

Wednesday, October 27th, 2021TUTORIALS start @ 8:30AM EST/2:30PM CET

Tutorials will be pre-recorded (~20-25min.) and available for viewing on October 27th for all individuals who sign up for the conference. After the conference, they will then be available to all paid members in the members section of our website.

1. **@ 8:30AM EST/2:30PM CET** [Moderator: Natalia Jaworska]
Source localization (e.g., LORETA) – **Dr. Derek Fisher**, Dalhousie University (~20-25min)
2. **@ ~8:55AM EST/2:55PM CET** [Moderator: Natalia Jaworska]
Deep learning – **Dr. Hanneke van Dijk**, Brainclinics (~15min) & **Dr. Sebastian Olbrich**, University of Zurich (~15min)
3. **@ ~9:25AM EST/3:25PM CET** [Moderator: Sebastian Olbrich]
Pre-clinical sleep EEG – **Prof. Dr. Pim Drinkenburg**, University of Groningen (~20-25min)
4. **@ ~9:50AM EST/3:50PM CET** [Moderator: Sebastian Olbrich]
Clinical sleep EEG – **Dr. Marcel Zeising**, Klinikum Ingolstadt (~20-25min)
5. **@ ~10:15AM EST/4:15PM CET Moderator** [Moderator: Sebastian Olbrich]
Introduction to EEG – **TBA** (~20-25min)

VIRTUAL GENERAL ASSEMBLY @ 11:00AM EST/5:00PM CET October 27th, 2021

30-45min; 15min Q & A

All members invited

[Moderators: Sebastian Olbrich & Pim Drinkenburg]

CONFERENCEThursday October 28th, 2019Introductions @ 8:45AM EST/2:45PM CET

Sebastian Olbrich (15min)

SYMPOSIUM #1 - "SLEEP" start time @ 9:00AM EST/3PM CET [Chair - Natalia Jaworska]

1. **@ 9:00AM EST/3:00PM CET - TBA**
2. **@ 9:25AM EST/3:25PM CET - Dr. Marcel Zeising**, Klinikum Ingolstadt

Title: sLORETA Neuroimaging and Heart Rate Variability during Slow Wave Sleep after Olanzapine in Healthy Subjects

Summary: Prior studies have shown that olanzapine prolongs slow wave sleep (SWS) duration and is also linked to cardiac side effects. Within an interventional study design, ten healthy, young, male subjects underwent two 118 channel sleep-EEG recordings i) drug-free before medication and ii) after a stepwise increase of olanzapine dosage across seven days up to 10 mg/d. The results suggest a direct parasympathetic effect of olanzapine within the brain with

increases in SWS duration and sgACC alpha activity, but also an indirect anticholinergic and disturbing effect on the brain-heart axis.

3. @9:50AM EST/3:50PM CET - Dr. Rebecca Robillard, University of Ottawa

Title: *Electroencephalographic markers of depression in the sleep state*

Summary: *This session will give an overview of some of the electroencephalographic markers of depression emerging during sleep. Elements of sleep macroarchitecture and microarchitecture showing abnormalities in depressive states, such as sleep slow waves and sleep spindles, will be covered. Some examples will be given of how these sleep features can relate to cognitive processes linked to depression and how they may be influenced by pharmacological agents.*

4. @10:15AM EST/4:15 PM CET - General Discussion (5-10min)

BREAK: 5-10min

1st KEYNOTE @ 10:30 EST/4:30PM CET [Introduction/Moderator - Sebastian Olbrich]

Dr. Diego Pizzagalli, Harvard University

Title: *Neurophysiological and Imaging Approaches to Predict Treatment Response in Depression*

Summary: *In this Keynote Lecture, Dr. Pizzagalli will summarize recent attempts to use EEG, fMRI and PET imaging to predict treatment response in major depression. Opportunities and challenges emerging from this literature will be discussed, along with possible treatment implications.*

BREAK: 5-10min

SYMPOSIUM #2 - "DEPRESSION PREDICTION & STRATIFICATION BASED ON BIOMARKERS"

start time @ 11:35AM EST/5:35PM CET [Chair – Martin Brunovsky]

