




Monday, 25 February, 2019


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|--------------------|---|--|--|--|--|---|---|
| 07:30-08:30 | Registration Room: East Convention Level Lobby | | | | | | Registration Desk Sponsored by:  |
| 08:30-09:00 | Opening Remarks , Harold A. Sackeim, PhD Room: East Ballroom A/B/C | | | | | | |
| 09:00-10:30 | Plenary Lectures Room: East Ballroom A/B/C | | | | | | |
| 09:00-09:45 | [PL01] Noninvasive neuromodulation with nanoparticle-mediated ultrasonic drug uncaging Raag Airan, MD PhD, <i>Stanford University, USA</i> | | | | | | |
| 09:45-10:30 | [PL02] Can stimulation improve muscle force through plasticity in the spinal cord? Janet Taylor, MD, <i>Edith Cowan University (ECU), Australia</i> | | | | | | |
| 10:30-11:00 | Refreshment break Room: Exhibitor Hall B | | | | | | |
| 11:00-12:45 | Plenary Lectures Room: East Ballroom A/B/C | | | | | | |
| 11:00-11:45 | [PL03] Tools for Noninvasively Controlling and Observing Neural Circuits Ed Boyden, PhD, <i>Massachusetts Institute of Technology, Cambridge, USA</i> | | | | | | |
| 11:45-12:45 | [PL04] International Brain Stimulation Award Plenary Lecture: How to move an individual finger Mark Hallett, MD, <i>National Institute of Neurological Disorders and Stroke, USA</i> | | | | | | |
| 12:45-13:45 | Lunch and Poster session 1 Room: Exhibitor Hall B | | | | | | Poster Session Sponsored by:  Lunch Sponsored by:  |
| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | Meeting Room East 11/12 | |
| 13:45-15:45 | Symposium session 1a: Targeting prefrontal cortical-subcortical circuitry with non-invasive neuromodulation and invasive stimulation in Bipolar Disorder and OCD: toward novel therapeutic interventions | Symposium session 1b: Non-invasive brain stimulation targeting neural drive to the lower limb | Symposium session 1c: Multimodal neuroimaging informs mechanisms of action for rTMS in depression | Symposium session 1d: Advanced tACS | Symposium session 1e: Ethics of DBS | Symposium session 1f: Advances in Paired Non-Invasive Vagus Nerve Stimulation Ther | |

| Chair | Mary Phillips, University of Pittsburgh, USA | Sangeetha Madhavan, University of Illinois at Chicago, USA | Michael Fox, Berenson-Allen Center for Noninvasive Brain Stimulation Boston, USA | Alexander Opitz, University of Minnesota, USA | Zelma Kiss, University of Calgary, Canada | Bashar Badran, The City College of New York, USA |
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| 13:45-14:15 | [S1a.01] Reward circuitry-targeted transcranial direct current stimulation impacts underlying reward circuitry function and affect: A promising intervention for bipolar disorder | [S1b.01] Use of TMS to evaluate cortical excitability of lower limb muscles: Effects of post-stroke gait retraining | [S1c.01] Effects of transcranial magnetic stimulation on the human brain revealed by intracranial electrocorticography | [S1d.01] Does tACS entrain neural oscillations? | [S1e.01] Ethical considerations for brain recording and stimulating neurotechnologies available in the open marketplace | [S1f.01] Understanding the underlying mechanisms behind VNS-paired therapies |
| 14:15-14:45 | [S1a.02] A direct comparison of ventral capsule and anteromedial subthalamic nucleus stimulation in obsessive compulsive disorder: clinical and imaging evidence for dissociable Effects | [S1b.02] Understanding and modulating walking recovery post stroke | [S1c.02] Structural connectivity between dorsolateral prefrontal cortex and cingulate cortex predicts clinical response to accelerated iTBS in major depression | [S1d.02] Biophysical mechanisms and physiological effects of tACS | [S1e.02] Patenting brain stimulation: Regions or methods? | [S1f.02] A novel pilot study of tavns paired with oral feeding in neonates with brain injury |
| 14:45-15:15 | [S1a.03] Neurosurgeries for intractable OCD: Deep brain stimulation and gamma ventral capsulotomy compared | [S1b.03] The use of rTMS to augment walking recovery after stroke | [S1c.03] Accelerated neurostimulation in major depression: Insights from brain imaging | [S1d.03] Exploring tACS effects on physiology and cognitive function through simultaneous imaging and Bayesian optimization approaches | [S1e.03] Regulatory oversight for DBS: Current framework for device recall in North America | [S1f.03] Non-invasive Vagal Nerve Stimulation Paired with Stress Exposure in Posttraumatic Stress Disorder (PTSD) |



