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BROWN
Alpert Medical School

Jointly Provided By
**Warren Alpert Medical School of Brown University
and the Department of Neurosurgery**

Friday, August 25, 2017

Warren Alpert Medical School of Brown University | Providence, RI

Program Description

This CME course is designed to provide a forum for the discussion and evaluation of new approaches for neurological disorders potentially treated using neurosurgical and neuromodulatory techniques, and to describe recent experience with existing techniques. The goal is to provide surgeons and non-surgeons with the understanding necessary to convey existing and near-term potential options to patients, and to foster collaborations among attendees to investigate and further develop effective techniques and technologies for the benefit of our patients.

Target Audience

Physicians, Residents, Fellows, Researchers, & Students specializing in Neurosurgery, Neurology, Neuroscience, Neuro-engineering, Neuro-radiology, and Psychology.

Learning Objectives

At the conclusion of this activity, participants should be able to:

- Describe the available neurosurgical tools, techniques and approaches for movement disorders.
- Compare different approaches to the treatment of medically-intractable epilepsy.
- Understand the potential application of neurosurgical techniques to intractable psychiatric diseases.
- Outline currently active areas of research in the field and the expected near-term application to patient care.

Competencies Areas

ABMS: Patient Care & Procedural Skills | Medical Knowledge | Practice-based Learning and Improvement

IOM: Provide Patient-Centered Care | Work Within Interdisciplinary Teams | Employ Evidenced-Based Practice

Program

<p>7:30–8:00 AM</p> <p>8:10–8:30</p> <p>8:35–8:55</p> <p>9:00–9:20</p> <p>9:25–9:45</p> <p>9:50–10:05</p> <p>10:05–10:20</p> <p>10:20–10:40</p> <p>10:45–11:05</p> <p>11:10–11:30</p> <p>11:35–11:50</p>	<p>Registration and Breakfast</p> <p><u>EPILEPSY</u></p> <p>Distal Brain Network Effects of Seizures in Surgical Epilepsy Dario J. Englot, MD, PhD</p> <p>Contribution of Diffuse vs. Focal Injury to the Development of Epileptiform Activity in Swine Models of TBI Han-Chiao Isaac Chen, MD</p> <p>Neural Networks in Epilepsy and Therapeutic Modulation Jason L. Gerrard, MD, PhD</p> <p>Single Unit Recordings From the Human Cortex During Memory Retrieval Kareem A. Zaghloul, MD, PhD</p> <p>General Discussion</p> <p>Break</p> <p><u>THE ART OF THE LESION</u></p> <p>Gamma Knife Capsulotomy for OCD: Evolution and Current Practice Sameer A. Sheth, MD, PhD</p> <p>Neuroimaging Correlates of Clinical Change in Anterior Capsulotomy for Intractable OCD Nicole C. McLaughlin, PhD</p> <p>Focused Ultrasound: Special Applications in Pediatric Neurosurgery Travis S. Tierney, MD, PhD</p> <p>General Discussion</p>	<p>11:50–1:00 PM</p> <p>1:00–1:20</p> <p>1:25–1:45</p> <p>1:50–2:10</p> <p>2:15–2:35</p> <p>2:40–3:00</p> <p>3:05–3:20</p> <p>3:20–3:45</p> <p>3:45–4:05</p> <p>4:10–4:30</p> <p>4:35–4:55</p> <p>5:00–5:30</p> <p>5:30 PM</p>	<p>Lunch</p> <p><u>NEUROMODULATION</u></p> <p>Development of Phase-Dependent Stimulation Techniques William S. Anderson, MA, MD, PhD</p> <p>Leveraging Biophysics to Design Rational Neuromodulation Protocols Shane Lee, PhD</p> <p>Rational Design of Closed-Loop Neuromodulation for Parkinson’s Disease Wael Asaad, MD, PhD</p> <p>Deep Brain Stimulation for Hypertension: A Proof-of-Concept Study in Five Patients Jonathan Miller, MD</p> <p>Cognitive Performance in Motor Disease and Elite Athleticism Joseph S. Neimat, MD</p> <p>General Discussion</p> <p>Break</p> <p><u>NEUROENGINEERING</u></p> <p>Re-Wiring the Nervous System, Without Wires David A. Borton, PhD</p> <p>Sensor-Brain Interfaces Timothy H. Lucas, Jr., MD, PhD</p> <p>BrainGate: Toward Restoring Communication and Mobility Leigh R. Hochberg, MD, PhD, FANA, FAAN</p> <p>General Discussion</p> <p>Adjourn</p>
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Faculty

