48th Meeting of the NIH Advisory Committee on Research on Women’s Health

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

April 10, 2019
Reminder:
Special Government Employees (SGE)

- Subject to the same ethics rules that apply to government employees
- Rules located in “Standards of Ethical Conduct for Employees of the Executive Branch”
- ACRWH members required to disclose any real, potential, or apparent conflict(s) of interest
- ACRWH members may not engage in any lobbying activities while attending committee meetings of ACRWH sponsored events
New SGE Procedures

- Electronic submission of Confidential Financial Disclosure Report (OGE form 450) via NIH Ethics Enterprise System (NEES)
- Beginning with 2019 ACRWH nominees
- Secured filing with eCommons account
- Conflict of Interest (COI) updates will be pre-populated with data from previously filed forms
Introducing Our New Advisory Committee Members

Welcome aboard!

Roger Fillingim, Ph.D.
Professor and Director, Pain Research and Intervention Center of Excellence (PRICE), University of Florida College of Dentistry

Stacie Geller, Ph.D.
G. William Arends Professor of Obstetrics and Gynecology Professor, Division of Academic Internal Medicine, University of Illinois College of Medicine

Margaret “Peg” McCarthy, Ph.D.
Professor, Pharmacology Chair, Department of Pharmacology, University of Maryland Medical School

Elena Rios, M.D., M.S.P.H.
President & CEO National Hispanic Medical Association
48th Meeting of the NIH Advisory Committee on Research on Women’s Health

Janine Austin Clayton, M.D.
NIH Associate Director for Research on Women’s Health
Director, Office of Research on Women's Health
National Institutes of Health

Director’s Report
April 10, 2019
NIH welcomes new leadership

Noni H. Byrnes, Ph.D.
Director
NIH Center for Scientific Review

Joni Rutter, Ph.D.
Deputy Director
National Center for Advancing Translational Sciences

Tara A. Schwetz, Ph.D.
Associate Deputy Director
National Institutes of Health
April is National Minority Health Month

**Maternal Mortality**

- N.H. Black
- N.H. White
- Hispanic

Maternal mortality rate per 100K live births*

- 2008–2009
- 2013–2014

*27 states (+D.C.) w/ comparable reporting

**Maternal Morbidity**

- N.H. Black
- Hispanic
- Asian/Pacific

Cases of severe maternal morbid. per 10K delivery hospitalizations**

- 2006
- 2015

**Overall U.S. rates

The advocacy group Black Mamas Matter Alliance recognizes April 11-17 as Black Maternal Health Week.
Maternal morbidity & mortality (MMM) are associated with many causes & risk factors and are influenced by many social determinants of health.

**Risk factors & influences**
- Race
- Age
- Chronic conditions
- Physical fitness
- Education
- Access to care
- Location
- Racial bias

**Pregnancy-Related Deaths in the US**

<table>
<thead>
<tr>
<th>Leading underlying causes of pregnancy-related deaths</th>
<th>Preventability among pregnancy-related deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hemorrhage</td>
<td>14.0</td>
</tr>
<tr>
<td>Cardiovascular and coronary conditions</td>
<td>14.0</td>
</tr>
<tr>
<td>Infection</td>
<td>10.7</td>
</tr>
<tr>
<td>Cardiomyopathy</td>
<td>10.7</td>
</tr>
<tr>
<td>Embolism</td>
<td>8.4</td>
</tr>
<tr>
<td>Preeclampsia and eclampsia</td>
<td>7.4</td>
</tr>
<tr>
<td>Mental health conditions</td>
<td>7.0</td>
</tr>
</tbody>
</table>

70.0% of pregnancy-related deaths from hemorrhage are preventable.

68.2% of pregnancy-related deaths from cardiovascular and coronary conditions are preventable.


