

## Resources for considering sex, gender, variations of sex characteristic and sexual orientation in health and medical research

## **NHMRC and MRFF Resources**

- The <u>Statement on Sex, Gender, Variations of Sex Characteristics and Sexual</u>
  <u>Orientation in Health and Medical Research</u> provides a guide for researchers and their supporting stakeholders to consider the Variables at all stages of their research project, including key definitions and better practice prompts.
- Responses to frequently asked questions (FAQs) on appropriately integrating
  the Variables in research and the new requirement in the NHMRC and MRFF
  grant programs are in the 'FAQs' tab on this webpage.
- Grant opportunity guidelines and peer review guidelines are available on GrantConnect.

## **Other Resources**

There are a range of online resources to help researchers learn more about how to consider sex, gender, variations of sex characteristics and sexual orientation in research. Please find below a list of resources and descriptions of what they contain, which are grouped by theme. Please note that the requirements for NHMRC and MRFF applicants and reviewers to consider the Variables may differ from those of other funding agencies.

Resource	Description
General	
Australian Centre for Sex and Gender Equity in Health and Medicine:  Resources	The Centre aims to provide <b>resources</b> that detail contemporary thinking about incorporating sex and gender in health and medicine and that give practical guidance to help you implement these recommendations into your own practice.





Resource	Description
Canadian Institutes of Health Research (CIHR):  How to Integrate Sex and Gender in Research Online training modules	CIHR provide links to a range of resources produced by them and others for both applicants and peer reviewers. Guidance and key articles are also provided for different areas of health and medical research. Anyone can register to take their online training modules, with separate courses on sex and gender in biomedical research, primary data collection with human participants and analysis of secondary data from human participants.
Medical Science Sex and Gender Equity (MESSAGE):  Policy Framework  Academic Resources	Whilst the MESSAGE project <b>policy framework</b> on accounting for sex and gender in biomedical, health and care research is intended for research funders, it also provides helpful guidance for researchers. The website links to an informative <b>webinar</b> about the framework and provides a <b>database of academic resources</b> .
Gendered Innovations:  Methods of Sex, Gender, and Intersectional Analysis  Case studies	Gendered Innovations provide guidance on general and specific <b>methods</b> of sex, gender and intersectional analysis and a variety of <b>case studies</b> on how methods of sex, gender and intersectional analysis lead to discovery and innovation.
The Netherlands Organisation for Health Research and Development (ZonMw)  FAQ sex and gender in research	ZonMw provide guidance on how to integrate sex and gender into your research at all stages of research projects. They have developed <b>useful e-books</b> for applicants and assessors and have published <b>recordings of lectures</b> made for the annual Gender in Health summer school.





Resource	Description	
Centre for Gender & Sexual Health Equity (Canada):  Gender & Sex in Methods & Measurement Toolkit	This <b>toolkit</b> provides guidance to address the erasure in research of people marginalised on the basis of their genders, sexes and sexualities, including intersex, trans and non-binary people. The toolkit helps researchers to achieve accurate and actionable findings by considering eligibility criteria, recruitment, sample size, stratification and survey design.	
Sex and Gender Equity in Research (SAGER) Guidelines  SAGER guidelines checklist	The SAGER guidelines are a comprehensive <b>procedure for reporting</b> of sex and gender information in study design, data analyses, results and interpretation of findings. They are designed primarily to guide authors in preparing their manuscripts but are also helpful to consider at the project conception stage.	
Animal Studies		
National Centre for the Replacement Refinement and Reduction of Animals in Research (NC3Rs)  Experimental Design Assistant  MRC/NC3Rs webinar: Using both sexes in animal experiments	The NC3Rs' Experimental Design Assistant is a free resource that has been used by thousands of researchers to help design robust animal experiments and provides guidance for considering sex when designing your studies. A joint webinar from the	

sex.

Medical Research
Future Fund



NC3Rs and the UK Medical Research

experiments that appropriately integrate

Council explores how to address common challenges when planning, conducting and analysing animal

Resource	Description
Sex Inclusive Research Framework (SIRF):  Online version	The SIRF tool provides guidance to researchers in designing preclinical research aligned with a sex-inclusive research philosophy. The Framework consists of an easy-to-use decision tree with supporting guidance and is available in both downloadable and interactive versions.
National Centre for the Replacement Refinement and Reduction of Animals in Research (NC3Rs)  Experimental Design Assistant  MRC/NC3Rs webinar: Using both sexes in animal experiments	The NC3Rs' Experimental Design Assistant is a free resource that has been used by thousands of researchers to help design robust animal experiments and provides guidance for considering sex when designing your studies. A joint webinar from the NC3Rs and the UK Medical Research Council explores how to address common challenges when planning, conducting and analysing animal experiments that appropriately integrate sex.
Australian Women's Health Alliance:  E-Learning Course: Introduction to Gender-Responsive Health	This <b>online course</b> is for individuals wanting to learn more about <b>gender-responsive health</b> , including health professionals, researchers, policy makers and students. This course is evidence-based, free, flexible and highly accessible. It was co-developed with health experts and people with lived experience.





Resource	Description
Cell focus issue on sex and gender in science	Following the rollout of guidelines for reporting sex- and gender-based analyses across all Cell Press journals, the journal Cell published a focus issue on sex and gender in science, exploring how more accurate, precise and inclusive approaches can lead to more rigorous scientific research. It includes an article focusing on methodology for integrating sex in laboratory research and Q&A with experts in the field.
Nature special collection on sex and gender in science	Nature launched a collection of <b>opinion articles</b> highlighting the necessity and challenges of studying sex and gender in research. Nearly 20 researchers from diverse fields have contributed to the series.



