6TH ANNUAL

VIVIAN W. PINN

SYMPOSIUM

The Impact of the COVID-19 Pandemic on the Careers of Women Scientists

May 12, 2022

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

NWHW
NATIONAL WOMEN'S HEALTH WEEK

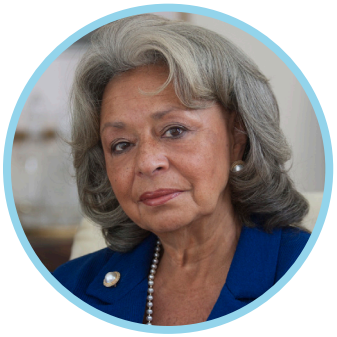
#6thAnnualVPS

Overview

6TH ANNUAL VIVIAN W. PINN SYMPOSIUM:
THE IMPACT OF THE COVID-19 PANDEMIC ON THE CAREERS OF WOMEN SCIENTISTS

The National Institutes of Health (NIH) Office of Research on Women's Health (ORWH) is thrilled to host the 6th Annual Vivian W. Pinn Symposium. Convened by ORWH each year during National Women's Health Week, this event honors the first full-time Director of the office, Dr. Vivian W. Pinn. In line with ORWH's mission to put science to work for the health of women, this event serves as a critical forum for experts across sectors to communicate and collaborate for the advancement of women's health.

This year's event will focus on the impact of the COVID-19 pandemic on the careers of women scientists. Providing the keynote address is Dr. Reshma Jagsi, the Newman Family Professor and Deputy Chair in the Department of Radiation Oncology and Director of the Center for Bioethics and Social Sciences in Medicine at the University of Michigan. After her talk will be a discussion moderated by Dr. Joshua Gordon, the Director of the National Institute of Mental Health. The panel includes Dr. Marie Bernard, NIH's Chief Officer for Scientific Workforce Diversity; Dr. Sonia Flores of the University of Colorado Anschutz Medical Campus; and Dr. Michael Lauer, NIH's Deputy Director for Extramural Research.



About

Vivian W. Pinn, M.D.

Founding Director (Retired), ORWH, NIH
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

2:00–2:30 p.m.	**Welcome and Opening Remarks**	**Xenia Tigno, Ph.D. (Emcee)** Associate Director for Careers, ORWH, NIH **Janine Austin Clayton, M.D., FARVO** Director, ORWH, NIH **Tara Schwetz, Ph.D.** Acting Principal Deputy Director, NIH
2:30–3:20 p.m.	**Keynote Address:** "Promoting Equity for Women in Medicine: Seizing a Disruptive Opportunity" Introduction: **Xenia Tigno, Ph.D.** The keynote will address the nature and causes of gender inequity in academic medicine—such as unconscious biases, gendered expectations of society, and harassment—and how the pandemic has exacerbated these challenges. It will highlight how the pandemic can provide a disruptive opportunity to implement interventions to promote equity in a "new normal."	**Reshma Jagsi, M.D., D.Phil.** Newman Family Professor and Deputy Chair, Department of Radiation Oncology Director, Center for Bioethics and Social Sciences in Medicine University of Michigan

Agenda *(Continued)*

3:20–4:15 p.m.	**Panel Discussion of Keynote:** "Challenges Faced by Women in STEMM During the COVID-19 Pandemic" **Moderator: Joshua Gordon, M.D., Ph.D.** Director, National Institute of Mental Health Panelists will discuss lessons learned in the recent past, such as interventions to cope with increased family caregiving demands.	**Marie Bernard, M.D.** Chief Officer for Scientific Workforce Diversity, NIH **Sonia Flores, Ph.D.** Professor and Vice Chair for Diversity and Justice in the Department of Medicine, Pulmonary and Critical Care Medicine Division, University of Colorado Anschutz Medical Campus **Michael Lauer, M.D.** Deputy Director for Extramural Research, NIH
4:15–4:30 p.m.	The Sex, Gender, & Intersectionality (SG&I) Innovations Collaborative	**Jamie White, M.S.** Health Science Strategy and Relations Lead, ORWH, NIH
4:30–4:40 p.m.	Remarks by **Dr. Vivian W. Pinn** Introduction: **Lisa Begg, Dr.P.H., RN** Senior Research Program Officer, ORWH, NIH	**Vivian W. Pinn, M.D.** Senior Scientist Emerita, Fogarty International Center, NIH Founding Director (Retired), ORWH, NIH
4:40–4:45 p.m.	Adjournment	

Opening Remarks

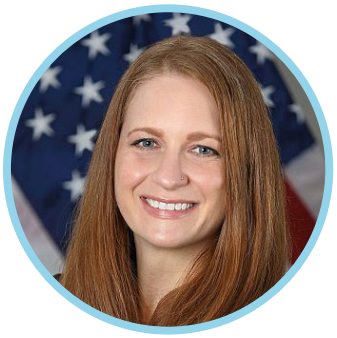
Janine Austin Clayton, M.D., FARVO

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.



