

Program at a Glance

Pre-Conference Days May 21 - 22

May 21 - Pre-Conference: Noninvasive Brain Stimulation

[Click here for more information](#)

May 22 - Pre-Conference: Innovations in Neuromodulation.

Not included in the main event CME/CPD credit.

More Information to follow

Legend:

Plenary	Breakout Session	Oral Presentations	Supported Symposium	Special Session
Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing	

Main Congress

Sunday, 22 May 2022

19:15 - 19:45	INS Opening Reception in the Exhibition Area
---------------	--

Monday, 23 May 2022

	Hall 1	Hall 2	Hall 3	Hall 4
08:30 - 12:00	Opening Plenary Session			
08:30 - 09:00	Welcome Address			
09:00 - 09:20	Neuralink: Creative Vision and Technical Execution TBD			
09:20 - 09:45	Modulation of Human Memory by Deep Brain Stimulation of the Entorhinal Hippocampal Circuitry Itzhak Fried, USA			
09:45 - 10:10	Deep Brain Stimulation: Potential for Neuroprotection Andres Lozano, Canada			
10:10 - 10:30	Spinal Cord Stimulation in Neuropathic Pain: Mechanisms of Action, New Locations, New Paradigms Elbert Joosten, The Netherlands			
10:30 - 10:55	Break, Posters & Exhibits			
11:00 - 11:20	Late Breaking Research: Deep Brain Stimulation for Huntington's Disease Jan Vesper, Germany			Lunch Symposium (not included in main event CME/CPD credit) [13.15-14.15]
11:20 - 11:40	Late Breaking Research: Occipital Nerve Stimulation for Cluster Headache Frank Huygen, The Netherlands			
11:40 - 12:00	Late Breaking Research			
12:00 - 12:50	Oral Poster Presentations Five Best Abstracts			
12:00 - 12:10	1			
12:10 - 12:20	2			
12:20 - 12:30	3			
12:30 - 12:40	4			
12:40 - 12:50	5			
13:00 - 14:30	Lunch, Posters & Exhibits			Lunch Symposium (not included in main event CME/CPD credit) [13.15-14.15]
14:30 - 16:00	Neuromodulation for Painful Peripheral Neuropathies	Deep Brain Stimulation (DBS) for Memory and Cognition	Bioelectric Medicine: Novel Applications of Vagus Nerve Stimulation (VNS)	Genitourinary Neuromodulation: Neurostimulation for Urogenital Pain
14:30 - 14:45	Moderator: Dorsal Root Ganglion/Spinal Cord Stimulation (Dorsal Root Ganglion/Spinal Cord Stimulation) for Peripheral Neuropathy: Evidence from Basic Science and Animal Models Elbert Joosten, The Netherlands	Moderator: Modifying the Progression of Alzheimer's Disease with Deep Brain Stimulation Andres Lozano, Canada	Moderator: Vagus Nerve Stimulation in Rheumatoid Arthritis TBA	Moderator: Systematic Review of Neuromodulation for Chronic Pelvic Pain Jan Kallewaard, The Netherlands
14:45 - 15:00	Invasive Electrical Neuromodulation for the Treatment of Painful Diabetic Neuropathy: Systematic Review and Meta-Analysis James Fitzgerald, UK	Deep Brain Stimulation of the Nucleus Basalis of Meynert and Alzheimer's Disease Jens Kuhn, Germany	Vagus Nerve Stimulation for Headache Disorders Stephen Silberstein, USA	Dorsal Root Ganglion Stimulation for Urogenital Pain Corey Hunter, USA
15:00 - 15:15	Results of the SENZA-PPN Study Erika Petersen, USA	Deep Brain Stimulation of the Internal Capsule Enhances Human Cognitive Control and Prefrontal Cortex Function Emad Eskandar, USA	Vagus Nerve Stimulation for COVID-19/Respiratory Disorders Bruno Bonaz, France	Sacral Nerve Stimulation for Chronic Pelvic Pain Sherif El-Nashar, USA
15:15 - 15:30	Dorsal Root Ganglion Stimulation for Peripheral Neuropathy Steven Falowski, USA	Fornix Deep Brain Stimulation in Brain Diseases Yasin Temel, The Netherlands	Vagus Nerve Stimulation for Diabetes/Obesity Valentin Pavlov, USA	Spinal Cord Stimulation for the Treatment of Chronic Pelvic Pain Sean Li, USA
15:30 - 15:45	TBA	TBA	TBA	TBA
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	Oral Poster Presentations			
16:30 - 16:40	Moderator: 1	Moderator: 1	Moderator: 1	Moderator: 1
16:40 - 16:50	2	2	2	2
16:50 - 17:00	3	3	3	3
17:00 - 17:10	4	4	4	4
17:10 - 17:20	5	5	5	5
17:20 - 17:30	6	6	6	6
17:30 - 17:40	7	7	7	7
17:40 - 17:50	8	8	8	8
17:50 - 18:00	9	9	9	9
18:00 - 18:10	10	10	10	10
18:10 - 18:20	11	11	11	11
18:30 - 19:30	Young Neuromodulators' Reception			