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| 15:15-15:45 | [S1a.04] Prefrontal cortical-cortical and subcortical circuits: White matter vs. grey matter stimulation targets | [S1b.04] Corticospinal contributions to lower-limb muscle activity after spinal cord injury | [S1c.04] Using the human brain connectome to optimize TMS targets for depression | [S1d.04] Does tACS entrain neural oscillations? Causal account of brain network computations driving value-based decisions | [S1e.04] Ethical considerations for brain stimulation: The industry perspective | [S1f.04] Enhancing rehabilitative therapies with vagus and trigeminal nerve stimulation to treat neurological disease. Lessons learned from tinnitus research | | |
| 15:45-16:15 | Refreshment break Room: Exhibitor Hall B | | | | | | | |
| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | Meeting Room East 11/12 | | |
| 16:15-18:15 | Symposium session 2a: New targets for rTMS: promising evidences in impulsive compulsive disorders | Symposium session 2b: Frontoparietal Electrophysiological Network and Neuromodulation | Symposium session 2c: ECT Now and Aiming Toward 2038: Recent Advancements and Speculations for the Centennial of the Bini-Cerletti Brain-Child | Symposium session 2d: Biomarkers for Invasive Stimulation of Focal Epilepsy: Theory, Modeling, and Results | Fast Track Symposium session 2e: Brain stimulation using depth and transcranial electrodes: Use in neuropsychiatry, modeling and validation | Fast Track Symposium session 2f: Advances in Pediatric and Neurodevelopmental Brain Stimulation | | |
| Chair | Giovanni Martinotti, University G.d'Annunzio Chieti, Italy | Yuping Wang, Capital Medical University Beijing, China | Peter Rosenquist, Augusta University, USA | Brian Lundstrom, Mayo Clinic, USA | Lee Wei Lim, The University of Hong Kong, Hong Kong and Pratik Yashvant Chhatbar, Medical University of South Carolina, USA | Derrick Matthew Buchanan, Children's Hospital of Eastern Ontario, Canada and Paul E. Croarkin, Mayo Clinic, USA | | |
| 16:15-16:45 | [S2a.01] Exploiting the hypodopaminergic state with transcranial magnetic stimulation in addiction | [S2b.01] Frontal prestimulation on parietal connectivity and application in neurological disorders modulation | [S2c.01] ECT: Too good to keep ignoring, now and in the future | [S2d.01] Trial stimulation and chronic subthreshold cortical stimulation to treat focal epilepsy | 16:15-16:30 | [FS2e.01] The electrophysiological effects of DBS in animal models of Parkinson's disease | 16:15-16:30 | [FS2f.01] Potentials of rTMS for neurodevelopmental disorders and road to clarification of TMS neuropathology |

