

NEUROSCIENCE NEWSLETTER

PROGRAM NEWS

NEW PIN STUDENTS:

We would like to welcome the following students to the Neuroscience Program:

Student's Name	Degree	Supervisor	Department
Yuwen Hung	MA	Margot Taylor	Psychology
Dominique Vuvan	PhD	Mark Schmuckler	Psychology
Fiona Wong	PhD	Elise Stanley	Physiology

UPCOMING PIN DISTINGUISHED LECTURES

Please check <http://www.utoronto.ca/neurosci> for updates.

Wednesday, February 6, 2008 4pm

UWE HEINEMANN, Johannes Muller Center of Physiology, Berlin, Germany
"Cholinergic switching of hippocampal working modes"
Medical Sciences Building, Rm 3153

The Seventh Sackler Distinguished Visiting Neuroscientist
Tuesday, February 26, 2008 3pm

PATRICIA GASPAS, Institut du Fer a Moulin, Paris
"How serotonin shapes neural circuits during critical periods in development"
Medical Sciences Building, Rm 3154

Thursday, March 6, 2008 4pm

FRED GAGE, Salk Institute, California
Title: TBA
Medical Sciences Building, Rm 3153

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Program Committee Members

J.O. Dostrovsky / PHYSIOLOGY (Dir.)	J. Peever / CELL AND SYSTEMS BIOLOGY.
W.M. Burnham / PHARMACOLOGY	J. Roder / MOL. MED. GENETICS
P. Carlen / INST. MED. SCIENCE	B.J. Sessle / DENTISTRY
L.F. De Nil / SPEECH LANG. PATHOL.	M. Shoichet / INST. BIOMAT. & BIOMED. ENG.
Z. Jia / PHYSIOLOGY	W. Trimble / BIOCHEMISTRY
N. Kabani / MEDICAL BIOPHYSICS	J.W. Wells / PHARMACY
M. Lewis / HUMAN DEVELOPMENT AND APPLIED PSYCHOLOGY	J.S. Yeomans / PSYCHOLOGY
S. Nag / LAB. MED. PATHOBIOL.	K. Zabjek / REHAB. SCI.

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Telephone: 416-978-4894 Fax: 416-978-1878

e-mail: p.neuroscience@utoronto.ca.

<http://www.utoronto.ca/neurosci>

Office Hours: Wednesdays - 1:15pm-4:30pm;

Thursdays - 8:45am-5:00pm; Fridays - 8:45am-5:00pm

Friday, April 4, 2008 2pm

ROBERT WENTHOLD, National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Bethesda, Maryland
Title: TBA
Medical Sciences Building, Rm 3153

PIN POSTER DAY - Medical Sciences Building, Stone Lobby

Wednesday, April 30, 2008 Time: TBA

ISABELLE MANSUY, University of Zurich

Title: TBA

Medical Sciences Building, Rm 2172

2008 U of T BRAIN BEE

The Program in Neuroscience is once again hosting a neuroscience competition for High School students and it will take place on Wednesday, February 20, 2008, 1:00-5:00 p.m. in Room 3163 of the Medical Sciences Building, University of Toronto. If you wish to volunteer for this event, please contact the PIN office.

FACULTY NEWS

We are pleased to announce that **Dr. Mark A. Schmuckler** of the Department of Psychology has joined the PIN faculty.

Dr. Schmuckler's research interests:

My research focuses on perceptual-motor development, and on adult musical cognition. In perceptual-motor development my primary interest is in infants' and young toddlers' visual-motor integration, in infants' perceptions of surfaces, self-recognition of body movement, balance control, visually guided locomotion, and spatial orientation. In music cognition my primary research interest involves listeners' perceptions of pitch structure organizations, including the perception of tonality, melodic expectancy, and melodic contour.

Dr. Schmuckler can be reached at: Department of Psychology, UTSC, 1265 Military Trail, Scarborough, ON M1C 1A4. Tel: (416) 287-7417; Fax: (416) 287-7642; e-mail address: marksch@utsc.utoronto.ca.

NOTICE TO GRADUATING STUDENTS

Please notify the PIN office upon your graduation to ensure that you will receive the notation "completed Collaborative Program in Neuroscience" on your degree transcript as well as a separate certificate suitable for framing from the PIN office to indicate that you have completed the program's requirements. Please let the office know the address you wish your certificate sent to and please also send us your thesis title. If you have transferred from a Master's degree to a Ph.D., please notify the PIN office.

