#### **THE SCHMITT FOUNDATION**

The Kilian J. and Caroline F. Schmitt Foundation, in cooperation with the University of Rochester, supports a new research program for investigators interested in the nervous system and its disorders. The Program, now in its third year, is specifically targeted toward interdisciplinary research that crosses traditional boundaries. The Schmitt Program on Integrative Brain Research (SPIBR) supports new research projects, postdoctoral fellows, visiting scientists, and colloquium professors that fall within three areas of focus:

- 1. Learning, Plasticity, and Memory
- 2. The Senses and Behavior
- 3. The Neurobiology of Aging and Disease

Each of these topics is well represented across the neuroscience community. However, departmental, institutional, and disciplinary boundaries often prevent investigators studying the same topic at different levels of inquiry from developing collaborative or integrative research programs. The Schmitt Program is intended to catalyze and promote new directions of neuroscience research within the three target areas, and to encourage interdisciplinary and collaborative research, spanning cognitive through systems to cellular and molecular approaches.

The SPIBR is directed by an *Executive Committee* comprised of Drs. Gary Paige (Chair), Howard Federoff, and Elissa Newport in collaboration with the Board of the Schmitt Foundation. A *Review Committee*, comprised of Drs. Ernest Nordeen (Chair), William O'Neill, and Harris Gelbard, representing the three areas of focus, govern the selection process for the support mechanisms described above. The Program is administered through the Department of Neurobiology and Anatomy.

#### **SYMPOSIUM SCHEDULE**

Sept. 28, 2006 - Keynote Address - John W. McDonald, MD. PhD

4-00 PM

5:30-6:30PM

4.00 FW	Sept. 20, 2000 - Reynote Address - John W. McDonald, MD, Fild
7:45-9:00AM 9:00-9:45AM	Continental Breakfast (Flaum Atrium)  Mark Noble, PhD - Introduction and Overview of the Symposium;  Biology and Physiology of CNS Progenitors in Respect to CNS Repair
9:50-10:30AM	<b>Steven Goldman, MD, PhD</b> – Strategies for Motor Neuron-Directed Therapies
10:35-10:55AM	Break
11:00-Noon	Marie Filbin, PhD – Physiological and Molecular Approaches to
	Enhancing CNS Regeneration
Noon-1:00PM	Lunch (Flaum Atrium)
1:05-1:45PM	<b>Maiken Nedergaard, MD, DMSc.</b> – Purinergic Signaling in Spinal Cord Injury
1:50-2:50PM	Stephen Davies, PhD – Suppressing Scar Formation and Bridging Spinal Cord Injuries: New Solutions to Old Problems
2:55-3:15PM	Break (Flaum Atrium)
3:20-4:00PM	Roman Giger, PhD – Molecular Analysis of Inhibitors of CNS Regeneration
4:05-5:05PM	Neville Hogan, PhD – Physical Therapy by Robots: A Critical

Component of Future Restorative Strategies

Faculty Reception (Forbes Mezzanine)

# SCHMITT PROGRAM ON INTEGRATIVE BRAIN RESEARCH SYMPOSIUM

SPINAL CORD INJURY RESEARCH: MOLECULAR AND CELLULAR MECHANISMS TO PROMOTE NEURONAL GROWTH AND GLIAL RECONSTRUCTION

### September 28<sup>th</sup> and 29<sup>th</sup>, 2006 Class of '62 Auditorium



Major advancements in the understanding of the cellular mechanisms underlying CNS Development, damage and repair are dramatically altering our ability to understand a multitude of fundamental problems in neurobiology. This Symposium will provide a focused presentation on a spectrum of advances that are receiving considerable attention at the national and international levels.



## **Visiting Faculty**



John W. McDonald, MD.



Kennedy Krieger Institute



Steven Davies, PhD Baylor College



Marie Filbin, PhD Hunter College



Neville Hogan, PhD MIT

**Director: International Center for Spinal Cord Injury** 

Dr. McDonald's research is increasingly focusing on approaches to regeneration and restoration of function in spinal cord injury and other disorders of paralysis using activity-base therapies. Such focus includes other regenerative approaches that have the potential of being translated into human therapies in the near-term.

**Suppressing Scar Formation and Bridging Spinal Cord Injuries: New Solutions to Old Problems** 

Physiological and Molecular Approaches to **Enhancing CNS Regeneration** 

Physical Therapy by Robots: A Critical **Component of Future Restorative Strategies** 

# **URMC Faculty**



Roman Giger, PhD



Maiken Nedergaard, MD, **DMSc** 



Mark Noble, PhD

**Molecular Analysis of Inhibitors of CNS** Regeneration

\*Symposium Organizer

**Purinergic Signaling in Spinal Cord Injury** 



Introduction and Overview of the Symposium; Biology and Physiology of CNS **Progenitors in Respect to CNS** Repair.

\*Symposium Organizer



Steven Goldman, MD, PhD

**Strategies for Motor Neuron-Directed Therapies**