IBRO NEWS

Elsevier, The Boulevard, Langford Lane, Kidlington, Oxford OX5 1GB, UK

www.ibro.info

VOLUME 33 2005

International Brain Research Organization

PENS SETS THE PACE FOR EUROPEAN NEUROSCIENCE!

FENS/IBRO Launch European Schools Programme

The Federation of European Neuroscience Societies (FENS) and IBRO this year launched an exciting joint venture to train young scientists throughout Europe. It is entitled PENS (Programme of European Neuroscience Schools). PENS brings together FENS' and IBRO's educational activities. PENS will provide funds to support high-quality schools and courses on a wide range of important topics in the neurosciences.

As well as increasing the quality of neuroscience education in Europe, the programme will assist the development of neuroscience outside Europe by providing opportunities in Europe for the training of promising students who intend to return to their home countries.

As a rule, each PENS school will last around two weeks and will enrol some 20 promising students to work intensively with distinguished teacher-scientists from within and outside Europe. The curriculum will focus on specialized issues in neuroscience but will usually change from year to year. Where the needs and infrastructure justify it, a successful school may be repeated more than once in the same location or move elsewhere. The creation of PENS derives largely from the need to build greater strength in the brain sciences. There is a chronic under-funding of basic neuroscience in Europe, which results in the progressive loss of well-trained scientists largely to North-America. Even young scientists from Eastern Europe now 'jump over' Western Europe to end up in the USA.

FENS and IBRO – already aided by support from partner organizations – provide the financial backing for the programme. Corporations and academic and philanthropic institutions interested in brain research are invited to help PENS expand the school system and set the pace for European neuroscience. Visit the Pens web site: **http://mars.glia.mdc-berlin.de/pens/**

IN THIS ISSUE

MELBOURNE 2007!

7th IBRO WORLD CONGRESS OF NEUROSCIENCE

IBRO's 7th World Congress, to be held in Melbourne, Australia, 12-17 July 2007, promises to offer an exciting programme of plenary lectures, symposia, workshops, poster presentations and satellite meetings (in Melbourne and other Australian cities), covering all aspects of international neuroscience. The President of the Congress is George Paxinos, the Secretary-General Frederick Mendelsohn.

POSTER DEADLINE DECEMBER 2006!
Submissions in all areas of neuroscience are welcome. Material aimed at understanding better the workings of the brain and nervous system in health and disease or bringing the results of cellular/molecular and animal studies closer to human brain function is encouraged. Please return all proposals by email or fax to: Prof. Elspeth M. McLachlan, Co-Director, Spinal Injuries Research Centre, Prince of Wales Medical Research Institute, Gate 1 Barker Street Randwick, NSW 2031, Australia (Phone: 61 2 9399 1031; fax: 61 2 9399 1034; email: e.mclachlan@unsw.edu.au)
A preliminary programme for the Congress will be in place before the end of this year.

Melbourne, home to almost four million people, is one of the most multicultural and cosmopolitan of cities, set on the beautiful south-eastern coast of the Australian continent. Melbourne was recently voted the World's Most Liveable City by the Economic Intelligence Unit in London, based on its excellent climate, geographical environment, affordable accommodation and restaurants, low crime rate, etc.

Most Congress delegates will be accommodated within walking distance of the centrally located convention center, as there are over 12,000 accommodation rooms in the central business district, ranging from 5 star hotels to budget/student accommodation. Attendees at the conference will not only be able to enjoy a wide range of local attractions, but also to take the opportunity to enjoy pre/post touring to spectacular Australian locations such as the Great Ocean Road (Victoria), Sydney (New South Wales), the Great Barrier Reef, Daintree Rainforest and the Gold Coast (Queensland) as well as Uluru (Ayer's Rock) and Kakadu National Park (Northern Territory).

The Local Organizing Committee (Secretary Andrew Lawrence; email a.lawrence@hfi.unimelb.edu.au) can be contacted for details about the meeting. Congress web site **www.ibro2007.org**

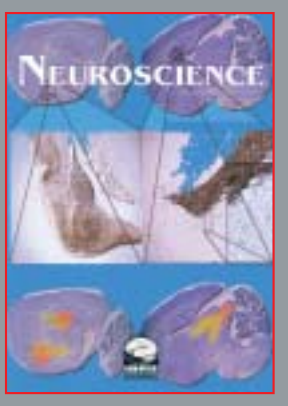
NEW EXECUTIVE DIRECTOR FOR IBRO

Stephanie de La Rochefoucauld, formerly Assistant Executive Director at the IBRO Secretariat in Paris, France became IBRO's Executive Director in January 2005. She has worked at the Secretariat for the past four years and took over the position from Olga Popoff who retired at the end of 2004.

Stephanie de La Rochefoucauld

Olga Popoff retires from IBRO ... p. 2

IBRO'S JOURNAL *NEUROSCIENCE* SUBMISSIONS UP 50%!



Brazilian Neuroscientist Wins* Neuroscience *Cover Competition p. 3

Our journal *Neuroscience* made significant strides in 2004: there were 1500 new submissions - 50% up on 2003 and the highest number in its nearly 30-year history. The time to first decision is now 30 days from submission and, post-acceptance, publication time for the author-corrected article on-line is now only seven weeks.

New Section Editors joined the journal in 2004-5: Greg Quirk (Puerto Rico), Menahem Segal (Israel), Richard Weinberg (USA), Miles Herkenham (USA) and Asla Pitkanen (Finland) for, respectively, the Behavioural Neuroscience, Cellular Neuroscience, Sensory Systems, and Systems Neuroscience sections.

Ole Petter Ottersen (Norway) assumes the Chief Editorship of the journal from January 2006 for a four-year term, and Steve Lisberger (USA) will take up the position of Associate Editor at the same time. David Amaral (USA) retires as Chief Editor after four years during which time he, with Ole Petter Ottersen, oversaw the implementation and expansion of a Board of Section Editors, upgrading of the journal's production system to ensure field-leading photomicrograph reproduction and a more modern, cleaner article format and cover design. He also set in motion full web-submission and peer-review and centralization of the journal's review process administration in San Diego.

Author feedback via formal questionnaire indicates widespread satisfaction with these changes. Plans for late 2005/early 2006 include expansion of the Editorial Advisory Board to ensure the journal attracts papers from all areas of the neurosciences and more review and special issue commissioning and publication.

This figure, taken from the journal's most recent Author Feedback report, and derived from hundreds of author questionnaire responses, illustrates how satisfaction with the refereeing standard for Neuroscience *has improved over the last two years and how the journal is now rated as one of the best in the field for its review process.*

IBRO THE ORGANIZATION

BEHIND THE SCENES

INTERNATIONAL BRAIN RESEARCH ORGANIZATION

EXECUTIVE COMMITTEE
President
Albert Aguayo (Canada)
Secretary-General
Jennifer Lund (USA)
Treasurer:
Steve Redman (Australia)

Chairs of Regional Committees
R. N. Kalaria (Africa)
Y. S. Chan (Asian/Pacific)
L. Kaczmarek (Central and Eastern Europe)
M. Hallak (Latin America)
B. S. McEwen (US/Canada)
G. Di Chiara (Western Europe)

IBRO SECRETARIAT
Executive Director
Stephanie de La Rochefoucauld
ibro3@wanadoo.fr
Director of Programmes
Stephanie Wubben
ibro4@wanadoo.fr
255 Rue Saint-Honoré
75001 Paris, France
Phone:+33-1-46-47-92-92
Fax: +33-1-46-47-42-50

IBRO web site: www.ibro.info
Webmaster & Head of Information Technology
Ante Padjen
Senior Editor
Andrée Blakemore

'IBRO News'
Editor in Chief
Andree Blakemore
andree.blakemore@physiol.ox.ac.uk

IBRO'S COMMITTEES AND CHAIRS

Alumni
Sigismund Huck
sigismund.huck@meduniwien.ac.at

Animals in Research
Sharon Juliano (USA)
sjuliano@usuhs.mil

Board of IBRO Schools
John G. Hildebrand
jgh@neurobio.arizona.edu

Book Fund
Kate Whitlock
kew13@cornell.edu

Brain Campaign
Esther Binns
estherlennon@ntlworld.com

By-laws & Procedures
Eduardo Roberto Macagno
dean@biology.ucsd.edu

Fellowships & Travel Grants
Kwok-Fai So
hrmaskf@hkucc.hku.hk

Finance
Steve J. Redman
redman@jcsmr.anu.edu.au

Neuroscience History
Javier de Felipe
defelipe@cajal.csic.es

IBRO Centre for Equipment Donation
Alan Pearlman
alpsf@comcast.net

IBRO Cyber Journals Club
Paul H. Patterson
php@its.caltech.edu

IBRO-Edu
Ante L. Padjen
ante.padjen@mcgill.ca

IBRO Science Advisory Programme
Walter Stühmer
wstuehm@gwdg.de

IBRO on the Web Board of Editors
Andree Blakemore
andree.blakemore@physiol.ox.ac.uk

International Registry of Neuroscience Training Programme
Andrew Gundlach
a.gundlach@hfi.unimelb.edu.au

Membership and Partnerships
Sten Grillner
sten.grillner@neuro.ki.se

Neuro-Grants
Connie Atwell
atwellc@ninds.nih.gov

Neuroscience Libraries
Marina Bentivoglio
marina.bentivolgio@univr.it

Nominating
Annica Dahlström
annica.dahlstrom@anatcell.gu.se

Publications
Piergiorgio Strata
piergiorgio.strata@unito.it

Return Home
Fernando Lopes da Silva
silva@science.uva.nl

Symposia & Workshops
Kenneth J. Muller
kmuller@miami.edu

World Congress
Josef Syka
syka@biomed.cas.cz

OLGA POPOFF RETIRES AFTER 21 YEARS WITH IBRO

Torsten Wiesel (IBRO President 1999-2004) and Olga Popoff in Paris September 2004

In 1983 David Ottoson, of the Karolinska Institute in Stockholm, was elected Secretary-General of IBRO. He persuaded his personal assistant at the Institute, Olga Popoff, to establish and run the IBRO Secretariat in Paris where she was later appointed Executive Director. David Ottoson's term as Secretary-General ended in 1997. Olga directed the affairs of the Secretariat until the end of 2004. Olga will be remembered in her position at the IBRO Secretariat for her management abilities, her compulsive attention to detail, her loyalty. IBRO President Albert Aguayo remembers her: "Olga has served IBRO most loyally for longer than anyone I know. I certainly owe her a lot for good advice and help. She will be missed by many and very specially by the members of IBRO from all corners of the world that knew and trusted her. I join the rest of my colleagues in wishing Olga all the best in this new phase in her life."

