The Africa programme

When I was elected President, I stated in my platform presentation that we have an obligation to the developing countries. The major conclusion from the Neurology Atlas was that the available resources are insufficient to meet the global burden associated with neurological disorders. We focus upon Africa simply because Africa now confronts the world’s most dramatic public health crisis.

At the WFN Strategy meeting, held

Contd. on page 4

NEUROLOGICAL DISORDERS AFFECT MILLIONS GLOBALLY: WHO REPORT

A new report from the World Health Organization (WHO) shows that neurological disorders, ranging from epilepsy to Alzheimer’s disease, from stroke to headache, affect up to one billion people worldwide. Neurological disorders also include brain injuries, neuro-infections, multiple sclerosis and Parkinson’s disease.

The report, Neurological disorders: Public health challenges, reveals that of the one billion people affected worldwide, 50 million suffer from epilepsy and 24 million from Alzheimer’s and other dementias. Neurological disorders affect people in all countries, irrespective of age, sex, education or income.

An estimated 6.8 million people die every year as a result of neurological disorders. In Europe, the economic cost of neurological diseases was estimated at about 139 billion euros in 2004.*

Access to appropriate care is difficult for many people with neurological disorders, their families and caregivers. WHO advocates for the integration of neurological care into primary health care. For many people, primary health care is the only access to medical care they have. In these settings, doctors can use low-technology interventions. Community-based rehabilitation is also an option.

“Despite the fact that highly effective, low-cost treatments are available, as many as nine out of 10 people suffering from epilepsy in Africa go untreated. Health systems need to be strengthened to deliver better care for people with neurological disorders,” said Dr Margaret

Contd. on page 5

Acknowledgement: World Neurology is published with a generous grant from the Japan Foundation for Neuroscience and Mental Health.

Visit the WFN website at http://www.wfneurology.org
President’s Column .................................................. 1
Neurological Disorders Affect millions Globally: WHO Report .................................................. 1
Editorial ..................................................................... 3
Taiwan Neurological Society Supports Neurology ........................................................................ 5
Education in Vietnam .................................................. 5
WFN Annual Reports .................................................. 6
World Federation of Neurology ..................................... 7
Junior Travelling Fellowships, 2007 .............................. 7
Abstracts of some of the Papers Published in Journal of Neurological Sciences ................................. 9
Regional Conferences .................................................. 10
Reports on WFN Education Programme ....................... 11
Siena Agreement for Cooperation Among Several European Neurological Societies ....................... 12
Obituary: Professor Ian McDonald ................................ 13
Calendar ..................................................................... 14
Elsevier Advertisement ................................................ 15-16

COPYRIGHT © 2006 World Federation of Neurology. All rights reserved. Published by Elsevier B.V., Amsterdam, the Netherlands. Manuscripts accepted for publication become the copyright of the World Federation of Neurology (WFN). Before publication a copyright form will be supplied by the Publisher, which must be completed by all authors.

Advertisers should contact Elsevier Advertisement, 15-16

World Neurology, ISSN 0899-9465, is published by Elsevier B.V., Radarweg 29, 1043 NX Amsterdam, The Netherlands; Phone: +31 (20) 485 3358; Fax: +31 (20) 485 3249; e-mail: p.f.bakker@elsevier.com

Reprints
Reprint requests and all correspondence regarding the journal should be addressed to the Editor. However, back issues of World Neurology can be obtained from the publisher.

CHANGE OF ADDRESS
Notice of change of address should be sent to: World Neurology, Editorial Secretariat, 12 Chandos Street, London W1G 9DR, UK. Fax: +44 20 7323 4012; e-mail: WFNLondon@aol.com

Printed by Chandika Press (P) Ltd, 126 Industrial Area-1, Chandigarh-160002, India. Fax: +91-172-2657783. e-mail: chandika.press@gmail.com

Visit the WFN website at http://www.wfneurology.org
Neurological disorders in the world cause colossal human misery and mortality. The most debilitating diseases for the human race are neurological ailments that result in expenditure of billions and billions of dollars the world over. Startling figures bear testimony to the WHO report printed in this issue which also reflects that the poor resource countries are worst affected. This burden can be reduced, with meticulous planning for the prevention of some neurodisorders, but it will need the determined will and understanding of world states. The WFN has rightly stepped up its efforts to reduce this burden in Black Africa, which is worst affected; but at the same time, without ignoring other countries that need the WFN’s expertise and planning capability. The President and other members of the WFN Management Committee, along with several others, have set their minds to the problems and have made a good beginning, as seen in President’s Column, by ensuring co-operation between WFN and WHO to work to minimise this burden. All member states of the UN should now take up the challenge.

The Taiwan Neurological Society’s financial support for the neuroeducation programme in Vietnam deserves our appreciation and support. This is an example which other rich countries should emulate. If every developed and rich country adopted one underdeveloped country and helped with financial and human resources then the neuroburden as estimated in the WHO Report could be reduced considerably. Global co-operation is the need of the day.

Reports on WFN, CME and Education Programmes are also published in this issue. The Education Committee under the stewardship of Ted Munsat has always been centre stage and the results from its efforts are paying dividends. It may be a drop in the ocean as per the estimation of the WHO Report in this issue but those drops, multiplied over and over again, create oceans. WFN Education Programmes have perhaps stimulated countries in the same global region to cooperate more.

Now we have the Siena agreement for co-operation among some European States to improve neuro-education programmes and research with funding from the EU. More such groups may appear in future in other regions of the world with the aim of expanding the WFN’s neuroeducation programmes globally. However, I hope that for the good of mankind the Siena agreement group of countries, and such other groups that may arise in the future, should co-operate with the WFN and that the WFN itself should become a nodal agency for monitoring and steering the co-ordination of different Regional Groups. What we need is overall improvement in educational programmes and patient services for neurological diseases the world over.

‘Chemobrain’ is the term which relates to patients receiving chemotherapy for cancer treatment who develop mental fuzzi ness, memory loss and cognitive decline. Now it is believed that there is anatomical change in the brains of such patients. Dr Stewart Fleishman, Director of Cancer Supportive Services at the Beth Israel Medical Center and St Luke’s Roosevelt Hospital Center in New York, has stated that chemotherapy is a crucial component of cancer treatment, and that there is a need for increased research on shielding the brain from toxic effects and developing more selective cancer drugs. Neurologists all over the world are aware that chemotherapy may cause damage to the peripheral nervous system apart from cognitive and memory decline, but at the same time we are also aware that the above mentioned damage can also be due to paraneoplastic effects of malignancy. These should not be confused. Several studies have suggested that 40-80 per cent of cancer patients on chemotherapy suffer from chemobrain. Dr Masatoshi Inagaki and his colleagues from the National Cancer Centre Hospital in Shikoku, Japan recently reported in the journal Cancer that one year after treatment key areas of the brain involved in cognitive processes—including prefrontal, parahippocampal, and cingulate gyril—were significantly smaller in 51 women who received chemotherapy for breast cancer when compared with 54 breast cancer women who only had surgery. Results were compared after one year and it was found that the greater the damage in these areas, the greater was the memory and cognitive decline.

