Society for Brain Mapping and Therapeutics (SBMT)
MEG/EEG Conference 2021:
Room 410 - Judith Ann Thatcher Memorial Session

Organized by Dr. Robert Thatcher, Dr. Warren Boling, Dr. Zoltan Mari

Friday, July 9th 10:00-11:30 am

A7: New Advancements in Electrical Neuroimaging: Neuro-Surgical Planning and Pre vs Post Surgery Assessment

Chair & Recipient of SBMT 2020 Pioneer in Medicine Award: Dr. Robert Thatcher (Applied Neuroscience, Inc., CEO and Director Applied Neuroscience Research Institute, www.appliedneuroscience.com)

10:00-10:15 am: Dr. Robert Thatcher, Ph.D. (Applied Neuroscience Research Institute)
Neuro-navigation of Functional and Effective Connectivity in Epilepsy

10:15-10:30 am: Dr. Joel Lubar, Ph.D. (President Southeastern Neurofeedback Institute)
Electrical Neuroimaging of Epileptic Foci and Affected Networks

10:30-10:45 am: Dr. Wesley Center, Ph.D. (Brain and Behavior Associates)
Electrical Neuroimaging for Pre vs Post Treatment Evaluation

10:45-11:00 am: Emin Eralp, B.A. (Applied Neuroscience Research Institute)
3-Dimensional EEG Evaluation of Brain Networks

11:00-11:15 am: Dr. Richard Abbey, Ph.D. (Abbey Neuropsychology Clinic)
Electrical Neuroimaging and Diffusion Tensor Imaging

11:15-11:30 am: Session Discussion
Friday, July 9th 1:30-3:00 pm

A20: Epilepsy and Intraoperative Brain Mapping

Chairs: Dr. Dawn Eliashiv (Professor Co-Director, UCLA Seizure Disorder Center UCLA Department of Neurology)

Dr. Warren Boling (Professor and Chairman, Department of Neurosurgery Loma Linda University)

1:30-1:45 pm: Dr. Mohammad Dastjerdi (Loma Linda University)
Post-traumatic Epileptogenesis and Its Biomarkers

1:45-2:00 pm: Dr. Warren Boling (Loma Linda University)
Surgical Treatment of Epilepsy. A Brief History and Future Directions

2:00-2:15 pm: Dr. Gordon Baltzer (President of MEGIN)
The challenges in converting research and development into successful commercial products or services

2:15-2:30 pm: Dr. Dawn Eliashiv (University of California of Los Angeles)
Neuro stimulation network-based therapy for Epilepsy

2:30-2:45 pm: Dr. Yu Mike Chi, Ph.D. (Cognionics, Inc. and CGX LLC.)
The State of High-quality Dry and 'Almost-Dry' EEG Electrodes for Research and Clinical Applications

2:45-3:00 pm: Session Discussion
Friday, July 9th 3:30-5:00 pm

A32: MEG/EEG Clinical Applications

The EEG and MEG NeuroNavigator for the Evaluation of Epilepsy and Brain Network Dysregulation Using a Lifespan Normative Database from Birth to Senescence.

Chair: Dr. Robert Thatcher.
(Applied Neuroscience, Inc., CEO and Director Applied Neuroscience Research Institute, www.appliedneuroscience.com)

3:30-3:45 pm: Dr. Robert Thatcher, Ph.D. (Applied Neuroscience Research Institute)
Real-Time Electrical Neuroimaging of the Cerebellum, Red Nucleus and Sub-Thalamus: Future Applications in Parkinsonism and Ataxia.

3:45-4:00 pm: Dr. Wesley Center, Ph.D. (Brain and Behavior Associates)
Real-Time swLORETA EEG Neurofeedback of Veterans with PTSD

4:00-4:15 pm: Dr. Richard Abbey, Ph.D. (Abbey Neuropsychology Clinic)
Real-Time swLORETA EEG Neurofeedback of Autistic Spectrum Disorder

4:15-4:30 pm: Dr. Joel Lubar, Ph.D. (President Southeastern Neurofeedback Institute)
Electrical Neuroimaging in Epilepsy Patients

4:30-4:45 pm: Emin Eralp, B.A. (Applied Neuroscience Research Institute)
Real-Time swLORETA EEG Neurofeedback of TBI Patients.

4:45-5:00 pm: Session Discussion
Saturday, July 10th 10:00-11:30 am

**B45: Practical Advances in Electrical Neuroimaging: Hands On Training**

**Chair: Dr. Robert Thatcher (Applied Neuroscience, Inc., CEO and Director Applied Neuroscience Research Institute, www.appliedneuroscience.com)**

10:00-10:15 am: Dr. Robert Thatcher, Ph.D. (Applied Neuroscience Research Institute)
Electrical Neuroimaging and Diffusion Tensor Imaging of Functional and Effective Connectivity

10:15-10:30 am: Dr. Ernesto P. Soler, Ph.D. (Applied Neuroscience Research Institute)
Time Domain Evaluation of Epileptic Foci and Networks

10:30-10:45 am: Dr. Joel Lubar, Ph.D. (President Southeastern Neurofeedback Institute)
Real-Time Electrical Neuroimaging of the Cerebellum, Red Nucleus and Subthalamus

10:45-11:00 am: Dr. Joel Lubar, Ph.D. (President Southeastern Neurofeedback Institute)
Seizure Localization with Surface Projection and Diffusion Tensor Imaging (DTI)

11:00-11:15 am: Emin Eralp, B.A. (Applied Neuroscience Research Institute)
Real-Time swLORETA EEG Neurofeedback in PTSD