Tara A. Schwetz, Ph.D.

Acting Principal Deputy Director, NIH

Dr. Tara Schwetz has been the Acting Principal Deputy Director of NIH since December 20, 2021. For much of 2021, Dr. Schwetz was on detail to the White House Office of Science and Technology Policy as the Assistant Director for Biomedical Science Initiatives. In this role, she led the efforts to stand up the Advanced Research Projects Agency for Health (ARPA-H). The Biden administration proposed ARPA-H to tackle some of the biggest health challenges facing Americans by driving medical innovation more rapidly.

Since 2019, Dr. Schwetz has served as the Associate Deputy Director of NIH and the Alternate Deputy Ethics Counselor for NIH. Throughout her nearly 10-year tenure at NIH, Dr. Schwetz has held multiple positions across several institutes and within the Office of the Director. She has served as the Acting Director and Acting Deputy Director of the National Institute of Nursing Research (NINR), the Chief of the Strategic Planning and Evaluation Branch at the National Institute of Allergy and Infectious Diseases (NIAID), the Senior Advisor to the Principal Deputy Director of NIH, the Interim Associate Director of the NIH Environmental influences on Child Health Outcomes (ECHO) Program, and a Health Science Policy Analyst at the National Institute of Neurological Disorders and Stroke. Dr. Schwetz started her career at NIH as an AAAS Science and Technology Policy Fellow at NINR.

Dr. Schwetz has led or co-led a number of high-profile NIH-wide efforts, including two Rapid Acceleration of Diagnostics programs (RADx Underserved Populations and RADx Radical), the Implementing a Maternal health and PRegnancy Outcomes Vision for Everyone (IMPROVE) initiative, and NIH presidential transition activities. She also has spearheaded several strategic planning efforts—such as the first NIH-Wide Strategic Plan, the NIH-Wide Strategic Plan for COVID-19 Research, the NIAID Strategic Plan for Tuberculosis Research, and the NIH Office of the Director Strategic Engagement Agenda—and played a significant role in the development of the National Pain Strategy.

She received a B.S. in biochemistry with honors from Florida State University and a Ph.D. in biophysics from the University of South Florida, followed by a postdoctoral fellowship at Vanderbilt University.

Keynote Address

Reshma Jagsi, M.D., D.Phil.

Newman Family Professor and Deputy Chair, Department of Radiation Oncology
Director, Center for Bioethics and Social Sciences in Medicine
University of Michigan

Dr. Reshma Jagsi is the Newman Family Professor and Deputy Chair in the Department of Radiation Oncology and Director of the Center for Bioethics and Social Sciences in Medicine at the University of Michigan. Gender equity in academic medicine has been a key area of Dr. Jagsi's scholarly focus, a subject to which she brings her perspective as a physician and social scientist to promote evidence-based intervention.

Dr. Jagsi is the author of over 300 articles in peer-reviewed journals, including multiple high-impact studies in journals such as *The New England Journal of Medicine, The Lancet,* and *The Journal of the American Medical Association (JAMA)*; her research to promote gender equity has been funded by R01 grants from NIH, as well as large independent grants from the Doris Duke Charitable Foundation and several other philanthropic foundations. She has mentored dozens of others in research investigating women's underrepresentation in senior positions in academic medicine and the mechanisms that must be targeted to promote equity.

Active in organized medicine, she has served on the Steering Committee of the Association of American Medical Colleges' (AAMC) Group on Women in Medicine and Science and now serves on the National Academies' Committee on Women in Science, Engineering, and Medicine. Also an internationally recognized clinical trialist and health services researcher in breast cancer, she has had her work frequently featured in popular media, including *The New York Times*, *The Wall Street Journal*, *The Washington Post*, NPR, and national networks' nightly newscasts.

Frequently invited as a keynote speaker, she has delivered talks at over 50 institutions and professional societies, including AAMC, NIH, the National Academy of Medicine, and the National Academy of Sciences. Her contributions have been recognized with her election to the American Society for Clinical Investigation and the Association of American Physicians, the Leadership Award of AAMC's Group on Women in Medicine and Science, Women Leaders in Oncology's Woman Oncologist of the Year, and the American Medical Women's Association's Woman in Science Award.

