As Africa faces a growing burden of neurologic diseases and a severe shortage of both basic and clinical neuroscientists, relief is likely to come with the recruitment of a new generation of neuroscientists. Leaders in the African neuroscience community recently took the first steps in getting young Africans interested in careers in the neurosciences. In a joint effort between the International Brain Research Organisation, the Society of Cameroonian Neurologists, and the University of Yaounde I in Cameroon, organizers of the Pan African Association of Neurological Sciences (PAANS) Congress 2008 devoted their pre-Congress activities to getting local students interested in the neurosciences.

The neuroscience outreach program—Neuroscience in Africa: Raising the Next Generation 2008—sought to educate participants about epilepsy, including how to care for people living with epilepsy and measures that can help prevent the disorder. They also tried to make students aware of the potential career opportunities available in the neurosciences. The need for neurologists in Africa is striking. The World Health Organization estimates that there is an average of 0.03 neurologists per 100,000 individuals in Africa, compared with 4.84 in Europe. At the same time, the burden of neurologic disease continues to grow. Neurologic problems such as epilepsy, dementia, stroke, and headaches are common among patients seeking care in primary care settings throughout Africa and have a significant impact on productivity and quality of life.

As part of the pre-Congress activities at the PAANS Congress last October, the organizers invited primary school, high school, and undergraduate students to participate in a neuroscience competition. They also surveyed the participating students on their knowledge and interest in the neurosciences. In addition, the organizers of the program sought to educate participants about epilepsy, including how to care for people living with epilepsy and measures that can help prevent the disorder. They also tried to make students aware of the potential career opportunities available in the neurosciences.

Although the European Stroke Organisation has not yet published specific guidelines focused on subarachnoid hemorrhage (SAH), single European countries have been provided with recommendations by their neurologic or neurosurgical societies. Many aspects of the U.S. aneurysmal SAH guidelines are in good agreement with most of the recommendations of these societies or common European clinical practice. This is particularly true for the SAH guidelines of the German Neurological Society (version 2008), which contains similar recommendations that are based on much of the same scientific basis in regard to most facets of the disease, according to Prof. Werner Schneider.
EDITOR IN CHIEF'S COLUMN
Changing Times

HALLET, M.D.

When I did my training, the great neurologists of our times were those who could examine a patient with an exquisite technique—not unlike the skill, clarity of thought, and basic physiological levels. We still have not converted our genetic understanding to the molecular level. Advances in cell biology and genetics are providing fascinating insights. A few years ago, we did not even think that Parkinson’s disease had a genetic factor, and now it is becoming clear that most, if not all, forms of Parkinson’s disease have a genetic component. Medications (and surgery) have been developed based on our new understandings, do. Medications (and surgery) have been developed based on our new-found understanding at the molecular and basic physiological levels. We still have not converted our genetic understanding into many therapies, and stem cells are in the sky, but that is the probable future.

It is emerging that even some clinical-pathological correlation is confusing. For example, a patient with a frontotemporal dementia and another with parkinsonism with a dystonic, apraxic arm might have similar pathology of corticobasal degeneration. If we consider molecular pathology, it can become even more confusing. A type of ataxia (SCA6) and hemiplegic migraine are a result of a mutation on the same gene, and stiff person syndrome, ataxia, or epilepsy might be due to anti-GAD antibodies (described by Francesc Graus and Albert Saiz in the December issue of WORLD NEUROLOGY).

The era of clinical-pathological correlation is drawing to a close, and the next generation of molecular neurologists will have to be on the cutting edge of clinical neurology. Content for WORLD NEUROLOGY is provided by the World Federation of Neurology and Elsevier Global Medical News.

Disclaimer: The ideas and opinions expressed in WORLD NEUROLOGY do not necessarily reflect those of the World Federation of Neurology or the publisher. The World Federation of Neurology or Elsevier, Inc., will not assume responsibility for damages, loss, or claims of any kind arising from or related to the information contained in this publication, including any claims related to the products, drugs, or services mentioned herein.

Editorial Correspondence: Send editorial correspondence to WORLD NEUROLOGY, 5635 Fishers Lane, Suite 6000, Rockville, MD 20852, U.S.A; worldneurology@elsevier.com; Phone +1-800-798-1822; Address Change: Fax of change of address to +1-973-290-8245

©Copyright 2009, by the World Federation of Neurology

The Nominating Committee of the World Federation of Neurology invited nominations for three officer posts and one trustee to be elected at the Council of Delegates Annual General Meeting in October at the World Congress of Neurology in Bangkok. The committee now recommends to the membership those listed below as candidates in accordance with the Federation’s Memorandum and Articles of Association.

President (from Jan. 1, 2010)
Jagjit Chopra (India)
Leontino Battistini (Italy)
William Carroll (Australia)
Werner Hacke (Germany)
Wolfgang Grisold (Austria)
Raad Shakir (U.K.)

One Elected Trustee (Oct. 2009)
Wolfgang Grisold (Austria)
Orla Hardiman (Ireland)

Candidates for President and First Vice President will be required to formulate a statement of their goals and objectives for the organization, which will be published. Anyone can make additional nominations by contacting the World Federation of Neurology or submitting the name(s) of the individual(s) to the Secretary-Treasurer General, c/o the WFN Headquarters Office, Hill House, Heron Square, Richmond-Upon-Thames, TW9 1EP, U.K., at least 30 days before the date of the Council of Delegates’ Annual General Meeting.

ELECTIONS COMMITTEE

The nominating committee is responsible for the nomination of candidates for the following positions:

President (from Jan. 1, 2010)
Jagjit Chopra (India)
Leontino Battistini (Italy)
William Carroll (Australia)
Werner Hacke (Germany)
Wolfgang Grisold (Austria)
Raad Shakir (U.K.)

One Elected Trustee (Oct. 2009)
Wolfgang Grisold (Austria)
Orla Hardiman (Ireland)

Candidates for President and First Vice President will be required to formulate a statement of their goals and objectives for the organization, which will be published. Anyone can make additional nominations by contacting the World Federation of Neurology or submitting the name(s) of the individual(s) to the Secretary-Treasurer General, c/o the WFN Headquarters Office, Hill House, Heron Square, Richmond-Upon-Thames, TW9 1EP, U.K., at least 30 days before the date of the Council of Delegates’ Annual General Meeting.

Editor in Chief

Mark Hallett, M.D.

Executive Editors

Denise Fulton, Kathy Scarbeck

Managing Editor

Revere Matthews

Editorial Assistant

Marcia Idler

Production Manager

Judith Shaffer

Creative Director

Louise A. Koenig

Journalist

Vanne Evans

Elsevier Global Medical News

A Division of the International Medical News Group

President

MMG Alan J. Inhouse

Editor in Chief

Mary J. O’Dales

Executive Editor

Denise Fulton, Kathy Scarbeck

Managing Editor

Revere Matthews

Clinical News Editor

Jeff Evans

VP, Medical Education

Sylvia H. Reitman

Circulation Analyst

Barbara Cavallaro

Executive Director, Operations

Jim Choca

Production Manager

Vanne Evans

World Federation of Neurology

Editor in Chief

Mark Hallett (U.S.A.)

