

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
Negar Ahmadi	MSc	Peever/Shapiro	Cell & Sys Bio
Kimberly Bauerly	PhD	Luc DeNil	Speech-Lang Path
Maithe Arruda Carvalho	PhD	Paul Frankland	IMS

GRADUATING STUDENTS:

We would like to congratulate the following PIN graduates:

Student's Name	Degree	Supervisor	Department
Michele Askew	MSc	Martin Wojtowicz	Physiology
<u>Thesis title:</u> "Running, Neurogenesis and Learning: Are they related?"			
Karin Korth	PhD	Fletcher/Yeomans	Psychology
<u>Thesis title:</u> "Prefrontal cortical dopamine depletion in neonatal and adult rats: Neurochemical and behavioural consequences"			

UPCOMING PIN DISTINGUISHED LECTURES

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

Friday, January 18, 2008 1 pm

BARBARA JONES, Department of Neurology & Neurosurgery, McGill University

"Role of cholinergic and GABAergic basal forebrain neurons in modulating cortical activity and behavioural state"

Leslie Dan Pharmacy Building, 144 College St., Rm B150

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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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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

Wednesday, February 6, 2008 4pm

UWE HEINEMANN, Johannes Muller Center of Physiology, Berlin, Germany

Title: TBA

Medical Sciences Building, Rm 3153

The Seventh Sackler Distinguished Visiting Neuroscientist

Tuesday, February 26, 2008 3pm

PATRICIA GASPAREL, 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 Time: TBA

FRED GAGE, Salk Institute, California

Title: TBA

Location: TBA

Friday, April 4, 2008 Time: TBA

ROBERT WENTHOLD, National Institute on Deafness and Other Communication Disorders, National Institutes of Health, Bethesda, Maryland

Title: TBA

Location: TBA

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

FACULTY NEWS

Congratulations to PIN faculty member **Dr. Barry Sessle**, Faculty of Dentistry, who has received a renewal of his Tier I Canada Research Chair in Dental and Craniofacial Pain.

Congratulations also to PIN faculty members **Drs. Bryan Stewart** (Cell and Systems Biology) and **Lu-Yang Wang** (Physiology) for the renewal of their Tier 2 Canada Research Chairs in Molecular Genetics of Neural Communication and in Brain and Behaviour respectively.

STUDENT NEWS

Congratulations to the following PIN students who were winners for their posters at the Department of Physiology's BRAIN Platform Day:

Mohamed Abdelghani (Tweed lab). Sensitivity derivatives for flexible sensorimotor learning. Category: Motor and Sensory systems.

Anthony Senzel (Feng lab). The role of the C2A and C2B domains of synaptotagminI in long term memory consolidation. Category: Synaptic transmission and excitability.

from PhysioLink, December 14, 2007

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 NEUROSCIENCE NEWS

International Conference on Neural Signaling: Opportunities for Novel Diagnostic Approaches and Therapies

**Asilomar conference grounds in Pacific Grove, California
February 16-20, 2008**

Dr. Edward J. Goetzl, Professor of Medicine and Immunology at University of California San Francisco, will chair the "International Conference on Neural Signaling: Opportunities for Novel Diagnostic Approaches and Therapies" on February 16-20, 2008, at the Asilomar

conference grounds in Pacific Grove, California. The conference is CME accredited. The URL for registration and abstraction submission is:

<http://medicine.ucsf.edu/conferences/asilomar2008/index.html>

If you have any questions, please email Robert Chan at robert.chan@ucsf.edu.

10th International Neuroscience Winter Conference Sölden, Austria April 5-10, 2008

Next year's program again provides a very high level of neuroscience with numerous very prominent speakers.

