

WORLD NEUROLOGY

THE NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

VOLUME 15, NUMBER 2, JUNE 2000

FIRST-CLASS SCIENTIFIC PROGRAMME XVIITH WORLD CONGRESS OF NEUROLOGY, LONDON, 2001

This programme will be of interest not only to neurologists but also to those who have an interest in neurological diseases such as researchers, health care providers, pharmaceutical companies and last but by no means least, patients and patient support organisations. The Congress will be built around main themes, which have already been approved by the National Delegates of the WFN. The following programmes will form the main themes:

STROKE (Monday)

Chaired by Professor Charles Warlow from Scotland, the programme will include epidemiological, pathological and treatment aspects of stroke. An original and exciting feature will be a clinicopathological conference in which international experts will pit their wits against a diagnostic

problem. Specific topics will include: 1) The worldwide burden of stroke; 2) The pathology of acute ischaemic stroke; 3) The role of the neurologist in the management of subarachnoid haemorrhage; 4) Atrial fibrillation and stroke prevention; 5) The story of carotid surgery; 6) The story of CADASIL.

DEMENTIA (Tuesday)

François Boller will chair a session on dementia, which will cover epidemiological to pathogenetic aspects. This symposium will include the inaugural Macdonald Critchley Lecture to be given by Professor Martin Rossor from London on the early diagnosis of Alzheimer's Disease. Specific presentations will include. 1) Epidemiology (to include developing countries); 2) Molecular biology; 3) Genetics; 4) Non-

Alzheimer dementia; 5) Risk factors and clinical diagnosis; 6) Vascular dementia; 7) Mild cognitive impairment; 8) Controversies in dementia – debate; 9) Coping with dementia.

EPILEPSY (Wednesday)

The epidemiological aspects of epilepsy will be considered from a worldwide international basis. There will be another clinicopathological conference. Topics during this and the other themes will include paediatric issues so that the Congress will be of interest to paediatric as well as adult neurologists. Specific presentations will cover: 1) Epidemiology of epilepsy: a global problem; 2) The cellular biology of epileptogenesis; 3) Genetic aspects of epilepsy; 4) Anatomic brain imaging of epilepsy; 5) Status epilepticus; 6) New therapeutic developments; 7) Paediatric considerations; 8) Surgical interventions.

MULTIPLE SCLEROSIS (Thursday)

Chaired by Hartmut Wekerle from Germany the programme will include epidemio-

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The new 'London Eye' (seen from Westminster Bridge) affords tremendous views across the capital and beyond. (© by Richard Lateano.)

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 - WFN Annual Report 1999
 - Neurosciences in 2025
- Prevention & Care of Epilepsy
 - 1999 WFN Junior Travelling Fellowships - Reports
 - News
 - Book Reviews
 - Meetings Calendar

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PRESIDENT'S COLUMN

The more I travel to interact with World Federation of Neurology Associations, the greater becomes my conviction that neurology is still in its formative years. In contrast to most of the other major fields of medicine, our specialty began less than 150 years ago with small beginnings in Salpêtrière in Paris, the National Hospital in London, and soon thereafter in the USA. In its nascent years, neurology went through a phase of correlation of clinical signs and symptoms with neuroanatomy and neuropathology before specific therapies were devised for the disease entities identified. This lasted so long that some opined that the few remaining neurologists might be made irrelevant by remarkable advances in neurosurgery and psychiatry, which far surpassed medical management for neurological disorders. During this time, because of the hard labors of a small cadre, the light of neurology was preserved through these dark ages, later on to emerge as the most exciting specialty in the field of medicine. Within my time as a neurologist, we have learned how to visualize brain anatomy and its vascular system non-invasively, to measure neural metabolism, to understand cellular machinery, and to intervene with effective therapies and prophylaxis.

In the USA, the American Academy of Neurology, founded in 1948, became a focal point for a national and, later, international renaissance in neurological education and research. When I joined the field in 1955, there were approximately 1,700 neurologists in the USA; now there are more than 12,000

and 50,000 worldwide. In the 1950's, few nations had neurologists; now nearly 90 nations do. Moreover, when I attend international meetings, I am struck by the ever-expanding knowledge regarding diseases of the nervous system, which make it increasingly more difficult, if not impossible, for one to encompass the many facets of our chosen field. For example, when I became a neurologist, there was no group specializing in stroke. Now, the body of knowledge in this one aspect of neurology is so great that the recent 25th Conference of the Stroke Council of the American Heart Association had attendance of about 2,500 and that of its parallel organization, the National Stroke Association of Mexico, Canada, and the US, exceeded the numbers of neurologists in the entire USA when I first became one.

However, as a group, we have been derelict in emphasizing this vascular neurology and in attracting young trainees to it. To illustrate my point, there is no specialty designation for stroke within most neurological organizations and even the World Health Organization uses the rubric, "Mental Health and Social Change," to identify nervous system, neurology, stroke, and dementia. This must be corrected by emphasizing this increasing problem of the aging population, particularly vascular dementia and stroke, which are predicted to become the fourth most common disorder of human kind by the year 2025. I believe that it is an obligation of neurologists to address these anticipated manpower needs by providing education to the public and to our co-workers in the health professions. We must be aggressive in distributing our knowledge because we have the special training which is necessary to

have an impact on prevention, treatment, and rehabilitation of diseases of the nervous system. Further to illustrate my point that neurology has extremely broad dimensions, in February 2000, I attended the III International Symposium on Coma and Death held in Havana, Cuba under the leadership of the Cuban Neurological Association and Dr. Calixto Machado. This very important interdisciplinary meeting attracted neurologists, ethicists, religious leaders, and sociologists from 22 nations, including a surprisingly large representation from the United States.

Consideration of neuroethics is a growing necessity for the aging population because the concept of brain death is changing and there is an increasing demand for harvesting organs. That is one of the reasons why the WFN has formed a Neuroethics Committee with Dr. Franz Gerstenbrand as Chair. I was pleased that the conference was not only scientifically excellent but the ambiance was very cordial, despite political differences. This is another example of the fact that neurologists (and health care workers in general) can conduct their scientific deliberations without being drawn into the political arena.



James F. Toole, MD
President WFN

EDITORIAL

We are all looking forward to being in London in 2001 for a number of exciting events, the main attraction being the XVIIth World Congress of Neurology. Historically it will be the first World Congress of the new millennium. A scientific programme befitting this event is planned and will attract a large number of delegates from all parts of the globe. The local organizers of the Congress will have to work hard to set the standard of a high-class Congress which will be a trendsetter for the congresses to follow in the new millennium.

National delegates will also have the opportunity during this congress to elect from amongst a galaxy of nominees the leaders to form a formidable team to look after the affairs of the World Federation of Neurology, the first elected team in the new millennium. The WFN President James F. Toole is rightly perturbed about the current status of neurology as listed under Mental Health and Social Change by the WHO. The WFN Manage-

ment Committee and all neurologists must work hard for recognition of Diseases of the Nervous System as a distinct specialty.

This issue also carries the Annual Reports of the officials of the WFN for the year 1999. These provide a window on the running of WFN and, indeed, could be considered a tribute to the last millennium, which of course ended on a marvellous note. The Annual Report of the President was published in the March 2000 issue of WN.

Prof. K. Ganapathy, a neurosurgeon working in a country where mythology is considered scientific, predicts revolutionized changes in neurosciences by 2025. You may consider it as prophecy, fantasy or fiction; however, many neurologists worldwide will be in a position to watch and see for themselves the truth or otherwise of these predictions for 2025.

We had initiated a discussion on Epilepsy in these columns starting with the article on 'Epidemiology of Epilepsy' in the March 2000 issue by Prof. Allen Hauser. Dr. Donna Bergen, a seasoned neurologist, has given

her opinion on planning for the prevention and care of epilepsy. The discourse is interesting to read and worth considering for those engaged in planning for care of epilepsy, especially in the developing countries. There are millions of epileptics in the world who suffer silently because very little attention is paid to most aspects which Donna Bergen has highlighted. I thank her for this interesting manuscript.

I request readers to send their suggestions and critical reviews of the deliberations published in *World Neurology*. We can only learn from our mistakes and I shall accept their suggestions with humility.