Change in maternal mortality rate by state, 1997-2012 (deaths/100K live births)
Not surprisingly, there is broad interest in MMM across the NIH

- Ongoing focus of the CCRWH, with presentations by:
  - NICHD
  - NIEHS
  - ORWH
  - NHLBI
  - NCATS
  - OBSSR
  - NIDDK
  - NIAAA
  - ODS
  - NINR
  - NIBIB
  - NIMHD
  - NINDS

- ORWH portal/resource page with info. on relevant FOAs, events, resources for moms, etc. (under construction)
“[T]his plan will enhance the basic, preclinical, and clinical foundations of women’s health research; fuel new scientific initiatives to address pressing needs in women’s health; and bring disciplines together for integrated research to improve the health of women and, therefore, our nation.”

Francis S. Collins, M.D., Ph.D.
Director, National Institutes of Health
February 2019

Available at https://report.nih.gov/strategicplans
Outline

• Scientific Collaborations
• Research Programs
• Women in Biomedical Careers
• Building Connections

(Images from bottom: Pixabay, public domain; NCI / Wash. U., Liu & Achilefu, 2017; NCI, Daniel Sone, 2014; NCI, Sone, 2013; Pixabay, public domain; NCI, Sone, 2011)
The opioid public health crisis rages on

U.S. Trends in Drug Use among Delivering Women
(HCUP’s National Inpatient Sample; N = 47,164,263)

The Helping to End Addiction Long-term SM (HEAL) Initiative is a trans-agency effort to advance scientific solutions to this crisis.

- Basic research on pain & addiction pathways
- Implementation science to develop & test Tx models
- Research to integrate behavioral interventions with medication-assisted Tx for opioid use disorder
- Development of non-addictive pain Tx
The Helping to End Addiction Long-term SM (HEAL) Initiative is a trans-agency effort to advance scientific solutions to this crisis.

NIH HEAL INITIATIVE

A trans-NIH effort to address the opioid crisis through science

Nora D. Volkow, M.D.
Director of the National Institute on Drug Abuse

Photo: Mary Noble Ours
ORWH signed onto 14 recent HEAL collaborations

<table>
<thead>
<tr>
<th>FOA Title</th>
<th>FOA Number</th>
<th>Date Posted</th>
<th>Expiration Date</th>
<th>ORWH signed on?</th>
<th>Language on importance of sex/gend. diffs., SABV, and/or inclusion of W?</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEALthy Brain &amp; Child Development (BCD) Study (Collaborative R34, R34)</td>
<td>RFA-DA-19-029</td>
<td>Dec. 21, 2018</td>
<td>Mar. 26, 2019</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td></td>
<td>RFA-DA-19-036</td>
<td>Dec. 21, 2018</td>
<td>Mar. 26, 2019</td>
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<tr>
<td>Clinical Devices to Treat Pain (UH3)</td>
<td>RFA-NS-19-018</td>
<td>Dec. 10, 2018</td>
<td>Feb. 23, 2021</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>RFA-NS-19-017</td>
<td>Dec. 10, 2018</td>
<td>Feb. 23, 2021</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Centers (U19); Data Integration (U24); Technology Research Sites</td>
<td>RFA-AR-19-027</td>
<td>Dec. 10, 2018</td>
<td>Mar. 21, 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(UH2/UH3); Phase 2 Clinical Trials (UG3/UH3)</td>
<td>RFA-AR-19-028</td>
<td>Dec. 10, 2018</td>
<td>Mar. 21, 2019</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>RFA-AR-19-029</td>
<td>Dec. 10, 2018</td>
<td>Feb. 27, 2019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effectiveness Trials to Optimize, Implement, Scale &amp; Sustain Collaborative</td>
<td>RFA-MH-19-525</td>
<td>Dec. 10, 2018</td>
<td>Apr. 2, 2019</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>Care Model for Individuals with OUDs &amp; Mental Health Conditions (U01)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Treat Pain (UG3/UH3, U44)</td>
<td>RFA-NS-19-010</td>
<td>Nov. 5, 2018</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analytical and/or Clinical Validation of a Candidate Biomarker for Pain</td>
<td>RFA-NS-18-046</td>
<td>Sep. 19, 2018</td>
<td>Mar. 13, 2020</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
<tr>
<td>(R61/R33)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discovery of Biomarkers, Biomarker Signatures &amp; Endpoints for Pain</td>
<td>RFA-NS-18-041</td>
<td>Aug. 2, 2018</td>
<td>Mar. 13, 2020</td>
<td>Yes</td>
<td>Yes*</td>
</tr>
</tbody>
</table>

