

**Program IPEG Meeting
New York, New York, USA**

November 17th - 20th, 2022





International
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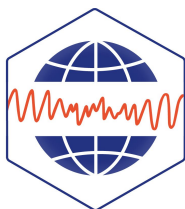
Neuropsychobiology

The sponsors have no influence on the content of the lectures of the meeting.

Program-At-A-Glance

Unless stated otherwise, all events occur on the 2nd Floor, Hess Center for Science and Medicine, Mount Sinai Health System, 1470 Madison Ave, New York, NY 10029, USA

Time	Nov 17th, 2022 [THURS]	Nov 18th, 2022 [FRI]	Nov 19th, 2022 [SAT]	Nov 20th, 2022 [SUN]	
08:30-08:45	Registration [Atrium]	Coffee/Tea+Light Breakfast & Registration [Atrium & Seminar B]	Coffee/Tea+Light Breakfast & Registration [Atrium & Seminar B]	Coffee/Tea+Light Breakfast & Registration [Atrium & Seminar B]	
08:45-09:00					
09:00-09:15	Coffee/Tea+Light Breakfast [Atrium & Seminar B]	Welcome (5min)	KEYNOTE 3 - DAVIS - Dr. Judith Nottage - “Are high frequencies of the human EEG useful biomarkers for psychopharmacological research?”	Symposium 7 - DAVIS - ORAL PRESENTATIONS - selected from abstract submissions: S.de la Salle, K.Williams, A.Bankwitz, P.Bob, M.deBardeci (Chairs: S.Olbrich & N.Jaworska)	
09:15-09:30		KEYNOTE 1 - DAVIS - Prof. Dr. Thomas Penzel - “Sleep research today - technical possibilities & challenges”			Break/Q&A/Set-Up for next
09:30-09:45					
09:45-10:00	Introduction & Welcome	Break/Q&A/Set-Up for next	Break/Q&A/Set-Up for next		Break/Q&A/Set-Up for next
10:00-10:15	Tutorial #1 - DAVIS - Prof. Dr. Thomas Penzel (<i>Sleep EEG</i>)				
10:15-10:30					
10:30-10:45					
10:45-11:00	Break/Q&A/Set-Up for next	Symposium 1 - DAVIS - Sleep Symposium - Speakers: T.Penzel, G.Poe, T.Mikoteit (Chair: M.Zeising)	Break/Q&A/Set-Up for next	Farewell	
11:00-11:15	Tutorial #2 - DAVIS - Dr. Christoph Mulert (<i>EEG+fMRI</i>)				
11:15-11:30					
11:30-11:45					
11:45-12:00	Break/Q&A/Set-Up for next	Lunch [Atrium & Seminar B] & Poster Session [Seminar B]	General Assembly - IPEG Members [DAVIS]		
12:00-12:15	Tutorial #3 - DAVIS - Dr. Judith Nottage (<i>High frequency signals</i>)				Break/Q&A/Set-Up for next
12:15-12:30					
12:30-12:45					
12:45-13:00	Q&A		Lunch [Atrium & Seminar B] & Poster Session [Seminar B]		Symposium 5 - DAVIS - Translational/Industry Symposium Speakers: P.O'Donnell, R.Gould, M.Hajos, S.Kantor (Chair: S.Leiser)
13:00-13:15	General discussion				
13:15-13:30	Lunch [Atrium & Seminar B]	Break/Q&A/Set-Up for next			
13:30-13:45					
13:45-14:00					
14:00-14:15					
14:15-14:30		KEYNOTE 2 - DAVIS - Dr. Helen Mayberg - “Tracking Brain and Behavioral Dynamics to Optimize Deep Brain Stimulation for Depression”	Break/Q&A/Set-Up for next		
14:30-14:45					
14:45-15:00					
15:00-15:15					
15:15-15:30	Itil Prize Winner - DAVIS - Dr. Christoph Mulert - “Excitation- Inhibition balance, neural oscillations and schizophrenia”				
15:30-15:45					
15:30-15:45	Break				



15:45-16:00	KEYNOTE 1 - DAVIS - Dr. Dan Javitt - ("Beyond MMN: A time-frequency deconstruction of auditory pro-cessing deficits in schizophrenia")	Break/Q&A/Set-Up for next	Symposium 6 - DAVIS - PharmacoEEG Symposium - Speakers - J.Revels, S.Olbrich, Ls.Prichep, M.Arnes (Chair: M.Arnes)
16:00-16:15			
16:15-16:30			
16:30-16:45			
16:45-17:00	Werner Hermann Prize	Symposium 3 - DAVIS – Psychedelics & EEG - Speakers - T.Páleníček, C.Vejmola, I.Griškova-Bulanova, K.Godfrey (Chair: M.Brunovsky)	
17:00-17:15	Free Evening	Free Time	Free Evening
17:15-17:30			
17:30-17:45			
17:45-18:00			
18:00-18:15			
18:15-18:30			
18:30-18:45			
18:45-19:00			
19:00-19:15		Social for those registered (<u>Upstairs at The Kimberly</u> - 145 E 50th St, NY) 7PM-10PM	
19:15-19:30			
19:30-19:45			
19:45-20:00			



