

# NEUROSCIENCE NEWSLETTER

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Director, UTNP:  
**Michael G. Fehlings MD, PhD**



Director, CPIN:  
**David R. Hampson, PhD**

Planning & Operations: **Alexander A. Velumian, PhD, DSc**

Program Coordinator: **Frazer Howard**

UTNP Administrative Office:

**MP 11-315, Toronto Western Hospital**

Collaborative Program in Neuroscience Office:

**Rm904, Leslie Dan Faculty of Pharmacy, University of Toronto**

Email: [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca) | Telephone: 416-978 8761 Fax: 416-978-8511 | Website: [www.neuroscience.utoronto.ca](http://www.neuroscience.utoronto.ca)

## PROGRAM NEWS

### NEUROSCIENCE POSTER DAY

The 2010 University of Toronto Annual Neuroscience Poster Day was held Wednesday April 14, 2010 in conjunction with David Brooks' Distinguished Lecture: "Imaging inflammation in neurodegenerative diseases"

Congratulations to the five top poster presenters:

- Ava Elahipannah
- Monika Janus
- Graeme Schwindt
- David Wasserman
- Adelaide Yiu

Each was awarded a \$100 gift certificate to the UofT Bookstore and a certificate.

Thank you to all those students who presented and attended. A very special thank you to the faculty and postdocs who volunteered to judge the presentations: Susanne Benseler, Jonathan Dostrovsky, Zhong-Ping Feng, Zheng-Ping Jia, John Kennedy, Myriam Lafreniere-Roula, William MacKay, Jose Nobrega, Ian Rogers, Joanne Rovet, Lorelei Silverman Gavrila, Frances Skinner, Margot Taylor, Vincent Tropepe, Alexander Velumian, Lu-Yang Wang, Jerry Warsh, John Yeomans

### CHANGES TO CPIN REQUIREMENTS APPROVED

After significant consultation with the neuroscience community, changes to the requirements for new PhD students joining the Program in September have been approved by the School of Graduate Studies. Starting in September 2010, all new PhD students will be required to take one of three full year graduate "core" courses to provide students with a solid background in neuroscience fundamentals. This will also enhance the common learning experience and foster a greater sense of community for the diverse range of students.

For further details, please visit the Student section of the UTNP website: [www.neuroscience.utoronto.ca/students](http://www.neuroscience.utoronto.ca/students)

## UTNP CAN2010 TRAVEL AWARDS

Congratulations to the winners of the UTNP 2010 Canadian Neuroscience Meeting Travel Awards. Each will receive \$500 towards their travel to the meeting in Ottawa May 15-18.

Recipient	Pos	Department	Supervisor
Melanie Sekeres	PhD	Physiology	Sheena Josselyn
Angela Roedding	PhD	Pharmacology & Toxicology	Jerry Warsh
Robert Bonin	PhD	Physiology	Beverley Orser
Sakina Rizvi	PhD	Pharmaceutical Sciences	Sidney Kennedy
Sarah Johnson	PhD	Psychology	Suzanne Erb
Romina Coppa-Hopman	PDF	Biopsychology	Paul Fletcher

Special thanks to the judges: Cindi Morshead, Ian Rogers, Mary Nagai, Linda Mills, Sheena Josselyn.

### DR. GABRIELLE DeVEBER RECEIVES 2010 SIDNEY CARTER AWARD

Congratulations to UTNP member Dr. Gabrielle deVeber, Staff Neurologist and Scientist, Child Health and Evaluative Studies, who is the recipient of the 2010 Sidney Carter Award in Child Neurology. The award, presented by the American Academy of Neurology (AAN), recognizes outstanding achievements in the field of child neurology.

The Carter Lectureship, one of AAN's premier lectures, was presented to deVeber at the 62nd AAN Annual Meeting on Tuesday, April 13, at the Metro Toronto Convention Centre.

"This award is one of the biggest honours that the academy has to bestow on anyone and is a wonderful reflection upon Gabrielle's unparalleled competence as a Physician-Scientist, as well as the Division of Neurology, the Research Institute and SickKids," says Dr. Carter Snead, Head of Neurology. deVeber started at SickKids as a part-time consultant and

joined full-time as a Staff Neurologist in the Division of Neurology in 1998. She is currently the Director of the Children's Stroke Program at SickKids. She also holds grants with the Heart and Stroke Foundation, the Canadian Institutes of Health Research and a private children's research foundation.

## RENOWNED BIOIMAGING RESEARCHER WINS KILLAM PRIZE

UTNP member Professor Mark Henkelman is one of five prominent scholars to be awarded one of Canada's most distinguished annual awards for outstanding career achievements in health sciences, engineering, humanities, natural sciences and social sciences, the Killam Prize.

