

# WORLD NEUROLOGY

THE NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

VOLUME 19, NUMBER 3, SEPTEMBER 2004

## Education Committee Report

### Continuing Medical Education (CME)

The CME program continues to progress and increase in its attraction to those countries of middle and low income who qualify and who are in need of updated information.

The two mailings of *Continuum* take place in January and July of each year, and titles for the July 2004 mailing were: "Dementia", "Neurologic Complications of Organ Transplantation", and "Movement Disorders" (inclusive of an interactive CD-ROM). The WFN Trustees have recently approved purchase of an additional 200 copies of each course which will double our theoretical capacity.

#### 1. Membership

At present there are 31 countries participating in the CME program (see below). Member countries continue to be enthusiastic about the program, but the following receive particular mention—Argentina, Cuba, Mexico, Russia, Serbia & Montenegro, Slovenia, Syria, Turkey, and Uganda. The co-ordinators for these countries hold effective discussion groups, return regular feedback to the WFN with whom they also maintain frequent contact, and from their activities appear especially committed to CME in their country. The following two examples illustrate this. **a).** Dr Aksel Siva, the co-ordinator for Turkey, held a very comprehensive meeting on "Acute Stroke



WFN's CME Education Coordinators meeting during the European Federation of Neurological Societies Conference in Paris, Sept. 2004.

Management" in February, with invited speakers from institutions throughout Turkey. **b).** Under the co-ordination of Dr Raul Federico Pelli Noble, the Argentine Neurological Society holds regular meetings on the *Continuum* material. The size of the country necessitates the program being divided into six regions with a total of fifty-one participants. As a result, we have now received the first batch of evaluation forms from India that cover the courses on "Emergency Neurology", "Acute Stroke Management", and "Headache Update".

#### 2. Certificates

By the middle of June, just over 250 certificates of participation had been awarded to individuals who have participated in the program. In addition to these, the WFN Education Executive Committee decided at their meeting in December

2003, that certificates should be awarded after three years' service to all WFN CME co-ordinators in recognition of their work on the program. A further decision was made to award special certificates to all participants who had participated in the program for 5 years.

*Cont. on page 5*

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- WFN Regional News
- Magnetic Resonance Imaging of the Epilepsies
- Book Reviews & Calendar
- International Stroke Society—A Report
- WCN 2009 Bid for Madrid

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Visit the WFN website at <http://www.wfnneurology.org>

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## EDITORIAL

The education programmes of WFN are expanding as is evident from the report of its Education Committee Chairman, Ted Munsat. One of the major goals of the World Federation is to promote the availability of neurological services in 'have not' countries of the world. The President, Jun Kimura, has elaborated on this major goal of WFN and on the successes achieved. He has mentioned that some of the national neurological societies have pledged financial support and he has appealed to others to join in this noble cause. The target to be achieved is massive but the will to do it is equally strong. Progress is slow only because of a paucity of funds. All neurologist members of WFN are asked to help in enhancing the financial capabilities of the organization.

Teaching programme reports from Argentina and Malawi are also published in this issue. They are interesting and encouraging and sooner or later WFN efforts in this direction are bound to succeed. Ted Munsat in his report has mentioned the Book Sharing Programme established as a pilot programme in 2003. Although the response has not been as rapid as we would like, the goal is being achieved. Following the Vancouver World Congress in 1993, Donald Silberberg and Pauline Monroe established a very successful programme called the Neurology International Partnership Programme (NIPP) which sought to link neurology departments in developing and developed countries. There were around 250 pairs of sponsors and partners active in the 1990's. In a similar way, the present Book Sharing Programme seeks to match donors from well-resourced countries with recipients who can make good use of the materials they are sent.

I am grateful to John Duncan of London for his contribution in this issue on 'Magnetic Resonance Imaging of the Epilepsies'. Diffusion weighted imaging is more sensitive than routine MRI. This and functional MRI are the most recent advances in imaging. The importance of MRI has increased in view of the good outcomes in surgery for epilepsy, which is achieving universal acceptance. Its emergence in some of the developing countries is benefiting patients suffering from intractable epilepsy. However, a successful result of surgery for epilepsy requires team-

work and advanced technologies.

As with the heart, 'brain pacemakers' have been at the forefront in recent years in the treatment of various neurological disorders. Deep Brain Stimulation (DBS) for patients suffering from the advanced stage of Parkinsonism has already become popular. The results are encouraging although the procedure is expensive. Researchers are now working on periodic electricity pulses for the stimulation of the anterior thalamus nucleus to control the seizures of patients suffering from intractable epilepsy. A recent publication in *Epilepsia* (2004-45) by Kerrigan et al may bring hope for a large number of epileptics. The anterior thalamic region is indeed a pacemaker structure which has influence over the electrical activity of widespread regions of the brain. There is every possibility of breaking up the wave to withhold the development of seizures by activation of the anterior thalamic nucleus. It is a great advance in the treatment of epilepsy where drugs have failed and surgical intervention is contraindicated, although the devices are still in the development phase. A statistically significant reduction in the frequency of seizures with a 'brain pacemaker' is the initiation of this research which in the near future may see a revolution in the treatment of intractable epilepsy. Researchers in this field deserve our congratulations and support to improve upon the devices and technology so that it becomes affordable by lower socio-economic strata of our society.

The Management Committee (Trustees) of WFN has permitted the International

Stroke Society to utilize some space in each issue of *World Neurology* on payment of a fee. To implement this decision, the activities of the ISS are highlighted in this issue for the first time. The WFN Liaison Committee on Stroke, under the chairmanship of Julien Bogousslavsky, is collaborating with WHO and other stroke societies to prevent and reduce the burden of stroke. Julien also happens to be the current President of ISS.

*Practical Neurology*, edited by Charles Warlow and published by Blackwell with six issues a year, is bringing the latest advances in neurology instantly to its readers. Although started only recently, it has already become popular amongst neurologists. It contains review articles; articles on pathophysiology, practice and thinking in neurology; and current neurological dilemmas and how to solve them. It is a useful publication for updating knowledge of neurological diseases. *Neurology Today*, a publication of the American Academy of Neurology, is another outstanding publication providing insight into the latest researches, therapeutics and management of neurological diseases.



Jagjit S. Chopra, FRCPC, PhD  
Editor-in-Chief

## WFN ZAMBIA PROJECT WFN NEUROLOGICAL INSTRUCTOR FOR AFRICA

As part of the WFN Zambia Project, the WFN has agreed with the University of Zambia and the Chainama College of Health Sciences in Lusaka, Zambia to supply a visiting professor to assist with the education of medical students, housestaff, and clinical officers in training.

WFN seeks a neurologist volunteer willing to spend at least one month in Lusaka in order to impart his or her knowledge and expertise. Months a visiting professor is requested include November 2004, May 2005, August 2005 and November 2005. The volunteer's airfare will be covered by the WFN and modest accommodation is jointly sponsored by WFN and the University of Zambia.

Interested WFN members who can commit to providing a full month of service should forward a letter of interest and CV to Gretchen L. Birbeck, MD MPH, Michigan State University, #138 Service Road, A217, East Lansing, MI 48824-1313, USA (Fax: +1-517-432-9414; e-mail: Gretchen.Birbeck@ht.msu.edu) no later than December 1, 2004. Please provide an e-mail address for ease of communication.