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Thursday: November 17th, 2022 – Training Course

Davis Auditorium, 2nd Floor, Hess Center for Science and Medicine, Mount Sinai Health System, 1470 Madison Ave, New York, NY 10029, USA

- 08:30-09:00 Registration [Davis atrium]
09:00-09:45 Welcome & Light Breakfast [atrium + Seminar B]
09:45-10:00 Introduction [Davis]
10:00-10:45 **Tutorial Session 1: “Sleep-EEG”** – Thomas Penzel, Ph.D., *Scientific Chair of Sleep Center, Charité Universitätsmedizin, Berlin, Germany*
10:45-11:00 Q&A and Break
11:00-11:45 **Tutorial Session 2: “EEG-fMRI”** – Christoph Mulert, M.D., Ph.D., *Dept. Psychiatry and Psychotherapy, Justus-Liebig-Universität, Universitätsklinikum Giessen und Marburg, and Center for Mind, Brain and Behavior, Central German Mental Health Center, Germany*
11:45-12:00 Q&A and Break [atrium + Seminar B]
12:00-12:45 **Tutorial Session 3: “Extracting high frequency signals from the scalp EEG”** – Judith Nottage, Ph.D., *Birkbeck, University of London and King's College London, U.K.*
12:45-13:00 Q&A and Break
13:00-13:15 General Discussion
13:15-14:30 Lunch [atrium + Seminar B]
14:30-15:30 **Itil Prize Winner Lecture: “Excitation-Inhibition balance, neural oscillations and schizophrenia”** – Christoph Mulert, M.D., Ph.D., *Dept. Psychiatry and Psychotherapy, Justus-Liebig-Universität, Universitätsklinikum Giessen und Marburg, and Center for Mind, Brain and Behavior, Central German Mental Health Center, Germany*
15:30-15:45 Break
15:45-16:45 **Keynote 1: “Beyond MMN: A time-frequency deconstruction of auditory processing deficits in schizophrenia”** – Dan Javitt, M.D., *Director Schizophrenia Research program, Nathan S. Kline Institute (NKI), Professor and Director, Division of Experimental Therapeutics, Psychiatry and Neuroscience, Columbia University, New York, USA.*
16:45-15:00 **Werner Hermann Prize Announcement**
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Friday: November 18th, 2022

Davis Auditorium, 2nd Floor, Hess Center for Science and Medicine, Mount Sinai Health System, 1470 Madison Ave, New York, NY 10029, USA

- 08:30-09:00 Registration & light Breakfast [atrium + Seminar B]
09:00-09:05 Welcome – Sebastian Olbrich, M.D., *President IPEG, Deputy Head of Center for Social Psychiatry, University Zurich, Switzerland*
09:05-10:00 **Keynote 2: “Sleep research today - technical possibilities and challenges”** – Thomas Penzel, Ph.D., *Professor, Scientific Chair of Sleep Center, Charité Universitätsmedizin, Berlin, Germany*
10:00-10:15 Q&A and Break [atrium + Seminar B]