Jagjit S. Chopra, MD
Editor-in-Chief, *World Neurology*

cont. from page 1:

logical and pathogenetic mechanisms leading onto a discussion of exciting advances in treatment and a look forward to the advances in prospect. Specific topics will include: 1) Genetic epidemiology of MS; 2) The pathology of MS; 3) Immune mechanisms on MS; 4) The pathophysiology of demyelination and remyelination; 5) Leucodystrophies and other white matter disorders; 6) Imaging the CNS in MS; 7) The provision of services for MS; 8)

Symptomatic treatments and rehabilitation; 9) Disease modifying treatments: effects and indications; 10) Disease modifying treatments: future prospects.

NEUROMUSCULAR DISEASE (Friday)

Frank Mastaglia from Australia will chair the main theme on Neuromuscular Disease, which will include discussion of the pathogenesis and management of Peripheral Neuropathy in the morning and

Muscle Disease in the afternoon. Specific presentations will include: 1) Environmental factors; 2) Genetic factors; 3) Immune mechanisms; 4) Mechanisms and treatment of neuropathy; 5) Paediatric peripheral neuropathy; 6) Painful neuropathy; 7) Treatment of inflammatory neuropathy; 8) Muscle disease; 9) Muscular dystrophy; 10) Mitochondrial myopathy; 11) Treatment of inflammatory myopathy; 12) Prospects for gene therapy of muscular dystrophy.

WFN ANNUAL REPORTS: A GLANCE AT ACTIVITIES IN 1999

Report of the First Vice President and Chairman of the Constitution and Bye-Laws Committee

Thanks to the efforts of the Committee, we were able to update the Constitution and Bye-Laws of the current, unincorporated WFN and distribute them to Delegates. This laid the groundwork for developing governing instruments for WFN Inc., a new incorporated Federation registered in the UK. The Management Committee concluded that we should revise the Memorandum and Articles of Association of WFN Inc. themselves to tailor them to the specific character of the WFN.

Our legal advisors prepared a preliminary draft and a number of recommendations also stemmed from the long-range Strategic Planning Meeting held last June. In addition, our solicitor considered all the overriding requirements of the UK Companies Act and Charities Act. The plan was presented to the Council of Delegates, which re-affirmed the proposed incorporation.

Until transition to a fully incorporated body is finalized in 2001, there is no legal requirement to hold meetings of Delegates annually. Nevertheless, it was thought desirable to introduce more frequent meetings than in the past, starting with a meeting during 2000. We asked our legal advisors to draft a document for initial consideration by the Management Committee in November. After some modification it was circulated among the Constitution and Bye-Laws Committee. We intended to distribute it to Delegates in early February 2000. Each national society will discuss the matter in preparation for the Council meeting in May. The current unincorporated WFN will then be dissolved and its membership and assets transferred to the WFN Inc.

The Memorandum and Articles contain few specific details on day to day operations, to allow flexibility. Once the document is approved, we will develop a series of rules based on the current Constitution. It is a clear requirement of company law in the UK that the 'Trustees' carry the responsibility for running the organization properly. The 'Members' exercise democratic control over their activities and hold them to account for their actions or omissions. They do this primarily at the Annual General Meeting (AGM) which Trustees attend but at which they cannot vote. This is a marked departure from previous practice, where Officers have, by right, voted alongside Delegates as members of Council. Nevertheless, it is an innovation the Management Committee understands and fully accepts.

I was involved in a number of other activities, including Management Committee meetings in Toronto and London, as well as the Strategic Planning Meeting and Council of Delegates. I participated in the Central American Congress of Neurology in Honduras under the direction of Dr. Medina and his colleagues, who made a surprisingly quick comeback after the disaster caused by Hurricane Mitch. I also represented the WFN at the 10th Pan American Congress of Neurology in Cartagena, organized by Dr. Pradilla and his associates despite the hardship created by the devastating earthquake and exaggerated concerns about safety. I attended the 54th Chile Congress of Neurology, Psychiatry and Neurosurgery in Valdivia. Ted Munsat and I substituted for the President at the Egyptian International Neurology Conference in Cairo in December.

In summary, this has been another busy and interesting year. I believe we are making steady progress in restructuring our organization, the better to serve the cause

of Neurology in the next Millennium.



Jun Kimura, MD
First Vice President
Chair, Constitution and Bye-Laws Committee

Report from the Secretary-Treasurer General

1999 has been a most important and exciting year for the World Federation of Neurology and I have been fortunate to have begun my term of office this year. With the establishment of Chandos Street as the core of WFN activity it has been possible to move forward on several fronts. We now have comprehensive prospective budgetary control: we have an office to co-ordinate and assist in the publication of *World Neurology*: the office is the distribution centre for educational material for the Education Committee: and the Chandos Street office enables us to keep in touch and help with congress organisation both of World Congresses and Regional Congresses worldwide. It is now difficult to understand how the WFN managed without an office and secretariat. Keith Newton and Susan Bilger, our Administrator and Secretary, have worked efficiently and conscientiously providing invaluable support for the Management Committee, Constitution and Bye-Laws Committee, Executive Committee for

WCN 2001, Education Committee and for the re-launch of *World Neurology*.

In June 1999 two major events for the WFN were (a) the three-day Planning Meeting and (b) the meeting of the "Council of Delegates". The Planning Meeting was organised in such a way that the 47 attendees were able to debate and finally agree recommendations on a range of important issues:

- i. A Mission Statement defining the purpose and aims of the WFN
- ii. Revision of the Constitution of the WFN to establish our corporate status under UK Charity Law. This protects the financial and tax status of the WFN but of course carries important responsibilities for the Officers and Trustees of the WFN.
- iii. Goals were defined for the Research Standing Committee, Education and Public Relations
- iv. Recommendations were drawn up for Regional and Sub-regional meetings and World Congresses

But the importance of this meeting was to create a sense of purpose with identified aims for the WFN. And this sense of purpose carried through into the Council of Delegates meeting on Sunday, 20th June 1999. It was gratifying to note the enthusiasm and support given to the WFN by the National Delegates and the Chairmen of the various committees represented.

During 1999 income received totalled £286,000. Over a third came from Pfizer to fund the Neuro-urology Education programme negotiated by Dr. Munsat as Chair of the Continuing Education Committee. Annual dues from member societies and Corporate Members contributed £76,500 (27%); investments produced £58,000 (20%); and income from publishing royalties came to £36,500 (13%).

On the expenditure side, we were able to award Travelling Fellowships, to young neurologists from developing nations, of a little over £10,000 funded by a generous donation from Glaxo Wellcome the previous year. A sum of £15,000.00 was invested to establish a WFN Foundation in the United States, which will be the vehicle for fund-raising there. Total running costs for the London Headquarters Office, inclusive of rent, rates, utilities, staff salaries and a contribution to re-decoration, came to £89,000. The 1998 cost was £73,000 for 10 months, the Office having opened at the beginning of March that year. It is encouraging to note that for the same 10-month period in 1999, expenditure was once again £73,000.

Management Committee expenses were also contained at just under £14,000, thanks largely to the employment of international telephone conference calls to conduct regular business in place of face-to-face meetings with all their associated travel and accommodation expenses.

Professional fees of some £20,000 reflected not only the one-off, intensive legal work required for finalizing the transition to company status but also insurance and auditing costs and the beneficial employment of a professional facilitator at the Strategic Planning Meeting.

Although our financial situation is very tight, with careful budgeting and use of our limited resources the WFN can look towards the future with confidence.



Richard Godwin-Austen, MD, FRCP
Secretary-Treasurer General

Report of the Chairman of the Continuing Education Committee

The last year of the millennium was a busy and hopefully productive one for the WFN Education Committee, whose current members are listed below. We have established effective e-mail communication between all members of the Committee and this has speeded the decision-making process significantly. We have been encouraged by the results of the Sopwell House long-range planning meeting which has placed education of developing countries as a high priority and we have directed our efforts with this goal in mind.

