

# WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

## Neurology, Environment and World Brain Day

BY WOLFGANG GRISOLD, MOHAMMAD WASAY,  
AND JACQUES REIS



Jacques Reis, along with Serfnur Ozturk from the Turkish Neurologic Society, during World Brain Day 2018.

The World Brain Day (WBD) was established to commemorate the foundation of the WFN, at the WCN 2013, in Vienna. The idea is to gather all member societies for a yearly event, to promote the interest of neurology.

Several topics such as stroke, dementia, and epilepsy were used in previous WBDs in cooperation with other societies.

After WBDs with topics involving epilepsy and stroke, this year's topic was the environment. The title "Clean Air for a Healthy Brain" was chosen to signify that air pollution is a major problem relating to brain health. So far, we are aware of stroke and pollution, and there is substantial evidence that worldwide many more persons are compromised by the effects of pollution.

This WBD has brought the important message to all policy- and decision-makers around the world: Take care of our

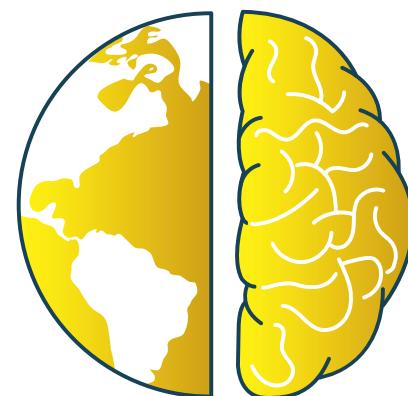
environment, notably air quality; healthy air is mandatory for our brain's health!

The second message is for neurologists: The tremendous impact of environmental factors in the pathogenicity of many neurological diseases should not be neglected.

Presently, neurologists are not trained to manage such environmental issues. Prevention and mitigation of these environmental consequences will be important.

An important issue is prevention. For example, indoor air quality issues, such as "home fire" for cooking is still prevalent in many countries, due to lack of resources.

The great lesson, which comes from the stroke Global Burden of Disease study, shows that prevention is no longer only a personal concern but a societal challenge. Neurologists must act and advocate for a better environment.



Yet environment for many neurologists is still not as tangible as conventional neurological problems such as symptoms and diseases, and for some societies these seemed a remote topic and of less evidence than we are usually trained to think of. This may be wrong, as evidence shows that environmental factors are increasingly important for the generation of a number of diseases, including in neurology. An example is the Turkish Neurological Society, which has brought

see **WORLD BRAIN DAY**, page 2

## World Brain Day in Albania

BY JERA KRUIJA

Albania, acknowledging the importance of air pollution as a risk factor for neurological disorders, organized a special event during World Brain Day. The conference was titled "Dita Botërore e Trurit: Ajër i Pastër për

Tru të Shëndetshëm," ("Clean air for brain health).

Prof. Dr. Jera Kruja, head of the neurology service at the University Hospital Center "Mother Teresa," advocated with the faculty of medicine at the University of Medicine, Tirana, and the Albanian Institute of Public Health to

join efforts toward raising awareness on air pollution and its deleterious effects exerted on the brain. As a result, all three institutions participated actively in organizing and disseminating the information to health professionals and general public.

Besides Prof. Dr. Jera Kruja, speakers included Prof. Dr. Enver Roshi, head of the department of public health (faculty

see **WBD ALBANIA** page 2



## INSIDE

### FEATURES

#### TOWARD A MORE MEANINGFUL WHO/WFN RELATIONSHIP

The WFN and WHO share a number of common features and have had useful collaborations in the recent past.

PAGE 3

#### BRAIN DISEASE FROM BENCH TO BEDSIDE

The meeting focused on the recent developments in translational research and treatment innovations in cerebrovascular diseases, epilepsy, cognitive impairment and dementia, depression, demyelinating diseases, and others.

PAGE 9

#### PALLIATIVE CARE IN NEUROLOGY

There is increasing awareness of the role of palliative care for neurological patients, and this has been emphasized at two recent conferences.

PAGE 10



# WORLD BRAIN DAY 2018

آلودگی کے باعث ڈھائی کروڑ پاکستانی دماغی امراض کا شکار ہیں، ڈاکٹر واسع شاکر

کراچی | اسٹاف رپورٹ | July 20, 2018, 1:58 AM



کراچی: نیورولوجی ایسوسی ایشن ریسرچ فاؤنڈیشن کے ڈاکٹر واسع شاکر پریس کانفرنس کر رہے ہیں

کراچی (اسٹاف رپورٹ) پاکستان میں اس وقت فضائی آلودگی کی وجہ سے ڈھائی کروڑ افراد ذہنی امراض کا شکار ہیں اور اقوام متحدہ کے ادارے ورلڈ ہیلتھ آرگنائزیشن کے مطابق پاکستان کے 3 بڑے شہر کراچی، راولپنڈی اور پشاور دنیا کے آلودہ ترین شہروں میں شمار کیے جاتے ہیں۔ ان خیالات کا اظہار معروف نیورولوجسٹ و نیورولوجی ایسوسی ایشن ریسرچ فاؤنڈیشن (راف) کے صدر ڈاکٹر واسع شاکر نے 22 جولائی کو منانے والے عالمی یوم دماغ کے حوالے سے کراچی پریس کلب میں منعقدہ پریس کانفرنس سے خطاب کرتے ہوئے کیا۔ اس موقع پر نیورولوجی ایسوسی ایشن ریسرچ فاؤنڈیشن کے سیکرٹری ڈاکٹر محمد مالک نے بھی خطاب کیا۔ ڈاکٹر واسع شاکر نے مزید کہا کہ اس وقت دنیا بھر میں ترقی پزیر ممالک میں فضائی آلودگی کی وجہ سے دماغی امراض میں مسلسل اضافہ ہو رہا ہے، اس لیے اس سال ورلڈ ہیلتھ ایسوسی ایشن آف نیورولوجی نے عالمی یوم دماغ کو (صاف ہوا) سے منسوب کیا ہے تاکہ دنیا میں تیزی سے بڑھتی ہوئی فضائی آلودگی کے خلاف شعور بیدار کیا جاسکے۔ اس وقت دنیا میں ہر سال طویلین افراد فضائی آلودگی کی وجہ سے امراض میں مبتلا ہو کر موت کا شکار ہو رہے ہیں۔ انہوں نے کہا کہ دنیا بھر میں بہت تیزی کے ساتھ فضائی آلودگی میں اضافہ ہو رہا ہے اگر اس صورتحال کا بروقت تدارک نہیں کیا گیا تو آنے والے دنوں میں دماغی امراض اور اموات کی شرح میں مزید اضافہ ہونے کے امکانات ہیں۔ انہوں نے حکام کو سطح پر فضائی آلودگی کو روکنے کے لیے فاعل خواہ اقدامات کی ضرورت ہے تاکہ آئندہ آنے



وٹ لگائیں ۽ انہیں جو خیال کریں  
فیکٹرین کی رہائشی علاقوں کان پری کریں۔  
سج جی روشنی، پانی ۽ ہوا سان بجلی جی پیداوار  
کریں۔  
عوامی سفری سہولت کی بہتر بنائیں جیٹن مائٹھون گھٹ  
ہر گھٹ پنہنجون گاڈیوں استعمال کن۔  
فصلن جی باقیات کی ساڑھن کی سخت منع کریں۔  
روڈ رستن تی کچرو ۽ ٹائر ساڑھن جی مکمل پابندی  
کریں۔



## WORLD BRAIN DAY

continued from page 1

the debate to the societal level.

It has been the privilege of the WFN Applied Research Group on the environment to promote their topic, by yearly meetings, publications, and this year their effort was recognized as the topic of the WBD.

The World Brain Day team consisted of Jacques Reis, M. Wasay, Walter Struhal, and Wolfgang Grisold, with great help from Jade Levy and Laura Druce at the WFN offices in London, and we used press and promotional advice from Birgit Kofler.

