ADVANCES IN FUNCTIONAL NEUROSURGERY
FRIDAY, AUGUST 3, 2018

ROOM 505 E/W
JORDAN MEDICAL EDUCATION CENTER
PHILADELPHIA, PA

7:30-8:00 AM Registration & Breakfast

8:00-8:10 AM Welcome
H. Isaac Chen, MD
Assistant Professor of Neurosurgery
Perelman School of Medicine
University of Pennsylvania
Staff Neurosurgeon
VA Medical Center
Philadelphia, PA

Timothy Lucas, MD, PhD
Assistant Professor of Neurosurgery
Perelman School of Medicine
University of Pennsylvania
Philadelphia, PA

NEUROMODULATION

8:10-8:35 AM Focused Ultrasound for the Treatment of Movement Disorders
Gordon Baltuch, MD, PhD
Professor of Neurosurgery
Perelman School of Medicine
University of Pennsylvania
Philadelphia, PA

8:35-9:00 AM Pediatric Epilepsy/Functional: Not Just Little Adults
Benjamin Kennedy, MD
Assistant Professor of Neurosurgery
Perelman School of Medicine
University of Pennsylvania
Philadelphia, PA

9:00-9:25 AM Short Timescale Biomarkers of Parkinson’s Disease
Wael Asaad, MD, PhD
Associate Professor of Neurosurgery
Brown University
Providence, RI

9:25-9:50 AM Computational Modeling of Cortical Stimulation
William S. Anderson, MA, MD, PhD
Associate Professor of Neurosurgery
Johns Hopkins Medicine
Baltimore, MD
NEW INDICATIONS AND TREATMENT MODALITIES

10:20-10:45 AM  Advanced Imaging in Deep Brain Stimulation  
Chengyuan Wu, MD, MSBmE  
Assistant Professor of Neurosurgery  
Thomas Jefferson University  
Philadelphia, PA

10:45-11:10 AM  Focused Ultrasound for Epilepsy  
Travis Tierney, MD, DPhil  
Director of Neurosurgery  
Sperling Neurosurgery Associates  
Miami, FL

11:10-11:35 AM  Global Brain Dynamics of Coma and Consciousness  
Charles Mikell, MD  
Assistant Professor of Neurosurgery  
SUNY Stony Brook  
Stony Brook, NY

11:50-1:00 PM  Lunch/Discussion of direction of ASSFN led by Dr. Joseph Niemat

EPILEPSY

1:00-1:25 PM  RNS: The University of Pennsylvania Experience  
Danielle Becker, MD  
Assistant Professor of Neurology  
Perelman School of Medicine  
University of Pennsylvania  
Philadelphia, PA

1:25-1:50 PM  RNS Patient Interview  
Danielle Becker, MD

1:50-2:15 PM  Multimodal Network Analyses to Improve Epilepsy Surgery  
Dario J. Englot, MD, PhD  
Assistant Professor of Neurosurgery, Radiology, and Biomedical Engineering  
Vanderbilt University  
Nashville, TN

2:15-2:40 PM  Targeting Neural Networks for the Treatment of Epilepsy  
Jason L. Gerrard, MD, PhD  
Assistant Professor of Neurosurgery  
Yale University  
New Haven, CT
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<th>Time</th>
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<tr>
<td>2:40-3:00 PM</td>
<td>Discussion</td>
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<td>3:00-3:25 PM</td>
<td>Break</td>
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<td>3:25-3:45 PM</td>
<td><strong>EMERGING TECHNOLOGIES</strong></td>
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<td><strong>Novel Robotic Therapies for Epilepsy</strong></td>
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<td><strong>Joseph S. Neimat, MD</strong></td>
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<td>Professor &amp; Chair of Neurosurgery</td>
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<td>3:45-4:05 PM</td>
<td><strong>Using Human Cerebral Organoids to Repair Brain Circuitry</strong></td>
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<td><strong>H. Isaac Chen, MD</strong></td>
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<td>4:05-4:25 PM</td>
<td><strong>Sensory Brain-computer Interfaces</strong></td>
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<td><strong>Timothy Lucas, MD, PhD</strong></td>
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<td>4:25-5:00 PM</td>
<td>Discussion</td>
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