Because of the rapidly escalating amount of work, the Education Committee has formed several sub-committees with specific goals as follows:

1. Neurology Training Programmes in Developing Countries (Chair, Alberto Portera-Sanchez, Spain)
This sub-committee is charged with helping to develop new training pro-

grammes in Neurology when requested by a developing country. The first such programme has been established in Honduras under the direction of Professor Marco Medina. Despite the tremendous disruption caused by Hurricane Mitch, five outstanding candidates from Central America began their training in January 1999: Drs. Reyna Duron, Heicke Hesse, Humberto Su, Lazaro Molina and Hermann Calderon. A first year review of the programme will be conducted in March 2000. As this programme grows, it will undoubtedly lead to improved neurologic care for patients not only in Honduras but all of Central America where the need is so great.

2. WFN Seminars in Neurology (Chair, Clare Fowler, UK)

This series of educational courses is designed to provide CME experience for neurologists who practice in countries with limited resources. It emphasises low-technology diagnosis and care but diagnosis and care which is nonetheless of the highest and most current calibre. The first course entitled "Neurology of the Bowel, Bladder and Sexual Function" has been written by a distinguished international faculty chaired by Professor Clare Fowler of London and will be distributed to WFN member societies without charge sometime this summer. Other courses are being planned.

3. Zambia Project (Chair, Gretchen L. Birbeck, USA)

The WFN has recently provided start-up funding for a unique project headed by Gretchen L. Birbeck, a University of California at Los Angeles neurologist. Dr. Birbeck has had a personal interest in the delivery of neurologic services to under-served African patients, especially those in Zambia where there are no qualified neurologists. She has begun preparing a manual of neurologic care for Clinical Officers, paramedics who currently deliver most of the neurologic care in this country. This effort, which will take place in several stages, includes a detailed evaluation component. Dr. Birbeck's work has already attracted others with similar interests and there is a distinct possibility that the program will eventually expand to cover an increasingly larger part of this under-served region.

4. The Neurology International Partnership Programme (NIPP) (Chair, Donald Silberberg, USA)

This innovative programme has cre-

ated links between academic centres which have a need for educational material and information, and those centres that are able to provide these resources. Two hundred and twenty-five academic units in Australia, Canada, Europe, Israel, Japan, New Zealand and the USA are now linked with 227 departments and divisions in Africa, Asia, Central and Eastern Europe, the Caribbean, Mexico, Central and South America. Each Sponsoring Department is responsible for the cost of any books or journals acquired for their Partner and for the cost of shipping when necessary.

5. Neurology On-Line

Recently, the American Academy of Neurology has generously offered to make its journal, *Neurology*, available to academic institutions and medical libraries in developing countries without charge. This provides an unprecedented opportunity for neurologic societies with limited resources to gain access to neurology's premier publication.

6. The WFN CONTINUUM Study Group Programme (Chair, T. L. Munsat, USA)

The American Academy of Neurology has generously donated almost 2,000 of its previously published CME courses entitled CONTINUUM to the WFN. CONTINUUM is an innovative, self-study, interactive CME programme that has been tested extensively and shown to be effective in improving patient care. These courses will be distributed to WFN member neurologic societies which have demonstrated need on a first come, first served basis. Other than mailing, there are no costs to the participating neurologic societies. In addition to receiving the courses, participants will take part in discussion/study groups based on the course material. Since these courses were prepared primarily for American neurologists, some of the discussion time will be spent addressing how the scientific principles, which are not region-specific, can be applied to their own unique practices and own regional health care systems. This WFN programme has been successfully pilot tested in Sao Paulo, Brazil (Co-ordinator: Prof. Alain Gabbai). Courses are currently being prepared to be sent to neurologic societies which have indicated their interest in participating, including Russia, India, Tunisia, South Africa, Hungary, Egypt, Estonia, Czech Republic and Jordan.

7. CME Credits (Chair, Marco Medina, Honduras)

This sub-committee has been charged with making recommendations to the Management Committee and Council of Delegates regarding the advisability of establishing a programme by which CME credits and ultimately a certificate of accomplishment could be awarded. A report from this sub-committee is expected shortly.

8. Meetings Endorsements and Co-sponsorship (Chair, James Temlett, South Africa)

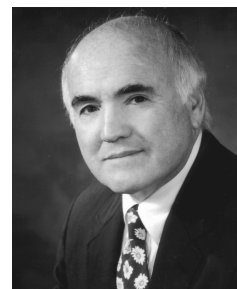
During the past year the Education Committee has endorsed the following meetings: 5th Congress of the European Society of Clinical Pharmacology; 10th Asian and Oceanian Congress of Neurology; 10th Pan-American Congress of Neurology; 3rd International Symposium on Coma and Death; 3rd International Congress of Tropical Neurology; and the 4th World Stroke Congress. However, currently the WFN has no specific rules or regulations regarding approval of meetings which are held by member organisations, Research Groups or other organisations. Professor Temlett is chairing a committee to address this deficiency and a report is expected shortly.

During this first year of the new millennium, it is anticipated that few additional programmes will be started. Rather the Committee will focus on strengthening and expanding existing programmes, several of which are just beginning and will require close supervision.

Members, Continuing Education Committee:

Dr S M Al Deeb (Saudi Arabia); Prof A A Kurdi (Jordan); Dr V Askanas (USA); Dr A Benomar (Morocco); Prof V Berginer (Israel); Prof P L A Bill (South Africa); Dr A Culebras (USA); Dr S Davis (Australia); Prof G Donnan (Australia); Prof E I Gusev (Russia); Prof A Guekht (Russia); Prof Ndiaye (Senegal); Dr L Jimenez (Puerto Rico); Dr Jin Soo Kim (South Korea); Dr A Koeppen (USA); Prof A Korczyn (Israel); Prof O Madkour (Egypt); Dr N Miladi (Tunisia); Dr P Monroe (UK); Dr T J Murray (Canada); Prof J Olesen (Denmark); Prof Dr C Ozdemir (Turkey); Dr A Portera-Sanchez (Spain); Dr G Pradilla (Colombia); Dr G C Roman (USA); Dr A M San Luis (Philippines); Prof D H Silberberg (USA); Prof J A

Temlett (South Africa); Dr N H Wadia (India)



Theodore L. Munsat, M.D.
Chair, WFN Continuing Education Committee

Report of the Chairman of the Research Committee

This report has been approved by the Committee membership. The last year of the millennium has been a meaningful and busy one. The Research Committee currently consists of 29 active Research Groups (RG) as listed below and on our website (www.wfnneurology.org)

Three RGs have been discontinued, one having achieved its mission (Neuroimmunology & Neurovirology) and two because of inactivity (Cerebrovascular Disease and Neuro-oncology). Two new Research Groups have been added: Occupational and Environmental Neurotoxicology (R. Feldman, USA) and Clinical Neuropharmacology (A. Korczyn, Israel).

One of the major changes affecting the RG structure and activity has been the transformation of the WFN into an official Charity organization incorporated in the United Kingdom. This will be of great benefit to the way RGs function but at the same time imposes significant new reporting obligations to assure continuing membership in the WFN. Each RG is now required by Charity law to make a full annual report of its professional activities including detailed financial documentation in order to remain within the WFN. This has not been the practice in the past but is now a requirement for WFN affiliation.

The productive long-range planning retreat at Sopwell House held last June, had important ramifications regarding the future of the Research Committee. When the WFN was originally organized there was a divergence of views as to whether its primary function should be research related or involve other international neuro-

logic activities such as education. Because of this divergence of opinion, which apparently at times was quite substantial, the Research Committee and its Research Groups was given significant administrative autonomy with its own statutes, its own mechanism of electing its leadership and a permanent place on the Management Committee. With the passage of time it has become clear that this administrative autonomy is neither in the best interests of the Research Committee nor the WFN itself, and the recommendation was made at Sopwell House that the Research Committee should be a standing committee like any other WFN committee. This view has received general acceptance by the WFN leadership and will be submitted to the Council of Delegates as part of the new constitution currently being framed.

The WFN continues to be an important, and at times an essential, organization for the successful activities of many RGs. Detailed reports of some of the more active Groups will appear periodically in *World Neurology*. In the case of some disciplines, it is the only venue for an international organization and international information exchange. In some disciplines, particularly those which are large and deal with the more common neurologic illnesses, the membership is better served by its own separate organization. Epilepsy is an example of this situation. It is clear that the Research Groups do not do research per se. Rather they serve as forums for meetings and exchange of research related information. In fact, at Sopwell House and after, there has been considerable discussion about a change in name which would more accurately reflect the true activities of the Groups. However, no name change consensus has been reached.