Keynote Lectures:

Thomas Klausberger (UK)

"Neuronal timing and network oscillations in cortical circuitries"

MRC Anatomical Neuropharmacology Unit

Oxford, United Kingdom

Richard Morris (UK)

"Elements of neurobiological theory of the role of the hippocampal formation in memory"

Centre for Cognitive and Neural Systems,

The University of Edinburgh

Oswald Steward (USA)

"Local translation of mRNA at synapses"

Reeve-Irvine Research Center, Anatomy & Neurobiology School of Medicine

University of California, Irvine CA, USA

Bernardo Sabatini (USA)

"Mechanisms of activity induced dendritic spine growth"

Dept. of Neurobiology

Harvard Medical School, Boston MA 02115

Michael N. Shadlen, (USA)

"Probability and time: a neural mechanism for reasoning and decision - making"

Howard Hughes Medical Institute

University of Washington Medical School, Seattle, WA

Takao Hensch (USA)

"Local circuits in critical period brain development"

Center for Brain Science

Harvard University, Cambridge, MA

For further enquiries, information, online registration and hotel reservation at the conference venue please visit <http://inwc.sambax.com/> or contact the conference manager, Philipp Tsolakis, at philipp.tsolakis@i-med.ac.at.

TWELFTH INTERNATIONAL CONFERENCE ON COGNITIVE AND NEURAL SYSTEMS

May 14 - 17, 2008

Boston University

677 Beacon Street, Boston, Massachusetts 02215 USA

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

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.

Confirmed Invited Speakers:

Cynthia Breazeal (MIT Media Lab)

Computational models of embodied cognition to support human-robot teamwork

Gyorgy Buzsaki (Rutgers University) (Plenary Lecture)

Segregation of cell assembly sequences by oscillatory synchrony

Gail Carpenter (Boston University) (Plenary Lecture)

Large-scale neural systems for vision and cognition

Peter Dayan (University College London)

The misbehavior of value

Greg DeAngelis (University of Rochester)

Roles of visual area MT in depth perception

Stephen Grossberg (Boston University)

Cortical dynamics of attentive object recognition, scene understanding, and decision making

Joy Hirsch (Columbia University)

Functional specificity and cortical mechanisms that regulate emotion and cognition: What the human face tells the human brain

Ranu Jung (Arizona State University)

Neurotechnology for making neural circuits functional

Gordon Logan (Vanderbilt University)

The mysterious story of cognitive control

Javier Movellan (University of California at San Diego)

Developing social robots: A paradigm for the scientific study of human behavior

Charan Ranganath (University of California at Davis)

Relational binding in human memory

John Reynolds (Salk Institute) Mapping the microcircuitry of

attention: Attentional modulation varies across cell classes in visual area V4

Daniel Salzman (Columbia University)

Learning about rewards and punishments in the amygdala and orbitofrontal cortex

For more information, please go to

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

2008 Marine Biological Laboratory Special Topics Course Woods Hole, MA

Summer Program in Neuroscience, Ethics & Survival (SPINES)

June 14 - July 12, 2008

This program provides a rich experience in neuroscience. In the first month, students are exposed to neuroscience techniques, contemporary neuroscience research in seminar and lecture formats; in ethics using case studies; in survival skills such as grant writing, teaching, and public speaking, using lecture and workshop formats. In a second optional month, students may apply to work full time in a research laboratory at the MBL, especially those funded by the National Institute of Mental Health. The program is targeted to groups underrepresented in neuroscience to increase the probability of professional success, although applications from any qualified student who is interested in the SPINES curriculum are welcome.

Course Directors: Joe L. Martinez, University of Texas, San Antonio; and James Townsel, Meharry Medical College

Application Deadline: February 1, 2008

Admission to MBL courses is competitive; student selection is determined by review committees appointed for each individual course.

Tuition: Costs of attending this course, including travel, housing and meals at the MBL, are fully supported by the National Institute of Mental Health, NIH, and the Marine Biological Laboratory.

For application forms and information, contact: Carol Hamel, Admissions Coordinator; (508) 289-7401; admissions@mbi.edu OR visit our website: <http://www.mbl.edu/education>

The MBL is an Equal Opportunity/Affirmative Action Employer.