Editorial Advisory Board

Dr. Parvis Bell (South Africa); Dr. William M. Carroll (Australia); Dr. Jagjit S. Chopra (India); Dr. Paolo Cistulli (Portugal); Dr. Michael Finkel (U.S.A.); Dr. Oswaldo Fistino (Argentina); Dr. Alla Guekht (Russia); Dr. Theodore Muralid-U.S.A.); Dr. Daniel Truong (U.S.A.)

WFN Officers

President: Dr. Johan A. Aarli (Norway)
First Vice-President: Dr. Vladimir Hackini (Canada)
Secretary-Treasurer: Dr. Raad Shakir (United Kingdom)

Elected Trustees

Surinder Romano (U.S.A.); Prof. Werner Hacke (Germany); Dr. Raju Kaji (Japan)

Co-opted Trustees

Dr. Roger Rosenberg (U.S.A.); Dr. Niphon Ploumgarin (Thailand)
Regional Directors

Dr. Alfred K. Njimjoh (Pan Africa); Dr. Jacques De Reuck (Europe); Prof. Ravid Gozaler (Pan Arab); Dr. Amadou San Luis (Asian-Oceania); Dr. Steve Sagar (North America); Dr. Mario Tolentino-Dipp (Latin America)

Executive Director

Keith Newton

World Federation of Neurology

Morristown NJ USA 07960

Fax change of address to +1-973-290-8245

©Copyright 2009, by the World Federation of Neurology

WWW.WFNEUROLOGY.ORG • FEBRUARY 2009
The World Congress of Neurology is an important rendezvous for our profession, offering many opportunities for neurologists to meet, such as our regional conferences; the annual conferences of the American Academy of Neurology; and the international congresses of epileptology, Parkinson’s disease and related disorders, headache, multiple sclerosis, and other sectors in the field. Nevertheless, the WCN’s quadrennial meetings—which this year will become biennial—remain the most effective venue for the presentation of scientific achievements and for interaction among delegates from varied backgrounds and with diverse perspectives. The gatherings are also crucial for the visibility of the organization, the number of participants has increased steadily over the years, as have the number of contributions.

World congresses also offer a unique opportunity for young neurologists to receive updates on developments in the neurosciences. Some of them will be able to present their own research data, and even more will get to meet new friends and meet up with old ones. Such interaction is an important component of any international congress, so this year the World Federation of Neurology is offering twice the number of traveling fellowships for young neurologists from countries classified as low- or lower-middle income by the World Bank to attend the congress. This year, the World Congress of Neurology will take place in Thailand, at the Bangkok International Trade & Exhibition Centre, Oct. 24-30. Professor Niphon Pounvarin, the congress president, will welcome us to this beautiful, exotic city. Dr. Naraporn Prayoonwiwat, local chair of the Scientific Program, and Prof. Roger Rosenberg, chair of the WFN Research Committee, have put together an outstanding scientific program. The main themes, assembled under the common heading of “Innovation in Neurology,” will be stroke, epilepsy, neurogenetics, multiple sclerosis, dementia, movement disorders, headache, and pain.

In addition, there will be a broad education program offering 27 half-day and full-day teaching courses in a variety of topics, which has been organized by Prof. Swaporn Chankrachang, chair of the local Education Programme, and assisted by the WFN Education Committee chaired by Prof. Theodore Munsat. At the XVII World Congress of Neurology in London in 2001, we launched our first Neurological Tournament, a knockout competition in which teams of delegates from countries represented in the WFN participate. Similar tournaments have for many years provided educational entertainment at the meetings of the American Academy of Neurology. The London tournament was a great success and was repeated at the XVII World Congress of Neurology in Sydney in 2005. This year, Dines Rakamokorn and the coordinators of the tournaments at the London and Sydney congresses, will organize the 3rd Tournament of the Minds at the Bangkok congress. We look forward to an exciting competition that no doubt will bring with it a special Thai flair. Organizing a congress of this scope and nature is an immense task, and the chair of the local Organization Committee, Dr. Pairoj Boonkongchuen, together with the Congress Chairman Kammant Phanthumchinda, Somnak Lapkitkulsut (Secretary), Somchai Tonwanab (Treasurer), and conference coordinator Kate Sarasin have worked for endless hours to ensure the smooth running of this year’s congress. Their aim is to make it a worthwhile and attractive experience during which the delegates can enjoy the rich and exciting scientific program in an exotic and intriguing setting. We all look forward to gathering in Bangkok in October.

World Congress of Neurology
Bangkok, Thailand (Oct. 24-30, 2009)
Plans for the Congress are progressing well. We encourage neurologists from across the world to submit abstracts and travel congress fees for the early registration window. For details, go to www.wcn2009bangkok.com.

Johan A. Aarli, President, WFN
Niphon Pounvarin, President, WFN

WFN Research Group Defines Standards In Neurosonology

For more than 30 years, the Neurosonology Research Group has provided an international forum for the presentation of scientific advances and the promotion of research, education, and training in ultrasonic techniques. The group consists of a worldwide pool of more than 300 technological and clinical experts in neurosonology. Statutory meetings take place every 3 years, with 2 years of regional teaching courses in between. Our main meetings with general assembly rotate from continent to continent. The last meeting was in 2007 in Budapest, Hungary, and the next will be held Sept. 4-6, 2009, in the Asian-Pacific region at Cairns, Australia. It will take place in association with the 6th Asian Pacific Conference Against Stroke, organized by Australian and Asian neurologists—Craig Anderson, Christopher Levi, Jose Navarro, N.V. Ramani, L. Wong, and Shan Jin Ryu. The main topics will be ultrasound in clinical research; standards in neurosonology; sonothrombolysis, including technical updates; functional testing; and monitoring during interventions. The NSRG will provide platform presentations from basic research to clinical application and the process of certification will be carried forward. It will also be active at the World Congress of Neurology in Bangkok, Thailand, where we will make connections in the main program and offer a full-day teaching course on Oct. 25, before the congress. In particular, we invite young researchers to join us. Cerebrovascular ultrasound is a rapidly developing field with many innovative aspects, and the NSRG offers a stimulating forum for new ideas and for establishing global contacts. For more information, visit www.nsrg.org.tw.