IBRO ON THE WORLD WIDE WEB

Over the last 15 years the World Wide Web has become a major medium of communication. The Web is a particularly attractive environment for an organization such as IBRO, with its worldwide membership of over 50,000, its multitude of programmes and a wide array of activities. **IBRO Web Gateway** is a true mirror of IBRO's dynamic existence. A glance at the hubs of IBRO Gateway - News, Announcements, Events, Funding, Education, Science Issues and others - provides a quick insight into what is happening at IBRO.

Publishing is not the only role of IBRO Gateway. For the past two years it has been undergoing a major transformation so as to provide an interactive support tool for a variety of IBRO programmes. From this year the IBRO Fellowships and Travel Grants Programme are run completely via the web: students submit applications over on-line forms; committee members review them on-line - all with substantial savings in time and effort. The same model is now extended to IBRO's Neuroscience Schools and will soon apply to the other programmes.

Since December 2004, IBRO members can register on-line, obtain an account with password and access protected sections of the site. They can join different Forums of interest, protected from the menace of spam, viruses, etc. Several IBRO programmes such as the Brain Campaign, IBRO Alumni and IBRO-Edu are considered to be better served with a semi-detached site (**www.braincampaign.org**; **http://alumni.ibro.info; www.ibroedu.org**). Members are invited to use Feedback Form to seek help, post questions, comments or suggestions.

Ante L. Padjen
IBRO Webmaster & Head of Information Technology

IBRO'S SCIENCE ADVISORY PROGRAMME OFFERS EVALUATION SERVICE TO NEUROSCIENCE INSTITUTES

IBRO's Science Advisory Programme (ISAP), created in 2003 and chaired by Walter Stühmer (Germany), offers a new service to the world neuroscience community. Institutes or university departments engaged in brain research anywhere in the world can request from IBRO an evaluation of their research activities. Based on a brief description of an institution's research profile, an advisory board of international experts in the relevant fields is chosen to carry out the review. At the end of each site visit, the board prepares a written report of each team or laboratory in the research institution. ISAP evaluations should help institutions develop a strategy to support the best programmes and most promising research groups and provide indispensable information for decision making by agencies running such facilities. The reports will form the backbone of an IBRO database of neuroscience institutions worldwide, which will be maintained in the form of a World Map of Brain Research on the IBRO web site.

In April 2004 ISAP received its first request for evaluation by the Institute of Experimental Medicine, Hungarian Academy of Sciences, Budapest, Walter Stühmer described the evaluation: "The Institute for Experimental Medicine, Hungarian Academy of Science, Budapest, Hungary (Director: Tamas Freund) was the first institution to request a review by the IBRO Science Advisory Programme. The members of the Scientific Advisory Board were Marina Bentivoglio, (Italy), Jean-Claude Lacaille (Canada), Henry Markam (Switzerland), Roger Nicoll (USA) and Larry Swanson (USA).

"This very first review served as a test for the procedures established or the assessment of institutional performance. Issues to be addressed in the ISAP's evaluations include the research structure of the institute, future plans, external funding, and rate and quality of publications. The Advisory Board's report consists of two parts: one that is immediately made available to all members of the institute; and the other confidential, more detailed and specific in its assessment, which is sent to the head of the institute. Both are aimed at giving the institution under review tools and suggestions for further improvement. The ISAP hopes to strengthen the neurosciences by assisting institutions in their own quest to achieve and maintain international research and academic standards. Special mention has been made of the external and thus unbiased nature of the evaluation that the programme provides. Other requests for review have been received and we hope that as this programme achieves greater visibility, more institutions will use this opportunity to be reviewed by an external panel of neuroscientists."
For more information, contact ISAP Chair Walter Stühmer (wstuehm@gwdg.de) or go to:
http://www.ibro.info/Pub_Main_Display.asp?Main_ID=234

NEW DIRECTOR OF PROGRAMMES FOR IBRO

In February this year, Stephanie Wubben took up a new position at IBRO as Director of Programmes. She is assisting in web site maintenance and data collection such as on-line applications for funding, alumni records, and elections.
She hopes to set in motion new and creative ways in which IBRO's committees can share and display information on the web site. Stephanie is originally from Dubuque, Iowa, USA.
Before moving to Paris, she was a pattern designer for Victoria's Secret in New York.

Stephanie Wubben

Visit IBRO-Edu www.ibroedu.org for Neuroscience Learning Resources

IN THE NEWS

NEUROSCIENCE NEWS AND EVENTS

IBRO SECRETARY-GENERAL TO CHAIR SYMPOSIUM AT SfN MEETING

'Neuroscience Education and Research in the Developing World'

Jennifer Lund, Secretary-General of IBRO, is to chair the Symposium on Neuroscience Education and Research in the Developing World on Monday, November 14, 2005, 1:30-4:00 pm at the Washington Convention Center, Ballroom A, Washington, DC, USA in conjunction with the Society for Neuroscience 35th Annual Meeting. Topics will include current strategies for assisting neuroscience education and research in disadvantaged world regions. The many foreign members of the SfN will have the opportunity to discuss with leaders of the International Brain Research Organization's Regional Committees how international programmes are best formulated to help them develop and sustain their own neuroscience communities. The schedule is as follows:

1.30 pm (460.1): Introduction. J. S. Lund Utah University, USA.
1.40 pm (460.2): Formats for Education: Visiting Lecture Team, Schools, Fellowships and Meeting Sponsorship. A. J. Aguayo, McGill University, Canada.
2.05 pm (460.3): The Needs of Neuroscience in Developing Countries. R. N. Kalaria, Newcastle General Hospital, UK.
2.30 pm (460.4): Use and Care of Animals in Research in Developing Countries. S. L. Juliano, USUHS, USA.
2.55 pm (460): Neuroscience Outreach by North America to the Developing World. B. S. McEwen, Rockefeller University, USA.

SfN Waives Registration Fees for IBRO Travel Grantees to Attend 35th Annual Meeting

The Society for Neuroscience will provide complementary registration for the recipients of SfN/IBRO International Travel Fellowships, and the IBRO Travel Grants to attend the SfN 35th Annual Meeting in Washington, DC, November 12-16, 2005. The partnership between SfN and IBRO continues to focus on providing support to scientists from the less developed countries to share their research findings with the neuroscience community.

FOREIGN SCIENTISTS FACE US VISA PROBLEMS

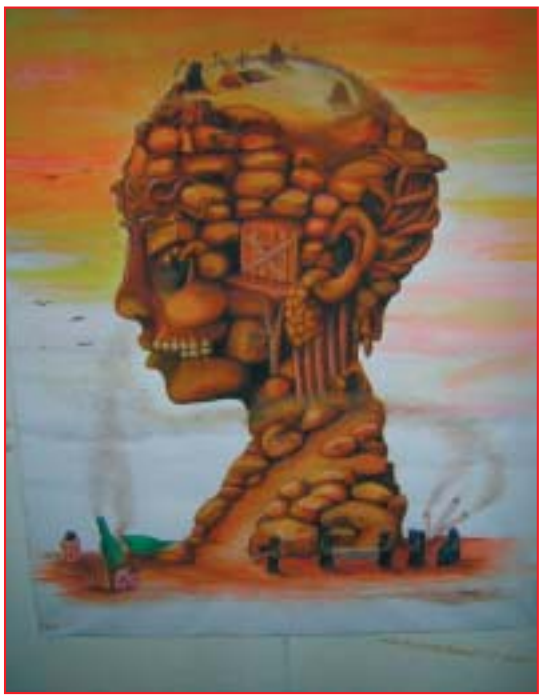
Foreign students wishing to travel to a meeting or study in the US are likely to encounter equally frustrating problems. Since September 11, 2001 harsh restrictions on visas have resulted in a reduction of foreign neuroscientists attending US meetings and the inability of international students to obtain visas for work in US neuroscience establishments.

According to the US National Science Board in its 2004 report Science and Engineering Indicators 2004, the US State Department issued 20% fewer visas for foreign students in 2001 than in 2000, and the rate fell further between 2001 and 2002. Meanwhile, the number of jobs requiring advanced science and engineering skills is growing almost 5% annually. In contrast, countries in Europe and Asia have increased their investment in science and engineering education at higher rates than the US and are continuing to offer attractive opportunities for foreign talent.

There was a reduction in foreign applications of 28% for the 2004 school year, according to a US Council of Graduate Schools survey.
So far in the 2004-5 school year, the CGS reports a 5% per cent drop in foreign student applications to US graduate programmes, the largest number being students from China and India and in the engineering and business fields.
In October 2004 the US Fogarty International Center (FIC) published information on visas for foreign scientists, emphasizing that Fogarty itself could not "help with Visas for foreign scientists other than providing invitations for FIC meetings they are to attend."

In response, the US government in February 2005 announced a relaxation in immigration policy for foreign students. The US Dept. of State and Dept. of Homeland Security jointly announced an extension of the period of security clearance for up to four years for visa-holding scientists and students visiting the country from overseas. Also, new regulations make available 20,000 new H-1B visas for foreign workers with a minimum master's level degree from a US academic institution. It is hoped that the US Government's response will be sufficient to maintain access to US neuroscience training by overseas students. Meanwhile, other countries of the world will no doubt benefit from an increase in talented applicants to their training programmes.
(See IBRO's Listing of Training Programmes worldwide: **http://www.ibro.info/Pub_Main_Display.asp?Main_ID=162)**

BRAIN CAMPAIGN FUNDS EDUCATIONAL EVENTS



Brain Awareness Week in Manzanillo, Cuba, March 15-16, 2005, supported by IBRO. Painting Competition: 1st Prize: 'Sexto sentido' by Eusebio Merladet.

The Brain Campaign is a joint venture between IBRO, SFN, the Dana Alliance for Brain Initiatives, and EDAB (European Dana Alliance for the Brain) to help create better public understanding of the brain. With financial help from the Brain Campaign, neuroscientists around the world organize public educational events. Each March many events are focused on Brain Awareness Week, when hundreds of public events are staged to draw attention to what is being accomplished in scientific laboratories and provide information to the public about the brain.