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| | | | | | 16:30 - 16:45 | [FS2e.02] Translational aspects of DBS for depression | 16:30 -16:45 | [FS2f.02] Harnessing plasticity in the atypical developing brain using neurostimulation |
| 16:45-17:15 | [S2a.02] rTMS and cognitive control in gambling disorder | [S2b.02] Frontoparietal tms-eeG: transcranially versus peripherally induced brain responses | [S2c.02] Don't hold your breath-it's time to stimulate! | [S2d.02] Linking stimulation-evoked cortical activity and ongoing, intrinsic activity: Towards measures of intrinsic cortical excitability | 16:45 - 17:00 | [FS2e.03] High frequency stimulation of the subthalamic nucleus: linking mood and motor effects at the level of the basal ganglia and 5-HT system | 16:45 -17:00 | [FS2f.03] Making transcranial direct current stimulation treatment in atypical child and adolescent neurodevelopment a reality: Translating safety tolerability and acceptability evidence from the laboratory into the doctors office, the classroom, and home. |
| | | | | | 17:00 - 17:15 | [FS2e.04] Pacemaker in the aged brain: From molecular profiling to memory enhancement | 17:00 -17:15 | [FS2f.04] Effectiveness of the prefrontal rTMS on cognitive functions in depression, schizophrenia, and Alzheimer's disease and investigation of the impaired prefrontal neuroplasticity in treatment-resistant depression using combined TMS-EEG |

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| 17:15-17:45 | [S2a.03] A Pilot Study of Transcranial Magnetic Stimulation of the Medial Prefrontal and Cingulate Cortices and Cocaine Self-Administration. | [S2b.03] Can combined TMS-EEG to the dorsolateral prefrontal cortex help guide therapeutic rTMS? | [S2c.03] Precision Seizure Therapy: Towards safer and personalized depression care for the future | [S2d.03] Electrographic correlates of clinical seizures | 17:15 - 17:30 | [FS2e.05] Individualizing tES dose and montage from non-invasive EEG monitoring | 17:15 -17:30 | [FS2f.05] A clinical trial comparing intermittent theta burst stimulation to dorsomedial prefrontal cortex and right temporoparietal junction in autism spectrum disorder |
| | | | | | 17:30 - 17:45 | [FS2e.06] ROAST: a fully-automated, open-source, Realistic volumetric-Approach-based Simulator for TES | 17:30 -17:45 | [FS2f.06] Modulating the developing motor system toward better outcomes for disabled children |
| 17:45-18:15 | [S2a.04] Empirical development of TMS as a treatment tool for disorders of impulsivity and cue-reactivity: where we have been and where we need to go | [S2b.04] Combined TMS-EEG-fMRI. The level of TMS-evoked activation in anterior cingulate cortex depends on timing of TMS delivery relative to frontal alpha phase | [S2c.04] Principles of Brain Stimulation and the Future of ECT | [S2d.04] Model-based approaches to controlling brain networks | 17:45 - 18:00 | [FS2e.07] Deep brain areas can be reached by transcranial electric stimulation with multiple electrodes | 17:45 -18:00 | [FS2f.07] Reduced motor cortex modulation during response inhibition task correlates with worse performance more severe clinical and motor impairment in children with ADHD |

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| | | | | | | | | 18:00 -18:15 | [FS2f.08] Monitoring and modulating adolescent depression and suicidality. |
| 18:15-20:00 | Welcome Reception and Poster Session 1 Room: Exhibitor Hall B | | | Welcome Reception Sponsored by: | | | | | |
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Tuesday, 26 February, 2019