In another study biomedical geneticist Mark D. Noble and his colleagues from Rochester Medical Center in the USA exposed human brain cells and brain tumour cells grown in the laboratory to the three most commonly used drugs for cancer. They reported in the Journal of Biology a 60-90 per cent brain cells reduction in viability with low doses of chemotherapeutic drugs but little effect on tumour cells. They also commented that to kill 40-80 per cent of tumour cells required drug doses which killed 70-100 per cent of brain cells. They fed mice with these drugs and studied their brains after autopsy. They found that the drugs killed brain cells in several regions of the brain, and that cells continued to die in some cases, several weeks after stoppage of the drugs.

In the third study, reported in the Journal of Breast Cancer Research and Treatment, Dr Daniel Silverman and his colleagues at the University of California, Los Angeles, conducted PET on women who received chemotherapy after breast surgery; on women who received no chemotherapy but only surgery for breast cancer; and on another group of women who had no cancer and did not receive any treatment. The metabolism of women during memory testing spiked sharply in those who received chemotherapy. They commented that the brains of the latter worked harder than the control brains in recalling same information and these effects persisted in some even after 10 years. Therefore there is scientific evidence that chemotherapeutic drugs do affect the brain cells and precipitate cognitive decline and memory deficit.

Recently in India, a patient—a US citizen of Pakistani origin—suffering from Parkinsonism was reported to have made a good recovery after stem cells were injected following failure of both conventional and surgical treatment in the USA. The South India-located Manipal Hospital, Bangalore, claimed that this is the first case of such recovery in the world. The bed-ridden patient was injected with stem cells last year and walked unaided to meet media persons this year. The news created a furore among patients suffering from Parkinsonism in India and abroad. Caution is needed on the part of researchers to ensure that only scientifically-proven cases, published in scientific journals of repute, are brought to the public’s attention. Otherwise, patients will get a wrong signal through news based on single case results.

Jagjit S. Chopra, FRCP, PhD
Editor-in-Chief
during the 2006 AAN meeting in San Diego, there was general agreement on a policy to work out a roadmap for developing neurology in Africa. Since then, several groups and individuals have collaborated to delineate the Africa policy. At a meeting in London in December 2006, the Africa programme was launched. The work and recommendations were developed together with African colleagues. Redda T. Haimanot (Ethiopia), Pierre Bill (Durban, South Africa), Amadou Gallo Diop (Senegal) and Michel Dumas from Limoges, France, who was born in Benin and has been a teacher for many neurologists in French-speaking Africa, have been active in the programme formation. Professor Rajesh Kalaria represented IBRO and Africa at the London meeting and will be a link with IBRO and the Society of Neuroscientists of Africa. Dr. Jose Bertolote, the Vice Director for the Department of Mental Health, represented WHO and discussed various methods of collaboration between WHO and WFN. Jacques de Reuck, the President of the EFNS, and Stephen Sergay, President-elect of the AAN, born in South Africa, contributed to the strength of the programme. Michael Finkel, the new President of the World Neurology Foundation, participated in order to define individual projects appropriate for future collaboration between the two organisations. The individual projects will be evaluated, modified if necessary and applied, in close collaboration with WFN delegates, the local health authorities, and the World Health Organization.

The WFN Education Committee, chaired by Ted Munsat, has an important function in the Africa programme. There is a general agreement on the need for WFN to organise regional teaching courses in Africa. These courses will be modelled partly on the experiences from the highly successful EFNS regional teaching courses in East Europe. Wolfgang Grisold, the Vice Chair of the WFN Educational Committee, will, in co-operation with African partners, be the main organiser for 2 courses, held, if possible, in 2008. One of the courses will be held in a French-speaking country, the other may take place in Addis Ababa, Ethiopia. Teachers will be from the African continent, but some also from outside Africa.

EFNS has also had success in organising Department-to-Department programmes, and WFN will establish similar exchange programmes for African neurologists. Travelling Fellowships will be established. The Japanese Neurological Association has generously offered to receive one African neurologist for clinical training in neurology in Japan.

At the London meeting, a Task and Advisory Force for Neurology in Africa (TAFNA), chaired by Amadou Gallo Diop and Johan A. Aarli, was established. TAFNA will advise, support, fund-raise, and evaluate neurology initiatives in Africa, accompanied by an African Neurology Committee. Rajesh Kalaria represents a link with IBRO and SONA (Society of Neuroscientists of Africa). Gallo Diop is setting up the WFN Africa Committee with African neurologists working and residing in the continent. This committee will have key persons chosen from each of the regions of Africa; North, South, East, Centre and West as well as neurologists originating from Africa, residing in Europe or North America but having a strong and constant link with the continent. One of the first tasks for the Africa Committee is to prepare a directory of neurologists living in Africa. This will be essential for the selection of candidates for the Travelling Fellowships and Department-to-Department programmes.

Neurology development programmes will have to be established in countries where there are no neurologists. There is a need for manuals for clinical officers and assistance with training programmes. Gretchen Birbeck has had great success with integration of neurology into primary health in Zambia, and we hope this model “Neurology where there are no neurologists” will be tested out in other countries.

There is a lack of neurologists on the African continent. South Africa has a special position because of its size and high standards of medicine. South African neurologists will evaluate possibilities for training of other African neurologists also in their country. There is also a need to establish, on the African continent, regional training centres and institutes of excellence for research in brain disorders. Innovative approaches involving strong partnerships must be put in place in order to achieve real improvements in the health indicators. Such centres may be linked to institutions in high-income countries through multicenter research projects, staff exchanges and training, and internet communication.

The Pan African Association of Neurological Sciences (PAANS) brings together African neurosurgeons and neurologists, but it does not yet have the international voice it deserves in neurology. The PAANS congresses should become the venue for African neurology like for example the PAUNS and EFNS meetings are in their respective regions. The Website, World Neurology and the Journal of the Neurological Sciences are also important media for our work. The chair of the WFN Publications Committee, Piero Antuono, participated in the meeting to review areas for future collaboration.

The Africa programme does not mean that developing countries outside of Africa will be left alone. The Education Committee has a comprehensive global programme to support neurological activities in various parts of the world. Our resources are, however, limited and international collaboration is an expensive activity. The main new initiatives will therefore be on Africa.

Left to Right: Dr Donna Bergen, Dr William Carroll, Dr Johan Aarli

President WFN
Taiwan Neurological Society Supports Neurology Education in Vietnam

For the past two years, the generous financial support of the Taiwan Neurological Society to the World Federation of Neurology has enabled the University Training Center for Health Care Professionals in Ho Chi Minh City to complete several educational projects. These initiatives are expected to significantly improve patient care in Vietnam by improving the knowledge and skills of neurologists throughout urban and rural areas.