This year the American Academy of Neurology (AAN) actively participated, which is a significant acknowledgement of the WBD activities, and also a sign of fruitful cooperation! We thank the AAN for their involvement.

In the past years, we have aimed to make virtual press conferences. Last year, we had a webinar to receive statements on the topic. This year, we collected a number of videos from specialists worldwide on the topic, and we hope that these interviews will be a source of ongoing information on environment and neurology.

The best immediate results of WBD are press and media echoes, as well as reports from our members on their celebration of WBD. All of this material will be collected, and will be subsequently displayed on the website to give an overall impression of this year's WBD.

Please use our material, report on your WBD, and join us again for the next World Brain Day in 2019. The theme for 2019 World Brain Day is related to headache disorders.

**RISE and the ENRG** are pleased to invite you to the third meeting dedicated to the environmental impact on brain, which will be held in Strasbourg, Council of Europe Nov. 28-30, 2018. Visit [asso-rise.com](http://asso-rise.com) for more information. •

## WBD ALBANIA

continued from page 1

of medicine at the University of Medicine), Elida Mataj, MD, PhD, head of the environmental epidemiology and air quality department (Institute of Public Health), Aida Quka, MD, neurologist, Neurology Service (University Hospital Center "Mother Teresa").

The event, organized at the faculty of medicine, was attended by health professionals and the general public, which recognized the importance of air pollution and its consequences highlighting the seriousness, gravity, and urgency of public health preventive interventions tackling environmental pollution in general and air pollution in particular.

Moreover, the topic relevance and the speakers' excellence were appraised from the National Center of Continuous Medical Education by accrediting the event with two CME credits. Additionally, special acknowledgment was attained from the Albanian representatives of the European Industrially



Contaminated Sites and Health Network.

Furthermore, the conference was reported by national television and press, and special interviews were given by the speakers addressing the general public in an effort to raise awareness on air pollution. •

Jera Kruja, MD, is a professor of neurology and head of the neurology service at the University of Medicine, Tirana, UHC Mother Teresa, Tirana, Albania, a member of the WFN Teaching Courses Committee, a former member of the European Academy of Neurology Scientific Committee, and *Lancet* commissioner for LMIC.

PRESIDENT'S COLUMN

# Toward a More Meaningful WHO/WFN Relationship

BY WILLIAM CARROLL  
WFN PRESIDENT

The WFN and WHO share a number of common features and have had useful collaborations in the recent past. Both organizations have a global perspective with regional organizations, parallel mission and goals, and the development of the Atlas of Neurology and the neurology section of the 11<sup>th</sup> revision of the International Classification of Disease (ICD11) to its present stage. In addition, the WHO and WFN have collaborated during the Zika virus Public Health Emergency of International Concern of 2016, and the recognition of stroke as a disease of the brain and dementia and on other degenerative neurological disorders being included in the WHO non-communicable disease (NCD) initiative. The two organizations diverge only in the magnitude of the tasks confronting them.

The WFN mission is to foster quality neurology and brain health worldwide; the WHO to improve equity in health, reduce health risks, promote healthy lifestyles and settings, and respond to the underlying determinants of health. Arguably, the two organizations are a natural fit with the potential for beneficial cooperative activity. Both have regional organizations of similar geographic distribution pursuing the same goals as above. For the WHO, member states are grouped into six regions: African, the Americas, South-East Asian, European, Eastern Mediterranean, and Western Pacific. WFN member societies are in five regions; the American (represented by the American Academy of Neurology and the Canadian Neurological Society) and the Pan American Federation of Neurological Societies, representing Central and South American members, the European region comprising the European Academy of Neurology, the



WILLIAM CARROLL, MD

## DRAFT AGENDA

### 1300-1305

Introduction and welcome to delegates by the President, Dr. William Carroll (BC)

### 1305-1320

Roll call and proxies Dr. Wolfgang Grisold (SG)

### 1320-1325

Minutes of the COD Meeting in Kyoto 2017 (BC)

### 1325-1345

Presentation of the WCN 2023 intending candidate venues (5 minutes each)

a. Canada, Montreal  
b. Mexico  
c. Brazil

### 1345-1355

Receipt of Annual Report 2017  
President's report (WHO, GNA, Brief Dubai, Needs Registry)

### 1355-1405

First Vice President's report (RK)  
WCN 2019 progress report

### 1405-1415

Secretary General's report (WG)  
London Office Overview

### 1415-1425

Treasurer's report (RST)  
Receipt of the accounts of the Federation for the financial year Dec. 31, 2017.  
Appointment of auditor.

### 1425-1450

Election: Candidate statements (5 minutes each)

### Secretary General

Wolfgang Grisold

### Elected Trustee

Morris Freedman  
Alla Guekht  
Jean-Marc Leger  
Daniel Truong

### 1450-1515

Election: Voting

### Secretary General

Wolfgang Grisold

### Trustee

First round voting  
Second round voting

### 1515-1525

Education Committee Report (SL)  
Continuum Training Centres/ Teaching courses World Neurology

### 1525-1535

Membership Committee Report (MF)

### 1535-1545

Public Awareness and Advocacy Committee (WBD MW)

### 1545-1555

Publications Committee (Journals JE)

### 1555-1605

E-Communications Committee (WS)

### 1605-1615

Africa Education Report (RG)

### 1615-1620

AOB

### 1620-1625

Announcement of all voting results

Close

## Draft agenda for the upcoming WFN council of delegates meeting in Berlin Tuesday, Oct. 9, 2018.

Middle East and North African region represented by the Pan Arab Union of Neurological Societies, the African region represented by the newly formed African Academy of Neurology, and the Asia Pacific region represented by the Asian and Oceanian Association of Neurology.

The WHO is the lead organization for all matters in health. Its constituency is the national health organizations representing national governments in most instances.

The WHO does interact with many non-governmental organizations termed "non state actors" but it recognizes only one type of formal relationship known as "official relations." Other informal contact includes "working relations" which have their own set of criteria. Official relations are usually between the WHO and global organizations which share common goals as does the WFN. Further, "official relations" is conferred by the WHO for a specified period and for designated topics. The WFN has greatly appreciated having "official relations" status for its partnership in the Atlas of Neurology and with the topic advisory neurology group for ICD-11 extended to 2019. It is the seemingly arbitrary nature of this collaborative

effort and that the WHO does not have the same ready access to medical specialties and their global, regional, and national organizations as does the WFN for neurology and others such as the World Heart Foundation, the International Union of Immunological Societies and the International Society of Nephrology, that the WFN believes could be reviewed and probably optimized.

In the neurological sphere, it became apparent some years ago that there might be benefit in a closer alignment between two existing groups of "neurological" organizations. One roughly represented those with more specialty-focused neurological interests such as stroke (World Stroke Organization), epilepsy (International League Against Epilepsy), dementia (Alzheimers Disease International) movement disorders (International Parkinson and Movement Disorder Society) and multiple sclerosis (Multiple Sclerosis International Federation). The other included those with neurologically related interests such as the World Federation of Neurosurgical Societies, the World Federation of Neurorehabilitation, the World Psychiatry Association, the International Child

Neurology Association and the International Brain Research Organization.

During recent in-depth discussions with the WHO over ICD11 and the classification of stroke, these two groupings worked more closely than previously to the benefit of the WHO, the WFN, and members of these two groups. Emerging from this experience was a sentiment that had first been expressed during the meeting of representatives attending the WCN 2015 in Santiago; that a more formal unified structure interacting more regularly to share information, acting concertedly and advocating more cohesively could be mutually beneficial. This organization, at present in formal development, would be known as the Global Neurological Alliance (GNA).

