STANFORD

SCHOOL OF
HUMANITIES AND SCIENCES

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Gendered Innovations

in Science,
Health & Medicine,
Engineering, and
Environment

SCIENCE

HEALTH & MEDICINE

ENGINEERING

ENVIRONMENT

What is **Gendered Innovations**?

SEX & GENDER ANALYSIS

Methods

Terms

Checklists

CASE STUDIES

Science

Health & Medicine

Engineering
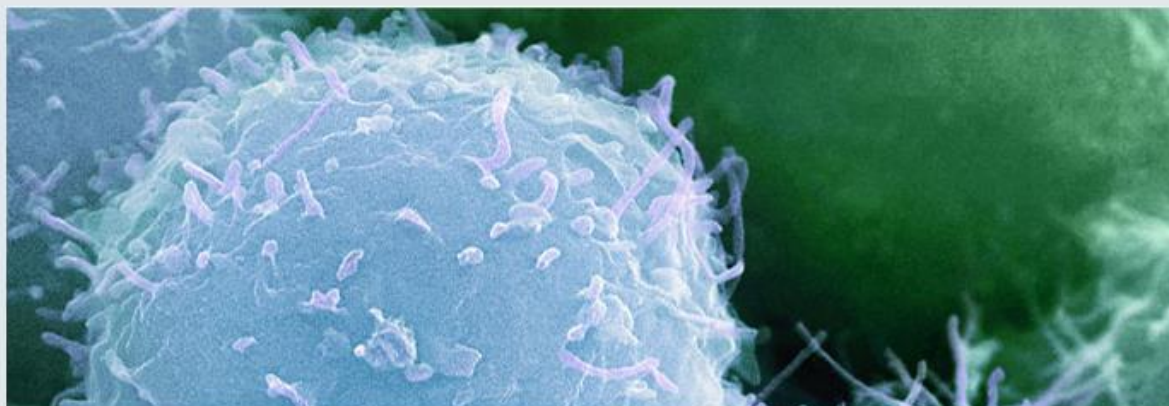
Environment

POLICY

INSTITUTIONAL TRANSFORMATION

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SCIENCE
Sex and Gender Methods for Research | Gendered Innovations ▶

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.

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).

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.

Gendered Innovations

- Fairness, Accountability, and Transparency in Machine Learning project

- "AdFisher"

- Fairness through Awareness

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