



# THE SOCIETY OF NEUROLOGICAL SURGEONS

## RESEARCH UPDATE IN NEUROSCIENCE FOR NEUROSURGEONS DIRECTORS AND FACULTY OCTOBER 23-30, 2010

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**Lecture Title: "Mechanisms of Cell Death in Neurologic Diseases"**

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**Laboratory Experience: "Squid Lab"**

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**Lecture Title: “Philosophy of Science and Neurosurgery” and “Translational and Integrational Research: Cavernous Angioma as a Paradigm”**

**Henry Brem, M.D.**

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**Lecture Title: “Brain Tumor Therapy”**

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**Lecture Title: “Research and Balance in an Academic Neurosurgery Career. Getting started: How do I Write a Grant or Paper?”**

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**Larry Benowitz, Ph.D.**

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**Lecture Title: “Rewinding the Injured CNS”**

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**Lecture Title: “ Science, Clinical Practice, and the Quest of Academic Excellence”**

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**Lecture Title: “On The Evolution of an Electronic Species”**

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**Lecture Title: “Acute CNS Injury and Chronic Neurodegenerative Disease: Common Pathways and Therapeutic Targets”**

**E. Antonio Chiocca, M.D., Ph.D.**

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**Lecture Title: “Translational Therapeutics for Brain Tumors: From the Lab to the Clinic and Back”**

**C. Edward Dixon, Ph.D.**

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**Lecture Title: “Traumatic Brain Injury: Lessons Learned from the Bench”**

**V. Reggie Edgerton, Ph.D.**

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**Lecture Title: “Activity Dependent Mechanisms that Enhance Sensorimotor Function Following Spinal Cord Injury”**

**James Galbraith, Ph.D.**

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**Laboratory Experience: “Squid Lab”**

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**Lecture Title: “Optical Imaging of Epileptiform Activity: From Brain Slices to the Operating Room”**

**Robert E. Harbaugh, MD, FACS, FAHA**

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**Lecture Title: “Biostatistics and Clinical Trial Design”**

**Leigh Hochberg, M.D., Ph.D.**

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**Lecture Title: “Intracortically-based Brain-Computer Interfaces”**

**Sean Lawler, Ph.D.**

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**Lecture Title: “MicroRNAs – Key Players in CNS Biology and Tumorigenesis”**

**Jeff W. Lichtman, M.D., Ph.D.**

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**Lecture Title: “Connectomics”**

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**Lecture Title: “Neurovascular Mechanisms of Injury and Repair after Stroke”**

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**Lecture Title: “Adjusting the Activity in Human Brain Circuits”**

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**Lecture Title: “Signals and Systems in the Human Brain: Water and Electricity”**

**Professor Richard I. Morimoto, Ph.D.**

Bill and Gayle Cook Professor of Biology, Professor of Biochemistry, Molecular Biology and Cell Biology, and Director of the Rice Institute for Biomedical Research at [Northwestern University](http://northwestern.edu).  
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**Lecture Title: “The Stress of Misfolded Proteins in Aging and Neurodegenerative Disease”**

**Edward H. Oldfield, M.D.**

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**Lecture Title: “Von Hippel-Lindau Disease: Studies on Biology, Natural History, Patient Management in a Familial Tumor Suppressor Syndrome”**

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**Lecture Title: “Medulloblastoma - from a Difficult Past to a Promising Future”**

**W. Mark Saltzman, Ph.D.**

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**Lecture Title: “Polymer Nanoparticles for Controlled and Targeted Delivery of Agents to the Brain”**

**Jerry Silver, Ph.D.**

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**Lecture Title: “Functional Regeneration Beyond the Glial Scar”**

**Marc Simard, M.D., Ph.D.**

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Professor of Pathology, University of Maryland

Professor of Physiology, University of Maryland

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**Lecture Title: “The SUR1-Regulated NC(Ca-ATP) Channel – a New Player in CNS Ischemia?”**

**Peter L. Strick, Ph.D.**

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**Lecture Title: “Basal Ganglia and Cerebellar 'Loops' with the Cerebral Cortex: Circuits for Movement, Cognition and Affect”**

**Leslie M. Thompson, Ph.D.**

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**Lecture Title: “Epigenetics in Huntington’s Disease: Implication for Therapeutics”**

**Junying Yuan, Ph.D.**

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**Keynote Speaker Lecture Title: “Regulation of Cell Death: From Apoptosis to Necroptosis”**