In 2005 the Brain Campaign gave awards totalling $6000 to help fund 12 public education projects, including: **Cuba**: Neuroscience for All: Our Brain, Our Friend; **Mexico**: Exhibition of posters and anatomical models in metro station La Raza; **Venezuela**: Children's workshops on the brain; **Australia**: Children's workshops on the brain; **India**: Exhibitions, symposia, competition; **Cameroon**: Explaining epilepsy & dispelling people's fears; **Kenya**: Discovering the Brain (workshop for high-school students), Public information campaign on Health and Socio-economic Burdens of Brain Disorders; **Morocco**: Symposium on Brain and Disabilities (for young people); **Uganda**: Understanding of the Structure and Functioning of the Brain and Common Brain Disorders (poster exhibition and seminars for young people).
Brain Campaign web site **www.braincampaign.org**

BAW banner in Chandigargh, India where a series of public lectures was held at the Postgraduate Institute of Medical Education and Research's Dept of Neurology. Credit: Renju Kuriakose.

BRAZILIAN NEUROSCIENTIST WINS *NEUROSCIENCE* COVER COMPETITION

The winning image of the 2004 *Neuroscience* cover competition was the cover for Vol. 125, Issue 3, 2004, which is in the article 'Limbic epileptogenecity, cell loss and axonal reorganization induced by audiogenic and amygdala kindling in wistar and sudiogenic rats (WAR strain)'. The author is Norberto Garcia-Cairasco, Assistant Professor of Physiology (Neurophysiology), Director of the Neurophysiology and Experimental Neuroethology Laboratory (LNNE), Physiology Dept., Ribeirao Preto School of Medicine, University of Sao Paulo, Ribeirao Preto, SP, Brazil. Dr Garcia-Cairasco described the image: "The work is related to the behavioral and cellular evaluation of chronic seizures in a genetically developed audiogenic rat strain. The so-called audiogenic kindling is a known model of limbic networks recruitment, with impact in epilepsy research. The composite image was created with digital manipulation and enhancement using digital capturing of actual Nissl and Timm stained sections and modified in Painter software (Corel)."

This year the Editors of *Neuroscience* once again invite all authors who have papers accepted for publication in the journal during 2005 to enter a competition for the year's best cover design.

The competition is judged by the IBRO Publications Committee. The winner will receive $1000 worth of books from Elsevier, publishers of the journal.

NEWS IN BRIEF • NEWS IN BRIEF • NEWS IN BRIEF • NEWS IN BRIEF • NEWS IN BRIEF

New Chair for IBRO's Return Home Programme: Fernando Lopes da Silva, Institute of Neurobiology, University of Amsterdam, Amsterdam, Netherlands, has been elected by IBRO's Executive Committee as the new Chair of the Return Home Programme, as former Chair Carlos Belmonte steps down. The objective of the Return Home Programme of IBRO is to develop specific policies and coordinate efforts with other organizations to improve the opportunities for productive neuroscience research (allied to health services) in the less advantaged regions of the world and to provide more aid to those researchers trained overseas who wish return to their home countries.

IAC-USNC Publishes Cyber Neuroscience Workshops and Lectures: IAC-USNC, serving as the US-Canada Committee of IBRO, has published the online sites of a number of Neuroscience Workshops and Lectures entitled 'Web-based Lectures and Neuroscience Methods' (**http://www.iac-usnc.org/education.html**), including the '2003 SfN Neurobiology of Disease Workshop', 'Archived Webcasts of NIH Lectures', IBRO's educational website 'IBRO-Edu', and 'Methods in Neuroscience'.

SfN Offers Reduced Fees for Members in Developing Countries: In an effort to provide aid to neuroscientists and students living in resource-restricted countries and to broaden access to all areas of the world, the Society for Neuroscience is offering reduced dues for the year 2005 to members in more than 100 developing countries. Details can be found on the SfN web site (**http://sfn.org**).

HFSP/TWAS/Wellcome Trust/EMBO Report on Promotion of Science in Developing Countries: As a result of a meeting between the Human Frontier Science Program (HFSP), the Third World Academy of Sciences (TWAS), the Wellcome Trust and the European Molecular Biology Organisation (EMBO) in Trieste, Italy, 8-10 November 2003, the following papers have been published: 'Promoting Life Science Research and Training in Developing Countries: A Need for Concerted Action'; 'Research and Education in Resource-constrained Countries'; 'The Pipeline and the Tree: Towards a New Paradigm for Education', 'Training and Career Paths in the Natural Sciences'. These reports can be found on the HFSP web site at **http://www.hfsp.org/pubs/PosPap_top.php**

Fogarty International (NIH) Announce Grant-writing Help and Information: Fogarty International Center (NIH) has announced web sites for help and information with grant-writing: **http://www.fic.nih.gov** (click on Funding); **http://www.fic.nih.gov/butrum/welcome.pdf** (Grants Information CD); **http://grants1.nih.gov/grants/oer.htm; http://grants1.nih.gov/grants/resources.htm**

SARETI Offers Health Research Ethics Training: The Sareti African Research Ethics Training Initiative (SARETI), with partners University of KwaZulu-Natal (School of Psychology) the University of Pretoria (School of Health Systems and Public Health), and the Johns Hopkins University (Bio ethics Institute, Bloomberg School of Public Health), is a comprehensive and multi-disciplinary education programme in health research ethics for Africa.

SARETI aims to build African capacity for the ethical review of health research and to strengthen Africa's institutional training capacity necessary to achieve and sustain this. It offers advanced training in health research ethics to scientists and other professionals involved with health research in Africa. Further information can be obtained on the SARETI web site: **http://shsph.up.ac.za/sareti.htm**

IBRO'S FUNDING OPPORTUNITIES

2006-2007

FELLOWSHIPS & TRAVEL GRANTS

Chair: Kwok-Fai So

Applications and information for IBRO Fellowships and Travel Grants are to be found on-line on the IBRO web site http://www.ibro.info/Pub_Main_Display.asp?Main_ID=3

The IBRO Fellowship Programme:
The IBRO Fellowship & Travel Grants Programme aims to foster neuroscience research in the less developed and less well-funded countries by providing funding support to high-quality candidates in the regions who wish to broaden the scope of their training in neuroscience by working abroad in good laboratories, or participating at international neuroscience meetings. Priority will be given to those who have not obtained an IBRO Fellowship within the past three years and who, after completion of the training funded by this Fellowship, are willing to return to their home countries, bringing with them new knowledge and skills to advance neuroscience in their regions.
The funding for a 12-month fellowship is US$25,000. An 'Outstanding IBRO Fellowship' of additional US$5,000 will be awarded to the distinguished candidate(s).
Application Deadline: 1 March 2006

John G. Nicholls Fellowship:
This Fellowship of US$25,000 aims to assist one promising researcher who wishes to further his/her training in neuroscience at a distinguished foreign laboratory for one year. The successful candidate is expected to return to his/her home country after the training, bringing new knowledge and skills in the neurosciences. Candidates should be younger than 30 years old at the time of application and reside in one of the 18 countries where the IBRO Visiting Lecture Team Programme (VLTP) has been held under Dr Nicholls' direction: **Africa:** Nigeria; **Asia Pacific:** China, India, Malaysia, Philippines, Sri Lanka and Vietnam; **Central/Eastern Europe:** Bulgaria, Iran and Poland; **Latin America:** Argentina, Brazil, Chile, Cuba, Mexico, Peru, Uruguay and Venezuela.
Application Deadline: 1 March 2006

IBRO Travel Grants July-December 2006 and January-June 2007: IBRO offers Travel Grants for high-quality neuroscientists especially from the less-developed and less well-funded countries to present their findings at international neuroscience meetings. Priority will be given to those who have not obtained an IBRO Travel Grant in the past three years.
Funding for travel will be up to US$1500 per award.
Applications for Travel Grants for the six month period:
a) July-December 2006 should be submitted by 1 March 2006
b) Jan-June 2007 should be submitted by 1 September 2006

SfN/IBRO Travel Fellowships: The Society for Neuroscience offers Travel Fellowships of up to US$1500 each, for neuroscientists under the age of 35 from the less-developed countries of the five IBRO Regions (Africa, Asia/Pacific, Central and Eastern Europe, Latin America, Western Europe) to attend the 36th SfN Annual Meeting in 2006. The applicant should be the first author of an abstract to be presented at the annual meeting. Copy of abstract submitted to SfN for a poster or a platform presentation is required.
Application Deadline: 1 March 2006.

All applicants should fill in the appropriate fellowship or travel grant application forms provided on-line on the IBRO web site: **www.ibro.info/Pub_Main_Display.asp?Main_ID=3**. There are no hard copies of forms available. Applicants cannot apply for more than one category of funding for travel (IBRO Travel Grant, SfN/IBRO International Travel Fellowship) or fellowship (IBRO Research Fellowship, John G. Nicholls Fellowship).

Current funding levels of all Fellowships are under review for 2006.

SYMPOSIA AND WORKSHOPS

Chair: Ken Muller

IBRO invites requests for partial funding of Symposia and Workshops on important topics in neuroscience with the aim of encouraging neuroscience research and scholarship in regions of the world with limited funds for science. Participants should represent the international neuroscience community as well as regional interests. Meetings should have a clear focus on a particular topic. Preference will be given to activities that include younger scientists and offer training for scientists from countries in which little money is available for research or teaching.

Applicants are encouraged to include a component available publicly on the web that could involve participant discussion either before or after a regular symposium or workshop. Such discussions might, for example, include opportunities for students and others to ask questions, make suggestions and provide relevant information.

Symposia should deal with topics of key interest, specialized or broad, with background talks to help those unfamiliar with the material, as well as accounts of current research.

Workshops are more technical and practical in orientation. A major portion of the programme should involve discussion, practical teaching of techniques and the presentation of concepts and controls necessary for experimental work. Workshops that bring useful techniques and donate permanent equipment to less funded countries are encouraged.

IBRO will publish abstracts of its supported events on the IBRO web site for the information of the membership at large.

Deadlines: Deadlines for receiving proposals are 1 February and 1 September each year.