*Above and beyond boilerplate
HEAL

HEALTHY BRAIN AND CHILD DEVELOPMENT INITIATIVE

"Given the higher prevalence of pain disorders in females and their greater sensitivity to pain, there is a crucial need to include women in pain and opioid-related research. Integrating the purposeful accounting for [SABV] in biomedical research on pain and opioid use throughout the life span will fill gaps in our knowledge and inform more effective, personalized approaches to improve health for women and men."

HEAL Initiative: HEALthy Brain and Child Development Study. R34 Planning Grant. RFA-DA-19-029

Photo: Intropin [CC BY 3.0 (https://creativecommons.org/licenses/by/3.0)]
On March 13, 2019, the federal charter for the Task Force on Research Specific to Pregnant Women & Lactating Women (PRGLAC) was renewed for 2 years

- Est. in 2016 by the 21st Century Cures Act
- Membership:
  - NICHD, ORWH, NIAID, NIDDK, NIMH, NHLBI, NCATS
  - OASH (Senior Vaccine Advisor), OWH
  - CDC, FDA, AHRQ, HRSA
  - U.S. Dept. of Veterans Affairs
  - Defense Health Agency [DoD]
  - Reps. of relevant medical societies & NPOs
  - Relevant industry reps.
  - Design research to include pregnant W & nursing moms, unless scientifically justified not to do so
  - Expand workforce of clinicians & researchers w/ expertise in obstetric & lactation pharmacology & therapeutics
  - Remove regulatory barriers that exclude pregnant W & nursing moms from research
- Will now provide advice & guidance to HHS Sec. on implementation of the 15 recommendations
On March 13, 2019, the federal charter for the Task Force on Research Specific to Pregnant Women & Lactating Women (PRGLAC) was renewed for 2 years.
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ORWH Funding History & FY18 Extramural Award Profile

Data not adjusted for inflation.

FY18 Extramural Award Profile (as % of Extramural Budget)

- BIRCWH (30%)
- Other IC Co-Funds (23%)
- R56 (6%)
- SCORE (17%)
- Sex/Gender Admin. Supp. (14%)
- U3 Admin. Supp. (10%)

Fiscal Year: 1991 to 2018

Total Budget (in $M): 1.50 to 43.73

Total Budget (in $M) for each year:
- 1991: 10.24
- 1992: 17.20
- 1993: 22.05
- 1994: 37.33
- 1995: 41.22
- 1996: 42.34
- 1997: 43.73

Other IC Co-Funds:
- 1991: 5.00
- 1992: 10.00
- 1993: 15.00
- 1994: 20.00
- 1995: 25.00
- 1996: 30.00
- 1997: 35.00
- 1998: 40.00
- 1999: 45.00
- 2000: 50.00

Sex/Gender Admin. Supp.:
- 1991: 6%
- 1992: 14%
- 1993: 17%
- 1994: 14%
- 1995: 10%
- 1996: 6%
- 1997: 14%
- 1998: 17%
- 1999: 14%
- 2000: 10%
- 2001: 6%
- 2002: 14%
- 2003: 17%
- 2004: 14%
- 2005: 10%
- 2006: 6%
- 2007: 14%
- 2008: 17%
- 2009: 14%
- 2010: 10%
- 2011: 6%
- 2012: 14%
- 2013: 17%
- 2014: 14%
- 2015: 10%
- 2016: 6%
- 2017: 14%
- 2018: 17%