It should bolster many areas to do with brain health not least by providing ready access to neurological specialties and speciality perspectives. In effect, it adds a valuable third dimension for the promotion of brain health by the WFN and GNA. Recognizing the role the WFN will play as the communication hub for this new alliance, the trustees have

see PRESIDENT, page 11

## FROM THE EDITORS

BY STEVEN L. LEWIS, MD, EDITOR,  
AND WALTER STRUHAL, MD, CO-EDITOR

We'd like to welcome neurologists worldwide to the August 2018 issue of World Neurology. In this issue, Drs. Mohammed Wasay and Wolfgang Grisold report on the activities that surrounded World Brain Day 2018 from around the globe, with an additional report by Jera Kruja about the activities in Albania. Dr. Grisold also reports on the highly successful meeting of the International Congress of Neuromuscular Disease that was recently held in Vienna; Dr. Grisold and Javier Cardenas update

us on the Palatucci Advocacy Workshops from the American Academy of Neurology in 2018. Reporting on another international meeting, Dr. Peter Sandercock provides a report on Brain Diseases – From Bench to Bedside that was recently held in Moscow.

In the President's Column, Dr. William Carroll describes the parallels and the relationship between WHO and WFN and updates us on purpose and aims of the Global Neurology Network. Dr. David Oliver informs and updates us on the important topic of palliative care in neurology, and in this issue's well-illustrated history column, Dr. Peter Koehler

describes the neurological aspects of the work of the Dutch physician and anatomist Frederik Ruysch.

Education is an important aspect of the WFN and the joint AAN/WFN Continuum program is an excellent example of collaboration to promote worldwide neurology education. In this issue, Dr. Aaron Berkowitz reports on the recent introduction of Continuum to the trainees in Haiti. Finally, this issue includes two reports from recent recipients of WFN Junior Traveling Fellowships to attend June's EAN Congress that was held in Lisbon, Portugal.

We hope you all enjoy the many and



STEVEN L. LEWIS, MD



WALTER STRUHAL, MD

varied contributions in this issue, and we continue to look forward to receiving contributions from and about neurologists around the globe for publication in World Neurology. •



**WORLD FEDERATION OF NEUROLOGY**

**Editors-in-Chief**  
Steven L. Lewis (Editor)  
Walter Struhal (Co-editor)

**WFN London Office**  
Chester House  
Fulham Green  
81-83 Fulham High Street  
London SW6 3JA

United Kingdom  
Tel.: +44 (0)20 3542 1657/1658  
Fax: +44 (0)20 3 542 1301  
[info@wfneurology.org](mailto:info@wfneurology.org)

**WFN OFFICERS**

**President** William Carroll (Australia)  
**First Vice President** Ryuji Kaji (Japan)  
**Secretary General** Wolfgang Grisold (Austria)  
**Treasurer** Richard Stark (Australia)

**ELECTED TRUSTEES**

Morris Freedman (Canada)  
Riadh Gouider (Tunisia)  
Steven L. Lewis (USA)

**CO-OPTED TRUSTEES**

Jean-Marc Léger, MD (France)

**REGIONAL DIRECTORS**

Saeed Bohlega (Pan-Arab)  
Ralph Sacco (North America)  
Günther Deuschl (Europe)  
Marco Tulio Medina (Latin America)  
Man Mohan Mehndiratta (Asian-Oceania)  
Mansour Ndiaye (Pan-Africa)

**EDITOR OF THE JOURNAL**

**OF THE NEUROLOGICAL SCIENCES**  
John England (USA)



**WORLD NEUROLOGY**, an official publication of the World Federation of Neurology, provides reports from the leadership of the WFN, its member societies, neurologists around the globe and news from the cutting-edge of clinical neurology. Content for *World Neurology* is provided by the World Federation of Neurology and Ascend Integrated Media.

**Disclaimer:** Articles in *World Neurology* represent the authors' personal views and do not necessarily represent the opinions of the editors, trustees, or leadership of the World Federation of Neurology or the publisher. The World Federation of Neurology and Ascend Media 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 products, drugs or services.

**Editorial Correspondence:** Send editorial correspondence to *World Neurology*, Dr. Lewis at [Steven.L.Lewis@vhn.org](mailto:Steven.L.Lewis@vhn.org) or Dr. Struhal at [walter.struhal@akh.linz.at](mailto:walter.struhal@akh.linz.at).

*World Neurology*, ISSN: 0899-9465, is published bimonthly by Ascend Integrated Media  
7171 W. 95th Street, Suite 300  
Overland Park, KS 66212  
Phone +1-913-344-1300  
Fax: +1-913-344-1497

©2018 World Federation of Neurology



**PUBLISHING PARTNER**

Ascend Integrated Media

**President and CEO**  
Barbara Kay

**Vice President of Content**  
Rhonda Wickham

**Vice President of eMedia**  
Scott Rarden

**Vice President of Sales**  
Donna Sanford

**Project Manager**  
Amanda Nevala

**Art Director**  
Brianna Vaughn

**Editorial Offices**

7171 W. 95th Street, Suite 300  
Overland Park, KS 66212  
+1-913-469-1110

**HISTORY**



Figure 1. Anatomical lecture of Frederik Ruysch by Adriaen Backer (1670; courtesy Amsterdam Museum).

# Neurological Aspects in the Work of Frederik Ruysch

BY PETER J. KOEHLER

In the first chapter of *Peau de chagrin* (1831), one of the novels in the *Comédie Humaine* series by French writer Honoré de Balzac, it is written “Là dormait un enfant en cire, sauvé du cabinet de Ruysch, et cette ravissante créature lui rappelait les joies de son jeune âge.” [There, a child in wax slept, saved from the cabinet of Ruysch, and that splendid creature reminded him of the joys of his youth; p.36].

Apparently, 100 years after the death of Dutch physician and anatomist Frederik Ruysch (1638-1731), his work was still known in non-medical circles in Paris. Moreover, almost 1,000 of his anatomical preparations are still displayed at the Kunstkamera Museum in St. Petersburg.



Figure 2. Rembrandt's Anatomical Lesson of Dr. Deijman (1656); Deijman is working on the brain of the cadaver; his head and several other persons on the original painting were lost by a fire (1723). Courtesy Hermitage, Amsterdam.

## Ruysch's Life

Following his examination to become an apothecary, Frederik Ruysch studied medicine in Leiden. (See Figure 1.) At age 28, he became *praelector anatomiae* of the Amsterdam surgery guild, succeeding Johannes Deijman, whose name was immortalized in Rembrandt's “Anatomical Lesson of Dr. Deijman” (1656, Figure 2). Ruysch kept the position for over 60 years. He developed a successful method to embalm corpses, probably based on alcohol. Child bodies seemed like sleeping children. (See Figure 3.) His collection (“cabinet”) of anatomical (and other) preparations became a real touristic Amsterdam attraction.

In 1717, he sold the collection to tsar Peter the Great of Russia for the amount of 30,000 guilders. He preferred to teach with his preparations rather than with recently deceased corpses. As an empirical physician, his device was “come and see.” Next to anatomy and teaching, Ruysch examined midwives and was appointed professor of botany. In this position, he taught at the city's botanical garden, which had been founded in 1638.

## Ruysch as (Neuro)Anatomist

Today, Ruysch's *Opera Omnia* are available online, but unfortunately only in Latin and Dutch. (See Figure 4.) These contain the descriptions of the anatomical preparations including the figures. Furthermore, we find his correspondence with other scholars on anatomical subjects. These include the German anatomist Abraham Vater (1684-1751), the physician Michael Etmüller (1644-1683), and Andreas Goelicke (1670-1744), who spent



Figure 3. Picture of a child's head taken from above. (Courtesy, Kunstkamera, St. Petersburg, Frederik Ruysch's Collection 4070 – 176).

some time in Leiden and Amsterdam. Ruysch improved his method to prepare anatomical specimens in the 1690s by adding vascular injections with fluid wax. Preparations could now be conserved in *liquor balsamicus* for longer periods. Moreover, this technique also allowed him to study the blood vessels. Herewith, he was able to refute the theory of the Italian physician Marcello Malpighi (1628-1694) who believed the cerebral cortex consisted of glands. After all, by his method, Ruysch was able to show that the cortex consisted largely of small blood vessels. However, his findings were not accepted by everyone. He wrote:

*Marcellus Malpighius*, in the treatise on the bark of the brain, writes that this consists of an abundance of very small glands that spring in the twisting wrinkles; and apparently pressed against each other, constitute the external surface of the brain. After I filled the blood vessels with such a great accuracy that the smallest

see RUYSCH, page 5

**RUYSCH**

*continued from page 4*

branches were filled and appeared like down, we may clearly see that the bark-like substance of the brain consists merely of joined blood vessels (Ruysch, 1744, p.350)

One of the figures in the *Opera Omnia* (Tablet 10, Figure 5) “shows the head of a young man that has been kept for several years already as if it was alive” and shows a “small tube put between the arachnoid and pia mater so that these will yield by wind blown between.” Another figure shows the lifted arachnoid. Another interesting figure depicted in his *Opera Omnia* is that of “the brain taken from the skull of an approximately 10-year-old boy, to which is added the course of the arteries spread out through the pia mater, as well as the emerging nerves from the medulla oblongata.” (See Figure 6.) Ruysch and his contemporaries distinguished 10 cranial nerves. “Our” 7<sup>th</sup> and 8<sup>th</sup> were considered one pair. Only at the end of the 18<sup>th</sup> century, German physician Thomas von Sömmering (1755-1830) described 12 cranial nerves.