## PRESIDENT'S COLUMN

We had very fruitful meetings of the WFN, including the Annual General Meeting, during the European Federation of Neurological Societies (EFNS) conference held in Paris on September 5-8, 2004. The other meetings held were of the Management Committee (Trustees), Nominating Committee, Publications & Website Committee, and CME-Co-ordinators meeting. The Council of Delegates (COD) elected a WFN Trustee (Julien Bogousslavsky), and, among others items, discussed the possibility of hiring a Brussels-based Professional Management Company to relocate the Secretariat from London. I will bring you up to date on the outcome of the COD discussion in the next President's Column.

Neurological disorders with a profound public health problem such as stroke and epilepsy have the highest incidence and prevalence in the developing countries, where a limited number of neurologists struggle to provide even a minimum of care to their patients. Many of these disorders are, despite high rates of disability, either preventable or treatable through affordable means. I am pleased to report that we are making notable progress in this regard thanks to the tireless efforts of the responsible parties. For example, a fairly modest investment in the Honduras program has already produced a measurable effect on healthcare in that country in a relatively short period of time according to the report submitted by Dr. Marco Medina, who together with Dr. Ted Munsat, Chair of the Education Committee, spearheaded the project. Since the last AGM approximately 15 months ago, the Trustees have continued to work hard to further promote the education of clinical neurologists also in other areas.

Our CME program is currently implemented in 30 developing countries worldwide. Outcome data from the program indicate a high level of impact on actual neurology practices. Neurologists participating in the program value the currency of the information provided and the opportunity to have group discussions with other practising neurologists. The very popular CME projects attracted a number of non-member societies wishing to subscribe to this program. The Trustees took the position, while understanding the need for such activity globally, that we make the programs available



WFN Publication & Website Committee Meeting—Sept. 6, 2004 (left to right) William Carroll, Piero Antuono, Susan Bilger, Francois Boller, Jun Kimura, Keith Newton, Daniel Truong and Oded Abramsky.

only to dues paying WFN members. An associate member is also entitled to this benefit, if it is possible to formulate a discussion group, which enhances learning by reinforcement of the educational message, as envisioned by the Education Committee. Our *Book Sharing* program complements CME, in linking neurologists in high income countries with those in less affluent countries for the purpose of sharing books and other educational material. The program also receives neurology materials donated by publishers and forwards them to countries in need.

To continue to support all these programs with an increasing scope, we have begun vigorous efforts to mount a successful fundraising campaign by appealing to member societies. In response to this solicitation, the Canadian, Dutch, and British Neurological Societies have recently made a pledge to support our educational activities with a sizeable gift. I should also recognize here a major contribution from the Japan Foundation for Neuroscience and Mental Health, which donated a fund sufficient to support publication and distribution of *World Neurology* for 5 years. I would like to take this opportunity to ask other national societies for their support of our program. On a related matter, Carrie A. Becker, Ph.D., Development Consultant, recently sent a letter of appeal to national societies to join in our effort to support neurology education in developing countries. Specifically, we are seeking financial assistance for two of our above mentioned programs, *Continuing Medical Education (CME)* and our *Book Sharing*

program. A donation of \$7500 would provide CME courses to two developing countries, while \$5000 toward our *Book Sharing* program would defray shipping costs for hundreds of useful texts. I request that you consider support for either or both programs, which successfully address the needs of healthcare workers in regions throughout the world for quality, cost effective neurological training.

In another development, which deserves a special mention, the Trustees approved a new contract with Elsevier at their recent conference call as proposed by the Publications Committee. Francois Boller and Mark Hallett jointly guided a complicated negotiation with the publisher to strike an accord, which is mutually beneficial to our organization and the publisher. I am personally pleased with this closure which has been pending for the past several years. Publication of the *Journal of the Neurological Sciences*, ably guided by Dr. Robert Lisak as Editor-in-Chief, is one of the main functions of WFN for dissemination of scientific reports. The new contract also brings in added revenue to our organization, which helps support various ongoing educational activities.

During the interim, I visited Riyadh Armed Forces Hospital in Saudi Arabia to participate in Neurology Update, a 3-day course and workshop on how to improve clinical practice and achieve clinical excellence. The meeting was directed by Professor Basim Yaqub and his staff with help from Dr. Mohammed Sofi as Administrative Director. The course attracted a large number of



Organizers and participants of the Neurology Update (seated from left to right) Dr. Mohammad Kabiraj, Prof. Yacoub Bahou, H.E. Prof. Ashraf Al Kurdi, Prof. Ra'ad Shakir, Prof. Jun Kimura and Prof. Basim Yaqub.

attendants from Saudi Arabia and neighboring Arab countries. I was very happy to see that our Saudi Arabian colleagues are keeping up with the new trends in teaching by emphasizing an interactive approach and ample time allocation for comments and questions. I, for one, enjoyed running a skills workshop on clinical electrophysiology with Drs. Nabil Biary and Mohammed Kabiraj.

I also attended the Annual Meeting of the Japanese Neurological Society held in Tokyo from May 11 through 15 under the able direction of Professor Yoshikuni Mizuno. Here too emphasis was on

interaction between the faculty and the participants, a format not traditionally employed in Japan until recently. The scientific program covered all the important subdisciplines of neurology in both clinical and basic fields utilizing parallel sessions to accommodate the large number of neurologists who attended the meeting. It was good to see many old friends to discuss not only progress in the neurological sciences but also the Asian perceptions of international concerns in general and WFN missions in particular on my own home ground.

Jun Kimura  
President WFN

those from Dr Julien Bogousslavsky (Switzerland), Professor Kaste Markku (Finland), Professor Geoffrey Donnan (Australia), Dr Jock Murray (Canada) and Dr Lindsay Haas (New Zealand) to Uganda, Moscow, Argentina, Cuba and the Philippines respectively. Professor Stefan very kindly offered the program 26 copies of *Challenge Epilepsy—New Antiepileptic Drugs*, edited by Hermann Stefan, Günter Krämer and Bruno Mamoli. Heads of university neurology departments in the United States (120), United Kingdom (18) and Europe (242), were emailed with details of the program during April and May.

Dr. Diana Schneider, President of Demos Medical Publishing and WFN Executive Committee member, made a very generous donation to the program at the beginning of 2004. This consisted of *Handbook of Neurologic Rating Scales*, edited by Robert M. Herndon, M.D.—40 copies; *Neurologic Disease in Women*, edited by Peter W. Kaplan, M.D.—100 copies; *Manual of Nerve Conduction Studies*, Ralph M. Buschbacher, M.D.—200 copies; and *Surface Anatomy for Clinical Needle Electromyography*, Hang J. Lee, M.D. and Joel A. DeLisa, M.D.—200 copies. Three other publishers responded and have donated books to the program. These are from Cambridge University Press, Oxford University Press, and Elsevier (U.S.).

A total of 1,290 volumes of Elsevier's *Handbook of Neuropsychology*, first edition, have been donated to the program by Peter Bakker. These are being sent out during June by Elsevier to all Book Program and CME members. Peter Bakker has also recently offered the program a very large donation of books including nearly 1,000 excess volumes of *Handbook of Clinical Neurology*, revised edition.

