# ORWH E-Learning Bridging the Learning Gap on Sex & Gender Differences in Health and Disease

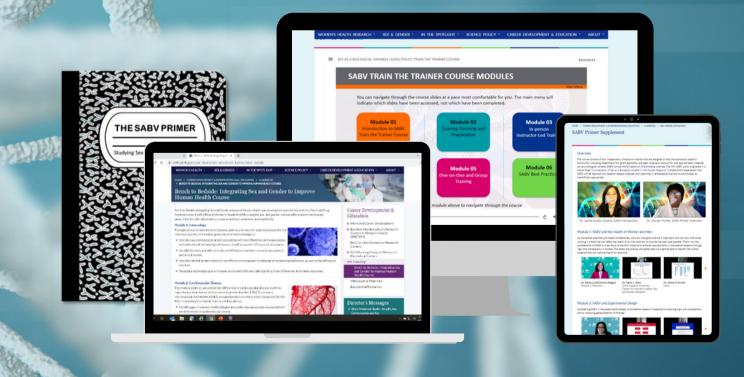
# **COURSE GUIDE**













Witness R. P. T. S. T.

TELEVILLE

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



DEVELOPED IN COLLABORATION WITH MULTIPLE FEDERAL AGENCIES AND OVER 25 EXPERTS FROM LEADING INSTITUTIONS WORLDWIDE



## **ORWH E-Learning Courses**

Developed by the Office of Research on Women's Health (ORWH) in collaboration with multiple Federal agencies, including other NIH Institutes and Centers, and with the help of over 25 experts from leading institutions worldwide, the ORWH e-learning courses are a critical resource for advancing knowledge of sex and gender differences across the biomedical enterprise. The ORWH E-Learning Program provides users with a thorough and up-to-date understanding of sex and gender influences on health and disease and NIH requirements on factoring sex as a biological variable into research designs. Users will be able to apply this knowledge when designing and conducting research or interpreting evidence for clinical practice. **These courses are free and open to the public.** 

## Bench to Bedside: Integrating Sex and Gender to Improve Human Health

This course was developed in partnership with the Food and Drug Administration (FDA) Office of Women's Health. This online course gives users a thorough and up-to-date understanding of sex and gender influences on health and disease, with the aim of enabling users to apply this knowledge when conducting research and interpreting evidence for clinical practice. Course material showcases examples from basic science through clinical trials and translation into practice to provide an understanding of the importance of considering the influence of sex and gender throughout the research spectrum and beyond. Through its six modules, the course focuses on key health conditions on which sex and gender have an impact. The six modules are listed below:

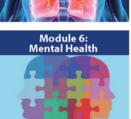
Module 1: Immunology

- Module 1: Immunology
- Module 2: Cardiovascular Disease
- Module 3: Pulmonary Disease
- Module 4: Neurology
- Module 5: Endocrinology
- Module 6: Mental Health

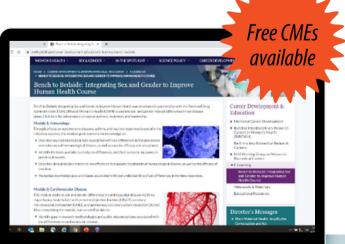
*Register at <u>https://bit.ly/3nYzNTK</u> Upon completion, participants will receive a certificate.* 



Module 2



Module 3: Pulmonary Disease



#### **Continuing Medical Education Credits**

Through the joint providership of Johns Hopkins University School of Medicine and NIH, the Accreditation Council for Continuing Medical Education has designated up to six American Medical Association Physician Recognition Award (AMA PRA) Category 1 Credits for Bench to Bedside: Integrating Sex and Gender to Improve Human Health. For more information, visit: https://bit.ly/3nYzNTK.

### Sex as a Biological Variable: Primer & Supplement

Sex as a biological variable (SABV) is a key focus of the NIH initiative to enhance reproducibility through rigor and transparency. NIH expects that SABV will be factored into research designs, analyses, and reporting in vertebrate animal and human studies. The SABV Primer includes four interactive modules that walk users through how to consider SABV in all stages of the biomedical research spectrum. This course was developed by ORWH with funding support from the National Institute of General Medical Sciences.

The four modules in this course aim to clarify the requirements of the NIH SABV policy and address myths and perceived challenges to implementation.

- Module 1: SABV and the Health of Women and Men
- Module 2: SABV and Experimental Design
- Module 3: SABV and Analyses
- Module 4: SABV and Research Reporting

Register at <u>http://bit.ly/3LJpJLC</u>



### **SABV Primer: Train the Trainer**

This Train the Trainer course was developed by ORWH. The course is designed to help the biomedical research community, including researchers, NIH grant applicants, and trainers, to account for and appropriately teach the SABV policy. The course has six independent, interactive modules that cover a range of training settings, including in-person training, virtual training, and one-on-one training.

Ensuring that the biomedical research community – including researchers, NIH grant applicants, and trainers – are equipped to appropriately implement and teach SABV policy is essential.

This course offers six interactive modules:

- Module 1: Intro to the SABV Train the Trainer Course
- Module 2: Training Planning and Preparation
- Module 3: In-person Instructor-led Training
- Module 4: Virtual Instructor-led Training
- Module 5: One-on-One and Group Training
- Module 6: SABV Best Practices

*Register at <u>http://bit.ly/3JAxYHj</u>* 





# Introduction to Sex and Gender: Core Concepts for Health-Related Research

Understanding and accounting for sex and gender influences on health and disease are key steps toward improving patient outcomes. Introduction to Sex and Gender: Core Concepts for Health-Related Research explores sex, gender, and intersectionality as health-related variables, as well as the complexity within those domains. The narrated video and downloadable PDF slide deck provide an accessible overview and were developed for a wide audience in mind. These materials are appropriate for anyone who touches the health care and health-related research ecosystems – researchers, healthcare providers, policymakers, patients, advocates, and students.

#### Learning objectives:

- 1. Understand commonly used definitions of sex, gender, and intersectionality
- 2. Understand the complexity of sex and gender as health-related variables
- 3. Identify appropriate applications of the terms "sex" and "gender" in health research

#### Additional training materials are available for download with this course:

- Introduction to Sex and Gender [Course Overview & Video]
- Introduction to Sex and Gender: Core Concepts for Health-Related Research [PDF]\*
  \*must be registered and logged into course to access

Register at https://bit.ly/3yzAWak

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ORWH E-Learning Program For more information, contact ORWHCourses@od.nih.gov.