**Ruysch as Physician**

In this period, many physicians published case reports, and so did Ruysch. Usu-

ally, disorders of the whole body were discussed *a capite ad calcem* [from head to feet]. In his *Hundred anatomical and surgical comments*, several are of neurological interest. Case 34 describes a “child with a spine split in two” as well as a “lumbar growth” (Spina bifida; Figure 7). The child also suffered from hydrocephalus.

“When we have examined this growth meticulously, we will see clearly that this is a dropsy of a part of the spinal cord and that this is the same ailment as which is called hydrocephalus in the head of an infant.” Ruysch was aware of the grave prognosis. “With respect to the treatment of this ailment, it can hardly or never be dispelled. As none of the children that I have seen, survived.”

Referring to his Amsterdam colleague Nicolaas Tulp (1593-1674; of Rembrandt’s “Anatomical lesson of Dr. Tulp”) he warned not to open the cyst “as we experienced, when it is opened or burst, that death was precipitated.”

**“A Headache that Stroke Root”**

Another case describes the 18-year-old daughter of a merchant who suffered from headaches that did not react to the usual treatments. “Laxatives, bloodletting alternating from the feet and other locations, Spanish flies [used in the past for blistering, nowadays as aphrodisiacum],

sniffing, cupping, etc. At last, she permitted an incision crosswise on the skull ... as proposed by us, upon which a considerable amount of blood was lost, but with the slightest relief.” Ruysch now intended to perforate the skull with a small drill,” but beforehand tried a seton on the skin of the neck.

“Soon after the start of this treatment, the pains disappeared.” After a few days, she removed the seton, after which the headache recurred, but after the installment of a new seton, “the pains that tormented her stopped immediately and being more prudent than the first time, she kept it until nature expelled the seton.” Following a third seton, the headache did not recur at all, and she “started to live cheerfully and merrily and she remained in this condition up to the present.”

Apparently, the case report had impressed Gerard van Swieten (1700-1772), who published it in his own *Commentaries on the Aphorisms of Boerhaave* (his Leiden teacher). This practice was not unusual in those days.

In 1715, Ruysch became fellow of the prestigious Royal Society and continued to teach anatomy up to the age of 85. He received letters, of which he was only able to answer a quarter. He received famous foreign physicians, including his former

pupil, the Danish-born French anatomist Jakob Winslow (1669-1750), who had become a member of the Académie de Sciences in Paris. He referred to Ruysch as “plus grand pionnier parmi les anatomistes de ce siècle” [the greatest pioneer among the anatomists of the century].

Another visitor was the French surgeon Guillaume Desnoues (1650-1735) well-known by his wax anatomy model) who, in the guest book of Ruysch’s cabinet, wrote, “qu’il a surpassé les autres anatomistes dans les injections des vesseaux” [that he had surpassed other anatomists by injections into blood vessels].

Ruysch died at age 93 in 1731. His daughter Rachel became a well-known painter of flower still lifes, many of which are displayed at the Rijksmuseum in Amsterdam (See Figure 8.) •

**Literature**

Koehler PJ, Boes CJ. A history of non-drug treatment in headache, particularly migraine. *Brain* 2010;133:2489-500.

Kooijmans L. De doodskunstenaar. De anatomische lessen van Frederik Ruysch. Houten, NTVG/Bohn Stafleu Van Loghum, 2004.

Ruysch W. Alle de ontleed- genes- en heekkundige werken. Amsterdam, Janssoons van Waesberge, 1744.



Figure 4. Frontispice of Ruysch's *Opera Omnia* (1721).

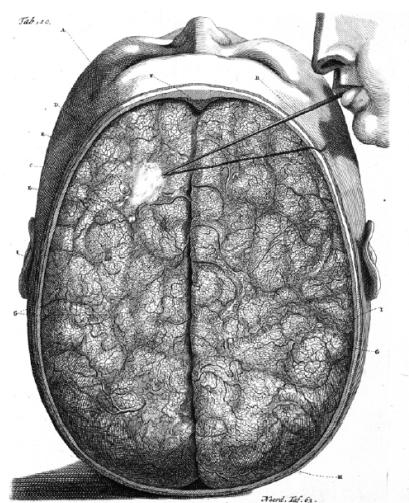


Figure 5. Brain preparation (air is blown between the pia mater and arachnoid).

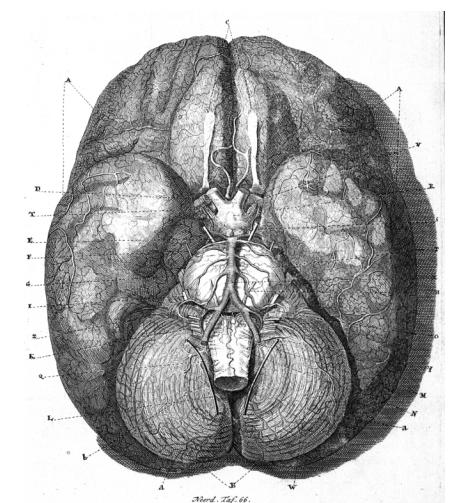


Figure 6. Brain preparation with arteries and 10 cranial nerves.

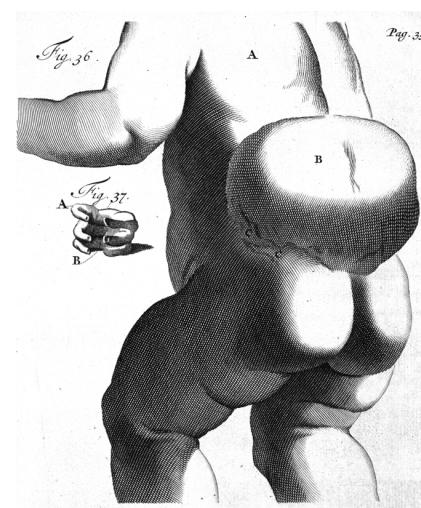


Figure 7. Spina bifida and split spine.



Figure 8. One of Rachel Ruysch's flower still lifes (courtesy Rijksmuseum, Amsterdam).

# ICNMD 2018 Update

BY WOLFGANG GRISOLD, MD

The 15<sup>th</sup> International Congress on Neuromuscular Diseases (ICNMD 2018) took place July 6-10 in Vienna, Austria. The congress was organized on behalf of the Applied Research Group on Neuromuscular Disorders of the World Federation of Neurology.

The venue for ICNMD 2018 was Austria's largest conference hotel, the Hilton Vienna Am Stadtpark. Combining the magnificent location in the heart of the city with great amenities and services, the Hilton Vienna provided the perfect location for the meeting.

For the first time, a conjoint meeting was organized with the European Federation of Autonomic Societies (EFAS). Joint sessions were organized with the Peripheral Nerve Society (PNS) and the European Neuromuscular Centre (ENMC).