### Book Program Members (with contacts)

Argentina (Dr Horacio Gori), Cuba (Dr Francisco Miyares), Egypt (Professor Anwar Etribi), Iraq (Professor Khalil Shaikhly), Jordan (Professor Ashraf Kurdi), Lithuania (Dr Dalius Jatuzis), Mexico (Dr Lilia Nunez Orozco), Morocco (Professor Ali Benomar), Philippines (Dr. Amado San Luis), Russia (Moscow: Professor Alla Guekht; St Petersburg—Dr Tima Stuchevskaya), Uganda (Dr Edward Ddumba), Uruguay (Dr Laura Fojgiel)

## (WFN Education Committee Report cont. from page 1)

### 3. Continuum

While new members are always welcomed, expanding membership demonstrated that the 200 copies of each issue of *Continuum*, generously donated by the American Academy of Neurology, were insufficient to meet members' needs. In response to this, the AAN agreed to provide an additional 200 copies at cost.

### Participating countries and coordinators

Argentina (Federico Pelli), Bangladesh (Hasan Rahman), Bulgaria (Ekaterina Titianova), Croatia (Slava Podobnik), Cuba (Francisco Miyares), Cyprus (Chris Mesis), Czech Republic (Otakar Keller), Egypt (Anwar Etribi), Guatemala 1 (Luis Salguero), Guatemala 2 (Henry Stokes), Honduras (Marco Medina), Hungary (Anita Kamondi), India (Sudesh Prabhakar), Iraq (Khalil Shaikhly), Jordan (Ashraf Kurdi), Lebanon (Salim Atrouni), Lithuania (Dalius Jatuzis), Mexico (Nunez-Orozco), Peru (Alberto Villalobos), Philippines (Amado San Luis), Romania (Cristina Tiu), Russia (Alla Guekht), Serbia & Montenegro (Jelena

Drulovic), Slovenia (Simon Podnar), Sri Lanka (M.T.M. Riffsy), Syria (Ahmad Khalifa), Tunisia (Najoua Miladi), Turkey (Aksel Siva), Uganda (Edward Ddumba), Uruguay (Laura Fojgiel and Marco Medici), Venezuela (Simon Starosta)

### WFN Book Sharing Program

The Book Sharing Program, which was established with a pilot program in 2003, is progressing very well. A list of the early participants is given below. Individual donors or neurologic departments assume responsibility for the shipping charges. Recipients are requested to place a notice inside the front cover of the book acknowledging that the donation was made from the donor as part of the WFN's Book Sharing Program and are responsible for appropriate care of the donated volumes. Although this response was disappointing, the quality of donations that have materialized recently is high. For example, Dr David Coulter from the U.S.A, made a very generous donation to the Department of Neurology at City Hospital, St. Petersburg. Other donations include

### Development Activities

From January 1, 2004 through June 30, 2004 development activities, under the direction of Carrie Becker, yielded the following outcomes:

- Communications with international neurological societies resulted in: **a)** Approval by the Canadian Neurological Association of \$7500 in support of the CME programs in Hungary and Cuba **b)** Approval by the Dutch Neurological Society of Euro 30,000 over three years to benefit the residency training program in Honduras **c)** Confirmation by the Association of British Neurologists of a partnership with the WFN to begin in 2005, the WFN/ABN Neurology Fellowship Project to provide visiting professors to low resource countries. **d)** An offer of program support for Central and South American programs by the Spanish Neurological Society, currently being negotiated
- 550 direct mail requests to neurologists yielded a total of \$3,692, with funding continuing to be received from the campaign
- Approval of a \$5,000 grant from the Edith and Stanley Horowitz Foundation, with an option for renewal in 2005.
- 14 requests submitted to UK-based foundations/trusts for program support including a request for renewal of a \$18,000 grant from Ferguson Trust, with notification to the WFN of final decisions anticipated between August and November of 2004.

### Program in Honduras

In response to a documented need for more neurologists in Honduras, the World Federation of Neurology, in collaboration with the Postgraduate Direction of the National Autonomous University of Honduras, the Honduran Neurological Association, the Honduran Health Ministry, and the Neurology Service of the Internal Medicine Department at the Hospital Escuela in Tegucigalpa, helped establish the country's first Neurology Training Program. This program has now resulted in a 21% increase in the national neurologist per population ratio, significantly improved the quality of patient care, and has reduced the mortality rate due to neurological problems.

### Program in Africa

This program is currently primarily located in Zambia under the direction of Gretchen Birbeck. The WFN Visiting Professors program continues to thrive. The most recent VP was Dr. Joseph Friedman in April 2004. He is the first VP in Zambia under the guidance of the new

local coordinator, Prof. Masharip Atadzhanov and Dr. Friedman's contribution was certainly maximized by Prof. Atadzhanov's efforts. With Prof. Atadzhanov's assistance we have relocated the VP's accommodation to the University Teaching Hospital's guesthouse. Dr. Friedman divided his time between the Chainama College of Health Sciences and the University Teaching Hospital. At Chainama he worked with Prof. Alan Haworth (attending psychiatrist) systematically evaluating the inpatients at Chainama Hospital for evidence of movement disorders and Drs. Atadzhanov, Haworth and Friedman anticipate developing a brief manuscript from this work. In addition, Dr. Friedman provided didactic teaching sessions to the staff at Chainama and provided consultation for some of their more puzzling neurologic cases.

Through UTH the VPs are now centrally involved in the instruction of 5th and 7th year medical students as well as registrars in Internal Medicine. A series of lectures has been established and incorporated into the Medical Education curriculum for the coming year when VPs are planned for August and November.

WFN's support of medical education in Zambia has also provided major support

to the fledgling "Neurologic and Psychiatric Society (NPSZ)" of Zambia, which held a very successful inaugural meeting in June. This day-long educational series covered topics in epilepsy and headache and was attended by over 50 physicians as well as 7th year medical students and house staff. Discussants and health policy makers plan further meetings to develop health policies related to antenatal care for women with epilepsy.

In conjunction with:  
*Monica Brough*,  
 WFN Education Program Manager  
*Gretchen Birbeck*, M.D.  
 Program Director, Africa  
*Carrie Becker*,  
 Development Director



*Theodore Munsat*, M.D.  
 Chair, WFN Education Committee

<sup>1</sup>An educational manual developed with WFN's assistance

## WFN Committee Meeting

**A meeting of the Publications and Website Committee was held on April 28, 2004 in San Francisco within the context of the 56th Annual meeting of the AAN.**

**Members present were:** François Boller—Paris, France, Chair, Tullio Bertorini—USA & Peru, Jagjit Chopra—Chandigarh, India, Robert Daroff—Cleveland, USA, Robert Lisak—Detroit, USA, Hiroshi Shibasaki—Japan (currently in Bethesda), Daniel Truong—Fountain Valley, USA, Joseph Masdeu—Pamplona, Spain, Piero Antuono—Milwaukee, USA, Alberto Portera-Sanchez—Madrid, Spain. **Also present were:** Jun Kimura—Kyoto, Japan/Iowa, USA President, WFN, Keith Newton—London, Susan Bilger—London.

Dr Boller opened the meeting at 7:35 am. After greeting the participants, he presented the terms of the new contract prepared by Elsevier for the *Journal of the Neurological Sciences* (JNS). The main points of the proposal are:

- 10 year contract without renewal clause
- payments of 15% of the net income
- a grant of USD 30,000 to WFN to be distributed as travel fellowships to attend the Sydney meeting
- two Young Investigators awards to be given to Junior members, with the best paper published in JNS.

