Lecture series "Gender and Neuroscience"

Women talk a lot, men don't. Women don't have good spatial reasoning, men do. Women are emotional, men are rational. There are two clearly distinguishable genders and clear differences between them that can be proven scientifically, e.g. with the help of neuroscientific studies of the brain - right? Whether this gender binary and differences between the sexes, often perceived as natural, are really so unambiguous, what research on biological gender differences can and cannot say, and what other perspectives there are on gender within the natural sciences - these and similar questions will be addressed in the lecture series.

All researchers, students and interested parties are welcome!

If you would like to join, please send an email to sarah.czernev@lin-magdeburg.de

26.10.2022 3 p.m.

Dr. Emily Ngubia Kessé (University of Freiburg) "Neuro SCIENCE – What's race got to do with it? How societal values contaminate" Neuroscience research, theory and practice"

07.06.2022 3 p.m.

Dr. Daphna Joel (Tel Aviv University) "Rethinking sex, brain, and gender beyond the binary"

09.03.2022 10 a.m. (online)

Prof. Dr. Cordelia Fine (University of Melbourne): "Avoiding Neurosexism in Neuroscience: 8 things you need to know about sex, gender and the brain"

01.12.2021 2 p.m. (online)

Dr. Hannah Fitsch (HU Berlin/Goethe-University Frankfurt/M.):

"What Leibniz has to do with binary (sex/gender) categories in neuroscience. Mathematical logic in the methods of computational neurosciences"

29.09.2021 3 p.m. (online)

Dr. Mercedes Küffner (University of Freiburg): "Sex & Gender as biological Variables (SABV) - selected foundations"

17.06.21 2 p.m. (online)

Prof. Dr. Kerstin Palm (HU Berlin):

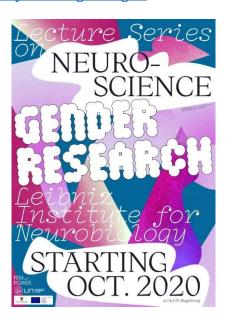
"Sex/Gender studies in biology - the critical view of sex/gender within the life sciences"

03.03.2021 3 p.m. (online)

Prof. Dr. Anelis Kaiser (University of Freiburg): "From the female-vs.-male-brain to the human brain continuum"

23.10.2020 2 p.m. (online)

Prof. Dr. Sigrid Schmitz (HU Berlin): "The Gendered Brain: Gender Research in Dialogue with the Neurosciences"













Abstracts:

Prof. Dr. Sigrid Schmitz (HU Berlin): "The Gendered Brain: Gender Research in Dialogue with the Neurosciences"

Prof. Dr. Anelis Kaiser (University of Freiburg): "From the female-vs.-male-brain to the human brain continuum"

The topic of sex/gender crosses the research field of neuroscience on different levels. But for some time now, studies have maily focused on examinations of sex/gender difference, i.e., research that reveals differences between women's and men's brains. Recently, however, the sex/gender variable has been started to be explored in terms of a human brain continuum. The talk will highlight this progression.

Prof. Dr. Kerstin Palm (HU Berlin): "Sex/Gender studies in biology - the critical view of sex/gender within the life sciences"

Gender studies is primarily characterized by a plethora of studies in the humanities and social sciences on Gender relations. Less well known is the critical sex/gender research within biology that has been taking place since the 1970s, which has been researching the biological foundations of sex/gender, sexuality and sex/gender difference. The lecture presents this biological research on gender with examples and explains the theoretical self-understanding of this research.

Dr. Mercedes Küffner (University of Freiburg): "Sex & Gender as biological Variables (SABV) - selected foundations"

Does the historic sex bias in neuroscience and biomedical research still exist? How can we integrate Sex and Gender to improve Human Health? The sexually dimorphic brain, similar to most sex differences, does not fall into a hard binary readout—but rather is on a continuum or spectrum with each cell and each brain region comprised of varying degrees of 'male' and 'female' (Hines, 2005; Joel and McCarthy, 2016). Sex and gender are therefore important variables to consider when designing studies and assessing results within biomedical research. Let's have a look on how some publications and research policys in the US, Canada and Europe have shaped a new way of thinking and what efforts already have been made by Funding Organizations, Peerreviewed journals and Universities to advance consistent sex and gender analysis within the research community. Moving away from a strict binary view of how sex/gender is manifested in the brain will be illustrated by selected publications and future challenges on how to establish SABV. By raising awareness from the biological perspective we may contribute to building a society where individuals identifying themselves in between the labels of male and female and feel included rather than discriminated.

Dr. Hannah Fitsch (HU Berlin/Goethe-University Frankfurt/M.): "What Leibniz has to do with binary (sex/gender) categories in neuroscience. Mathematical logic in the methods of computational neurosciences"

There has been a desire to formalize the complex structure of the brain and its neuronal processes for some centuries. This talk traces the history of the new approaches by using the concept of the mathematization of perception to show how methods and models from computer science and mathematics have found their way into brain research.

Prof. Dr. Cordelia Fine (University of Melbourne): "Avoiding Neurosexism in Neuroscience: 8 things you need to know about sex, gender and the brain"

Biological explanations of differences in behaviour between women and men or girls and boys are to be found everywhere: from scientific articles, to bestselling self-help books, diversity and inclusion workshops, and Hollywood movies. However, researching, understanding, and interpreting male/female differences in brain and behaviour is surprisingly complicated, and particularly so when humans are involved. To help everyone parse the next biological explanation of female/male differences in behaviour that appears in the academic literature or popular media, this talk will review eight things everyone should know, look out for, and ask: from the nitty-gritty of whether there even is a difference, to the grand sweep of evolutionary explanations. (This talk is based on work co-authored with Gina Rippon and Daphna Joel.)

Dr. Daphna Joel (Tel Aviv University) "Rethinking sex, brain, and gender beyond the binary"

Are the brains of women and men the same or different? Or maybe it's the wrong question? Sexrelated variables affect brain structure and function and there are group-level differences between women and men in specific measures of brain and behavior. These are often taken as supporting the existence of 'male' and 'female' brains. Studies in rats reveal, however, that sex effects on the brain may be different under different conditions – an observation that led me to formulate the 'mosaic' hypothesis – the claim that sex differences in the brain do not add-up consistently in individuals; rather, most brains comprise of both features that are more common in females and features that are more common in males. I will describe the development of the binary conceptualization of the relations between sex and the brain in response to the challenge posed by the mosaic hypothesis and its supporting evidence, and present the results of our recent studies, in which we applied machine learning algorithms to better understand the relations between sex and the brain beyond the binary.

Dr. Emily Ngubia Kessé (University of Freiburg) "Neuro SCIENCE – What's race got to do with it? How societal values contaminate" Neuroscience research, theory and practice"

Neuroscience theory, research and practice (like any other natural science) is essentially tangled up in social power structures and discourses that it has -for as long as its existence- been unaware of, or unwilling to acknowledge. Where does this "contamination" take place, and is inevitable? How can it be operationalized to productively to enrich the way in which neuroscience research is conducted, the way the brain is theorized and in fact even the paradigms and methods used in collecting and analyzing the data? In this talk I would like us to think about the necessity of implementing the concept of intersectionality (that is, how we can take social values into consideration) and weave them into neuroscience research and theorizing.