BIRCWH:
- 1991: 30%
- 1992: 23%
- 1993: 20%
- 1994: 18%
- 1995: 16%
- 1996: 14%
- 1997: 12%
- 1998: 10%
- 1999: 8%
- 2000: 6%
- 2001: 4%
- 2002: 2%
- 2003: 0%
- 2004: 0%
- 2005: 0%
- 2006: 0%
- 2007: 0%
- 2008: 0%
- 2009: 0%
- 2010: 0%
- 2011: 0%
- 2012: 0%
- 2013: 0%
- 2014: 0%
- 2015: 0%
- 2016: 0%
- 2017: 0%
- 2018: 0%
Building Interdisciplinary Research Careers in Women’s Health Program uses K12 mechanism & focuses on junior faculty

Spotlight on BIRCWH

Karen M. Freund, M.D., M.P.H.
Jennifer DuPont, Ph.D.
Loss of vascular angiotensin II type 2 receptor contributes specifically to female vascular aging

Jill M. Goldstein, Ph.D.
Simmie L. Foster, M.D., Ph.D.
Regulation of inflammatory cytokines by

Kim A. Boggess, M.D.
Matthew C. Mauck, M.D., Ph.D.
Sex differences in chronic pro-inflammatory immune responses

Ellen B. Gold, Ph.D., M.A.
Laura M. Tully, Ph.D.
Neural mechanisms underlying ↑ psychotic & mood symptoms in females with schizophrenia

Watch the videocast: https://videocast.nih.gov/Summary.asp?Live=28502&bhcp=1


20 BIRCWH Progs. supported by RFA-OD-15-001 & RFA-OD-16-013, to which the following ICOs signed on:
- ORWH
- NICHD
- NCI
- NIA
- NIAAA
- NIAID
- NIAMS
- NIDA
- NIDCR
- NIEHS
ORWH FY18 Extramural Award Investments by ICO

NICHID BIRCWH Awards, $8.4M

Plot excludes Contract R&D Awards.
ORWH FY18 Extramural Award Investments by ICO

Plot excludes Contract R&D and BIRCWH Awards.
## ORWH Extramural Award Investments by Program in FY2018

<table>
<thead>
<tr>
<th>Program</th>
<th>ORWH Contribution in FY18</th>
<th># Funding ICs in FY18</th>
<th>List of Funding ICs in FY18</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SCORE</strong>*</td>
<td>$4.87 M</td>
<td>3</td>
<td>NIA; NIDA; NIDDK</td>
</tr>
<tr>
<td><strong>BIRCWH</strong></td>
<td>$8.81 M</td>
<td>5</td>
<td>NICHD; NIDA; NIAAA; NIAID; NIAMS</td>
</tr>
<tr>
<td><strong>R56</strong></td>
<td>$1.80 M</td>
<td>5</td>
<td>NCI; NHLBI; NICHD; NIDDK; NINR</td>
</tr>
<tr>
<td><strong>Sex/Gender Admin. Supp.</strong></td>
<td>$4.27 M</td>
<td>19</td>
<td>NIDA; NINDS; NHLBI; NIAID; NIAMS; NIMH; NIDDK; NIA; NICHD; NIAAA; NIGMS; NCI; NIEHS; NCCIH; NIDCR; OD; NIBIB; NIMHD; NEI</td>
</tr>
<tr>
<td><strong>U3 Admin. Supp.</strong></td>
<td>$2.92 M</td>
<td>8</td>
<td>NCI; NIAID; NICHD; NIDA; NIDDK; NIEHS; NIMH; NINR</td>
</tr>
<tr>
<td><strong>Other IC Co-Funds</strong></td>
<td>$6.75 M</td>
<td>17</td>
<td>FIC; NCCIH; NCI; NEI; NHGRI; NHLBI; NIA; NIAAA; NIAID; NIAMS; NICHD; NIDA; NIDDK; NIGMS; NIMH; NINR; OD</td>
</tr>
</tbody>
</table>

*Previously SCOR*
Since the program started in FY02, NIH has invested more than $180 M in Specialized Centers of Research (Excellence) on Sex Differences.