University Training Center was founded in 1988. The Center is one of only two medical universities in Ho Chi Minh City, which together serve nearly 8 million urban residents and another 10 million people in outlying rural regions, many of them indigent. Every year, 20 neurological residents (MDs) receive training at University Training Center, with the support of a faculty of 9 professors.

In late 2005, the Taiwan Neurological Society granted $7,000 to the WFN in support of educational neurology projects under the leadership of Dr. Nguyen Huu Cong. This funding has supported several grand rounds with invited speakers, intended to improve faculty and student expertise. In addition, University Training Center has also applied the Taiwan Society’s support toward:

- Sponsorship of a workshop on Parkinson’s Disease at Gia Dinh Hospital, which included evaluation and case assessment of patients by outside neurology faculty, and presentations on new therapeutic interventions for the disease;
- Development and distribution of the “Clinical Manual” software program, written in Vietnamese for use by clinical neurologists currently practicing in urban and rural regions. The program includes a database for managing patient information, a knowledge base of neurology terminology, and a practical diagnostic system for neurological disorders;
- Sponsorship of a course on Clinical EMG and EP’s at An Binh Hospital. The course included a thorough training in EEG and EMG techniques and interpretation.

The World Federation of Neurology was pleased to be recently informed of an additional $7,000 grant from the Taiwan Society for purposes of furthering the successful work of Dr. Cong and others in this high need region. This support will be directed toward:

- A training course in July 2007 on the subject of CT and MRI Imaging for Neurological Practice, open to neurologists and residents throughout Ho Chi Minh City;
- Purchase of an updated textbook on neurodiagnosis and neuromuscular diseases, to be distributed to all 250 members of the Vietnamese Association of Neurology. This subject area was determined to be one of great interest and need to Vietnamese neurological professionals given the incidence and preva-
Neurology patients during the Workshop on Parkinson's Disease, University Training Center for Health Care Professionals, Ho Chi Minh City, Vietnam

The World Federation of Neurology encourages funding partnerships with member neurological societies in support of neurology education needs in developing countries worldwide. In addition to the Taiwan Neurological Society, other societies that have recently provided generous contributions to WFN initiatives which help improve neurological care worldwide include:

- Australian Association of Neurologists, funding the WFN Continuing Medical Education program in four different regions of India;
- The Netherlands Society of Neurology, providing support for equipment and training in association with the Honduran Neurology Training Program in Tegucigalpa;
- Japan Foundation for Neuroscience and Mental Health, supporting the publication of “World Neurology”;
- Società Italiana di Neurologia, sponsoring the distribution of “Neurological Sciences” to 37 CME program sites worldwide;
- Sociedad Española de Neurología, providing assistance to the WFN Neurocysticercosis Task Force and other projects of the Spanish-speaking Subcommittee of the WFN Education Committee;
- American Academy of Neurology, providing in-kind Continuum courses to 37 CME program sites, as well as resource information helpful to WFN program development.

For more information about World Federation of Neurology partnership opportunities, neurological member society and association representatives may contact Dr. Carrie Becker at carrie_becker@post.harvard.edu, or +1 (802)-483-2806.

WFN ANNUAL REPORTS, 2006

Report of Secretary-Treasurer General

Over 2006 there have been major events affecting the WFN structure. Our new President took over in January and it was the last year of the term of Dr Richard Godwin-Austen. The year following a world congress is always busy with a variety of financial arrangements and decisions. The organisation and administrative shape of the WFN has become in need of a major overhaul and this meant a possible change of head office arrangements. These activities will be reported on in the near future.

From the financial side, a very small number of Finance Committee members were able to attend the meeting of the committee which took place during the annual AAN congress in San Diego in April. Nevertheless, among the subjects discussed was the Federation’s Reserves Policy i.e. the amount of money held in investments which had also been reviewed in Sydney where a decision had been taken to make no change. The committee had also examined the Investments Policy and made a recommendation to the Trustees that all investments be triple A.

The Trustees had noted the recommendation but wished to reserve the right to select non-AAA investments if so advised by the Federation’s financial advisors in accordance with the Articles of Association. The main principle that will guide our future financial status is that the WFN should not just rely on the quadrennial income for the World congress; other income sources should also be sought. The fund raising committee under the Chairmanship of Professor William Carroll is the one entrusted with this crucial task.

Generally, the financial highlight of the year was the outstanding success of the Sydney World Congress which added just over £400,000 to the WFN’s coffers as its share of the profits from the meeting. Many congratulations and thanks are due to our Australian colleagues for mounting such a memorable and lucrative meeting.

The year was also marked by the generosity of three of our national societies — the Netherlands, Australia and Taiwan—which contributed donations to support the CME efforts of their colleagues in Honduras, India and Vietnam respectively. We hope that this will set an example which others will follow.

Again, the Japan Foundation for Neuroscience and Mental Health donated over £57,000 to support the production of our quarterly newsletter, World Neurology. We would like to take this opportunity to express the Federation’s deep gratitude for the Foundation’s assistance and to former President Kimura who has been instrumental in negotiating this extremely important arrangement enabling our prime means of communication to be so widely distributed amongst neurologists across the globe.

Expenditure was kept under control thanks to the firm hand of Dr Richard Godwin-Austen whom I succeeded on January 1st when he reached the end of an eight-year term of office as Secretary-Treasurer General. All the officers, Trustees and Members of the WFN will join me, I know, in recording our sincere thanks for a job so well done. A hard act to follow.

Raad Shakir
Secretary-Treasurer General
Journal of the Neurological Sciences Annual Report

Fourteen issues, including ten double issues, featuring 328 articles and the Cumulative Author/Subject Index were published. These included one Special Section in 249.1 (November) that presented “Terrorism for the Neurologist: A Seminar Presented at the World Congress on Neurology”, Sydney, Australia, November 7, 2005. Guest editor was L. D. Prockop.

A Special Issue 242.1-2 (March) presented “Advances and Current Concepts in Neuromuscular Disease: A Special Issue in Honour of the Careers of Robert E. Lovelace, M.D., FRCP and Jack Patajan, M.D., Ph.D.” Guest editors were A. Gordon Smith and Louis H. Weimer.

Another Special Issue 245.1-2 (June) presented “Cognitive Decline in Multiple Sclerosis: Biological, Clinical and Therapeutic Aspects” at the European Charcot Foundation Symposium, Taormina, Italy, November 11-13, 2004. Guest editor was O. R. Hommes.

A third Special Issue 248.1-2 (October) presented “Dementia in Parkinson’s Disease” at the International Symposium, Salzburg, Austria, October 24-27, 2004. Guest editors were A. D. Korczyn, D. Calne, and E. C. Wolters.