1. @ 11:35AM EST/5:35PM CET - Dr. Faranak Farzan, Simon Fraser University

Title: *EEG and neurostimulation in assessment and treatment of depression*

Summary: *EEG and its combination with neuromodulation modalities provide an opportunity to assess and modulate selective neurocircuitries in depression for diagnostic and treatment applications. In this talk, I will present our studies on EEG/TMS neuromarkers and their utility in treatment selection and development in depression.*

2. @12:00PM EST/6:00PM CET - Ms. Helena Voetterl, Brainclinics (on behalf of

Dr. Martijn Arns)

Title: *Taking the Guesswork Out of Stepped-Care: EEG Biomarker Based Treatment Stratification*

Brief info: *I will review the paradigm-change from one-size-fits-all psychiatry to more personalized-psychiatry, where a distinction is made between 'precision psychiatry' and 'stratified psychiatry'. Using examples in depression and ADHD, I argue that stratified psychiatry, using EEG biomarkers to facilitate patients to best 'on-label' treatments, is a more realistic future for implementing biomarkers in clinical practice.*

3. @12:25PM EST/6:25PM CET - Dr. Cheng Teng Ip, Copenhagen University

Title: *How reliable are EEG biomarkers in antidepressant treatment response?*

Summary: EEG biomarker has shown certain values in identifying the subgroups in depressed cohorts, but independent validations of these markers are missing. Here, I will present the validation of EEG biomarkers in response to standard selective serotonin reuptake inhibitor (SSRI drugs) and also to the fast-acting drug, ketamine.

4. @12:50PM EST/6:50PM CET - General Discussion (5-10min)

End of Day 1

Link to posters will be available to all on website for all those who registered (or visit our page) throughout the conference

Friday, October 29th, 2019

2nd KEYNOTE @ 8:30AM EST/2:30PM [Introduction/Moderator - Natalia Jaworska]

Dr. Georg Northoff, University of Ottawa's Institute of Mental Health Research

Title: Time & the brain - The dynamics of our mind

Summary: Our brain is intrinsically temporal, however, the mechanisms of this property and its functional are not yet fully understood. In this talk, I present data on the brain's intrinsic neural timescales, their hierarchy, their role in input processing, and their important functional role in consciousness, the self, and psychiatric disorders.

BREAK: 5-10min

SYMPOSIUM #3 - "TRANSLATIONAL PHARMACO-EEG" start time [Chair - Steven Leiser]

1. @9:35AM EST/3:35PM CET - Dr. Rob Gould Wake Forest School of Medicine
Title:
Summary:
2. @10:00AM EST/4:00PM CET – Prof. Dennis Kätzel Ulm University
Title: Do rodent and human working memory assays measure the same function?
Insights from neurophysiological correlates revealed by single-trial decoding
Summary:
3. @10:25AM EST/4:25PM CET –Dr Mihály Hajós Yale University School of Medicine
Title: Neurophysiological Abnormalities in Alzheimer's Disease: Diagnostics, Translational Biomarkers, and Targets for Treatment
Summary:
4. @10:50AM EST/4:50PM CET - General Discussion

BREAK: 5-10min

SYMPOSIUM #4 – ORAL PRESENTATIONS [Chair - Marcel Zeising]

1. @11:00AM EST/5:00PM CET - TBA
2. @11:15AM EST/5:15PM CET - TBA
3. @11:30AM EST/5:30PM CET - TBA

4. **@11:45PM EST/5:45PM - General Discussion**

BREAK: 5-10min

CLOSING FORUM @12PM EST/6PM CET

Hosted by IPEG: Big data (EEG consortia) & guidelines

WRAP-UP @12:45PM EST/6:45PM CET [Moderator: Pim Drinkenburg]

PROF. WERNER M. HERRMANN MEMORIAL GRANT PRIZES for best trainee presentations:

1st prize - 750 Euro; 2nd prize - 500 Euro; 3rd prize – 250 Euro

Winner presentations: 3-4min blitz each

CLOSING @1PM EST/7PM CET [Sebastian Olbrich]