## Advancing Science for the Health of Women: 2019-2023 Trans-NIH Strategic Plan for Women's Health Research

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"You can't really know where you are going until you know where you have been" — Maya Angelou

> MOVING INTO THE FUTURE WITH NEW DIMENSIONS AND STRATEGIES:

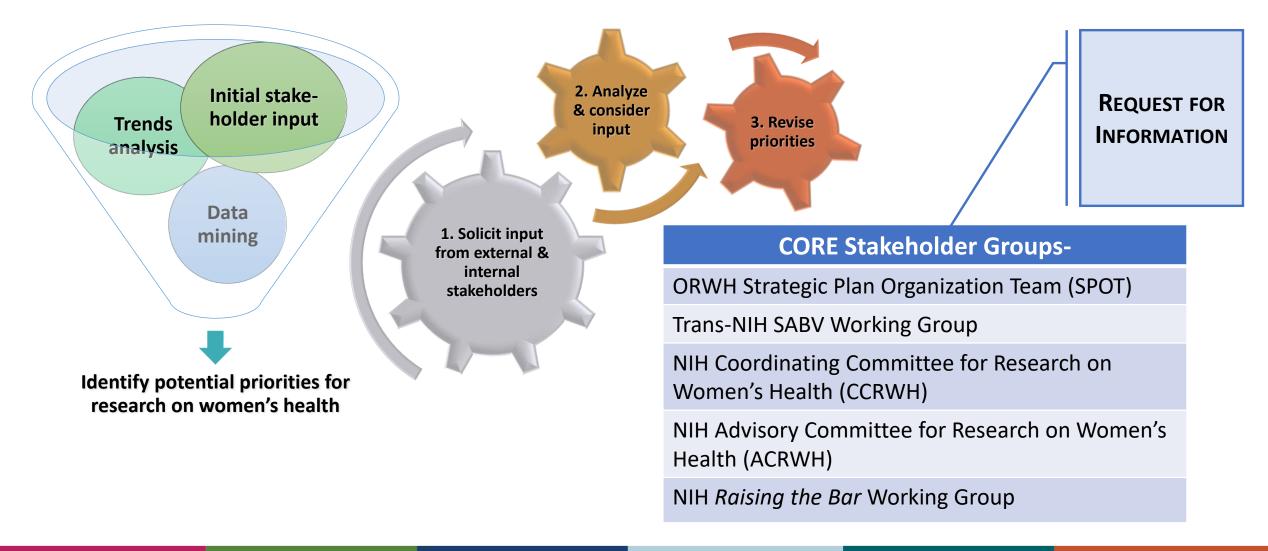
A VISION FOR 2020 FOR WOMEN'S HEALTH RESEARCH

OFFICE OF RESEARCH ON WOMEN'S HEALTH NATIONAL INSTITUTES OF HEALTH U.S. DEPARTMENT OF HEALTH & HUMAN SERVICES

### STRATEGIC PLAN



## ORWH took a multi-resource, iterative approach to strategic planning, with a strong focus on stakeholder input



## **RFI Methods & Results**

- Sep. 12 Nov. 10, 2017
- 145 responses\*
  - ✓ Researcher 46%
  - ✓ Federal 18%
  - ✓ Advocate 17%
  - ✓ Clinician 15%
  - ✓ Other/Unknown 14%
  - ✓ Patient 7%
- 45 broad thematic categories

\*Multiple response selection permitted; consequently, percentages sum to more than 100%.



### 45 Categories informed the development of 5 strategic goals support Contextual fact dissemination sex inclusive research sleep Career sex differences dissemination nitring system cance cancer injury tet metabo SB ties gender minorit E exposi labetes quidance translationaldie precision medicine early life influences interdiscip 6 Sex

# Refining the plan involved the NIH broadly, as well as external stakeholders

- NIH Council of Councils
- IC Director Meetings
- CCRWH
- ACRWH Strategic Plan Working Group
- NIH Strategic Plan Teams











### Trans-NIH strategic plan teams *collaborated* to develop the final goals and objectives

*Purpose*: To contribute to the development, implementation, and dissemination of the 2019 – 2023 Trans-NIH Strategic Plan for Women's Health Research

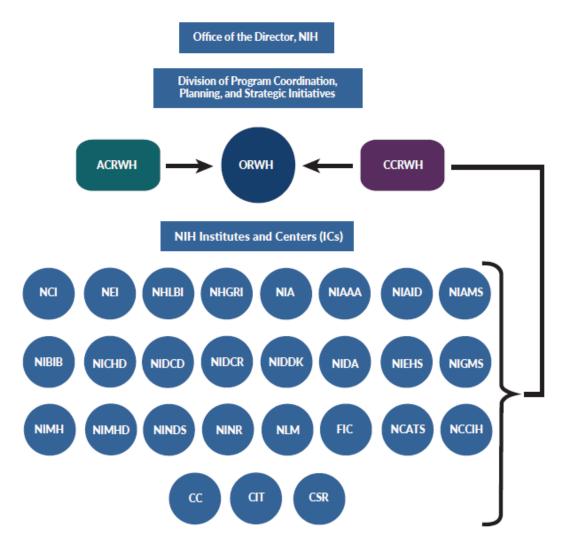
Each team co-led by ORWH team member & ICO scientist/colleague

Membership: 102 NIH staff representing 22 ICs and multiple offices of the OD





### NIH Coordinating Committee for Research on Women's Health members were critical partners



- Consistent engagement
- Critical input
- Supportive for staff engagement
- Agents for implementation



Thank you 2017-2018 **ACRWH Members** & ORWH for contributing to the Strategic Plan!