OTHER U of T NEUROSCIENCE NEWS

HISTORY OF PSYCHIATRY SEMINAR

Neuroscience: The Next Frontier
Wednesday, February 13, 2008 5:00 pm to 7:00 pm
The Munk Centre, 1 Devonshire Place
Seminar Leader: Dr. James Kennedy
Discussants/Presenters: Drs. James Kennedy, Albert Wong, David Mikulis

During the half-century from 1907-57, the brain was largely missing from psychiatry and the mind was in control. Slowly but empirically, the brain has progressed to find its proper place as the target organ in the medical science of psychiatry. New technologies of brain imaging, molecular genetics, and pharmacology have revolutionized our understanding of ourselves and our mental illnesses. What of the future? Will we visualize the brain telling a lie? Predict who should not be director of a nuclear power plant? Eliminate the circuitry for psychosis, but lose creativity? Our discussion of the past and future of neuroscience in psychiatry will undoubtedly disturb, provoke and stimulate. Dr. James Kennedy, Professor and Head of the Neuroscience Program in the Department of Psychiatry at the University of Toronto, will introduce the seminar with comments

regarding the impact of the powerful technology of molecular genetics in psychiatry. Examples will be given as to how genetic tests are entering psychiatry at this time, and the specific plan that CAMH has to incorporate pharmacogenetics into clinical care in the coming months. Implications of genetic information to society in general will also be addressed. Dr. Albert Wong, Associate Professor of Psychiatry and a new member of the Neuroscience Research Department at CAMH, will explain some recent intriguing developments in neuroscience research and how they may influence our perspective of the human condition in general and psychiatric care in particular. Dr. David Mikulis, Assistant Professor of Medical Imaging at the University of Toronto, will provide an informative update on the impressive advances in technology used to image the brain. In particular he will describe how scientific developments in MRI and related technologies are probing more deeply and precisely into the processes of behaviour that previously we have never been able to visualize. This new ability to observe the 'thinking and feeling' brain will undoubtedly change the way we approach psychiatric conditions. Refreshments and light snacks will be served. Pre-registration is not required.

Visit www.utpsychiatry.ca for the complete list of History of Psychiatry Seminars and for updates on all Centenary events.

SpineFEST - Symposium Forum on Emerging Spinal Technologies Friday, April 18, 2008

SYMPOSIUM SYNOPSIS

SpineFEST™, the Forum for Emerging Spinal Technologies, is a University of Toronto CME symposium focusing on recent advances in spinal translational research. Bridging the gap between fundamental sciences to clinic, this year's symposium will focus on innovative advances for the treatment of early degenerative disc disease, repair/regeneration of the injured spinal cord, and oncological translation. We invite you to share in this symposium that would be of interest to clinicians, scientists and students alike.

Website: <http://events.cmetoronto.ca/website/index/SUR0836>

Email: help-SUR0836@cmetoronto.ca

OTHER NEUROSCIENCE NEWS

UPCOMING SYMPOSIA

**14th Annual Wisconsin Symposium on Emotion
"Emotion, Consciousness and Psychopathology"**
April 17-18, 2008
Monona Terrace, Madison, Wisconsin
Healthemotions.org/symposium

**2008 Annual Centre for Brain and Behaviour Day
Hospital for Sick Children**

"Sleep and Memory"
Thursday, June 5, 2008
The Old Mill, Toronto

**2009 Centre for Brain and Behaviour
Hospital for Sick Children**

International Symposium
"The Paediatric Injured Brain"
July 8, 9, 10, 2009
Toronto, Ontario

UPCOMING COURSE

The 2008 edition of the Frontiers in Neurophotonics Summer School will take place at the Robert-Giffard Research Centre in Quebec City on May 18-24, 2008. It is an opportunity to meet fellow researchers and students from around the world, discuss and discover the latest advances in live cell imaging techniques put in perspective by experimental challenges in the field of neuroscience.

The school will combine tutorials given by experts in photonics and neuroscience while participants will be given the opportunity to perform hands-on experiments involving advanced optical approaches to measure, manipulate and follow molecular events in living neuronal cells.

Topics to be covered include:

- Tracking cell migration and maturation in live brain slices
- Video-rate multimodal imaging in vivo
- Coherent Anti-stokes Raman Scattering microscopy
- Imaging protein trafficking in and out of dendritic spines
- Single membrane receptor tracking
- Fluorescence lifetime approaches
- Photobleaching and Photoactivation techniques

Registration is limited and opened until February 22nd, 2008. More information is available on the website:
<http://www.neurophotonics.ca>.

For additional information, contact Cedric Lopez at:
cedric.lopez@crulrg.ulaval.ca

NEW NEUROSCIENCE PROGRAMS

**New Göttingen Graduate School for Neurosciences and
Molecular Biosciences**

There is a new Göttingen Graduate School for Neurosciences and Molecular Biosciences (GGNB), funded by the German federal and state governments in the framework of the Excellence Initiative to promote top-level research in Germany. The Graduate School is a joint enterprise of six faculties of the University of Göttingen, three Max Planck Institutes and the Leibniz Institute German Primate Center. Twelve doctoral programs are currently united under the roof of

GGNB including the MSc/PhD programs - International Max Planck Research Schools *Molecular Biology* and *Neurosciences*.

The programs accept students with a Master's degree (for PhD programs) or a Bachelor's degree (for MSc/PhD programs) coming from molecular life sciences, biochemistry, neurosciences, medicine, physics, or related fields.

