

PROGRAMME

THURSDAY 21ST SEPTEMBER

- 09:00** Registration
09:30 Conference Opening Address
09:45 Dr. Lauren Hadley, University of Nottingham
Research Challenge Update
10:10 Luke Priestley, University of Oxford
Transcranial Ultrasound Stimulation of Small Subcortical Nuclei Influences Reward-Guided Decisions in Macaques
10:35 Poster Pitches Cohort I
11:30 Poster Session
12:00 Lunch
13:00 Dr. Róisín Mc Mackin, Trinity College Dublin
Measuring the Function of Specific Cortical Networks Using Task-Linked EEG/MEG: Considerations During Study Design
13:25 Dr. Danielle Kurtin, Imperial College London
Noninvasive Temporal Interference Stimulation of the Human Hippocampus Selectively Modulates Resting State Functional Connectivity
13:50 Poster Pitches Cohort II
14:45 Coffee Break
15:20 Professor André Brunoni, University of São Paulo
tDCS in depression: mechanisms and empirical evidence
15:45 Dr. Alex Tang, University of Western Australia
The Synaptic and Non-Synaptic Plasticity Mechanisms of Repetitive Transcranial Magnetic Stimulation
16:10 Dr. Kieth Murphy, Stanford University
Optically Tuned Ultrasound Neuromodulation for Remote Control of Walking and Vasodynamics
16:35 Professor Walter Paulus, Ludwig Maximilians University
17:25 Day I Closing Remarks
17:30 Extended Poster Session
18:30 Social Event
19:30 Day I End

FRIDAY 22ND SEPTEMBER

- 09:00** Registration Opens
09:45 Welcome
09:50 Karen Wendt, University of Oxford
Multi-Scale Temporal Considerations from TMS: From Pulse Shapes to Patterns - From Microseconds to Hours
10:15 Dr. Daisy Thompson-Lake, Rockefeller Neuroscience Institute, West Virginia University
Reducing Cravings in Opioid Use Disorder Using Low Intensity Focused Ultrasound
10:40 Dr. Meghan Gonsalves
Cortical Glutamatergic and N-acetylated Compounds: Potential Biomarkers of rTMS Outcomes in Major Depression
11:05 Dr. Joshua Brown, Harvard Medical School
Young Investigator Award Winner 2023



PROGRAMME

- 11:35** John Rothwell Award
12:05 Lunch
13:00 Samaneh Rashidi, University of Surrey
The Effect of Transcranial Random Noise Stimulation Techniques on Language Learning
13:25 Ingrid Odermatt, ETH Zurich
TMS-Based Motor Imagery Neurofeedback Enhances Individuation of Neural Finger Representations
13:50 Dr Jerome Sallet, INSERM, University of Oxford
Probing Decision-Making Circuits in Primates using Transcranial Ultrasound Stimulation
14:15 Dr. Maria Gallagher, University of Kent
Using Galvanic Vestibular Stimulation to Investigate Vestibular Processing in Virtual Reality
14:40 Break
15:15 Dr. Lennart Verhagen. Donders Institute
The Effect of Transcranial Random Noise Stimulation Techniques on Language Learning
15:40 Dr. Domenica Vanieró, University of Nottingham
Brain Oscillations as a Mechanism of Cortical Communication
16:05 Professor Simon Hanslmayr, University of Glasgow
Neural Mechanisms of Episodic Memory Formation: Implications for Neurotech
16:30 Dr. Jacinta O'Shea, University of Oxford
16:40 Poster Prize Presentation, Research Challenge Presentation
17:20 Closing Remarks
17:35 Conference End

SATURDAY 23RD SEPTEMBER

- 09:00** Workshop Programme
OPM Technology and System Overview
Video Demonstration of Mag4Health OPM-MEG Research System
Clinical Applications for OPM-MEG
Post-processing Result Presentation
Discussion Q&A
Close

This year, in-person attendees of the Brainbox Initiative Conference will have the opportunity to join us on Saturday 23rd September for a half-day, interactive workshop.

The workshop will explore the fundamentals and recent advancements in MEG, as well as future directions in the field of OPM-MEG.

Joined by: **Dr Etienne Labyt** (MAG4Health), **Andrew Thomas** (Brainbox), **Dan Phillips** (Brainbox)
Soffia Cahill (Brainbox)

Spaces for this satellite workshop are strictly limited.

This satellite workshop is free to attend for conference attendees; it is not possible to attend the workshop only. Spaces are limited and must be booked in addition to the conference itself. The workshop is only available in person; it will not be included in the online streaming for virtual attendees.

Programme subject to changes

