



## **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 9<sup>th</sup> 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](http://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 9<sup>th</sup> 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 9<sup>th</sup> 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](http://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 10<sup>th</sup> 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](http://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 10<sup>th</sup> 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. Prischep, Ph.D. (BrainScope Company, Inc.)  
Triage of acute traumatic brain injury using electrophysiological biomarkers**

**1:15-1:30 pm: Dr. Robert Isenhardt, 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 21<sup>st</sup> 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 11<sup>th</sup> 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 11<sup>th</sup> 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](http://www.appliedneuroscience.com))**

**and**



**Dr. Ernesto Palmero Soler (Applied Neuroscience, Inc., Senior Scientist & Software Engineer, [www.appliedneuroscience.com](http://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 17<sup>th</sup> Annual World Congress SBMT 2021*

<https://worldbrainmapping.site-ym.com/events/register.aspx?id=1318248>

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