Internet: www.ggnb.uni-goettingen.de
E-mail: ggnb@gwdg.de

New PhD program in Paris

The Paris School of Neuroscience (ENP) is a network of outstanding neuroscience laboratories in Paris area, within major universities and research institutes. It covers all areas of Neuroscience and associated methodologies, from fundamental to clinical and from molecular to cognitive. Pre-PhD and PhD programs are open to highly talented and motivated students, irrespective of their original disciplines.

Pre-PhD - Up to a year of rotations in participating laboratories. This can include a Masters degree.

PhD - Three year program (with possible one year extension).

Training and Courses - Courses in neuroscience and related topics. International conferences and seminars. French and/or English language courses. Individual supervision by a tutor and a thesis committee. Annual retreat with faculty members and guest scientists.

Support and Stipends - Assistance and support for settling in Paris (visa, housing, social security, medical and/or other insurance). Stipends from the ENP and other sources (minimum levels: pre-PhD 1200 Euros/month, PhD 1800Euros/month). Scholarships for attendance to international meetings. Support for periods of training in other laboratories.

Next deadline: March 30, 2008

The Ecole des Neurosciences de Paris (ENP), includes a majority of high profile Neuroscience research laboratories in Paris region. These groups belong to several different research institutes and universities. This network has probably few, if any, equivalent in France or other countries. ENP aims at further improving the research in Neuroscience by fostering interactions and synergy, improving common resources and enhancing visibility of participating research groups.

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POSITIONS AVAILABLE

OVERSEAS

UNIVERSITY OF TORONTO

POSTDOCTORAL POSITION

POSTDOCTORAL POSITION

POSTDOCTORAL POSITION IN NEURODEGENERATION

Centre for Research in Neurodegenerative Diseases, University of Toronto

A highly skilled molecular biologist is required to fill a postdoctoral position at the Centre for Research in Neurodegenerative Diseases (CRND) at the University Toronto to study disease mechanisms in amyotrophic lateral sclerosis (Lou Gehrig's disease). The candidate must hold a Ph.D. in Molecular Biology/Biochemistry or a related discipline and have demonstrated experience in RNA and DNA techniques. An interest in genetics, transgenesis or alternative splicing would be an advantage. Salary will be commensurate with experience. The CRND is recognized both nationally and internationally as a leading centre for the study of neurodegenerative diseases, providing a dynamic and highly interactive environment that promotes career advancement.

Applicants should forward a covering letter, curriculum vitae and contact details of three references to: jan.robertson@utoronto.ca or to Dr. Janice Robertson, Centre for Research in Neurodegenerative Diseases, The Tanz Neuroscience Building, 6 Queen's Park Crescent West, Toronto, Ontario, Canada, M5S 3H2.

CANADA

GRADUATE STUDENT/POSTDOCTORAL POSITION

**Graduate Student / Postdoctoral Fellow: Synaptic Plasticity in Autistic Disorders
McGill University**

Applications are invited for a position that is immediately available to study the disruption of glutamate receptor plasticity in genetic models of Autism. The successful applicant will use a combination of electrophysiology, morphology and imaging techniques with an emphasis on identifying defects in the mechanisms that lead to the insertion of synaptic AMPA-type glutamate receptors. Applicants with prior experience in electrophysiology are preferred, however, training will be provided to motivated individuals with an interest in childhood disorders of neurodevelopment.

Interested students / postdoctoral fellows should send their cv and names of 3 referees to Dr. Bowie for consideration. Contact details are: Email: derek.bowie@mcgill.ca; Tel: (514) 398-1581 Fax: (514) 398-6690.

Lab website: <http://www.medicine.mcgill.ca/pharma/dbowielab>

Post-doctoral position in Paris, France

Starting date: as soon as possible

Application deadline: until post is filled

Duration: up to 3 years

Institution: INSERM, Université Paris 6

Medical center: Institut du Fer à Moulin.

Job Description :

A post-doctoral position is available with immediate effect funded by the European Commission to study the role of serotonin and GABA neurotransmission in the building of brain connexions. The project is part of a multidisciplinary consortium aimed at defining the developmental basis of anxiety disorders.

Studies in the laboratory of Patricia Gaspar will involve the analysis of the heterogeneity of the ascending serotonin systems, using several mouse strains. In vivo and in vitro studies (primary cultures and co-cultures) will be done in parallel. Techniques will involve anatomical tracing, transfections of genes, molecular characterization (immuno, in situ hybridization), and live-cell imaging.

Applicants should have a PHD degree in (developmental) neuroscience. Ideally, they should have prior experience in any of the fields related to the project. Please send your applications or questions preferably by e-mail to [gaspar\[at\]chups.jussieu.fr](mailto:gaspar[at]chups.jussieu.fr). Application should include a CV, a brief statement of research interest including your past experience and names of 2 references.

Contact Information:

Dr Patricia Gaspar, Institut du Fer à Moulin Paris FRANCE

Phone: +33-(0) 1 45 87 61 1; E-mail: [gaspar\[at\]chups.jussieu.fr](mailto:gaspar[at]chups.jussieu.fr)