HIGHLIGHTS: THE JOURNAL OF NEUROLOGICAL SCIENCES

Cryptogenic New-Onset Refractory Status Epilepticus in Adults

The sudden onset of intractable seizures is not uncommon, and all neurologists have had to manage such patients. Often, the condition can be traced back to a known cause, such as epilepsy, stroke, infection, neoplasm, or intoxication. The most difficult cases are those where the cause is unknown, and since there are few data to help guide management of these patients, apart from the direct, but definition unsuccessful, suppression of the seizures. Thus, clear-cut therapeutic options such as antibiotics, corticosteroids, antiviral, or plasmapheresis are not available. Since status epilepticus is not uncommon in viral encephalitis and viral encephalitis can be difficult to reliably exclude, it remains a leading candidate for the etiology of new-onset refractory status epilepticus (NORSE). In this paper, the authors summarize the experience of five medical centers, where we will make comparisons in the main program and offer a full-day teaching course on Oct. 25, before the congress. In particular, we invite young researchers to join us. Cerebrovascular ultrasound is a rapidly developing field with many innovative aspects, and the NSRG offers a stimulating forum for new ideas and for establishing global contacts. For more information, visit www.nsrg.org.tw.

The sudden onset of intractable seizures is not uncommon, and all neurologists have had to manage such patients. Often, the condition can be traced back to a known cause, such as epilepsy, stroke, infection, neoplasm, or intoxication. The most difficult cases are those where the cause is unknown, and since there are few data to help guide management of these patients, apart from the direct, but definition unsuccessful, suppression of the seizures. Thus, clear-cut therapeutic options such as antibiotics, corticosteroids, antiviral, or plasmapheresis are not available. Since status epilepticus is not uncommon in viral encephalitis and viral encephalitis can be difficult to reliably exclude, it remains a leading candidate for the etiology of new-onset refractory status epilepticus (NORSE). In this paper, the authors summarize the experience of five medical centers, where we will make comparisons in the main program and offer a full-day teaching course on Oct. 25, before the congress.
The strengths of recommendations in some aspects of the guidelines differ between the U.S. and Germany. DR. BÖSEL

The German Neurological Society also emphasizes the treatment of SAH patients in specialized intensive care units (i.e., neuro ICUs) and the importance of intensified hemodynamic monitoring, especially during triple-H therapy, somewhat more than do the U.S. recommendations. Regional differences in SAH management or guidelines outside the United States and Germany seem to depend on whether neurologic or neurosurgical societies have created the guidelines, on diagnostic options, on the regionally different availability of high-volume treatment centers, on the standard of endovascular alternatives to surgery, and on the appreciation of evidence, Prof. Hacke and Dr. Bösel said.

Success Seen in African Outreach

PAANS • from page 1

Attitudes about epilepsy both before and after a brief educational activity designed to raise awareness of the condition.

Three prizes were awarded in each of the three categories—primary students, secondary students, and university students. The winners received their awards at the opening of the Congress of the Pan African Association of Neurological Sciences, the largest single gathering of neurologicians in Africa. The prizes were presented by Prime Minister, Minister of Justice, Keeper of the Seal, and other members of the Cameroon Government, and other dignitaries.

The outreach activities appear to be a success, according to Dr. Rufus Akinwyn, Dr. Faustin Njiosa Yepnjo, and Prof. Alfred K. Njammhi, who issued a report on the outreach project. Immediately following the program, many of the student participants said they would consider a career in the neurosciences.

The leaders who organized the events plan to work with the Society of Cameroonian Neurologists, PAANS, and the University of Yaounde 1 to follow the progress of the students who participated in the program over the next several years.

“The type of outreach program presented in Cameroon is important because it makes neurosciences not a foreign and exotic subject, but a part of their daily life and of public health,” said Dr. Johan A. Aarli, president of the World Federation of Neurology.
Help Haitian Health by Adopting a Soccer Team

BY ANTHONY G. ALESSI, M.D.

G lobal medicine is an increasingly popular area of specialization for young physicians who are motivated by adventure and spirit of making a lasting contribution. Although most are drawn to it from primary care, neurologists are uniquely qualified to participate in these worldwide initiatives. They are taught to rely on observation as well as the neurologic history and examination, skills that are essential when caring for patients in regions where technology is not always readily available for a diagnosis.

We have seen media footage of the poverty and hunger that has gripped Haiti for decades. Located just 90 miles off of the coast of Florida, Haiti is the poorest nation in the Western Hemisphere, and although it is relatively small, it has a population of about 8 million.

It was during a recent medical mission to the hurricane-ravaged island, that I came across an inspiring story. The Haitian Health Foundation (HHF) of Norwich, Conn., has been caring for the poor in Haiti since 1982. Its workers have built schools, medical clinics, and housing for people in the coastal city of Jérémie and 105 surrounding villages.

Four times a year, its founder, orthodontist Dr. Jeremiah J. Lowney, leads a week-long excursion to the island, during which physicians, dentists, and volunteers from all walks of life work with the local people. These pilgrimages are designed to benefit the poor, but it is often the volunteers who find themselves invigorated. “Over 90% of volunteers return to spend additional weeks among the poor,” he said.

While evaluating a girl in one of the HHF clinics, I learned her soccer coach had accompanied her, and I was surprised to hear that women’s soccer was well organized and thriving in that area. Ordinarily, women in Haiti do not play soccer. Haitian girls, especially in remote areas, grow up believing that playing games such as soccer will deform their reproductive organs and prevent them from bearing children.

However, many girls are interested in playing the game so, in 2006, HHF started a health education and soccer program for girls aged 13-19 years. It seeks to empower girls through knowledge and education and is structured so that they have to complete a 1-week course on responsible sexuality before qualifying for the soccer league.

The classes cover topics such as reproductive anatomy, sexually transmitted diseases, and women’s rights under Haitian law, with the underlying message that education is the key to better opportunity.

In the past year, almost 1,300 girls have been educated through the program and 830 played in the league. “Participation in the program has become a source of pride for the girls and their parents,” says Callie Kaplan, from Chicago, the program coordinator.

Unfortunately, the HHF soccer program is losing its major grant support, which could result in ending this worthwhile program. It costs $1,000 to fund a team, which would cover the most basic equipment and the educational component. Any donation would be gratefully accepted, but I encourage any individual or business to join me in adopting a team. Donations can be sent to Haitian Health Foundation, 97 Sherman Street, Norwich, CT, 06360 or made on its Web site at www.haitianhealthfoundation.org.

Help Haitian Health by Adopting a Soccer Team

DR. ALESSI is in private practice and is chief of neurology at the William W. Backus Hospital in Norwich, Conn.
The PAANS congress served as an important information and discussion forum for African neurology. The meeting also was attended by local politicians and representatives from the government, which is essential in increasing the visibility of neurology. Prof. Alfred Njammshi, Cameroon, was elected president of the PAANS and is also ex officio WFN Regional Director for Africa. The first international teaching course in neurology in Africa, which took place in Dakar, Senegal, June 26-28, was organized by EFNS and became a great success. It reflected the basic idea of the Africa initiative. With Africa–For Africa, and came as a joint venture between several international organizations, WFN, IBRO, WFNS, and PAANS, in addition to EFNS, which was the prime organizer. EFNS already is planning the successor to this meeting, in Addis Ababa, Ethiopia, in June 2009.