**Spotlight on Other IC Co-Funds**

**Stephen W. Patrick, M.D., M.P.H., M.S.**
Asst. Prof. of Pediatrics & Health Policy
Dept. of Pediatrics
Vanderbilt U. School of Medicine

**Early Stage Investigator / New Investigator**
R01: *Improving access to Tx for W with opioid use disorder (OUD)*

Field expt. w/ simulated female patients of reprod. age (incl. pregnancy status) in randomly-selected outpatient BUP providers & opioid Tx programs in 10 states w/ varying policies

**Specific Aims**
- Are pregnant women w/ OUD more likely to have trouble accessing opioid agonist Tx (OAT)?
- Does insurance type modify access to OAT?
- Do state policies promote or hinder access to Tx?
The R56 High-Priority, Short-term Project Award is a DPCPSI initiative involving ORWH, ODS & OAR

Spotlight on R56

Tonda L. Hughes, Ph.D., R.N., FAAN
Henrik H. Bendixen Prof. of Int’l Nursing
Director, Global Health Research
Columbia U. School of Nursing

National Institute on Alcohol Abuse and Alcoholism

March 2016 R56: *Impact of supportive policies on minority stress, drinking, and health among sexual minority women (SMW)*

September 2016 – present: R01 on the same topic

- Examine effect of legal recognition of same-sex marriage on drinking outcomes in SMW—e.g., hazardous drinking (HD)
- Compare drinking outcomes among SMW who marry their same-sex partner & those of SMW in other same-sex relationships
- Identify associations between long-term trajectories of alcohol consumption & HD and SMW’s physical & mental health

Within the 2 yrs. following receipt of the R56, 57% of FY16 grantees were found to have gone on to obtain R01 funding on the same or closely-related topic.

3 papers were supported by the R56 funding

Spotlight on SCORE

Multi-PI Award: U54: Emory Specialized Center of Research Excellence on Sex Differences

Igho Ofotokun, M.D., M.S.
Professor of Medicine
Prof. of Behavioral Science & Health Education

Lisa Haddad, M.D., M.S., M.P.H.
Assoc. Prof. of Medicine
Dept. of Gynecology & Obstetrics

3 research projects will explore synergy between HIV-induced immune activation & chronic inflammation & that induced by E insensitivity in W aging w/HIV

1. Neuro HPA Axis Project
2. Musculoskeletal Project
3. Cardiovascular Project

Photos provided by MPIs

• Disease agnostic, inter-disciplinary & translational research on sex differences
• Supported by a cooperative agreement (U54 mechanism)
• New mandatory Career Enhancement Core
• ORWH received 24 apps. in FY18 & co-funded 6 with 3 ICs: NIA, NIDA, NIDDK
• FOA reissued: RFA-OD-19-013
ORWH has invested $32.9 M in the Sex & Gender Administrative Supplement Program since FY13

Investments by ICO & FY

NIH Institute, Center, or Office

Award Investments (in $K)
ORWH has supported 341 S/G Admin Supps since FY13 and renewed the program for FY19

**Spotlight on Sex/Gender Admin. Supp.**

<table>
<thead>
<tr>
<th>PI &amp; Institution</th>
<th>Parent Grant</th>
<th>Admin Supp</th>
<th>Study Type</th>
<th>Main Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esther Dupont-Versteegden, Ph.D.</td>
<td>R01 AT009268-01 NIH National Center for Complementary and Integrative Health</td>
<td>Preclinical</td>
<td>Addition of subjects to existing study to increase power for testing sex diffs.</td>
<td></td>
</tr>
<tr>
<td>Forest White, Ph.D.</td>
<td>US4 CA210180-02 NIH National Cancer Institute</td>
<td>Preclinical + Clinical</td>
<td>Addition of new sex/gender to single sex/gender research</td>
<td></td>
</tr>
<tr>
<td>Monica Uddin, Ph.D.</td>
<td>R01 MD011728-01 NIH National Institute on Minority Health and Health Disparities</td>
<td>Clinical</td>
<td>Sex/gender-based comparative analysis of existing samples/data sets</td>
<td></td>
</tr>
</tbody>
</table>
ORWH has supported 23 U3 Admin Supps ($4.4 M tot.) since FY17, and we reissued the FOA for FY19