Dr Lisak summarized the report he had presented at the JNS board meeting. The paper subscriptions to the Journal have decreased, but this is in part offset by the rise in e-subscriptions. Dr Lisak feels that the quality of submitted papers has improved. The Impact factor is stable, over 2. He indicated his willingness to continue as Editor-in-Chief if this is the wish of the Committee and of the Trustees.



The Committee then turned its attention to *World Neurology*. The newsletter is now entirely produced in India and shipped from there, a situation which reduces expenses, but tends to increase delivery time. The support of the Japan Foundation for Neuroscience and Mental Health is gratefully acknowledged and has helped decrease the deficit. Other expected revenues are advertisements and news coming from the National Societies that are bidding for the 2009 WCN and from the ISS. Dr Chopra pointed out that he would like to include in WN some reviews and other frontline topics. It was the Committee's feeling that more coordination should take place between JNS and WN. It would probably not be appropriate to publish full reviews in WN. However, synopses and summaries of reviews (and relevant articles) would be fine. Dr Truong pointed out that this, in addition to increasing the interest of the newsletter, would disseminate knowledge among neurologists who are not always trained to discern the methodological subtleties of regular scientific articles.

### Report of the Publications Subcommittee for Review of JNS and WN

The next speaker was Dr Antuono. A subcommittee was assembled to evaluate the journals and make recommendations regarding the editorship and format of the two WFN publications, *Journal of the Neurological Sciences* (JNS) and *World Neurology* (WN). The Members were Drs P. Antuono (Chair), D. Truong and J Masdeu.

**JNS**—The JNS has a contract stipulated in 1988. A new proposed contract will emphasize electronic availability of the Journal. The current Editor, Dr R P Lisak, was elected in 1997 and has a tenure of 5 years renewable for an additional three years. This would indicate 2005 as the term of the current editorship. The subcommittee feels that the current line-up of Editors is good and the journal has a specific international niche. At the time of a change in Chief Editor, a change or an expression of continued interest is recommended from the Editors. No comments were made re the proposed contract with Elsevier which is still in progress. The issue of co-ownership was discussed between Elsevier and Dr F Boller.

**WN**—The subcommittee has deter-

mined that *World Neurology* may benefit from remaining in print format for the next 5 years due to its unique distribution among world neurologists. At that time a move towards an electronic format may be considered as this medium may be more widely accepted in developing countries. The printed version is now produced in India at a lower cost than in the past. The main concern is to develop a 5 year plan to assure viability and transition from the current funding from the Japan Foundation for Neuroscience and Mental Health to a new source of support. An effort by Dr Chopra to obtain advertising from drug companies is planned in order to increase financial viability in the long term. This is strongly encouraged. To reach this goal a scientific page may be added to the newsletter to make it more appealing to pharmaceutical sponsors. WN is published the month of the issue and is distributed by "surface mail" which may account for the delay in receiving the issue. To maintain low publishing/ shipping cost this should be continued. Changes in the editorial board are suggested on a rotation basis. At present, Trustees are on the Board and rotate yearly. Regional Vice-Presidents are rotated every 4 years. This system may assure a rotation on the Editorial Board. The mandate of the Chief Editor, Dr Chopra, started in 1998 and has no specific renewal terms. In order to assure continuity into the next 5 years a rotation of editorship is recommended; or an assistant editor who can lead WN into the next term.

To conclude this part of the meeting, the following announcements and decisions were made:

**1)** It is recommended that Dr Lisak be confirmed for another 4 year term (2005-

2009). **2)** The Finance Committee has moved to recommend that WN continue in its present format until funding is available. **3)** Dr Antuono's subcommittee was asked to propose a short list of suitable Deputy Editors for WN. There will then be a mail ballot and the leading two or three candidates will be presented to the Trustees for final decision. One of the roles of the new Deputy Editor will be to assure a liaison with JNS.

**Website:** The London office is exploring the possibility of making payments on the web by means of a credit card.

Dr Masdeu announced his plan to download neural images listed by type of change rather than by diagnosis. The Committee unanimously supports this initiative.

**Other business:** The affiliated Journals (Neuroepidemiology, ALS, Parkinson's) continue to do well. There is yet to be a final decision concerning ADAD on the part of the Publisher, Lippincott. There being no other business, the meeting was closed at 8:30 AM.

**Appendix:** The Trustees, having reviewed the new JNS contract, have given it their approval.



*François Boller*  
Chair, WFN Publications and Website Committee

## WFN Teaching Programme—Reports

### A. Development and Evolution in Argentina.

Of the postgraduate's educational options, Continuing Medical Education (CME) provides an excellent opportunity for professionals who aspire to keep up-to-date and continue their training. In April 2003, reading an article in *World Neurology* by Theodore Munsat, Chair of the WFN Education Committee, about the WFN CME Program in Neurology, I thought that it would be good to introduce this in Argentina. The conditions were: first, the approval of the National

Neurological Society was needed, in our case the Sociedad Neurológica Argentina (SNA); second, the selection of a National Coordinator; and third, organization of the Program locally.

Dr. Horacio Gori, President of our SNA welcomed the proposal enthusiastically and, together with the Secretary of our Society, Dra. Cristina Zurrú, we began to develop the most appropriate way to distribute the program in Argentina, a country of 3,800,000 km and divided into 23 counties. Taking into account the number of neurologists and their geographi-

cal distribution, we decided to divide the country into 6 regions: NW-NE-Buenos Aires-Centre-Cuyo and Patagonia, this last one being the most extensive, with students from Rio Negro having to travel 1000 km to attend the discussion group meetings. For better operation of the Program, 9 Regional Delegates were chosen, with a National Coordinator and central headquarters based at the SNA in Buenos Aires. The Regional Delegates held their first Meeting in November 2003 during our National Neurology Meeting in Mar del Plata, Buenos Aires.

The Program's success depends on the Discussion Group Guidelines being strictly followed; frequent contact with Monica Brough, WFN CME Program Manager; and the leadership of each Regional Delegate: P. Nofal (NW); S. Bestoso (NE); M. Daffra (Cuyo); J. Fernández (Patagonia); G. Saredo and G. Zeppa (Centro); and M. Melcon, V. Campanille and M. Nogués (Buenos Aires). At present, 60 professionals are involved with the program, 46 of whom have completed evaluation sheets. The WFN CME Program in Argentina is very active and expanding quickly.



*Pelli Noble RF*  
WFN CME Argentina Study Group  
Coordinator

## B. Teaching visit to the College of Medicine, University of Malawi, Blantyre

This is the second year that I have taught neurology to medical students at the college of Medicine in Blantyre, Malawi. Though short—the time allocated to neurology is only a week—I managed to give the students an intensive week of lectures, interactive sessions and case based teaching.

Malawi's medical school was founded in 1992 to train Malawian doctors in Malawi. Despite difficulties with funding, the medical school has grown to train about 20 doctors for Malawi each year. This is a small number of doctors for a country of

10 million. The school is based at Queen Elizabeth Hospital in Blantyre. They have close links with the Wellcome Trust, Johns Hopkins University and programs run by the Dutch government.

I learnt many lessons from my last visit that made this year's visit much more successful. My teaching style was more fluent—I had learnt that blackboard and overheads prevented students from slumbering in front of yet another Power-Point presentation. I knew more about neurology in Africa.