In 2008, WORLD NEUROLOGY began to change its image. Dr. Mark Hallett has taken over as the new editor in chief, and the newsletter aims to emphasize new and emerging clinical and basic neuroscientific reports in the neurological literature. For 2008, we had as before four issues. This year, we might print more. We also have a new Web site, and Wolfgang Gissold is the Web site editor. I hope these changes prove positive and help increase the visibility of neurology in all parts of the world.
Before the research is published...

Before the drug is approved...

Before the guideline is issued...

You read it first in

Clinical Neurology News

We Write Medicine’s First Draft

www.clinicalneurologynews.com
MS in Asia: PACTRIMS Inaugural Meeting

BY BHIM SINGHAL
Past Asian-Oceanian Regional Director, WIN

The newly formed Pan-Asian Committee for Treatment and Research in Multiple Sclerosis held its first meeting at Kuala Lumpur, Malaysia, on Nov 21-22 last year under the leadership of Dr. Takahiko Saida of Japan (President) and Dr. William Carroll of Australia (Vice President).

The organizing chairman of this very successful meeting was Professor Chong Tin Tan of Malaysia. The Scientific Committee, headed by Professor Jun-ichi Kira of Japan (Chairman) and Dr. Victor Chong of Malaysia (Vice Chairman), drew together an impressive program dealing with the epidemiology, pathogenesis, manifestations, and treatment of multiple sclerosis (MS).

More than 350 delegates from 21 countries participated in the meeting. In addition to the talks by invited speakers from the East and the West, there were 54 posters presented by investigators and dealing with a range of aspects of MS and other demyelinating disorders.

There is a growing interest in multiple sclerosis and related demyelinating disorders in the Asian region. Although the disease is less common in Asia than it is in the West, more cases are being diagnosed, and detection and treatment of MS are improving in these countries.

In contrast to earlier data, CMS cases seem to be on the rise, compared with OS-MS. The latter cases include patients with longitudinally extensive spinal cord lesions (LESCLs). Neurromyelitis optica (NMO) was first described as a severe monosymptomatic optic neuritis and transverse myelitis. It has now been recognized also to have a relapsing course with optic nerve involvement and LESCLs. In Asia, as in the West, it remains controversial as to whether CMS, OS-MS, and especially NMO are different disorders or different manifestations of MS.

The detection of aquaporin-4 (AQP4) antibodies has given a new tool and direction to the study of demyelinating diseases. AQP4 has been reported to have high sensitivity and specificity in patients with an NMO-type of presentation. AQP4 antibodies have also been found in patients with other manifestations such as recurrent optic neuritis, myelitis with longitudinally extensive spinal cord lesions, patients with intractable vomiting and hicups, and patients with unique lesions on MRI in hypothalamus and periaqueductal regions. The antibody has a high concentration in the cerebrospinal fluid and has a high specificity. The antibody has been found to be of low sensitivity and specificity in NMO in some Asian studies, including in white Australians. AQP4 has also been found occasionally in CMS patients.

Many specialists in the field hope that the ongoing Registry of Asia Pacific Idiopathic Demyelination (RIPID) study in the Asian region and the global MS base registry will provide useful epidemiological data and help resolve some of these issues.

The second meeting of the PACTRIMS is scheduled to be held in Hong Kong in November 2009.

For more information about the inaugural PACTRIMS meeting and the upcoming meeting later this year, visit www.PACTRIMS.org.

Exercise Doesn’t Promote Foot Ulcers in Neuropathy

BY HEIDI SPLETE
Elsevier Global Medical News

Exercise does not increase foot ulcer rates in adults with diabetic peripheral neuropathy by itself. However, regular exercise during walking is important for people with diabetes and neuropathy limit weight-bearing activity to reduce the risk of foot ulcers.

“This was based on a longstanding assumption that repetitive mechanical stimulation, which can induce laceration or erosion known as shear stress, would lead to foot ulcers in those with neuropathy, an assumption that has remained untested since rat foot pad studies in the 1970s,” said Dr. Joseph LeMaster of the University of Missouri-Columbia.

Previous studies have shown that people with diabetes who walk regularly can reduce their risk of developing complications such as cardiovascular disease. To determine whether regular walking increased the risk of foot ulcers, Dr. LeMaster and his colleagues conducted a randomized, controlled trial known as the Feet First, in which 41 adults received an intervention that included leg-strengthening and balance exercises, directions for a self-guided walking program, and telephone support every 2 weeks. Dr. LeMaster presented the results at the annual meeting of the North American Primary Care Research Group.

The control group and a control group of 38 adults received foot care education, regular foot checks, and eight sessions with a physical therapist, but the control group received no additional exercise intervention. The average age was 66 years, and 51% were women.

After 6 months, the average number of total daily steps taken was not significantly different between the two groups, although the total steps decreased in the control group. But participants in the intervention group increased the steps taken during a 30-minute exercise session by 14% from baseline, compared with a 5% decrease in the control group.

Although the activity level was lower than the researchers hoped for, the results suggest that the intervention helped avoid avulsion ulcers in activity. Dr. LeMaster said.

Overall, 22 lesions occurred in the intervention group and 14 in the control group after 6 months, but this difference was not significant. This number increased to 27 lesions in the intervention group and 21 in the control group after 12 months. The total of 48 lesions excluded 9 lesions that resulted from trauma during self-care (such as cutting a toe while trimming a toenail).

The overall ulcer rates were similar between the groups at 6 months, but by 12 months the rate of weight-bearing full thickness ulcers was higher in the intervention group, compared with the intervention group (five lesions vs. one lesion).

“We conclude that intervention achieved a modest increase in daily ambulatory activity,” Dr. LeMaster said. “Prescribing these patients a carefully monitored program in which they gradually increase walking over several months is probably safe,” he said. But foot healthcare providers “careful attention to footwear and regular foot checks are important.”

“More intense interventions that achieve greater change in activity are needed to confirm these preliminary outcomes,” he said. Dr. LeMaster and his colleagues have received funding from the U.S. National Institutes of Health to conduct a follow-up study that will involve walking more closely with patients to increase activity.

The study was limited by wide confidence intervals, “so we can only draw preliminary conclusions about effects of the intervention on foot ulcers,” Dr. LeMaster said.

But gradually increasing activity is the key to success for diabetic neuropathy patients, he said during a question-and-answer session. When asked what clinicians can tell diabetic neuropathy patients about increasing activity, he emphasized using a pedometer to ensure a gradual increase in activity. Ulcers are more likely to occur when someone has been inactive and tries to increase activity too quickly, he said.