Tuesday, 24 May 2022					
	Hall 1	Hall 2	Hall 3	Hall 4	
8:30 - 9:30				Breakfast Symposium (not included in main event CME/CPD credit)	
09:30 - 12:30	Plenary Session 2 Moderator:	An Interactive Workshop for Nurses and Allied Health – The Patient Journey to Neuromodulation			
09:30 - 10:00					Translational Neurocardiology: Preclinical Models and Cardioneural Integrative Aspects Jeffrey Ardell, USA
10:00 - 10:30					Targeted Neurotechnology in Patients with Spinal Cord Injury Jocelyne Bloch and Gregoire Courtine, Switzerland
10:30 - 11:00					Transcutaneous Spinal Cord Stimulation and Motor Rehabilitation in Spinal Cord Injury: A systematic Review Julian Taylor, Spain
11:00 - 11:25	Break, Posters & Exhibits				
11:30 - 12:00	Chemogenetic Neuromodulation Nick Boulis, USA				
12:00 - 12:30	Discussion of the New Neurostimulation Appropriateness Consensus Conference and Polyanalgesic Consensus Conference Guidelines Robert Levy and Timothy Deer, USA				
12:30 - 13:10	INS General Assembly (Members only)				
13:10 - 14:30	Lunch, Posters & Exhibits			Lunch Symposium (not included in main event CME/CPD credit) (13:15 -14:15)	
14:30 - 16:00	Does Spinal Cord Stimulation (SCS) Therapy Result in Decreased Opioid Exposure? Moderators:	Closed Loop Deep Brain Stimulation (DBS) Moderator:	Spinal Cord Stimulation (SCS) for Motor Recovery after Spinal Cord Injury Moderators:	Cardiovascular Neuromodulation Moderators: Mike DeJongste, The Netherlands; Rod Taylor, UK	
14:30 - 14:45	The Promise of Adjunctive Scalable Psychological Treatment Used in Combination with SCS: Pain and Opioid Reduction Beth Darnall, USA	Patterns, Scheduled and Closed Loop Deep Brain Stimulation Michael Okun, USA	Recovery of Over-Ground Walking after Motor Complete Spinal Cord Injury with Spinal Cord Stimulation Claudia Angeli, USA	Neuromodulation for Refractory Angina, Heart Failure and Peripheral Vascular Disease Zion Zivli, Israel	
14:45 - 15:00	The Effect of Spinal Cord Stimulation on Pain Medicine Reduction: A Systematic Review Susan Moeschler, USA	Evoked Potentials as Feedback Signals for Closed-Loop Deep Brain Stimulation Warren Grill, USA	Neuromodulation of the Thoracic Spinal Cord to Regulate Hemodynamic after Spinal Cord Injury Aaron Phillips, Canada	Spinal Cord Stimulation and Vagus Nerve Stimulation: Effects on Primary Afferent Transduction of the Ischemic Heart Siamak Salavatian	
15:00 - 15:15	Discontinuation of Opioids after Spinal Cord Stimulation is Highly Dependent on Daily Opioid Dose Tom Simopoulos, USA	Dynamic Network Targeting in Closed-Loop Deep Brain Stimulation Alik Widge, USA	Spinal Cord Stimulation for Spinal Cord Injury and the ESTAND Trial David Darrow, USA	Cost Benefit of Neuromodulation in Cardiac Diseases Rod Taylor, UK	
15:15 - 15:30	Opioid-Sparing Effects of Spinal Cord Stimulation Adnan Al-Kaisy, UK	Dual Threshold Closed Loop Deep Brain Stimulation in Parkinson's Disease Helen Bronte-Stewart, USA	Transcutaneous Spinal Stimulation for Motor Rehabilitation after Spinal Cord Injury Julio Gómez-Soriano, Italy	Respiratory Rhythm, Autonomic Modulation, and the Spectrum of Emotions: The Future of Emotion Recognition and Modulation Ravinder Jerath	
15:30 - 15:45	Spinal Cord Stimulation Reduces Opioid Use with Better Outcomes when Opioids are Not Used Julie Pilitsis, USA	Future Perspectives for Target Identification and Adaptive Closed Loop Stimulation Paul Krack, Switzerland	DBS for Post-stroke Rehabilitation Andre Machado, USA	Baroreflex Activation Therapy and the Heart TBA	
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion	
16:00 - 16:30	Break, Posters & Exhibits				
16:30 - 18:20	Oral Poster Presentations Moderator:				
16:30 - 16:40	1	1	1	1	
16:40 - 16:50	2	2	2	2	
16:50 - 17:00	3	3	3	3	
17:00 - 17:10	4	4	4	4	
17:10 - 17:20	5	5	5	5	
17:20 - 17:30	6	6	6	6	
17:30 - 17:40	7	7	7	7	
17:40 - 17:50	8	8	8	8	
17:50 - 18:00	9	9	9	9	
18:00 - 18:10	10	10	10	10	
18:10 - 18:20	11	11	11	11	
18:30 - 19:30	International Women in Neuromodulation Reception				

