



THURSDAY, JANUARY 18, 2024

ENGINEERING PRINCIPLES OF DEEP BRAIN AND SPINAL CORD STIMULATION

Time	Presentation Title	Speakers
7:00 – 8:00 AM	Breakfast and Registration	
8:00 – 8:10 AM	Introduction – Morning Session	Marom Bikson, PhD; and Scott Lempka, PhD
8:10 – 8:50 AM	Selective Targeting and Evoked Responses During Spinal Cord Stimulation	Scott Lempka, PhD
8:50 – 9:30 AM	Biophysical Basis of Deep Brain Stimulation and Local Field Potential Recordings	Cameron McIntyre, PhD
9:30 – 10:10 AM	Automated Programming and Closed-loop Deep Brain Stimulation	Svjetlana Miocinovic, MD, PhD
10:10 – 10:20 AM	Break	
10:20 – 11:00 AM	Subthreshold Mechanisms of Brain and Spinal Cord Stimulation	Marom Bikson, PhD
11:00 – 11:40 AM	Advanced Techniques to Improve Charge Delivery During Neurostimulation	Dan Merrill, PhD
11:40 AM – 12:00 PM	Faculty Panel Q&A	Marom Bikson, PhD; Scott Lempka, PhD; Cameron McIntyre, PhD; Dan Merrill, PhD; and Svjetlana Miocinovic, MD, PhD
12:00 – 1:30 PM	Lunch	
1:30 – 1:40 PM <small>*Afternoon Session not eligible for CME</small>	Introduction – Afternoon Session	Marom Bikson, PhD; and Scott Lempka, PhD
1:40 – 2:00 PM	Review and Update on Technologies: Saluda	Aileen Ouyang, PhD
2:00 – 2:20 PM	Review and Update on Technologies: Medtronic	Juan Hincapie, PhD
2:20 – 2:40 PM	Review and Update on Technologies: Nevro	Kerry Bradley, MS
2:40 – 3:00 PM	Review and Update on Technologies: Abbott	Doug Lautner, PhD
3:00 – 3:40 PM	Break	
3:40 – 4:00 PM	Review and Update on Technologies: Boston Scientific	Tianhe Zhang, PhD
4:00 – 4:20 PM	Review and Update on Technologies: Nalu	Lee Hartley, PhD
4:20 – 5:00 PM	Faculty Panel Q&A	Juan Hincapie, PhD; Kerry Bradley, MS; Lee Hartley, PhD; Aileen Ouyang, PhD; David Page, PhD; and Tiahne Zhang, PhD
5:00 PM	Course Ends	