Spotlight on U3 Administrative Supplement

Multi-PI Award – Parent Grant: (R01)

Novel Wireless Ingestible Sensor System for Measurement of Medication Adherence in HIV Treatment & Prevention

Sara Browne, M.D.
Associate Clinical Professor
Dept. of Medicine
Div. Infectious Diseases

Connie Benson, M.D.
Prof. of Medicine & Global Public Health
Div. Infectious Diseases

This study will:
• provide PK data on Truvada® for American women for the first time;

Ingestion event marker (*Proteus Digital Health*): composed of Si, Mg, Cu; generates electrical current on contact with stomach acid, thereby producing signal

Skin patch: receives signal from ingestible sensor; also records heart rate, body temp., and data on activity & rest patterns

Mobile device: logs medication adherence & basic physiol. measures
SABV expertise and knowhow in sex & gender analysis considered for peer review: ODP efforts

ODP enhanced their database of peer reviewers, which is populated via the Prevention Research Expertise Survey (PRES). They added:

- A methodological field of expertise related to sex & gender analysis
- A content topic area of expertise in assessing SABV
SABV expertise and knowhow in sex & gender analysis considered for peer review: ODP efforts

**NIH National Institutes of Health**
Office of Disease Prevention

**Prevention Research Expertise Survey**
OMB# 0925-0728
Expiration Date: 11/30/2020

ODP enhanced their database of peer reviewers, which is populated via the Prevention Research Expertise Survey (PRES). They added:
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Historic *Lancet* issue champions advancing women in STEMM

The art of medicine

Women’s value: beyond the business case for diversity and inclusion

Achieving women’s equity in academic medicine: challenging the standards

Historic Lancet issue champions advancing women in STEMM

Factors affecting sex-related reporting in medical research: a cross-disciplinary bibliometric analysis

Athena SWAN and ADVANCE: effectiveness and lessons learned

Taking the battle against sexual harassment in global academia online
New article advocates “sex-based & gender-based research curricula”

“Although much work remains to be done, the foundations are now laid to change how sex and gender considerations are addressed in research. The stakes are high: optimal health for all people across the lifespan, regardless of their sex or gender.”

2018 BIRCWH meeting brought scholars together for mentoring, networking, and advancing
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2018 BIRCWH meeting brought scholars together for mentoring, networking, and advancing.

DR. JEANNE-MARIE GUISE
“MENTORING AS MEDICINE”
RUTH L. KIRSCHSTEIN MEMORIAL LECTURE
NIH promotes women scientists and career-enhancing networking

- Jan. 16 “Wednesday Afternoon Lecture Series” featured Dr. Alondra Nelson
  - President of the Social Science Research Council and Professor of Sociology at Columbia University
  - First spoke to the WG’s WOC Committee
  - Her lecture “The Social Life of DNA” addressed the intersections of race, science, history, and social issues
- Two recent speakers include
  - April 3: Julie Segre, Ph.D., National Human Genome Research Institute, “Microbiome: friend and foe”
  - March 27: Lauren O. Bakaletz, Ph.D., Research Institute, Nationwide Children’s Hospital, “How to bust up a bacterial biofilm”
- Ten high-profile women speakers since the fall

womeninscience.nih.gov
NASEM revisits seminal report, ... but first some history

"Career impediments for women deprive the nation of an important source of talented and accomplished scientists and engineers who could contribute to our nation’s competitiveness."