Wednesday, 25 May 2022				
	Hall 1	Hall 2	Hall 3	Hall 4
08:30 - 09:30				Breakfast Symposium (not included in main event CME/CPD credit)
09:30 - 12:00	Plenary Session 3			
09:30 - 10:00	Moderator: Current Status of Deep Brain Stimulation for Depression Thomas E. Schlaepfer, Germany			
10:00 - 10:30	Ethics of Brain-Computer Interfaces Eric Racine, Canada			
10:30 - 11:00	High Cervical Spinal Cord Stimulation for Parkinson's Disease Paolo Mazzone, Italy			
11:00 - 11:25	<i>Break, Posters & Exhibits</i>			
11:30 - 12:00	Neurovascular Neuromodulation TBC			
12:00 - 12:50	Giant of Neuromodulation Award			
13:00 - 14:30	<i>Lunch, Posters & Exhibits</i>			Lunch Symposium (not included in main event CME/CPD credit) (13:15 - 14:15)
14:30 - 16:00	Trialing in Spinal Cord Stimulation: Predictive or Non-Productive Moderator: The TRIAL-STIM Study Sam Eldabe, UK	Deep Brain Stimulation for Treatment Resistant Depression Moderator: Translational Aspects of Deep Brain Stimulation for Depression Clement Hamani, Canada	Neurostimulation for Chronic Mechanical Low Back Pain Moderators: Etiology of Chronic Mechanical Low Back Pain Marc Russo, Australia	Neuromodulation for Covid-19 Moderator: Elliot Krames, USA
14:30 - 14:45				Non-Invasive Vagus Nerve Stimulation Inhibits Cytokine Storm: A Treatment for Covid-19 Respiratory Disease Carlos Tornero Tornero, Spain
14:45 - 15:00	Trial versus No Trial of Spinal Cord Stimulation: Cost Analysis Simon Thomson, UK	Deep Brain Stimulation for Depression: What has Gone Wrong? Emad Eskandar, USA	The Burden of Chronic Low Back Pain TBD	Inflammation and Related Organ Dysfunction in Covid-19: A Role for Neuromodulation Bruno Bonaz, France
15:00 - 15:15	Trial versus No Trial of Spinal Cord Stimulation: Clinical Utility G. Baranidharan, UK	Deep Brain Stimulation for Depression: Predictors of Response Zelma Kiss, Canada	Multifidus Stimulation: The ReActiv8 Trial Chris Gilligan, USA	Clinical Studies of Neuromodulation in COVID-19 Kristl Vonck, Belgium
15:15 - 15:30	Trial versus No Trial of Spinal Cord Stimulation: US Considerations Richard North, USA	Closed Loop Brain Stimulation for Depression Darin Dougherty, USA	Multifidus Stimulation: Implications for Clinical Practice Sam Eldabe, UK	Neuromodulation Devices for Managing COVID-19 Sequelae Marom Bikson, USA
15:30 - 15:45	TBA	Deep Brain Stimulation for Depression: Towards a Patient-Specific Transdiagnostic Approach Alik Widge, USA	TBA	TBA
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	<i>Break, Posters & Exhibits</i>			
16:30 - 18:20	Oral Poster Presentations			
16:30 - 16:40	Moderator: 1	Moderator: 1	Moderator: 1	Moderator: 1
16:40 - 16:50	2	2	2	2
16:50 - 17:00	3	3	3	3
17:00 - 17:10	4	4	4	4
17:10 - 17:20	5	5	5	5
17:20 - 17:30	6	6	6	6
17:30 - 17:40	7	7	7	7
17:40 - 17:50	8	8	8	8
17:50 - 18:00	9	9	9	9
18:00 - 18:10	10	10	10	10
18:10 - 18:20	11	11	11	11