The Elsevier Editorial System (EES) was implemented in May 2006. All submissions since then have been electronic as is the review process. EES has accelerated both the submission rate and the review process. There was a 42% increase in submissions for the year. 225 manuscripts were accepted in 2006 and 305 manuscripts were rejected.

The distribution of manuscripts accepted by country parallels that of the past eight years. The top three ranked countries were Japan (21%), USA (20.5%), and Italy (7.5%). These three countries alone accounted for 111 of all manuscripts accepted in 2006. Geographically, accepted manuscripts were as follows: Africa 2; Asia 36; Australia/New Zealand 6; Eastern Europe 6; Japan 48; Middle East 7; Scandinavia 4; South/Central America/Mexico 8; USA and Canada 52; and Western Europe 56.

Clinical research still dominates every issue. 9% of all submissions were basic (non-human) research. Ad hoc reviewers were acknowledged in April issue, 243.

Changes were made to the editorial board. A. Tselis assumed the role of book review editor replacing A. Koeppen. D. Truong and A. Siva were both invited to join the board.

Robert P. Lisak, M.D.

Annual Report World Neurology

All the four issues published under Elsevier Amsterdam and printed by Chandika Press (P) Ltd at Chandigarh were mailed to over 25,000 WFN members, and other affiliated groups as per schedule. At least 5 per cent of mailed World Neurology copies are received back as address not found, incorrect address or the person concerned has left from the given address. There is very little input from the Regional Directors who were previously called Vice Presidents as regards to regional news on CME, Education programmes or regional conferences. The Regional Directors are requested to send regional news for every issue of World Neurology so that other regions can also benefit.

Jagjit S. Chopra
Editor in Chief

WINNERS OF THE WFN JUNIOR TRAVELLING FELLOWSHIPS 2007

<table>
<thead>
<tr>
<th>Name</th>
<th>Country</th>
<th>Meeting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pablo Bonardo</td>
<td>Argentina</td>
<td>59th American Academy of Neurology Annual Meeting Boston, USA, April 28 - May 5, 2007</td>
</tr>
<tr>
<td>Anabel Roxana Chade</td>
<td>Argentina</td>
<td>59th American Academy of Neurology Annual Meeting Boston, USA, April 28 - May 5, 2007</td>
</tr>
<tr>
<td>Rolan Lorenzo Sancho</td>
<td>Cuba</td>
<td>Annual Meeting of the AANEM Phoenix, Arizona, USA, October 17 - 20, 2007</td>
</tr>
<tr>
<td>Luis Velazquez Perez</td>
<td>Cuba</td>
<td>XII Pan American Congress of Neurology Santo Domingo, Dominican Republic, October 7 - 11, 2007</td>
</tr>
<tr>
<td>Luis Cesar Rodriguez Salinas</td>
<td>Honduras</td>
<td>XII Pan American Congress of Neurology Santo Domingo, Dominican Republic, October 7-11, 2007</td>
</tr>
<tr>
<td>Rufus Olusola Akinyemi</td>
<td>Nigeria</td>
<td>Symposium on Brain Ageing and Dementia in Developing Countries Nairobi, Kenya, April 10-13, 1007</td>
</tr>
<tr>
<td>A F Mustapha</td>
<td>Nigeria</td>
<td>London Colloquium on Status Epilepticus London, UK, April 12-14, 2007</td>
</tr>
<tr>
<td>Ikenna Obinwanne Onwuekwe</td>
<td>Nigeria</td>
<td>132nd Annual Meeting of the American, Neurological Association Washington DC, USA, October 7-10, 2007</td>
</tr>
</tbody>
</table>
WFN CME Programme

The critical care continuum CME course was conducted on 17th December 2006. The programme began at 10 am and there were 24 participants. My numbers are smaller compared with some of the other centres like Pune and Bangalore. However, the bulk of the participants were essentially postgraduate students in neurology and four were doing their critical care diplomas at Jaslok Hospital. Dr. Girish Nair began the session with a discussion on the Management of ICH and he also reviewed the article by Stephen Meyer in *Lancet Neurology* 2005. This was followed by a discussion on Status Epilepticus by Dr. Srinivas Mallya. There was some discussion about what the precise definition of SE should be and all the participants expressed their views. The chapter on Hypertensive Encephalopathy was not discussed in any detail as it was already done so in the programme on Internal Medicine. The chapter on Coma in ICU was well received by most of the participants particularly the useful points on prognosis for good recovery. I added my experience in this sphere which basically concurs with those of the authors. Subsequently we had a brief discussion on monitoring intracranial pressure. The MCQs were answered and all the participants got 39/40 correct answers which reflects their understanding of the problem. Lastly, I discussed a few personal cases relevant to these chapters. The session ended at 1.30 pm with snacks and cold drinks for the participants. I have forwarded the 24 participant evaluation forms to Keith Newton in London.

The second CME for 2007—Infectious Diseases: This was held on 28th January 2007. The session began at 10 am and twenty postgraduates attended. All of them agreed that there was no new data available in the chapters on acute and chronic meningitis. I felt that some emphasis should have been placed on CSF examination and how to extract the maximum information from a CSF examination. Secondly, the problem of an accurate assessment of a traumatic CSF in an acutely ill patient was conspicuous by its absence. Lastly, the problem of a partially treated pyogenic meningitis, a common problem in a tertiary hospital in Mumbai, was totally overlooked, and antibiotics which can be given intrathecally was not mentioned at all. The chapter on viral encephalitis was relevant to those occurring in North America, whereas we discussed Japanese encephalitis and the recent epidemics in India of Chikungunya and NIPAH virus. The chapter on infections in organ transplant was well structured but there was an overlap with co-infection with HIV virus. As I mentioned to the postgraduate students that infections in organ transplant patients is due to non-HIV AIDS whereas in retroviral infections it is HIV-AIDS. All the students found my chapter in Prof. N.H.Wadia’s book more pertinent to the Indian scenario. The last chapter on infections in international travellers was not relevant to us as we have a lot of dengue and other types of infections here itself. This time the postgraduates got 36 out of the 40 MCQs right as they were not aware of the patterns of infection in particular geographic areas of the US. The session ended at 1.30 pm with soft drinks and snacks.

WFN CME programme report

In September 2004, I read a report submitted by the committee chairperson, Dr. Ted Munsat regarding the WFN CME programme (*World Neurology* Vol 19, No. 3, 2004). Although countries from Africa and Eastern Europe were mentioned for exemplary work in this programme, the report mentioned that the WFN CME programme had a weak presence in Asia, particularly in India. This stimulated me to take over the reins as Coordinator for this programme in India.

As per the advice and guidelines provided by Dr. Ted Munsat, I initially started the programme in Mumbai. The first CME was held on 17th July 2005 on the topic of Multiple Sclerosis. Twenty five postgraduate students from the 5 institutions in Mumbai attended this session. Based on the remarks in their evaluation forms, it was evident that they enjoyed the CME and found it to be unique and useful. Their response was very encouraging and at the same time satisfying from a teacher’s viewpoint. Since then I have conducted 12 CME programmes based on the Continuum journals generously provided by the AAN. The enthusiasm of the participants has not waned and the numbers vary between 25-30 participants. The last CME of this semester was held on 11th March 2007 on Muscle Diseases.