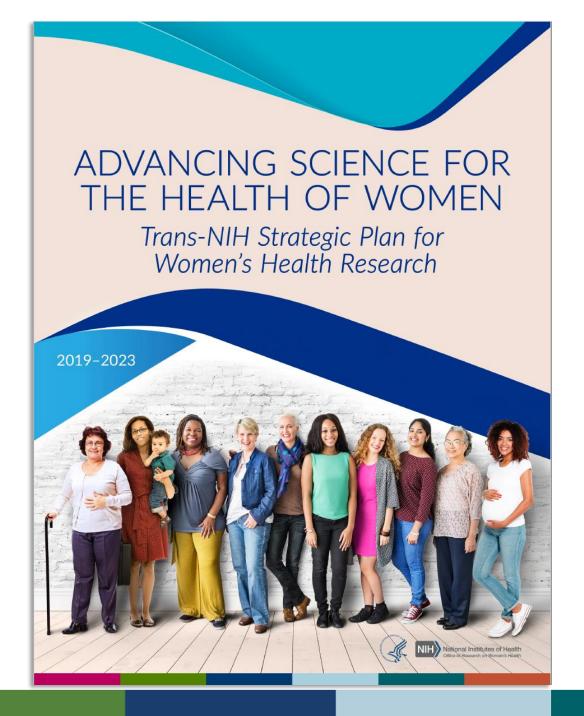




## ACRWH Working Group – Report 2019-2023 Trans-NIH Strategic Plan Carolyn M. Mazure Ph.D.

- *Process*: broad engagement by the full committee & working group, iterative & responsive to feedback
- *Plan*: cross-cutting themes as guiding principles, provides goals & objectives
- NIH commitment to the health of women: affirmed
- ACRWH: poised to support the effective dissemination, evaluation and implementation within & among NIH Institutes & Centers







## Advancing Science for the Health of Women

#### **NIH Institute & Center Mission Areas**

#### ORWH Mission

- To enhance research related to diseases, disorders, and conditions affecting women
- To help ensure that women are appropriately represented in biomedical research supported by the NIH
- To improve the advancement of women in biomedical careers

Trans-NIH Strategic Plan for Women's Health Research

#### **NIH Vision**

- Sex and gender influences are integrated into the biomedical research enterprise
- Every woman receives evidence-based disease prevention and treatment tailored to her own needs, circumstances, and goals
- Women in science careers reach their full potential



12

# Women's Health Research is research that is *relevant* to the health of women

The **Health of Women** encompasses all diseases & conditions that affect a woman from head to toe and recognizes that individual-level biological factors interact with numerous influences across a woman's life course.





## Science that will improve the health of women is guided by 3 principles



Inclusion of women, especially **populations** known to experience a disproportionate burden of illness



Engagement of multiple **perspectives** especially researchers with diverse skills, knowledge, and experiences



Consideration of the complex intersection among multiple biological **factors** and the context of a women's life



### Principle: Inclusion of women, especially populations known to experience a disproportionate burden of illness

## Research must be relevant to the health experiences of *all* women at every age & every stage

Designated U.S. health disparity populations: Blacks/African Americans; Hispanics/Latinos American Indians/Alaska Natives; Asian Americans Native Hawaiians and other Pacific Islanders Socioeconomically disadvantaged; Underserved rural Sexual and gender minorities

- Pregnant and Lactating women
- Other populations e.g. physical and developmental disability









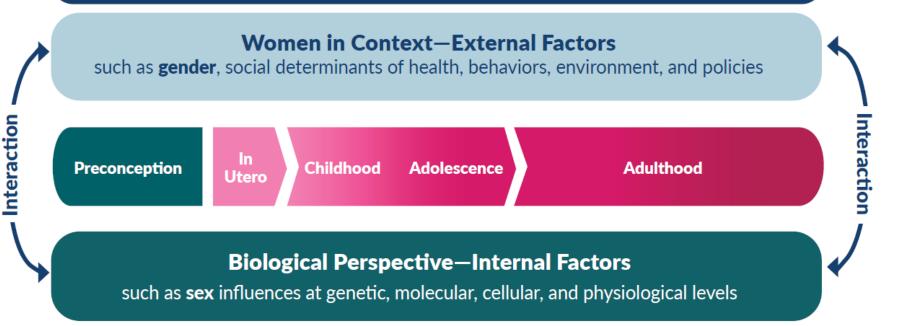


Smoky River Rural Health Week, 2017 (photo: H. Handfield & M. Lanctot; CC BY 2.0)



## Principle: Consideration of the complex intersection among multiple biological factors and the context of a women's life







