

### Program at a Glance

Legend:

Plenary	Breakout Session	Oral Presentations	Workshop
Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing

Sunday, 12 May 2024	
Pre-Conference Day - Noninvasive Brain Stimulation: From Pain, to Inflammatory, to Post-Viral Symptoms	
	East Ballroom AB
08:30 - 09:00	<i>Breakfast &amp; Posters</i>
09:00 - 12:25	Session 1
09:00 - 09:35	Neurovascular Modulation: Is the Direct Stimulation of Brain Vasculature as a Therapeutic Mechanism? <b>Marom Bikson, USA</b>
09:35 - 10:10	Transcranial Direct Current Stimulation for Inflammatory and Post-Infection Disorders <b>Giuseppina Piloni, USA</b>
10:10 - 10:40	<i>Break &amp; Posters</i>
10:40 - 11:15	Non-Invasive Brain Stimulation for Addiction Medicine <b>Hamad Ekhtiari, USA</b>
11:15 - 11:50	Transcranial Magnetic Stimulation for Pain, Headache, and Comorbid Depression <b>Albert Leung, USA</b>
11:50 - 12:25	Innovation in Neuromodulation: The Case for Pro-Cognitive Therapies <b>Joan Camprodon, USA</b>
12:25 - 13:45	<i>Lunch &amp; Posters</i>
13:45 - 17:00	Session 2
13:45 - 14:20	Advanced Current Delivery Techniques for HD-tDCS: From Higher Current to Home-Based Treatment <b>Benjamin Hampstead, USA</b>
14:20 - 14:55	At-Home Transcranial Direct Current Stimulation (tDCS) with Telehealth Support for Symptom Control in Chronically-Ill Patients <b>Helena Knotkova, USA</b>
14:55 - 15:30	A New Disposable Electrotherapy Platform <b>Mohamad FallahRad, USA</b>
15:30 - 15:55	<i>Break &amp; Posters</i>
15:55 - 16:30	Non-Invasive Brain Stimulation to Treat Disorders of Human Verticality <b>Taiza Grespan Santos Edwards, Brazil</b>
16:30 - 17:05	Non-Invasive Brain Stimulation in Rehabilitation: Where are we and Where are we Going? <b>Dylan Edwards, USA</b>
17:05 - 17:15	Closing Comments

Main Congress	
Sunday, 12 May 2024	
18:30- 19:45	INS Opening Reception in the Exhibition Area

Monday, 13 May 2024				
	East Exhibit Hall A	East Ballroom C	East Meeting Room 11 & 12	Parkview East 2+3
08:00-08:30	Morning Coffee + Pastries in the Exhibition Hall			
08:30 - 12:00	<b>Opening Plenary Session</b>			
08:30 - 09:00	Welcome Address			
09:00 - 09:25	Placebo Effect in Neuromodulation <b>Robert Levy, USA</b>			
09:25 - 09:50	Big Data and AI in Neuromodulation <b>Jeff Rogers, USA</b>			
09:45 - 10:10	Why is Neuromodulation Effective in CRPS? <b>Frank Huygen, The Netherlands</b>			
10:10 - 10:30	Effects of Deep Brain Stimulation on Brain Function in Obsessive-Compulsive Disorder: From Animal Models to Patients Speaker <b>Damiaan Denys, The Netherlands</b>			
10:30 - 10:55	Break, Posters & Exhibits			
11:00 - 11:15	An In-Depth Analysis of "Asleep" vs. "Awake" DBS – A Neurologist's Perspective (Argument for awake) <b>Leo Verhagen, USA</b>			
11:15 - 11:30	An In-Depth Analysis of "Asleep" vs. "Awake" DBS – A Neurosurgeon's Perspective (Argument for asleep) <b>Kim Burchiel, USA</b>			
11:30-11:40	Discussion between "Awake" and "Asleep" <b>Leo Verhagen, USA &amp; Kim Burchiel, USA</b>			
11:40 - 12:00	INS Neurostimulation Appropriateness Consensus Committee 2024: An Update <b>Marc Russo, Australia</b>			
12:00 - 13:00	Oral Poster Presentations Five Best Abstracts			
