

**International Neuromodulation Society 14th World Congress May 25 - 30, 2019, Preliminary Scientific Program\***

*\*Subject to change*

**Pre-Conference Days May 25 - 26**

May 25 - Pre-Conference: Noninvasive Brain Stimulation

[Click here for more information](#)

May 26 - Pre-Conference: Innovations in Neuromodulation. Disruptive Innovation: The Driving Force of Progress in Neuromodulation.

Not included in the main event CME/CPD credit. [Click here for more information.](#)

May 26 - 2019 NSANZ and INS Cadaver Workshop

[Click here for more information.](#)

## Main Congress

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

<b>Sunday, May 26 2019</b>	
<b>18:00 - 19:30</b>	<b>INS Opening Reception in the Exhibition Area</b>

<b>Monday, May 27 2019</b>				
	<b>Pymont Theatre</b>	<b>Room C4.4</b>	<b>Room C4.5</b>	<b>Parkside Ballroom</b>
<b>07:30 - 08:00</b>	<i>Morning Coffee and Pastries in the Exhibition Area (Hall 1)</i>			
<b>08:00 - 11:30</b>	<b>Opening Plenary Session</b>			
08:00 - 08:30	Welcome and INS Leadership Message			
08:30 - 08:50	Novel Model of Brain Function			
08:50 - 09:15	Non-Surgical Deep Brain Stimulation			
09:15 - 09:40	A Critical Analysis of Clinical Trials in Neuromodulation			
09:40 - 10:00	Closed-loop Spinal Cord Stimulation: Evoke Study Results			
<b>10:00 - 10:25</b>	<i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			

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Monday, May 27 2019		
10:30 - 10:50	Blinded Randomized Controlled Trial on Waveforms: The SURF Study	
10:50 - 11:10	Multifidus Peripheral Nerve Stimulation Randomized Controlled Trial	
11:10 - 11:30	Anatomical Lead Placement is a Viable Alternative to Targeted Lead Placement for Spinal Cord Stimulation: Results from a Prospective, Randomized, Single-Blinded, Multi-Center, International, Study	
<b>11:30 - 12:20</b>	<b>Oral Poster Presentations Five Best Abstracts</b>	
11:30 - 11:40	1	
11:40 - 11:50	2	
11:50 - 12:00	3	
12:00 - 12:10	4	
12:10 - 12:20	5	
<b>12:30 - 14:30</b>	<i>Lunch, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>	Lunch Symposium (not included in the main event CME/CPD) (12.35 - 13:35)

## Main Congress

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

Monday, May 27 2019				
	Pymont Theatre	Room C4.4	Room C4.5	Parkside Ballroom
<b>14:30 - 16:00</b>	<b>Improving Delivery of Neuromodulation</b>	<b>Brain Neuromodulation</b>	<b>Cardiovascular Neuromodulation</b>	
14:30 - 14:45	What is on the Horizon for Stimulation Patterning?	Adaptive Stimulation in Deep Brain Stimulation	What's Hot and What's not in Neuromodulation for Cardiac Diseases	
14:45 - 15:00	Adding Objective Markers to Spinal Cord Stimulation Assessments	Rhythms of the Brain	Basic Mechanisms of Vagal Modulation in Cardiac Diseases	
15:00 - 15:15	Common Research Questions for SCS Research and How to Answer them	Deep Brain Stimulation for Obesity	Basic Mechanisms of Spinal Cord Stimulation in Cardiac Diseases	
15:15 - 15:30	Systematic Troubleshooting Intrathecal Delivery Systems: Emerging Tools	Deep Brain Stimulation for Eating Disorders	Anesthetic Considerations and Perioperative Management of SCS	
15:30 - 15:45	Animal models of Paresthesia based-SCS and Sub-perception-SCS and Clinical Correlates	Deep Brain Stimulation for Addiction	Clinical Outcomes of Neuromodulation for Angina	
15:45 - 16:00	Discussion	Discussion	Discussion	
<b>16:00 - 16:30</b>	<b><i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i></b>			