 WFN CME Programme

Following the success of the CME programme in Mumbai, I requested other teachers to conduct similar sessions. The WFN CME programme has now been "exported" to Pune (Dr. R.S.Wadia), Nagpur (Dr. C.Meshram), Chandigarh (Dr.S.Prabhakar), Bangalore (Dr. A.B.Taly), Hyderabad (Dr. Jabeen), and Kolkata (Dr. K.Bhattacharya) where 5-7 programmes have been held and over 150 postgraduate students have reaped the benefit of these educational programmes. Two other centres have received the Continuums (Indore and Guwahati) and will be "kick starting" the programme in the near future. Requests to participate in this programme have been received from two other centres in New Delhi and Tirupati.

One of the reasons why this programme faltered earlier could probably be attributed to the fact that my predecessor, Prof. S. Prabhakar, did not have funds for posting the journals to the various centres and the evaluation forms to the WFN London office. This was conveyed to Dr. Ted Munsat and Ms. Monica Brough (then WFN Education coordinator). I was fortunate, that through the good offices of Ms. Carrie A. Becker, WFN Development Consultant, I got a generous grant from the Australian Association of Neurologists for a sum of A$5000.00 in August 2005 and again in July 2006. On behalf of the Indian Academy of Neurology, our parent body, and myself, we are grateful for their generous gesture in promoting education in India. Lastly, I would be failing in my duty if I did not acknowledge the help, guidance and encouragement given by Dr. Ted Munsat and my mentor, Dr. N.H.Wadia.

Dr. S. Katrak
Jaslok Hospital, Mumbai, India
Abstracts of some of the Papers Published in Journal of Neurological Sciences

**Review of Plasma S100b and NSE levels and progression in multiple sclerosis.**

Koch M, Mostert J, Heersma D, Teelken A and De Keyser J.
JNS 252 (2007): 154-158

Multiple sclerosis is a common disease causing significant disability. There are several types of courses delineated, including relapsing-remitting (RRMS), secondary progressive (SPMS) and primary progressive (PPMS). The progression of disease and accumulation of disability are unpredictable and the search for prognostic factors continues. Imaging studies are rather expensive and difficult to analyze, and do not provide tight prognostic information. It may be simpler to look at other biomarkers for the disease and see whether there is prognostic value to them.

In this study, serum levels of two potential markers were studied. Neuron specific enolase (NSE) and the glial protein S100 were measured in serum in approximately 20-25 patients each with RRMS, SPMS, and PPMS at baseline and at 5 years of followup. NSE is a measure of neuronal integrity and S100 is a measure of glial turnover in the nervous system, with appropriate adjustments.

It was found that S100 had no correlation with disease subtype at baseline or with progression over the next five years. NSE at baseline was highest in RRMS, lower in SPMS and lowest in PPMS, although these were barely statistically significant. Further, those with more severe disease, as measured by higher baseline levels of disability, a progressive disease course and greater accumulation of disability, had lower serum levels of NSE than those with milder disease.

It is interesting that there was no correlation of disease course and severity with serum levels of a glial marker but there was significant correlation with NSE, marker of neuronal integrity. In fact, the milder cases had higher serum levels of NSE, which may be counterintuitive, since a more rapid turnover of neurons (as would be seen in any destructive process) would be expected to give a higher serum level of this neuronal constituent. The authors suggest that the lower serum levels of NSE in more “severe” disease may reflect relatively greater hypometabolism in neuronal cells in these cases compared with the “milder” cases.

**Sympathetic disturbances increase risk of sudden cardiac arrest in sporadic ALS**

Asai H, Hirano M, Udaka F, et al
JNS 2007 in press

ALS is usually considered a progressive neurodegenerative disease involving the motor neurons exclusively. However, in many other neurodegenerative diseases, particularly Shy-Drager disease and Parkinson’s disease, there is often autonomic involvement, occasionally very prominently. Sudden cardiac death is associated with this autonomic dysfunction. Rarely, patients with ALS have been reported to have sudden cardiac death. This interesting study is a first attempt to study this aspect of the disease.

Twelve consecutive ALS patients were recruited into the study and had electrocardiographic studies done using the QT interval and QT dispersion (the difference between the maximum and minimum QT intervals among all 12 leads) as a measurement of autonomic integrity, with results early in the course of the disease compared with those late. In 6 of the patients, the thoracic cord was studied at autopsy with specific attention paid to the intermediolateral cell column, which contains sympathetic neuron cell bodies.

The results showed that there was a significant increase in both QT interval and QT dispersion in all the patients, and that these were correlated with neuronal loss in the intermediolateral cell column. The QT interval changes were highest in the two patients who had sudden cardiac deaths. Most patients died of other complications of terminal ALS.

This study underlines the fact that while the major impact of ALS is on motor neurons, it also affects other parts of the nervous system, particularly the autonomic neurons, which are more involved in various diseases than is commonly appreciated and may well substantially contribute to the deaths of some patients. These deaths due to dysautonomia may be in part preventable.

**Special Section. Terrorism for the Neurologist.**

Leon D Prockup, MD, Editor

In the past few years, concern with terrorism has become especially prominent in North America and Europe, after the events of September 11, 2001, and the subsequent contamination of the US postal system by anthrax. Other smaller episodes of biological attacks have occurred in the past, but were not as well publicized; one may recall the use of pathogenic bacteria in a salad bar in Oregon and sarin (nerve agent) in Japan several years ago.

Weapons of mass terror and mass destruction are of several types, including nuclear, chemical, biological, nonnuclear explosives (eg suicide bombers) and radiological (eg dirty bombs, in which a conventional explosive is mixed with radioactive waste, and detonation causes radioactive contamination of an area).

Neurologists are most likely to be called after chemical, biological and nonnuclear explosive attacks. Each of these can cause a characteristic series of neurological problems and some acquaintance with them is nowadays necessary.

Chemical and biological weapons (CW) can cause illnesses that have prominent neurologically manifest manifestations, and CW attacks should be suspected during an outbreak of unusual neurological disease. Thus a close geographical cluster of Guillain-Barre syndrome would lead to suspicion of the use of such biological toxins as botulinum. A febrile encephalopathy following a febrile myalgic syndrome would prompt consideration of anthrax or Venezuelan equine encephalitis or other infectious agent, both of which are prime CW candidates—anthrax can readily be found in the soil and the VEE virus is easily grown in tissue culture and the genome can...
Readily be engineered. Chemical agents generally have a much more rapid onset of action. Nerve agents, many of which are cholinesterase inhibitors, would produce paralysis, seizures and death within minutes or at most a few hours. Such illnesses will prompt urgent neurological consultation. All of them leave much residual damage.