Young Physiologists Symposium 2008

University of Cambridge

July 12-13, 2008

The Young Physiologists Symposium 2008 (YPS 2008) invites undergraduate, postgraduate and young postdoctoral researchers to present their work at a two-day meeting on July 12-13. This year's theme is "Experiment Meets Theory: Integrated Approaches to Neuroscience". The meeting will link different levels of understanding neural systems, from the way molecular and cellular interactions shape neural circuit function to how circuits assemble into brain systems and generate behaviour. We aim to generate cross talk between theoretical modelling of the nervous system and empirical data from different levels. We would like to invite you to share the insights arising from your work with fellow researchers, and explore the implications of your research in the wider context of neural system function.

YPS 2008 is organised by young scientists for young scientists. The symposium will be a stimulating opportunity to network with young researchers, meet eminent scientists and find out about industry opportunities from our sponsors. You would also enjoy a full social programme, including a wine reception and a Symposium BBQ

hosted by Homerton College.

Participants will present their work either orally or as a poster. This would be an excellent opportunity to develop your presentation skills in a friendly setting, raise awareness of your research and get feedback from your colleagues. Prizes will be awarded for the best oral and poster presentations.

YPS 2008 will take place in the two days before the Physiological Society Main Meeting, which you may like to attend too (please note that the Main Meeting registration is separate). YPS 2008 registration is free and opens on the 1st of March. The deadline for registration and abstract submission is April 5th. The first 50 participants to register will be entered into an Early Bird prize draw.

The conference will be held in the department of Physiology, Development and Neuroscience at the University of Cambridge. You will have the opportunity to stay in a Cambridge college to fully experience student life within this beautiful historic city. For those travelling from abroad: Cambridge is well connected to several airports and the train to London takes less than an hour.

Please see our website (<http://www.pdn.cam.ac.uk/yps2008>) for further information on the programme, registration, abstract submission, accommodation and travel bursaries.

POSITIONS AVAILABLE

OVERSEAS

RESEARCH ASSOCIATE

Full-time Research Associate Position in Computational Cognitive Neuroscience University of Illes Balears, Mallorca, Spain

Applications are invited for a 3-year Research Associate with the Clinical Neuropsychology Research Group at the Psychology Department and Health Sciences Research Institute (IUNICS), University of Illes Balears (Mallorca, Spain). The position is jointly funded by the Spanish Ministry of Education and Science (www.mec.es), and will involve technical support in an ongoing project ("Cognitive flexibility in normal aging: A computational model of prefrontal function", ref.: SEJ2007-61728, PI: Francisco Barceló, www.mcst.es).

Job Description: Work in a cognitive neuroscience lab integrating brain imaging techniques of electroencephalography (EEG), magnetoencephalography (MEG) and functional MRI to study how interacting brain regions underlie cognition (i.e., memory and attention). The focus will be on the analysis of functional connectivity and fast neural dynamics in young and elderly people.

Job Responsibilities: A key role in all aspects of EEG/MEG data collection and analysis (with a 20% and 80% time-share, respectively). Data collection will involve the enrolment and tracking of subjects, the preparation of experimental materials, collection of

EEG/MEG and behavioral data, and the maintenance and backup of databases. Data analysis will involve the utilization of established software (e.g., CURRY, LORETA, SPM2, Scan2), as well as the programming of new analytical scripts (i.e., wavelet analysis, functional connectivity analysis, etc).

Qualifications: highly motivated applicants with a degree in Neuroscience, Physics, Maths, Bioengineering, or related sciences; previous research experience in this field (e.g., with multimodal EEG/MRI integration, neural synchrony, functional connectivity analysis, etc); computer programming skills, specially with MATLAB; working knowledge of some related software (e.g., CURRY, LORETA, SPM2, EEGLAB, etc); good organizational skills; ability to work independently as well as with others; ability to handle fluctuating deadlines; interest in learning brain-mind relationships and working with healthy as well as neurological patients. Experience with computational neural modeling will be an advantage, but is not essential.

The position is funded for 3 years, starting April-May 2008. Salary starting €22.500 (plus health benefits), negotiable depending on skills and experience. Please send a resume, a cover letter and the names and address of 2 referees to Francisco Barcelo (f.barcelo@uib.es), quoting the reference SEJ2007-MEG in all correspondence. Deadline: March 15th 2008.