In an interview, Prof. Solomon Tesfay, a consultant physician at the Royal Hallamshire Hospital, Sheffield (England), said that, although regular exercise would clearly be useful in patients with neuropathy, “careful attention to footwear and regular foot checks are important.”

However, he called the study an “important advance as it reassures us that it is reasonably safe for neuropathic patients to participate in a gradually increasing exercise program if they have appropriate footwear and have received education about how to care for their foot.” He added that the study only included patients without foot ulceration at baseline, he would still advise those with recurrent ulceration to refrain from excessive walking.

The Feet First study was sponsored by the Robert Wood Johnson Foundation, and the results were published in Physical Therapy (2008;88:1385-98).
REGISTER NOW FOR A GROUNDBREAKING CONFERENCE
WWW.KENES.COM/ADPD2009

CONFERENCE HIGHLIGHTS

• 2,500 participants expected
• Comprehensive scientific program with over 40 topics in the field of AD, PD and related neurodegenerative diseases
• Presentations from over 125 top scientists and clinicians from 28 countries
• The latest techniques, research and breakthroughs in etiology, treatment and therapy
• Focus on opportunities for young investigators, including presentation of awards
• CME accreditation

1-3 Rue de Chantepoulet, PO Box 1726, CH-1211 Geneva 1, Switzerland
Tel: + 41 22 908 0488; Fax: + 41 22 732 2850; E-mail: adpd@kenes.com
© Kenes International 2008. All rights reserved
A Review of Neurology in North America During 2008

BY STEPHEN M. SERGAY, M.B. B.Ch., North American Regional Director, WFN
AND RICHARD DEBIENS, M.D.
President, Canadian Neurological Society

Neurology in North America enjoyed a robust year in 2008 in all areas, from science to advocacy. We are very fortunate to be making progress on many fronts, but research, education, and the practice of neurology continue to be challenged by economic and political forces.

The dynamics of last year’s presidential election and the aging populations in the United States and Canada present us with challenges, and we are concerned that we may soon be facing a shortage of neurologists.

Report From Canada

The Canadian Neurological Society (CNS) represents more than 600 neurologists from the 10 provinces and territories of Canada. It is part of the Canadian Neurological Sciences Federation (CNSF), which includes the Canadian Neurosurgical Society, the Canadian Association of Child Neurologists, and the Canadian Society of Clinical Neurophysiologists.

In partnership with the CNSF, the CNS is active in organizing the annual scientific meeting (the Congress) held each June. It provides educational opportunities for its membership in connection with the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada. The abstracts and publications derived from the annual meeting, along with abundant peer-reviewed material, are published in the Canadian Journal of Neurological Sciences (www.ijns.org).

The society is also active in advocacy through its branch, the Canadian Brain and Nerve Health Coalition (CBANHC), and through its involvement with the Canadian Medical Association. Canada has a universal access, public-funded health care system, which is challenged by a chronic shortage of doctors and by other factors, such as the aging of the population and inadequate funding. After the release of the CBANHC report in 2007 titled “The Burden of Neurological Diseases, Disorders and Injuries in Canada,” the CNS embarked on a study on wait times and access to neurologists throughout Canada.

Our society is active internationally through a program to support neurologists and neurosurgeons from economically underdeveloped countries. After years of support to various countries, we decided to support one country in a more meaningful way: In 2008, we established the Canada-Cuba Partnership, which will help provide physicians with the material and scientific tools they need to continue providing excellent care to their populations.

On the same international note, one of our members, Dr. Vladimir Hachinski, is the first vice president of the World Federation of Neurology.

For more information about the Canadian Neurological Society and the Canadian Neurological Sciences Federation, visit www.ccnms.org. Neurologists, neurosurgeons, pediatric neurologists, and clinical neurophysiologists from all over the world are invited to attend our annual scientific meeting in Halifax, N.S., June 9-12, 2009.

Report From the United States

Neurology in the United States is being advanced by a multitude of quality-driven initiatives representing neuroscience, neurology education, and neurology care delivery.

The largest of these are the Society for Neuroscience (38,000 members) and the American Academy of Neurology (21,500 members). They are joined by many other organizations that are dedicated to both basic science and care delivery, by adult and pediatric neurology, and, more recently, by increasing numbers of neurology subspecialty organizations, all of which are contributing to the increasing depth and the ongoing dynamism of U.S. neurology.

The American Academy of Neurology has more than 100 specialty societies in the United States, which the AAN provides with active support. The Academy also partners with numerous medical and patient organizations.

The annual meeting of the Society for Neuroscience in San Diego, Calif., in November 2007 attracted more than 32,000 attendees. The 60th annual meeting of the American Academy of Neurology in Chicago attracted 12,730 delegates—our new record—consisting mostly of neurologists, 37% of whom work outside the United States.

The AAN offered integrated neuroscience sessions on tropical neurology; new methods of imaging; autism; genetics of epilepsy; stroke imaging and emerging therapeutics; and mitochondrial diseases, among others. Neural repair was the topic of the Future of Neuroscience Conference at the meeting.

As clinical neurology has become increasingly subspecialized, the AAN has supported this process through its membership sections.

The AAN also has joined with the other four principal teaching organizations in neurology—the American Neurological Association, the Association of the University Professors of Neurology, the Child Neurology Society and Professors of Child Neurology—to form the United Council for Neurologic Subspecialties. The UCNS represents, to date, eight subspecialties, and has accredited 40 subspecialty training programs.

The AAN has recently embarked on a reevaluation of its methods of operation. We are working toward being a more data-driven organization that will react rapidly to change. We conducted a broad and deep examination of the scientific, academic, and professional environment of neurology in the United States to identify opportunities and threats to the success of our work.

Our leadership and staff are committed to meeting these challenges successfully, having built on 60 years of representing neurology in the United States and the following accomplishments of the past 12 months.

Science.

Our science community continues to make great strides in improving our understanding of the basic causes of neurologic disorders. This information is published in many journals throughout the year—to which you are referred—and will not be reviewed here. The AAN and its foundation are providing ever-increasing funding for clinical research training fellowships.

Education.

Despite the advances in neuroscience, only 331 (57.6%) of the 575 PGY-1 and PGY-2 neurology positions offered through the National Resident Matching Program were filled by U.S. allopathic medical school seniors. Perhaps students are threatened by tuition debt, reimbursement patterns, and the demurring nature of the specialty.

The AAN is trying to alleviate these situations both politically and with outreach programs to medical students who are interested in neurology, and courses at the annual meeting that are specifically focused on residents’ needs.

Many neurologists in the United States are addressing the requirements for Maintenance of Certification mandated by the American Board of Medical Specialties and the American Board of Psychiatry and Neurology (the branch of the ABMS that is focused on neurology).

The American Academy of Neurology offers ABPN-approved educational opportunities at its annual meeting and regional conferences, and an increasing number of online distance learning opportunities, through such tools as the NeuroSAE (Neurology Self-Assessment Examination), virtual annual meeting programs, and the publications Neurology and Continuum: Lifelong Learning in Neurology.

