7TH ANNUAL NEUROSCIENCE RESEARCH DAY
THE NEUROSCIENCE OF CONSCIOUSNESS

Friday, February 20, 2009, 7:45am - 3:45pm

LOCATION
Eleanor N. Dana Conference Center, The University of Toledo
Health Science Campus, 3110 Glendale Avenue, Toledo, Ohio 43614

INTRODUCTION
The Departments of Neurology and the Neurosciences and Neurological Disorders Track of the Biomedical Sciences Ph.D. Program at The University of Toledo College of Medicine and the Northwest Ohio Chapter of the Society for Neuroscience are pleased to host the 7th Annual Neuroscience Research Day. This meeting will be a forum for the latest in basic and clinical neuroscience research across northwest Ohio and southeast Michigan. We encourage neuroscientists, physicians, nurses, allied health professionals, residents, graduate, professional and undergraduate students to attend.

The theme for this year’s program will be “The Neuroscience of Consciousness.” Our distinguished guest speaker this year is Dr. Rodolfo R. Llinás, Chair of Physiology at NYU, who will present a talk entitled “The Neuronal Basis of Thalamocortical Relations: A Basis for Consciousness?” Four additional faculty from The University of Toledo College of Medicine and Bowling Green State University will present their research on brain mechanisms of sensory processing, wakefulness and attention. In addition, a poster session and a platform session will cover the broad range of neuroscience research across the region. Come find out what’s happening in neuroscience in northwest Ohio!
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
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<tbody>
<tr>
<td>7:45-8:00AM</td>
<td>Registration &amp; Continental Breakfast</td>
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<tr>
<td>8:00-8:05</td>
<td>Welcome and Introductions</td>
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<td></td>
<td><em>L. John Greenfield, Jr., M.D, Ph.D.</em></td>
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<tr>
<td>8:05-8:55</td>
<td>Menopausal Insomnia - Sex Hormone Effects on Sleep and Metabolism</td>
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<td><em>Raymond E. Bourey, MD., FACP, FACE, FAASM</em></td>
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<td>8:55-9:45</td>
<td>Effects of Limb Loss-Associated Pain on Cortical Structure</td>
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<td><em>John T. Kane, M.D.</em></td>
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<td>9:45-10:20</td>
<td>Exhibitors</td>
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<td><em>Atrium</em></td>
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<tr>
<td>10:20-11:10</td>
<td>Inhibitory Gating and the Brain:</td>
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<td>Single Units and Event-Related Potentials</td>
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<td><em>Howard Casey Cromwell, Ph.D.</em></td>
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<td>11:10-12:10</td>
<td>Neuronal Basis of Thalamocortical Relations:</td>
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<td>A Basis for Consciousness?</td>
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<td><em>Rodolfo R. Llinás, Ph.D., M.D.</em></td>
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<td>12:10-1:30</td>
<td>Lunch and Exhibits</td>
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<td><em>Atrium</em></td>
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<tr>
<td>1:30-2:20</td>
<td>Neurobiology of Attention and Timing</td>
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<td><em>J. Devin McAuley, Ph.D.</em></td>
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<td>2:20-2:40</td>
<td>Platform Session I</td>
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<td>2:40-3:00</td>
<td>Platform Session II</td>
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<tr>
<td>3:00-3:20</td>
<td>Platform Session III</td>
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<td>3:20-3:30</td>
<td>Summary, Evaluation and Final Remarks</td>
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<td><em>L. John Greenfield, Jr, M.D.,Ph.D.</em></td>
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<tr>
<td>3:30PM</td>
<td>Adjournment</td>
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**ACCREDITATION**

The University of Toledo and St. Vincent Mercy Medical Center are accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

The University of Toledo and St. Vincent Mercy Medical Center designates this educational activity for a maximum of 4.50 *AMA PRA Category 1 Credit(s).* Physicians should only claim credit commensurate with the extent of their participation in the activity.