I taught a 40 hour programme, covering neurological examination, epilepsy, stroke, dementia, HIV neurology, bacterial, malarial and viral nervous system infections, coma, brain tumours, head injury, movement disorders and diseases of spine and peripheral nerve. Each topic was supported by bedside teaching and case based sessions. At the end of the course the students were examined in a format familiar to them from other courses—short answers and multiple choice questions.

Whilst I spent most of my time teaching medical students, I gave a grand round to the departments of medicine, surgery and obstetrics, and lectured to the department of medicine on new developments in stroke medicine. I organised a teaching session for the Part 1 MRCP for registrars in medicine and local GPs. Every morning admissions from the previous 24 hours were presented, and during my stay we discussed cases with neurological presentations. Whenever I had the opportunity I saw puzzling cases



*Students*

on the ward or in outpatients. This was a learning experience for me—I saw cases of neuromyelitis optica, ataxic neuropathies, rabies and encephalitis that were very different from my day to day experience in Edinburgh. All this activity left very little time for anything else during my 10 day stay. Next year I hope to stay for longer, and make further improvements to the undergraduate course. There may be a postgraduate training program in medicine, and I hope to be able to contribute to the neurological parts of this course.

I would like to thank the World Federation of Neurologists for supporting my visit this year.



*William Whiteley*  
Department of Clinical Neurology,  
Western General Hospital, Crewe Road,  
Edinburgh

## WFN REGIONAL NEWS

### A. The 7th Congress of the European Society for Clinical Neuropharmacology (ESCNP)

The Congress was held in Trieste, Italy on May 5-9, 2004 under the auspices of the World Federation of Neurology and of the European Federation of Neurological Societies. There were two Teaching Courses on the Opening day, one on Headache and the second on Clinical Trials. The 3 days of the Congress were divided into Plenary Sessions in the morning and Parallel

Symposia in the afternoon. On the first day the Plenary Session was focused on the topic of Post-Stroke Treatment and Management, whereas the Parallel Symposia were on the topics of Functional Imaging; the Pharmacological Approach to Neurorehabilitation; and Epilepsy. On the second day the Plenary Session was devoted to the topic of Early Dementia Diagnosis and Treatment, whereas the Parallel Symposia were on the topics of Parkinson and Parkinsonisms, Single or Cocktail Treatment, and Psychiatric



Disorders in CNS Diseases. On the third day the Plenary Session was on Multiple Sclerosis, whereas the Parallel Symposia were on Neuropathic Pain, Neuro-immunology: Basic and the Influence of Pharmacological Treatment; Drug Monitoring; and Pharmacogenetics.

There were also four Special Lectures; the Opening was given by V. Hachinski (Canada) on "A new approach to cognitive disorders and stroke: opportunities for neuropharmacology"; the second was given by E.S. Vizi (Hungary) on "Role of sympathetic nervous system in neuroimmune diseases"; the third was given by M. Youdim (Israel) on "Genomics and proteomics in neurodegeneration and neuroprotection"; and finally the Closing Lecture by F. Gerstenbrand (Austria) on "Ethics in clinical neuropharmacology".

The Business Meeting of the ESCNP confirmed Prof. L. Battistin as President of the Society for another term, as well as the other members of the Executive Board, that is E. Giacobini and P. Jenner as Vice-Presidents; L. Vecsei as Secretary; E. Wolters as Treasurer; and P. Riederer as Chairman of the International Advisory Board. Also, it was decided that the next Congress will be held in 2006 in Amsterdam and it will be organized by Prof. E. Wolters.

*Prof. Leontino Battistin*  
WFN Regional Vice-President for Europe

## **B. The First Parkinson's Disease and Parkinsonism Symposium—Istanbul, Turkey, 11 April 2004**

On the occasion of the World Parkinson's Disease Day on April 11, the Turkish Heart Foundation and the Unit of Parkinson's Disease and Movement Disorders of the Society of Neurocardiology jointly organized the First Parkinson's Disease and Parkinsonism Symposium in Istanbul. The Symposium, which took place in conjunction with the Turkish Heart Foundation's Annual Heart Week, had a very successful outcome thanks to the much appreciated academic contribution and collaboration of some very distinguished lecturers from Turkey, Israel and Italy. The Scientific Board of the Symposium was chaired by Professor Kemal Bayülkem, M.D as the President of the Neurocardiology Society, and was honoured by the presence of Professor Leontino Battistin, M.D, the European Regional Vice President of the World Federation of Neurology, from Padova University; Professor Moussa Youdim, M.D from Eve Topf and NPF Centers of Excellence for Neurodegenerative Diseases Research of Technion-Faculty of Medicine in Haifa; Professor Amos Korczyn, M.D from the Sackler School of Medicine of Tel-Aviv University, as well as many Turkish colleagues from very prominent Faculties of Medicine in Kocaeli, Ankara, Istanbul and Izmir. The

Symposium, which had been previously announced by the European Parkinson's Disease Association (EPDA), was held in very intensive consecutive sessions with outstanding presentations on various aspects of Parkinsonism and Parkinson's Disease.

Following the Symposium, on 12 April, a public panel was organized for the patients of Parkinson's disease and their families.

This symposium is intended to be organized biennially, in Istanbul on 11 April, in commemoration of the English physician Dr. James Parkinson, who first described the symptoms of Parkinson's Disease.



*Prof. Leontino Battistin*  
WFN Regional Vice-President for Europe

## **WINNERS OF THE GLAXOSMITHKLINE JUNIOR TRAVELLING FELLOWSHIPS 2004**

<b>Name</b>	<b>Country</b>	<b>Meeting</b>
Mariana Spitz	Brazil	57th Annual Meeting of the American Academy of Neurology, Miami Beach, Florida, USA, April 9-16, 2005
Idoris Nunez Lahera	Cuba	XXVIII Annual Meeting of the Mexican Academy of Neurology, Guanajuato, Mexico, October 26-30, 2004
Juzar Hooker	Kenya	8th EFNS Congress, Paris, France, September 4-7, 2004
Shuren Dashzeveg	Mongolia	8th EFNS Congress, Paris, France, September 4-7, 2004
Puntsag Soyolmaa	Mongolia	129th Annual Meeting of the American Neurological Association, Toronto, Canada, October 3-6, 2004
Joanna Pera	Poland	8th EFNS Congress, Paris, France, September 4-7, 2004
Anna Lebedeva	Russia	8th EFNS Congress, Paris, France, September 4-7, 2004
Milija Mijajlovic	Serbia & Montenegro	8th EFNS Congress, Paris, France, September 4-7, 2004
Maha A M El Zubeir	Sudan	8th EFNS Congress, Paris, France, September 4-7, 2004
Fadia al Naddaf	Syria	20th Congress of the European Committee for Treatment & Research in Multiple Sclerosis, Vienna, Austria, October 6-9, 2004

## WFN Junior Travelling Fellowship

### A Report

The 5th World Stroke Congress was held at the Vancouver International Convention Center last June 23-26, 2004. The convention stirred great interest from more than 1000 delegates from all over the world.

A one-day simultaneous teaching course covering relevant topics on Thrombolysis, Stroke Mechanisms, Stroke in Young Adults, Uncommon Causes of Stroke, Neurosonology, and Neuro-

imaging among others, ushered in the 4-day scientific event. World-renowned stroke experts gave high-powered and professionally enlightening lectures one after the other during the wide array of plenary sessions, satellite symposia, workshops, and parallel platform and breakfast sessions.