More: <http://www.news.utoronto.ca/lead-stories/u-of-t-medical-professor-wins-killam-prize.html>

## RECENT PUBLICATIONS

Grieder TE, Sellings LH, Vargas-Perez H, Ting-A-Kee R, Siu EC, Tyndale RF, van der Kooy D. Dopaminergic signaling mediates the motivational response underlying the opponent process to chronic but not acute nicotine. *Neuropsychopharmacology*. 2010 Mar;35(4):943-54. Epub 2009 Dec 23.

Please send us information regarding recent publications, awards or other achievements from your lab and we will share it with the UT Neuroscience community. Send your notification to the Program office: [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca)

## NEW CPIN STUDENTS

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

Student Name	Deg.	Department	Supervisor
Ho-Suk Mun	PhD	Molecular Genetics	John Roder

## CPIN MARCH 2010 GRADUATES

Congratulations to the following Collaborative Program in Neuroscience graduates:

Student	Deg	Department	Supervisor
<b>Suhail Asrar</b>	PhD	Physiology	Zheng-ping Jia
<i>Thesis Title: Synaptic Plasticity Induced through CP-AMPA is Dependent on the ERK/MAPK Signalling Cascade</i>			
<b>James Bae</b>	MSc	Physiology	Wei-Yang Lu
<i>Thesis Title: Increased Transforming Growth Factor-beta 1 Modulates Hippocampal Glutamatergic Synaptic Protein Expression and Synaptic Transmission</i>			
<b>Vedran Lovic</b>	PhD	Psychology	Alison Fleming
<i>Thesis Title: The Effects of Maternal Deprivation, through Artificial Rearing, on Impulsiveness in Rats</i>			
<b>Bechara Saab</b>	PhD	Molecular Genetics	John Roder
<i>Thesis Title: Role of Neuronal Calcium Sensor 1 in Dentate Gyrus Plasticity, Curiosity and Spatial Memory</i>			

## UTNP DISTINGUISHED LECTURESHIP SERIES

Speakers for the 2010-11 Series are currently being selected.

Please send your suggestions to us by May 7th. We welcome feedback on the Series.

## NOTICE TO GRADUATING STUDENTS

Please notify the CPIN 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 CPIN office to indicate that you have completed the program's requirements. Please inform the office of your mailing address and thesis title. If you have transferred from a Master's degree to a PhD, please notify the CPIN office.

## U OF T NEUROSCIENCE EVENTS AND SEMINARS

### KREMBIL NEUROSCIENCE CENTRE GRAND ROUNDS

Held Thursdays 7:30-8:30am  
Main Auditorium, 2 West Wing, Room 401  
Toronto Western Hospital

### ROTMAN ROUNDS

Held Mondays 3:30pm  
Classroom 842, 8th Floor, Brain Health Complex  
Rotman Research Institute

### CENTRE FOR BRAIN AND BEHAVIOUR CROSSTALKS

Held the last Thursday of every month 4:00pm  
DI Multimedia Room (2810J) 2nd Floor Atrium, Diagnostic Imaging, SickKids Hospital

## UPCOMING NEUROSCIENCE MEETINGS

### XI INTERNATIONAL CHILD NEUROLOGY CONGRESS

**Cairo, Egypt , May 2-7, 2010**

This 11th International Congress of Child Neurology will present novel and current aspects of the 'cutting edge' science and 'art' of Child Neurology, including a global perspective on the significant burden of neurological diseases in the Developing World .

For more details on the Faculty, Symposia and Focus group sessions see

<http://www.icnc2010.org>

### SONA - SOUTHERN ONTARIO NEUROSCIENCE ASSOCIATION

**Friday, May 7, 2010**

Annual Meeting at Brock  
Academic South Complex, Brock University, St. Catharines ON  
The SONA meeting is organized as a one-day event on May 7<sup>th</sup>, 2010, filled with talks, poster presentations and time for social interactions in an informal, friendly atmosphere. Abstracts of the oral and poster presentations will be published in a booklet and distributed to all registrants as a permanent record of the meeting event.

Registration is at 8:30 a.m. in the Academic South Complex of the Brock University main campus with talks beginning at 9:15 a.m. The meeting will have two keynote speakers, a

section of 20-min oral presentations, and a general poster session.

Anyone who would like to receive further information is asked to send his or her email address to:

Dr. Stefan M. Brudzynski, email: [sbrudzyn@brocku.ca](mailto:sbrudzyn@brocku.ca)

### **15TH INTERNATIONAL ENDOSCOPIC NEUROSURGERY WORKSHOP**

Ghent, Belgium

**9 - 12 May 2010**

There will be interactive teaching videos and discussion on operative techniques as well as demonstration of the operation theatre and the role of the instrument nurse. During the course there will be practice on anesthetized rats with full equipment of all instruments, video, laser and bipolar coagulation.