The congress was attended by over 1,450 delegates from 69 countries, which made it a truly international event. This great participation showed that there is a continuous need for neuromuscular research and treatment worldwide.

The meeting was preceded by a day of teaching courses. For the first time, a hands-on teaching course in cooperation with the Anatomical Institute of the City of Vienna was organized by Prof. Meng. Only a small group of participants were able to participate in this course and experience ultrasound on anatomic specimens, which were also demonstrated in detail later in the course. Participants received a botulinum toxin introduction, which was presented by Prof. Truong.

## Scientific Program Development

For the scientific program development, the online blogging tool "Basecamp" was used. The blog contained a headquarter channel, and each topic channel and its content access was limited to ICNMD committee members and organizers. The general congress information and program development announcements were delivered by the organizers via the headquarter channel, and the program ideas were shared by committee members, each via topic channels that they specialize in. This sharing blogging system gave the whole committee an interactive program development process, which was highly appreciated by the individual members.

## Public Patient Day

For the first time, ICNMD also hosted a Public Patient Day (held in German only). More than 70 people participated in the Public Patient Day raising questions on neuropathy, muscle disease, and myasthenia among others.

## Opening Ceremony

The ICNMD 2018 Opening Ceremony represented the Austrian as well as the Viennese culture. Classical music by Franz Schubert and typical Carinthian folklore built the musical framework for the official opening of ICNMD 2018.

Prof. Wolfgang Grisold, ICNMD 2018 Congress president and Master of Ceremony, had the honor of welcoming Mag. Beate Hartinger-Klein, the Austrian Minister of Health, Prof. John England (ICNMD) and Prof. Walter Struhal (EFAS 2018 president).

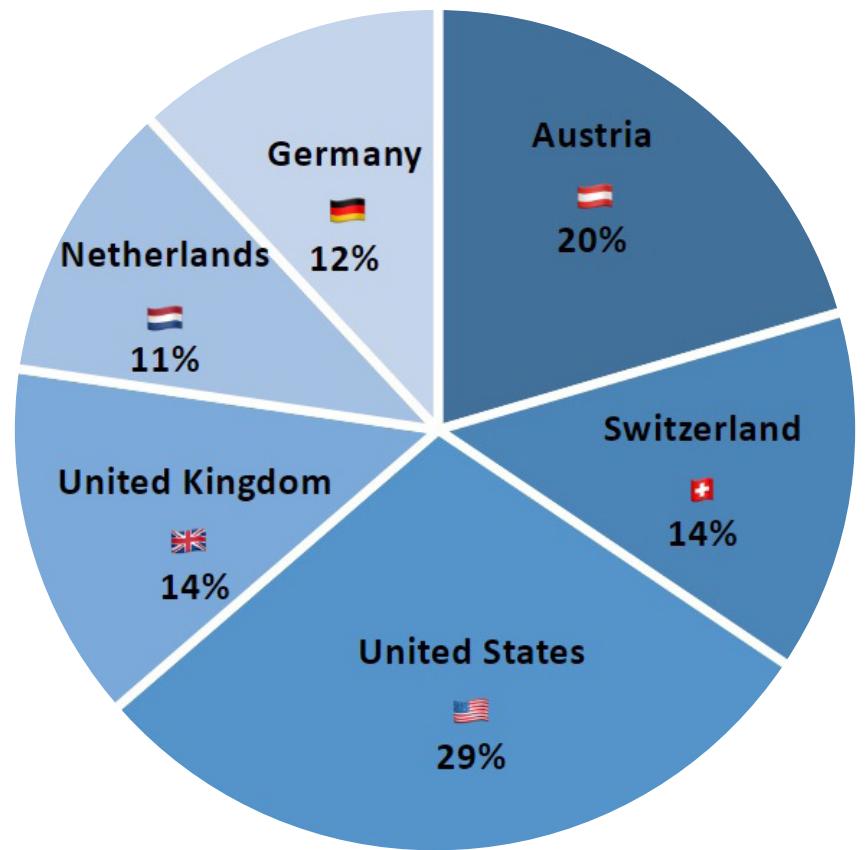
Furthermore, the ICNMD - WFN Fellow Program Winner, Dr. Laila Belarabi, training in Rabat, was honored during the ICNMD opening ceremony.

## Scientific Program

The scientific program was divided into four main topics: muscle disease, peripheral neuropathy, motor neuron disease and neuromuscular junction. Each congress day was devoted to one of these topics and started with a plenary session followed by scientific breakout sessions and problem-oriented workshops.

ICNMD 2018 incorporated innovative ideas into its scientific program which introduced overarching sessions and joint sessions with EFAS, Peripheral Nerve Society (PNS), and European Neuromuscular Centers societies. The congress also brought new subtopics such as cranial nerve diseases and aspects of cancer on the PNS.

Another innovation was an interactive virtual session with an HIV Research Center in Cape Town, South Africa. Three cases were presented virtually by speakers from Cape Town, which were discussed live with the audience at the congress in Vienna.



There were participants from 69 countries at the ICNMD 2018. The distribution from the top 6 represented countries is shown here.

This new session type helped in solving an unforeseen speaker travel issue where one of the plenary speakers was unable to travel from Japan. He was able to use the same virtual session method to deliver his presentation virtually as well as interact with delegates in real time.

The well attended plenary sessions were recorded onsite, and the videos will be made available to the delegates on the congress website as well as the WFN website.

This meeting also demonstrates the important need for interdisciplinary and multiprofessional collaboration.

The congress was able to present several new treatments, and new therapies such as gene therapy, enzyme replacement therapy, new immune therapies, and others mark a new area in the treatment of neuromuscular disease. These novel concepts were not only part of the scientific sessions, but also several industry supported satellite symposia of high quality. High traffic and much interaction in the exhibit hall allowed delegates and exhibitors to network and share the most up-to-date information in the field.

In addition to the neuromuscular topics, the congress also integrated palliative care and patient related issues into the program. Several historical epochs also were discussed in the history session.

## Poster Sessions

A total of 357 posters were presented throughout the three guided poster sessions. All posters were reviewed onsite by the invited poster chairs using a mobile-friendly poster rating page. Based on the submitted evaluation results, eight Best Poster Award winners were selected, and the winners received a certificate and Viennese souvenir during the closing ceremony.



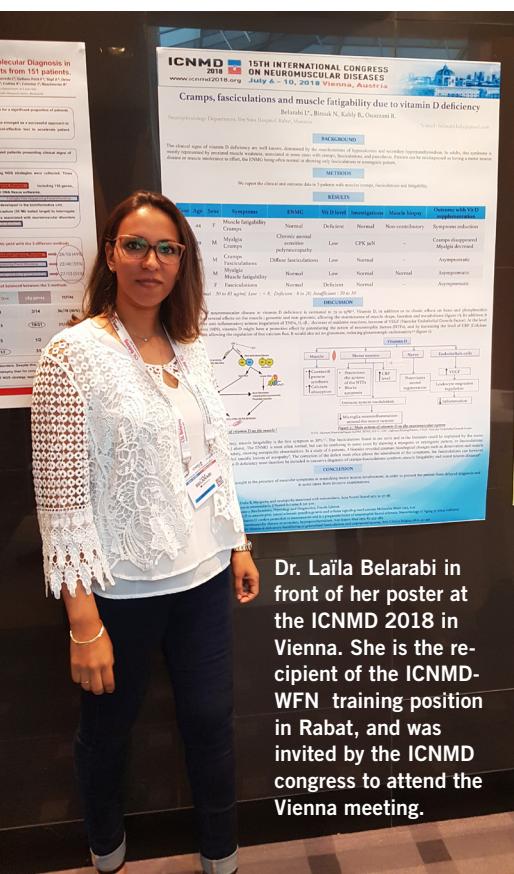
## EACCME

ICNMD2018 has been accredited by the European Accreditation Council for Continuing Medical Education (EACCME®) with 34 European CME credits (ECMEC®s). Through an agreement between the European Union of Medical Specialists and the American Medical Association, physicians may convert EACCME® credits to an equivalent number of AMA PRA Category 1 Credits™.