Intracerebral hemorrhage was accorded a separate symposium since its management continues to pose a challenge.

The session aptly started with a discussion of the phases in the pathophysiology of intracerebral hemorrhage, the understanding of which is necessary in order to identify areas for potential therapeutic intervention. Early surgery was not found to confer better outcome as compared to conservative management in the ISTICH.

I would like to thank the World Federation of Neurology for its generosity in providing assistance for my attendance at the Congress.

*Maria Cristina Z. San Jose*

## MAGNETIC RESONANCE IMAGING OF THE EPILEPSIES

The superiority of magnetic resonance imaging (MRI) over X-ray computed tomography scanning in terms of sensitivity and specificity for identifying the aetiology of epilepsy is firmly established. The most common abnormalities identified are hippocampal sclerosis (HS), malformations of cortical development (MCD), vascular malformations, tumours, and acquired cortical damage. The principal clinical applications of MRI are to identify the structural basis of epilepsy and patients who may be suitable for surgical treatment. Rapid advances are being made in MRI techniques so that patients who were previously regarded as being 'MRI negative' may have relevant abnormalities, which can be identified with contemporary optimal imaging.

**MRI epilepsy protocol and indications:** The Neuroimaging Commission of the International League Against Epilepsy has produced recommendations for structural and functional imaging (Duncan, J. S. et al, 2000). The rationale for imaging the brains of patients developing epilepsy is to identify underlying pathologies such as vascular lesions, infections and tumours that require specific therapy; and secondly to assist the formulation of syndromic and aetiological diagnoses, particularly if surgical treatment is a consideration.

In the non-acute situation, an MRI scan should include T2-weighted, proton density and fluid attenuated inversion recovery (FLAIR) sequences to cover the whole brain in at least two orthogonal planes, with the minimum slice thickness possible. There should also be a T1-weighted volume acquisition with a partition size of 1.5 mm or less, to allow reformatting in any orientation and three-

dimensional reconstruction of the data set. The FLAIR sequence produces images in which parenchymal lesions have high signal and CSF gives low signal. This may help in the differential diagnosis of areas of high signal on T2-weighted images and increase the conspicuity of lesions. In the first two years of life, incomplete myelination results in poor grey-white matter contrast, making identification of cortical abnormalities difficult and, in these cases, MRI may need to be repeated after 1-2 years.

The best practice is to obtain MRI in all patients with epilepsy, with the exception of those with a definite diagnosis of idiopathic generalised epilepsy or benign rolandic epilepsy of childhood with centrotemporal spikes, who go into early remission. In situations with limited access to MRI, essential indications for MRI are: o Patients with partial or secondarily generalised seizures, and apparently generalised seizures, that are not controlled with AEDs o Patients who develop progressive neurological or neuropsychological deficits.

Whilst X-ray CT is less sensitive and specific than MRI, it has a role if there are contraindications to MRI, in the acute situation, and to clarify the extent of calcification.

**Structural cerebral abnormalities underlying epilepsy identified with MRI:** Hippocampal sclerosis is the most common pathology underlying refractory focal epilepsy, and is amenable to surgical treatment. The features of HS identified by MRI are hippocampal atrophy, demonstrated with coronal T1-weighted images, and increased signal intensity within the hippocampus on T2-weighted spin-echo

images, decreased T1-weighted signal intensity and disruption of the internal structure of the hippocampus. Atrophy of temporal lobe white matter and cortex, dilatation of the temporal horn and a blurring of the grey-white matter margin in the temporal neocortex variably accompany HS. Assessment of the severity and extent of HS can be improved by measuring hippocampal volumes and quantifying T2-weighted signal intensity.

**Malformations of cortical development:** (MCD) are increasingly being recognised in patients with seizure disorders previously regarded as cryptogenic. The range of MCD identified with MRI include schizencephaly, agyria, diffuse and focal macrogyria, focal polymicrogyria, minor gyral abnormalities, subependymal grey matter heterotopias, bilateral subcortical laminar heterotopia, tuberous sclerosis, focal cortical dysplasia and dysembryoplastic neuroepithelial tumours. Hypothalamic hamartomas, sometimes associated with gelastic epilepsy, precocious puberty and cognitive impairment, are clearly demonstrable using MRI. Focal cortical dysplasia is not always identified with conventional MRI and may be more easily identified on a FLAIR sequence, by reconstructing the imaging dataset in curvilinear planes and by quantitative assessment of signal and texture.

**Cerebral cavernomas** commonly underlie epilepsy and surgical removal carries up to a 70% chance of subsequent seizure remission. Cavernomas are circumscribed and have the characteristic appearance of a range of blood products. The central part contains areas of high signal on T1- and T2-weighted images, reflecting oxidised haemoglobin, with darker areas on T1-weighted images

due to deoxyhaemoglobin. The ring of surrounding haemosiderin appears dark on a T2-weighted image. There may be calcification, which usually appears dark on T1- and T2-weighted images.

**Granulomas**—Worldwide, the commonest causes of refractory focal epilepsy are cysticercosis and tuberculomas. These lesions have characteristic appearances on MRI that evolve with time and which, unless calcified, may resolve and be regarded as 'disappearing lesions'.

#### Longitudinal MRI studies of the effect of epilepsy on the brain:

Voxel and anatomically-based methods may be applied in longitudinal studies to identify subtle changes in the brain and to determine the effects of epilepsy. The majority of previous cross-sectional studies have inferred that more severe hippocampal damage is associated with a longer duration of epilepsy and a greater number of seizures. Longitudinal studies, however, are necessary to ascribe cause and effect. Two recent studies have suggested atrophy of the hippocampus occurring over three years of active epilepsy in patients attending epilepsy clinics (Fuerst, D. et al, 2003). A large community-based study has shown that patients with chronic epilepsy are more likely to have had significant loss of neocortical, hippocampal or cerebellar volume over 3.5 years (Liu, R. S. et al, 2003). These studies implied that secondary brain damage might occur in the context of chronic epilepsy. The next step is to identify the aetiological factors and how to intervene to prevent this process.

#### Recent MRI developments:

Diffusion-weighted imaging is very sensitive in the detection of early ischaemic changes, and shows changes in status



*Destination Turkey—Xlth International Congress on Neuromuscular Disease, Istanbul 2006*

epilepticus. Diffusion tensor imaging (DTI) reveals lesions found with conventional MRI and also abnormalities that are not visualised on routine sequences. Tractography is a derivation of DTI that allows identification of nerve fibre tracts within the brain, and demonstrates the structural basis of connectivity between brain regions, including areas defined functionally (Guye, M. et al, 2003). Other promising new MRI sequences include magnetisation transfer ratio imaging, double inversion recovery imaging and fast FLAIR T2-mapping. Ultra-fast low-angle rapid acquisition and relaxation enhancement is a sequence that may be useful for patients who are restless and can only tolerate short studies.

Continuous arterial spin labelling perfusion MR imaging can detect asymmetries in mesial temporal lobe perfusion interictally in patients with TLE. This technique is potentially a further useful non-invasive tool for assessing inter-ictal function.

Improved gradient performance is anticipated to improve speed and spatial resolution. Phased array surface coils improve signal-to-noise ratio in superficial cortex and hippocampal regions and this may lead to improved spatial resolution. Imaging at higher field strengths will also improve spatial resolution and 3T MRI scanners are now available as mature clinical instruments.