The AAN continues to make Continuum available to all members of the World Federation of Neurology.

Practice and Medical Economics.

Neurologists continue to contend with declining reimbursement, with more than 57% of AAN members reporting decreased compensation for cognitive services since 2000.

This has created so-called “perverse incentives” to spending time with all patients, and more particularly, with those patients with more complex neurologic problems.

One of the presumed consequences is that over the past decade, more neurologists have moved away from small and solo practices to larger groups. Increasing costs for medical liability insurance contributes to increasing practice costs. Half of the respondents to an AAN/AMA survey confirmed that in response to these increases, they are making major practice changes, including treating fewer complex cases and discontinuing certain services.

The medical community continues to look for efficiencies that contain within them a greater commitment to quality care, and hopes that electronic health records (EHR) will fill this need. In 2004, former President George Bush set a goal for 90% of U.S. physicians to be using EHRs by 2014; to date, only about a quarter of physicians do so. The AAN continues to assess different EHR platforms, and provides evaluations and additional information to its members.

More neurologists are participating in pay-for-performance and other quality initiatives, which are now required. Much work is left to be done to set up the appropriate infrastructure and measurement systems and to confirm their value.

The AAN has worked closely with its members and national organizations, such as the American Medical Association, and, as required, is drafting two measurement sets per year.

Through its committees, including the Medical Economics Committee, the Legislative Affairs Committee, and the newly established political action committee BrainPAC, the AAN continues to fight for the rights of patients to access quality neurologic care.

Continued on following page
World Sleep Day Highlights Dangers of Drowsy Driving

BY ANTONIO CULEBRA, M.D.
Sleep Research Group
Chair, WFN, and Cochair of World Sleep Day

The second annual World Sleep Day, an international event aimed at raising awareness of the burden and impact of sleep disorders, will be held on Friday, March 20, 2009. This year, the event will highlight the dangers of drowsy driving. World Sleep Day’s message, “Drive alert, arrive safe,” aims to raise awareness that the next-day effects of sleep problems, such as excessive daytime sleepiness and poor concentration, can lead to accidents. World Sleep Day is sponsored by the World Association of Sleep Medicine and endorsed by the Sleep Research Group of the WFN.

We celebrated the AAN’s 60th anniversary during last year’s annual meeting in Chicago, and we are fully engaged in planning to build on this success at our 61st annual meeting. We invite you to Seattle for our 2009 meeting, starting April 25 and running through May 2. ■

Dr. Sergio is a general neurologist practicing in Tampa, Florida, and president of the American Academy of Neurology. Dr. Desbiens is a researcher at the Hotel de l’Enfante Jesus in Quebec, Canada.

2009

9th International Conference on Alzheimer’s and Parkinson’s Diseases: Advances, Concepts, and New Challenges
March 13-15
Prague
www.kenes.com/adpq

5th World Congress of the World Institute of Pain
March 13-16
New York
www.kenes.com/wip

4th Fred J. Epstein International Symposium on New Horizons in Pediatric Neurology, Neurosurgery, and Neurofibromatosis
March 15-19
Eilat, Israel
www fredhorizons.com

24th Conference of Alzheimer’s Disease International
March 26-28
Singapore
www.adi2009.org

Calendar of International Events

World Neurology • 11

Continued from previous page

Advocacy and Health Care Reform. The U.S. health care system is clearly in need of reform. Issues for us include the increasing costs of care, increased numbers of uninsured and underinsured patients, inconsistent access to care, questionable economic incentives, and regional and individual disparities in quality of care. It remains to be seen what type of electoral mandate President Barack Obama receives to change this system.

The AAN members and staff have made significant strides in its advocacy activities. In 2008, it helped lead the way to the elimination of a 10.6% cut in physician reimbursement under Medicare, the government-defined health insurance program.

The main AAN legislative priorities for 2008 have been the following:

Permanent repeal of the sustainable growth rate (that is, the government-derived amount available for physician reimbursement).

Access to imaging services.

Care for veterans with traumatic brain injury.

Establishment of Epilepsy Centers of Excellence for the Department of Veterans Affairs.

Medical liability reform.

The Academy welcomed the reauthorization of an important children’s health insurance plan, the State Children’s Health Insurance Program, which was signed by President Barack Obama in early February. Under his tenure, the Academy also looks toward possible removal of restrictions to embryonic stem cell research and reform of the government-run Medicare health insurance program.

The AAN continues to train neurology advocates from its national and international membership. Since 2003, 180 members have received training and are addressing local, regional, and national health care issues. The AAN also continues its annual member visits to Washington, D.C.—known as Neurology on the Hill.

In 2007, the AAN’s professional association launched BrainPAC—a political action committee to support federal legislators who champion the concerns of neurologists and patients with neurologic disease.

We celebrated the AAN’s 60th anniversary during last year’s annual meeting in Chicago, and we are fully engaged in planning to build on this success at our 61st annual meeting. We invite you to Seattle for our 2009 meeting, starting April 25 and running through May 2. ■

Dr. Sergio is a general neurologist practicing in Tampa, Florida, and president of the American Academy of Neurology. Dr. Desbiens is a researcher at the Hotel de l’Enfante Jesus in Quebec, Canada.

2nd International Conference on Psychogenic Movement Disorders and Other Conversion Disorders
April 2-4
Washington, D.C.
www.movementdisorders.org/education/pmd

The Innsbruck Colloquium on Status Epilepticus 2009
April 2-4
Innsbruck, Austria
www.innsbruck-se2009.eu

61st Annual Meeting of the American Academy of Neurology
April 25-May 2
Seattle
www.aan.com

21st Annual Symposium on the Treatment of Headaches and Facial Pain
April 26
New York
www.NYHeadache.com

8th Baltic Congress of Neurology (BALCONE)
May 13-16
Vilnius, Lithuania
www.balcone2009.com

1st International Course on Pain Medicine
May 28-31
Granada, Spain
www.icpm.org

13th International Congress of Parkinson’s Disease and Movement Disorders
June 7-11
Paris
www.movementdisorders.org/congress/congress09

15th Annual Meeting of the Organization for Human Brain Mapping
June 18-22
San Francisco
www.humanbrainmapping.org/sanfrancisco2009

Association of British Neurologists
Annual Meeting
June 22-26
Liverpool, England
abn.org.uk/meetings/annual_meeting.php

14th Meeting of the WFN
Neuroonology Research Group
September 4-6
Cairns, Australia
www.uniklinikum-giessen.de/neuro
www.nrsg.org.tw

World Congress on Huntington’s Disease
September 12-15
Vancouver

13th Congress of the European Federation of Neurological Societies
September 12-15
Florence
www.efns.org/efns2009

19th World Congress of Neurology
October 24-30
Bangkok
www.wcn2009.bangkok.com

2010

March 8-12
Tucson, Ariz.
www.nanosweb.org
Immunotherapy’s Emerging Role in Alzheimer’s Disease

By Anton P. Porsteinsson, M.D. and Kelly M. Cosman

Research into the use of immunotherapy in the treatment of Alzheimer’s disease remains vibrant, despite some setbacks.