Thursday, 26 May 2022				
	Hall 1	Hall 2	Hall 3	Hall 4
08:00 - 10:00	Peripheral Nerve Stimulation (PNS) for Low Back Pain Moderator:	Variable Frequency Deep Brain Stimulation (DBS) for Parkinson's Disease and Neuromodulation for Refractory Epilepsy Moderators:	Interfacing with the Nervous System at a Cellular Scale and Biological Level; and Conflict of Interest in Neuromodulation Moderator:	Neurostimulation for Visceral Pain: Update Moderators:
08:00 - 08:15	Dorsal Root Ganglion Stimulation for Low Back Pain at T12 Ken Chapman, USA	Frequency Issues in Deep Brain Stimulation for Parkinson's Disease Irene DiGiulio, UK	Ultramicroelectrodes Fabricated from Amorphous Silicon Carbide TBA	Spinal Cord Stimulation for Visceral Pain: Current Approaches Amy Pearson, USA
08:15 - 08:30	Dorsal Root Ganglion Stimulation for Low Back Pain at L2 Frank Huygen, The Netherlands	Reduction of Deep Brain Stimulation Frequency Improves Parkinson's Disease Symptoms Julie Pilitsis, USA	Tissue Engineered Electronic Interface (TEENI) for the Peripheral Nervous System TBA	Treatment of Chronic Abdominal Pain: Safety and Efficacy from a 12-Month Prospective, Multicenter Feasibility Study Leonardo Kapural, USA
08:30 - 08:45	Peripheral Nerve Field Stimulation for Low Back Pain Frank Patrick Schwarm, Germany?	TBA	Engineering the Biology and Biochemistry of the Interface to Promote Reliability TBA	SCS for Visceral Pain: Present Approaches and Future Strategies TBA
08:45 - 09:00	The SubQStim Study Sam Eldabe, UK	Variable Frequency Deep Brain Stimulation for Axial Features in Parkinson's Disease Leo Verhagen-Metman, USA	Applications of Graphene and Carbon Nanotube Structures to Control Neural Signaling TBA	Neurostimulation for Chronic Pancreatitis G. Baranidharan, UK
09:00 - 09:15	TBA	Personalized Vagus Nerve Stimulation for Drug Resistant Epilepsy Kristl Vonck, Belgium	Conflict of Interest Panel Session TBA	Vagus Nerve Stimulation for Gastrointestinal Disorders/Crohn's Disease Bruno Bonaz, France
09:15 - 09:30	Radiation Safety in Neuromodulation David Provenzano, USA	Thalamic Deep Brain Stimulation for Epilepsy Francisco Velasco, Mexico	Conflict of Interest: How it Can Leak into Journals and Medical Decision Making TBA	Autonomic Neuromodulation for Metabolic Disorders Jiande Chen, USA
09:30 - 09:45	TBA	Hippocampal Deep Brain Stimulation for Epilepsy Arthur Cukiert, Brazil	Conflict of Interest and Industry: Is the Partnership Broken? Marc Russo, Australia	Methods and Mechanisms of Gastric Electrical Stimulation for Nausea and Vomiting Thomas Abell, USA
09:45 - 10:00	Discussion	Discussion	Discussion	Discussion
10:00 - 10:25	<i>Break, Posters & Exhibits</i>			
10:30 - 11:20	Oral Poster Presentations			
	Moderator:	Moderator:	Moderator:	Moderator:
10:30 - 10:40	1	1	1	1
10:40 - 10:50	2	2	2	2
10:50 - 11:00	3	3	3	3
11:00 - 11:10	4	4	4	4
11:10 - 11:20	5	5	5	5
11:30 - 13:40	Closing Plenary Session			
	Moderators:			
11:30 - 12:00	Vagus Nerve as Modulator of the Brain-Gut Axis in Psychiatric and Inflammatory Disorders Gregor Hasler, Switzerland			
12:00 - 12:30	Deep Brain Stimulation for Movement Disorders: From Experimental Surgery to Evidence-Based Therapy Jens Volkmann, Germany			
12:30 - 13:00	Neuroimaging Based Pain Biomarkers Sean Mackey, USA			
13:00 - 13:30	Women in Neuromodulation: The WIN Survey Julie Pilitsis, USA			
13:30 - 13:40	Closing Comments			
13:40	Congress Adjourns			