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- 10:15-11:45 **Symposium 1: “Sleep – from preclinical gained understanding to clinical usability as predictor of treatment response”** [Davis]
Chair: Marcel Zeising, M.D., *Head of Sleep Centre and EEG Dept., Klinikum Ingolstadt, Germany*
1. “Asymmetric sleep states in humans and other animals” - Gina Poe, Ph.D., *Professor, Integrative Biology and Physiology, University of California, Los Angeles, USA*
 2. Heart rate variability and sleep – its interdependency and relevance for mental health” - Thomas Penzel, Ph.D., *Professor, Scientific Chair of Sleep Center, Charité Universitätsmedizin, Berlin, Germany*
 3. “Prospective study - prefrontal theta EEG in sleep predicts response in depressed patients” - Thorsten Mikoteit, M.D., *Psychiatric Services of Solothurn and University of Basel, Switzerland*
- 11:45-13:00 Lunch [atrium + Seminar B]
Poster Session [Seminar B]
- 13:00-14:30 **Symposium 2: “Epilepsy: seizure prediction, high field neuroimaging and minimally invasive surgery”** [Davis]
Co-Chair: Madeline Fields, M.D., *Co-Director of the Mount Sinai Epilepsy Pro-gram, Mount Sinai Health System, New York, NY, USA*
Co-Chair: Priti Balchandani Ph.D., *Professor of Diagnostic, Molecular and Interventional Radiology, Neuroscience and Psychiatry, Icahn School of Medicine, at Mount Sinai, New York, NY, USA*
1. Madeline Fields, M.D., *Co-Director of the Mount Sinai Epilepsy Program, Mount Sinai Health System, New York, NY, USA*
 2. Saadi Ghatan, M.D., *Professor of Neurosurgery and Pediatrics at the Icahn School of Medicine at Mount Sinai and Chair of Neurosurgery at Mount Sinai Health System, New York, NY, USA*
 3. Preeti Balchandani, Ph.D., *Professor of Diagnostic, Molecular and Interventional Radiology, Neuroscience and Psychiatry, Icahn School of Medicine, at Mount Sinai, New York, NY, USA*
 4. Bülent Yenner, Ph.D., *Professor, Depts. Computer Science, Electrical, Computer and Systems Engineering, and Data Science Research Center at Rensselaer Polytechnic Institute (RPI) in Troy, New York, USA*
- 14:30-14:45 Q&A and Break [atrium + Seminar B]
- 14:45-15:45 **Keynote 3: “Tracking Brain and Behavioral Dynamics to Optimize Deep Brain Stimulation for Depression”** - Helen Mayberg, M.D., - *Director Nash Family Center For Advanced Circuit Therapeutics, Icahn School of Medicine at Mount Sinai* [Davis]
- 15:45-16:00 Q&A and Break [atrium + Seminar B]
- 16:00-17:30 **Symposium 3: “Understanding the neurobiology of psychedelic action using EEG”** [Davis]
Chair: Martin Brunovsky, M.D., Ph.D., *Head of Brain Electrophysiology Research Programme, National Institute of Mental Health, Klecany, Czech Republic*
1. “EEG biomarkers in the prediction of psilocybin’s persisting positive effects on mood in healthy volunteers” - Tomáš Páleníček, M.D., Ph.D., *NIMH; Charles University in Prague, Czech Republic*



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2. "Psychedelics-induced broadband desynchronization and disconnection of EEG in rats and underlying pharmacological mechanisms" - Čestmír Vejmla, Ph.D., *NIMH; Charles University in Prague, Czech Republic*).
3. "Effect of psilocybin on the ability to generate gamma activity: translational perspective in human and rat" - Inga Griškova-Bulanova, Ph.D., *Vilnius University, Lithuania*
4. "EEG markers of human neuroplasticity in psychedelic research" – Kate Godfrey, Ph.D., *Imperial College London, UK*

17:30-17:45 Q&A

19:00-22:00 Social for Registrants – Upstairs at The Kimberly
145 E 50th St, New York, NY 10022, United States

Saturday: November 19th, 2022

Davis Auditorium, 2nd Floor, Hess Center for Science and Medicine, Mount Sinai Health System, 1470 Madison Ave, New York, NY 10029, USA

08:30-09:00 Registration & light Breakfast [atrium + Seminar B]

09:00-09:45 **Keynote 4: "Are the high frequencies of the human EEG useful biomarkers for psychopharmacological research?"** - Judith Nottage, Ph.D., *Postdoctoral Researcher, Birkbeck, University of London and King's College London, U.K* [Davis]

9:45-10:00 Q&A and Break [atrium + Seminar B]

10:00-11:30 **Symposium 4: "Hot Topics in EEG & Neuroscience Research"**
Chair: Sebastian Olbrich, M.D., *President IPEG, Deputy Head of Center for Social Psychiatry, University Zurich, Switzerland*

1. "Distinct neural profiles in people with bipolar disorders with and without auditory hallucinations: Perspectives from multi-modal brain imaging approaches" - Natalia Jaworska, Ph.D., *University of Ottawa Institute of Mental Health Research (IMHR), Canada*
2. "Effect of psilocybin on the ability to generate gamma activity: translational perspective in human and rat." – Inga Griškova-Bulanova, Ph.D., *Vice-Director, Research Professor, Institute of Biosciences, Life Sciences Centre Vilnius University, Vilnius, Lithuania*
3. "Feasibility and reliability of real-world functional neurophysiology with at-home use of Cumulus' wireless EEG" – Alison R. Buick, Ph.D., *Director of Clinical Programmes, Cumulus Neuroscience Ltd., United Kingdom*