## Networking Events

To round out the extensive scientific program and to allow more time for delegates to visit with colleagues, the congress offered various networking opportunities.

The President's Committee Mystery Dinner (invitation only) showcased the



Dr. Laila Belarabi in front of her poster at the ICNMD 2018 in Vienna. She is the recipient of the ICNMD-WFN training position in Rabat, and was invited by the ICNMD congress to attend the Vienna meeting.

**WFN JUNIOR TRAVELING FELLOWSHIP REPORT**

BY MELODY ASUKILE

The European Academy of Neurology (EAN) is the home of neurology in Europe and was formed in 2014 by the union of the EFNS (European Federation of Neurological Societies) and ENS (European Neurological Society). Their goal is to promote neurological excellence in Europe and the world.

I had the privilege of attending the Fourth EAN Congress held June 16-19 in the history-rich city of Lisbon, Portugal under the theme of Neurogenetics. The program was filled with a wide range of interesting topics, including but not limited to movement disorders, dementia, stroke, neuromuscular disorders, epilepsy, and multiple sclerosis with presentations from leaders in their respective fields.

The congress also had a lot of activities that catered for neurologists in training such as case-based workshops, focused topic workshops, hands-on courses, teaching courses, and several interactive sessions. I particularly enjoyed

the interactive sessions as we had the opportunity to network with neurology experts and residents from all over the world. Examples of the interactive sessions were the EAN BrainChallenge, a case-based interactive quiz show, and real patient assessment and management by experts. These sessions were not only enjoyable but also informative regarding the clinical approach to neurology patients.

There were ePoster and ePresentation sessions on three days of the congress. My abstract was accepted as an ePoster presentation in the Epilepsy 3 session. My topic was "The Efficacy of an Online Learning Tool in Improving EEG Analysis and Interpretation Skills of Neurology Registrars, Neurologists and Technologists." I had three minutes to present and discuss my findings that showed that the course had proved to be an effective EEG teaching resource. Some important points raised were the usefulness of the online course in resource-poor settings where EEG teachers were lacking, but also extending to better resourced areas; and the affordable cost



of the 6-month program.

Overall, the congress was informative and showcased some of the groundbreaking research in-progress in Europe regarding the use of neurogenetics for the diagnosis and treatment of both "old and new" neurological conditions.

I am grateful to the WFN for affording me the opportunity to attend this meeting through the Junior Traveling Fellowship Grant. •

Melody Asukile is a Zambian neurology resident in Cape Town, South Africa.

# Palatucci Events

BY WOLFGANG GRISOLD AND JAVIER CARDENAS

In May 2018, the Palatucci Advocacy Leadership Forum (PALF) took place May 16-20 at the Rancho Bernardo Inn in San Diego. The American Academy of Neurology (AAN) has a longstanding initiative to promote advocacy and leadership by inviting interested colleagues from the United States with international participation. These events are called Palatucci Events after Dr. Donald Palatucci who was an early founder of this idea. They offer a comprehensive program on patient advocacy.

Palatucci Events teach and encourage participants to engage in learning advocacy and in practical engagement in regard to advocacy for patients and neurology. This activity started in 2001, and has recruited a network of Palatucci/PALF graduates.

The participants are from all age

groups of practicing and training neurologists and bring an interesting mixture of professional knowledge and experience of both academic and practice level. The participants are divided into groups. Each group has a tutor who discusses with his/her group the participants and their work. Prior to the meeting, the participants need to develop a project, which is exposed to discussion and advice during the meeting. This is a valuable experience to create, promote, and subject projects to different people and to a different audience. In the follow-up of the Palatucci meetings, participants are encouraged to share the experience of their work. Positive developments and equally important roadblocks and setback are discussed.

One of the most important tasks is communication. Interviews with the press, the importance of short messages (sound bites) is taught and actively trained with professionals.



In addition to press news and communication, essentials about how to talk, discuss, and negotiate with politicians is thoroughly discussed. This content is important and helps to understand the mechanisms in politics.

Being invited to testify and being able to present a case was part of an intensive training.

In addition to the tutors, a faculty of experienced Palatucci graduates were invited. They were able to share their often exciting experience in advocacy.

At this meeting, Representative Scott Peters of California talked about himself and interacted with the participants by engaging in communication. This activity shows that the content and the ideation of these Palatucci courses are highly specific and aim in the direction of interaction with policymakers, local authorities, and with policymaking on "The Hill." The

Palatucci courses demonstrate that being a good neurologist is not enough. Part of the agenda is to advocate for patients and, in the long term, for neurology. Advocacy and communication are important tools in neurology.

For several years, starting in Thailand, the World Federation of Neurology has had a regular American Academy joint World Federation Palatucci Meeting at its World Congresses of Neurology (WCN), which usually involves a full day of work devoted to project development, how to make a stand, how to present in press and how to appear in legal situations. This part of Palatucci is only a small copy of the American Academy of Neurology Palatucci Event but follows its pattern and is led by experts who are able to attend the Palatucci meeting. The idea still needs promotion and advocacy, and all levels of neurology are needed to promote neurology. •



## WFN JUNIOR TRAVELING FELLOWSHIP REPORT

BY AHMED DAHSHAN, MD

It is my pleasure to write this report about my attendance and participation in the Fourth European Academy of Neurology (EAN) Congress held June 16-19, 2018, in Lisbon, Portugal.

I presented a poster at that event. My poster title was "Normal Appearing Gray Matter in Multiple Sclerosis, Is It Really Functionally Normal?" I presented the

poster to colleagues who attended the congress. It was useful to show them my work, listen to their comments, and answer their questions.

There were more than 5,000 participants in the congress, and it was a good opportunity to share knowledge in that area of research and make some agreements to have collaboration in some research work in the future. Attending the congress added a lot to my knowledge in neurology in general and particularly in the area of genetics and new treatments on the molecular level.

The congress proved fruitful, and I enjoyed attending the different symposiums, controversies, and the EAN brain challenge, which was a useful and exciting session. The most useful scientific activity apart from presenting my poster was attending the different interactive sessions. They were simple, updated and interesting with properly prepared scientific materials.

I would like to thank the WFN for its generous support, which helped me to attend such a great scientific event in neurology and present my work. I hope this support continues helping more young colleagues to increase their experience and attend scientific events all over the world. •

Ahmed Dahshan is neurology assistant lecturer at Cairo University, Cairo, Egypt.



## ICMND

continued from page 6

beauty of the Danube with a short boat ride followed by a traditional Austrian fish dinner in a traditional Austrian restaurant along the river.

The ICMND 2018 Congress Dinner was held at the historic Vienna Town Hall. This prestigious venue represented traditional Viennese flair. After a delicious Austrian dinner, participants were introduced to the Waltz and could give it a try themselves.

Finally, delegates were invited to a Heurigen Evening, a traditional Viennese wine tavern where delegates enjoyed the typical Viennese "Gemütlichkeit" by enjoying some delicious Austrian dishes and wines.

The closing ceremony highlighted

the great success of ICMND 2018. Prof. Juan Jesús Vilchez Padilla was inaugurated as the congress president for ICMND 2020 with the traditional handover of the ICMND trophy, a wooden stick carved by indigenous communities of the city of Vancouver.

The 16<sup>th</sup> International Congress on Neuromuscular Diseases (ICMND 2020) will take place July 10-14, 2020 in Valencia, Spain. ICMND 2022 will take place in Brussels, Belgium.

The international cooperation needed to organize and develop the scientific content by the congress and scientific committee worked smoothly.

Welcome to Valencia in 2020, and we do hope that the present speed of drug development for neuromuscular diseases continues, or even increases. •



## JOURNAL OF THE NEUROLOGICAL SCIENCES

## Editor's Update

JOHN D. ENGLAND, EDITOR-IN-CHIEF, JOURNAL OF THE NEUROLOGICAL SCIENCES

I would like to take this opportunity to thank all of our authors, reviewers, and readers for helping to make the *Journal of the Neurological Sciences* a successful journal. The mission of our journal aligns exactly with the mission of the World Federation of Neurology. Thus, we strive to publish articles that improve world health by promoting prevention and care of people with disorders of the nervous system.