BEYOND BIAS AND BARRIERS FULFILLING THE POTENTIAL OF WOMEN IN ACADEMIC SCIENCE AND ENGINEERING, 2007
NIH took report seriously—established working group and new work-life policies

- NIH Director Elias Zerhouni, M.D., created and co-chaired the Working Group on Women in Biomedical Careers (WG) in 2007
  - Co-chaired today by Francis S. Collins, M.D., Ph.D. and Janine A. Clayton, M.D.
- Introduced family-friendly policies and programs
  - Paid parental leave
  - Leave bank
  - Backup care
  - Extended tenure clock
  - Temporary lab mgr. program
  - Keep the Thread

Visit womeninscience.nih.gov
NIH funds research on causal factors and interventions to support women in science

Generating Evidence

- 14 Grants
- $16.8M/4 years
- 11 ICs & 4 Offices in OD
- Research on unconscious bias, mentoring, institutional flexibility
- Research Partnership for Women in Biomedical Careers


Fast forward: NASEM study is “addressing the underrepresentation of women” in STEMM

**EXAMINE:**
- *How* women’s participation varies across disciplines
- *How* the intersection of race and gender impacts on women of color in STEMM
- *What* interventions have produced *sustained* improvements in representation and leadership
- *Why* effective interventions haven’t been scaled up or adopted more

**DEVELOP** actionable recommendations to improve representation and leadership

Mae Jemison, M.D. – Chair President, BioSentient Corp.
First African American woman to go into space
BRAIN Initiative Awards promote diversity and launch careers for women

• With ORWH co-funding and broad IC participation, NIH BRAIN Initiative Advanced Postdoctoral Career Transition Awards offer independent research support

• Facilitate transition of outstanding postdoc researchers from mentored positions to tenure-track or equivalent faculty positions

• Help awardees from diverse backgrounds launch independent research careers
"Sexual harassment is about power. ... It’s morally indefensible, it’s unacceptable, and it presents a major obstacle that is keeping women from achieving their rightful place in science."

FRANCIS S. COLLINS, MD, PHD
Director, National Institutes of Health
September 28, 2018
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• Scientific Collaborations
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ORWH staff connect via publications


A MORE SOCIAL OR WH
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<thead>
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<tbody>
<tr>
<td>Posts</td>
<td>76</td>
<td>2,939</td>
</tr>
<tr>
<td>Engagements</td>
<td>1,769/1,341</td>
<td>30.9 Million</td>
</tr>
<tr>
<td>Clicks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potential Viewers</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ORWH finished 5th among 19 ICOs, with 30.9 million potential viewers v. average of 25.42 M.
Four ORWH posts were in the top 50!

Of the 1000+ NIH posts that were shared, ORWH had 4 in the top 50. One placed 19th!
MEDIA HITS
"Through this whole experience, I realized, especially with the pregnancy part, that a lot of women, especially black women, aren’t listened to, and the rate that black women are dying and the mortality rate of moms is not shocking, it’s actually frightening."  

Serena Williams
ORWH heightens visibility in media

Commonwealth Fund, March 2019
Seervai S. Mar. 2019. Closing the Medical Research Gap: Why It’s Important to Study How Disease Impacts Men and Women Differently
https://doi.org/10.26099/61m9-k921.
ORWH heightens visibility in media

NBC Today Show, Feb. 2019
Interview about NIH’s efforts to reduce maternal morbidity and mortality. To be aired tomorrow, during the inaugural Black Maternal Health Week, part of National Minority Health Month.
ORWH heightens visibility in media

NBC Today.com, Jan. 2019
Follow up to July interview continued discussion of gender bias in medicine, resulting in poor diagnoses and suboptimal treatment of women. To be broadcast sometime in April.
Future Women’s Health Events

Advancing Science for the Health of Women: The NIH Office of Research on Women's Health – A Symposium at the OSSD Annual Meeting
May 5, 2019 | 10am – 12pm EDT
Washington Marriott Georgetown
Washington, D.C.

Improving Maternal Health: Behind the Numbers
May 15, 2019 | 12pm-4:30pm EDT
Building 1 (Wilson Hall)
NIH Campus

https://www.ossdweb.org/2019-meeting

Latest issue of **WOMEN’S HEALTH IN FOCUS AT NIH** features new Trans-NIH Strategic Plan for Women’s Health Research.
A well-trained, diverse, and robust workforce is the engine of scientific progress.