

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	Breakfast & Posters
09:00 - 12:25	Session 1
09:00 - 09:35	Neurovascular Modulation: Is the Direct Stimulation of Brain Vasculature as a Therapeutic Mechanism? Marom Bikson, USA
09:35 - 10:10	Transcranial Direct Current Stimulation for Inflammatory and Post-Infection Disorders Giuseppina Piloni, USA
10:10 - 10:40	Break & Posters
10:40 - 11:15	Non-Invasive Brain Stimulation for Addiction Medicine Hamad Ekhtiari, USA
11:15 - 11:50	Transcranial Magnetic Stimulation for Pain, Headache, and Comorbid Depression Albert Leung, USA
11:50 - 12:25	Innovation in Neuromodulation: The Case for Pro-Cognitive Therapies Joan Camprodon, USA
12:25 - 13:45	Lunch & Posters
13:45 - 17:00	Session 2
13:45 - 14:20	Advanced Current Delivery Techniques for HD-tDCS: From Higher Current to Home-Based Treatment Benjamin Hampstead, USA
14:20 - 14:55	At-Home Transcranial Direct Current Stimulation (tDCS) with Telehealth Support for Symptom Control in Chronically-Ill Patients Helena Knotkova, USA
14:55 - 15:30	A New Disposable Electrotherapy Platform Mohamad FallahRad, USA
15:30 - 15:55	Break & Posters
15:55 - 16:30	Non-Invasive Brain Stimulation to Treat Disorders of Human Verticality Taiza Grespan Santos Edwards, Brazil
16:30 - 17:05	Non-Invasive Brain Stimulation in Rehabilitation: Where are we and Where are we Going? Dylan Edwards, USA
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	Opening Plenary Session			
08:30 - 09:00	Welcome Address			
09:00 - 09:25	Placebo Effect in Neuromodulation Robert Levy, USA			
09:25 - 09:50	Big Data and AI in Neuromodulation Jeff Rogers, USA			
09:45 - 10:10	Why is Neuromodulation Effective in CRPS? Frank Huygen, The Netherlands			
10:10 - 10:30	Effects of Deep Brain Stimulation on Brain Function in Obsessive-Compulsive Disorder: From Animal Models to Patients Speaker Damiaan Denys, The Netherlands			
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) Leo Verhagen, USA			
11:15 - 11:30	An In-Depth Analysis of "Asleep" vs. "Awake" DBS – A Neurosurgeon's Perspective (Argument for asleep) Kim Burchiel, USA			
11:30-11:40	Discussion between "Awake" and "Asleep" Leo Verhagen, USA & Kim Burchiel, USA			
11:40 - 12:00	INS Neurostimulation Appropriateness Consensus Committee 2024: An Update Marc Russo, Australia			
12:00 - 13:00	Oral Poster Presentations Five Best Abstracts			
13:00 - 14:30	Lunch, Posters & Exhibits			
14:30 - 16:00	Spine – Mechanisms of Action	Neuromodulation for Movement Disorders	Neuromodulation for Neuropsychiatry: Obsessive Compulsive Disorder and Depression	Neuromodulation for Rehabilitation After Stroke
14:30 - 14:45	Surround Inhibition Mechanism of Action Warren Grill, USA	Microcircuit Engagement at the Singloneuron Resolution Luka Milosevic, Canada	Therapeutic Neuromodulation for Depression and Bi-Polar Disorder: The Case for Biomarker Driven Treatment Development Joan Camprodon, USA	The Current State of Non-Invasive Neuromodulation for Post-Stroke Rehabilitation Dylan Edwards, USA
14:45 - 15:00	Role of Spike Synchrony in Perception in the Optimization of SCS Steve Prescott, Canada	Deep Brain Stimulation Induced Neurophysiological Effects to Guide Treatment of Movement Disorders Kara Johnson, USA	Novel TMS Protocols for Depression Noah Philip, USA	Novel Non-Invasive Neuromodulation Strategies for Post-Stroke Rehabilitation Eva Plow, USA
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 Scott Lempka, USA	Electrocorticography in Investigation of Cortico-Subcortical Dynamics Philip Starr, USA	VNS for Depression: RECOVER Study Charles Conway, USA	Vagus Nerve Stimulation as a Strategy to Augment Stroke Rehabilitation Seth Hays, USA
15:15 - 15:30	Mechanism of PNS, SCS: Supraspinal Mechanisms and MOA Eellan Sivanesan, USA	Modulatory Influence on Brain-Wide Network Connectomics Barbara Hollunder, USA	A Decade of Clinical and Translational Experience of Superolateral Medial Forebrain Bundle DBS in Depression and OCD Volker Coenen, Germany	Spinal Cord and Peripheral Nerve Stimulation for Motor Rehabilitation Doug Weber, USA