In the coming year I would predict that many of the Research Groups will more specifically define their goals and increase their activity. The increasing availability of internet communication is a major asset to the work of the Groups and will undoubtedly result in new initiatives. I would expect that, as neurology continues to sub-specialize, there will be a need for Groups which are interested in the international aspects of their discipline and that the WFN will continue to be an effective and appropriate home.

Theodore L. Munsat, MD
Chair, WFN Research Committee

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Journal of the Neurological Sciences

Report from the Editor-in-Chief

The Editorial Board remained unchanged except for one minor change. Arnulf H. Koepfen will remain the Book Review Editor, and the Editor-in-Chief will handle all other reviews. No format changes were made to the journal. Eighteen issues featuring 263 articles, one supplement on the Eighth International Symposium on Amyotrophic Lateral Sclerosis/Motor Neuron Disease held in Scotland, and one special issue on the Proceedings of the 9th International Symposium on Amyotrophic Lateral Sclerosis/Motor Neuron Disease held in Germany were published. The review cycle has been shortened, resulting in an accelerated acceptance/rejection rate. Of the 444 new submissions and the 193 carry overs from 1998, 244 manuscripts were accepted in 1999 compared to 177 last

year; 210 manuscripts were rejected in 1999 compared to 180 in 1998. The distribution of manuscripts accepted by country, however, parallels that of 1998. The top five ranked countries were Japan (33%), USA (21%), Italy (9%), Germany (6%), and UK (5%). These five countries alone accounted for 183 or 75% of all manuscripts accepted in 1999. The USA almost doubled its rate of accepted manuscripts over 1998. Geographically, rankings for accepted manuscripts were as follows: Japan had 82; Western Europe had 77; USA and Canada had 54; Asia (non-Japan) had 10; the Middle East had 6; Scandinavia had 6; South/Central America had 5; Australia had 2; and Africa and Eastern Europe had 1 each. Clinical research still dominates every issue. Editorial and review articles are being developed. Ad hoc reviewers were acknowledged in June, volume 165.2 and again in September, volume 168.1.



Robert P. Lisak, MD
Editor-in-Chief, JNS

World Neurology

Report of the Editor-in-Chief

World Neurology, the official Newsletter of the World Federation of Neurology, is published and mailed quarterly to over 22,000 neurologists the world over in 84 countries. It was published regularly till the last issue of 1998, in December, by Cambridge Medical Publications based in the UK under the Editorship of Dr. Frank Clifford Rose who was also the Secretary-Treasurer General of WFN until Dec. 31, 1998. The first three 1999 issues of *World Neurology* were suspended pending discussion of its production in future in view of the costs involved.

Dr. Robert Daroff, Chairman of the WFN Publications Committee, did a splendid job by negotiating a contract on behalf of WFN with Elsevier through Dr. Tatjana Fischer-Driessen for future publication of *World Neurology* by Elsevier from January 2000 and the latter soliciting global adver-

tisements to defray the costs of publication. Webmaster B. Todd Troost, in co-ordination with Elsevier, has produced a website for *World Neurology*.

There was a change in the management of *World Neurology* as well. The Publications Committee at its June 1999 meeting selected Dr. Jagjit S. Chopra as the next Editor-in-Chief of *World Neurology* and in order to get more regional input, the Editorial Advisory Board included the Regional Vice Presidents in addition to the officials of WFN. The first issue of *World Neurology* under the new management was Volume 14, Number 1, October 1999 issue which was mailed to the readers before the turn of the Century. The Newsletter has been reformed and the settings of October 1999 issue were made by Elsevier gratis and it was published and mailed at Chandigarh in India thereby utilising the stranded share of WFN funds held in the XIVth World Congress of Neurology (India) Trust. The October 1999 issue carried the recommendations of WFN Strategic Planning for the New Millennium in addition to the WFN Annual Report for 1998 and other WFN news.

Dr. Jagjit S. Chopra
Editor-in-Chief, *World Neurology*

WFN Neurosonology Research Group: a Report 9/97 – 12/99

The membership has grown to 285 from 36 countries (versus 237 in 1997). The NSRG co-sponsored the Meeting of the Austrian Society of Neuroimaging, Salzburg, November 1997 and the 3rd Meeting of the European Society of Neurosonology and Cerebral Hemodynamics, Glasgow, 25–27 May, 1998. The consensus paper "Brain Death" was distributed to all members. The NSRG is affiliated with the Journal of Neuroimaging and since spring of 1997 has had a presence on the Internet, at <http://www.sime.com/nsrg/>. The e-mail address is: nsrg@sime.com. Regular Newsletters are issued. The Research Group participated in the WFN Strategic Planning Conference, June 99, London and held its 8th meeting in Taipei, Taiwan, November 2nd – 6th, 1999. The 311 participants from 29 countries presented more than 150 invited lectures, oral presentations and posters, covering all aspects of adult and pediatric Neurosonology.

FINANCIAL STATEMENT FOR 1999

Starting balance
(January 1st, 1999): ATS 44,093.00
(€3,204.00)

Closing balance
(December 31st 1999): ATS 46,360.10
(€3,369.00)

Dr. Kurt Niederkorn
Secretary, NSRG

Report of the International Symposium on Neurosonology and Stroke (INS'99)

The Symposium was organized by the Prasop Ratanakorn Foundation, the Neurological Society of Thailand on 8–9 November 1999 at the Prasat Neurological Institute, Bangkok. General Prem Tinsulanonda, President of the Privy Council, Statesman and Former Prime Minister of Thailand opened the Symposium. Remarks were also given by Professor James F. Toole, President of the WFN, Professor Athasit Vejjajiva, Regional Vice-President and Professor Prasop Ratanakorn. Scientific sessions included the lecture on Homocysteine and Stroke by Professor James F. Toole, lectures on neurosonology by Professor Charles H. Tegeler, President of the American Society of Neuroimaging and Dr. Disya Ratanakorn, Assistant Professor, Faculty of Medicine, Ramathibodi Hospital. There were 200 participants including neurologists, neurosurgeons, vascular surgeons, radiologists and general practitioners.



Prof. Athasit Vejjajiva
Bangkok, Thailand

NEUROSCIENCES IN 2025 – A PEEP INTO THE FUTURE

How will our world be in 2025? For a starter, the number of centenarians would be twenty times more. 15 to 20% of the population of several countries will be octogenarians. Today human sperms and ova can be purchased through the Internet. At least 120,000 babies in the US alone have so far been produced, not on a bed but in a petri dish. We have entered the era of designer babies. The single largest contribution to unravelling the mysteries of the human nervous system will no doubt be the Human Genome Project. Of the 130,000 genes at least 30% direct the growth and development of the nervous system. The neuro-oncologist of the future will not be a knife-toting, aggressive skull base surgeon, but a PhD in molecular neuro-oncology.

Discovery of the adult human neural stem cell will revolutionise treatment options. Stem cells can be injected stereotactically into diseased areas, as a cellular replacement therapy. Manipulation of stem cells will be the ultimate body repair kit. Organ transplantation may become redundant. Growing a new brain is certainly even beyond the realms of science fiction. Growing specific groups of cells in the brain is not. The interventional neurologist will be injecting highly specific capillary growth factors into the thrombosed cerebral blood vessel to ensure angiogenesis and revascularisation to reverse the deleterious effects of stroke. The neurosurgeon of 2025 may be the primary consultant in the management of insulin-dependent diabetes. This will involve transplantation of islets of Langerhans into a CSF reservoir. Can we replace our body? Most parts – yes. Nerves, blood vessels, bone and cartilage, heart, liver, kidneys can be regenerated from stem cells. Prosthetic limbs will be directly wired to motor parts of the brain. Genetically engineered tissue, grown in the lab, will be freely available.

It is now believed that neurotransmitters can leak out of the synapse and head off on their travels to just about anywhere. Neurotransmitter receptors have been found far away from synapses. Is the brain a wired super computer or a super pharmacy? Perhaps both! Complex craniotomies on the exteriorised primate foetus have been successfully performed. Better and faster healing, besides quicker reorganisation in foetal brain cells, makes foetal neurosurgery an attractive proposition. Antenatal genetic diagnosis will be commonplace. Foetal muscle biopsy will con-

firm myopathies leading to gene correction. The Methuselah gene in the fruit fly increases its life span by 35%. Will we identify this in the human?