Voxel-based morphometry may demonstrate occult abnormalities in individual patients, but appears to be relatively insensitive at thresholds that do not give false positive results. Analysis of the texture of the neocortex on a T1-weighted volume scan may give increased sensitivity to identify focal cortical dysplasia (Bernasconi, A. et al, 2001). Curvilinear reconstructions may increase the visibility of subtle neocortical lesions. Three-dimensional reconstruction of the neocortex may assist visualisation of abnormalities and surgical planning.

### FUNCTIONAL MRI

**Ictal and inter-ictal epileptiform activity:** Focal increases in cerebral blood delivery have been identified in patients with frequent inter-ictal spikes (Krakow, K. et al, 1999). Continuous recording of EEG

and functional MRI (fMRI) is possible, following introduction of methods to remove the artifact on the EEG trace caused by the fMRI acquisition, and allows detailed analysis of the time course of haemodynamic changes. Clinically, these methods may aid EEG interpretation and understanding of the pathophysiological basis of epileptic activity. Their application, utility and limitations in defining the irritative zone of the cortex (that generates inter-ictal spikes) and its relationship with the epileptogenic zone (that gives rise to seizures) in patients in whom surgical treatment is being considered will need careful and critical evaluation. EEG-fMRI studies of absences with generalized spike-wave activity have shown heterogeneous findings: an increase in thalamic blood flow is commonly inferred, consistent with the thalamus having a key role in the pathophysiology of typical absences.

#### Localisation and lateralisation of cognitive function:

An important use of fMRI in patients with epilepsy is to delineate areas of brain that are responsible for specific functions, such as the primary sensory and motor cortex, and to identify their anatomical relation to areas of planned resection. In patients with cerebral lesions, the localisation of cognitive activation may differ from the pattern in normal subjects. These data may be helpful in the planning of neocortical resections of epileptic foci, in order to minimise the risk of causing a fixed deficit. Lateralisation of language function may also be accomplished using fMRI. A battery of language activation paradigms is needed to identify eloquent language areas in the vicinity of proposed surgery. A semantic decision task has been found to be predictive of a post operative decline in naming ability. In the future, these data may assist in planning surgical resections in the language-dominant hemisphere. Several fMRI studies have shown activation of bilateral medial temporal lobe, particularly posterior parahippocampal gyri, during encoding of novel verbal and spatial material. Activation may be less on the side of the focus. Verbal memory tasks that activate the medial left temporal lobe have been implemented (Dupont, S. et al, 2001). Thus fMRI has a promising role in the pre-operative assessment of memory function and the prediction of the likely negative impact of temporal lobe resections on memory in individual patients.



## References

1. Bernasconi, A., Antel, S.B., Collins, D.L., Bernasconi, N., Olivier, A., Dubeau, F., Pike, G.B., Andermann, F., and Arnold, D.L. (2001). Texture analysis and morphological processing of magnetic resonance imaging assist detection of focal cortical dysplasia in extra-temporal partial epilepsy. *Ann.Neurol.* 49:770-775.
2. Duncan, J.S., Ali, R., and Barkovich, A.J. et al (2000). ILAE Commission on Diagnostic Strategies: recommendations for functional neuroimaging of persons with epilepsy. *Epilepsia* 41:1350-1356.
3. Dupont, S., Samson, Y., Van de Moortele, P.F., Samson, S., Poline, J.B., Adam, C., Lehericy, S., Le Bihan, D., and Baulac, M. (2001). Delayed verbal memory retrieval: a

functional MRI study in epileptic patients with structural lesions of the left medial temporal lobe. *Neuroimage.* 14:995-1003.

4. Fuerst, D., Shah, J., Shah, A., and Watson, C. (2003). Hippocampal sclerosis is a progressive disorder: a longitudinal volumetric MRI study. *Ann.Neurol.* 53:413-416.

5. Guye, M., Parker, G.J., Symms, M., Boulby, P., Wheeler-Kingshott, C.A., Salek-Haddadi, A., Barker, G.J., and Duncan, J.S. (2003). Combined functional MRI and tractography to demonstrate the connectivity of the human primary motor cortex in vivo. *Neuroimage.* 19:1349-1360.

6. Krakow, K., Woermann, F.G., Symms, M.R., Allen, P.J., Lemieux, L., Barker, G.J., Duncan, J.S., and Fish, D.R. (1999). EEG-triggered functional MRI of interictal epileptiform activity in patients with partial seizures. *Brain* 122 ( Pt

9):1679-1688.

7. Liu, R.S., Lemieux, L., Bell, G.S., Hammers, A., Sisodiya, S.M., Bartlett, P.A., Shorvon, S.D., Sander, J.W., and Duncan, J.S. (2003). Progressive neocortical damage in epilepsy. *Ann.Neurol.* 53:312-324.



*John S. Duncan*  
National Society for Epilepsy, Chalfont St Peter, Bucks, and National Hospital for Neurology and Neurosurgery, London

## BOOK REVIEWS

### Critical Care Neurology and Neurosurgery

Editors: Jose I. Suarez MD  
ISBN: 1-58829-089-1  
No. of Pages: 631  
Price: \$145.0  
Publication Date: January 2004  
Publishers: The Humana Press

This is a most comprehensive book on critical care in neurology. This subjective was considered a diagnostic skill a few decades ago and treatment modalities were few. The neurological treatment is most challenging these days and perfect and timely handling of acute neurological problem is most rewarding. Almost all the critical neurological and neurosurgical emergencies are judiciously discussed in this book, be it a vascular episode, status epilepticus, acute Guillain-Barre' syndrome, myasthenia

gravis, respiratory failure requiring ventilatory support, traumatic injuries of spinal cord and brain, injections of the nervous system and many more neurological and neurosurgical emergencies. There are 34 chapters covering almost all emergencies or those requiring critical care. The book is useful for critical care physicians, surgeons and neuroscientists.

*Editor-in-Chief*

### Hypothermia and Cerebral Ischemia

Editors: Carolina M. Maier and Gary K. Steinberg  
HC: ISBN: 0-86903-660-X  
No. of Pages: 188  
Price: \$99.50  
Publication Date: October 2003  
Publishers: The Humana Press

Stroke or 'brain attack' is one of the most devastating disease in neurology with considerable mortality and morbidity. It is a global disease with enormous medical and socioeconomic impact. The authors in this book discuss the mechanisms and the most recent clinical applications of hypothermia as a method of cerebral protection. They have brought out a comprehensive review of mild hypothermia's therapeutic potential. The book is divided into 10 chapters with particular discussion on the role of hypothermic protection in traumatic brain injury and stroke patients. It is a useful book for stroke units and libraries.