<http://www.neuroendoscopy.org>

### **XXXII<sup>ND</sup> INTERNATIONAL SYMPOSIUM OF THE GRSNC**

*"Enhancing performance for perception and action - Multisensory integration, neuroplasticity & neuroprosthetics"*

**May 10-11, 2010 Université de Montréal**

The XXXII<sup>nd</sup> International Symposium of the Groupe de recherche sur le système nerveux central, entitled *"Enhancing performance for perception and action - Multisensory integration, neuroplasticity & neuroprosthetics"*, will be held on May 10-11, 2010 at the Université de Montréal. The preliminary program is now available at:

<http://www.grsnc.umontreal.ca/32s/prog-prel.html>

The symposium will be held at the Université de Montréal and is organized by Drs Elaine Chapman, Andrea Green, John Kalaska, and Franco Lepore.

The objective is to provide an overview of the various neural mechanisms that contribute to learning new motor and sensory skills, and to adapting to changed circumstances including the use of devices and implants to substitute for lost sensory or motor abilities (brain machine interfaces, BMI).

The symposium will focus on recent developments covering four major themes:

- 1) Mechanisms to enhance motor performance;
- 2) Mechanisms to enhance sensory performance;
- 3) Multisensory interactions and its role in enhancing action and perception;
- 4) Technological interventions to restore action and perception (BMI).

Submissions are invited for a limited number of poster presentations.



**May 15-18 2010**

Ottawa, Ontario

Westin Hotel

[www.can-ccnp2010.org](http://www.can-ccnp2010.org)

### **EPILEPTOLOGY COURSE**

Quail Hollow Resort, Paynesville, OH USA

17 - 19 May 2010

<http://casemed.case.edu/cme>

### **QUEEN SQUARE ADVANCED NEUROLOGY COURSES**

33 Queen Square Lecture Theatre, UCL Institute of Neurology, London, UK

17 - 21 May 2010

<http://www.ion.ucl.ac.uk/articles/events/queensquareadvancedneurologycourses>

### **FOURTEENTH INTERNATIONAL CONFERENCE ON COGNITIVE AND NEURAL SYSTEMS**

**May 19 – 22, 2010**

Boston University

677 Beacon Street, Boston, Massachusetts 02215 USA

<http://www.cns.bu.edu/meetings/>

Sponsored by the Boston University

Center for Adaptive Systems,

Department of Cognitive and Neural Systems

(<http://www.cns.bu.edu/>),

and the Center of Excellence for Learning in Education,

Science, and Technology (<http://cns.bu.edu/CELEST>)

with financial support from the National Science Foundation

This interdisciplinary conference is attended each year by

approximately 300 people from 30 countries around the

world. As in previous years, the conference will focus on

solutions to the questions:

How Does The Brain Control Behavior?

How Can Technology Emulate Biological Intelligence?

The conference is aimed at researchers and students of

computational neuroscience, cognitive science, neural

networks, neuromorphic engineering, and artificial

intelligence. It includes invited lectures and contributed

lectures and posters by experts on the biology and

technology of how the brain and other intelligent systems

adapt to a changing world. The conference is particularly

interested in exploring how the brain and biologically-

inspired algorithms and systems in engineering and

technology can learn. Single-track oral and poster sessions

enable all presented work to be highly visible. Three-hour

poster sessions with no conflicting events will be held on two

of the conference days. Posters will be up all day, and can

also be viewed during breaks in the talk schedule.



The “Stem Cell Global Blueprint Conference” (Stem Cell GBC), an international stakeholder meeting, will be held in

the MaRS Centre located within the Discovery District of Toronto, Ontario on May 21 and 22<sup>nd</sup>, 2010. The Stem Cell GBC will be chaired by Dr. Michael Fehlings, Krembil Chair in Neural Repair & Regeneration, Professor of Neurosurgery at the University of Toronto and Acute Practice Network Scientific Lead of the Rick Hansen Institute, (formerly known as the Spinal Cord Injury Solutions Network).

Who should attend?

Academic and industry researchers, clinicians, health regulators, public policy officials, bio-ethicists, government, non-governmental organizations, consumers, and patient advocacy groups, business development officers and technology transfer officers, legal representatives.

What is the purpose?

To facilitate knowledge exchange to resolve barriers impeding the advancement of stem cell discoveries from the laboratory into the clinic and market for spinal cord injury and related degenerative disorders of the central nervous system such as traumatic brain injury, stroke and multiple sclerosis.

Where?

MaRS Centre, 101 College Street, South Tower, Toronto, Ontario, Canada.