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<b>Monday, May 27 2019</b>				
	<b>Pymont Theatre</b>	<b>Room C4.4</b>	<b>Room C4.5</b>	<b>Parkside Ballroom</b>
<b>16:30 - 18:20</b>	<b>Oral Poster Presentations</b>			
16:30 - 16:40	1	1	1	
16:40 - 16:50	2	2	2	
16:50 - 17:00	3	3	3	
17:00 - 17:10	4	4	4	
17:10 - 17:20	5	5	5	
17:20 - 17:30	6	6	6	
17:30 - 17:40	7	7	7	
17:40 - 17:50	8	8	8	
17:50 - 18:00	9	9	9	
18:00 - 18:10	10	10	10	
18:10 - 18:20	11	11	11	
<b>18:20 - 18:30</b>	<i>Short Break</i>			
<b>18:30 - 19:30</b>	<b>Young Neuromodulators' Reception (Level 4 Foyer)</b>			

## Main Congress

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Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing	

Tuesday, May 28 2019				
	Pymont Theatre	Room C4.4	Room C4.5	Parkside Ballroom
07:00 - 08:00	<i>Morning Coffee and Pastries in the Exhibition Area (Hall 1)</i>			
08:00-08:30	<b>Plenary:</b> Medical Device Monitoring: Where are We and Where do We Need to Go?			
08:30 - 11:30	<b>Plenary Session</b>	<b>Allied Health Workshop on Neuromodulation</b> (Nurses, psychologists, physiotherapists)		
08:30 - 09:00	Neuromodulation Centers of Excellence	Introductions (08:30 - 08:40)  Management of Patients receiving SCS therapy – The Australian Experience (08:45 - 09:05)  Management of Patients receiving SCS therapy – The UK Experience (09:05 - 09:25)  Assessment of Patients receiving Neuromodulation therapies (09:25 - 09:55)		
09:00 - 09:30	Progress in Brain Machine Interface			
09:30 - 10:00	Dynamic Computational Model of the Human Spinal Cord Connectome			
10:00 - 10:25	<i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			
10:30 - 11:00	Neuromodulation for Visceral Pain	Outcomes from the implementation of a post-implant rehab program (10:30 - 11:00)  Growth in Neuromodulation and the potential provision for stronger nursing roles (11:00 - 11:30)  Panel Q&A session (11:30 - 11:50)		
11:00 - 11:30	Perspectives of Gastrointestinal Neuromodulation			
11:30 - 11:50	INS General Assembly of Members			
11:50 - 12:10				
12:10-12:30	<i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			
12:30 - 14:30	<i>Lunch, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			Lunch Symposium (not included in the main event CME/CPD) (12:30 - 13:30)

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Plenary	Breakout Session	Oral Presentations	Supported Symposium	Special Session
Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing	
<b>Tuesday, May 28 2019</b>				
	<b>Pymont Theatre</b>	<b>Room C4.4</b>	<b>Room C4.5</b>	<b>Parkside Ballroom</b>
<b>14:30 - 16:00</b>	<b>Basal or Non-Basal: Intrathecal Regimens for 2019</b>	<b>Deep Brain Stimulation for Pain</b>	<b>New Developments in Neuromodulation for Gastrointestinal Conditions</b>	
14:30 - 14:45	Tailoring Intrathecal Therapy to Match your Patient's Needs	Stimulation of the Accumbens Region	New Methods and Applications Using the Science Underlying GI Neuromodulation: Low and High Resolution Mapping	
14:45 - 15:00	Challenges for Bolus only Therapy	Cingulate Stimulation	Electroceuticals for Mapping and Modulating Gut Activity: Towards Closed-loop Management of Gastroparesis	
15:00 - 15:15	Functional Improvement with Continuous Intrathecal Morphine Infusion in Chronic Non-Cancer Pain	Deep Brain Stimulation for Pain: Pro and Con	Neuromodulation for Inflammatory Bowel Disease	
15:15 - 15:30	Are Side Effects Associated with the Long-Term Usage of Intrathecal Drug Delivery so Frightful?	Motor Cortex Stimulation for Pain and Related Conditions: Pro and Con	New Applications for Mid Gut Stimulation for Metabolic Disorders: GI Stimulation for Diabetes and Obesity	
15:30 - 15:45	The Economics of Cancer Related Pain: New Data to Support use of Targeted Drug Delivery for Both Short Term and Long Term Survivors		New Neuromodulation Therapies for Colonic Disorders	
15:45 - 16:00	Novel Intrathecal Analgesics in Cancer Pain	Discussion	Discussion	
<b>16:00 - 16:30</b>	<b><i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i></b>			