PHD RESEARCH POSITION

PhD Position in the Cognitive Neuroscience of Executive Control of Attention University of Barcelona, Spain

Applications are invited for a PhD research position in the Cognitive Neuroscience Research Group (www.ub.edu/brainlab) at the Psychiatry and Clinical Psychobiology Department (Faculty of Psychology) of University of Barcelona (Spain). The post is part of BRAINGLOT, a Spanish Research Network on Bilingualism and Cognitive Neuroscience (Consolider-Ingenio 2010 Scheme, Spanish Ministry of Science and Education), and will run in collaboration with Francisco Barceló at the University of Illes Balears (Mallorca, Spain).

The project brings together the efforts of six research groups integrating researchers from different scientific disciplines with the common purpose of addressing the phenomenon of bilingualism. The project is conceived with an open and multidisciplinary vocation, as one of its major anchor points places the stress on the mutual influence (both in terms of cognitive and neural processes) between bilingualism and other functions such as auditory perception, multisensory integration, and the executive control of attention. The PhD candidate will conduct behavioral and EEG (possibly also fMRI) experiments on task-switching in both linguistic and non-linguistic contexts.

We are seeking highly motivated applicants with a background in Cognitive Neuroscience, Life sciences or Computer science. Essential to the post are good communication and writing skills and interest in multidisciplinary teamwork. Specific requirements are:

To have a Master degree (or being registered at a Master course); to have top marks, and to be eligible for a valid visa (when required). Experience with ERPs or other neuroimaging methodologies and proficiency in all three languages, Spanish, Catalan and English will be highly regarded.

The position is funded for four years, starting in January-February 2008. Applicants should send curriculum vitae, list of exams with grades, and other documentation (letter of interest, publications, awards, letters of recommendation, etc.) in support of their application, to either Carles Escera (cescera@ub.edu) or Francisco Barceló (f.barcelo@uib.es). Please, use this reference in the email subject: Application POS-BG-PhD.

POSITIONS WANTED

Postdoctoral Position

Daniela Mohr studied biology at the University of Hohenheim, Germany and the University of Tuebingen, Germany. Her diploma thesis was "The role of dopamine in prepulse inhibition and prepulse facilitation in mice" in the Neuroethology Research Group at the Institute of Animal Physiology of the University of Tuebingen. Currently, she is a PhD student of Prof. Dr. Markus Fendt in cooperation with the Department of Neuropharmacology at the University of Tuebingen. She is working at the effects of MDMA on sensorimotor gating and she will finish her PhD thesis next year approximately in February or March. She is looking for a postdoc position starting in April. She is very interested in mental disorders or addiction research but she would also like to get insights into some new research areas and methods. Some methods she has used are stereotaxic surgeries in mice and rats, several methods of substance application and behavioural testings, telemetric monitoring, histology (different preparations of brains) and neurochemistry (HPLC). Please contact Daniela at: danimohr@yahoo.de.

Research Associate-Project Manager

Sevtap Savas obtained her Ph.D. degree in Molecular Biology and Genetics in 1999. Since then, she has been trained at the laboratories of Dr. Bronya Keats (Louisiana State University, USA) and Dr. Hilmi Ozelik (Mount Sinai Hospital, Toronto). She has expertise in molecular biology techniques as well as bioinformatics applications in the fields of Mendelian genetic diseases, SNPs and other genetic variations, cancer predisposition, and the genetic basis of variable drug response. She is the author of 20 scientific publications.

Dr. Savas also has extensive management experience at the laboratory settings. She is interested in the project management profession and has recently completed a "Project Management Fundamentals" certificate offered by the University of Toronto. She is a member of the Project Management Institute (PMI), the PMI-Southern Ontario Chapter (PMI-SOC), and the PMI-SOC Toronto HealthCare Local Interest Group (PMI-SOC-HLIG).

Dr. Savas is currently looking for a **Research Associate-Project Manager** position in healthcare research in Toronto, where she can continue to develop her scientific and management experience. Please contact Dr. Savas at: sayincalikus@hotmail.com