13:00 - 14:30	Lunch, Posters & Exhibits			
14:30 - 16:00	<b>Spine – Mechanisms of Action</b>	<b>Neuromodulation for Movement Disorders</b>	<b>Neuromodulation for Neuropsychiatry: Obsessive Compulsive Disorder and Depression</b>	<b>Neuromodulation for Rehabilitation After Stroke</b>
14:30 - 14:45	Surround Inhibition Mechanism of Action <b>Warren Grill, USA</b>	Microcircuit Engagement at the Singloneuron Resolution <b>Luka Milosevic, Canada</b>	Therapeutic Neuromodulation for Depression and Bi-Polar Disorder: The Case for Biomarker Driven Treatment Development <b>Joan Camprodon, USA</b>	The Current State of Non-Invasive Neuromodulation for Post-Stroke Rehabilitation <b>Dylan Edwards, USA</b>
14:45 - 15:00	Role of Spike Synchrony in Perception in the Optimization of SCS <b>Steve Prescott, Canada</b>	Deep Brain Stimulation Induced Neurophysiological Effects to Guide Treatment of Movement Disorders <b>Kara Johnson, USA</b>	Novel TMS Protocols for Depression <b>Noah Philip, USA</b>	Novel Non-Invasive Neuromodulation Strategies for Post-Stroke Rehabilitation <b>Eva Plow, USA</b>
15:00 - 15:15	Physiological Effects and Mechanisms of Action of Spinal Cord Stimulation to Treat Pain: Insights from Computational Models and Quantitative Sensory Testing <b>Scott Lempka, USA</b>	Electrocorticography in Investigation of Cortico-Subcortical Dynamics <b>Philip Starr, USA</b>	VNS for Depression: RECOVER Study <b>Charles Conway, USA</b>	Vagus Nerve Stimulation as a Strategy to Augment Stroke Rehabilitation <b>Seth Hays, USA</b>
15:15 - 15:30	Mechanism of PNS, SCS: Supraspinal Mechanisms and MOA <b>Eellan Sivanesan, USA</b>	Modulatory Influence on Brain-Wide Network Connectomics <b>Barbara Hollunder, USA</b>	A Decade of Clinical and Translational Experience of Superlateral Medial Forebrain Bundle DBS in Depression and OCD <b>Volker Coenen, Germany</b>	Spinal Cord and Peripheral Nerve Stimulation for Motor Rehabilitation <b>Doug Weber, USA</b>
15:30 - 15:45	Potential Mechanisms of Novel Neuromodulation Technologies / Therapy <b>Andrei Sdrulla, USA</b>	Directionality in DBS for Movement Disorders – Should Omnidirectional Stimulation be Abandoned? <b>Jan Vesper, Germany</b>	Efficacy of Deep Brain Stimulation for Treatment-Resistant OCD: Systemic Review and Metaanalysis <b>Sameer Sheth, USA</b>	Deep Brain Stimulation for Post-Stroke Rehabilitation <b>Kenneth Baker, USA</b>
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	<b>Oral Poster Presentations</b>			
	<b>Neuromodulation – Mechanism(s) of Action</b>	<b>Neuromodulation for Movement Disorders</b>	<b>Neuromodulation for Neuropsychiatric Disorders</b>	<b>Neurostimulation for Pain – Clinical Update 1</b>
18:30 - 19:30	Young Neuromodulators' Reception in the Atrium Foyer			

Tuesday, 14 May 2024					
	East Exhibit Hall A	East Ballroom C	East Meeting Room 11 & 12	Parkview East 2+3	East Ballroom AB
		<b>Nurses and HCP Workshop on Neuromodulation Part 1 Morning Session Basic Track (08:30 - 12:30)</b>	<b>Nurses and HCP Workshop on Neuromodulation Part 1 Morning Session Advanced Track (08:30 - 12:30)</b>		
08:30 - 9:00		Meet and Greet (Coffee and Pastries)	Meet and Greet (Coffee and Pastries)		
