



# THE SOCIETY OF NEUROLOGICAL SURGEONS

## RESEARCH UPDATE IN NEUROSCIENCE FOR NEUROSURGEONS DIRECTORS AND FACULTY OCTOBER 17-24, 2009

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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”**

**Robert Dempsey, M.D.**

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

**FACULTY**

**Martin M. Bednar, M.D., Ph.D.**

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**Lecture Title: Academic-Pharma Collaborations: A Critical Alliance and Neurorestoration: The Next Horizon”**

**Larry Benowitz, Ph.D.**

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

**Edward Benzel, M.D.**

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

**Kerry Bernstein, CPT(VT)**

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

**Richard Born, M.D.**

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**Lecture Title: “Modularity and Integration in the Primate Visual Cortex”**

**Mark P Burns, Ph.D.**

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

**E. Antonio Chiocca, MD, PhD**

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

**E. Sander Connolly, Jr., M.D.**

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**Lecture Title: “Neuroinflammation/Adhesion Molecules”**

**Patricia D’Armore, Ph.D.**

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Senior Scientist at the Schepens Eye Research Institute.  
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**Lecture Title: “Angiogenesis and Neoplasia”**

**Peter Dirks, M.D., Ph.D.**

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**Lecture Title: “Probing the Relationship between Stem Cells and Brain Cancer”**

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

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

**Michael Fehling, M.D., Ph.D.**

Professor in the Department of Surgery

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Director of the Spinal Program at the Toronto Western Hospital

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**Lecture Title: “Repair and regeneration of the injured spinal cord: from molecule to man”**

**James Galbraith, Ph.D.**

**National Institutes of Health**

**Laboratory Experience: “Squid Lab”**

**Murat Gunel, M.D.**

Professor of Neurosurgery and Neurobiology

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**Lecture Title: “Molecular Genetics and Biology of Intracranial Aneurysms and Cavernous Malformations”**

**Michael M. Haglund, Ph.D., M.D.**

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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”**

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**Lecture Title: “Connectomics”**

**Andres M Lozano, BMedSci, BSc, FRCSC, MD, PhD**

**Senior Scientist**

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

**Luis F. Parada, Ph.D.**

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**Lecture Title: “Gliomas in Mice”**

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**Lecture Title: "History of the MBL"**

**Lori Setton, Ph.D.**

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**Lecture Title: "Tissue and Cellular Engineering Approaches to Regeneration and Repair of the Intervertebral Disc"**

**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 Physiology, University of Maryland  
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**Lecture Title: "The SUR1-Regulated NC(Ca-ATP) Channel – a New Player in CNS Ischemia?"**

**David Sinclair, Ph.D.**

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**Lecture Title: "Genes and Small Molecules that Extend Lifespan"**