*Editor-in-Chief*

## CALENDAR

### 2004

#### 11th Asian & Oceanic Congress of Neurology (AOCN)

26-28 November, 2004, Singapore  
Contact: NNI Congress Secretariat, National Neuroscience Institute, 11 Jalan Tan Tock Seng, Singapore 308433  
Tel: + 65 6357 7151/7152/7162,  
E-mail: nni\_secretariat@ttsh.com.sg

#### International Forum on Neurology

2-3 December, 2004, Ho Chi Minh City, Vietnam

Contacts: (USA) The Parkinson's and

Movement Disorder Institute, 9940 Talbert Ave., #204, Fountain Valley, CA 92708, USA  
Tel: (714) 378 5062  
E-mail: dtuong@pmdi.org  
(Vietnam) Congress office: INFO 2004 Secretariat, Ngo Thi Ngoc Trinh, M.D., 215 Hong Bang st., Dist. 5, Ho Chi Minh City, Vietnam  
Tel: +84 8 8 554 269 - ext 112  
Fax: +84 8 9 506 126  
Email: contact@info2004.org  
Website: www.info2004.org

#### 15th International Symposium on ALS/MND

2-4 December, 2004, Philadelphia, USA  
Contact: Motor Neurone Disease

Association in co-operation with International Alliance of ALS/MND Associations, PO Box 246, Northampton NN1 2PR, UK  
Tel: + 44 1604 250505  
Email: alliance@alsmndalliance.org

#### The American Epilepsy Society 58th Annual Meeting

3-8 December, 2004, New Orleans, USA  
Website: www.aesnet.org/events/ann\_mtg.cfm

#### Alzheimer's Disease: From Molecular Mechanisms to Drug Discovery

11-17 December, 2004 Cancun, Mexico  
Website: www.worldeventsforum.com/ad/index.html

## INTERNATIONAL STROKE SOCIETY

### Address from ISS President

Stroke is one of the major burdens in healthcare in the world. It is also the most common acute brain disease, the first cause of death of neurological origin, and the first acquired cause of disability in adults. In this perspective, it is significant that World Neurology is opening its columns to the professional society which represents stroke at an international level. The International Stroke Society is of course open to non-neurologists, since the disease also involves surgeons, radiologists, geriatricians, etc. but it is also true that neurologists form the bulk of its membership and committees. For some time, stroke unfortunately was not so well represented within the WFN, but with the establishment of a WFN Stroke Affairs and Liaison Committee, and having the International Stroke Society representing stroke and cerebrovascular disease in the WFN Research Committee, this regrettable situation has now evolved. Besides, the International Society (ISS) is presently actively involved in the Global Stroke Initiative, an exciting joint project between ISS, WFN and WHO, which will be presented in World Neurology by its ISS Committee chair, Frank Yatsu.

The chartered mission of the ISS is to develop "the provision of aid to patients who are at risk of stroke, have suffered stroke of vascular dementia, the promotion of international cooperative research studies, the advancement and dissemination of scientific information on medicine for the treatment of stroke, the promotion of professional and cultural exchange by scientists and physicians throughout the world, and the fostering of educational endeavors of budding researchers". Over 1300 individual professionals from 71 countries are members of the ISS, which is managed by an international board of directors of 37 people, the core executive committee, operative since June, 2004, including J. Bogousslavsky (president), T. Yamaguchi (vice-president), B. Norrving (secretary), and F. Yatsu (treasurer) (the details can be found on the ISS website at <http://www.internationalstroke.org/>

The immediate tasks of the new ISS officers have been established as follows :  
1) Obtain the WHO status of official non-governmental organization  
2) Explore a professional management strategy for its

activities, in particular fund raising  
3) Develop communication means, including a newsletter, website, and a scientific publication  
4) Have a World Stroke Congress every two years instead of every four years. An intermediate step will be the Joint World Stroke Meeting in Capetown, 2006 before the 2008 World Stroke Congress, which will take place in Vienna  
5) Develop the Global Stroke Initiative, which is presently ongoing between ISS, WFN and WHO  
6) Develop membership around the world, especially in developing countries  
7) Develop collaboration with other associations, including WFN and the recently founded World Stroke Federation, a political structure of which national, regional and other stroke societies constitute the membership.

There is plenty of work ahead of us, but we are lucky to be able to count on the excellent job done by the previous administration, which was led by past-president J. Toole. We would be glad to answer to any question on ISS. Questions on membership, please contact Bo Norrving, MD at [Bo.Norrving@skane.se](mailto:Bo.Norrving@skane.se), on the Global Stroke Initiative, please contact Frank Yatsu, MD at [Frank.M.Yatsu@uth.tmc.edu](mailto:Frank.M.Yatsu@uth.tmc.edu), and on any other points, please contact J. Bogousslavsky, M.D. or Takenori Yamaguchi, M.D. at [tyamaguch@hsp.ncvc.go.jp](mailto:tyamaguch@hsp.ncvc.go.jp).



Julien Bogousslavsky, MD  
President, International Stroke Society

### ISS—Past and Present

In October, 1989, there was the landmark meeting in Kyoto, Japan, gathering physicians from many regions of the world, who are interested in stroke medicine. It was the very first international scientific congress of stroke, with 900 participants from 25 countries. This big success stimulated international leaders in this field to establish the International Stroke Society with the mission which Dr.

Bogousslavsky, President, has described in his column. Under the mission, we have convened a World Congress of Stroke every four years. The Congress site has been selected taking three continents' rotation into consideration. Actually, the Congress sites during the past 15 years have been Kyoto, Japan (Asian-Pacific); Washington, D.C., USA (American Continent); Munich, Germany (European Continent); Melbourne, Australia (Asian-Pacific); and the most recent, Vancouver, Canada (American Continent). The number of participants has been continuously increasing and reached 2,400 in Vancouver in June of 2004.

Along with the Congress sites, the Executive officers have also been elected according to the rule of continental rotation. Previous ISS Presidents have been, from the American Continent, Dr. H. J. M. Barnett (Canada); from the European Continent, Dr. D.-W. Heiss (Germany); from the Asian-Pacific Continent, Dr. F. Gotoh (Japan); from the American Continent, Dr. J.F.Toole (USA); and from the European Continent, Dr. J. Bogousslavsky (Switzerland). The new members of the International Board of Directors were elected and approved at the General Assembly held in Vancouver. As those members are chosen as broadly as possible to represent various regions of the world, you can make contact with them in case you need further information on ISS.

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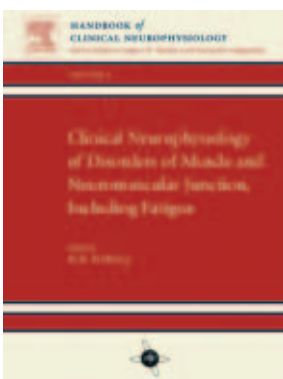
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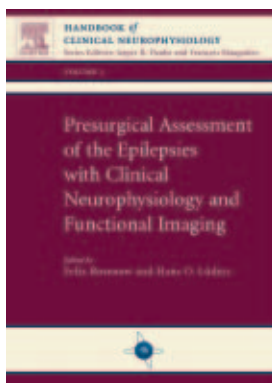
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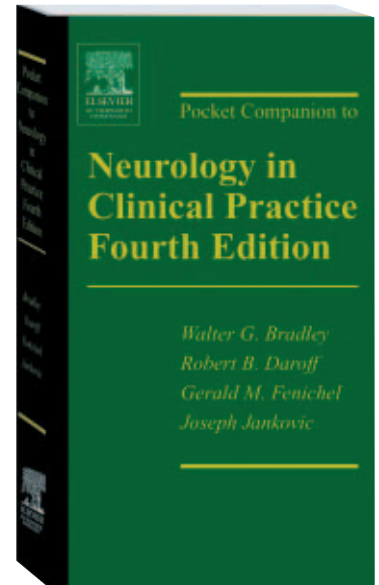
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