When?

May 21<sup>st</sup> – 22<sup>nd</sup>, 2010

Why?

There is no consensus regarding a “correct approach” to direct researchers, clinicians, industry and regulators to advance stem cell discoveries from the laboratory into the clinic and market.

For more information regarding the Stem Cell Global Blueprint Conference, please visit [www.stemcellglobalblueprint.net](http://www.stemcellglobalblueprint.net) or contact Dr. Darryl Baptiste by phone (416) 603-5364 or email [Darryl.Baptiste@uhnresearch.ca](mailto:Darryl.Baptiste@uhnresearch.ca).

#### ANNUAL BRAIN & BEHAVIOUR DAY

Mark your calendars, the SickKids Centre for Brain and Behaviour Annual Brain & Behaviour Day will take place **Thursday June 3<sup>rd</sup>, 2010** at The Old Mill, Toronto. The theme is *Epigenetics and Brain Function*. Confirmed speakers are:

- **Dr. Moshe Szyf**, McGill University Faculty of Medicine, Department of Pharmacology &

Therapeutics

- **Dr. Marcelo A. Wood**, Assistant Professor Department of Neurobiology and Behavior - Center for the Neurobiology of Learning and Memory University of California, Irvine
- **Dr. James Eubanks**, Senior Scientist Division of Genetics & Development Toronto Western Research Institute
- **Dr. Stephen Meyn**, Head Genetics & Genome Biology The Hospital for Sick Children
- **Dr. Michael D. Taylor**, Staff Neurosurgeon, Principal Investigator - The Arthur and Sonia Labatt Brain Tumor Research Centre, Scientist Developmental & Stem Cell Biology
- **Dr. Rosanna Weksberg**, Clinical Geneticist Clinical & Metabolic Genetics The Hospital for Sick Children

Join us starting at 8:00 am for a continental breakfast. The Symposium will begin at 9:00 am and end at 4:30 pm. Because this is a free event, we are asking that attendees submit a cost centre number along with their RSVP confirmation. In past years we have planned food (breakfast and lunch) based on RSVP numbers and unfortunately there have been a significant number of ‘no shows’ which is a waste of valuable Centre funds. Only RSVP confirmations submitted with a cost centre number will be accepted, and all ‘No Shows’ will have a fee of \$50.00 CAD charged to their cost centre.

RSVP’s are required only for confirming attendance and are appreciated no later than Thursday May 27th.

Conversely, all cancellations must be received by Thursday May 27th to avoid a cancellation fee \$50.00 CAD.

Please send your RSVP confirmation and cost centre number to Ms. Susy O’Neill at [susy.oneill@sickkids.ca](mailto:susy.oneill@sickkids.ca)

We look forward to another exciting Brain & Behaviour Day and hope that you will join us.

#### 4TH BALTIC SEA SUMMER SCHOOL ON EPILEPSY

Granavollen, Norway

6 - 11 June 2010

More information and online application (deadline 10 April 2010) can be found at: <http://www.epilepsy-academy.org> or contact Petra Novotny, EUREPA at [petra@epilepsy-academy.org](mailto:petra@epilepsy-academy.org)



## MAC 2010

8th International Conference On Mechanisms Of Anesthesia  
**June 15-18, 2010**  
University of Toronto  
Toronto, Canada  
Website: <http://www.mac2010.org/>  
Register: [http://www.mac2010.org/?page\\_id=110](http://www.mac2010.org/?page_id=110)

## 20TH MEETING OF THE EUROPEAN NEUROLOGICAL SOCIETY

Berlin, Germany  
19 - 23 June 2010  
[www.ensinfo.org](http://www.ensinfo.org)

## 14TH ANNUAL MEETING OF THE ASSOCIATION FOR THE SCIENTIFIC STUDY OF CONSCIOUSNESS

The 14th annual meeting of the Association for the Scientific Study of Consciousness (ASSC14) will be held in Toronto, Canada from **Thursday 24th - Sunday 27th, June 2010**. The Program committee invites proposals for Talks and Posters on any topic relevant to the scientific study of consciousness.  
[http://www.theassc.org/conferences/assc\\_14/abstract\\_submission](http://www.theassc.org/conferences/assc_14/abstract_submission)

## 9TH EUROPEAN CONGRESS ON EPILEPSY

Rhodes, Greece  
**27 June - 1 July 2010**  
<http://epilepsyrhodes2010.org/>  
Registration now open:  
<http://epilepsyrhodes2010.org/registration/registration.html>

### "TRIPARTITE SYNAPSES: FROM HYPOTHESIS TO REALITY?"

FENS satellite symposium  
**July 2, 2010**  
Amsterdam / The Netherlands  
VU University, 8:30 am-5:30 pm  
<http://www.tripartitesynapse-satellite.nl>

## 7TH FORUM OF EUROPEAN NEUROSCIENCE

Amsterdam RAI Convention Center, Amsterdam, The Netherlands  
**3 - 7 July 2010**  
Organized by the Federation of European Neuroscience Societies  
<http://forum.fens.org/2010>

The latest developments in brain research will be presented at the 7th FENS Forum of European Neuroscience, a meeting with 6000 neuroscientists in the RAI Convention Centre in Amsterdam, The Netherlands.