She is a Fellow of the American Society of Clinical Oncology, the American Society for Radiation Oncology, the American Association for Women Radiologists, and The Hastings Center.

Biographies

Lisa Begg, Dr.P.H., RN

Senior Research Program Officer, ORWH, NIH

Over her career, Dr. Lisa Begg has worked as a senior scientist, administrator, and educator within the Federal Government, academia, and clinical and research settings. Since joining NIH in 1998, she has developed, implemented, and managed several large, complex NIH extramural research programs.

She initially served as chief of the National Cancer Institute's Center for Cancer Training, overseeing a $110 million-per-year budget while implementing a broad strategic plan for research training and career development. Later, she joined ORWH, working across the NIH Institutes and Centers to develop and enhance a variety of initiatives in women's health and sex differences research, including several NIH-wide and Government-wide research initiatives. In addition to these activities, Dr. Begg oversees the Building Interdisciplinary Research Careers in Women's Health (BIRCWH) program, an institutional mentored career development grant program. The BIRCWH program was created in 2000 and continues to provide career development to junior faculty members who have recently completed clinical training or postdoctoral fellowships and who will be engaged in interdisciplinary basic, translational, behavioral, clinical, and/or health services research relevant to the health of women and, where appropriate, the use of both sexes to better understand the influence of sex as a biological variable on health and disease.

While working in academia, Dr. Begg created a large breast cancer research program with support from several extramural research grants and contracts. As a faculty member at the University of Pittsburgh, she taught students in the Graduate School of Public Health (GSPH) and the School of Nursing. She held faculty positions in the GSPH, the School of Nursing, and the School of Medicine. Earlier in her career, she founded the Oncology Nursing Society, which now has over 35,000 members domestically and worldwide and provides an amount of nursing research support that is second only to the National Institute of Nursing Research's support.

Dr. Begg holds earned degrees in epidemiology and nursing—a Dr.P.H. in epidemiology from the University of Pittsburgh; an M.P.H. in epidemiology from the University of California, Los Angeles; an M.S. in nursing from the University of California, San Francisco; and a B.S.N. from Boston College.

Marie A. Bernard, M.D.

Chief Officer for Scientific Workforce Diversity (COSWD), NIH

As NIH's COSWD, Dr. Marie Bernard leads NIH's effort to promote diversity, inclusiveness, and equity throughout the biomedical research enterprise, both intramurally and extramurally. Dr. Bernard also co-leads NIH's UNITE initiative to end structural racism.

Prior to being selected COSWD in May 2021, Dr. Bernard served as the Deputy Director of the National Institute on Aging (NIA). As the senior geriatrician of NIA, she served as the principal adviser to the NIA Director. She also led a broad range of activities, including co-chairing two categories of objectives in the U.S. Department of Health and Human Services' Healthy People 2020 and Healthy People 2030—older adults and dementias, including Alzheimer's disease. She co-led the NIH Inclusion Governance Committee, which ensures appropriate inclusion of individuals in clinical studies, including inclusion by sex/gender, inclusion by race/ethnicity, and inclusion of children and older adults.

Dr. Bernard also led the Women of Color Committee of the NIH Working Group on Women in Biomedical Careers. Her national leadership in geriatrics research, teaching, and clinical practice has been recognized with the Clark Tibbits Award from the Academy for Gerontology in Higher Education (2013) and the Donald P. Kent Award from the Gerontological Society of America (2014). Her work within NIH has been recognized with NIH Director's Awards (2018 and 2019), including the NIH Director's Award for Equity, Diversity, and Inclusion in 2020.

Prior to joining NIH, Dr. Bernard was the Endowed Professor and Founding Chair at the Donald W. Reynolds Department of Geriatric Medicine at the University of Oklahoma College of Medicine and Associate Chief of Staff for Geriatrics and Extended Care at the Oklahoma City Veterans Affairs Medical Center. She has held numerous national leadership roles, including Chair of the U.S. Department of Veterans Affairs National Research Advisory Council, Chair of the Clinical Medicine (now Health Sciences) Section of the Gerontological Society of America, board member of the American Geriatrics Society, President of the Association for Gerontology in Higher Education, and President of the Association of Directors of Geriatric Academic Programs. She has lectured and published widely in her area of research—nutrition and function in older adults, with a particular focus on underrepresented racial and ethnic populations.

