

of both disciplines to empower responsible behavior of people in a complex world in which non-human actors play their role.

Alexandra Kautzky-Willer Gender and Medicine

Gender medicine studies sex- and gender-based differences in development, awareness, and presentation of diseases as well as the effectiveness of prevention strategies and therapies. Differences exist in genes, chromosomes, hormones, and metabolism (biological factors) as well as in culture, environment, and society (psychosocial factors). Lifelong interactions between physical and psychosocial factors influence health and disease of men and women in different ways and also affect future generations through epigenetic modifications. Prominent differences occur within noncommunicable and psychological diseases, such as type 2 diabetes, cardiovascular diseases or the typically considered "female" diseases osteoporosis and depression. Such classifications of diseases often lead to inappropriate diagnosis and treatment of the opposite sex or gender. Modern medicine takes sex- and gender-sensitive factors into account to improve health-related quality of life of men and women.

Carmen Leicht-Scholten Tensions?! Gender and Diversity Perspectives in Science and Technology Studies, and Politics of Equality

Gender and Science & Technology Studies have for many decades been making efforts to integrate gender and diversity perspectives in research and development of technology on structural, organizational and content level. Yet the ambivalent relation between Gender and Science & Technology Studies and politics of equality has been characterized by tensions. To meet global challenges the connection of both provides an important potential for innovation generation and societal equality. Thus, if we take a closer look at the EU concept of „Responsible research and innovation“, we see the normative anchor points, investigations in research and innovation should be based on. Research and innovation must be committed to the needs and ambitions of society, reflect its values and be responsible. Building on this, the talk will discuss

chances and challenges for an inter- and transdisciplinary dialog between Gender & Science and Technology Studies and STEM disciplines.

Ruth Müller Of Rats and Women: Gender, Motherhood and Knowledge in Environmental Epigenetics

Environmental epigenetics is the study of how environmental signals affect gene expression. Within this growing field of molecular biology, experiments on the epigenetic effects of maternal care on offspring health have received much scientific and public attention and are often called upon to showcase how environmental epigenetics will create a new understanding of life as inherently biosocial. While this research is exciting and offers possible opportunities for collaboration between molecular biology and the social sciences, it is also necessary to consider its political dimensions; for example how commonsense assumptions about sex and gender, but also race and class, are present in the design, interpretation and dissemination of experiments on the epigenetic effects of maternal care mostly conducted in rodents. A critical analysis of these dimensions can be a fruitful starting point for imagining a new form of biosocial knowledge production that includes researchers from the biological and the social sciences.

Joan Roughgarden The Gender Binary in Nature and Across Human Cultures

The animal kingdom offers no support for a natural universal distinction between male and female sexual categories for whole organisms. Nor does the animal kingdom support the universal existence of two fixed genders within species. The discovery of extensive variation in gender expression and sexuality in nature challenges traditional biological explanations of animal behavior, especially accounts that trace to Darwin's theory of sexual selection. Variation in human gender expression and sexual orientation occurs among people in all cultures throughout the world. All cultures have indigenous institutions and norms to accommodate the natural variation in the human species. In Western culture too, even the Bible contains explicit inclusionary reference to human variation in gender expression.



Gendering
MINT

INTERNATIONAL CONFERENCE
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MINT**

GEFÖRDERT VOM



International Conference July 21–22 2016

Haus zur Lieben Hand, Löwenstr. 16, 79098 Freiburg

Gendering MINT

Networking and Exchange of Gender
Perspectives in the Natural Sciences and
Technology Sciences

Presentation

Dr. Claudia Neusüß

Conference language: english/german with
simultaneous translation

July 21st 2016

11.30 am Arrival / Registration

WELCOME

12.30 pm MinR'in Christina Hadulla-Kuhlmann (BMBF)
12.40 pm Vice-Rector for Equality and Diversity Freiburg/G
Prof. Dr. Giesela Riescher
Project Leader Freiburg/G
12.50 pm Prof. Dr. Nina Degele
01.00 pm Project Coordinator Freiburg/G
Dr. Marion Mangelsdorf