Non-nuclear explosives generate shock waves which will cause severe nervous system trauma, with the panoply of waves which will cause severe nervousness will prompt urgent neurological consultation. All of them leave much residual damage.

In this special issue of the Journal of the Neurological Sciences, the neurological aspects of terrorism involving CBW and nonnuclear explosives are treated in breadth and some depth, and come from a seminar given at the World Congress of Neurology in Sydney Australia in 2005. The characteristics of the agents, their production and suitability for weaponization, the recognition and characterization of the illnesses produced and their management are discussed in enough detail for the reader to have a broad familiarity with the subject. An initial paper by Leon Prockop, M.D., provides a broad overview of weapons of mass destruction.

In many under-resourced countries is commonly believed. It is also believed that Central Nervous System Infections contribute to this increased prevalence of epilepsy in a major way. The principal aims of the meeting were to review current knowledge and data about the interface between CNS infections and epilepsy; to identify unanswered questions; and to provide a roadmap for future epidemiological and clinical research. To this end, the following specific questions were considered:

1. Is the prevalence of epilepsy increased in developing countries? 2. What is the risk attributable to infectious disorders with regard to the occurrence of epilepsy? 3. What are the substratic correlates (determined from contemporary imaging studies) of epilepsy that may occur as a remote complication of CNS infections? 4. What is the course, outcome and prognosis of epilepsy that occurs as a remote complication of CNS infections? 5. In the specific context of chronic CNS infections, what is the effect of treatment of infectious disorder on the neurological aspects of terrorism involving CBW and nonnuclear explosives by Michael Donaghy, a survey of the neurologic aspects of explosives by Michael Finkel, a review of the potential chronic neurologic effects of mycotoxins by Sava et al, and a summary of the effects of and the response to the sarin attacks in Tokyo and Matsumoto by Yanagisawa et al. Finally, the treatment of exposure to nerve agents is discussed by Kevin Cannard. The discussion is well written, focused and provides useful information.

Tselis Alexandros
Detroit, USA

REGIONAL CONFERENCES

8th Cairo International Neurology Conference
February 14-17, 2007

In the land of the Pharaohs, on the shores of the Red Sea, at the Abou-Soma Intercontinental Hotel, Hurgcdada, Egypt, the 8th CNC was held. Many national and international neurologists attended this annual meeting of the Egyptian Society of Neurology. Among the important events of this meeting were:

- A French-Egyptian session chaired by Prof. Doctors: Georges Serratrice, Jean-Marc Leger and Jean-Mechille Vallat.
- A Pan Arab Session chaired by Prof. Doctors: Ashraf Al Kurdi (Jordan), Ryad Gouider (Tunisia) and Salam Koussa (Lebanon).
- The meeting included very important subjects, especially on Epilepsy, Dementia, Stroke, Neurogenetics, Neuromuscular disorders and Neuro-intervention.
- Among the guest speakers there were Prof. Doctors: Antonio Fedrico, (Italy), Francis Turjman (France) and Marina Hadidi (Jordan)

Prof. Doctor Saleh Attia President of the Congress & Society and Prof. Doctor Mohamad Al Tamawy, Secretary General of the Congress and Society, did an excellent job. It was a real success.

Dr Ashraf Al Kurdi, MD
Jordan

International Symposium on Infections and Epilepsy & Indo-Pak Neuroscience Colloquium

The main theme of the International Symposium on Epilepsy and Indo-Pak Neuroscience Colloquium, held at Chandigarh, India on February 11-13, 2007 was “Infections and Epilepsy”. The meeting created history on two accounts. It was for the first time that neurologists from India and Pakistan got together for what could be described as an academically stimulating and socially vibrant event. Besides, it was after several decades that many internationally renowned epileptologists and neurologists, infectious disease experts and epidemiologists from across different countries got together to discuss the interface between infections and epilepsy.

That the prevalence of epilepsy is higher
course and prognosis of the epileptic (seizure) disorder? 6. What is the effect of antiepileptic drug treatment on the course and outcome of the epileptic disorder?

As stated by Professor Simon Shorvon, Editor of the Epilepsia, the meeting was timely and topical as the subject was under-studied. Specific CNS infections were reviewed by experts: bacterial meningitis (JMK Murthy, India), neurocysticercosis (Hugo Garcia, Peru), Herpes simplex encephalitis (UK Mishra, India), malaria (Edgard Ngoungou, France), Nipah valley encephalitis (CT Tan, Malaysia) and tuberculosis (Sudesh Prabhakar, India). Others who delivered lectures were: W. Allen Houser, USA, Hasan Aziz Mohammad Wasay, Pakistan, Simon Shorvan, UK, Edgard Ngoungou, Africa. For those interested in more details, please await the publication of the proceedings as a supplement to Epilepsia.

Gagandeep Singh & Sudesh Prabhakar
Organising Secretary & Chairman
Chandigarh, India


Under the patronage of the his highness Sheikh Hamdan Bin Rashid Al Maktoum, Deputy ruler of Dubai, Minister of Finance & Industry, the 2nd International Emirates Congress & 1st Emilae Symposium, was held in Dubai, United Arab Emirates from 6-8 March 2007. Jointly organized by the Emirates Neurology Society of the Emirates Medical Association and Dnata World of Events, the Neurome 2007 event was well attended by over 300 professionals in the medical field from the Pan Arab and the GCC region. The theme of the Congress “Evidence based medicine in Neurology,” a three day intense program presided over by 21 renowned international speakers, 17 Regional and 10 local speakers, covered a wide range of topics from cerebrovascular disease, headache and pain, demyelinating, neuromuscular and extrapyramidal disorders, Alzheimer’s disease, neuro-rehabilitation, epilepsy and CNS infections. This year the organizers of the conference introduced new topics for discussion, in the field of neuro-otology, neuro-ophthalmology, neuro-genetics and amyotrophic lateral sclerosis.

The Dubai Convention Bureau a non-profit government organisation was one of the support sponsors of the events, whose aim is to further develop and increase Dubai’s share of the International MICE market and special events, whilst maximizing the economic prospects of Dubai. In addition, the Ministry of Health and the Department of Health and Medical Services strongly supported the Congress.

The three-day event formed a basis for cooperation between international, regional and local institutions. Among them was an agreement between the UK-based Sheffield Research Centre and Emins to exchange knowledge and expertise and in a move that will mark the first step in this co-operation, a medical student from Zayed University will be hosted by the Centre to complete his or her specialisation studies. In addition, Dr Saddah confirmed that an agreement to form a world class Neurology Research Centre in the UAE has also reached an advanced stage of discussion.

Dr. Mohammad Saada
Dubai

Reports on WFN Education Programme

I’ve been in Zambia since departing the London meeting and wanted to send an update on developments here. I realize this is an “unsolicited” report. But lot’s of developments I thought you might find of interest.