Further information on the IBRO web site: **http://www.ibro.info/Pub_Main_Display.asp?Main_ID=143**

SYMPOSIA & WORKSHOPS FUNDED IN 2005

Sri Lanka: Human brain autopsy tissue in research on neuroregeneration and neurodegeneration (January)
India: Workshop on evolution of developmental mechanisms that underlie behaviour (January)
Italy: 3rd International Meeting on Steroids and Nervous System (February)
Argentina: 7th Argentine Workshop in Neuroscience (April)
South Africa: Chronobiology in Africa (April)
Iran: Workshop on Cognitive Science and Neurophilosophy (May)
Netherlands: Introductory Course for Young Glial Cell Researchers (May)
Venezuela: 3rd Caribbean Neurobiology Course Brain-Environment Interactions (June)
Spain: 28th European Conference on Visual Perception (August)
France: Nature/Nurture in Brain Development and Neurological Disorders (September)
Cuba: IX International Conference on Cognitive Neuroscience (September)
UK: The fMRI Experience (September)
Russia: International Summer School in Behavioural Neurogenetics (September)
Slovak Republic: 5th Symposium on Experimental and Clinical Neurobiology (September)
Croatia: Mind and Brain V: Physics and the Brain (September)
Israel: Intracellular Recordings In-vivo (September)
Croatia: 2nd IBRO/FENS Summer School Development and Plasticity of the Human Cerebral Cortex (September)
Spain: XII International Symposium on Cholinergic Mechanisms (October)
Argentina: 8th Latin American Symposium on Chronobiology Neurophysiology of Biological Rhythms (October)

PENS: Programme for European Neuroscience Schools: PENs web site **http://mars.glia.mdc-berlin.de/pens/** for further information and application details about this new joint funding venture between FENS and IBRO.

Fellowships and grants awarded 2005-2006

Nine Research Fellowships were awarded to neuroscientists from less well-funded countries by IBRO in 2005. One neuroscientist was awarded the John G. Nicholls Fellowship. Thirty-one neuroscientists were awarded IBRO Travel Grants for the period July-December 2005. There were three recipients of the NIDA/IBRO Travel Fellowship 2005 for attending the NIDA (National Institute on Drug Abuse) satellite meeting at the 2005 SfN Meeting in Washington, DC. Fifteen candidates won SfN/IBRO Travel Fellowships to attend the 2005 SfN Meeting.

BULGARIAN NEUROSCIENTIST AWARDED JOHN G. NICHOLLS FELLOWSHIP

Dimiter Prodanov (age 30) from Bulgaria has been awarded the John G. Nicholls Fellowship for 2006. He will spend twelve months, from April 2006, with Dr Jean Delbeke of the Dept. of Physiology & Pharmacology, the Neural Rehabilitation Engineering Laboratory at the Catholic University of Louvain, Brussels, Belgium. The amount of the award is US$25,000. The John G. Nicholls IBRO Fellowship was created in honour of John G. Nicholls who headed IBRO's Visiting Lecture Team Programme (VLTP) from 1994 to 2002.

The Fellowship aims to assist annually one promising young researcher who wishes to further his/her training in neuroscience at a distinguished foreign laboratory for one year. The successful candidate is expected to return to his/her home country after the training, bringing new knowledge and skills in the neurosciences. Dr Prodanov attended an IBRO VLTP course in 1998 in Sofia, Bulgaria. His former supervisor in Bulgaria was Prof. Dr Nadka Boyadjieva of the Dept. of Pharmacology and Toxicology, Medical University, Sofia.
He is presently working in Prof. Enrico Marani's neuroregulation group in the Department of Neurosurgery, Leiden University Medical Center, Netherlands. He has three publications and one of these is in the journal *Arch. Physiol. Biochem.*, another in *Biomed. Rev.* and he is 5th author on a publication in *J. Pharm. Pharmacol.*

Dimiter Prodanov

Levi Montalcini Fellowships for African Women in Neuroscience

In July IBRO announced two Levi Montalcini Fellowships, named after Prof. Rita Levi Montalcini, winner of the 1986 Nobel Prize in Physiology or Medicine, for young women scientists from Africa. The **Fellowship for Africa** provides support for a graduate student or junior faculty member for two years at an African university/institution not in the applicant's home country. The **Fellowship for Study Overseas** provides support for a graduate student for two years to study for a higher degree or perform research at a university/institution outside Africa.

REGIONAL FUNDING

IBRO's Regional Funding: Most of IBRO's funding is directed to the membership via programmes managed by the IBRO's Regional Committees: **http://www.ibro.info/Pub_Main_Display.asp?Main_ID=241**

OTHER FUNDING SOURCES

IBRO Neuro-Grants Info: Under the chairmanship of Chair Connie Atwell, this programme provides an international funding database to facilitate neuroscientists' access to sources of support for research and researchers worldwide: **http://www.ibro.info/Pub_Main_Display.asp?Main_ID=226**

European Opportunities for Young Scientists: The Life Sciences Mobility Portal from the European Molecular Biology Organization (EMBO) offers searchable databases of grants, courses, scientific partners for collaboration and jobs. The site also includes stories from postdocs who made the move from one country to another following a recent competition for the best stories. **http://mobility.embo.org**

Fogarty/NIH Brain Disorders in the Developing World Program: The purpose of the Fogarty International Center Brain Disorders in the Developing World: Research Across the Lifespan Program is to develop collaborative research and capacity-building projects on brain disorders throughout life, relevant to low- and middle-income nations. Information: **http://www.fic.nih.gov/programs/BrainDisorders.html**

RESEARCH FELLOWS & ALUMNI

IBRO'S 'OUTSTANDING FELLOWS' . . . ALUMNI REUNIONS

OUR ALUMNI AROUND THE WORLD

At the last count, the number of IBRO Alumni stood at more than 1000, with more and more young neuroscientists participating in IBRO's schools, workshops and Visiting Lecture Team Programme (VTLP) courses around the world. Over the year there have been reunions, parties and the first IBRO Alumni Symposium in Montevideo.

More than 200 Alumni attended a joint FENS (Federation of European Neuroscience)/IBRO Alumni reunion during the FENS July 2004 meeting in Lisbon, Portugal. Attention was drawn to the importance of the role of mentoring of promising young students.

During the Society for Neuroscience 2004 meeting in San Diego, CA, USA, an International Training and Collaboration Social for Human Frontier Science Program (HFSP) Awardees and IBRO Alumni was held. Everyone had the chance to discuss international education and research opportunities. The event was combined with a satellite symposium 'Neuroscience in Developing Countries: Do You Dare Return Home?', organized by Gregory Quirk (Puerto Rico) and Gladys Maestre (Venezuela), when neuroscientists presented their return-home experience, highlighting key issues and problems.

IBRO's 1st Alumni Symposium followed the Tenth IBRO Latin America School of Neuroscience, Montevideo, Uruguay in March 2005. Eighty scientists attended the symposium, organized by Omar Macadar, Ana Silva, their colleagues, and Alumni Programme Coordinator Sigismund Huck. The Latin America Alumni sent a message of good luck to their African colleagues who were about to attend an Alumni reunion in Cape Town, South Africa after participating at the 9th IBRO School, which took place during the 7th SONA Congress, April 2005.

The Alumni now have an interactive site on the IBRO web site to facilitate interaction between students and students and faculty who have participated in IBRO educational programmes and to help create a community of young scientists.

IBRO LARC Alumni, Montevideo, Uruguay

The piñata challenge, Montevideo

THREE RESEARCH FELLOWS NOMINATED OUTSTANDING FELLOWS

In the awards for 2006 IBRO Research Fellowships, three young researchers were nominated 'Outstanding Fellows': Lucía Francini of Argentina, Thierry Charlier of Belgium, and Natalia Lozovaya of Ukraine. This category of fellowship recognizes the scientists' particularly strong potential and capability for further development in the area of neuroscience research. They are selected from amongst the top-ranking fellows from all the IBRO Regions. All three are keen to broaden the scope of their training in neuroscience and will be taking up positions abroad in established laboratories.

Lucia Francini, Institute for Genetic Engineering and Molecular Biology (INGEBI), Buenos Aires, Argentina

I work as a postdoctoral fellow at the laboratory of Dr Belén Elgoyhen at the Institute for Genetic Engineering and Molecular Biology (INGEBI) in Buenos Aires, Argentina. In this laboratory I am conducting a project whose major aim is to elucidate the evolutionary history of acetylcholine nicotinic receptors (nAChR) subunits in vertebrates. We are also interested in the co-evolution between subunit interacting domains. To understand the origin and evolution of nAChRs subunits we use a bioinformatics based approach.

Lucia Francini

During the IBRO Fellowship year 2006 I will have the opportunity of joining Dr Bruce Lahn's laboratory, in the Dept. of Human Genetics, University of Chicago, Chicago, IL, USA. In this lab I shall be working in a project whose major aim is the identification and study of candidate genes responsible for determining the distinctive abilities of the human brain. Determinant traits of humanness, such us the use of a complex language, long-term planning and exceptional learning capacities, are all the result of distinctive cognitive and behavioural abilities of our brain that have been acquired during the last 400,000 years of human evolution.
To study the molecular basis underlying the particular anatomical and functional configuration of the human brain it is necessary to understand fully what makes us humans. Moreover, the identification of genes responsible for our particular cognitive capacities will be crucial to the understanding of altered molecular functions underlying complex mental diseases such us schizophrenia, dyslexia, autism and attention deficit/hyperactivity disorder (ADHD).
I am convinced that this experience will allow me to take a key step in my scientific career because it will increase my education in evolutionary genetics, a fascinating field still underdeveloped in South America. After finishing the training proposed here, my next goal will be to set up my own laboratory in Argentina to perform studies in brain molecular genetics using an evolutionary approach. I also expect to have the opportunity of training young doctoral students in this novel area.

Thierry Charlier, Center for Cellular and Molecular Neurobiology, University of Liège, Belgium

I am currently a graduate student in the University of Liège in Belgium in the Center for Cellular and Molecular Neurobiology with Professor Jacques Balthazart. My doctoral research examines the mechanisms underlying estrogen signaling and is focused on the factors involved in the modulation of steroid activity in relation to specific behaviors. My research has focused so far on the physiological role of steroid receptor coactivators, principally SRC-1. The function of these coactivators is to increase the transcriptional activity of steroid receptors such as the estrogen or androgen receptors. Using avian models, I was interested by the regulation of the expression of SRC-1 in the brain and by the physiological function of this coactivator in the modulation of steroid-dependent behavior and the associated neural gene expression.

