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Stereotactic and Functional Neurosurgery Course for Neurosurgeons and Neurologists

Wednesday, April 2 – Friday, April 4, 2025 Oregon Health & Science University Portland, Oregon



Wednesday April 2 - DAY 1 - Pain

6:30 A.M. Shuttle Pickup

7:00 A.M. Registration and Continental Breakfast

7:45 A.M. Welcome and Opening Remarks - Kim Burchiel, M.D., Ahmed Raslan, M.D.

8:05 A.M. Current and Future States of Functional Neurosurgery – Joshua Rosenow, M.D.

8:25 A.M. Facial Pain Classification and Outcomes - Kim Burchiel, M.D.

8:45 A.M. Break / Questions

9:00 A.M. Imaging Based Facial Pain Diagnosis – Mojgan Hodaie, M.D., M.Sc.

9:15 A.M. Microvascular Decompression for Cranial Nerve Compression Syndromes - Christopher Honey, M.D., D.Phil.

9:30 A.M. Basic Principles of Neuromodulation - Kunal Gupta, M.D., Ph.D.

9:45 A.M. DRG Stimulation for Pain - Steven Falowski, M.D.

10:00 A.M. Break / Questions

10:15 A.M. DBS for Pain - Sharona Ben-Haim, M.D.

10:30 A.M. SCS for Pain – Julie Pilitsis, M.D., Ph.D., M.B.A.

10:45 A.M. Indirect Neuromodulation in Pediatric CP Hypertonia: The

Peripheral Ablation – Walid Abdel Ghany, M.D., Ph.D.

11:00 A.M. Lunch and Group Photo

12:00 P.M. Spinal Ablation for Cancer Pain (Cordotomy, Myelotomy, and Tractomy) - Ashwin Viswanathan, M.D.

12:15 P.M. Dorsal Root Entry Zone (DREZ) - Michael Kinsman, M.D.

12:30 P.M. Trigeminal Pathway Ablation - Ahmed Raslan, M.D.

12:45 P.M. IDDS for Pain and Spasticity - Albert Lee, M.D.

1:15 P.M. Break / Questions

1:30 P.M. Spinal Ablations for Chronic Pain - Ahmed Abdelbar Salem, M.D., Ph.D.

1:45 P.M. Cadaver Lab Pre-Teaching – Ahmed Raslan, M.D.

1:45 P.M. Break / Transition to Lab

Lab Session - VirtuOHSU

2:00 P.M. SCS | DREZ | DRG Demo (Kinsman, Petersen, Ben-Haim, Ko, F.

Islam, Abdelbar Salem)

2:00 P.M. MVD (Burchiel)

6:00 P.M. Transition/Travel Time

Evening Events – Faculty Dinner Offsite

6:15 P.M. Shuttle pickup - Return to Hotel

6:30 P.M. Shuttle pickup – Faculty at Hotel then to Dinner

7:30 P.M. Faculty Dinner – Serrato Restaurant

9:30 P.M. Faculty Lyft back to hotel

Thursday, April 3 - DAY 2 - Epilepsy

6:30 A.M. Shuttle Pickup

7:00 A.M. Continental Breakfast

7:45 A.M. Next Generation DBS Devices – Timothy Denison Ph.D., M.S., M.B.A.

8:00 A.M. White Matter Mapping Using Electrical Stimulation – Dora Hermes Miller. Ph.D.

8:25 A.M. Who is a Candidate for Epilepsy Surgery? - Marissa Kellogg, M.D.

8:40 A.M. Pre-surgical Localization of Epilepsy - David Spencer, M.D.

8:55 A.M. Break / Questions

9:10 A.M. Responsive Neurostimulation (RNS) - Lia Ernst, M.D.

9:25 A.M. RNS Surgical Perspective and New Indications - Jason Gerrard, M.D., PhD.

9:40 A.M. Vagus Nerve Stimulation (VNS) - Ittai Bushlin, M.D., Ph.D.

9:55 A.M. Break / Questions

10:10 A.M. SEEG As a Clinical and Research Tool – Chengyuan Wu, M.D.

10:25 A.M. Mechanisms of Onset and Termination of Epilepsy – Hai Sun, M.D., Ph.D.

10:40 A.M. Laser Interstitial Thermal Therapy (LITT) - Shabbar Danish, M.D.

11:00 A.M Lunch

11:45 A.M. Lunch + Lecture (30 mins): Tractographic Basis of DBS Mechanism of Action – Vanessa Milanese, M.D., Ph.D.