She completed her undergraduate education at Bryn Mawr College and received her M.D. from the University of Pennsylvania. Dr. Bernard trained in internal medicine at Temple University Hospital, where she also served as chief resident. She received additional training through the Association of American Medical Colleges' Health Services Research Institute, the Geriatric Education Center of Greater Philadelphia, and the Wharton School's Executive Development Program.

Sonia Castro Flores, Ph.D.

Professor and Vice Chair for Diversity and Justice in the Department of Medicine
Pulmonary and Critical Care Medicine Division
University of Colorado Anschutz Medical Campus

Dr. Sonia Flores is a Professor in the University of Colorado Anschutz Medical Campus's Division of Pulmonary Sciences and Critical Care Medicine and Vice Chair for Diversity and Justice in the division's Department of Medicine. She graduated with a B.S. in biology from the University of Puerto Rico and subsequently received her Ph.D. at the University of South Alabama in 1988.

Dr. Flores has made it her mission to increase the number of women and underrepresented individuals entering the sciences and pursuing academic research careers. Throughout her career, she has been invested in developing research education pipeline programs—including an NIH-supported training program, funded since 2000, called Graduate Experience for Multicultural Students, which provides summer research experiences for students from minoritized communities. She is the Program Director of the NIH-funded Programs to Increase Diversity among Individuals Engaged in Health-Related Research (PRIDE). PRIDE addresses the difficulties experienced by junior investigators and transitioning postdoctoral scientists in establishing independent academic research careers and negotiating through the academic ranks.

Dr. Flores is truly passionate about building and implementing programs that support equity, diversity, and inclusion and enhance career development and educational prospects.

Joshua A. Gordon, M.D., Ph.D.

Director, National Institute of Mental Health (NIMH), NIH

Dr. Joshua Gordon serves as the Director of NIMH, the lead Federal agency for research on mental disorders. He oversees an extensive research portfolio of basic and clinical research that seeks to transform the understanding and treatment of mental illnesses, paving the way for prevention, recovery, and cure.

He pursued a combined M.D.–Ph.D. degree at the University of California, San Francisco (UCSF). Medical school coursework in psychiatry and neuroscience convinced him that the greatest need—and greatest promise—for biomedical science was in these areas.

During his Ph.D. thesis with Dr. Michael Stryker, he pioneered the methods necessary to study brain plasticity in the mouse visual system. Upon completion of the dual degree program at UCSF, Dr. Gordon went to Columbia University for his psychiatry residency and research fellowship because of the breadth and depth of the research opportunities there. Working with Dr. Rene Hen, Dr. Gordon and colleagues studied the role of the hippocampus, a brain structure known to be important for memory and emotional processes associated with anxiety and depression. He joined the Columbia faculty in 2004 as an Assistant Professor in the Department of Psychiatry.

Dr. Gordon's research focuses on the analysis of neural activity in mice carrying mutations of relevance to psychiatric disease. His lab studied genetic models of these diseases from an integrative neuroscience perspective, focused on understanding how a given disease mutation leads to a behavioral phenotype across multiple levels of analysis. To this end, he employs a range of systems neuroscience techniques, including in vivo imaging, anesthetized and awake behavioral recordings, and optogenetics, which uses light to control neural activity. His research has direct relevance to schizophrenia, anxiety disorders, and depression.

In addition to his research, Dr. Gordon was an Associate Director of the Columbia University/New York State Psychiatric Institute Adult Psychiatry Residency Program, where he directed the neuroscience curriculum and administered research training programs for residents. Dr. Gordon also maintained a general psychiatric practice, caring for patients who were suffering from the illnesses he had studied in his lab at Columbia.

Dr. Gordon's work has been recognized by several prestigious awards, including the Brain and Behavior Research Foundation–NARSAD Young Investigator Award, the Rising Star Award from the International Mental Health Research Organization, the A.E. Bennett Research Award from the Society of Biological Psychiatry, and the Daniel H. Efron Research Award from the American College of Neuropsychopharmacology.

Michael Lauer, M.D.

Deputy Director for Extramural Research, NIH

Dr. Michael Lauer is the Deputy Director for Extramural Research at NIH, where he serves as the principal scientific leader and adviser to the NIH Director on all matters relating to the substance, quality, and effectiveness of the NIH extramural research programs and administration. He received education and training at Rensselaer Polytechnic Institute, Albany Medical College, Harvard Medical School, the Harvard School of Public Health, and the National Heart, Lung, and Blood Institute's (NHLBI) Framingham Heart Study.