09:00-10:30	Morning Coffee + Pastries in the Exhibition Hall	Introductions & Welcome Patient Selection <b>Rebekah Richards, Australia</b>	Introductions & Welcome Biopsychosocial in Combination with SCS in PSPS Type 2 Patients <b>Rimke Snel, The Netherlands</b>	Morning Coffee + Pastries in the Exhibition Hall	
09:30 - 12:30	<b>Plenary Session 2</b>	Basics in Psychology and Communication with the Chronic Pain Patient; Psychology and Pain - What is the Connection? <b>Kathryn Curtis, Canada</b>	Opioid Reduction and SCS current Requirements Study <b>Pieter van Looy, Belgium</b>		
09:30 - 10:00	Insights into Disease and Mechanisms of Neuromodulation from Invasive Neurophysiology <b>Nader Pouratian, USA</b>	Post-Implant Physio Programs <b>David Elvish, Australia</b>	Advanced Programming <b>Jenny Jennings, UK</b>		
10:00 - 10:30	Neuromodulation Targets for Psychiatric Disorders: Common Circuits <b>Patricio Posse, USA</b>	Morning Break	Morning Break		
10:30 - 11:00	Can Spinal Cord Stimulation Alter the Disease of Chronic Pain? <b>Yun Guan, USA</b>	Complication Management <b>Kara Hallett, Canada</b>	SCS Nurses in the Scientific Field - presentation about own research about SCS and objective data <b>Tanja Hamm, The Netherlands</b>		
11:00 - 11:25	Break, Posters & Exhibits			Break, Posters & Exhibits	
11:30 - 12:00	How Neuromodulation Changed the Landscape of Epilepsy Surgery <b>Arthur Cukiert, Brazil</b>	Patient Case Study <b>Alison Cox, UK</b>	Patient Case Study <b>Nancy Polytronopoulos, Canada</b> <b>Mandeep Sandhu, Canada</b>		
12:00 - 12:30	Controversies in Ethics Related to Neurotechnologies <b>Zelma Kiss, Canada</b>	Q & A	Q & A		
12:30 - 13:10	<b>INS General Assembly</b>				
13:10 - 14:30	Lunch, Posters & Exhibits				
14:30 - 16:00	<b>Spinal Cord Stimulation for Pain Clinical Update</b>	<b>Brain: Epilepsy</b>	<b>Brain: Neuropsychiatry - Novel Applications in Behavioral Neuromodulation</b>	<b>Neuroprosthetics and Neuroregeneration</b>	
14:30 - 14:45	Data on Non-Surgical Back and Experience with Different Waveforms <b>Timothy Deer, USA</b>	Neuromodulation for Refractory Epilepsy: Progress Towards Less Invasive Approaches <b>Andreas Schulz-Bonhage, Germany</b>	Deep Brain Stimulation of the Nucleus Accumbens in the Treatment of Severe Alcohol Use Disorder: A phase I Pilot Trial <b>Nir Lipsman, Canada</b>	Optimizing Physiological Closed-Loop Controllers (PCLC) in Closed-Loop Neuromodulation- <b>Tim Denison, UK</b>	
14:45 - 15:00	Restorative Stimulation for Chronic Nonsurgical Low Back Pain <b>Christopher Gilligan, USA</b>	Stimulation of the Thalamus for Arousal Restoral in Temporal Lobe Epilepsy (START) Clinical Trial <b>Hal Blumenfeld, USA</b>	Deep Brain Stimulation of the Nucleus Accumbens in Treatment-Resistant Alcohol use Disorder: A Double-Blind Randomized Controlled Multi-Center Trial <b>Jens Kuhn, Germany</b>	Neural Interfaces for Natural Touch Perception <b>Dustin Tyler, USA</b>	
15:00 - 15:15	T12 Dorsal Root Ganglion Stimulation for Axial Low Back Pain <b>Kiran Patel, USA</b>	Multitarget Neuromodulation for Epilepsy <b>Andrew Yang, USA</b>	Cortical Stimulation for Addictive Disorders <b>Dr De Ridder, New Zealand</b>	High Performance Speech Neuroprosthesis <b>Daniel Rubin, USA</b>	