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<b>Tuesday, May 28 2019</b>				
	<b>Pyrmont Theatre</b>	<b>Room C4.4</b>	<b>Room C4.5</b>	<b>Parkside Ballroom</b>
<b>16:30 - 18:20</b>	<b>Oral Poster Presentations</b>			
16:30 - 16:40	1	1	1	
16:40 - 16:50	2	2	2	
16:50 - 17:00	3	3	3	
17:00 - 17:10	4	4	4	
17:10 - 17:20	5	5	5	
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17:30 - 17:40	7	7	7	
17:40 - 17:50	8	8	8	
17:50 - 18:00	9	9	9	
18:00-18:10	10	10	10	
18:10-18:20	11	11	11	
<b>18:20 - 18:30</b>	<i>Short Break</i>			
<b>18:30 - 19:30</b>	<b>International Women in Neuromodulation Reception (Level 4 Foyer)</b>			



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Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing	

Wednesday, May 29 2019				
	Pyrmont Theatre	Room C4.4	Room C4.5	Parkside Ballroom
07:30 - 08:00	<i>Morning Coffee and Pastries in the Exhibition Area (Hall 1)</i>			
08:00 - 08:30	Plenary: Conflict of Interest in Neuromodulation Panel Discussion			
08:30 - 11:30	<b>Plenary Session</b>			
08:30 - 09:00	Sources of Bias in Randomized Controlled Trials of Neuromodulation and Advice on Mitigation			
09:00 - 09:30	Current Concepts and Evidence in Neuromodulation for Headache			
09:30 - 10:00	Prospective 12 Month Outcomes of Multi-Center Trials of 10 khz Spinal Cord Stimulation in the Treatment of Arm and Neck Pain (Australian & North American Centers)			
10:00 - 10:25	<i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			
10:30 - 11:00	Current State of Battery-Free Systems			
11:00 - 11:30	Recommendations of the Joint INS, IoN and IMMPACT Group			
11:30 - 12:20	<b>Giant of Neuromodulation Award</b>			
12:30 - 14:30	<i>Lunch, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i>			Lunch Symposium (not included in the main event CME/CPD)

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Meeting	Award Ceremony	Networking Event	Exhibit Break/Poster Viewing	
<b>Wednesday, May 29 2019</b>				
	<b>Pymont Theatre</b>	<b>Room C4.4</b>	<b>Room C4.5</b>	<b>Parkside Ballroom</b>
<b>14:30 - 16:00</b>	<b>Neuromodulation for Pain: Sensing and Feedback</b>	<b>Neuromodulation for Neuro-Rehabilitation and Stroke</b>	<b>Under the Hood: Mechanisms of Action Aspects</b>	
14:30 - 14:45	What Should a Neuromodulation Device Measure?	Neuromodulation for Neurorehabilitation of Motor Disorders for Stroke and Spinal Cord Injury: An Overview	Beyond the Gate	
14:45 - 15:00	Using Wearable Sensors and Implantable Neuromodulation Devices to Measure Function	Noninvasive Brain Stimulation for Stroke	Burst and High Frequency Stimulation: Mechanisms of Action	
15:00 - 15:15	Physiological Sensing in Deep Brain Stimulation	Invasive Brain Stimulation for Stroke	Role of ECAPS in Understanding Spinal Cord Stimulation Action	
15:15 - 15:30	Feedback Stimulation of the Dorsal Columns	Spinal Cord Stimulation for Spinal Cord Injury	Microglial Modulation in Neural Stimulation	
15:30 - 15:45	Long-term Outcomes from the Avalon Study: A prospective Multicenter Study Evaluating Closed-Loop SCS in the Treatment of Chronic Back and Leg Pain	Noninvasive Brain Stimulation for Spinal Cord Injury	Deep Brain Stimulation Mechanism of Action Review	
15:45 - 16:00	Discussion	Discussion	Discussion	
<b>16:00 - 16:30</b>	<b><i>Break, Posters &amp; Exhibits in the Exhibition Area (Hall 1)</i></b>			


