



SEX HORMONES AND THE BRAIN

Winter School

Tübingen,
31 January - 2 February 2018

TOPIC

To be female or male is one of the most important biological determinants of life, with critical consequences for many aspects ranging from cognitive and emotional functions to general well-being and physical health. Consequently, sex hormone levels differ between women and men and influence brain structure and function already in the prenatal period. However, sex hormones also have life-long effects on human behavior and the brain.

Surprisingly, until recently sex-related differences were almost completely neglected and brain research was mostly performed in male animals and male subjects. Limiting research to male organisms has critical consequences for human health inasmuch as studying only 50% of the population ignores the other half of humankind and may overlook aspects with specific relevance for the female organism..

Our Winter School "Sex Hormones & the Brain" will provide the attendees with the unique opportunity to learn about the effects of human sex hormones on essential aspects of mental health and disease, including mood, structural and functional brain connectivity, (social) cognition, metabolism and gender. Leading international researchers will address these and related issues in four designated symposia.

The Winter School is supported by the Rectorate of the University of Tübingen, the Universitätsbund Tübingen e. V., and the Werner Reichardt Centre for Integrative Neuroscience.

The Winter School is intended to strengthen the Matariki Network of Universities. We are therefore happy to specifically foster the cooperation between the Universities of Tübingen, Germany, and Uppsala, Sweden.

INFORMATION

DATE

31 January - 2 February 2018

VENUE

Department of Psychiatry and Psychotherapy
(Calwerstraße 14, Tübingen, Germany)

REGISTRATION

To register, please send us your contact data and, if applicable, your poster abstract (up to 300 words). There will be a poster session and a Poster Blitz, so your contribution, although not mandatory, will be very welcome!

Please register via e-mail to
winterschool2018@cin.uni-tuebingen.de
until 31 October 2017.

PARTICIPATION FEE

Your participation fee covers registration, catering at the venue and your ticket to the dinner party.

€50 for PhD students;

€100 for postdoctoral fellows and professors.

Please transfer your participation fee until 31 October 2017 to "Universitätsklinikum Tübingen",
IBAN: DE41600501017477503793, BIC: SOLADEST600.

ORGANIZATION

University of Tübingen, Germany
University of Uppsala, Sweden

CONTACT

Prof. Birgit Derntl, Prof. Manfred Hallschmid
(University of Tübingen)

FOR MORE INFORMATION

www.cin.uni-tuebingen.de/winterschool2018



HONORARY LECTURE

Prof. Niels Birbaumer (University of Tübingen):

From musical talent and hormones to brain-computer interfaces

KEYNOTES

Prof. Vibe G. Frojkaer (University of Copenhagen):

Sex hormone fluctuations as a risk model for depressive episodes; implications for stratification

Prof. Ute Habel (RWTH Aachen University):

Putting gender into question: from sex differences to gender dysphoria

** Honorary lecture and the keynotes are open to the public.*

POSTERS

Poster presentations are not mandatory but highly encouraged! Posters will be discussed at a **Poster Blitz** and a **poster session**.



SYMPOSIUM 1: SEX HORMONES AND MOOD

Prevalence rates of most mental disorders differ between women and men. Recent studies suggest that some of the differences are linked to sex hormones and their action on brain circuits. However, it is not fully understood how gender, sex and sex hormone fluctuations contribute to the pathogenesis and development of mental disorders.

PD Dr. Julia Sacher (MPI Leipzig):

Sex-hormone fluctuations as a risk model for postpartum mood disorders

Dr. Malin Gingnell (University of Uppsala):

Premenstrual dysphoria

SYMPOSIUM 2: SEX HORMONES AND FUNCTIONAL CONNECTIVITY

Functional and structural connectivity in the brain is affected by sex hormone concentrations, leading to sex differences as well as fluctuations across the menstrual cycle or during oral contraceptive intake. Thus, it is clear that sex hormones – estrogens, progesterone and testosterone – exert distinct modulatory effects, but the underlying mechanisms are not fully understood.

Dr. Lydia Kogler (University of Tübingen):

Impact of sex hormones and cortisol on functional connectivity of the amygdala in women and men

Prof. Inger Sundström Poromaa (University of Uppsala):

TBA



SYMPOSIUM 3: SEX HORMONES AND COGNITION

Behavioral and neuroimaging evidence indicates that endogenous hormonal fluctuations, as observed during the menstrual cycle, affect a variety of behaviors and cognitive abilities in women. Women score lower on spatial tasks, but higher on verbal tasks in the late follicular (2–3 days pre-ovulation) and subsequent luteal phases compared to the menstrual and early follicular phases.

Dr. Janine Bayer (University of Hamburg):

The effects of estrogen on emotional memory and its neuronal correlates

Dr. Belinda Pletzer (University of Salzburg):

Sex differences in cognitive strategies

SYMPOSIUM 4: SEX HORMONES AND GENDER (IDENTITY)

Understanding the effects of sex hormones on the human brain is mandatory to disentangle effects of biological vs. social sex. This is of course of particular importance for individuals suffering from gender dysphoria who in their own experience have been born in a body of the wrong sex.

Dr. Bastian Amend (University of Tübingen):

Gender reassignment surgery in gender dysphoria

Prof. Fotis Papadopoulos (University of Uppsala):

Gender dysphoria from a psychiatrist's perspective