

ESTABLISH the *U3 Program*, the only NIH program focused on understudied, underrepresented, and underreported populations of women facing substantial health disparities.

SPEARHEAD the development and implementation of the NIH Policy on Sex as a Biological Variable (SABV), and effectively tether SABV to a national and international movement to remove bias against female biology at the preclinical research stage — a huge contribution to science that benefits women, men, girls, and boys.

SUPPORT women in biomedical careers by providing mentoring opportunities (such as through ORWH's BIRCWH program) and by discovering and sharing evidence about effective best practices to promote the advancement of women in science at all stages of their career.

DEVELOP *online and interprofessional educational resources* to promote the recognition of sex differences during research and clinical training at all levels and across multiple disciplines.

CATALYZE many scientific advances, such as the HPV vaccine, which has the power to prevent cervical cancer, and a novel treatment for urinary tract infections that does not rely on antibiotics, thereby helping to address the worldwide crisis of antimicrobial resistance.

Since its establishment in 1990, the work, reach, and impact of ORWH has significantly expanded, not only in the increase of programs but also in the scope of its influence. Although we might never be able to quantify individual shifts in thinking or pinpoint all of the scientific advances that have resulted from ORWH's efforts, we can rest assured that science and the health of women greatly benefit from the ongoing dedication of ORWH and its partners.

 /NIHORWH

#NIHPinnSymposium

 @NIH_ORWH

#7thAnnualVPS

 nih.gov/women

#NWHW



National Institutes of Health
Office of Research on Women's Health