11:15-11:30 am: Session Discussion
Saturday, July 10th 1:00-2:30 pm

**B58: MEG/EEG Clinical Applications II**

*Chairs: Dr. Robert Thatcher (Applied Neuroscience, Inc., CEO and Director Applied Neuroscience Research Institute) and Dr. Leslie S. Prischep (Chief Scientific Officer, BrainScope Company, Inc.)*

1:00-1:15 pm: **Dr. Leslie S. Prichep, Ph.D.** (BrainScope Company, Inc.)
Triage of acute traumatic brain injury using electrophysiological biomarkers

1:15-1:30 pm: **Dr. Robert Isenhart, M.S.** (Wave Neuroscience)
QEEG optimization of TMS treatment

1:30-1:45 pm: **Emin Eralp, B.A.** (Applied Neuroscience Research Institute) *Real-Time Imaging of Brain Networks*

1:45-2:00 pm: **Dr. Ernesto P. Soler, Ph.D.** (Applied Neuroscience Research Institute)
MEG and EEG Neuroimaging of Functional and Effective Connectivity

2:00-2:15 pm: **Dr. Wesley Center, Ph.D.** (Brain and Behavior Associates)
Real-Time Electrical Neuroimaging and EEG Neuromodulation

2:15-2:30 **Dr. Richard Abbey, Ph.D.** (Abbey Neuropsychology Clinic)
Electrical Neuroimaging Linking Symptoms

2:30-2:45 pm: Session Discussion
Saturday 21st 3:00-4:30 pm

B66: Epilepsy and intraoperative monitoring

Chairs: Dr. Antal Berenyi, MD PhD (Adjunct Assistant Professor, Neuroscience Institute, New York University, NY) and Dr. Zoltan Mari (Lou Ruvo Clinic, Cleveland Clinic)

3:00-3:15 pm: Dr. Brach Poston (University of Nevada, Las Vegas)
Transcranial direct current stimulation to improve motor function in Parkinson's disease

3:15-3:30 pm: Dr. Teresa Arroyo-Gallegos (NQ- Medical)
Natural typing as a digital biomarker for fine motor impairment

3:30-3:45 pm: Dr. Yousef Salimpour (The John Hopkins Hospital)
Phase-dependent neuromodulation for treating Parkinson's disease symptoms

3:45-4:00 pm: Dr. Laszlo Grand (The John Hopkins University)
Multi Electrode Array (MEA) Technology: Understanding the Neurophysiological Characteristics of Neural Networks Modeling Neurological Disorders In-vitro

4:00-4:15 pm: Dr. Antal Berenyi (University of Szeged, Hungary, Neunos Ltd. New York University)
Oscillotherapy – Closed-loop transcranial electric stimulation in epilepsy and PTSD

4:15-4:30 pm: Session Discussion
Sunday, July 11th 10:00-11:30 am

C84: MEG Sensors.

Chairs: Dr. Peter Schwindt (Distinguished Member of Technical Staff Sandia National Laboratories) and Dr. Amir Borna (Distinguished Member of Technical Staff Sandia National Laboratories)

10:00-10:15 am: Dr. Peter Schwindt (Sandia National Laboratories, NM, US) Moving Closer to the Brain: Introduction to On-Scalp Magnetoencephalography

10:15-10:30 am: Dr. Vishal Shah (QuSpin, Inc., CO, US) Next Generation Magnetoencephalography (MEG)

10:30-10:45 am: Mr. Ryan Hill (University of Nottingham, United Kingdom) Next Generation Neuroimaging with Optically Pumped Magnetometer Magnetoencephalography (OPM-MEG)

10:45-11:00 am: Dr. Svenja Knappe (University of Colorado, Fieldline, Inc.) Towards a MEG system with microfabricated OPMs

11:00-11:15 am: Dr. Amir Borna (Sandia National Laboratories, NM, US) Non-Invasive Functional-Brain-Imaging with an OPM-based

11:15-11:30 am: Session Discussion
Sunday, July 11th 3:00-4:30 pm

**C110: Software Session for MEG/EEG**

The Neuro-Navigator for EEG Source and Connectivity Analyses of Cortical and Cerebellar Network Nodes

*Chairs: Dr. Robert Thatcher (Applied Neuroscience, Inc., CEO and Director Applied Neuroscience Research Institute, www.appliedneuroscience.com) and Dr. Ernesto Palmero Soler (Applied Neuroscience, Inc., Senior Scientist & Software Engineer, www.appliedneuroscience.com)*

3:30-3:45 pm: **Dr. Robert Thatcher, Ph.D.** (Applied Neuroscience Research Institute)  
Real-Time swLORETA Cerebellar EEG Neurofeedback of Parkinson Patients

3:45-4:00 pm: **Dr. Nicholas Peatfield Ph.D.** (Proto-Me)  
Modern Software Tools for MEG/EEG

4:00-4:15 pm: **Dr. Ernesto P. Soler, Ph.D.** (Applied Neuroscience Research Institute)  
MEG and EEG Neuroimaging of Functional and Effective Connectivity

4:15-4:30 pm: **Dr. William Lambos, Ph.D.** (President & Licensed Psychologist at ABF Behavioral Health)  
Real-Time swLORETA EEG Neurofeedback in PTSD

4:30-4:45 pm: **Dr. William Lambos, Ph.D.** (President & Licensed Psychologist at ABF Behavioral Health)  
Neuronavigation of EEG Functional and Effective Connectivity and Diffusion Tensor Imaging

4:15-4:30 pm: Session Discussion
Register for the 17th Annual World Congress SBMT 2021


Want to become a member?
https://www.worldbrainmapping.org/Membership/

Submit an Abstract
https://www.worldbrainmapping.org/Annual-Congress/Presentation-Guidelines-for-Speakers-and-Faculty