### "NEURON-ASTROCYTE SIGNALING IN THE EPILEPTIC BRAIN"

FENS satellite symposium  
July 7, 2010  
Amsterdam, The Netherlands  
[www.neuroglia.eu/files/FENS\\_Sat\\_Amsterdam\\_2010.pdf](http://www.neuroglia.eu/files/FENS_Sat_Amsterdam_2010.pdf)

## SBN 2010 ANNUAL MEETING

Society of Behavioral Neuroendocrinology's 2010 annual meeting  
Hilton Toronto, Ontario, Canada  
**July 18-21, 2010**  
For more information regarding the SBN 2010 Meeting, including Housing and Toronto Tourism, visit [www.sbn.org](http://www.sbn.org)!

## 2010 SAN SERVOLO SUMMER SCHOOL – ADVANCED INTERNATIONAL COURSE: FROM BASIC KNOWLEDGE AND CLINICAL TRIALS TO RATIONAL PRESCRIBING IN EPILEPSY

San Servolo, Italy  
**18 - 29 July 2010**  
<http://www.epilepsy-academy.org>



## 12TH INTERNATIONAL FRAGILE X CONFERENCE

Are you Ready?  
**July 21 To 25, 2010**  
Detroit, Michigan  
Ain't No Mountain High Enough  
Hosted by the [Fragile X Association of Michigan](http://www.fragilex.org)

- Discover the latest research by some of the world's leading Fragile X experts
- Learn new techniques, behavioral interventions and coping strategies
- Connect with researchers clinicians, educators, psychologists and parents
- Get the support you need
- Start a new lifelong friendship and reconnect with old friends
- Sample the best of Motown, including a visit to the historic Henry Ford Museum

More information:  
<http://www.fragilex.org/html/conference2010/index.php>

## XIX BIENNIAL MEETING OF THE INTERNATIONAL SOCIETY FOR EYE RESEARCH

ISER 2010, the XIX Biennial Meeting of the International Society for Eye Research, will take place in Montreal, Canada, **July 18-23, 2010**.

The Biennial Meeting brings together leading clinicians and vision researchers from all over the world with the aim of stimulating and promoting international research cooperation. Symposia address topics with broad, interdisciplinary interest and are balanced with plenary lectures and poster sessions. Researchers from around the world share their latest findings, technical expertise and

experience making this a much-anticipated international event.

For more information:

<http://www2.kenes.com/iser/Pages/Home.aspx>

### **NINETEENTH ANNUAL INTERNATIONAL COMPUTATIONAL NEUROSCIENCE CONFERENCE CNS\*2010**

**July 24 - July 30, 2010**

San Antonio, Texas, USA

<http://www.cnsorg.org>

Abstract Submission Website:

<Http://Www.Cnsorg.Org/2010/Submission.Shtml>

Early Meeting Registration Open: January 15, 2010

(<http://www.cnsorg.org> or

<https://www.regonline.com/CNS2010>)

CNS\*2010 will be held in San Antonio, Texas, USA July 24-30th, 2010.

The meeting will kick off with a day of tutorials and an evening

welcome reception on July 24th. The main meeting of CNS\*2010 will take place from Sunday July 25th-Wednesday July 28th, including a special Symposium, "Twenty years of computational success", on the afternoons of July 26th-27th. These events will be followed by two days of workshops on July 29-30th (Thursday-Friday).

The main meeting will be held in the historic Sheraton Gunter Hotel in central San Antonio, one block from San Antonio's Famous River Walk. San Antonio is home to several universities including the University of Texas Health Science Center - San Antonio and the University of Texas San Antonio, which are both sponsoring CNS\*2010. As is traditional, the CNS banquet will be an interesting and culturally themed event, hosted at Sundance Ranch on July 28th.

Submissions can include experimental, model-based, as well as more abstract theoretical approaches to understanding neurobiological computation. We especially encourage research that mixes experimental and theoretical studies. We also accept papers that describe new technical approaches to theoretical and experimental issues in computational neuroscience or relevant software packages.