12:15 P.M. Cortical Dysplasia and Extratemporal Resections in Epilepsy - Jeffrey Raskin, M.D., M.S.

12:30 P.M. Radiofrequency Lesioning in Epilepsy – Jonathan Miller, M.D.

12:45 P.M. Disconnection Surgery, Neena Marupudi, M.D., M.S.

1:00 P.M. Break / Questions

1:15 P.M. Visual Restoration Using BCI – Nader Pouratian, M.D., Ph.D.

1:30 P.M. Passive and Active Brain Mapping – Nathan Crone, M.D.

1:50 P.M. Brain Mapping in Children - Kelly Collins, M.D.

2:10 P.M. Break / Questions

2:25 P.M. Anatomy Review | Cadaver Lab Pre-teaching - Andrew Ko, M.D.

2:50 P.M. Break / Transition to Lab

Lab Session - VirtuOHSU

3:00 P.M. LITT (Danish, Raskin, Lipson, Grannan, Gupta, Hanft)

3:00 P.M. Temporal Lobectomy (Ben-Haim, Ko, Burchiel, Cleary, Collins)

3:00 P.M. Neurostimulator Programing for Epilepsy DBS|RNS (Neurology, Ernst)

Evening Events - Doernbecher Children's Hospital (Vey Auditorium Hall)

6:30 P.M. Change clothes | Travel Time

7:00 P.M. Course Dinner (Catered Buffet)

9:00 P.M. Shuttle Pickup - Return to Hotel

Friday, April 4 - DAY 3 - Movement Disorders

6:30 A.M. Shuttle Pickup

7:00 A.M. Continental Breakfast

7:30 A.M. Candidacy Considerations for Movement Disorders Surgery -

Shannon Anderson, MPAS, PA-C

7:45 A.M. Target Selection for Movement Disorder Surgery - Delaram Safarpour, M.D.

8:00 A.M. Asleep DBS Without MER – Kim Burchiel, M.D.

8:15 A.M. Break / Questions

8:45 A.M. Physiologic Guided DBS – Andres Lozano, M.D., Ph.D.

9:00 A.M. Awake DBS without MER – Erika Petersen, M.D.

9:15 A.M. Complications of DBS – Zvi Israel, M.D., Ph.D.

9:30 A.M. DBS for Epilepsy – Kai Miller, M.D., Ph.D.

9:45 A.M Break / Questions

10:00 A.M. Psychoaffective Brain Pathways – Sameer Sheth, M.D., Ph.D.

10:15 A.M. Using Sensing for Programming in Movement Disorders - Adolfo Ramirez-Zamora M.D.

10:30 A.M. Troubleshooting Programming in DBS – Joohi Jimenez-Shahed, M.D.

10:45 A.M. Closed-loop/Adaptive DBS - Kelly Foote, M.D.

11:00 A.M. Break / Questions

11:15 A.M. CNS Ablation in Movement Disorders - Zeiad Fayed, M.D., Ph.D.

11:30 A.M. Focused Ultrasound for Movement Disorders - Daniel Cleary, M.D., Ph.D.

11:45 A.M. New Indications for Focused Ultrasound in Neurosurgery – Vibhor Krishna, M.D.

12:00 P.M. Lunch

12:30 P.M. Lunch + Panel Discussion: DBS vs. Focused Ultrasound, 30 mins (Safarpour, Cleary, Burchiel)

1:00 P.M. Peripheral Nerve Stimulation for Pain – Konstantin Slavin, M.D.

1:15 P.M. Stimulation of the PSA for Tremors – Atilla Yilmaz, M.D.

1:30 P.M. Cadaver Lab Pre-teaching - Ahmed Raslan, M.D.

2:00 P.M. Break / Transition to Lab

Lab Session – VirtuOHSU

1:00 P.M. (Neurology) DBS Planning & Programing for Movement Disorders (Anderson, Ramirez-Zamora, Safarpour, Jimenez-Shahed)

2:15 P.M. Neurosurgery labs:

NeuroPace/ROSA Robot (Kinsman, Ko, Raskin, Oliveria)

ClearPoint Neuro (Burchiel, Cleary, Lipson, Oliveria)

Brainlab (Foote, Fayed, Ben-Haim, Oliveria)

Globus / Robotic SEEG (Kinsman, Ko, Raskin)

Alpha Omega Engineering MER Unit (Cleary)

6:30 P.M. - Course adjourns