First, I was able to attend one of the Neurologic & Psychiatric Society of Zambia’s (NPSZ) CME meetings utilizing the Continuums. (See the photo). The meeting was organized by Professor Atadzhanov (University of Zambia neurologist) and was well attended. I was extremely impressed with the methods the group used for their WFN-sponsored CME. The issue covered was Infectious Diseases (extremely relevant to this environment!). Dr.
Elwyn Chomba (pediatric neurology at UNZA) actually reviewed the Continuums materials via a formal Power Point presentation. But it was clear that all involved had pre-read the materials and these were really used as a “jumping off” point for open professional discussion and debate regarding the application of the “newest” data to the local environment.

A lively discussion ensued re: when it was safe to complete a lumbar puncture, CT utilization, and discussions of a “controlled” LP supervised by neurosurgery. There was also a very academic and evidence-based discussion around the issue of steroid usage in bacterial meningitis-who, when, when to avoid, etc. Much was also reviewed regarding the local laboratory capacity and optimal utilization of available technology.

I had always wondered how our colleagues in resource-limited settings took advantage of the Continuums. I was extremely impressed with NPSZ members in their ability to review cutting edge information all the while also considering the relevancy to their own environment. One of the most beneficial aspects was seeing the cross fertilization of ideas and enthusiasm in the group which included 3 neurosurgeons, a pediatric neurologist, 2 adult neurologists, a neuropsychiatrist, 3 Clinical Officers with neurologic expertise, the chair of the Epilepsy Association of Zambia and the new Medical Director for Chainama Hospital.

On a slightly different note, I was invited to a meeting held by Dr. Lambert, the University Teaching Hospital’s Managing Director. He held an open forum discussion for key stakeholders regarding future opportunities for collaboration and support from WFN. The meeting was attended by several key persons—all of the NPSZ Executive Committee, the new Medical Director for Chainama Hospital, and Dr. JB Simpungwe. Dr. Simpungwe has recently joined the Ministry of Health as head of Clinical Services. He was previously with the Zambian military. This is an exciting development as Dr. Simpungwe trained in neurology at Queen Square some years ago and is extremely supportive of fostering collaborative relationships between WFN and NPSZ, as well as the Zambian Ministry of Health.

During this meeting, the group developed a broad outline of where they hope to see the Clinical Neurosciences in the coming 10-15 years. Their plans are ambitious, but they have broken them into three clear phases, each with an evaluation phase and deliverables. A full written proposal is underway to WFN to seek support for some of these efforts. I’ve asked them to try and provide this proposal by early April so it might be discussed during the meeting held in Boston.

As I said, exciting developments. Simpungwe’s presence at the Ministry, as well as a the hire of a new additional neurosurgeon and a neuropsychiatrist bode well for the future growth and development of NPSZ. I’ll keep you posted.

Gretchen Birbeck, MD MPH DTMH
Chikankata Epilepsy Care Team
PO Box 670008
Mazabuka, ZAMBIA

2006 Travelling Fellowship award

Thank you very much for your the money you sent I attended an international conference in Jordan Neuromeditranee 8 conference 2-5 November 2006 at Movenpick Hotel Dead Sea it was very interesting conference neurologist from all over the world came I presented my paper (Headache in Acute Cerebrovascular Diseases). Without your help it was impossible to attend a conference like this one I hope you will continue help us with thanks.

Dr. Ammar Y. SALIH
FIBMS Neurology.

SIENA AGREEMENT FOR COOPERATION AMONG SEVERAL EUROPEAN NEUROLOGICAL SOCIETIES

On November 25th 2006 in Certosa di Pontignano, Siena, at the invitation of the Italian Society of Neurology, organized by Prof. A. Federico, representatives of the following Societies of Neurology—Italian (Convenor), Albanian, Austrian, Bulgarian, Croatian, Greek (not present, but approving the final agreement), Hungarian, Polish, Romanian, Slovenian, Turkish—had a meeting to discuss the strategies and possibilities of cooperation to mutually improve care, research and teaching in future years.

The attendees, as representative of the National Societies, were: Prof. G. Avanzini (Milano, Italy), Editor-in-Chief of Neurological Sciences; Prof. L. Battistin (Padova, Italy), representing Italian College of Professors of Neurology; Prof. U. Bonuccelli (Pisa, Italy), past President of European Society of Neuropsychopharmacology; Prof. G. Cruccu (Roma, Italy), General Secretary of the EFNS; Prof. P. Davaki (Athens, Greece) (apologized for absence); Prof. F.A. De Falco (Napoli, Italy), Vice-President of Italian Society of Neurology; Prof. V. Demarin (Zagreb, Croatia), President of Croatian Neurovascular Society and on behalf of Croatian Society of Neurology; Prof. A. Federico (Siena, Italy), Convenor, Italian SIN Delegate for Foreign Affairs; Prof. Franz Gerstenbrand (Wien, Austria); Prof. J. Kruja (Tirana, Albania), on behalf of Albanian Society of Neurology; Prof. M. Manfredi (Roma, Italy), President of Italian Society of Neurology; Prof. A. Mesec (Ljubljana, Slovenia), Slovenian Society of Neurology; Prof. I. Milanov (Sofia, Bulgaria), on behalf of Bulgarian Society of Neurology; Prof. D. Muresanu (Cluj-Napoca, Romania), on behalf of Romanian Society of Neurology; Prof. G. Opala (Katowice, Poland), on behalf of Polish Society of Neurology; Prof. P.M. Rossini (Roma, Italy), Italian Society of Neurology; Prof. A. Siva (Istanbul, Turkey), Turkish Society of Neurology; Prof. G. Tedeschi (Napoli, Italy), Italian Society of Neurology (Secretary); Prof. L. Vécsei (Szeged, Hungary), Hungarian Society of Neurology and Danube Association; Prof. G. Vita (Messina, Italy), Grant-holder of MEDA Project on Rehabilitation.

At the end of the meeting, they decided to formally agree to the following proposals:

- The participating societies will encourage the mutual relationship, the development of European Programmes for
Ian McDonald died on December 13th 2006, aged 73 years. He was respected and admired by neurologists throughout the world for his scholarship, scientific creativity, personal charm, and enthusiasm for the many professional and social aspects of international neurology. Born in Wellington, New Zealand on April 15th 1933, and trained in medicine and neurology at the University of Otago, he moved to London in 1963 holding appointments thereafter as Consultant Neurologist to the National Hospital for Neurology and Neurosurgery (1966-1998) and Moorfields Eye Hospital (1969-1998) in London, and as Professor of Neurology, Institute of Neurology, University of London (1974-1998). In work that was creative and sustained over a period of nearly 50 years, he transformed research into multiple sclerosis from an exploratory and somewhat disjointed approach into a highly productive discipline based on first class clinical science—contributions that made him the leading authority internationally on that difficult disease.