*Invited Speakers:*

**Miguel Nicolelis**, Duke University, USA, Frontiers of Computational Neuroscience Lecturer

**Vivian Mushahwar**, University of Alberta, Canada

**Jonathan Wolpaw**, Wadsworth Center and SUNY, USA

*Abstract Submission:*

Submissions to the meeting will take the form of a formatted abstract.

Submission instructions and submission website are at <http://www.cnsorg.org/2010/submission.shtml>.

*Awards:*

Limited number of travel grant awards, based on abstract review, will be available to students. See instructions for requesting travel awards at [www.cnsorg.org](http://www.cnsorg.org). Recipients of travel grants will be notified by May 5, 2010.

Student posters presented at CNS\*2010 will also be judged

for cash prizes awarded at the meeting.

Please check [www.cnsorg.org](http://www.cnsorg.org) periodically for announcement of additional categories of awards for postdoctoral fellows.

### **6TH LATIN AMERICAN CONGRESS ON EPILEPSY (6° CONGRESO LATINOAMERICANO DE EPILEPSIA)**

Cartagena, Columbia

**1 - 4 August 2010**

<http://www.epilepsiacartagena2010.org/>

### **4TH MIGRATING COURSE ON EPILEPSY**

Serock, Poland

**15 - 22 August 2010**

More information and online application (deadline 1 February 2010) can be found at: <http://www.epilepsy-academy.org> or contact Petra Novotny, EUREPA at [petra@epilepsy-academy.org](mailto:petra@epilepsy-academy.org)

### **12TH EUROPEAN CONFERENCE ON EPILEPSY AND SOCIETY**

Porto, Portugal

**25 - 27 August 2010**

<http://www.epilepsyandsociety.org/>

### **14TH CONFERENCE ON INTRACRANIAL PRESSURE AND BRAIN MONITORING**

**September 12-16, 2010**

Tubingen Germany

On behalf of the International Advisory Board we would like to welcome all international clinicians and scientists from the field to focus on an intensive week of knowledge-exchange at the old and famous University of Tuebingen, located in the geographical heart of Europe.

The ICP-conference has traditionally been a platform where clinicians from Neurosurgery, Neurology and Intensive Care Medicine meet basic scientists from all possible areas of intercept with the brain, a span that ranges from electric engineers to physicists, and from mathematicians to molecular biologists. We are trying hard to make the conference affordable regarding the "money to scientific benefit ratio" and ask you to contribute to the success of the conference by presenting your latest research related to our topics.

<http://www.icp2010.eu/>

### **2ND GLOBAL SYMPOSIUM ON THE DIETARY TREATMENTS FOR EPILEPSY AND OTHER NEUROLOGICAL DISORDERS**

Edinburgh, Scotland

**October 5-8th 2010.**

Although the ketogenic diet has been used in the treatment of epilepsy for almost 100 years, it is now 15 years since the story of Charlie, who, after failing numerous anti-epileptic drugs became seizure free and drug free on the ketogenic diet and brought awareness of the possible effects of the diet to a wider population. There is now no question of agreement to its efficacy, not only in epilepsy but also now widening to other neurological conditions. Research into basic mechanisms of action and implementation has also escalated; the number of publications on pubmed about research into the ketogenic diet has risen from <20 in 1996 to

>110 in 2008

The first Symposium was held in Phoenix, Arizona in April 2008. This was attended by over 200 participants from varied backgrounds including epilepsy and dietetics. Much discussion was undertaken, and it was agreed that progress would be sufficient to bring individuals together once again in 2010.

For further information:

<http://site.matthewsfriends.org/index.php?page=global-symposium-2010>

### **THE 10TH INTERNATIONAL CONFERENCE ON ALZHEIMER'S & PARKINSON'S DISEASES (AD/PD 2011)**

Explore New Horizons and Emerging Disease Modifying Therapies

SAVE THE DATE!

**MARCH 9-13, 2011**

We are pleased to announce the 10th International Conference on Alzheimer's & Parkinson's Diseases (AD/PD 2011), which will be held in Barcelona in 2011.

This conference will feature a diverse, multi-disciplinary scientific program covering the most recent research and discoveries in etiology, neurobiology, diagnosis, imaging, treatment and therapy.