15:15 - 15:30	Should we combine SCS and DRG as Synergistic Modalities to Address Chronic Refractory Pain? Results of BOOST-DRG RCT <b>Phillipe Rigoard, France</b>	Intracranial Neuromodulation in Children with Refractory Epilepsy <b>George Ibrahim, Canada</b>	Cognitive and Quality-of-Life Related Factors of Body Mass Index (BMI) Improvement after Deep Brain Stimulation in the Subcallosal Cingulate and Nucleus Accumbens in Treatment-Refractory Chronic Anorexia Nervosa <b>Gloria Villalba-Martinez, Spain</b>	Biohybrid Regenerative Interface <b>Damiano Barone, UK</b>	
15:30 - 15:45	Is there any Indication for SCS and DRG in Refractory Brachial Plexus Pain? <b>Jan Vesper, Germany</b>	Vagal Nerve Stimulation in Refractory and Super-Refractory Epileptic Status in Children <b>Andrea Landi, Italy</b>	Postsurgical Morbidity and Mortality Favorably Informs Deep Brain Stimulation for New Indications including Schizophrenia and Schizoaffective Disorder <b>Judith M. Gault, USA</b>	High Resolution EMG-Based Prosthetic Control <b>James FitzGerald, UK</b>	
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion	
16:00 - 16:30	Break, Posters & Exhibits				
16:30 - 18:20	Oral Poster Presentations				<b>Workshop on Neuromodulation Part 2 Afternoon Sessions (16:30 - 18:25)</b>
	<b>Neurostimulation for Pain – Clinical Update 2</b>	<b>Neuromodulation for Rehabilitation</b>	<b>Neuromodulation: Engineering and AI</b>	<b>Neurostimulation for Pain - Clinical Update 3: Closed Loop SCS</b>	International Panorama of Nurses - Panel speakers & interactive discussion using a digital device/app <b>Victoria Bains, Canada; Caro Edelbroek, The Netherlands; Phyllis McPhillips, Germany; Jenny Jennings, UK; Alba Maria Vivas Munoz, Spain; Ulrika Parker, Sweden; Rachel Whipp, Australia</b>  INS Nurses / Allied Health Committee & INS Mentorship program <b>Caro Edelbroek, The Netherlands; Rachel Whipp, Australia</b>  Session Close
18:30 - 19:30	International Women in Neuromodulation Reception in the Atrium Foyer				

Wednesday, 15 May 2024				
	East Exhibit Hall A	East Ballroom C	East Meeting Room 11 & 12	Parkview East 2+3
09:00-09:30	Morning Coffee + Pastries in the Exhibition Hall			
09:30 - 12:00	<b>Plenary Session 3</b>			
09:30 - 10:00	INS Polyanalgesic Consensus Conference 2024: Review and Recommendation <b>Jay Grider, USA</b>			
10:00 - 10:30	Low Intensity Ultrasound Neuromodulation as a New Brain Therapy <b>Andres Lozano, Canada</b>			
10:30 - 11:00	Sub-Threshold Neuromodulation: Everything Old is New <b>Marom Bikson, USA</b>			
11:00 - 11:25	Break, Posters & Exhibits			
11:30 - 12:00	ITDD Shall Remain an RCT Free Zone: The Challenges of Research in ITDD – ITDD Day <b>Sam Eldabe, UK</b>			
12:00 - 13:00	<b>Giant of Neuromodulation Award and Champion of INS Award</b>			
13:00 - 14:30	Lunch, Posters & Exhibits			
14:30 - 16:00	<b>Current Status of Intrathecal Drug Delivery Systems for Cancer-Related Pain</b>	<b>Cutting Edge Research in Noninvasive Brain Stimulation (NIBS)</b>	<b>Low Energy Focused Ultrasound (LiFu)</b>	<b>Neuromodulation for Gastrointestinal Disorders</b>
