

Gender in STEM – possibilities and challenges

Science researcher Londa Schiebinger's "Gendered Innovations" project at Stanford University has established an important networking platform. It brings together ground-breaking research approaches by renowned Feminist Science and Technology Studies (STS) pioneers, who have succeeded in introducing gender study issues into the STEM field, including medicine. I would like to discuss the opportunities and challenges that these interdisciplinary researchers continue to face today on the basis of examples found on this international platform, as well as results from the two FMER projects "Gendering STEM" and "Gendering STEM Digital," which I myself led for the University of Freiburg.

Dr. Marion Mangelsdorf is Scientific Director of the Center for Anthropology and Gender Studies.

Gender-sensitive medicine – perspectives on equal health and well-being?

Equal health and well-being are a defined human right. However, over the last decade, new insights triggered through gender-related research have revealed that health, health care and disease management differs between different genders in first world countries. Thus, gender independent well-being based on equal health has not yet been established in our societies. The talk introduces interesting findings in medicine related to these differences and will briefly review what has already been established about biological disease differences and their impact on our daily life. Thereafter, potential new treatments and prevention strategies will be discussed to further equal gender-independent health and health care management. Facing the gender data gap and trying to minimize it by establishing more scientific-based comprehension of our differences will sharpen our focus on equal health and well-being.

Prof. Dr. med. Hartmut Bürkle is Medical Director of the Department of Anesthesiology and Critical Care Medicine, Faculty of Medicine.

Small data, big impact: addressing gender bias in research

Gender-related data gaps are common in medicine and technology: women and gender-diverse individuals are often underrepresented, leading to biased results and unequal treatment. While AI and statistical methods are promising, they depend on data that may itself be incomplete or skewed. This talk highlights how approaches such as those developed in the CRC Small Data can help address these challenges. By integrating expert knowledge, enabling subgroup analysis with limited data, and focusing on transparency and interpretability, such methods can make potentially overlooked populations more visible. **PD Dr. Nadine Binder** is Group Leader in the Department of Data-driven Medicine, Faculty of Medicine, and Principal Investigator in the CRC 1597 Small Data.

Gender data gap in oncology – examples and ideas

This talk utilises the "wheel of representation" to illustrate data gaps in oncology as applying to various diversity domains like sex, gender and socio-economic status. It then addresses potential causes of observed effects in patients with cancer and challenges current medical practices of defining health and disease because they potentially disadvantage under-represented groups. A way forward could be to base the definition of health on functional assessment deduced from an example from hematology. In addition, an example from hematology that illustrates why race/ethnicity is simply a surrogate is given and again, a novel approach to overcome this imprecision is offered. In conclusion, the talk proposes to re-define some methods in medical research and practice to enable individualised care in a diverse society.

Prof. Dr. Marie von Lilienfeld-Toal is Director of the Institute for Diversity Medicine, Ruhr-University Bochum.

Invisible and painful – endometriosis as an example of the gender data gap

Endometriosis is the second most common gynecological disease, affecting approximately 190 million women worldwide. Despite its high prevalence, the causes of the disease remain unclear. There is also a lack of long-term studies on treatment methods. This keynote speech provides insight into the symptom-rich clinical picture of endometriosis from the patient's perspective. It explains why the disease remained invisible to researchers for so long and outlines the reasons why endometriosis is a prime example of the gender data gap.

Victoria Vonau, M.A. is research assistant of the Endometriosis-Association Germany, Leipzig.