Thierry Charlier

While mostly interested by the modulation of estrogen activity at the genomic level, I realized that rapid changes of steroidogenic enzyme activity also represent a physiologically relevant way of quickly modulating the concentrations of steroids in specific brain areas. Part of my thesis work was thus directed towards understanding the rapid modulation of aromatase activity in the preoptic area (via calmodulin binding and phosphorylation).
However, a broad overview of the modulation of steroid action would be incomplete without considering factors that regulate the access of steroids to specific brain regions. After my thesis, I will start collaborating with Professor G. Hammond and Dr K. Soma, in the Dept. of Zoology at the University of British Columbia, Canada, as a postdoctoral fellow. My training will focus on a specific globulin, the sex hormone binding globulin (SHBG), which controls the concentration of 'active' or free steroids. While its plasmatic form has been intensively studied, the function of SHBG in the brain remains unclear. I will test the hypothesis that the brain SHBG limits the concentration of free steroids and/or potentially triggers specific mechanisms at the membrane level, finally leading to changes of behavioral output.
Behavioral Neuroendocrinology is a tremendously exciting field within the Neurosciences. I am really grateful for the fellowship offered by the IBRO, which will allow me to pursue my research and I hope to give some insight into the understanding of the functionality of these modulators of steroid action.

Natalia Lozovaya (Ukraine), Center for Neurogenomics and Cognitive Research, Vrije Universiteit Amsterdam, Amsterdam, Netherlands

The main focus of my current research is to study the role of glycine receptors in CNS as target for non-retrograde action of cannabinoids. Cannabinoid CB1 receptors (CB1R) account for most of all central effects of cannabinoids. Nevertheless, while the majority of behavioural effects of cannabinoids are absent in CB1R-deficient mice, cannabinoids still induce the catalepsy and analgesia in these mice. The latter indicates the existence of functionally important targets for brain cannabinoid signalling different from CB1R
In collaboration with Profesor N. Burnashev's laboratory (Center for Neurogenomics and Cognitive Research (CNCR) and VU Medical Centre (VUMC)), Vrije Universiteit Amsterdam), we have recently obtained new data showing that cannabinoids may directly affect the functioning of the glycine receptor GlyR. In isolated CNS neurons, both synthetic and endogenous cannabinoids strongly inhibited the amplitude and altered kinetics of the Gly-activated current. These effects were observed in the presence of CB1/CB3 receptors antagonists suggesting direct action of cannabinoids on GlyR.
We demonstrated also that in conditions of excessive excitation depolarizing GlyRs may contribute to the generation of seizure-like activity in hippocampus. This activity was disrupted by cannabinoids. These findings suggest a fundamental importance of GlyR in the hippocampal network activity and nominate GlyR as a novel target for endocannabinoids signalling.

Natalia Lozovaya

The main purpose of this project is to confirm and extend these findings obtained by electrophysiological methods by combining them with studies in recombinant GlyRs, immunocytochemical approaches, as well as to extend the interpretation of these findings for the understanding of the role of cannabinoid signalling in the brain function. To address the functional implication of the direct action of cannabinoids on GlyRs we intend to study the mechanisms responsible for activation of GlyRs in hippocampus by paired whole-cell recordings from neurons in rat hippocampal slices.
We are going to search for glycinergic synaptically-connected pairs of neurons. Alternatively we will test the possibility of extrasynaptic GlyRs activation in conditions of excessive stimulation.

Alumni Reminisces One Year On

Ang Eng-Tat, a postdoc neuroscientist at the Institute of Histology, University of Fribourg, Switzerland, was among the students from China, Iran, Philippines, Iran, Taiwan and Singapore who attended the 4th IBRO School of Neuroscience, Hong Kong, April 20–May 1, 2004:

"At the opening ceremony, school organizer Prof. Y. S. Chan from HKU warmly greeted and welcomed each of us personally.
"There were eminent scientists from the USA, Australia, Japan, South Korea and of course HK. We were divided into tutorial groups and headed to different labs for hands-on experience. I was taken to the Institute of Molecular Biology (IMB), HKU, and there I had a good account of 'Functional genomics', where we covered in vivo and in vitro gene transfer under the guidance of Prof. Greg Lemke (invited specialist from Salk Institute, USA) and Prof. Sookja K. Chung (resident investigator, IMB, HKU).

"The second week of the school was spent at Dr Ng Tor Tai International House, Kowloon Tong, HK Baptist University (HKBU). We then had lectures and practical classes at the Chinese University of Hong Kong (CUHK) and Hong Kong University of Science & Technology (HKUST). Over the course of the remaining programme, I had a good idea of the field of genomics while exposed to techniques such as non-radioactive differential display at CUHK and the field of developmental biology at UKUST.

Then came the all-important presentation, for which we had to gather all our thoughts and data acquired over the two weeks. It turned out well and we had the humbling experience of knowing that there is really much to learn in the years ahead of our respective scientific careers.
In conclusion, I have benefited from the program and made many good friends along the way, which I have no doubt will bear fruit in future."

Students enjoy a meal together at the 4th IBRO School of Neuroscience, Hong Kong

NEWS FROM IBRO'S REGIONS

2004-2005

Africa Regional Committee: Neuroscience Activities: There is a buzz in Africa in the spirit of *umoja* (unity) towards the promotion of neuroscience on our large diverse continent. Through the generous support of IBRO the African Regional Committee (ARC) can be proud of various achievements in the past year. These include four Neuroscience Schools, the SONA-IBRO Congress in Cape Town, a regional meeting in Kinshasa (DRC), two specialized workshops on neurobiology (circadian rhythms and epilepsy), continental-wide Brain Awareness Week events and a neuroscience course lead by the VLTP in Kampala (Uganda). As previous years, almost 85% of the funds provided by IBRO were spent on these educational programmes and the remaining supported the SONA office, which is also the administrative centre (wango@uonbi.ac.ke) of the IBRO Africa Schools programme.

The gems of the African activities clearly comprise the IBRO Africa Neuroscience Schools programme. Members of the ARC hosted a record number of four IBRO schools in the past year, held in Kenya, Morocco and South Africa. The 6th School on 'Neurodgeneration and Regeneration' was held at Rhodes University, Grahamstown, 10-18 September 2004. The 7th School 'Neuropharmacology and Molecular Neuroscience' was held 1-8 November 2004 in collaboration with the International Society for Neurochemistry (ISN) at the International Centre for Insect Physiology & Ecology (ICIPE), Nairobi. For the first time students received lessons in cutting-edge molecular technology including patch clamping methods. The Canadian Institute of Neuroscience, Mental Health and Addiction (INMHA) generously supported our 8th School 'Hormones and the Brain', coordinated by Nouria Lakhdar-Ghazal (Morocco) and Quentin Pittman (Canada) and held in Rabat, Morocco, 23-29 March 2005. Young people from all corners of Africa, including Cameroon, Democratic Republic of Congo (DRC), Egypt, Ethiopia, Ghana, Morocco, Nigeria, Rwanda, South Africa, Tanzania, Uganda and Zimbabwe, can claim to be among the 200 or so alumni who have thus far benefited from the schools programme established in 2000.

The highlight of the year clearly was the 'banquet of brain science' under the world-famous Table Mountain where the two oceans meet: the joint International Conference of the Society of Neuroscientists of Africa (SONA), IBRO ARC and the Collegium Internationale Neuropsychopharmacoligum (CINP), focusing on the Neurosciences and Neuropsychiatry in Africa, 18-22 April 2005 in Cape Town. In an earnest attempt to bring clinical and basic research even closer, over 500 delegates attended the core of the SONA-CINP conference, who were also welcomed by Jenny Lund (Secretary-General of IBRO; Salt lake City, UT, USA). A unique feature of the scientific sessions was the large number of young African scientists given the platform to tell us about neurological research in Africa. The 10th Fogarty-IBRO African Neuroscience School 'Basic and Clinical Neuroscience' was held in Bamako, Mali, 23-27 July 2005.

Under the leadership of Pierre Luabeya (ARC; Belgium) and Prof. Kayembe Kalula (DRC) the ARC supported the 2nd International Symposium on Neurosciences in Central Africa, in Gombe, Kinshasa, 8-10 November 2004. The Association pour la Promotion des Neurosciences (APRONES) hosted around 150 people who attended various sessions with the general theme 'Neurosciences, Mental health and Development'.

The ARC continues to lead the IBRO Africa Schools programme and represents the interests of the Society of Neuroscientists of Africa (SONA), Moroccan Association of Neuroscience (MAN), Southern African Neuroscience Society (SANS), Kenyan Society for Neuroscience (KSN) and Nigerian Society for Neuroscience (NSN). The ARC at the same time continues to encourage interest groups in Congo, Egypt, Senegal and Uganda to be members of the IBRO Governing Council.

We are very grateful to our sponsors including several learned societies, educational institutions, funding bodies and commercial organizations. They include IBRO, Fogarty International Center, INMHA (Remi Quirion, Canada), ISN (Roger Butterworth and CAEN), Society for Neuroscience, SONA, the Third World Academy of Sciences, Elsevier Ltd., GlaxoSmithKline (UK), Axon Instruments (Molecular Devices Corp.), Leica (SA) and the Universities of Cape Town (SA), Grahamstown (SA), Kinshasa (DRC), Lubumbashi (DRC), Mbujimayi (DRC), Makerere (Uganda), Mohamed V University (Morocco), Nairobi (Kenya), Newcastle upon Tyne (UK), Oregon (CROET, USA) and Stellenbosch (SA).

Raj Kalaria
Chair, ARC

Asian-Pacific Regional Committee: Four new APRC members were elected in July 2004. They are: Ying-Shing Chan (Hong Kong, China), Fereshteh Motamedi (Tehran, Iran), Viji Ravindranath (Manesar, India), and Tadaharu Tsumoto (Osaka, Japan). Four other serving members of the APRC are: Samuel H.H. Chan (Kaohsiung, Taiwan), Andrew Gundlach (Melbourne, Australia), Hitoshi Okamoto (Wako, Japan), and Paul Pilowsky (Sydney, Australia). Three members retired from APRC: Chao-Yi Li (Shanghai, China), Elspeth McLachlan (Sydney, Australia) and Hee-Sup Shin (Seoul, Korea).