Telemedicine will electronically transport the specialist to the patient irrespective of where he is. Tomorrow's cybersurgeon will carry out advanced simulation routinely before executing any procedure. Electrical changes at the neuronal level will be recorded telemetrically. Eventually their physiological and even cognitive significance will be understood. The terrorist of the next decade will no longer have to be in prison. He will be on parole with an electronic chip implanted in the amygdala. This chip will continuously monitor the electrical activity. When even a thought of an antisocial nature occurs, the change in electrical activity will be detected and further propagation of the impulse to the effector organ will be prevented. Advanced intraoperative functional imaging will enable the surgeon to resect lesions from the most eloquent areas of the brain. Awake craniotomies, with the neurologist in the theatre evaluating the clinical effects of stimulation, will be commonplace. Tomorrow's neurosurgeon will be able to visualise the tumour through the intact skin, skull, dura and even through the cerebral cortex. He will be wearing special goggles through which the MRI image of the lesion will be superimposed three-dimensionally as he looks through the skin over the skull. This will result in choosing the smallest opening. Frameless stereotaxy will eventually replace frame-based stereotaxy. Craniotomies of the twentieth century will gradually fade into oblivion.

The computer in 2025 will have biological signal sensors with in-built thought recognition software. A computer chip can never reach the compactness of a neuron. Nerve cells grown in culture / protein based computers will replace the silicon chip. The body's bioelectricity will be used. Minute discharges from muscles, nerves, brain will be amplified 10,000 times and sent telemetrically from an electronic cap worn on the head. The electronic mouse will have sensors which monitor pulse rate, temperature, sweating, muscle tension and skin resistance. Voice imprint and visual images of the user will be analysed in real time, to reveal the emotional state. A humanised digital voice in the computer will respond appropriately. Tactile sensation of an image on the screen can be felt just by pointing and clicking.

The pharmacy of 2025 will tailor-make a drug to suit your genetic profile, which is readily available on your smart card. This card will also contain your entire medical history. The ultrasound taken when you were in utero, your last coronary angiogram and the histology of your grandmother's breast cancer can be viewed instantaneously from this card with a voice command.

Ladies and gentlemen, where is all this going to end? Will expert systems result in the death of clinical neurology? Many wild animals may be extinct in 2025. What about the neurosurgeon of today? Well, he will certainly be an endangered species! Many of us are afraid of the future and cling desperately to the present not realising that we are already the past. Arthur C. Clarke once said, "Advanced technology will eventually be indistinguishable from magic". To face this magic, what we require in the coming decade is a mature head on young shoulders – not to get carried away by gadgets. We should never forget that we have the unique privilege of trouble-shooting and repairing the greatest supercomputer of all time, the human brain. Science without compassion is blind; compassion without science is lame. In our anxiety to enter the third millennium let us never forget that we are healers first and technologists later.



Extracts from the lecture delivered by Prof. K. Ganapathy, Secretary General, Asian Australasian Society of Neurological Surgery and Secretary, Neurological Society of India at the 10th Asian and Oceanian Congress of Neurology held in Manila, January 22–26, 2000.

PLANNING FOR PREVENTION AND CARE OF EPILEPSY

Epilepsy is one of the commonest chronic neurological diseases in all parts of the world, with profound effects on employability, social acceptance, self-esteem, and other aspects of quality of life. Designing effective diagnosis and treatment strategies involves issues of pharmacological choices and availability, and the effective distribution and use of costly technology.

The prevalence of epilepsy varies, depending upon population characteristics such as genetics, age distribution, socioeconomic status, and endemic infections, making epidemiological surveys essential for planning purposes. Understanding the local causes of epilepsy is essential because some causes of epilepsy are preventable. For example, the relative risks posed by head trauma, neurocysticercosis, tuberculosis, meningitis, AIDS, malaria, and childhood lead poisoning vary widely from place to place; all are preventable causes of epilepsy. The severity of epilepsy varies from a self-limited disorder easily controlled by medication to a disabling condition intractable to medical treatment. This clinical spectrum most logically lends itself to a stratified medical system. The resources available to each level of care, however, will depend upon the economic strength and health care choices of each country. The diagnosis and treatment of epilepsy generally falls to the primary health care provider, whether it be a medical assistant covering basic needs in a remote rural area of a developing country, or the primary care physician in an industrialized one. Case-detection may not be straightforward, because epilepsy may be hidden by the patient or family where it is still considered a shameful or stigmatized condition.

At least 30% of those with epilepsy, however, continue to have seizures or do not tolerate the first anti-epileptic drug (AED) tried, and many of them have no better response to the next one. A secondary level of care is appropriate for such patients. In developed countries this is usually a neurologist; in developing countries it may be a physician in a district hospital or clinic. Such a consultation allows the diagnosis to be confirmed, refined, or rejected, and should include a broader expertise in the use of AEDs, diagnostic resources, and support services. It can be argued that where resources allow, most patients with a new diagnosis of epilepsy should have an initial consultation at this level, where an exact diagnosis of the type of epilepsy can be made, the cause found if possible, genetic and psycho-social counseling

given, and initial and secondary treatment plans sent back to the primary health care provider. Help for patients who fail to obtain a satisfactory outcome at this level may benefit from the expertise of a tertiary care center or center of excellence. Again, local conditions will define the services available, which ideally should include a team of one or more epileptologists, specialist nurses, neuropsychologists, and neurosurgeons. Clinical pharmacologists, health educators, and social workers may also be part of such centers. At this level, some patients will be found not to have epilepsy, others will be improved by a more sophisticated use of standard or research AEDs, and some will have curative surgery.

One of the most important activities of the specialists at secondary and tertiary care centers should be the continuing medical education of practitioners down the line. Helping a single patient referred to a tertiary care center is valuable, but educating the referring care-giver benefits many other patients. And a better educated physician is more likely to make cost-effective use of diagnostic tests and therapies. Patient education is crucial, to enlist cooperation in what is often years of drug-taking. Epilepsy is a good example of how lay advocacy groups may be a crucial part of health care planning, producing effective pamphlets, posters, and other educational materials often written by patients themselves, at low cost. Specialists in tertiary care are especially well placed to form or advise these groups.

Technology

The most rational distribution of technological aids may depend not only on these relative levels of service, but with the goals and the economic limits of the health care system. For example, although the electroencephalograph (EEG) has long been a part of the care of seizure disorders, it is relatively insensitive as a diagnostic test for many epilepsies, and when interpreted by the inexpert may also produce a disconcerting number of false positive results, particularly in children. Although often used to refine an established diagnosis of epilepsy or to characterize its severity, the cost-effectiveness of the routine EEG in patients with readily controlled, cryptogenic epilepsy has not been established. On the other hand, in secondary or tertiary care centers confronted by diagnostic dilemmas or evaluating patients for surgery, the vital role of the standard and ambulatory EEG is unques-

tionable. The production and reading of an EEG requires specialized training, paper (for older equipment) is expensive, and technical maintenance may be a problem in developing countries. The application of telemedicine to EEG solves only some of these problems. The traditional use (and overuse) of the EEG in affluent medical settings may make it difficult to avoid the reflex establishment of EEG labs in places where scarce resources might be more effectively devoted to brain imagers (CT, MRI) with a high sensitivity not to the diagnosis of epilepsy, but to the treatable structural brain pathology which may cause it (e.g., neoplasms, abscesses, parasites).

Where available and affordable, CT and MRI scanning is routinely ordered by primary care practitioners for adults with new-onset epilepsy. Where resources are scarce, brain imaging at secondary care facilities, and MRI scanning at tertiary care centers, are essential guides to the care of patients with focal neurological signs or treatment-refractory epilepsy.