The University of Toledo is an approved provider of continuing education units for psychologists. 4.50 hours will be approved.
7TH ANNUAL NEUROSCIENCE RESEARCH DAY, FEBRUARY 20, 2009

Name__________________________________________________________

Address_____________________________________________________________________

City __________________________ State _______ Zip ______________

County ________________________ Telephone________________________

Specialty/Profession_________________________________________ Credentials________________________________

To receive a receipt and confirmation an e-mail address is required: __________________________________________

Please advise us of any special needs or meals_________________________

Registration Fees: (Check one)

☐ Professionals (seeking CME credit).....$45  ☐ All Others.....$25

☐ Students/Residents...............................$15

Amount Enclosed:________________________

Please charge $___________ to my: (check one) (     ) Master Card (     ) Visa (     ) Discover

Number ________________________________ Expiration Date _____________

Signature__________________________________

Please make check payable to CME-UT #110419

Mail this form to: Center for Continuing Medical Education

MS #1181, The University of Toledo, Health Science Campus

3000 Arlington Avenue, Toledo, OH 43614-2598

REGISTRATION INFORMATION

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<th>Registration Fees</th>
<th>OBJECTIVES</th>
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<tr>
<td>Professionals seeking CME credit................ $ 45</td>
<td>By the end of this workshop participants will be able to:</td>
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<tr>
<td>All Others............................................... $ 25</td>
<td>• Discuss direct and indirect effects of estrogen and progesterone on central nervous system control of metabolism.</td>
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<tr>
<td>Residents/Students ...................................... $ 15</td>
<td>• Describe the effects of limb loss-associated pain on cortical structure as measured by functional MRI.</td>
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Deadline for registration is Wednesday, February 11, 2009. We cannot guarantee availability after this date.

Tuition Includes
- All registration and course materials
- Continental breakfast, breaks and boxed lunch
- Continuing education credit certificate

Cancellation Policy
Up to $10 will be retained for administrative services on any cancellation made prior to February 11, 2009. No refunds will be made thereafter.

To Register
- Fax 419-383-6602
- Online: cme.utoledo.edu
- Go to Upcoming Events
- By Mail: Center for Continuing Medical Education
  Mail Stop # 1181
  The University of Toledo
  3000 Arlington Ave.
  Toledo, Ohio 43614

By the end of this workshop participants will be able to:

- Discuss direct and indirect effects of estrogen and progesterone on central nervous system control of metabolism.

- Describe the effects of limb loss-associated pain on cortical structure as measured by functional MRI.

- Discuss how subcortical circuits alter sensory event-related potentials in the rat brain.

- Relate thalamocortical physiology to the emergence of consciousness in the human brain.

- Describe how neuronal timing mechanisms affect attention to auditory and other sensory information.

Accommodations
Should you require overnight accommodations, please contact the Toledo Hilton Hotel located on the Health Science Campus at 419-381-6800.
SYMPOSIUM DIRECTOR

L. John Greenfield, Jr., M.D., Ph.D.
Professor of Neurology and Physiology/Pharmacology
Vice Chair for Research, Department of Neurology
Director, MD/PhD Program
Associate Director, Comprehensive Epilepsy Program
The University of Toledo

GUEST FACULTY

Howard Casey Cromwell, Ph.D.
Department of Psychology
Bowling Green State University
Bowling Green, OH

Rodolfo R. Llinás, Ph.D., M.D.
Thomas and Suzanne Murphy Professor of Neuroscience
Chairman, Department of Physiology and Neuroscience
New York University School of Medicine
New York, NY

J. Devin McAuley, Ph.D.
Associate Professor
Director, JP Scott Center for Neuroscience Mind & Behavior
Department of Psychology
Bowling Green State University
Bowling Green, OH

THE UNIVERSITY OF TOLEDO FACULTY

Raymond E. Bourey, M.D, FACP, FACE, FAASM
Sleep Medicine and Metabolism
Interim Chief, Division of Endocrinology
Division of Pulmonary, Critical Care and Sleep Medicine
Center for Diabetes and Endocrine Research

John T. Kane, M.D.
Associate Professor, Vice Chief of Staff, Department of Orthopaedic Surgery
Service Chief, Inpatient Rehabilitation Services

Please send abstracts and any questions about scheduling to:
utoledoneuroresearchday@gmail.com

Brochure, schedule and poster (PDF format) can be found at:
www.utoledo.edu/med/grad/biomedical/neuro/researchday.html