In view of the geographic separation and diverse level of development within our region, two subgroups were formed in August 2004 under the central APRC as the governing body. After consulting various National Societies of the Federation of Asian-Oceanian Neuroscience Societies (FAONS), the subgrouping comprise: Group A: China, Hong Kong, Japan, Korea, Philippines, Taiwan, Thailand and Vietnam; Group B: Australia, India, Indonesia, Iran, Jordan, Malaysia, New Zealand, Pakistan, Singapore and Sri Lanka.

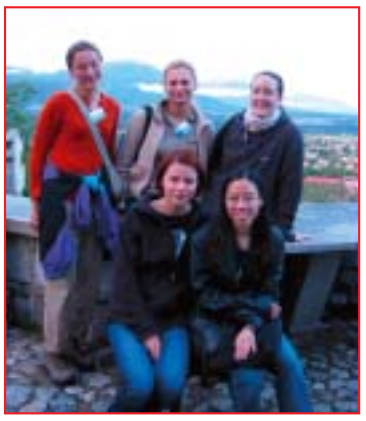
The purpose of the IBRO-APRC Associate Schools is to introduce updated concepts of neuroscience to graduate students in developing regions and to identify the brightest students suitable to attend main IBRO Schools of Neuroscience in the region over the next couple of years. The 1st Associate School (Chiang Mai, Thailand) was held in Chiang Mai University (February 23-27, 2004) in collaboration with the Thai Neuroscience Society and the Neurology Society of Thailand (local organizers: Siwaporn Schankra, Taweeporn Sittiracha). The 30 students were from Thailand, Philippines, Malaysia, Laos, Bhutan and Vietnam. Six overseas teachers (Australia, Hong Kong) and two local teachers delivered talks. The 2nd Associate School (Chongqing, China), was held in The Third Military Medical University (May 26-30, 2004) in collaboration with the Chongqing Neuroscience Society (local organizers: Wen-Qin Cao, Hui-zen Ruan). Thirty-six students attended from China, Thailand, India and Vietnam. Six overseas teachers (Australia, Korea, Hong Kong) delivered talks. The 3rd Associate School (Cochin, India) was held in Cochin University of Science & Technology on September 13-17, 2004 (local organizer: C.S. Paulose). Thirty-five students attended from India, Iran, Sri Lanka and Thailand. Four overseas teachers (Australia, Korea) and 2 teachers from India delivered talks.

The 5th IBRO School (Bangkok, Thailand) was held in Bangkok (December 7-18, 2004) with the assistance of the Thai Neuroscience Society (local organizer: Sukumal Chongthammakun). The 6th IBRO School of Neuroscience was held at the National Centre for Biological Sciences, Bangalore, India, August 8-20, 2005, covering basic concepts in neuroscience using vertebrate and invertebrate systems.

An Exchange Fellowship Scheme (age limit 40) was launched in 2004. Both applicant and host laboratory have to come from our region. Applicants must also provide justification that he/she will return to the home country after the exchange. Awards were given to 7 candidates (from China, India and Sri Lanka) for them to perform 6-month research in Australia, Japan, Hong Kong, and Singapore. IBRO-APRC provided travel support for young neuroscientists (especially those from disadvantaged countries) to attend courses (e.g. RIKEN Summer Program, Marine Biology Laboratory, USA) or to present papers at a conference (e.g. 2nd FAONS Symposium, Tehran, Iran, May 17-19, 2004).

Ying-Shing Chan
Chair, APRC

Central and Eastern Europe Regional Committee: The major activities in the Region in 2004 were three schools. The annual CEERC Summer School was organized by Pavel Balaban, Mikhail Ostrovsky and Konstantin Anokhin in Moscow on 'Sensory and Integrative Neuroscience: From Receptors to Behavior' in Moscow, Russia, August 18-31, 2004; 'Receptors, Channels, Messengers' was held September 16-28, 2004 in Yalta, Crimea, Ukraine organized by Platon Kostyuk, Oleg Krishtal and Elena Lukyanetz from Kiev; Maja Bresjanac organized the Cognitive Neuroscience Summer School on Working Memory in Bled, Slovenia, July 10-17, 2004.



Students at the Bled School

In 2005 four schools were supported by the CEERC: the regular Summer School 'Synaptic Transmission and Plasticity: Presynaptic and Postsynaptic Mechanisms', Debrecen, Hungary, organized by Miklos Antal; 'Behavioral Neurogenetics', Moscow, Russia, organized by Pierre Mormede; 'Confocal Microscopy', Belgrade, organized by Pavle Andjus; and 'Development and Plasticity of the Human Cerebral Cortex', Zadar and Zagreb, Croatia, organized by Ivica Kostovic. These activities provide an excellent background for the new joint initiative between IBRO (WERC/CEERC) and FENS: the Programme of European Neuroscience Schools (PENS).

The CEERC awarded 30 travel fellowships for the FENS Forum, Lisbon, Portugal, July 10-14, 2004. We awarded travel grants for the ISN/ESN International Congress for Neurochemistry, Innsbruck, Austria, August 22-26, 2005. Several symposia within the region as well as a number of local research visits were also supported.

The Committee evaluates most of the proposals it receives electronically, thus collecting the applications all year around and providing the applicants with fast decisions. In addition, once a year the CEERC meets in various countries throughout the region (Sofia, Bulgaria 2004; Kiev, Ukraine 2005) to discuss strategic issues and to evaluate candidates for the Summer School and other applications.

This year marks the departure of the five members who originally created the IBRO Committee for Central and Eastern Europe: Tamas Freund (Hungary, first chair), Leszek Kaczmarek (Poland, present chair), Oleg Krishtal (Ukraine), Josef Syka (Czech Republic) and Mikhail Ostrovsky (Russia). It is my great honour and pleasure to thank my four distinguished colleagues for their excellent service for the neuroscience community both in the Region and worldwide!

Leszek Kaczmarek
Chair, CEERC

Latin America Regional Committee: The goals of the IBRO-LARC Neuroscience Schools are to improve the quality of neuroscience education, foster links between alumni and teachers, establish networks to enhance scientific collaboration, and promote the international research projects among Latin American neuroscientists. The X Uruguayan Neuroscience School, partly sponsored by Fogarty International, was hosted at Montevideo, March 28-April 16, 2005. It was an interesting meeting because the organizers invited students from previous IBRO-LARC schools to participate as young faculty. The other school, the II Neuroscience School 'Receptors, Channels and Synapses', in association with INMHA (Canada), will take place in Buenos Aires, Argentina, November 19-December 6, 2005. Mexican neuroscientists have planned a second Ricardo Miledi Course in 2005, sponsored by the Grass Foundation and the Society for Neuroscience.

We sponsored seven courses in the LARC Region during the first half of 2005. Eleven courses will take place in the second half. All planned courses are superbly staffed with local and visiting professors. The students are selected from an excellent pool of applicants. The LARC has this year financed eight specialized training courses in the region, selected in response to two open announcements, one for each semester, and we have supported 11 very good proposals. Fourteen young neuroscience graduate students from the region were supported to work in a laboratory in another Latin American country to complement their experiments or to learn techniques that were essential for the completion of their dissertation. This exchange has been very important for the developing of cooperation among Latin-American neuroscientists. This year we are planning to grant 24 fellowships.

Marta Hallak
Chair, LARC

US/Canada Regional Committee:
The IAC-USNC (the Committee) is jointly appointed by the Society for Neuroscience (SfN) and the National Academy of Sciences (NAS), and represents the interests of both organizations as the US/Canada regional Committee for IBRO. The Committee organizes several types of programmes that benefit neuroscientists in other regions, working with IBRO Regional Committees and other contacts. Activities are supported by funding from the National Institutes of Health (specifically NIDA, NIMH and NINDS), the SfN and IBRO. The Committee's current programmes consist of 1) courses and workshops, 2) travel fellowships to scientific meetings, 3) support for participation in the Marine Biological Laboratory and Cold Spring Harbor neuroscience courses, 4) web-based teaching activities.

Epilepsy Workshop, Grahamstown

In September 2004, the IAC-USNC, working with the African Regional Committee, organized a Neurobiology of Epilepsy Workshop in conjunction with the IBRO 'Neurodegeneration and Regeneration' course at Rhodes University, Grahamstown, South Africa. The funds to support this programme came from NIH, IBRO and the American Epilepsy Society (AES). The 30 participants were from various African countries and included epileptologists and basic scientists. The workshop faculty developed with the AES a new initiative to bring 'American Epilepsy Society African Epilepsy Scholars' to the USA. Angelina Kakooza (Uganda) and Albert Akpalu (Ghana) will attend the SfN Meeting, complete a scientific/clinical visiting internship at a medical center, and then attend the AES annual meeting.

In 2005, the Committee worked with committee member Gregory Quirk (Ponce School of Medicine, Puerto Rico) and Gladys Maestre (University of Zulia, Venezuela) of the Latin American Regional Committee to develop a course on brain-environment interactions. This course was held in Venezuela, June 26-July 8. In 2006, committee member Janis Weeks will work with the African regional committee to organize a class modeled on the Neural Systems and Behavior course at the Marine Biological Laboratory. This year the IAC-USNC is supporting the attendance of 15 students from developing countries who will present abstracts at the SfN Meeting in Washington, DC. ***Cont. on p. 7...***

EDUCATION & TRAINING

THE VISITING LECTURE TEAM PROGRAMME 2004-2005

Once again IBRO's Visiting Lecture Team Programme, led by U. J. McMahan, has over the past year organized courses around the world, from Tehran to Qingdao, from Kampala to Kazan. The lecture tours are prepared in collaboration with the local and regional neuroscience associations in respective countries. Major funding for the VLTP is provided by the Grass Foundation.

Institute of Theoretical Physics and Mathematics (IPM), Tehran, Iran, May 20-23, 2004: Organizers Profs. Hossein Estek, Abdolhossein Abassian and John Nicholls. About 30-40 students attended the lectures and were joined by four to five local neuroscience faculty members. The students were PhD and pre-PhD students at the IPM, from Tehran's medical universities, Sharif University and Shiraz, Esfehan and Kherman. Prof. Michael Diamond (Trieste, Italy) lectured on the role of cortical topographic organization in learning in the rat whisker system, the application of topographic learning to the human tactile system and the cortical coding of vibration in humans. Prof. Timothy Shallice (London, UK) talked about methodologies in neuropsychology and functional imaging that attempt to determine whether higher cognitive functions should be considered as broadly distributed or modular and on the idea of prefrontal cortex as an executive system that coordinates the functioning of lower-level systems to direct complex cognition. The lecturers had the opportunity to visit the labs of Profs. Esteky and Abassian, which generate first-rate research in the areas of higher visual processing in temporal lobe and visual psychophysics. Several future collaborations and exchanges were established.