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|--------------------|---|---|---|---|---|--|
| 08:30-10:00 | Plenary Lectures Room: East Ballroom A/B/C | | | | | |
| 08:30 – 09:15 | [PL05] tDCS boosts Hebbian Plasticity Lucas Parra, PhD, <i>City University of New York, USA</i> | | | | | |
| 09:15 – 10:00 | [PL06] Using brain stimulation and neuroimaging to understand human motor plasticity in health and disease Charlotte Stagg, <i>University of Oxford, UK</i> | | | | | |
| 10:00-10:30 | Refreshment break Room: Exhibitor Hall B | | | | | |
| 10:30-11:15 | [PL07] Transcranial Brain Stimulation to Understand Neuronal Oscillations Til Ole Bergmann, PhD, <i>University Hospital Tübingen, Germany</i> | | | | | |
| 11:15-12:00 | [PL08] Imaging TMS-induced plasticity in animal models Dirk Jancke, PhD, <i>Ruhr-University Bochum, Germany</i> | | | | | |
| 12:00-13:30 | Lunch and Poster session 2 Room: Exhibitor Hall B | | Poster Session Sponsored by:  Rogue Research Inc. | | Lunch Sponsored by:  | |
| 13:30-15:30 | Workshops (Hands on Demonstrations and Round Table Discussions with Experts) | | | | | |
| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | |
| 13:30-15:30 | Workshop 1: Center and At-Home Methods of tDCS , Marom Bikson, PhD & Adam Woods, PhD | Workshop 2: Advanced TMS Methods – PAS, Theta Burst TMS , John Rothwell, PhD & Ulf Ziemann, MD | Workshop 3: Clinical Use of ECT , Peter Rosenquist, MD & Harold A. Sackeim, PhD | Workshop 4: Clinical Use of TMS , Paul Fitzgerald, MBBS, PhD, Mark S. George, MD & Jonathan Downar, MD, PhD, FRCPC | Workshop 5: Deep Brain Stimulation: Hot Topics and Demonstration , Zelma Kiss, MD, PhD & Claudio Pollo, MD | |
| 15:30-16:00 | Refreshment break Room: Exhibitor Hall B | | | | | |
| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | Meeting Room East 11/12 |
| 16:00-18:00 | Symposium session 3a: Transdiagnostic Theta Burst Stimulation – The Future is Now | Symposium session 3b: Individualized Brain Stimulation: Addressing Heterogeneity Across Modalities | Symposium session 3c: Induction of seizure-like events by brain stimulation | Symposium session 3d: Noninvasive Brain Stimulation in Addiction Medicine | Symposium session 3e: Improving the outcome of deep brain stimulation | Fast Track Symposium session 5e: New insights into precision medicine and target engagement in brain stimulation treatments: Electrophysiology, imaging and clinical predictors |

| Chair | Noah Philip, Brown University, USA | Joan Camprodon, Massachusetts General Hospital, USA | Josep Valls-Sole, University of Barcelona, Spain | Elliot Stein, NIDA-IRP/NIH, USA | Esmée Verwijk, Amsterdam UMC, University of Amsterdam, The Netherlands | Martijn Arns, Research Institute Brainclinics, Netherlands and Abraham Zangen, Ben-Gurion University, Israel | |
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| 16:00-16:30 | [S3a.01] Modulating cue-reactivity with continuous theta burst stimulation to the frontal pole: a novel target with transdiagnostic relevance | [S3b.01] Closed loop deep brain stimulation enhances cognitive control | [S3c.01] Transient loss of consciousness with brain stimulation | [S3d.01] High-frequency repetitive transcranial magnetic stimulation (rTMS) in alcohol dependence: Effects on emotion processing and reappraisal and neural mechanisms: An fMRI study | [S3e.01] Long-term efficacy and quality of life in patients with treatment-resistant depression following deep brain stimulation | 16:00-16:15 | [FS5e.01] The heart-brain pathway in depression: Optimizing TMS treatment for depression using cardiac response (Neuro-Cardiac-Guided-TMS). |
| | | | | | | 16:15-16:30 | [FS5e.02] Clinical and neurophysiological predictors of rTMS response in major depressive disorder: Robustness and clinical relevance |