## **FUNDING ANNOUNCEMENTS**

### **FOX FOUNDATION FOR PARKINSON'S RESEARCH, MICHAEL J. (MJFF) : Rapid Response Innovation Awards - Edmond J.**

**Safra Core Program for PD Research.** To promote testing of novel hypotheses, funding from our Rapid Response Innovation Awards program quickly supports high-risk, high-reward projects with little to no existing preliminary data, but potential to significantly impact our understanding or treatment of PD. **Deadline for Applications: Continuous.**

**National Fragile X Foundation (NFXF) : Translational Research.** Translational research projects focus on bringing discoveries made about the nature, causes, and consequences of Fragile X-associated Disorders into the realm of therapeutics and interventions designed to treat the symptoms or underlying deficits of those disorders. **Application deadline: May 31, 2010.**

## **POSITIONS AVAILABLE**

### **UNIVERSITY OF TORONTO & AFFILIATED INSTITUTIONS**

CIHR Strategic Training Program in  
**Biological Therapeutics**



### **CIHR PRE- AND POST DOCTORAL FELLOWSHIP OPPORTUNITIES**

We are pleased to announce the availability of Canadian Institutes of Health Research-funded graduate student and Post Doctoral Fellowships for our "CIHR Strategic Training Grant in the Development of Biological Therapeutics".

This multi-division University of Toronto program has 14 Principal Mentors and been awarded \$1,800,000 over the next 5 years. In the context of this program, "biological therapeutics" is defined as encompassing nucleic acids such as small interfering RNAs (siRNA), peptides and proteins including antibodies, and viruses and viral vectors. Projects will span the gamut from basic to applied research.

Depending on the research project, Postdoctoral Fellows and graduate students will receive training in bioinformatics, formulation and delivery of nucleic acids and proteins, and the analysis of the metabolism and fate of these macromolecules *in vivo*. Areas of application include neuroscience, cancer, and immunology. Each trainee will have a primary mentor and secondary mentor with whom they spend a minimum of 1 month per year. Our collaborative environment will deepen knowledge and technical skills, promote team oriented research with colleagues, and increase exposure to cross-disciplinary research in the fields of neuroscience, ophthalmology, cancer, immunology, and drug delivery. Finally, through an industrial internship program, this program will also provide opportunities to work (short-term) with the private sector (pharmaceutical and biotechnology companies) to acquire additional technical skills.

Please see our Website:

[http://www.utoronto.ca/biotherapeutics\\_training/](http://www.utoronto.ca/biotherapeutics_training/)

Please email a CV and *a1 page cover letter outlining your suitability and specific interest in working with one of the 14 mentors to:* [biotherapeutics@utoronto.ca](mailto:biotherapeutics@utoronto.ca)

### **POSTDOCTORAL FELLOW – CAMH**

The Addiction Imaging Research Group at the Centre for Addiction and Mental Health (Toronto, Canada) is recruiting a Post-doctoral Fellow (MD and / or Ph.D.) to join the Positron Emission Tomography (PET) brain research centre.

Minimum qualifications are a doctoral degree in a health related field (e.g.: neuroscience, psychology) or MD degree. The successful candidate will have some expertise in computational and statistical methods, and a good working knowledge of brain anatomy. Experience with image analysis will be advantageous, but not required. Good oral and written communication skills are required. The project will

focus on a brain PET investigation of the neurochemical events occurring during withdrawal from stimulant drugs. CAMH is Canada's largest mental health and addiction teaching and research hospital in Canada and is affiliated with the University of Toronto.

Send letter of interest outlining experience and CV to  
Isabelle Boileau, Ph.D.

Head, Addiction Imaging Research Group  
Centre for Addiction and Mental Health  
250 College Street

Toronto, Ontario CANADA M5T 1R8

phone: 416-535-8501, ext. 4918

fax: 416-979-6862

e-mail: [isabelle\\_boileau@camh.net](mailto:isabelle_boileau@camh.net)

**POSITION FOR A FUNCTIONAL MRI SCIENTIST - THE  
ROTMAN RESEARCH INSTITUTE, BAYCREST CENTRE  
UNIVERSITY OF TORONTO**

The Rotman Research Institute of Baycrest Centre invites applications for an fMRI physicist position. The successful candidate will engage in a research program on the development and application of structural and functional MRI techniques for neuroscience research. While pursuing an independent research program, he/she will be expected to collaborate on diverse studies of human cognition and neurological disorders that involve MRI research resources at Baycrest. The candidate must possess a PhD or equivalent and demonstrated experience in MRI. The Rotman Research Institute has a research-dedicated Siemens 3T TIM Trio MRI and fully-equipped electroencephalography and magnetoencephalography laboratories in-house. The successful candidate will play a central role in the coordination and operation of the MRI imaging facility.

Examples of research that a successful candidate would conduct include, but not limited to: development and refinement of MR pulse sequences for neuroimaging, development of MR acquisition tools and paradigms for studies in aging; development of novel methods to process and analyze both functional and structural MRI data. The successful candidate will benefit from the large collaborative neuroimaging community at The University of Toronto, and would be eligible for an academic at the assistant to associate professor level. Applications are encouraged from qualified women and men, members of visible minorities, aboriginal peoples and persons with disabilities. In accordance with Canadian immigration requirements, this advertisement is directed initially to Canadian citizens and permanent residents.