Dr. Lauer spent 14 years at the Cleveland Clinic as Professor of Medicine, Epidemiology, and Biostatistics. During his tenure at the clinic, he led a federally funded, internationally renowned clinical epidemiology program that applied big data from large-scale electronic health platforms to questions regarding the diagnosis and management of cardiovascular disease. From 2007 to 2015, he served as a Division Director at NHLBI, where he promoted efforts to leverage big data infrastructure to enable high-efficiency population and clinical research and efforts to adopt a research funding culture that reflected data-driven policy. He has received numerous awards, including the NIH Equal Employment Opportunity Award of the Year and the Arthur S. Flemming Award in recognition of his efforts to grow a culture of learning and accountability in the Federal Government.

Xenia T. Tigno, Ph.D.

Associate Director for Careers, ORWH, NIH

Dr. Xenia Tigno is the Associate Director for Careers at ORWH. Prior to her current position, she was a Program Officer at the National Heart, Lung, and Blood Institute and at the National Institute of Nursing Research.

Dr. Tigno has published in the areas of the biophysics of microcirculation, obesity, diabetes, aging, community-based epidemiology, chaos analysis, herbal medicine, and women's health. She taught medical physiology for nearly 30 years and served as Chair of the Department of Physiology at the University of the Philippines College of Medicine and coordinator of the medical physiology course at the University of South Florida. A native of Manila, Philippines, she obtained her bachelor's degree in physics and master's degrees in physiology and epidemiology from the University of the Philippines and her doctorate in natural science (with high honors) from the University of Würzburg in Germany.

As a bench scientist, Dr. Tigno has worked in various laboratories, including at the European Organization for Nuclear Research (CERN) in Geneva; at the physiological institutes in Würzburg, Munich, and Berlin; and at the National Cardiovascular Research Center in Osaka. She has edited a book for the American Physiological Society, titled *Sex-Based Differences in Lung Physiology* (2021), and a textbook on integrative physiology. Dr. Tigno's current efforts are directed toward supporting the advancement of women in biomedical careers and promoting diversity and inclusion in academia.

Jamie White, M.S.

Health Science Strategy and Relations Lead, ORWH, NIH

Jamie White was the Steering Committee Chair of the 5th Annual Vivian W. Pinn Symposium. She serves as the Health Science Strategy and Relations Lead at ORWH. In this position, she provides strategic guidance and consults with ORWH and NIH leadership concerning policy and programmatic challenges in science, health, and the biomedical workforce that are of significance to NIH. In addition, Ms. White conducts a wide range of staff functions involving strategy, vision, and process planning, as well as creating and maintaining external and internal partnerships through strategic engagement.

Ms. White began her career at NIH as a Presidential Management Fellow (PMF) – Science, Technology, Engineering, and Mathematics (STEM), acting as the Special Assistant to the Director of ORWH. Prior to her PMF-STEM fellowship, she worked as a Laboratory Analyst for the Blue Grass Chemical Agent-Destruction Pilot Plant and as a math and science tutor for the Professional Tutors of America and Varsity Tutors. Early in her career, she was a Research Chemist at the Centers for Disease Control and Prevention, working on the Hormone Standardization Project. She has expertise in multiple disciplines, including instrumentational analysis, analytical chemistry microscopy, behavioral neuroendocrinology, biochemistry, women's health, and policy, among a few others, and is passionate about seeing women and diverse groups in biomedical careers succeed.

She attained her graduate degree in neuroscience at Tulane University. Ms. White is a proud alumna of Spelman College and the Gates Millennium Scholars Program because of their commitment to promoting the academic excellence of diverse students. She understands the importance of diversity in science, technology, engineering, mathematics, and medicine (STEMM) and the need for exposure to STEMM fields starting at a young age. In her role at ORWH, Ms. White is grateful to work toward the advancement of women in biomedical careers and research on the health of women, carrying on the mission and legacy of the office's many programs and leaders that played such an important role in her own journey.

About The NIH Office of Research on Women's Health

The NIH Office of Research on Women's Health 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—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 Administrative Supplement 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 an international movement to remove bias against female biology at the preclinical research stage—a huge contribution to science that benefits everyone.

SUPPORT women in biomedical careers by providing mentoring opportunities (such as through the 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 careers.

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 vaccines, which have 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 ORWH's establishment in 1990, the office's work, reach, and impact have 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.

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#NIHPinnSymposium

#6thAnnualVPS

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National Institutes of Health

Office of Research on Women's Health