KEYNOTES

01.30 pm Prof. Dr. Carmen Leicht-Scholten/G
*Tensions?! Gender and Diversity in
Science and Technology Studies, and
Politics of Equality*
02.30 pm Break
03.00 pm Prof. Dr. Ruth Müller/G
*Of Rats and Women: Gender, Motherhood
and Knowledge in Environmental Epigenetics*
04.00 pm Break
04.30 pm Gendering MINT-Project Market

EVENING LECTURE

06.00 pm Prof. Dr. Joan Roughgarden/HI
*The Gender Binary in Nature and
Across Human Cultures*
07.00 pm Reception

Front photography: Bettina Flittner.
For more information see: www.genderingMINT.uni-freiburg.de.

July 22nd 2016

09.00 am Arrival / Registration

WELCOME

10.00 am Dr. Marion Mangelsdorf

GENDER PERSPECTIVES IN NATURAL
AND TECHNICAL SCIENCES

10.15 am Prof. Dr. Alexandra Kautzky-Willer/AU
Gender and Medicine

11.15 am Prof. Dr. Tomas Brage/SWE
*Gender and Physics – what does
recent research and experiences say?*

12.15 pm Prof. Dr. Dipl.-Math. Cecile K. M./NL
*The Dialogue between Gender Studies
and Computer Science*

01.15 pm Lunch

02.30 pm PANEL WITH SPEAKERS

*Gender in Science and Technology
Studies, Gendered Innovations, and
Diversity Politics*

03.45 pm Conclusion / Wrap-up Session

04.15 pm End

SPEAKERS

Brage, Tomas, Prof. Dr.
is a Professor of Physics at the Lund University,
Sweden.

Crutzen, Cecile K.M., Dr. Dipl.-Math.
is a researcher and author in Computer Science and
Gender Studies.

Kautzky-Willer, Alexandra, Prof. Dr.
is head of the Gender Medicine Unit at the medical
University in Vienna/Austria.

Leicht-Scholten, Carmen, Prof. Dr.
holds a professorship for Gender and Diversity in
Engineering at the faculty of Civil Engineering at RWTH
Aachen University.

Müller, Ruth, Prof. Dr.
is Assistant Professor of Science & Technology
Policy at the Munich Center for Technology in Society
(MCTS) at the TU München.

Roughgarden, Joan, Prof. Dr.
retired in 2011 and moved to the island of Kauai
in Hawaii where she remains a Stanford professor
(emerita).

Tomas Brage

Gender and Physics – what does recent research and experiences say?

Physics is often seen, by physicists not the least, as an objective science, we believe we are surrounded by a "culture without culture." At the same time our history, class- and board rooms are dominated by men. This is a clear paradox that should awaken the curiosity of anyone. In this talk I will give some examples on how you can approach the question of "what does gender have to do with physics." There have been several studies of Physicists and I will combine a discussion of these with some general theory and personal experiences, to paint a picture of how gender transgress physics, like all other fields. The talk is intended as a translation of results from recent progress in Gender Science to an audience of non-experts in the field, especially people within STEM-fields. The aim is to give some answers to the question in the title, but also to show that this is an extremely interesting and active research field.

Cecile K. M. Crutzen

The Dialogue between Gender Studies and Computer Science

The dialogue between the technological and the social has a severe impact on the daily life of humans. Computer Science is an important actor in this dialogue. Its product development, its data processing, and the use of its products has changed human interaction. The ready-making of products is not a neutral objective process. The producers act out of their own thoughts and opinions based in their own cultural and social surroundings, where the technological is often overestimated and where their own social acting and thinking becomes obvious. The epistemological and ontological conceptions in Gender Studies and in Computer Science are essentially different. In Computer Science, the world consists of objects which are classified on the basis of similarities. In Gender Studies, differences are respected. Gender is an integrated situated process, which manifests itself in the interactions of human and non-human actors and therefore social and technologically shaped. The recognition of differences in interaction and its materiality could lead to the cooperation