Pharmacologic treatment of epilepsy

Like other chronic illnesses, epilepsy is best treated by the same provider with a long-term, consistent management plan. Medical records should be consistently available for each encounter. Almost all AEDs are produced in industrialized countries. The price of AEDs ranges from less than \$5 per month for phenobarbital, to several hundreds of dollars for some of the newer drugs. Prices for the same drug may vary significantly from country to country. Because effective therapy can be given in most cases with a few older, less expensive drugs with well-known side effect profiles, simple treatment paradigms have been shown to be effective and safe when supervised by trained health care workers in the setting of a neighborhood clinic. Depending upon health care resources, the more expensive, newer AEDs may be available or used only at the secondary or tertiary level of care and expertise. Local circumstances may pose formidable obstacles to appropriate AED treatment. Maintaining a constant supply of individual AEDs can be physically or economically difficult, for example. Competition from traditional healers and alternative medical treatments may be an issue, and may be one factor in why many people in some countries do not receive conventional treatment. Devising ways to relate comfortably with such practices

may be a challenge to allopathic medical workers.

Careful planning for the care of people with epilepsy is a health care strategy which can be applied to other common neurological conditions as a way to rationalize delivery of neurological services.

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1999 WFN JUNIOR TRAVELLING FELLOWSHIPS – REPORTS

I send my thanks to the WFN for the award that enabled me to attend the 9th World Congress on Pain held in Vienna, August 22–29, 1999. I have attended many lectures, workshops and posters in such a prestigious event. The plenary sessions were on subjects of great interest such as lectures about new advances in neurophysiology and functions of the primary nociceptors, advances in neuropharmacology on pain, the pain syndromes, the ethical background of treatment and the pain patient. The workshops were designed to be as a dialogue or in the form of 'Meet the Expert'. Many of the workshops were useful and of value such as that of back pain and visceral hyperalgesia. The posters were numerous and of no less interest than the lectures. The Vienna International Centre, where the congress was held, is near the Danube and of modern architectural style. The exhibition was also of interest. Thanks again to the WFN awards and I'm looking forward to attending the World Congress of Neurology that will be held in London in 2001.

Sherif Hamdy, MD
Egypt

As a recipient of the Glaxo Junior Travelling Fellowship I had a remarkable opportunity to attend the 4th Congress of the EFNS, which was held in Lisbon, Portugal, September 7-11, 1999. The scientific program of the Congress was very interesting and covered a broad spectrum of topics on both clinical and basic aspects of neurology. I would like to note high-quality scientific sessions and innovative exhibitions. It is difficult to single out any specific session or presentation. Perhaps unintentionally biased I would like to mention memorable presentations by Dr. W.-D. Heiss, Dr. W. Hacke and Dr. M. Hennerici on stroke mechanisms, diagnostics and management, which are in the focus of my scientific interests. In general it was a re-

warding and unforgettable scientific and social experience.

Nina L. Tsakadze, MD, PhD
Georgia

I would like to express my gratitude to the Junior Travelling Fellowship that enabled me to attend the EFNS Congress, which was held in Lisbon in September this year. People were very friendly and at any time ready to help. The organisation, like social events and also the congress itself, was on the highest level. Concerning the congress programme, renowned speakers were selected, who gave very good lectures on topics such as headache, Parkinson's disease, epilepsy, neuroradiology, etc. As a neurologist and intensivist, I had also expected some lectures on neurocritical care, and more lectures on extremely detrimental diseases, such as cerebrovascular disease. At the end, I would like to thank WFN for the opportunity to meet colleagues from abroad and to exchange knowledge, and last but not least to have the opportunity to see the beautiful country of Portugal.

Viktor Svirgelj, Assistant Professor
Slovenia

I wish to express my deepest gratitude to the World Federation of Neurology for awarding me a Glaxo Wellcome Junior Travelling Fellowship. It gave me a chance to attend the XI International Congress of EMG and Clinical Neurophysiology in Prague, Czech Republic, September 7-11, 1999. The scientific programme was most interesting and important for me as a young pediatric electromyographer. I was able to participate in some Topical Seminars and Teaching Courses such as 'Pediatric EMG and Conducting Studies' which is my particular sphere of interest. The Congress gave me an excellent possibility to meet many of my famous colleagues from all over the world, and obtain first-hand information and knowledge

in medical science. I presented a poster 'Some Electroneurographic Data in Children of Diabetes Type I' which I dare to say aroused some interest among participants. Here, I would like to emphasize the importance of the above Fellowship for my country, since I was the only participant at the Congress from Georgia.

David Chkhartshvili, MD
Georgia

I would like to thank the World Federation of Neurology for awarding me a Junior Travelling Fellowship to attend the European Charcot Foundation Symposium "Genes and Viruses in Multiple Sclerosis", which was held in Venice in October 28-30, 1999. It was a great pleasure for me to attend this Symposium concerning the most controversial but challenging issues in multiple sclerosis – its aetiopathogenesis which, despite advances in research in this area, remains still poorly understood. The Symposium opened with the 5th European Charcot Foundation Lecture by Professor H. Wekerle entitled "Brain Immunology and Pathogenesis of Multiple Sclerosis", followed by discussions of a wide range of topics: genetic aspects of MS; the HLA system and MS susceptibility; genomic screening in MS; the relation between cytokine gene polymorphisms and disease susceptibility and progression in MS; genetic control of susceptibility to persistent infection; genetic susceptibility and epitope spreading in virus induced demyelination; infections and the course of disease in MS; the role of viruses in inducing relapses; viral and bacterial specificity of oligoclonal bands in MS; and the relation between MS as a disease and viruses that are or may become neurotropic. There were also interesting discussions on the role of Hepatitis B and Influenza vaccination in MS; the difference between infection, vaccination and immunomodulation in MS; retroviral elements associated with immuno- or neurotoxic molecules production; the role of

Human Herpes virus 6 and Epstein-Barr virus in MS; neuroinvasion by human respiratory coronaviruses; and *Chlamydia pneumoniae* infection of the CNS in MS. Finally, the clinical trials of antiviral drugs in MS and in vitro data on the tropism of HHV-6 for neural cell systems and the sensitivity of HHV-6 for antiviral compounds were reviewed. Thank you for enabling me to be in Venice, and with hope for further co-operation.

Lodi Gogovska, MD
Macedonia

The 4th Congress of the EFNS took place in Lisbon, the capital of Portugal, 7–11 September 1999. The most difficult problems facing modern neurology were reflected in the Congress sessions. Dr. F Clifford Rose presented some valuable material on the history of European neurology. Headache and migraine in Russia, which have been little explored, were of particular interest. The teaching course "Headache: Management of Difficult Problems" showed the different aspects of these disorders and presented modern treatments for everyday practice. The lack of objective assessment of the neurological status of patients provoked a number of questions. The satellite symposia were wonderfully organised. They added to participants' knowledge of new medicines. In the workshops and main topics, Parkinson's disease, epilepsy and cerebrovascular diseases were all discussed as well as many other important themes. The excellent organisation of the poster sessions allowed authors to present their reports comprehensively and discuss their ideas for further scientific research with each other and with chairmen. The presentation of the work from the St. Petersburg Neurologists Association and the Neurosurgical Center of the hospital where I am based aroused much interest and many questions. The printed materials received at the congress helped to illustrate the presentation. The 4th Congress will always remain in my memory because of its marvellous organisation and scientific importance.

Marina Koreshkina, MD, PhD
Russia

NEWS

Senior Management Changes at WHO

There have been management changes at the World Health Organization affecting

the representation of neurology at the agency. Dr. Derek Yach who has been Programme Manager for the WHO Tobacco Free Initiative becomes Executive Director of a new 'cluster' combining the previously separate areas of Non Communicable Diseases (NCD) and Social Change and Mental Health (HSC).

An epidemiologist from South Africa, where his interest in tobacco dates back to 1977, Dr Yach has been with WHO since 1995 and has a long list of outstanding publications to his name. He worked for the South African Medical Research Council in 1981 and again from 1985 to 1995, initially as an epidemiologist and then as a community-based researcher.

Dr. Yasuhiro Suzuki
Current Executive Director of the HSC cluster will become Executive Director of the Health Technology and Pharmaceuticals (HTP) cluster.