Bapineuzumab (AAB-801 / ELN115727) is a humanized N-terminal monoclonal antibody that has been developed by Eli Lon Pharmaceuticals Inc. and Wyeth and studied in phase I, II, and III clinical trials. Phase II results were announced recently, and are not without controversy. The phase II study enrolled 234 patients with mild to moderate Alzheimer’s disease (AD), who were infused with placebo or one of four dose levels of bapineuzumab (0.15, 0.5, 1.0, and 2.0 mg/kg) six times at 13-week intervals over 18 months.

Preliminary analyses of the phase II trial found no statistically significant changes on any of the primary or secondary efficacy end points. These analyses also revealed a slightly higher incidence of adverse events in patients treated with bapineuzumab (95%) than in those who received placebo (90%).

Some of the adverse events that occurred with an incidence of greater than 5% in bapineuzumab-treated patients also occurred at more than twice the rate seen in placebo-treated patients. These included back pain, anxiety, vomiting, vagogenic edema, hypertension, weight loss, paranoia, skin laceration, gait disturbance, and muscle spasm. The adverse events were reportedly transient and mild to moderate; vagogenic edema was the only seemingly dose-related adverse event.

When the phase II trial results were released, investigators emphasized results from post hoc analyses, which used a modified intent-to-treat (MITT) repeated measures model that did not assume linearity. They also were adjusted for baseline Mini-Mental State Examination (MMSE) score and stratified according to apolipoprotein E4 (apo E4) carrier status.

MITT analyses showed numerical but statistically insignificant—differences on the subscale of the AD Assessment Scale (ADAS-Cog) and Neuropsychological Test Battery (NTB) that favored the bapineuzumab group in the overall population. In apo E4 noncarriers, the analyses showed statistically significant results on the ADAS-Cog, NTB, MMSE, directional changes on the Disability Assessment of Dementia scale, and the sum of boxes on the Clinical Dementia Rating scale. All of these analyses favored bapineuzumab.

The apo E4 noncarriers also showed statistically significantly less brain volume loss and a smaller, nonsignificant increase in ventricular volume. The analyses of the apo E4 carrier subgroup, however, failed to show statistically significant differences on all efficacy end points except change in ventricular volume; apo E4 carriers taking bapineuzumab actually showed a greater increase in ventricular volume.

The primary notable safety concern resulting from the phase II trial was the occurrence of vasogenic edema (VE). VE developed in 12 patients, all of whom were taking bapineuzumab. The occurrence of VE seemed to be related to dose as well as apo E4 carrier status because 8 of the 12 patients were in the highest dose group and 10 were apo E4 carriers.

The investigators reported that VE resolved over time for all patients after discontinuing bapineuzumab. VE did not recur in six patients who were rechallenged with bapineuzumab.

Bapineuzumab has entered into phase III research. Four trials have been initiated since December 2007: two in 200 sites within the United States and Canada, and two in 150 sites in 20 countries outside the United States. Within each pair, one study will enroll 800 apo E4 carriers and the other will enroll 1,250 apo E4 noncarriers. The pairs of studies will follow the same general procedures, except that the apo E4 carrier subgroup in the experimental arm will receive only a 0.5 mg/kg dose of bapineuzumab, whereas the noncarrier treatment group will receive doses at three different levels (0.5, 1.0, or 2.0 mg/kg). Follow-up of the apo E4 genotypes separately, as well as limiting the dose of bapineuzumab for apo E4 carriers, should facilitate better vigilance over safety outcomes. Additionally, the planned separate analyses may improve the chance of detecting a meaningful effect of bapineuzumab in the apo E4 subgroups.

Clinical trials also are progressing with intravenous immunoglobulin, a purified polyclonal antibody product that has been found to block β-amyloid fibril formation or disrupt formation of fibrillar structure. Results from a phase II trial with 24 patients with mild to moderate AD have shown statistically significant improvements on cognitive and global outcome measures that favored immunoglobulin after 9 months continued treatment.

Baxter International Inc., maker of intravenous immunoglobulin, is working with the Alzheimer’s Disease Cooperative Study to do a phase III trial of this agent.

The monoclonal antibody against β-amyloid that has been under investigation by researchers affiliated with Eli Lilly & Co. has also been showing promise of advancing from phase II to phase III research. Following the results of a successful phase II trial of the antibody Lilly has announced its intention to begin a phase III trial in 2009.

Case Study: Headache and Papilledema in a Young Man

By Reena S. Shah, M.D., Robert Shin, M.D., and Laura Galcer, M.D.

A thin, 27-year-old man presented with headache, pulsatile tinnitus, and 4 weeks of transient visual obstructions. General and neurologic exams were normal, except for swelling of the optic disks and peripapillary hemorrhages. Both of the blind spots were enlarged on visual field testing.

Brain MRI revealed communicating hydrocephalus. His opening pressure was 410 mm H2O. Cerebral spinal fluid (CSF) analysis showed RBC 1.170/mcl, WBC 2/mcl, glucose 81 mg/dl, and protein 235 mg/dL. Spine MRI, including T1-weighted images of the lumbar spine, revealed a hyperintense intradural mass at S2, with enhancement on T1-weighted postgadolinium images. After gross total resection, histopathology was consistent with a myxopapillary ependymoma.

This case illustrates an unlikely finding in a young patient with headache, papilledema, and hydrocephalus: spinal ependymoma. Proposed mechanisms by which spinal tumors may cause hydrocephalus include increased CSF viscosity with decreased CSF flow and absorption; neoplastic or inflammatory arachnoiditis secondary to hemorrhage or secretion of tumor cells, fibrin, and/or transforming growth factor-β; blockage of the spinal subarachnoid space, reducing the capacity of the CSF reservoir to accommodate large CSF shifts; and compression of spinal venousplexus, increasing venous intracranial pressure.

Ependymomas are rare neorodermal tumors, occurring more often in males and in large and moderate-sized ventricles. Most patients have mild symptoms, which may delay diagnosis for years. Standard of care is surgical resection, providing a possibility for cure. Myxopapillary ependymomas are grade I ependymomas, classically thought to disseminate infrequently, though recent literature has revealed their potential for metastasis. Adjuvant radiation may increase progression-free survival. The 10-year survival of patients with lumbo-sacral ependymomas is 94%.

After resection of the tumor, our patient’s headaches and papilledema resolved. He remains recurrence-free 9 years later.
Leading resources in clinical neurology!