Qingdao University, Qingdao, China, July 21-29, 2004: Organizers Junxia Xie and U. J. McMahan. The course was attended by 81 students, teachers, research workers in neuroscience and related fields from various academic institutions throughout China.
Most lectures concerned classical and modern principles of selected areas in basic neuroscience. Two lectures were devoted to funding opportunities for training abroad and how to prepare grant/fellowship applications.
The lecturers were Prof. John Nicholls (Trieste, Italy), Prof. Harold Atwood (Toronto, Canada), Dr Yuan Liu (Bethesda, MD, USA), Prof. Henriette Raventos (San José, Costa Rica), Prof. Shlomo Rotshenker (Jerusalem, Israel), Prof. Xiong-Li Yang (Shanghai, China) and Professor U. J. McMahan (Stanford, CA, USA).

Yuan Liu and John Nicholls signing 'From Neuron to Brain'

The lectures covered the structural and functional organization of the visual system; principles of signalling; the structure, function and formation of synapses; steps and mechanisms of nervous system development and regeneration; and the genetic basis of human diseases. In a gesture of goodwill, Dr Liu personally donated a copy of the Chinese translation of John Nicholls *et al.*'s From Neuron to Brain to each of the students.
A highlight of the course was the series of lectures by local faculty members: Zheng-Yao Jiang, Lei Chen and Hong Jiang discussed the cellular and molecular aspects of CNS synaptic physiology and neurodegenerative diseases such as Parkinsonism.

First Military Medical University, Guangzhou, China, July 30-August 2, 2004: Organizers Profs. T. M. Gao and J. G. Nicholls. This was the first course ever held in English and Neuroscience at the First Military Medical University. There were 20 students from five universities in the region; some were medical students, others PhDs and MDs, others working in related fields. John Nicholls' lectures on two days dealt with signalling, development of the nervous system and regeneration. After each lecture there was a short discussion with questions from the students. Prof. Gao leads a group with excellent facilities for patch clamp engaged in active research on key problems of cell biology relating to ischaemia and degenerative disorders of the nervous system.

Arequipa, Peru, October 28-November 3, 2004: Organizers Wolfgang Trillo Alvarez and colleagues, medical students at the Medical University of Santa Maria in Arequipa. This course was proposed and planned entirely by medical students in Peru. In 2002 after a successful VLTP course in Cusco, Peru, the medical student organization of Peru organized one last year in Chiclayo, which was such a success that neurobiology was again chosen in 2004 for their annual meeting in Arequipa, with many of the same faculty: John Nicholls (Italy), José Ortiz (Puerto Rico), Francisco F. de Miguel (Mexico) and Elaine del Bel (Brazil). Wolfgang Trillo reported: "The Basic and Molecular Neurosciences course had as its main objective to make South Peruvian students realize that neuroscience is a very important branch of science where there is still much research to be done and that it is possible to carry out research in a developing country such as Peru. Around 80 students attended the course, representing some of the 250 students from Peruvian cities such as Cusco, Puno, Chiclayo, Lima and Arequipa who had been gathered together by the Center of Investigation and Medical Students (CIEM) to attend the National Congress of Medical Students. The VLTP course preceded the Congress. The alumni still refer to the IBRO Basic and Molecular Neuroscience Course as the model course not only for the quality of the lectures, but also for the knowledge conferred on the medical students in Arequipa."

Arequipa students

University of Nairobi, Nairobi, Kenya, February 12-13, 2005, Two-day Workshop: Organizers Youth Agency for Development of Science, Technology and Innovation at the University of Nairobi, Nilesh Patel (University of Nairobi) and VLTP Director U. J. McMahan. Eighty students from various campuses at the University of Nairobi and other Nairobi academic institutions attended the neuroscience workshop. Three VLTP members gave lectures covering the cellular and molecular basis of neural function under normal and pathological conditions. The aim was to introduce physics, mathematics and engineering students as well as medical students to problems of current interest in neuroscience and to describe methods being used to solve them. The lecturers were Profs. Elaine Del Bel (Ribeirao Preto, Brazil), U. J. McMahan (Stanford, CA, USA), John Nicholls (Trieste, Italy). Nicholls' lectures covered the principles of signalling, information processing in the visual system, CNS development and regeneration, and CNS mechanisms that regulate respiration. Del Bel's lectures concerned the principles of molecular neurobiology, correlating function and gene expression, nitric oxide as a transmitter in the CNS, and an experimental Parkinson's disease model. McMahan's lectures dealt with the structural basis of synaptic transmission and the steps and mechanisms involved in synapse formation.

Makerere University Faculty of Medicine, Kampala, Uganda, February 16-24, 2005: Organizers Dr Ebuk Moses (Dept. of Physiology, Makerere University) and Prof. U. J. McMahan: Nearly all the 143 course participants were from Makerere University. Lectures covered classical and modern principles of selected areas in basic neuroscience. Prof. Philippe Ascher's (Paris, France) lectures included the generation of the membrane potential, ionic mechanisms of the action potential, and NMDA receptors in synaptic plasticity and as targets in drug design. Prof. Elaine Del Bel's (Ribeirao Preto, Brazil) lectures covered the principles of molecular neurobiology, correlating function and gene expression, nitric oxide as a transmitter in the CNS, and an experimental Parkinson's disease model. Dr Alasdair Gibb's (London, UK) lectures included the electrophysiological and pharmacological basis of synaptic transmission, AMPA and NMDA receptor currents and channel kinetics; and integration of synaptic activity.
Dr Yuan Liu's (Bethesda, MD, USA) lectures were devoted to the nature of funding agencies that support graduate and postdoctoral training as well as research grants, and how to prepare grant/fellowship applications. Prof. U. J. McMahan's (Stanford, CA, USA) lectures dealt with the structural basis of synaptic transmission and the steps and mechanisms involved in synapse formation. Prof. Kenneth Muller's (Miami, FL, USA) lectures included regeneration of specific synaptic connections in the leech, the role of glia and microglia in nervous system repair, and mechanisms for simple learning. Prof. John Nicholls' (Trieste, Italy) lectures covered sensory transduction and information processing in the visual system, CNS development, regeneration in the immature CNS, and CNS mechanisms that regulate respiration.

Kazan State Medical University, Kazan, Russia, May 14-17, 2005: Local organizer Evgeny E. Nikolsky. The VLTP held an International Workshop in Neuroscience for young scientists; Profs. John Nicholls, U. J. McMahan, Andrea Nistri and Clarke Slater were the lecturers at the workshop.
More than 60 young scientists, graduates and undergraduates of Kazan State Medical University and other Kazan high schools and research institutions, and young scientists from Moscow, St. Petersburg, Minsk, Yerevan and Kiev participated. During the four-day workshop the lecturers gave 17 talks and held a number of conferences intended for informal discussions of questions arising from the lectures. On the last day of workshop, the speakers were Profs. R. Giniatullin (Italy), M. Bykhovskaya (USA) and E. Nikolsky (Kazan State Medical University). Very different aspects of modern neurophysiology were introduced in the lectures: from molecular mechanisms governing exocytosis and desensitization to the organization of neural networks and informational processes in the visual system.

VLTP in Kazan

IBRO'S Alumni . . . p. 5

Cont. from p. 6 . . . As in previous years, the Committee worked directly with the Board of IBRO Schools and the Marine Biological Laboratory (MBL Wood's Hole) course, instructors and applicant interviewers to seek and encourage highly qualified and motivated research trainees from developing countries to apply for admission to summer neuroscience courses. In 2005 the Cold Spring Harbor Laboratory in New York was added to this programme. Four participants attended CSHL courses and five attended MBL courses, with financial support for this programme from IBRO.

Finally, via the internet (**www.iac-usnc.org**) the Committee has continued to work on a seminar and neuroscience methods series to bring up-to-date neuroscience information to researchers in developing countries. The web-based neuroscience lectures are accessible by scientists worldwide and feature narrated data slides by prominent neuroscientists. New in 2005 is the Neurobiology of Disease Workshop, 'Protein Misfolding as a Common Pathway in the Dementias and Other Neurodegenerative Diseases', which was featured at the 2004 SfN Annual Meeting. The IAC-USNC, together with the SfN Education Committee, is also planning to post the Short Courses from the 2005 SfN Meeting on the web site next year.

Bruce McEwen
Chair, US/CanadaRC

Western Europe Regional Committee:
The WERC/FENS PhD Fellowship was launched by the WERC and FENS in 2003 in order to fund (max. US$24,000 per year) three PhD Fellowships in Neuroscience (two by WERC, one by FENS). Student applications had to be accompanied by the expressed willingness of the supervisor of the neuroscience PhD programme to enrol the fellows in the programme. Three fellows were selected: Aditee Vyas from India to the Institut de Génétique et de Biologie Moléculaire et Cellulaire (Strasburg), supervisor Prof. Brigitte Kieffer; Juliana Bentes Hughes from Brasil to the Max Delbruck Center of Molecular Medicine (Berlin), supervisor Dr Helmuth Kettenmann; Maria Marcia Mellado Lagarde from Cuba to the University of Sussex, supervisor Prof. Ian Russell. The first two fellowships are now in the second year while the third is completing the first year.

Under the supervision of Fernando Lopes da Silva and with the help of Erik de Shutter and Mike Wijnants in preparing the web site (**www.neuroinf.org**) a new call for applications to WERC Fellowships was posted in the second half of 2004. The winners and recipients of the 2005 WERC/FENS fellowships (each awarded US$24,000$ per year) are: Arun Chaudhury (India: Technical University, Munich), Federico Trigo (Uruguay: Université René Descartes, Paris), George Barreto (Brazil: Istituto Cajal, Madrid).