15:30 - 15:45	Potential Mechanisms of Novel Neuromodulation Technologies / Therapy Andrei Sdrulla, USA	Directionality in DBS for Movement Disorders – Should Omnidirectional Stimulation be Abandoned? Jan Vesper, Germany	Efficacy of Deep Brain Stimulation for Treatment-Resistant OCD: Systemic Review and Metaanalysis Sameer Sheth, USA	Deep Brain Stimulation for Post-Stroke Rehabilitation Kenneth Baker, USA
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	Oral Poster Presentations			
	Neuromodulation – Mechanism(s) of Action	Neuromodulation for Movement Disorders	Neuromodulation for Neuropsychiatric Disorders	Neurostimulation for Pain – Clinical Update 1
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
		Nurses and HCP Workshop on Neuromodulation Part 1 Morning Session Basic Track (08:30 - 12:30)	Nurses and HCP Workshop on Neuromodulation Part 1 Morning Session Advanced Track (08:30 - 12:30)		
08:30 - 9:00		Meet and Greet (Coffee and Pastries)	Meet and Greet (Coffee and Pastries)		
9:00-9:30	Morning Coffee + Pastries in the Exhibition Hall	Introductions & Welcome Patient Selection Rebekah Richards, Australia	Introductions & Welcome Biopsychosocial in Combination with SCS in PSPS Type 2 Patients Rimke Snel, The Netherlands	Morning Coffee + Pastries in the Exhibition Hall	
09:30 - 12:30	Plenary Session 2	Basics in Psychology and Communication with the Chronic Pain Patient; Psychology and Pain - What is the Connection? Kathryn Curtis, Canada	Opioid Reduction and SCS current Requirements Study Pieter van Looy, Belgium		
09:30 - 10:00	Insights into Disease and Mechanisms of Neuromodulation from Invasive Neurophysiology Nader Pouratian, USA	Post-Implant Physio Programs David Elvish, Australia	Advanced Programming Jenny Jennings, UK		
10:00 - 10:30	Neuromodulation Targets for Psychiatric Disorders: Common Circuits Patricio Posse, USA	Morning Break	Morning Break		
10:30 - 11:00	Can Spinal Cord Stimulation Alter the Disease of Chronic Pain? Yun Guan, USA	Complication Management Kara Hallett, Canada	SCS Nurses in the Scientific Field - presentation about own research about SCS and objective data Tanja Hamm, The Netherlands		
11:00 - 11:25	Break, Posters & Exhibits			Break, Posters & Exhibits	
11:30 - 12:00	How Neuromodulation Changed the Landscape of Epilepsy Surgery Arthur Cukiert, Brazil	Patient Case Study Alison Cox, UK	Patient Case Study Nancy Polytronopoulos, Canada Mandeep Sandhu, Canada		
12:00 - 12:30	Controversies in Ethics Related to Neurotechnologies Zelma Kiss, Canada	Q & A	Q & A		
12:30 - 13:10	INS General Assembly (Members only)				
13:10 - 14:30	Lunch, Posters & Exhibits				
14:30 - 16:00	Spinal Cord Stimulation for Pain Clinical Update	Brain: Epilepsy	Brain: Neuropsychiatry - Novel Applications in Behavioral Neuromodulation	Neuroprosthetics and Neuroregeneration	
14:30 - 14:45	Data on Non-Surgical Back and Experience with Different Waveforms Timothy Deer, USA	Neuromodulation for Refractory Epilepsy: Progress Towards Less Invasive Approaches Andreas Schulz-Bonhage, Germany	Deep Brain Stimulation of the Nucleus Accumbens in the Treatment of Severe Alcohol Use Disorder: A phase I Pilot Trial Nir Lipsman, Canada	Optimizing Physiological Closed-Loop Controllers (PCLC) in Closed-Loop Neuromodulation- Tim Denison, UK	
14:45 - 15:00	Restorative Stimulation for Chronic Nonsurgical Low Back Pain Christopher Gilligan, USA	Stimulation of the Thalamus for Arousal Restoral in Temporal Lobe Epilepsy (START) Clinical Trial Hal Blumenfeld, USA	Deep Brain Stimulation of the Nucleus Accumbens in Treatment-Resistant Alcohol use Disorder: A Double-Blind Randomized Controlled Multi-Center Trial Jens Kuhn, Germany	Neural Interfaces for Natural Touch Perception Dustin Tyler, USA	
15:00 - 15:15	T12 Dorsal Root Ganglion Stimulation for Axial Low Back Pain Kiran Patel, USA	Multitarget DBS and RNS for Epilepsy Andrew Yang, USA	Cortical Stimulation for Addictive Disorders Dr De Ridder, New Zealand	High Performance Speech Neuroprosthesis Daniel Rubin, USA	
15:15 - 15:30	Should we combine SCS and DRG as Synergistic Modalities to Address Chronic Refractory Pain? Results of BOOST-DRG RCT Phillipe Rigoard, France	Intracranial Neuromodulation in Children with Refractory Epilepsy George Ibrahim, Canada	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 Gloria Villalba-Martinez, Spain	Biohybrid Regenerative Interface Damiano Barone, UK	