11:30-11:45 Q&A and Break [atrium + Seminar B]

11:45-12:45 General Assembly [Davis] (*IPEG members only*)

12:45-14:00 Lunch [atrium + Seminar B]

Poster Session [Seminar B]

14:00-15:30 **Symposium 5: "Translational Utility of EEG in Drug Discovery"**
[Davis]



Chair: Steven C. Leiser, Ph.D., *Senior Principal Scientist, Translational Medicine & Biomarkers, Cerevel Therapeutics, Massachusetts, USA*

1. "Scalable ERP assessments for clinical trials: At home assessments with remote devices" - Patricio O'Donnell, M.D., Ph.D., *VP and Head of Translational Medicine, Sage Therapeutics, Massachusetts, USA*
2. "Mismatch negativity during sleep and wakefulness: the modulatory role of vigilance states in auditory information processing in rodents" - Sandor Kantor, Ph.D., *Scientific Lead, Transpharmation Ltd., London, UK*
3. "Using qEEG to examine estrogen depletion as a risk factor for neuropsychiatric symptoms associated with AD and schizophrenia" - Robert Gould, Ph.D., *Assistant Professor, Wake Forest School of Medicine, North Carolina, USA*
4. "Translating Neurophysiological Abnormalities of Dementia: Promises, Opportunities and Challenges" - Mihaly Hajos, PharmD., PhD., *Chief Scientific Officer, Cognito Therapeutics, Professor Adjunct at Yale University School of Medicine, Connecticut, USA*

15:30-15:45 Q&A and Break [atrium + Seminar B]

15:45-17:15 **Symposium 6: "Pharmaco-EEG 2.0 & QEEG 2.0: 21st century implementations of Pharmaco-EEG and QEEG"** [Davis]

1. "EEG Data Ecosystems & Next Generation Tools for CNS Therapeutics" - Jarrett Revels, M.D., *Chief technology officer and Co-founder Beacon Biosignals, Massachusetts, USA*
2. "From Research to a Clinical EEG-Platform" - Sebastian Olbrich, MD/PhD *Head of the Centre for Depression, Anxiety Disorders and Psychotherapy, Department of Psychiatry, Psychotherapy and Psychosomatics, University Hospital of Psychiatry Zurich*
3. "AI/ML Derived EEG-Based Biomarkers for Traumatic Brain Injury and Beyond" - Leslie S. Prichep, PhD., *Chief Scientific Officer, BrainScope Company, Inc.; Professor of Psychiatry (ret), New York University School of Medicine*
4. "From one-size-fits-all psychiatry to stratified psychiatry: Brainmarkers and Heart-Brain-Coupling" - Martijn Arns, Ph.D., *Research Director, Brainclinics Foundation, Netherlands; Associate Professor, Maastricht University, Dept. of Cognitive Neuroscience*

17:15-17:30 Q&A

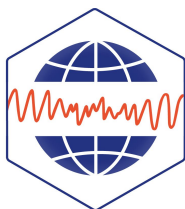
Sunday: November 20th

Davis Auditorium, 2nd Floor, Hess Center for Science and Medicine, Mount Sinai Health System, 1470 Madison Ave, New York, NY 10029, USA

08:30-09:00 Light Breakfast [atrium + Seminar B]

09:00-10:45 **Symposium 7: Oral Presentations** [Davis]

Chair: Sebastian Olbrich, M.D., *President IPEG, Deputy Head of Center for Social Psychiatry, University Zurich, Switzerland*



1. “Neural indices of a modified auditory oddball task and their symptom correlates in post-traumatic stress disorder dissociative vs. non-dissociative subtypes” – Sara de la Salle, PhD
2. “Pharmacodynamic Implications of Transcranial Photobiomodulation and Quantum Physics in Clinical Medicine” – Kristin S. Williams, PhD, Columbia University Medical Center- New York, New York USA
3. “EEG Source Functional Connectivity in Patients After a Recent Suicide Attempt” – Anna Bankwitz, BSc, *Dept. Psychiatry, Dept Exp Psychopath & Psychotherapy, University of Zurich, Zurich, Switzerland*
4. “Stress, epileptiform symptoms in schizophrenia and neural information transmission” – Petr Bob, PhD, *First Faculty of Medicine, Charles University, Prague, Czech Republic*
5. “Deep Learning Applied to Electroencephalogram Data in Mental Disorders: A systematic Review” – Mateo de Bardeci, BSc, *Department for Psychiatry, Psychotherapy and Psychosomatics, Psychiatric University Hospital Zurich (PUK), Switzerland*

10:45-11:00 Q&A and Break [atrium + Seminar B]

11:00-11:15 Farewell