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	Mandarin–English, English–Mandarin (Simultaneous Translation)
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Thursday, May 30 2019				
	Pyrmont Theatre	Room C4.4	Room C4.5	Room C2.6
<b>07:30 - 08:00</b>	<i>Morning Coffee and Pastries in the Exhibition Area (Hall 1)</i>			
<b>08:00 - 10:00</b>	<b>New Targets, New Diseases</b>	<b>Advances in Neuromodulation for Refractory Epilepsy</b>	<b>Neuromodulation for Pelvic Organ Motility Disorders</b>	<b>Special Session Neuromodulation in Asia</b>  <b>Welcome (08:00 - 08:10)</b> <b>Neuromodulation for Epilepsy (08:10 - 08:30)</b> <b>Neuromodulation in Minimally Conscious State (08:30 - 08:50)</b> <b>Neuromodulation for Psychiatric Disorders (08:50 - 09:10)</b> <b>The Present and Future Status of Neuromodulation Treatment in Taiwan (09:10 - 09:30)</b> <b>Discussion (09:30 - 09:55)</b>
08:00 - 08:15	The Case for Cordotomy vs. Neuromodulation for Cancer Pain	Neurobiology of Neuromodulation of Epilepsy	Sacral Neuromodulation for the Treatment of Urinary Bladder Dysfunction: Mechanism of Action	
08:15 - 08:30	Sphenopalatine Ganglion Stimulation Therapy: Procedural Challenges	Neuro-Anatomy Relevant to Neuromodulation for Epilepsy	Indications and Clinical Results of Pelvic Floor Neuromodulation	
08:30 - 08:45	Treatment of Refractory Chronic Migraine: Results from a Feasibility Study	Responsive Vagal Nerve Stimulation	Standardization in Sacral Neuromodulation Technique	
08:45 - 09:00	The Approaches in Peripheral Nerve Stimulation of Brachial Plexus	Responsive Deep Brain Stimulation	Complications Associated with Sacral Neuromodulation	
09:00 - 09:15	Mechanisms of Action of Dorsal Root Ganglion Stimulation for Pain	Hippocampal Deep Brain Stimulation	Sacral Neuromodulation for Pelvic Pain and Pelvic Organ Dysfunction	
09:15 - 09:30	State of the Art Review of Dorsal Root Ganglion Stimulation	Targeting in Deep Brain Stimulation for Epilepsy	Updates in Percutaneous Tibial Neuromodulation	
09:30 - 09:45	New Indications for Dorsal Root Ganglion Stimulation	Experience of Deep Brain Stimulation for Epilepsy	Pudendal Stimulation	
09:45 - 10:00	Discussion	Discussion	Panel Discussion - Stage 1 vs PNE	
<b>10:00 - 10:25</b>	<i>Coffee Break in the Pyrmont Theatre Foyer</i>			

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Thursday, May 30 2019				
	Pymont Theatre	Room C4.4	Room C4.5	Room C2.6
<b>10:30 - 11:20</b>	<b>Oral Poster Presentations</b>			<b>Special Session</b>
10:30 - 10:40	1	1	1	 <b>Neuromodulation for BackPain in Hong Kong</b> (10:30 - 10:50)
10:40 - 10:50	2	2	2	<b>Combat with Neuromodulatory Therapies in Korea as a Pioneer</b>  (10:50 - 11:10)
10:50 - 11:00	3	3	3	(10:50 - 11:10)
11:00 - 11:10	4	4	4	(10:50 - 11:10)
11:10 - 11:20	5	5	5	TBD (11:10 - 11:30)
<b>11:20 - 11:30</b>	<i>Short Break to Change Halls</i>			
11:30 - 13:20	<b>Closing Plenary Session: The Future?</b>			TBD (11:30 - 11:50)
11:30 - 12:00	Vagus Nerve Implants to Optimize Vagal Signals and Function - Bioelectronic Medicine as a Future Standard of Care			TBD (11:30 - 11:50)
12:00 - 12:30	Big Data Use in Neuromodulation			<b>Salvage of Spinal Cord Stimulator in Chronic Pain</b> (11:50 - 12:10)
12:30 - 13:00	Transcranial Stimulation for a Smarter You			Discussion (12:10 - 12:35)
13:00 - 13:30	Cyber Security in Neuromodulation			
<b>13:30</b>	<b>Congress Adjourns</b>			