## The ultimate aim of advancing science for the health of women requires the pursuit of several goals







### Goal 1: Advance Rigorous Research that is Relevant to the health of women





Discover biological differences between males & females

Investigate influences of sex & gender on health & illness

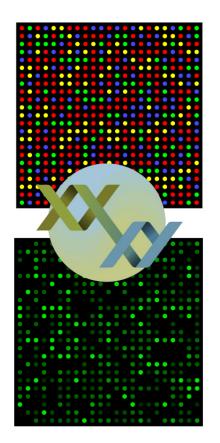
Identify the effects of exposures across the life course

Explore the influence of sex & gender on the mind-body connection

Expand research on female-specific conditions & disesases



## Goal 2: Develop Methods & Leverage Data Sources that consider sex & gender influences



Expand approaches to detect influence of sex & gender

**Develop & adapt measures** 

Leverage secondary data sources

Expand methods to recruit & retain understudied women

Sequencing flow cell & microarray chip (image: Thomas Shafee, 2017; CC BY 4.0)



## **Goal 3: Enhance Dissemination & Implementation** of evidence to improve the health of women

### Design & test approaches to integrate evidence into practice

### Leverage partnerships to disseminate research



## **Goal 4: Promote Training & Careers** to develop a well-trained, diverse & robust workforce to advance science for the health of women

Enhance knowledge of sex & gender influences: researchers & providers

Develop the next generation of women's health researchers

Enhance & develop programs to support women in research careers

Promote & support efforts to retain & advance women in research careers

Promote research on barriers & interventions to retain & advance women

# **Goal 5: Improve Evaluation** of research that is relevant to the health of women

Optimize the identification of research that is relevant to the health of women



Implement systematic tracking & evaluation

### Identify research priorities for funding



## The *strategic plan for women's health research* operates in synergy with the *NIH-Wide Strategic Plan*

### Women's Health Research

Advance Rigorous Research Relevant to the Health of Women

Develop Methods and Leverage Data Sources to consider sex and gender influences

Enhance Dissemination and Implementation of evidence to improve the health of women

Promote Training and Careers to develop a well-trained, diverse, and robust workforce

Improve Evaluation of research

### NIH-Wide

Advance Opportunities in Biomedical
Research

#### Enhance Scientific Stewardship

#### Foster Innovation by Setting NIH Priorities

Excel as a Federal Science Agency by Managing for Results

## To Advance Science for the Health of Women – the NIH needs you!

- Connect with networks, research and beyond
- Serve as Ambassadors for a multidimensional framework, for the inclusion of all women, and for interdisciplinary research
- Advocate for the plan & SABV- e.g. on editorial boards
- Disseminate in presentations
- Advise the NIH on its impact in the 'real world'



Photo: Pixabay (CCO)





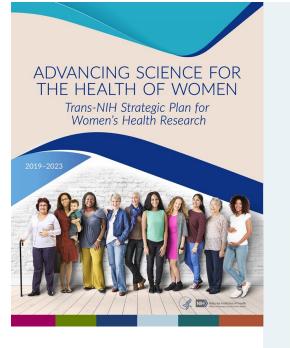
25

## A resource for you

2019-2023

Trans-NIH Strategic Plan for

Women's Health Research



ADVANCING SCIENCE 2019–2023 Trans-NIH Strat

Advancing Science for the Health vision in which sex and gender influence every woman receives evidence-based d needs, circumstances, and goals; and wo

The Health of Women encompasses al that affect a woman from head to toe an individual-level biological factors interaction numerous influences across a woman's life course.

Develop Methods and Leverage Data Sources to consider sex and gender influences that enhand research for the health of women

- 2.1 Expand and develop advanced and innovativ approaches for study design, data collection, analysis to optimize data quality and the abili to detect the influences of sex and gender or health and disease
- 2.2 Develop and adapt reliable and valid measure relevant to the health of women.
- 2.3 Leverage secondary data sources for researcl on the health of women through a big data enterprise that includes data sharing and analytic strategies.
- 2.4 Expand and refine methodologies to improve the recruitment and retention of women underrepresented in clinical research.

Goal 2



National Institutes of H

search that is Relevant en rences, structural and functional, between females x and gender on disease prevention, presentation, management, and long-term effects of exposures on health and disease ADVANCING SCIENCE FOR is the influence of sex and gender on the connection between the THE HEALTH OF WOMEN on health and disease ecific conditions and diseases, including reproductive stages, and ith. Goal 1 0= 0= Improve Evaluation of research that is relevant to the health of women to he health 5.1 Optimize the identification of research that is relevant to the health of women. 5.2 Implement systematic tracking and evaluation render influences of investments in research on the health of ientists, clinicians, to accelerate the to practice. 5.3 Identify priority areas for additional study to advance the health of women researchers to of women. Goal 5 to recruit. omen at all stages early career to **Guiding Principles** nentoring and PRINCIPLEI ifrastructure to Consideration of the heir careers. complex intersection among multiple biological factors rch on barriers and the context of a women's life ent of women terventions to PRINCIPLE II PRINCIPLE III ancement Inclusion of Engagement women, especially of multiple

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