JOHN D. ENGLAND, MD

As such, our articles cover a wide spectrum, ranging from basic neuroscience to purely clinical and public health topics. With the full support of the World Federation of Neurology, we have been able to improve the quality of our journal. This is reflected in the latest metrics available from 2017.

The five-year impact factor (IF) is 2.536, and the IF has risen steadily over the past few years. Although this metric is important, other measures of a journal's

impact are available and are increasingly more important. During the last five years, the number of articles downloaded from our journal is 36,733,371. The four countries with the largest downloads are China, Japan, the U.S., and the U.K.; however, virtually every major country in the world is downloading our articles at an ever-increasing rate.

Our authors submit articles from all over the world, and they collaborate frequently with peers at different institutions and different countries. The review and publication times are now shorter than almost any other major journal. The average review time to first decision is 2.8 weeks, and the time to final decision is 5.7 weeks. Once an article is accepted, the online article publication time is a quick 0.3 weeks (2 days). With your continued support, I am confident that the journal will do even better in the next several years.

In our ongoing attempt to inform readers of important and interesting new developments in the journal, the editorial staff has selected two new "free-access" articles.

Miming neurological syndromes improves medical student's long-term retention and delayed recall of neurology.

[https://www.jns-journal.com/article/S0022-510X\(18\)30253-3/fulltext](https://www.jns-journal.com/article/S0022-510X(18)30253-3/fulltext)

The article by Emmanuel Roze and colleagues summarizes the impact of an innovative simulation-based training program on long-term retention of neurological semiology in third-year medical students at the University Pierre et Marie Curie in Paris. The researchers named this teaching program *The Move* because it used mime-based role-play where students were trained to simulate patients with neurological syndromes. Thirty months after the teaching sessions, the students who participated in *The Move* were tested for long-term retention of neurological semiology and compared with a group of students who participated in only a standard teaching program in clinical neurology. Students who participated in *The Move* program achieved significantly higher scores in neurological semiology compared to the students who participated in only the standard teaching program. The authors conclude that simulation-based learning

enhances learning of clinical neurology and suggest adoption of such programs in medical school curricula.

**E. Roze, Y. Worbe, C. Louapre, et al., Miming neurological syndromes improves medical student's long-term retention and delayed recall of neurology, J. Neurol. Sci. 391 (2018) 143-148.**

The move: When neurosciences teach us to better teach neurosciences.

[https://www.jns-journal.com/article/S0022-510X\(18\)30252-1/fulltext](https://www.jns-journal.com/article/S0022-510X(18)30252-1/fulltext)

The accompanying Editorial by Marc Verin and Pascal Benquet emphasizes the conclusions and significance of the study by Emmanuel Roze and colleagues. They provide a background and context for understanding why active learning increases both performance and motivation through the process of cognitive embodiment. Incorporation of these newer teaching methods may result in enhancing the clinical proficiency of physicians and other health care providers.

**M. Verin, P. Benquet. The move: When neurosciences teach us to better teach neurosciences, J. Neurol. Sci. 391 (2018) 149-150. •**

# Brain Diseases From Bench to Bedside Report

April 12-13, 2018, Moscow

BY PETER SANDERCOCK

The meeting, organized by Profs. Eugene Gusev and Alla Guekht, focused on the recent developments in translational research and treatment innovations in cerebrovascular diseases, epilepsy, cognitive impairment and dementia, depression, demyelinating diseases, and others. It was held at the Buyanov City Clinical hospital, and was organized in partnership with the

following institutions: Ministry of Health of The Russian Federation, Russian Academy of Sciences, Moscow Healthcare Department, Pirogov Russian National Research Medical University, World Stroke Organization, European Stroke Organization, World Federation

of Neurology, International League Against Epilepsy, European Federation of Neurorehabilitation, All-Russian Society of Neurologists, Moscow Research and Clinical Center for Neuropsychiatry.

The International Stroke Faculty included Profs. P. Sandercock (WSO, UK), V. Caso (ESO, Italy), M. Hilz (Germany), L. Østergaard (Denmark), and D. Muresanu, (EFNR, Romania). The WFN had been represented by Prof. M. Freedman

(Canada); and the ILAE by Profs. S. Wiebe (Canada), I. Blumcke (Germany), A. Hauser (USA), E. Beghi (Italy), N. Specchio (Italy).

The conference faculty had a high-level meeting with Prof. V. Skvortsova, Minister of Health for the Russian Federation, to discuss the management of stroke and brain disorders and highlight the priority this should be given both internationally and within the Russian Federation. An action plan on collaborative strategy in brain diseases has been discussed.

The conference proved popular and over 700 delegates from 42 cities of the Russian Federation attended with additional registrants from Belarus, Georgia, Kazakhstan, Tajikistan, Ukraine, and Uzbekistan. The conference attracted a high level of media coverage and both Profs. P. Sandercock and V. Caso gave video interviews for local media organizations.

The stroke session began with an update on controversies in thrombolysis by P. Sandercock, who highlighted the importance of not withholding thrombolysis to patients with ischemic stroke purely on the basis of age over 80.

V. Caso gave a powerful talk on life after stroke in women. She highlighted the particulars of stroke management during pregnancy and demonstrated how gender inequality results in adverse effects in women's health care in general and in stroke outcome in particular. M. Hilz gave



Opening ceremony. Left to right: V. Caso, E. Gusev, A. Guekht, and P. Sandercock.

a detailed overview of autonomic dysfunction in diseases requiring neurological intensive medicine.

V. Parfenov covered management of patients after stroke, highlighting the value of lifestyle changes (quitting smoking, increasing physical activity, and fresh fruit and vegetable consumption) and antithrombotic therapy with aspirin after ischaemic events.

I. Koltunov, N. Pechatnikova, and V. Kakaolina presented their work on cerebrovascular diseases associated with genetic metabolic disorders and demonstrated the program of genetic screening for rare diseases, supported by the Moscow government. A. Pryamikov, A. Mironkov, and O. Sazhina, doctors from the regional stroke center in the host hospital, closed the session with an interesting talk on their experience on carotid endarterectomy and internal carotid artery stenting in acute stroke.

The clinical stroke-focused session was followed by a translational science session, which covered a broader range of topics. I. Blumcke reported work from the European Epilepsy Brain Bank Consortium: 25 years of interdisciplinary experience with epilepsy surgery in 9,579 children and adults, L. Østergaard presented novel data on the role of capillary pathways in stroke and cognitive decline, N. Gulyaeva highlighted how distant hippocampal damage in brain disorders may be related to corticoid-mediated mechanisms. A. Shpak spoke on neurotrophic factors in neurophthalmology, showing their important role in glaucoma as the model of neurodegenerative diseases. D. Muresanu gave a talk titled, "From Neurobiology to Evidence-Based Medicine: Concepts in Neurorehabilitation After Stroke."

The session on cognitive and affective disorders was opened by the lecture by M. Feedman focusing on the diagnostic and treatment challenges of frontotemporal dementia. R. Akzhigitov and co-authors gave an overview on depression in neurological diseases, presenting the huge

experience of the Moscow Research and Clinical Center for Neuropsychiatry with the effective programs of multidisciplinary management of depressions and cognitive impairment, including post-stroke.

The session on the following day was dedicated to epilepsy. V. Krylov and I. Trifonov presented the results of the epilepsy surgery program, which is successfully developing in Moscow and other cities of the Russian Federation. S. Wiebe gave a thorough overview of the outcomes of epilepsy surgery. He emphasized that the novel way of conceptualizing surgical outcomes highlights the importance of longitudinal data. N. Specchio described special issues of epilepsy surgery in children. A. Hauser demonstrate how TBI and post-traumatic epilepsy represent a substantial societal burden. He reviewed the major risk factors and stated that studying the predictors of epilepsy after TBI should become one of the priorities. The successes and challenges in the implementation of the 68th WHA Resolution on Epilepsy were presented by E. Gusev and A. Guekht. They demonstrated that epilepsy is comorbid to stroke and other major noncommunicable diseases, dramatically increasing their severity and mortality.