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| 16:30-17:00 | [S3a.02] Theta-burst stimulation in major depression: Clinical and neuroimaging results | [S3b.02] Individualized electroconvulsive therapy for treatment of depression | [S3c.02] The dynamics of TMS-induced seizures and epileptiform discharges | [S3d.02] Small- and large-scale network modulation as mechanistic and predictive biomarkers for tdc; Randomized clinical trials among methamphetamine users | [S3e.02] Personalized prediction of response to deep brain stimulation in obsessive-compulsive disorder using structural MRI data | 16:30-16:45 | [FS5e.03] Accelerated intermittent theta burst stimulation rapidly attenuates suicide ideation in major depression: Insights from brain perfusion and functional connectivity |
| | | | | | | 16:45-17:00 | [FS5e.04] Towards a personalized approach to rTMS target selection in depression |
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| | | | | | | 17:15-17:30 | [FS5e.06] EEG and fMRI network-based predictors of response to rTMS in depression |
| 17:00-17:30 | [S3a.03] Accelerated intermittent theta burst stimulation for acute suicidality in an inpatient setting | [S3b.03] Individualized TMS target selection for MDD: Clinical outcomes, mechanisms of action and predictors of response. | [S3c.03] Syncope or seizure or even other types of transient loss of consciousness ? A differential-diagnostic challenge | [S3d.03] Can prefrontal TMS Help smokers stop smoking? A summary of recent small trials and new data from a large pivotal industry sponsored study | [S3e.03] Association between ventral subthalamic deep brain stimulation and apathy in Parkinson's disease | 17:30-17:45 | [FS5e.07] Transcranial magnetic stimulation and electroencephalography predictors of response to rTMS in youth depression |
| 17:30-18:00 | [S3a.04] Theta burst transcranial magnetic stimulation for posttraumatic stress disorder | [S3b.04] Downloading Personalized Brain Stimulation | [S3c.04] Therapy-oriented induction of seizures | | [S3e.04] Deep brain stimulation for Parkinson's disease: Cognitive outcome three years after surgery and the relation between preoperative cognitive status, functional health and quality of life after surgery | 17:45-18:00 | [FS5e.08] Resting-state and stimulation train induced EEG activity predict alleviation of ADHD symptoms following deep TMS treatment |
| 18:45 | Buses to depart convention centre | | | | | | |
| 19:30-22:00 | Conference Dinner | | | | | | |

Wednesday, 27 February, 2019

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| 08:30-10:00 | Plenary Lectures Room: East Ballroom A/B/C | | | | | |
| 08:30-09:15 | [PL09] Do we know how DBS works and does it matter? <i>Zelma Kiss, MD PhD, University of Calgary, Canada</i> | | | | | |
| 09:15-10:00 | [PL10] NIBS in Disorders of Consciousness <i>Aurore Thibaut, University of Liège, Belgium</i> | | | | | |
| 10:00-10:30 | Refreshment break Room: Exhibitor Hall B | | | | | |
| 10:30-11:15 | [PL11] Precision Seizure Therapy: Towards safer and personalized depression care for the future <i>Sarah Hollingsworth Lisanby, MD, NIH, United States</i> | | | | | |
| 11:15-12:00 | [PL12] What's next for therapeutic rTMS? Highlights from an era of rapid progress <i>Jonathan Downar, MD PhD FRCPC, Toronto Western General Hospital, Canada</i> | | | | | |
| 12:00-13:30 | Lunch and Poster session 3 Room: Exhibitor Hall B | | | | | Poster Session Sponsored by:  Rogue Research Inc. |
| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | Meeting Room East 11/12 |
| 13:30-15:30 | Symposium session 4a: New techniques in rTMS for Depression | Symposium session 4b: Noninvasive brain stimulation in dementia: from emerging biomarkers to novel therapeutic strategies*** | Symposium session 4c: Enhancing cognition with tDCS combined with cognitive training | Symposium session 4d: How to use controlled TMS (cTMS) | Fast Track Symposium session 4e: Innovative techniques for non-invasive, low-energy, brain stimulation: from models to potential clinical applications | Fast Track Symposium session 4f: The Use Non-invasive Brain Stimulation to Target Cognition and Mood in Special Populations |
| Chair | Fidel Vila-Rodriguez, University of British Columbia, Canada | Giacomo Koch, Santa Lucia Foundation IRCCS, Italy | Donel Martin, University of New South Wales, Australia | Yoshikazu Ugawa, Fukushima Medical University, Japan | Lei Sun, The Hong Kong Polytechnic University, Hong Kong and Fioravante Capone, Università Campus Bio-Medico, Italy | Daniel Blumberger, CAMH, Canada and Amer Burhan, Parkwood Institute Mental Health/Lawson Health Research, Canada |