Ian was an ambassador for all that is valued most in British neurology. He provided professional hospitality for visitors to Queen Square from around the world during the three periods of active experimental work that marked his scientific career: the physiology and morphology of demyelination and remyelination in the 1960s; the development of evoked potentials and diagnostic criteria for multiple sclerosis from the 1970s; and the use of magnetic resonance imaging to illuminate the pathogenesis of human and experimental disease in the 1980s and beyond. In all of this work, Ian provided an opportunity for younger neurologists to understand and make a contribution to investigative neurology and, for over 30 years, students from throughout the world sought to be part of his team at Queen Square—many establishing productive research groups on return to their own institutions. He trained by example, lifting less gifted colleagues, and reflecting with generosity and uncomplicated pride on their achievements.


To list these badges of international acclaim may say something, but it was the manner in which Ian strode the international stage that so endeared him to his contemporaries, and to younger and older generations of neurologists and clinical neuroscientists alike. Through his obvious interest in himself as a person, everyone held Ian in high esteem. Conversation was lively and informed, revealing the warmth and wisdom of someone who enjoyed the company of others, knew a great deal about medicine, history, literature and the arts, received and gave much in friendship, and assumed the best in everyone. He always took time to express in writing gratitude and appreciation. Ian McDonald was an outstanding ‘gentleman-neurologist’ and his sudden death leaves friends and colleagues upset, but nonetheless reflecting with warmth and gratitude on the many achievements of his lifetime and their legacies for our subject.

Alastair Compston
Department of Clinical Neurosciences,
University of Cambridge, United Kingdom.
partnership of the participating societies will be mutually encouraged.

Application for Research Projects within the EU will be very much stimulated. The different countries will exchange their expertise, that will be distributed to the different national Scientific Committees, in order to facilitate the creation of scientific networks, including small to medium size enterprises.

In order to better know the scientific possibilities and backgrounds, a reciprocal invitation to the National Congresses of members of the different societies will be very much encouraged within round tables on collaborative projects or with special reciprocal attendance.

The possibility of a common editorial policy will be stimulated.

Prof. Antonio Federico
Siena

---

**CALENDAR 2007**

**8th Congress of the European Base Skull Society**
May 2-5, 2007
Prague, Czech Republic

**Neuroendoscopy 2007**
May 9-12, 2007
Paris-Versailles, France
http://www.neuroendoscopy2007.com

**2007 Meeting of the Australian and New Zealand Association of Neurologists**
May 21-25, 2007
Alice Springs, Australia

**12th Meeting of the European Society of Neurosonology and Cerebral Hemodynamics**
May 26-29, 2007
Budapest, Hungary
http://www.esnch.org/

**16th European Stroke Conference**
May 29-June 01, 2007
Budapest, Hungary
http://www.eurostroke.eu/

**4th Dubrovnik International Conference on Multiple Sclerosis and Continuing Education**
May 30-June 2, 2007
Dubrovnik, Croatia
http://www.multipla.hr/

**39th Danube Symposium and 1st International Congress on ADHD**
June 2-5, 2007
Wuerzburg, Germany
http://www.adhd-wuerzburg.de
Email: wuerzburg@cpo-hanser.de

**11th International Congress of Parkinson's Disease and Movement Disorders**
June 3-7, 2007
Istanbul, Turkey
http://www.movementdisorders.org/

**Second International Congress on Neuropathic Pain**
June 7-10, 2007
Berlin, Germany
http://www.kenes.com/neuropathic/

**SLEEP 2007**
June 9-14, 2007
Minneapolis, MN, USA
http://www.apss.org/

**European Atherosclerosis Society 76th Congress**
June 10-13, 2007
Istanbul, Turkey
http://www.eas2007.fi/

**4th World Congress of the International Society of Physical and Rehabilitation Medicine**
June 10-14, 2007
Seoul, South Korea

**17th Meeting of the European Neurological Society**
June 16-20, 2007
Rhodes, Greece
http://www.akm.ch/ens2007/

**7th World Congress on Brain Injury**
June 17-21, 2007
Jerusalem, Israel
http://www.kenes.com/iba07/

**Canadian Neurological Sciences Federation 42nd Annual Congress**
June 19-22, 2007
Edmonton, AB, Canada
http://www.ccns.org/

**9th International Conference of Baltic Child Neurology Association (BCNA)**
June 20-23, 2007
Vilnius, Lithuania

**International Headache Society**
June 28-July 01, 2007
Stockholm, Sweden
http://www.ihc2007.org/

**27th International Epilepsy Congress**
July 8-12, 2007
Singapore, Singapore
http://www.epilepsysingapore2007.org

**3rd Congress of the International Society for Vascular and Cognitive Disorders (VAS-COG)**
July 11-14, 2007
San Antonio, TX, USA

**7th IBRO World Congress of Neuroscience**
July 12-17, 2007
Melbourne, Australia

**VIII Congreso Colombiano de Neurologia**
August 17-19, 2007
Cali, Colombia
http://congreso2007.acnweb.org/

**13th International Congress of Immunology**
August 21-25, 2007
Rio de Janeiro, Brazil
http://www.immunorio2007.org.br/

**11th European Federation of Neurological Societies Congress (incorporating WFN Council of Delegates Annual General Meeting and WFN 50th Jubilee Symposium)**
Brussels, Belgium

**World Federation of Sleep Research Societies World Congress 2007**
September 1-8, 2007
Cairns, Australia
Impressive 1st Impact Factor of 2.000!

Journal Citation Reports®, published by Thomson Scientific 2006

An excellent first impact factor, ranking the journal as the top Impact Factor journal among the paediatric neurology journals!

Under the guidance of a prestigious International editorial board, this multi-disciplinary journal publishes exciting clinical and experimental research in this rapidly expanding field. High quality papers written by leading experts encompass all the major diseases including epilepsy, movement disorders, neuromuscular disorders, neurodegenerative disorders and mental retardation.

Other exciting highlights include articles on brain imaging and neonatal neurology, and the publication of regularly updated tables relating to the main groups of disorders.

European Journal of Paediatric Neurology provides for your article

• Online submission
• Fast publication speed
• Rapid publication through Articles in Press
• Maximum visibility and worldwide readership

Submit your article now at http://ees.elsevier.com/ejpn

Maximum visibility and worldwide readership

Over 3,000 institutes worldwide have access European Journal of Paediatric Neurology online via ScienceDirect!

See what your peers are reading!
A selection of most downloaded articles

Attention deficit disorders: Are we barking up the wrong tree?

What is acute disseminated encephalomyelitis (ADEM)?

The potential of pharmacogenetics in the treatment of epilepsy

Idiopathic intracranial hypertension

Ornithine transcarbamylase deficiency: a urea cycle defect

Find out whether you have access to these articles via your institute and visit www.sciencedirect.com/science/journal/10903798

www.elsevier.com/locate/ejpn