15:30 - 15:45	Is there any Indication for SCS and DRG in Refractory Brachial Plexus Pain? Jan Vesper, Germany	Vagal Nerve Stimulation in Refractory and Super-Refractory Epileptic Status in Children Andrea Landi, Italy	Postsurgical Morbidity and Mortality Favorably Informs Deep Brain Stimulation for New Indications including Schizophrenia and Schizoaffective Disorder Judith M. Gault, USA	High Resolution EMG-Based Prosthetic Control James FitzGerald, UK	
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion	
16:00 - 16:30	Break, Posters & Exhibits				
16:30 - 18:20	Oral Poster Presentations				Workshop on Neuromodulation Part 2 Afternoon Sessions (16:30 - 18:25)
	Neurostimulation for Pain – Clinical Update 2	Neuromodulation for Rehabilitation	Neuromodulation: Engineering and AI	Neurostimulation for Pain - Clinical Update 3: Closed Loop SCS	International Panorama of Nurses - Panel speakers & interactive discussion using a digital device/app Victoria Bains, Canada; Caro Edelbroek, The Netherlands; Phyllis McPhillips, Germany; Jenny Jennings, UK; Alba Maria Vivas Munoz, Spain; Ulrika Parker, Sweden; Rachel Whipp, Australia INS Nurses / Allied Health Committee & INS Mentorship program Caro Edelbroek, The Netherlands; Rachel Whipp, Australia 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	Plenary Session 3			
09:30 - 10:00	INS Polyanalgesic Consensus Conference 2024: Review and Recommendation Jay Grider, USA			
10:00 - 10:30	Low Intensity Ultrasound Neuromodulation as a New Brain Therapy Andres Lozano, Canada			
10:30 - 11:00	Sub-Threshold Neuromodulation: Everything Old is New Marom Bikson, USA			
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 Sam Eldabe, UK			
12:00 - 13:00	Giant of Neuromodulation Award and Champion of INS Award			
13:00 - 14:30	Lunch, Posters & Exhibits			
14:30 - 16:00	Current Status of Intrathecal Drug Delivery Systems for Cancer-Related Pain	Cutting Edge Research in Noninvasive Brain Stimulation (NIBS)	Low Energy Focused Ultrasound (LiFu)	Neuromodulation for Gastrointestinal Disorders
14:30 - 14:45	Intrathecal Drug Delivery for Cancer-Related Pain: Pathophysiological Changes and Chemosensitivity after IDDS Eellan Sivanesan, USA	Transcranial Magnetic Stimulation of the Visual Cortex: An Update Ivete Ferraz, Brazil	Potential Mechanisms Supporting Low Intensity Focused Ultrasound for Neuromodulation Noah Philip, USA	Bioelectric Neuromodulation for Gastrointestinal Disorders Sophie Payne, Australia
14:45 - 15:00	Intrathecal Drug Delivery for Cancer-Related Pain: A Systematic Review and Meta-Analysis of Clinical Studies Rui Duarte, UK	Neuromodulation of Motor Regions for Migraine: New Science and New Technology Alex DaSilva, USA	Low Energy Focused Ultrasound Neuromodulation: Basic and Translational Research Erica McCune, USA	Transcutaneous Cervical Vagal Nerve Stimulation for Gastro-Intestinal Issues Linda Nguyen, USA
15:00 - 15:15	Intrathecal Drug Delivery for Cancer-Related Pain: Trunk and Limb Pain Shane Brogan, USA	TDCS for Depression: The Last Ten Years and the Next Five Andre Brunoni, Brazil	Low Intensity Focused Ultrasound for Epilepsy Emma Lescauwae, Belgium	Transcutaneous Neuromodulation for Gastrointestinal Disorders Jiande Chen, USA
15:15 - 15:30	Intrathecal Drug Delivery for Cancer-Related Pain: Head and Neck Pain Denis Dupoirion, France	Leveraging Neuromodulation-Induced Brain Plasticity for Improvement in Attention and Working Memory in Mild Traumatic Brain Injury Lars Hungerford, USA	Low Energy Focused Ultrasound Neuromodulation of the Spinal Cord Julie Pilitsis, USA	Electronic Bypass for Diabetes: Optimization of Stimulation Parameters and Mechanisms of Glucagon-Like Peptide-1 Shiyang Li, USA
15:30 - 15:45	Intrathecal Drug Delivery for Cancer-Related Pain: Pain Secondary to Cancer Therapy (Radiation, Chemotherapy, Immunotherapy) Christophe Perruchoud, Switzerland	Transcranial Electrical Stimulation in Neuropathic Pain Helena Knotkova, USA	Round Table Discussion moderated by Stana Bojanic, UK	DBS for Obesity Clement Hamani, Canada
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	Oral Poster Presentations			
	Peripheral Nerve Stimulation – Clinical Update	Neuromodulation for GU and GI Disorders	Neurostimulation for Pain – Clinical Update 4	Neurostimulation for Pain – Clinical Update 5

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