Gendered innovations in science, health & medicine and engineering

(http://genderedinnovations.eu)

Why Gendered Innovations?
Thirty years of research have revealed that sex and gender bias can be socially harmful and expensive, making it important to identify gender bias and understand how it operates in science and technology. But analysis cannot stop there: focusing on bias is not productive. Analysing sex and gender prospectively provides an opportunity to stimulate new knowledge and technologies. From the start, sex and gender analyses act as controls providing critical rigor in science, medicine, and engineering research, policy and practice.

Rationale and background
Several funding agencies, such as the European Commission, the U.S. National Institutes of Health, and the Gates Foundation now require that requests for funding address “whether, and in what sense, sex and gender are relevant to the objectives and methodologies of the research proposed.” The editorial policies of leading peer-reviewed journals (eg Nature, The Lancet and Circulation) are encouraging researchers to plan to analyse data by sex. Few research scientists or engineers, however, know how to do sex and even more complex gender analysis. This is the problem the Gendered Innovations project seeks to solve. As recommended in the 2010 genSET Consensus Report and the 2011 United Nations resolutions passed in March 2011, methods of sex and gender analysis are being developed through robust international collaborations.

Publicly accessible website
The goal of the EU/US Gendered Innovations (GI) project is to provide scientists (physical and life scientists), biomedical and public health researchers, engineers, and technology designers with practical methods for sex and gender analysis. Researchers will want to consider such methods and think creatively about how these methods can enhance their own research.

To achieve these goals, the GI project launched a website (http://genderedinnovations.eu) on 1st November 2011. The site highlights three elements: 1) Methods of sex and gender analysis relevant to science, health & medicine and engineering; 2) Terminology defining key concepts used throughout the site; 3) Case Studies documenting specific gendered innovations and demonstrating how methods of sex and gender analysis are applied in specific examples.

Audience
The GI project is aimed at research scientists, engineers, gender experts and students. Gendered Innovations case studies may be used in university science, medicine and engineering courses. The current Gendered Innovations project was initiated at Stanford University in July 2009. Gendered Innovations entered into collaboration with the European Union in January 2011. The FP7 Expert Group “Innovation through Gender” is directed by Londa Schiebinger, Hinds Professor of History of Science, Stanford University; Ineke Klinge, Associate Professor of Gender Medicine, Maastricht University, Caphri School for Public Health and Primary Care; and Martina Schraudner, Professor of Gender and Diversity in Organizations, Technical University, and Fraunhofer Institute, Berlin.

Gendered Innovations – fueled by sophisticated methods – stimulate the creation of gender-responsible science and technology, and by doing so enhance the lives of both men and women around the globe.

Some outcomes of gender analysis
1. The development of pregnant crash test dummies that can be used to enhance safety in automobile design.
2. The inclusion of men in osteoporosis research has led to better diagnoses and treatments (in the past, osteoporosis was conceptualized as a disease of postmenopausal women).
3. New knowledge from animal research about how hormones influence the basic molecular pathways involved in immune system function.

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