The official journal of the World Federation of Neurology

THE journal for the prompt publication of studies on the interface between clinical neurology and the basic sciences.
And did you know... Journal of the Neurological Sciences is your ultimate resource for the latest developments and research on Vascular Dementia, Stroke and Multiple Sclerosis!

www.elsevier.com/jns

For a complete list of neurology products, detailed information on the titles above and online access to the journal articles, visit

www.elsevier.com/clinicalneurology
Obituary: Dr. Raymond D. Adams

Dr. Raymond D. Adams was a distinguished neurologist and prolific writer whose contributions to the field of neurology have had a lasting impact. Adams was a mentor and role model for many younger neurologists, and his legacy continues to inspire generations of neurologists.

Adams was born on June 19, 1911, in Lebanon, Vermont, and attended the University of Vermont and the University of Michigan, where he received his medical degree. He then went on to complete his residency at Harvard Medical School and later became a staff neurologist at Massachusetts General Hospital.

Adams’ career was marked by his dedication to academic medicine and his contributions to the field of neurology. He was a member of the Rockefeller Foundation’s first fellowship program and spent several years at the Institute of Pathology in Cambridge, Massachusetts, where he worked with some of the great minds of his time, including Gordon Holmes, Guillaume Duchenne, and Sir Charles Symonds.

Adams was known for his clear and concise writing style, and his books on neurology were widely read and influential. His most famous work, “Fundamentals of Neurology,” was first published in 1943 and went on to become a classic text in the field.

Adams was also known for his dedication to clinical care. He was a fatherly mentor to his residents and was known for his patience and kindness. He was a kind and compassionate physician who was deeply respected by his patients and colleagues.

Adams passed away on July 25, 1999, at the age of 88. He is survived by his wife, Dr. Maria Salam-Adams, and his children, John and Margaret. His legacy continues to inspire neurologists around the world.

In memory of Dr. Raymond D. Adams, we remember a true giant in the field of neurology, whose contributions will continue to shape the future of the field for generations to come.
Trustee Profile: Johan A. Aarli

BY JOHAN A. AARLI, M.D.

A t the Council of Delegates meeting held in 2005 in Sydney, I was elected President of the World Federation of Neurology. As First Vice President, I had been the WFN liaison officer to the World Health Organization. There, I expanded my appreciation of the importance of public health in neurology. I also gained an appreciation for the importance of and worked for the greatest honor to work in a team that promotes neurology in developing countries, particularly in Africa, and I have the great honor to work in a team that realizes the importance of and works for the ‘Africa initiative.’

My career in neurology began in the 1960s, a period marked by dramatic changes in treatment procedures. Before that time, neurology was a discipline with a reputation for advanced clinical diagnosis but no therapeutic possibilities. Ours was the first generation of neurologists who experienced the awakening effects of L-dopa in Parkinson’s disease. New antiepileptic drugs were introduced, and freedom from pain in trigeminal neuralgia could be obtained without dramatic neurosurgical intervention. I became a certified specialist in neurology in 1968.

This also was an era when immunology entered neurology. Neither thymectomy nor steroid treatment was a generally accepted therapeutic modality in myasthenia gravis. I defended my PhD thesis in 1972, demonstrating antibodies to an extractable striated muscle antigen. At that time, antibodies to acetylcholine receptor had hardly been demonstrated in human disease. I did research on experimental myasthenia gravis with Edith Heilbronn at the National Research Institute of Sweden in Stockholm and, during a sabbatical at Dr. Barry Arnason’s department at the University of Chicago, I showed that titin is the striatal muscle antigen to which most patients with thymoma and myasthenia gravis have antibodies.

For a neurologist with an interest in immunology, it was impossible not to become fascinated by the pathogenesis of multiple sclerosis. In 1973, I worked at Leeds (England) University with Prof. Charles Lumsden, the leading multiple sclerosis pathologist at that time. He believed multiple sclerosis was an autoimmune disorder related to the presence of antibodies to myelin. Together with the electron microscopist Samuel Aparicio, we showed that what were believed to be antibodies to myelin protein as demonstrated by immunofluorescence was in actuality nonspecific binding by the Fc part of the immunoglobulin G molecule.

The World Congress of Immunology was held in Brighton in 1973 and had two workshops of interest for neurologists: One was on myasthenia gravis, and the other was on immunologic aspects of neurologic disorders. We were a group of young men who met in Brighton: Barry Arnason, Oded Abramsky, Dale McFarlin (deceased), and Robert P Lisak. We have since remained close friends.

In 1977, I became professor of neurology and head of the department of neurology at the University of Bergen (Norway) Hospital, where I remained until retiring in 2006. During that time, I had the great opportunity to gather young, hard-working neurologists with special competence in a variety of sectors of neurology. Together, we established a spinal unit, a regional epilepsy center, an amyotrophic lateral sclerosis clinic, a stroke unit, a national multiple sclerosis center and registry, a myasthenia gravis competence center, and a neuroimmunology research center. Our department was a central feature of the university hospital. In 1996, I was knighted by King Harald V to Knight, First Class, of Saint Olav’s Order.

I was vice dean of the faculty of medicine at the University of Bergen from 1982 to 1984, dean from 1985 to 1987, and chair of the Board of University Research Bergen UNIFOB from 1989 to 1993.

I also was chairman of the Norwegian Neurological Association from 1984 to 1988 and am now an honorary member.

I am also an honorary corresponding member of the American Academy of Neurology, as well as honorary foreign member of the Association of British Neurologists and of the French Society of Neurology.

The European Federation of Neurological Societies (EFNS) was founded in 1991 by Frantz Gerstenbrand. Its growth almost explosive, and this time was a fascinating period for European neurologists. As the Norwegian delegate, I was elected chair of the liaison committee from 1991 to 1995. Thereafter, I had the great honor to be the chair of the Teaching Course Committee for three periods, from 1997 to 2003, followed by 2 years as the Secretary-General of EFNS.

I became the Norwegian delegate to WFN in 1991, and in 1993, John Walton invited me to chair the WFN Public Relations Committee. Under the administrations of James Toole and Jun Kimura, I was responsible for contact with World Health Organization.

My wife Gullborg and I were married in 1962, and we have 5 children and 14 grandchildren. Two sons and one son-in-law are physicians. When we are not traveling, Gullborg and I love to stay at the family summer home, a farm in the unspoiled mountains of southern Norway. My favorite interests include history and literature, and I am an active founding member of the Norwegian Neuroliterary Club and of the Norwegian Thomas Mann Academy.

Dr. Aarli’s groundbreaking research explored the role of immunology in neurologic disorders.
Welcome to the

19th World Congress of Neurology

24 - 30 October 2009
Bangkok, Thailand

“Innovation in Neurology”

Deadline for abstract submission is 29 April 2009

More information regarding abstract submission and guidelines on the website: www.wcn2009bangkok.com