The WERC supported the Sevilla (Spain) Latin-American Doctoral Programme on Neuroscience and Behavioural Biology in the years 2004 and 2005. This two-term programme (about 10 weeks per term) led by José M. Delgado-García and Alberto Ferrús is very popular among students in Latin America. Equally popular, the Advanced Course in Computational Neuroscience also gained WERC support for two years for its schools in August-September 2004 (Obidos, Portugal) and August 2005 (Arcachon, France). IBRO funds for this successful course have particularly supported student participation from developing countries. In cooperation with both CEERC-IBRO and FENS, the WERC provided the financial backbone for the Cognitive Neuroscience Summer School on Working Memory in Bled, Slovenia (July 10-17, 2004). Grega Repovs and Maja Bresjanac did an excellent job to start this ambitious course from scratch in Slovenia (note the upcoming special issue of Neuroscience with the two organizers as Guest Editors as an immediate result of this school). Finally, WERC funded student travel grants for the two FENS Winter Schools in Kitzbuehel, Austria, December 2004 and December 2005. Starting in 2006, the Schools Programme of the WERC, CEERC and FENS will be run under the joint umbrella of PENS (Programme of European Neuroscience Schools) and the chairmanship of Sigismund Huck. PENS web site: **http://mars.glia.mdc-berlin.de/pens/**

Gaetano di Chiara
Chair, WERC

EDUCATION & TRAINING

IBRO'S NEUROSCIENCE SCHOOLS 2004-2005

The Neuroscience Schools Programme is run by a committee headed by John Hildebrand and was created to link and support both the Neuroscience Schools initially created by IBRO and its Regional Committees and those that derive from partnerships with other national and international organizations. On average there are 15 schools each year. Much of the planning process is now organized via the web site, with school organizers posting all data, including post-school reports, on-line. A selection of reports from schools around the world follows.

Obidos, Portugal, August 6-September 10, 2004: The Advanced Course in Computational Neuroscience/IBRO Neuroscience School introduced students to the panoply of problems and methods of computational neuroscience, addressing issues of neural organization from sub-cellular to network and inter-areal levels.

Moscow, Russia, August 18-31, 2004: IBRO Summer School Sensory and Integrative Neuroscience: From Receptors to Behavior. The school was directed at graduate students and young postdoctoral fellows below the age of 35. The main objectives were to review recent advances in the field of sensory and integrative neuroscience and to provide participants with a practical experience on techniques for the study of sensory and integrative neural functions at different levels - from receptor physiology to behavior. One student's reaction indicated the school's success: "Dear Prof. Balaban [School Director], it was the greatest school I ever attended and the people I had a chance to meet there became real friends. Therefore, I would like to thank you again for the great chance you gave me, for all the exceptional lectures, seminars and practicals, and all the efforts you've made to create this two weeks so incredible. My IBRO T-shirt made a real furore in the lab. Best greetings from Cracow, Ania."

Moscow Summer School

Grahamstown, South Africa, September 10-18, 2004: At the 6th IBRO Africa Region Neuroscience School, in addition to currently accepted pathogenetic mechanisms associated with Alzheimer's, Parkinson's and Huntington's diseases, and spinal injury, the students received instruction on cutting-edge advances in neuroprotection and therapeutic use of stem cells. Students were offered hands-on practical workshops on basic neuropathology, neural stereology, cell culture methods, HPLC analysis and electrochemistry techniques; they also presented short oral communications on their research.

Sharon Juliano (USA) in the lab, Grahamstown

Cochin, India, September 12-17, 2004: The purpose of the 3rd IBRO Asia-Pacific Associate School of Neuroscience was to introduce modern concepts of research in neuroscience to graduate students. Students came from areas in the western Asian region where there is limited opportunity to undertake research in neuroscience.

Cordoba, Argentina, September 6-24, 2004: The IBRO/INMHA School was a joint venture between IBRO and the Canadian INMHA (Institute of Neurosciences, Mental Health and Addiction, Canada) and sought to provide a platform for PhD students and junior post-doctoral fellows in the Latin-America area where they could acquire basic and advance knowledge on theoretical and technical aspects in key areas of cellular and molecular neuroscience research. It covered lectures, seminars and a variety of laboratory projects. Topics included early development of the nervous system, neuronal cell death during development, neuronal differentiation and establishment of neuronal polarity, trafficking of proteins in nerve cells, mechanisms of synaptic plasticity, differentiation of glial cells and cellular and molecular aspects of neurodegenerative and psychiatric disorders.

INMHA/IBRO School, Cordoba, Argentina

Learning another discipline - the Tango, Cordoba, Argentina

Crimea, Ukraine, September 16-23, 2004: IBRO Advanced Neuroscience Crimea School: Receptors, Channels, Messengers. Thirty-two students from Georgia, Hungary, Poland, Belarus, the Slovak Republic, Russia and Ukraine participated in this IBRO Summer School in Yalta, the Crimea. The school comprised 12 days of lectures and practical courses that aimed to review and discuss the newest brain research achievements in the field of receptors, channels and messengers. Lectures were given by leading neuroscientists from several countries covering new knowledge and the use of various experimental approaches to study different aspects of intracellular signalling in the nervous system. Virtual demonstrations were also employed to illustrate practical laboratory approaches.

Crimea School, Ukraine

Rio de Janeiro, Brazil, September 27-October 14, 2004: The Second IBRO School of Neuroscience comprised two weeks of practical activities around the themes of Neurochemistry, Developmental Neurobiology and Physiology of Cognition. They were encouraged to suggest paradigms eventually associated with projects they were developing. The practical activities ended with an integrative seminar where students presented results. Local and international faculty presented their data and the state of the art in their specific areas during four to five days of thematic symposia.

Nairobi, Kenya, November 1-8, 2004: IBRO Africa Region Neuroscience School. 21 students on this course came from Zimbabwe, Kenya, Nigeria, Uganda, Cameroon, Ethiopia and Morocco. The faculty gave a series of lectures each morning covering several major areas of neuropharmacology, including ion channels, receptors, signalling, molecular neurobiology, genomics, channelopathies, microarrays and drug discovery. Technical lectures were also given on making electrophysiological recordings from neurons, expressing recombinant receptors in cells, mapping receptors in the brain and making transgenic mice. Each afternoon a series of laboratories ran a hands-on experience of isolating brain RNA, preparing and injecting Xenopus Laevis oocytes with RNA or DNA; making two-electrode voltage-clamp recordings from the oocytes; preparing a brain slice and recording, extracellularly, field potentials from the hippocampus and inducing epileptiform activity and Long-Term Potentiation (LTP) in these preparations.

Bangkok, Thailand, December 7-18, 2004: The 5th IBRO School of Neuroscience covered lectures, seminars and a variety of laboratory projects focussing on five technique-oriented areas in neuroscience. Each was allotted to a particular project and attended hands-on workshops at Chulalongkorn University, Mahidol University and Srinakarinwirot University.

Kitzbühel, Austria, December 12-19 2004: At the FENS/Hertie/IBRO Winter School 40 young scientists, mostly PhD students and postdocs, represented 21 different European countries. A wide range of model systems for the study of cognition, from drosophila to primate, was presented, with the emphasis on methodological issues. A variety of techniques were considered including genetic manipulation and selection, *in vivo* electrophysiological recording and functional imaging. Ethical and social issues related to behavioural and cognitive neuroscience received a good deal of attention.

Rabat, Morocco, March 19-27, 2005: 8th IBRO/INMHA Africa Region Neuroscience School 'Hormones and Brain'. This was an advanced school in Neuroendocrinology, covering basic topics on anatomy of the neuroendocrine system and a specialized overview on sex-related differences in the brain, including how hormones induce plasticity in synaptic functions and in the development of the brain in conjunction with human behaviour. Other topics concerned stress and hormonal regulation, hormones and neurodegenerative/neuroinflammatory/neuroprotective process and the involvement of hormones in brain dysfuntion/protection. The school ended with a session on animal models (African) and hormonal regulations.

Montevideo, Uruguay, March 28 - April 16, 2005: X Latin America School of Neuroscience and IBRO Alumni Symposium: Students from Argentina, Brazil, Chile, Peru, Colombia, Venezuela and Mexico joined Uruguayan students for three weeks covering a wide range of topics: intrinsic membrane properties, neurogenesis in development, postnatal neurogenesis, ammiotrophic lateral sclerosis, neuroprotection and system neurobiology. The classes, seminars and lab work were held in different neuroscience laboratories of Uruguay. For one day students attended an international symposium 'Amyotrophic Lateral Sclerosis: Beyond the Motor Neuron' at Punta del Este. The IBRO Alumni Symposium is described in the Alumni section of this newsletter.

Cape Town, South Africa, April 23 – 27, 2005: IBRO/ICNS Africa Region Neuroscience School 'Neural Plasticity'. Topics varied from an in-depth review of the glutamatergic system to molecular and cellular mechanisms involved in neural plasticity in the rat hippocampus, aplysia and the mammalian visual system. The impact of the environment and hormones on brain plasticity was also discussed. Some attention was also given to myelin and the role of iron in myelination. A clinical bent to the course was added by talks on the neuropathology of the dementias and neuromuscular disorders caused by staple food (Cassava) toxin injury to the nervous system such as konzo. The didactic lectures were spiced with two excellent hands-on workshops. The first demonstrated a battery of easy executable tests to test and establish animal models to study Parkinson's disease and stroke. The second workshop exposed the students to the cutting-edge science of neuroproteomics and bioinformatics. There were open discussions on the way forward for African neuroscientists to secure funding and how 'valuable' it is when your submitted manuscript is rejected by an editor of a journal. Students came from Cameroon (2), Democratic Republic of Congo (2), Ethiopia (1), Ghana (1), Kenya (4), Nigeria (1), South Africa (5), Uganda (3), Zimbabwe (1). The students were highly motivated. The school was a great success.

9th IBRO African Neuroscience School

Fogarty Makes Donation to IBRO Schools 2004-2005

Fogarty International Center, a division of the US National Institutes of Health (NIH), made a substantial donation to help support six IBRO Neuroscience Schools in 2004-5. The 2004 Fogarty-supported IBRO Schools were held in Grahamstown, South Africa, Cordoba, Argentina and Crimea, Ukraine. Schools in 2005 will take place in Mali, Africa and Montevideo, Uruguay. A third school is being planned on Infectious Diseases and the Brain by IBRO's Clinical/Basic Science Committee Chair, Patrick Brundin.

INMHA (Canada) Supports IBRO Schools for Three More Years

The Institute of Neurosciences, Mental Health and Addiction (Canada), announced that it would provide financial support towards IBRO's Neuroscience Schools in Africa and Latin America for a further three years, from 2005 to 2008. INMHA initially co-funded a highly successful Advanced School at Stellenbosch University, Cape Town, South Africa in 2003. It also sponsored three more IBRO schools in Africa and a school in Latin America in 2004-5.