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| 13:30-14:00 | [S4a.01] Three target networks for rTMS in depression | [S4b.01] Identification of Alzheimer's and mixed Alzheimer's/vascular dementias using electrovestibulgraphy: A pilot study | [S4c.01] Who, what, where and how much: tDCS and training effects on working memory | [S4d.01] Effects of pulse width on responses to single, double and repetitive TMS of motor cortex | 13:30-13:45 | [FS4e.01] Non-invasive and selective brain stimulation by ultrasound via activation of mechanosensitive ion channels | 13:30-13:45 | [FS4f.01] Randomized controlled trial of transcranial magnetic stimulation in pregnant women with major depressive disorder |
| | | | | | 13:45-14:00 | [FS4e.02] Neuromodulation of the macaque brain by focused ultrasound with MRI guidance and detection | 13:45-14:00 | [FS4f.02] Transcranial direct current stimulation (tDCS) for depression in pregnancy: A pilot randomized controlled trial |
| 14:00-14:30 | [S4a.02] Clinical outcomes with intermittent theta burst versus high frequency repetitive transcranial magnetic stimulation in patients with depression: A THREE-D report | [S4b.02] Impact of neuromodulation on online and offline learning processes in different age groups | [S4c.02] Clinical effects of transcranial direct current stimulation combined with cognitive emotional training in patients with treatment resistant depression | [S4d.02] Differential effects on corticospinal excitability and adaptation task by paired associative stimulation (PAS) with distinct pulse width | 14:00-14:15 | [FS4e.03] Focused ultrasound for modulation of the central and peripheral nervous system | 14:00-14:15 | [FS4f.03] Recent developments in non-invasive brain stimulation for adolescents with major depressive disorder |

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| | | | | | 14:15-14:30 | [FS4e.04] Transcranial ultrasound selectively biases decision-making in primates | 14:15-14:30 | [FS4f.04] Bilateral repetitive transcranial magnetic stimulation in older adults with depression |
| 14:30-15:00 | [S4a.03] Are side effect trajectories during rTMS for depression associated to treatment response? | [S4b.03] Operator exposure limits for transcranial magnetic stimulation | [S4c.03] tDCS combined with cognitive training for improving memory in people with amnesic mild cognitive impairment (aMCI) | [S4d.03] Longer cTMS pulse width switches 1 Hz inhibitory motor cortex rTMS aftereffects to excitation | 14:30-14:45 | [FS4e.05] Extremely low frequency magnetic fields as neuroprotective treatment in acute ischemic stroke | 14:30-14:45 | [FS4f.05] Effects of transcranial direct current stimulation on cognition in late life depression |
| | | | | | 14:45-15:00 | [FS4e.06] Probing brain networks to quantify the consciousness level: Which role for ELF brain stimulation? | 14:45-15:00 | [FS4f.06] The potential for bilateral high-frequency repetitive transcranial magnetic stimulation (HF-rTMS) to modulate motoric-cognitive risk syndrome in older adults |

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| 15:00-15:30 | | [S4b.04] The impact of TMS on the differential diagnosis and progression of dementia. | [S4c.04] Neurophysiological and behavioural effects of tDCS upon memory and learning in schizophrenia | [S4d.04] Simulation of controllable pulse parameter transcranial magnetic stimulation in realistic head model with morphologically-accurate cortical neurons | 15:00-15:15 | [FS4e.07] Patient Semi-Specific Computational Modeling of Electromagnetic Stimulation | 15:00-15:15 | [FS4f.07] Improvement of higher brain dysfunction after brain injury with strategic application of repetitive transcranial magnetic stimulation and intensive rehabilitation therapy: a report of three cases. |
| | | | | | 15:15-15:30 | [FS4e.08] Acute neurophysiological response to ELF-MF and magnetophosphene perception, | 15:15-15:30 | [FS4f.08] Using repetitive Paired Associative Stimulation to enhance brain plasticity and working memory in Alzheimer's disease |
| | | [S4b.05] Transcranial magnetic stimulation: a novel biomarker to predict cognitive decline and response to therapy in Alzheimer's disease patients. | | | | | | |
| 15:30-16:00 | Refreshment break Room: Exhibitor Hall B | | | | | | | |