Applicants should submit a covering letter describing current research interests and future research goals, a complete C.V., relevant reprints and the names of three potential references to:

Claude Alain, PhD

The Rotman Research Institute

Baycrest Centre for Geriatric Care

3560 Bathurst St, Toronto, Ontario, M6A 2E1

Tel (416) 785-2500, ext 3523; Fax (416) 785-2862

E-mail: [calain@rotman-baycrest.on.ca](mailto:calain@rotman-baycrest.on.ca)

**INTERNATIONAL**

**CALL FOR A PHD PROJECT FUNDED BY THE EUROPEAN  
COMMUNITY PROGRAM**

SYMBAD <http://symbad.risc.cnrs.fr/>

Development of a new technique for fast multiphoton super-resolution imaging of thick biological samples

Project: The teams "Dynamic of receptor organization in neuronal membranes" and "Quantitative Imaging of the Cell" at the laboratory Cellular Physiology of the Synapse in Bordeaux (France) have one position opening for a PhD student. The PhD project is developed in the framework of European network, SyMBaD (Synapse: from Molecules to higher Brain function And Diseases) and in partnership with an industrial collaborator. The aim is to set up an innovative fast multiphoton imaging technique which will allow imaging of thick biological samples at the single molecule level. This technique will be applied to study the movement of receptors in live neurons, in brain slices. The setup will be designed to be versatile in order to implement, on the same microscope, multiphoton SPT-PALM (Single Particle Tracking & PhotoActivation Localization Microscopy) and SIM (Structured Illumination Microscopy) techniques.

Scientific Environment: The "Quantitative Imaging of the Cell" is a newly created team, headed by Jean-Baptiste Sibarita, which develops new advanced cellular imaging techniques with the goal to monitor the dynamic of biological compartments at high spatial and temporal resolutions. Other related projects also being developed are FRAP (Fluorescence Recovery After Photobleaching), SPT-PALM (in 2 and 3 dimensions) and SIM. In addition to instrumental development, the team also develops software solutions for image processing and analysis, as well as instrumentation for micropatterning and microfluidics to control cell shape and chemical environment. The team "Dynamic of receptor organization in neuronal membranes", headed by Daniel Choquet, aims at understanding the role of glutamate receptor trafficking in controlling synaptic transmission in health and disease. It has developed and applied in the last decade a series of single molecule tracking approaches to image receptor diffusion in live neurons (e.g. Borgdorff & Choquet, Nature, 2002; Triller and Choquet, Neuron, 2008). Recently, the team has associated imaging and electrophysiological approaches to uncover a new unsuspected role of glutamate receptor fast diffusion in controlling information processing in the brain (Heine & al., Science 2008). The next challenge lies in imaging receptor trafficking in 3D in brain slices and to associate this with the analysis of receptor trafficking in vivo. The industrial collaborator is Amplitude Systèmes, a French company which develops femtosecond oscillator for life science.



Environment: Bordeaux is located in South West of France (3h from Paris by train). This charming town, near the Atlantic Ocean, has a city center which is world heritage of the UNESCO.

Qualification: The candidate should be a non French citizen, and preferentially be originally from one of the European Union countries. He or she should have a physics background and a strong interest in the treatment of biological questions. Important for work in the lab is the ability to build optical instrumentation, and to write programs that control the setup and automate the data acquisition. Masters or equivalent degree is required.

To apply, send login to the website <http://symbad.risc.cnrs.fr/> and register

In parallel, please send a complete CV, a motivation letter, and the names and addresses of two referees for letters of recommendation to: Daniel Choquet, [daniel.choquet@u-bordeaux2.fr](mailto:daniel.choquet@u-bordeaux2.fr) Jean-Baptiste Sibarita, [jean-baptiste.sibarita@u-bordeaux2.fr](mailto:jean-baptiste.sibarita@u-bordeaux2.fr) Institut Magendie – UMR 5091 CNRS, Université Bordeaux 2, 146, rue Léo Saignat 33077 Bordeaux cedex, For further details on the Cellular Physiology of the Synapse, please visit our website: <http://www.synapse.u-bordeaux2.fr/equipechoquet.htm>

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## SUBMISSION & CONTACT INFORMATION

Email: [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca) | Fax: 416-978-8511 Attn: Frazer Howard | Submissions to the newsletter must be made by the 25th of the preceding month. Previous issues of the newsletter are posted on our website at: <http://www.neuroscience.utoronto.ca/newsletter>  
If you no longer would like to receive this newsletter, please contact [p.neuroscience@utoronto.ca](mailto:p.neuroscience@utoronto.ca) with subject line “unsubscribe from UTNP Newsletter”