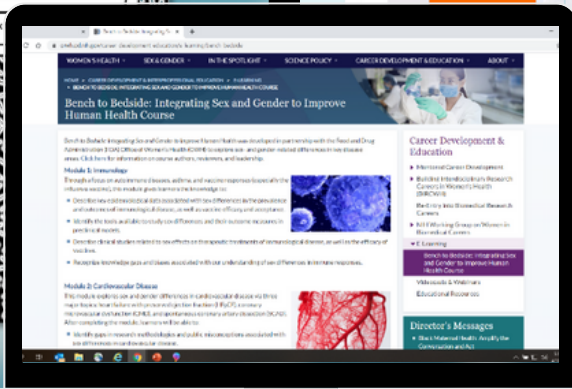


ORWH E-Learning

Bridging the Learning Gap on Sex & Gender Differences in Health and Disease

COURSE GUIDE

ORWH
E-Learning
Program



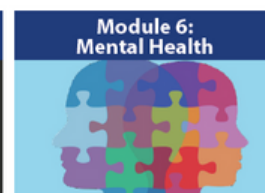
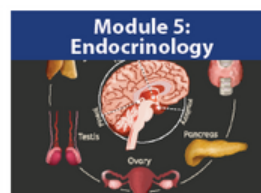
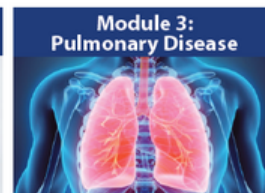


Developed by the Office of Research on Women's Health (ORWH) in collaboration with multiple Federal agencies, including other NIH Institutes and Centers, and with the help of over 25 experts from leading institutions worldwide, the ORWH e-learning courses are a critical resource for advancing knowledge 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:

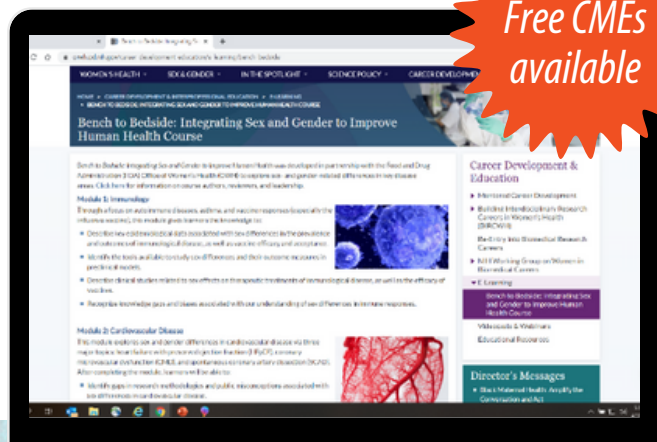
- **Module 1: Immunology**
- **Module 2: Cardiovascular Disease**
- **Module 3: Pulmonary Disease**
- **Module 4: Neurology**
- **Module 5: Endocrinology**
- **Module 6: Mental Health**



Register at <https://go.usa.gov/xG6uj>

Upon completion, participants will receive a certificate.

**Free CMEs
available**



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://go.usa.gov/xG6uj>.

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 <https://go.usa.gov/xHPu8>

The SABV Primer Supplement provides an introduction to SABV and the NIH SABV policy, as well as an overview of the above course modules.



SABV Primer: Train the Trainer

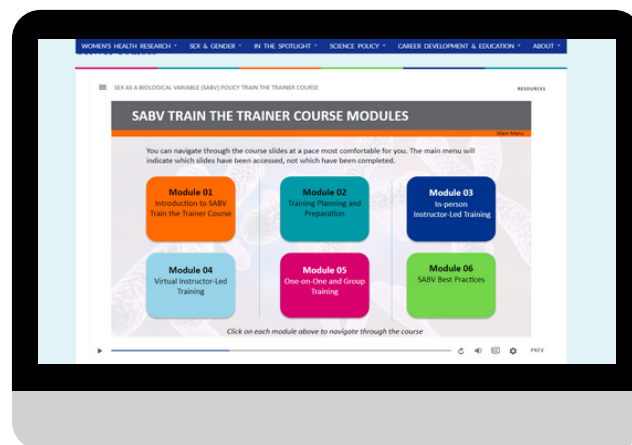
This Train the Trainer course was developed by ORWH. The course is designed to help the biomedical research community, including researchers, NIH grant applicants, and trainers, to account for and appropriately teach the SABV policy. The course has six independent, interactive modules that cover a range 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 <https://go.usa.gov/xueBg>



Introduction: Sex- and Gender-Related Differences in Health

Understanding and accounting for sex and gender influences on health are key steps toward improving outcomes for all patients—regardless of sex or gender. This course offers a self-paced introductory training aimed at researchers, clinicians, and policymakers. The course presents material on multidimensional perspectives of gender, the importance of consistent and accurate terminology, and key regulatory requirements related to sex and gender. The downloadable slide deck and accompanying **Facilitator's Guide** can be used by individuals or teams to initiate dialogue about how—and why—to incorporate a sex and gender lens into research and clinical care.

Learning objectives:

1. Define the terms “sex” and “gender”
2. Understand the confusion caused by imprecise language
3. Understand the appropriate applications of the terms “sex” and “gender” in biomedical research
4. Describe the ethical considerations related to sex, gender, and health research
5. Explain the concepts of a “sex and gender lens” and the “multidimensional framework”
6. Describe key regulatory requirements governing sex and gender in biomedical research

Additional training materials are available for download with this course:

- Introduction: Sex- and Gender-Related Differences in Health Training
- Facilitator's Guide for the Introduction: Sex- and Gender-Related Differences in Health Training

Register at <https://go.usa.gov/xH9jI>

Facilitator's Guide

