



STANFORD

SCHOOL OF
HUMANITIES AND SCIENCES



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Environment**

Gendered Innovations

in Science,
Health & Medicine,
Engineering, and
Environment

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What is **Gendered Innovations**?

SEX & GENDER ANALYSIS

Methods

Terms

Checklists

CASE STUDIES

Science

Health & Medicine

Engineering

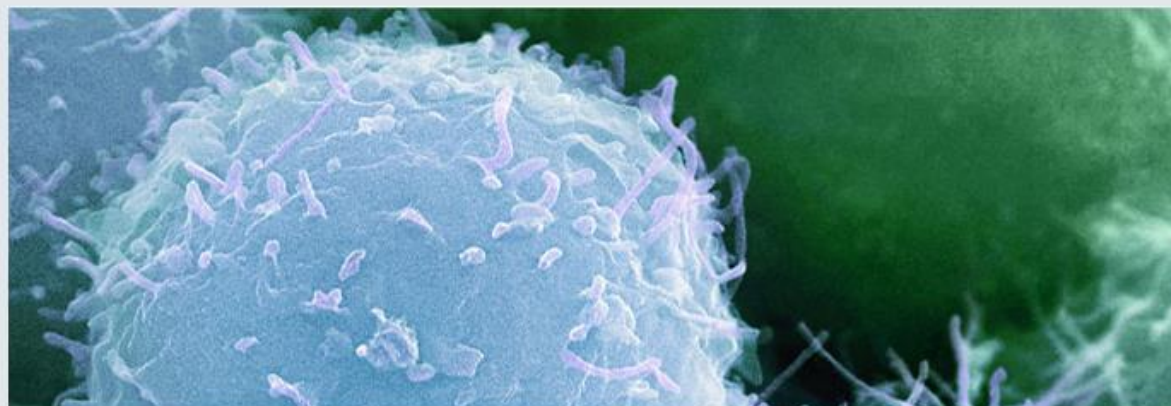
Environment

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SCIENCE

Sex and Gender Methods for Research

Gendered Innovations

SCIENCE

HEALTH & MEDICINE

ENGINEERING

ENVIRONMENT

FEATURED CASE STUDIES



Stem Cells: Analyzing Sex



Osteoporosis Research in Men: Breaking the Gender Paradigm




HIV Microbicides: Formulating Research Questions & Analyzing Academic Disciplines


Why Gendered Innovations?

“Gendered Innovations” employs methods of sex and gender analysis to create new knowledge.


Gendered Innovations

- 1) develop state-of-the-art Methods of sex and gender analysis
 - 2) provide Case Studies to illustrate how gender analysis leads to innovative science and technology.
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Machine Learning

- ▶ Unconscious gender bias from the present amplifies gender inequality in the future.
 - ▶ When trained on historical data, the system inherits bias (including gender bias).
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Analyzing Gender reveals

- ▶ A search of Google images for the term “CEO” returns 11% women, when, in fact, women are 27% of CEOs in the US.
 - ▶ Ads for high-paying jobs are more often shown to men than women.
 - ▶ Google Translate defaults to the masculine pronoun.
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Gendered Innovations

- ▶ Fairness, Accountability, and Transparency in Machine Learning project
 - ▶ “AdFisher”
 - ▶ Fairness through Awareness
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Gendered Innovations

- ▶ The goal is to design algorithms that optimize fairness.

Continue to Gendered Innovations

- ▶ Public Transportation:
<http://genderedinnovations.stanford.edu/case-studies/transportation.html>
- ▶ Climate Change: <http://genderedinnovations.stanford.edu/case-studies/climate.html>
- ▶ Genetics of Sex Determination:
<http://genderedinnovations.stanford.edu/case-studies/genetics.html>
- ▶ Policy:
http://genderedinnovations.stanford.edu/policy_landing.html