LOCATIONS

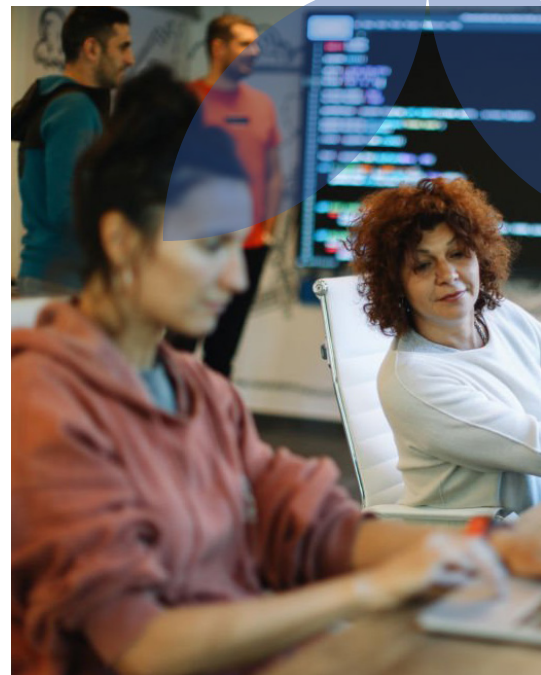
- **Piena:** Albertstr. 23 b, HS II, 02 033
- **Lunch Break:** Mensa, Stefan-Meier-Straße 28
- **Hackathon:** IMBI, Institute of Medical Biometry and Statistics, Stefan-Meier-Str. 26, HS first floor
- **Simulation Workshop:** The FACTS-S Simulation center is located in the Chirurgie Hauptgebäude lower level. Signs to look for FACTS-S Simulation



Facing the Gender Data Gap

How can AI and simulation-based methods be used to close gender-related data gaps?

PROGRAM

Program
Autumn School 2025

October 6–10, 2025

The autumn school will be filmed by Stefan Salm (Sacha Studio). The material will be used to create a blended learning unit.



Monday, October 6, 2025

9–12.30 a.m. PLENUM

Open for the public until 10.30 a.m.

9–9.15 a.m. WELCOME GREETINGS

Dr. Marion Mangelsdorf

Scientific Director, Center for Anthropology and Gender Studies

Prof. Dr. Sylvia Paletschek

Vice-rector for University Culture

Prof. Dr. Daiana Stolz

Equal Opportunities Officer, Faculty of Medicine

9.15–10.15 a.m. KEYNOTES

Dr. Marion Mangelsdorf

Gender in STEM – possibilities and challenges

Prof. Dr. med. Hartmut Bürkle

Gender-sensitive medicine – perspectives on equal health and well-being?

PD Dr. Nadine Binder

Small data, big impact: addressing gender bias in research

10.15–10.30 a.m. BREAK

10.30–12.30 a.m.

- Interactive Introduction
- Round Panel Discussion
- Outlook on Hackathon (Dr. Susanne Weber) & Simulation Workshop (Prof. Dr. Hartmut Bürkle)

12.30–2 p.m. LUNCH BREAK

2–4.30 p.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

Tuesday, October 7, 2025

9–12.30 a.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

12.30–2 p.m. LUNCH BREAK

2–4.30 p.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

Wednesday, October 8, 2025

9–12.30 a.m. PLENUM

9–9.30 a.m. REPORT FROM THE HACKATHON & SIMULATION WORKSHOP

9.30–10.45 a.m. IMPULSE & DISCUSSION

Prof. Dr. Marie von Lilienfeld-Toal

Gender data gap in oncology – examples and ideas

10.45–11 a.m. BREAK

11–12.30 a.m. PANEL DISCUSSION

12.30–2 p.m. LUNCH BREAK

2–4.30 p.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

Thursday, October 9, 2025

9–10.30 a.m. PLENUM

9.00–10.30 a.m. IMPULSE & DISCUSSION

Victoria Vonau, M.A.

Invisible and painful – endometriosis as an example of the gender data gap

10.30–12.30 a.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

12.30–2 p.m. LUNCH BREAK

2–4.30 p.m. PARALLEL HACKATHON & SIMULATION WORKSHOP

Friday, October 10, 2025

9–12.30 a.m. PLENUM

- Presentation of results
- Panel discussion
- End

GEFÖRDET VOM

Bundesministerium
für Bildung
und Forschung