BOOK REVIEWS

A Short History of Neurology: The British Contribution 1660–1910

Ed: F Clifford Rose
ISBN: 0 7506 4165 7
No. of Pages: 282
Price: £25.00
Publication Date: 1999
Publisher: Butterworth Heinemann

This attractive volume, edited with his usual outstanding efficiency by Frank Clifford Rose, former Secretary-Treasurer General of the WFN, contains 20 essays, each written by an acknowledged international expert and based upon the proceedings of a Mansell Bequest Symposium held at the Medical Society of London in 1998 as a part of the Society's celebrations commemorating the 225th anniversary of its foundation. As the editor points out in his preface, this work does not purport to present a definitive history of British neuroscience but shows nevertheless that the history of neurology, in Britain as elsewhere, is an active and fruitful field of research, showing how a discipline develops and how some discoveries of yesterday, either largely forgotten or sometimes even ignored, can have a very modern flavour. A short review such as this cannot do full justice to this book, which is one to possess, enjoy and savour.

John Walton (Lord Walton of Detchant),
Oxford, UK

The Treatment of Epilepsy

Editors: Simon Shorvon, Fritz Dreifuss, David Fish and David Thomas
ISBN: 632-03782-2
No. of pages: 835
Price: £115
Publication date: 1999
Publishers: Blackwell Science Ltd.

A hard-bound book with contributions from eighty-four authors in a total of 63 chapters. The book is divided into four main sections. Pathophysiology, developmental basis and classification of seizures are discussed in section one which also highlights the economic cost and prognosis of epilepsy. In section two the authors have discussed the medical treatment which in detail explains the mechanism of action of anti-epileptic drugs, the pharmacokinetic principles of drug treatment, the treatment of newly diagnosed patients, chronic active epilepsy, childhood epilepsy, epilepsy in the elderly, status epilepticus, drug interactions and social aspects. The anti-epileptic drugs including the newer drugs are discussed in section three. Surgical treatment, its principles, surgery of mesial temporal epilepsy, same in paediatric epilepsy, hemispherectomy, corpus callosum section and some more surgical aspects are discussed in detail in this section. The historical introduction covering 28 pages is one of the highlights of this book. This is an excellent addition for personal and institutional collections and one of the few books which discusses many aspects of epilepsy.

J.S. Chopra
Editor-in-Chief

Neuroscience at a Glance

Ed: Roger A Barker, Stephen Barasi and M J Neal
ISBN: 0-86542 869 7
No. of Pages: 128
Price: £11.95
Publication Date: 1999
Publisher: Blackwell Science

Neuroscience at a glance, indeed, lives up to its title. The carefully selected chapters are presented in an easily assimilable format. Each chapter begins with a clear, uncomplicated diagram impregnated with the subject matter to follow, which unfolds the message in one to two pages at the most. The bold emphasis on the key words in the text enables the discerning reader to further 'quicken the glance'. The brevity has in no way compromised the clarity. The basic neuro-anatomy and em-

bryology is dealt with concisely in chapters 1–4 and 10–16. The more complex modern concepts of neuro-physiology – on ion channels, resting membrane and action potential, the neuromuscular junction and synapses – are presented in an easily understood manner in chapters 5–7. Parts 2,3,4 of the book deal in an accurate, concise and ‘applied’ manner on the sensory, motor and autonomic, limbic and brainstem systems respectively. Part 5 on neural plasticity and disorders of the nervous system is the icing on the cake. The book is very readable and the avid reader may indeed imbibe a significant quantum over a weekend at a seaside resort in the tropics or even a long haul in a plane or an alert transit stop.

J. B. Peiris
Sri Lanka

The Clinical Practice of Critical Care Neurology

Ed: Eelco F.M. Wijdicks
ISBN: 0-316-94759-8
No. of pages: 419
Price: \$115.00
Publication Date: July 1997
Publisher: Lippincott-Raven

Critical care is a relatively new sub-specialty of neurology so that this monograph, written by the co-director of the Neurology-Neurosurgery Intensive Care Unit of the Mayo Clinic, should be gratefully welcomed. The first part on General Principles of Management is essential reading. The second part on Equipment and Technologies comprises two chapters on Monitoring Devices and Diagnostic Procedures.

Part III deals with Specific Disorders and includes a chapter on Brain Death whilst Part IV covers the Management of Systemic Complications. Altogether this is a model monograph and should be ready to hand for any specialist dealing with critical care neurology.

Therapeutic Potential of Melatonin

Ed: G J M Maestroni, A Conti, R J Reiter
ISBN: 3-8055-6439-2
No. of pages: 174
Price: US\$172.25
Publication Date: 1997
Publisher: Karger

This book is based on a symposium held in Locarno in May 1996 as part of a meeting on Neuro-endocrino-immunology. It reviews the scientific basis of the hormone's action but is short on its use in

clinical practice, probably because much more needs to be done on this aspect. It thus subserves a narrow need but will be important for researchers in this field.

Molecular Neurobiology of Pain

Progress in Pain Research and Management, Volume 9

Ed: David Borsook
ISBN: 0-931092-19-1
No. of pages: 369
Price: US\$76.00
Publication Date: 1997
Publisher: IASP Press

While pain research is a relatively young discipline, it is rapidly growing and there should be few patients, even with chronic pain, who would not benefit from the increasing range of our anti-nociceptive armamentaria. This book covers the active research fields and is a must for anyone who looks after patients with pain problems.

Perspectives of Motor Behavior and its Neural Basis

Ed: M-C Hepp-Reymond
ISBN: 3-8055-6403-1
No. of pages: 138
Price: US \$85.25
Publication Date: 1997
Publisher: Karger

This volume is based on a symposium held in Fribourg, Switzerland, at the end of 1994, and attended by specialists in the field of motor control. Based on a large variety of experimental approaches to motor control, it will appeal to all neurophysiologists interested in this area. The first and final chapters are excellent historical reviews, the latter by Mario Wiesendanger, in whose honour the meeting was held.

Frontiers in Headache Research, Volume 7

Headache Pathogenesis, Monoamines, Neuropeptides, Purines, and Nitric Oxide

Ed: Jes Olesen, Lars Edvinsson
ISBN: 0-7817-1208-4
No. of pages: 316
Price: US \$109.25
Publication Date: 1997
Publisher: Lippincott-Raven

This is Volume 7 in the well-known series Frontiers in Headache Research. It deals

with the messenger molecules involved in headache and so is important for pharmacological research.

Divided into 6 sections, the first deals with General Aspects, the second with Cranial Blood Vessels, the third with Pain Processing, the fourth specifically with Amines and Amino Acids, the fifth with Neuropeptides, and Section VI is on the Involvement of Nitric Oxide.

This is a very useful summary of present knowledge and will be essential reading for those involved in headache research.

Childhood Epilepsies and Brain Development

Editor: A Nehling, J Motte, S L Moshé, P Plouin
ISBN: 0 86196 578 7
No. of pages: 311
Price: £59 / US\$103
Publication Date: 1999
Publisher: John Libbey & Company Ltd

This book is based on a meeting held in April 1997 in France, 5 years after a similar one in Houston in 1992. It focuses on developmental abnormalities of the brain in relationship to childhood epilepsy. Divided into seven parts, the first deals with brain development, the second with neuronal migration disorders, and the third with such age-specific syndromes as Lennox-Gastaut, infantile spasms, and the Landau-Kleffner syndrome. Part IV is on experimental models, part V on the consequences of seizures and Part VI on the consequences of treatment.

The final Part VII is a useful summary indicating future research.

Emergency Neurology

(Principles and Practice)

Editors: Sid M. Shah and Kevin M. Kelly
ISBN: 521-49688-8
No. of Pages: 614
Price: £95.00
Publication Date: 1999
Publisher: Cambridge University Press

The editors themselves have long experience in emergency medicine and have brought out explicitly the neurological problems as presented in the emergency department of any hospital. It is a multi-author book divided into seven parts containing 43 chapters. Neurological examination relevant to emergency room is discussed in chapter 1 and chapter 2 deals

cont. on p. 16

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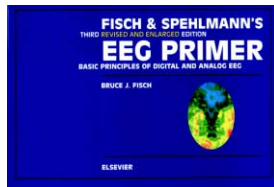
Unlike other EEG textbooks, the second half of the book is uniquely organized according to EEG findings rather than individual disorders. This is the best practical approach to learning interpretation because it mirrors the actual practice of EEG – the EEGer is confronted by EEG patterns, not diagnosis.