14:30 - 14:45	Intrathecal Drug Delivery for Cancer-Related Pain: Pathophysiological Changes and Chemosensitivity after IDDS <b>Eellan Sivanesan, USA</b>	Transcranial Magnetic Stimulation of the Visual Cortex: An Update <b>Ivete Ferraz, Brazil</b>	Potential Mechanisms Supporting Low Intensity Focused Ultrasound for Neuromodulation <b>Noah Philip, USA</b>	Bioelectric Neuromodulation for Gastrointestinal Disorders <b>Sophie Payne, Australia</b>
14:45 - 15:00	Intrathecal Drug Delivery for Cancer-Related Pain: A Systematic Review and Meta-Analysis of Clinical Studies <b>Rui Duarte, UK</b>	Neuromodulation of Motor Regions for Migraine: New Science and New Technology <b>Alex DaSilva, USA</b>	Low Energy Focused Ultrasound Neuromodulation: Basic and Translational Research <b>Erica McCune, USA</b>	Transcutaneous Cervical Vagal Nerve Stimulation for Gastro-Intestinal Issues <b>Linda Nguyen, USA</b>
15:00 - 15:15	Intrathecal Drug Delivery for Cancer-Related Pain: Trunk and Limb Pain <b>Shane Brogan, USA</b>	TDCS for Depression: The Last Ten Years and the Next Five <b>Andre Brunoni, Brazil</b>	Low Intensity Focused Ultrasound for Epilepsy <b>Emma Lescauwae, Belgium</b>	Transcutaneous Neuromodulation for Gastrointestinal Disorders <b>Jiande Chen, USA</b>
15:15 - 15:30	Intrathecal Drug Delivery for Cancer-Related Pain: Head and Neck Pain <b>Denis Dupoirion, France</b>	Leveraging Neuromodulation-Induced Brain Plasticity for Improvement in Attention and Working Memory in Mild Traumatic Brain Injury <b>Lars Hungerford, USA</b>	Low Energy Focused Ultrasound Neuromodulation of the Spinal Cord <b>Julie Pilitsis, USA</b>	Electronic Bypass for Diabetes: Optimization of Stimulation Parameters and Mechanisms of Glucagon-Like Peptide-1 <b>Shiyang Li, USA</b>
15:30 - 15:45	Intrathecal Drug Delivery for Cancer-Related Pain: Pain Secondary to Cancer Therapy (Radiation, Chemotherapy, Immunotherapy) <b>Christophe Perruchoud, Switzerland</b>	Transcranial Electrical Stimulation in Neuropathic Pain <b>Helena Knotkova, USA</b>	Round Table Discussion moderated by <b>Stana Bojanic, UK</b>	DBS for Obesity <b>Clement Hamani, Canada</b>
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	<b>Oral Poster Presentations</b>			
	<b>Peripheral Nerve Stimulation – Clinical Update</b>	<b>Neuromodulation for GU and GI Disorders</b>	<b>Neurostimulation for Pain – Clinical Update 4</b>	<b>Neurostimulation for Pain – Clinical Update 5</b>

Thursday, 16 May 2024				
	East Exhibit Hall A	East Ballroom C	East Meeting Room 11 & 12	Parkview East 2+3
07:30 - 08:00	Morning Coffee + Pastries			
08:00 - 10:00	<b>Peripheral Nerve Stimulation + Non-Epilepsy Vagus Nerve Stimulation</b>	<b>Artificial Intelligence</b>	<b>Neuromodulation for Genitourinary Disorders</b>	<b>Neuromodulation for Neurocardiology</b>
08:00 - 08:15	Optoelectric Vagus Nerve Stimulation <b>Robert Levy, USA</b>	Overview of AI, What it is and What it isn't <b>Jeffrey Rogers, USA</b>	New in Sacral Neuromodulation for GU Indications <b>Stefan De Wachter, Belgium</b>	Myocardial Ischemic Challenges and Neural Control Strategies <b>Siamak Salavatian, USA</b>