William S. Anderson, MA, MD, PhD

Associate Professor of Neurosurgery
The Johns Hopkins University School of Medicine
Associate Professor of Biomedical Engineering
Brain Stimulation Center | Epilepsy Center |
Parkinson's Disease and Movement Disorders Center
The Johns Hopkins Hospital | Baltimore, MD

Wael Asaad, MD, PhD (Course Director)

Assistant Professor of Neurosurgery and Neuroscience
Warren Alpert Medical School of Brown University
Rhode Island Hospital & The Miriam Hospital | Providence, RI

David A. Borton, PhD

Assistant Professor of Biomedical Engineering
Brown University | Providence, RI

Han-Chiao Isaac Chen, MD

Assistant Professor of Neurosurgery
Perelman School of Medicine, University of Pennsylvania
Philadelphia, PA

Dario J. Englot, MD, PhD

Assistant Professor of Neurological Surgery & Biomedical Engineering
Surgical Director of Epilepsy
Vanderbilt University Medical Center | Nashville, TN

Jason L. Gerrard, MD, PhD

Assistant Professor of Neurosurgery and of Neuroscience
Yale Medicine | Chief, Functional Neurosurgery
Chief, Trauma Neurosurgery
Yale New Haven Hospital | New Haven, CT

Leigh R. Hochberg, MD, PhD, FANA, FAAN

Professor of Engineering | Laboratory for Restorative Neurotechnology
Brown Institute for Brain Science | Brown University
Director, Center for Neurorestoration and Neurotechnology
Providence VA Medical Center | Providence, RI
Director, Center for Neurotechnology and Neurorecovery
Massachusetts General Hospital | Boston, MA

Shane Lee, PhD

Postdoctoral Research Associate in Neuroscience
Warren Alpert Medical School of Brown University | Providence, RI

Timothy H. Lucas, Jr., MD, PhD

Assistant Professor of Neurosurgery
Center for Neuroengineering and Therapeutics
Perelman School of Medicine
University of Pennsylvania | Philadelphia, PA

Nicole C. McLaughlin, PhD

Assistant Professor of Psychiatry & Human Behavior (Research)
Warren Alpert Medical School of Brown University
Butler Hospital | Providence, RI

Jonathan Miller, MD

Associate Professor of Neurological Surgery
School of Medicine, Case Western Reserve University
George R. and Constance P. Lincoln Endowed Chair
Director, Functional and Restorative Neurosurgery University
Hospitals Cleveland Medical Center
Associate Director of Clinical Affairs
University Hospitals, Cleveland FES Center | Cleveland, OH

Joseph S. Neimat, MD

Associate Professor of Neurological Surgery
Chair, Neurological Surgery
University of Louisville Hospital | Louisville, KY

Sameer A. Sheth, MD, PhD

Assistant Professor of Neurological Surgery
Columbia University College of Physicians and Surgeons
Director and Founder
Functional & Cognitive Neurophysiology Laboratory
Columbia University Medical Center | New York, NY

Travis S. Tierney, MD, PhD

Pediatric Neurosurgeon
Nicklaus Children's Hospital | Miami, FL

Kareem A. Zaghoul, MD, PhD

Primary Investigator, Functional & Restorative Neurosurgery Unit
National Institute of Neurological Disorders & Stroke | Bethesda, MD

Registration Information

Register online at: <http://tinyurl.com/BrownCMEreg>

Conference Location and Parking

Warren Alpert Medical School of Brown University
222 Richmond Street, Providence, RI 02912

Parking will be available in the parking garage connected to the
Medical Building, 333 Eddy Street on Google Maps.

Hotel Accommodations

The Omni Providence Hotel

1 West Exchange Street, Providence, RI 02903

A room block has been reserved with a special conference rate of
\$169.00 plus 13% sales taxes at The Providence Omni Hotel. To
make a reservation, please contact the hotel directly no later than
August 7th via phone at 1-800-THE-OMNI and reference "Brown
Neurosurgery" to ensure the rate.



Notify the Brown CME Office in writing at least two weeks prior
to the conference to request reasonable accommodations.

Accreditation

This activity has been planned and implemented in accordance with
the accreditation requirements and policies of the
Accreditation Council for Continuing Medical Education
(ACCME) through the joint providership of the Warren Alpert
Medical School of Brown University and Department of
Neurosurgery at Rhode Island Hospital. The Warren Alpert
Medical School of Brown University is accredited by the ACCME to
provide continuing medical education for physicians.

Credit Designation

Physicians: The Warren Alpert Medical School of Brown
University designates this live activity for a maximum of 6.25
AMA PRA Category 1 Credits[™]. Physicians should claim only the
credit commensurate with the extent of their participation in the
activity.

For More Information, Contact the Brown CME Office

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