ISBN 0-444-82147-3, Hardbound, US\$ 198

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Journal of Clinical Neurophysiology (on reviewing the 2nd edition)



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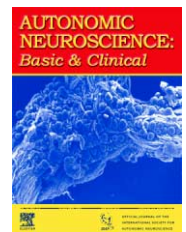
Announcing a change of title

Autonomic Neuroscience: Basic & Clinical

The *Journal of the Autonomic Nervous System* has changed its name to *Autonomic Neuroscience: Basic and Clinical* to reflect current developments in the field, a changing emphasis in Aims and Scope of the journal towards a better balance between basic and clinical papers, and the stronger ties with the International Society for Autonomic Neuroscience. The new name, and accompanying new cover, will be implemented starting Volume 82. What will remain the same is the excellent quality of articles published in the journal, under the expert management of Geoffrey Burnstock, Director of the Autonomic Neuroscience Institute in London, and six international Associate Editors.

For more information on *Autonomic Neuroscience: Basic and Clinical*, please visit <http://www.elsevier.com/locate/autneu>

The International Society for Autonomic Neuroscience will hold its second conference in London, 17–21 July 2000. For information on the congress, please visit <http://plexus.physiol.unimelb.edu.au/isan/isan.htm>



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American Society for Sleep Disorders,

17–22 June 2000, Las Vegas, NV, USA

Federation of European Neuroscience Societies,

24–28 June 2000, Brighton, UK

World Alzheimer Congress 2000,

9–18 July 2000, Washington DC, USA

Autonomic Neuroscience Society,

17–23 July 2000, London, UK

European Congress of Clinical Neurophysiology,

27–30 August 2000, Lyon, France

Child Neurology Society,

25–28 October 2000, St. Louis, USA

Society for Neuroscience,

4–9 November 2000, New Orleans, LA, USA

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What's New in Neurology...

Journal of the Neurological Sciences - News

In each issue of *World Neurology*, you will find specific information related to JNS, the official journal of the World Federation of Neurology.

In this issue, we want to highlight a specific article published in JNS 172/1, page 41–48, January 2000.

Low cerebral glucose extraction in the human medial temporal cortex and cerebellum
Sakamoto, S and Ishii, K (Japan)

The importance of the article as stated by Dr. Lisak, Editor-in-Chief:

It is known that certain areas of the brain are more susceptible to damage in hypoxia and hypoglycemia. Some of these differences are believed to represent differences in the response of different neuronal cell types. In this article the authors show that in normal individuals certain vulnerable areas of the brain have lower cerebral blood flow, cerebral glucose utilization and glucose extraction rates suggesting that cerebral blood flow and metabolism may also help determine selective vulnerability to hypoxia and hypoglycemia.

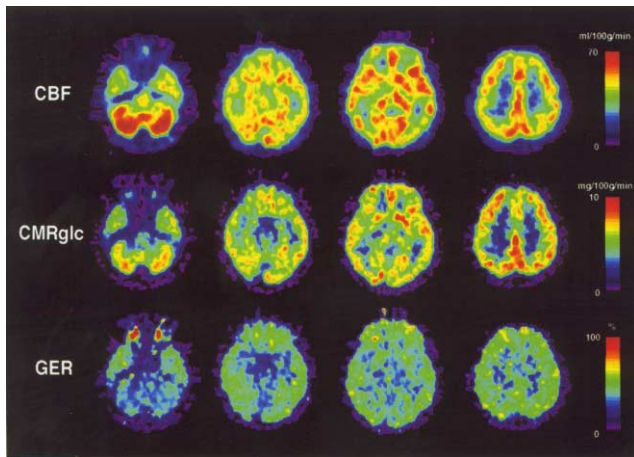


Fig. 2. Representative images of cerebral blood flow (CBF), cerebral metabolic rate for glucose (CMRglc), and glucose extraction rate (GER) in a 38-year-old healthy man under resting conditions. Note the low level of GER in the medial temporal lobe and cerebellum.

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cont. from p. 13:

with neuroradiology with an extensive coverage with illustrations. EEG, EMG, evoked potentials and lumbar puncture are dealt with in part I. Part II contains chapters on common neurological presentations. Specific neurological conditions such as CNS infections, cerebrovascular disease, movement disorders, neuromuscular disorders, multiple sclerosis and some neurosurgically related conditions are discussed in part III. Part IV is on neurological trauma to brain, spinal cord and peripheral nerves. Part V deals with pediatric neurological emergencies and part VI with such problems related to pregnancy. Neurotoxicology and brain resuscitation are discussed in the last part. This book is of great value to the neurologists, primary care physicians and others dealing with neurological emergencies and will be a valuable addition to the Emergency Department Library.

J.S. Chopra
Editor-in-Chief

Jasper's Basic Mechanisms of the Epilepsies

Third Edition, Advances in Neurology Series Vol. 79

Ed: A V Delgado-Escueta, W A Wilson, R W Olson, R J Porter
ISBN: 0-7817-1438-9
No. of Pages: 1,104
Price: US \$159.00
Publication Date: 1999
Publisher: Lippincott, Williams and Wilkins

This updated volume of the ongoing Advances in Neurology series is the third edition of the classical review of epilepsy research that was first published by H H Jasper, A A Ward and A Pope in 1969. This present volume is the culmination of three scientific meetings between 1992 and 1996, presenting the current state of science regarding epilepsy research. This multi-authored text presents an agenda for epilepsy research for the next decade, organized in five sections and covering 1032 pages from 207 contributors. Each of the sections begins with an editor's in-

roduction, which provides an overview of the field of biology covered in that particular segment. Following an overview and discussion of the epidemiology of epilepsy, in Section I, Section II reviews neural development and genes associated with the epilepsies; Section III: the idiopathic epilepsies; Section IV: symptomatic lesional epilepsies; and Section V: frontiers in brain imaging and therapeutics. The section on symptomatic lesional epilepsies is the most lengthy portion of the text, covering four areas regarding the electrical and biochemical properties of neuronal and glial circuitry during the generation, synchronization, spread and clinical expression of epileptogenic discharges. This is an important reference source that will be an important addition to the library for the basic science researcher, postdoctoral student as well as the clinician who cares for the epileptic patient. The editors and authors should be commended for the high standard of scholarship presented in this reference source.

Prof. Mark S. Scher, M.D.
Cleveland, U.S.A

CALENDAR

2000

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Fax: +44 171 404 6946
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URL: <http://www.headache2000.com>

15th European Sleep Research Society Congress

12-16 September 2000
Lütfi Kırdar International Congress & Convention Centre, Istanbul, Turkey
Contact: Prof. Hakan Kaynak, Congress Secretary, Cerrahpasa Medical School, Dept. of Neurology, Sleep Disorders Unit, Cerrahpasa, Istanbul, Turkey

Tel: +90-212-586 1596
Fax: +90-212-632 9696
E-mail: info@tsrs.org.tr
Website: <http://www.tsrs.org.tr>

5th Congress of the European Federation of Neurological Societies

14-18 October 2000
Bella Center, Copenhagen, Denmark
Contact: EFNS Head Office, Neurological Hospital Rosenhügel, Riedelgasse 5, A-1130 Vienna, Austria
Tel: +43 1 880 00 270
Fax: +43 1 889 25 81
E-mail: headoffice@efns.org

125th Annual Meeting of the American Neurological Association

15-18 October 2000
Marriott Copley Plaza, Boston, Massachusetts, USA
Contact: American Neurological Association, 5841 Cedar Lake Road, Suite #204, Minneapolis, MN 55416, USA
Tel: +1 612 545 6284
Fax: +1 612 545 6073
E-mail: lwilkerson@compuserve.com

3rd Congress of Asian Oceanian Epilepsy Organisation (AOEO)

11-13 November 2000
New Delhi, India
Contact: Satish Jain, MD, Secretary General, Department of Neurology, Neurosciences Centre, All India Institute of Medical Sciences, New Delhi - 110 029, India
Tel: 91-1-659 4210/656 9007

Fax: 91-11-652 1086/686 2663
E-mail: sjain@medinst.ernet.in

Second Asia Pacific Symposium on Neural Regeneration

30 November - 2 December 2000
Xian, China
Contact: Vera S. Yip, Ph.D, Dept. of Anatomy, The University of Hong Kong, 5 Sassoon Road, Hong Kong, P.R. China
Fax: 852-2817-0857
E-mail: neurores@hku.hk

2001

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XIV International Congress on Parkinson's Disease

28-31 July 2001
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