



Helsinki TMS Hub Kickoff

Understanding and repairing complex neuropathologies with transcranial magnetic stimulation (TMS)

Online mini-conference

Date: Thursday 10th of September 2020, 9.00 – 12.00

Organizations: BioMag Laboratory, Helsinki University Hospital (HUH) in collaboration with the University of Helsinki and Aalto University

Welcome to the Helsinki TMS Hub Kickoff and mini-conference aiming to increase awareness about the latest advances in the field of transcranial magnetic stimulation (TMS), to boost collaboration between scientists and health care professionals working with TMS and foster translation of technological and methodological innovations into effective clinical applications.

TMS is a unique noninvasive neuromodulation method to probe and repair the brain function. TMS has shown diagnostic and therapeutic potential in a wide variety of disease states in neurology and psychiatry. Multi-locus TMS, studies of TMS-induced neuroplasticity and advanced combinations of TMS with neuroimaging and electrophysiology will shape our understanding of cortical networks and define the future treatments of complex neuropathologies.

Helsinki TMS Hub is an interdisciplinary collaborative project between Helsinki University Hospital, the University of Helsinki, and Aalto University. Helsinki TMS Hub aims to provide infrastructure and support for researchers and research groups as well as organizes TMS courses and events. BioMag Laboratory HUH is the TMS Hub's core facility. The project is funded by the Helsinki Network Brain and Mind's Grand Challenge program.

Preliminary Program

- 9.00 - 9.10 **Welcome and Opening remarks**
Docent **Hanna Renvall**, *Head of BioMag Laboratory, HUH*
- 9.10 – 9.20 **Helsinki TMS Hub: an overview**
Dr. **Andrei Rodionov**, *Scientific Coordinator, Helsinki TMS Hub*
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Mini-lectures

- 9.20 – 9.40 **TBA**
Professor **Risto Ilmoniemi**, *Head of Department of Neuroscience and Biomedical Engineering, Aalto University*
- 9.40 – 10.00 **Functional network models for relevant and reliable TMS targeting**
Docent **Tuukka Raij**, *HUS/HYKS psychiatry*
- 10.00 – 10.20 **rTMS in neuropathic pain – HUH experiences**
Dr. **Selja Vaalto**, *Department of Clinical Neurophysiology, HUH*

10.20 – 10.40 **Made in BioMag: from TMS-EEG to cortical mapping and rehabilitation approaches**

Dr. **Pantelis Lioumis**, *Department of Neuroscience and Biomedical Engineering, Aalto University*

10.40 – 11.00 **Paired associative stimulation for spinal cord injury patients: success stories and future directions**

Dr. **Anastasia Shulga**, *BioMag Laboratory, HUH, Clinical Neurosciences, Neurology, HUH*

11.00 – 11.10 *Online coffee break*

11.10 – 11.50 **Virtual round table: Translation of TMS research and technological innovation into clinical practice**

Moderator: Docent **Hanna Renvall**, *Head of BioMag Laboratory, HUH*

11.50 – 12.00 **Closing remarks**

Docent **Hanna Renvall**, *Head of BioMag Laboratory, HUH*

The Helsinki TMS Hub Kickoff and mini-conference is an online meeting organized via Zoom video conferencing service due to the Coronavirus situation. Participation is free of charge, but registration is compulsory. After the registration participants will receive a confirmation letter by email including a link to online meeting room.

Registration:

<https://elomake.helsinki.fi/lomakkeet/106273/lomake.html>

Keep informed at www.biomag.hus.fi



Contact organizers:

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