08:15 - 08:30	Selective Optogenetic Stimulation of Efferent Fibers in the Vagus Nerve <b>Lindsea Booth, Australia</b>	AI-Based Outcome Prediction to Optimize Patient and Device Selection in SCS <b>Phillipe Rigoard, France</b>	High-Density SCS: Selective Activation of Lower Urinary Tract Nerves <b>Robert Gaunt, USA</b>	The Neurometabolic Axis: A Novel Therapeutic Target in Heart Failure <b>Tarun Dasari, USA</b>
08:30 - 08:45	Modulation of Sympathetic Nervous System for Cardiac Disease <b>Jeffrey Ardell, USA</b>	Practical AI Algorithm to Optimize DBS Planning and Programming <b>Neavir Gallani, Brazil</b>	Neuromodulation for Chronic Pelvic Pain <b>Corey Hunter, USA</b>	Overview Neuromodulation in Patients with Refractory Angina Pectoris <b>Fabienne Vervaat, The Netherlands</b>
08:45 - 09:00	Does Neuromodulation have a Role in the Management of Head & Facial Pain? <b>Jean-Pierre van Buyten, Belgium</b>	AI Brain Imaging for Surgical Targeting <b>Noam Harel, USA</b>	Mechanism of Actions for Sacral, Tibial and Pudendal Nerve Stimulation – Looking for Similarities and Differences <b>Magdy Hassouna, Canada</b>	Neuromodulation Devices for Heart Failure <b>Veronica Dusl, Italy</b>
09:00 - 09:15	VNS in PTSD <b>Doug Bremner, USA</b>	Mapping Functional Connectome of the Default Mode Network for Targeted Neuromodulation <b>Dirk de Ridder, New Zealand</b>	State-Dependent Bioelectronics Interface to Control Bladder Function <b>James Hokanson, USA</b>	Vagal and Median Nerve Stimulation to Treat Arrhythmias <b>Natasja de Groot, The Netherlands</b>
09:15 - 09:30	High-Frequency PNS for Post-Amputation Pain <b>Leo Kapural, USA</b>	Machine Learning STN Biomarkers for PD Patient <b>Hagai Bergman, Israel</b>	Closed Loop Neuromodulation in GU Dysfunction <b>Tim Denison, UK</b>	DRG Stimulation for Management of Cardiovascular Disease <b>Alexander Green, UK</b>
09:30 - 09:45	Neuromodulatory Mechanisms of VNS-Enhanced Rehabilitation <b>Catherine Thorn, USA</b>	Applying AI Data Science in Brain Neuromodulation for Epilepsy <b>Martha Morrell, USA</b>	Transcutaneous Electrical Stimulation or Neurogenic Bladder following SCI <b>Evgeniy Kreydin, USA</b>	A Future Perspective on Neuromodulation for Cardiovascular Diseases <b>Mike DeJongste, The Netherlands</b>
09:45 - 10:00	Discussion	Discussion	Discussion	Discussion
10:00 - 10:25	Break			
10:30 - 11:20	Oral Poster Presentations			
	Neuropsychiatric Disorders: Behavioral Neuromodulation	Stimulation for Epilepsy	Topics in Non-Invasive Stimulation	Neuromodulation for Cardiovascular Disorders
11:30 - 13:40	Closing Plenary			
11:30 - 12:00	Socioeconomic Impact of Spinal Cord Stimulation: Best Practices for Assessment and Measuring What Matters - Anywhere <b>Rod Taylor, UK</b>			
12:00 - 12:30	Advances in our Clinical Understanding of Autonomic Regulation Therapy Using Vagal Nerve Stimulation in Patients with Heart Failure <b>Jeffrey Ardell, USA</b>			
12:30 - 13:00	Deciphering Vagal Anatomy and Brain-Body Signaling to Optimize Neuromodulation Therapies <b>Theodore Zanos, USA</b>			
13:00 - 13:30	INS Research Award Winners Lectures <b>Dominic Siler, USA; Maria Dardalat Makin, USA</b>			
13:30 - 13:40	Closing Comments			
13:40	Congress Adjourns			