



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
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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			
09:45 - 10:10	Deep Brain Stimulation: Potential for Neuroprotection Andres Lozano			
10:10 - 10:30	Spinal Cord Stimulation in Neuropathic Pain: Mechanisms of Action, New Locations, New Paradigms Elbert Joosten			
10:30 - 10:55	Break, Posters & Exhibits			
11:00 - 11:20	Late Breaking Research			
11:20 - 11:40	Late Breaking Research			
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	Moderator: Modifying the Progression of Alzheimer's Disease with Deep Brain Stimulation Andres Lozano	Moderator: Vagus Nerve Stimulation in Rheumatoid Arthritis TBA	Moderator: Systematic Review of Neuromodulation for Chronic Pelvic Pain TBA
14:45 - 15:00	Invasive Electrical Neuromodulation for the Treatment of Painful Diabetic Neuropathy: Systematic Review and Meta-Analysis TBA	Deep Brain Stimulation of the Nucleus Basalis of Meynert and Alzheimer's Disease Jens Kuhn	Vagus Nerve Stimulation for Headache Disorders TBA	Dorsal Root Ganglion Stimulation for Urogenital Pain Corey Hunter
15:00 - 15:15	Results of the SENZA-PPN Study Erika Petersen	Deep Brain Stimulation of the Internal Capsule Enhances Human Cognitive Control and Prefrontal Cortex Function Emad Eskandar	Vagus Nerve Stimulation for COVID-19/Respiratory Disorders Bruno Bonazzoli	Sacral Nerve Stimulation for Chronic Pelvic Pain Sherif El-Nashar
15:15 - 15:30	Dorsal Root Ganglion Stimulation for Peripheral Neuropathy Steven Falowski	Fornix Deep Brain Stimulation in Brain Diseases Yasin Temel	Vagus Nerve Stimulation for Diabetes/Obesity Valentin Pavlov	Spinal Cord Stimulation for the Treatment of Chronic Pelvic Pain Sean Li
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			
	Moderator:	Moderator:	Moderator:	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	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:	Workshop on Neuromodulation (Nurses, psychologists, physiotherapists)		
09:30 - 10:00	Translational Neurocardiology: Preclinical Models and Cardioneural Integrative Aspects Jeffrey Ardell			
10:00 - 10:30	Targeted Neurotechnology in Patients with Spinal Cord Injury Jocelyne Bloch and Gregoire Courtine			
10:30 - 11:00	Transcutaneous Spinal Cord Stimulation and Motor Rehabilitation in Spinal Cord Injury: A systematic Review Julian Taylor			
11:00 - 11:25		Break, Posters & Exhibits		
11:30 - 12:00	Chemogenetic Neuromodulation Nick Boullis			
12:00 - 12:30	Discussion of the New Neurostimulation Appropriateness Consensus Conference and Polyanalgesic Consensus Conference Guidelines Robert Levy and Timothy Deer			
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:
14:30 - 14:45	Chronic Pain, Spinal Cord Stimulation and Opioid TBA	Patterns, Scheduled and Closed Loop Deep Brain Stimulation Michael Okun	Recovery of Over-Ground Walking after Motor Complete Spinal Cord Injury with Spinal Cord Stimulation Claudia Angeli	Baroreflex Activation Therapy and the Heart TBA
14:45 - 15:00	The Effect of Spinal Cord Stimulation on Pain Medicine Reduction: A Systematic Review Susan Moeschler	Evoked Potentials as Feedback Signals for Closed-Loop Deep Brain Stimulation Warren Grill	Neuromodulation of the Thoracic Spinal Cord to Regulate Hemodynamic after Spinal Cord Injury Aaron Phillips	Transvenous Neurostimulation for Central Sleep Apnoea: A Randomised Controlled Trial TBA
15:00 - 15:15	Discontinuation of Opioids after Spinal Cord Stimulation is Highly Dependent on Daily Opioid Dose Tom Simopoulos	Dynamic Network Targeting in Closed-Loop Deep Brain Stimulation Alik Widge	Spinal Cord Stimulation for Spinal Cord Injury and the ESTAND Trial David Darrow	Respiratory Rhythm, Autonomic Modulation, and the Spectrum of Emotions: The Future of Emotion Recognition and Modulation Ravinder Jerath
15:15 - 15:30	Opioid-Sparing Effects of Spinal Cord Stimulation Adnan Al-Kaisy	Dual Threshold Closed Loop Deep Brain Stimulation in Parkinson's Disease Helen Bronte-Stewart	Transcutaneous Spinal Stimulation for Motor Rehabilitation after Spinal Cord Injury Julio Gomez-Soriano	Pulmonary Arterial Hypertension: The Case for a Bioelectronic Treatment TBA
15:30 - 15:45	Spinal Cord Stimulation Reduces Opioid Use with Better Outcomes when Opioids are Not Used Julie Pilitsis	Future Perspectives for Target Identification and Adaptive Closed Loop Stimulation Paul Krack	DBS for Post-stroke Rehabilitation Andre Machado	Spinal Cord Stimulation and Vagus Nerve Stimulation: Effects on primary afferent transduction of the ischemic heart Siamak Salavatian