| Room | East Ballroom A | East Ballroom B | East Ballroom C | Meeting Room East 1 | Meeting Room East 2/3 | |
|-------------|---|---|--|--|---|--|
| 16:00-18:00 | Symposium session 5a: Enhancing Rehabilitation with Vagus Nerve Stimulation | Symposium session 5b: What can non-invasive stimulation tell us about concussion/traumatic brain injury? New evidence across the lifespan from children to adults | Symposium session 5c: Multimodal approaches as a key to personalized brain stimulation | Symposium session 5d: Neurophysiologic Biomarkers of Clinical Outcome of Repetitive Transcranial Magnetic Stimulation (rTMS) Treatment of Major Depressive Disorder | Fast Track Symposium session 5f: Novel approaches towards Precision medicine for Stroke recovery from motor and visual deficits | |
| Chair | Crystal Engineer, The University of Texas at Dallas, USA | Naznin Virji-Babul, University of British Columbia, Canada | Christian Windischberger, Medical University of Vienna, Italy | Andrew Leuchter, Semel Institute of Neuroscience and Human Behavior at UCLA, USA | Friedhelm Hummel, EPFL, Switzerland | |
| 16:00-16:30 | [S5a.01] Vagus nerve stimulation as a strategy to augment stroke rehabilitation | [S5b.01] Exploring the targeted application of transcranial direct current stimulation (tDCS) for cognitive modulation after brain injury | [S5c.01] Using advanced neuroimaging to increase precision for non-invasive brain stimulation | [S5d.01] Individual alpha frequency proximity to stimulation frequency is associated with clinical outcome during 10 Hz repetitive Transcranial Magnetic Stimulation (rTMS) treatment of Major Depressive Disorder (MDD) | 16:00-16:15 | [FS5f.01] Motor control in stroke |
| | | | | | 16:15-16:30 | [FS5f.02] Towards multi-focal orchestrated neuromodulation to enhance recovery |
| 16:30-17:00 | [S5a.02] Vagus nerve stimulation as a strategy to augment auditory rehabilitation | [S5b.02] Exploring tDCS-induced changes in EEG power and network connectivity in youth concussion: Preliminary findings | [S5c.02] Comparing the results of field modelling to physiological measurements and MR-based current flow measurements | [S5d.02] Neurophysiological Mechanisms of rTMS Efficacy in Treatment Resistant Depression | 16:30-16:45 | [FS5f.03] Cerebellar rTMS to promote motor recovery in hemiparetic stroke patients: a double blind sham controlled randomized controlled trial |

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| | | | | | 16:45-17:00 | [FS5f.04] Insights from rodent stroke models |
| 17:00-17:30 | [S5a.03] Clinical translation of VNS therapy for tinnitus patients | [S5b.03] Evidence of altered inter-hemispheric communication in paediatric mild traumatic brain injury | [S5c.03] Targeting cortical oscillations with EEG-informed TMS: Potential and challenges | [S5d.03] 10 Hz rTMS-induced Neural Response of Gamma Oscillations in Subgenual Anterior Cingulate Cortex (sgACC) is Anti-correlated with Left Dorsolateral Prefrontal Cortex (DLPFC) in Major Depressive Disorder | 17:00-17:15 | [FS5f.05] Individualized and targeted real-time fMRI neurofeedback applications to the visual cortical system in health and disease |
| | | | | | 17:15-17:30 | [FS5f.06] Mapping the spatial and temporal characteristics of visual perception with transcranial magnetic stimulation |
| 17:30-18:00 | [S5a.04] Vagus Nerve Stimulation as a Strategy to Augment PTSD Rehabilitation | [S5b.04] Theta-tACS normalizes brain network activity in patients with traumatic brain injury | [S5c.04] Verifying successful brain stimulation by concurrent TMS/fMRI | | 17:30-17:45 | [FS5f.07] NIBS to restore visual field deficit |
| 18:00-18:15 | Closing Remarks, Poster Award and Conference Summary Room: East Ballroom A | | | | | |