15:45 - 16:00	Discussion	Discussion	Discussion	Discussion
16:00 - 16:30	Break, Posters & Exhibits			
16:30 - 18:20	Oral Poster Presentations			
	Moderator:	Moderator:	Moderator:	Moderator:
16:30 - 16:40	1	1	1	1
16:40 - 16:50	2	2	2	2
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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			
10:00 - 10:30	Ethics of Brain-Computer Interfaces TBA			
10:30 - 11:00	High Cervical Spinal Cord Stimulation for Parkinson's Disease Paolo Mazzone			
11:00 - 11:25	<i>Break, Posters & Exhibits</i>			
11:30 - 12:00	Neurovascular Neuromodulation Thomas Oxley			
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:	Deep Brain Stimulation for Treatment Resistant Depression Moderator:	Neurostimulation for Chronic Mechanical Low Back Pain Moderators:	Neuromodulation for Covid-19 Moderator: Elliot Krames
14:30 - 14:45	The TRIAL-STIM Study Sam Eldabe	Translational Aspects of Deep Brain Stimulation for Depression Clement Hamani	Etiology of Chronic Mechanical Low Back Pain Marc Russo	Non-Invasive Vagus Nerve Stimulation Inhibits Cytokine Storm: A Treatment for Covid-19 Respiratory Disease Carlos Tornero Tornero
14:45 - 15:00	Trial versus No Trial of Spinal Cord Stimulation: Cost Analysis Simon Thomson	Deep Brain Stimulation for Depression: What has Gone Wrong? Emad Eskandar	The Burden of Chronic Low Back Pain Martin Underwood	Inflammation and Related Organ Dysfunction in Covid-19: A Role for Neuromodulation Bruno Bonaz
15:00 - 15:15	Trial versus No Trial of Spinal Cord Stimulation: Clinical Utility G. Baranidharan	Deep Brain Stimulation for Depression: Predictors of Response Zelma Kiss	Multifidus Stimulation: The ReActiv8 Trial Chris Gilligan	Clinical Studies of Neuromodulation in COVID-19 Kristl Vonck
15:15 - 15:30	Trial versus No Trial of Spinal Cord Stimulation: US Considerations Richard North	Closed Loop Brain Stimulation for Depression Darin Dougherty	Multifidus Stimulation: Implications for Clinical Practice Sam Eldabe	Neuromodulation Devices for Managing COVID-19 Sequelae Marom Bikson
15:30 - 15:45	TBA	Deep Brain Stimulation for Depression: Towards a Patient-Specific Transdiagnostic Approach Alik Widge	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
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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: Joe Pancrazio	Neurostimulation for Visceral Pain: Update Moderators:
08:00 - 08:15	Dorsal Root Ganglion Stimulation for Low Back Pain at T12 Ken Chapman	Frequency Issues in Deep Brain Stimulation for Parkinson's Disease Irene DiGiulio	Ultramicroelectrodes Fabricated from Amorphous Silicon Carbide TBA	Spinal Cord Stimulation for Visceral Pain: Current Approaches Amy Pearson
08:15 - 08:30	Dorsal Root Ganglion Stimulation for Low Back Pain at L2 Frank Huygen	Reduction of Deep Brain Stimulation Frequency Improves Parkinson's Disease Symptoms Julie Pilitsis	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
08:30 - 08:45	Peripheral Nerve Field Stimulation for Low Back Pain Frank Patrick Schwarm	TBA	Engineering the Biology and Biochemistry of the Interface to Promote Reliability TBA	Neurostimulation for Abdominal Pain-related Functional Gastrointestinal Disorders in Adolescents TBA
08:45 - 09:00	The SubQStim Study Sam Eldabe	Variable Frequency Deep Brain Stimulation for Axial Features in Parkinson's Disease Leo Verhagen-Metman	Applications of Graphene and Carbon Nanotube Structures to Control Neural Signaling TBA	Vagus Nerve Stimulation for Gastrointestinal Disorders/Crohn's Disease Bruno Bonaz
09:00 - 09:15	TBA	Personalized Vagus Nerve Stimulation for Drug Resistant Epilepsy Kristl Vonck	Conflict of Interest Panel Session Conflict of Interest in Neuromodulation TBA	Autonomic Neuromodulation for Metabolic Disorders Jiande Chen
09:15 - 09:30	Radiation Safety in Neuromodulation TBA	Thalamic Deep Brain Stimulation for Epilepsy TBA	Conflict of Interest and Industry: Is the Partnership Broken? Marc Russo	Methods and Mechanisms of Gastric Electrical Stimulation for Nausea and Vomiting Thomas Abell
09:30 - 09:45	TBA	Hippocampal Deep Brain Stimulation for Epilepsy Arthur Cukiert		TBA
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			
12:00 - 12:30	Deep Brain Stimulation for Movement Disorders: From Experimental Surgery to Evidence-Based Therapy Jens Volkmann			
12:30 - 13:00	Neuroimaging Based Pain Biomarkers Sean Mackey			
13:00 - 13:30	Women in Neuromodulation: The WIN Survey Julie Pilitsis			
13:30 - 13:40	Closing Comments			
13:40	Congress Adjourns			