The last session was opened by E. Beghi with the talk describing the mechanisms and predictors of falls in neurological diseases, including stroke, Parkinson's disease, multiple sclerosis, and others. He stressed that stroke can be the cause of balance disorders due to impaired ability to produce fast, accurate, and coordinated muscular patterns. Several interesting talks were presented by Russian colleagues on multiple sclerosis, including the burden of multiple sclerosis (V. Mkrtychyan, N. Pavlov) and therapeutic approaches (N. Khachanova and N. Arzymanian).

The novel techniques and experience of neurostimulation in gait disorders in multiple sclerosis patients were presented by the neurosurgery team of the Buyanov



PETER SANDERCOCK



Meeting with Prof. V. Skvortsova, Minister of Health for the Russian Federation (center). Left to right: M. Hilz, S. Wiebe, N. Specchio, E. Gusev, V. Caso, S. Muraviev, M. Martynov, E. Beghi, L. Østergaard, M. Freedman, A. Hauser, A. Guekht.



Meeting in the Moscow Research and Clinical Center for Neuropsychiatry.

## MOSCOW

continued from page 9

City Clinical Hospital (S. Asratyan). The significant part of the session was dedicated to management of ALS, presented by members of the Russian and foreign faculty.

The interactive video session concluded the conference with presentation of interesting cases in different aspects of neurology and with a lot of discussion.

On the next day, the international faculty and the leading Russian specialists on brain diseases visited the Moscow Research and Clinical Centre for Neuropsychiatry of the Healthcare Department of Moscow, one of the leading institutions for management of patients with post-stroke cognitive impairment, depression and anxiety, suicidal ideations, epilepsy, and other brain diseases. It was the second meeting of the international scientific advisory board of the Research and Clinical Centre, formed in October 2017 during the World Stroke Day Congress in Moscow.

The meeting started with an overview of the more than 100-year history of the center, presented by its director A. Guekht. The scientific achievements, patient management, and educational activity of the center, as well as the state-of-the-art facilities for diagnostics and research were quite impressive.

Prof. N. Gulyaeva (Institute of Higher Nervous Activity, RAS) presented the results of studies in translational neuroscience. Then, completed and ongoing research projects in post-stroke cognitive

impairment, epilepsy, depression and suicide, and autonomic disorders were presented by the specialists of the center and of collaborative institutions (Pirogov Russian National Research Medical University, A.I. Yevdokimov Moscow State University of Medicine and Dentistry, Serbsky State Scientific Center for Social and Forensic Psychiatry, Institute of Higher Nervous Activity and Neurophysiology of RAS, N.V.Sklifosovsky Research Institute of Emergency Medicine and Buyanov City Clinical Hospital). The projects were extensively discussed by the faculty, and plans for international publications and new projects had been developed. The true highlights of the meeting were a series of seminars in stroke and other brain diseases led by the eminent members of the international faculty. These seminars were of high educational value for the doctors and researchers from Moscow clinics.

The conference closed with warm thanks from the organizing committee to the supporting organizations, the conference faculty, and conference participants for their efforts in improving the outcomes for people with stroke and brain disorders. The conference strengthens the international collaborative efforts to tackle these disorders, which place such a burden on patients, society and health systems. •

Prof. Peter Sandercock is emeritus professor of neurology at the University of Edinburgh. He is a member of the Board of Directors of the World Stroke Organization and chairman of the WSO Education Committee. He is commissioning editor for the World Stroke Academy, the WSO's online global educational resource.



The seminar on post-stroke cognitive impairment led by M. Freedman.

# Palliative Care in Neurology

BY DAVID OLIVER

There is increasing awareness of the role of palliative care for neurological patients, and this has been emphasized at two recent conferences.

At the Fourth Congress of the European Academy of Neurology in Lisbon, there was a European Association for Palliative Care / EAN Symposium on



DAVID OLIVER

Palliative Care and Neurology as part of the program. Over 100 people attended.

During the session, Prof. Raymond Voltz, Dr. Simone Veronese, and Prof. David Oliver spoke on developments within the field. The importance for all neurologists to provide a palliative care approach and to collaborate with specialist palliative care was emphasized, as has been emphasized in the EAN / EAPC Consensus on palliative care and neurology. There was good feedback, and several members of the audience discussed the issues afterward.

Within the same congress, there was a case-based workshop on end-of-life care for the neurological patient, looking at the use of interventions such as gastrostomy or ventilation at the end of life, coping with difficult patient and family situations, and how to be involved in difficult conversations. Prof. Oliver also spoke at a scientific theater, a presentation within the poster and exhibition area, on the Consensus document on palliative care and neurology.

The 15<sup>th</sup> International Congress on Neuromuscular Disease (ICNMD) was held in Vienna in early July. Over 1,400 delegates from 69 countries attended the meeting, which was held in collaboration with the European Federation of Autonomic Societies (EFAS).

Palliative care was included within the program, and the workshop on palliative care was attended by over 40 people who heard about the role of palliative care for neurological patients, the effectiveness of multidisciplinary care approach, the recognition of end of life care, and the experience of an ALS team in Moscow, Russia,

in developing a clinic and increasing the availability of both palliative care and morphine use in symptom management.

Prof. Oliver, who is co-chair of the EAN Palliative Care Specialty Panel and chair of the EAPC Reference Group on palliative care and neurology, spoke in two other sessions. There was an “overarching session” on dysphagia, and he spoke on the ethical challenges of the management of dysphagia, including the assessment, use of interventions, discussions with patient and families and consideration of care at the end of life, including the consideration of withdrawal of treatment. The session allowed a wider discussion of the issues of dysphagia, which may affect many with neuromuscular disease.

Palliative care also was featured in a plenary session on motor neurone disease. Prof. Oliver discussed the ethical issues in the management of motor neurone disease, discussing the telling of the diagnosis, the issues of genetics, cognitive change, nutritional support, ventilator support, and end-of-life issues. The session was a new development at the congress with palliative care being discussed in the large plenary session, with over 500 people attending.

This was a wonderful opportunity to introduce palliative care and ethical discussions into the care of people with neuromuscular diseases. We are very grateful to Prof. Wolfgang Grissold, the chair of the ICNMD Scientific Committee and the organizers, for facilitating these opportunities to present at this congress. •

### Further Information

<https://www.eanpages.org/2018/06/17/lisbon-2018-report-on-symposium-4-ean-eapc-palliative-care-and-neurology/>

Oliver DJ, Borasio GD, Caraceni A, de Visser M, Grisol W, Lorenzi S, Veronese S, Voltz R. A consensus review on the development of palliative care for patients with chronic and progressive neurological disease. *Eur J Neurol* 2016; doi:10.1111/ene.12889

Prof. David Oliver is honorary professor at the University of Kent, an EAPC board member, and chair of Reference Group on Neurology and Palliative Care.

“This was a wonderful opportunity to introduce palliative care and ethical discussions into the care of people with neuromuscular diseases.”

– David Oliver

# Continuum in Haiti

BY AARON BERKOWITZ, MD, PHD

When I first began working in Haiti with the nongovernmental organization Partners In Health (PIH) and its Haitian sister organization Zanmi Lasante (ZL) in 2012, I was asked to provide CME in neurology for internists, family physicians, and residents in several hospitals. There is only one neurologist in Haiti for 10 million citizens and no



AARON BERKOWITZ

neurology training programs. Therefore, physicians training in Haiti have no opportunity to learn about neurologic disease from a neurologist – no preclinical course, no rotation, no CME. And yet, since the majority of

patients in Haiti do not have access to the country's only neurologist, they see these same general practitioners who have had no access to neurology education.

I began providing week-long CME courses on neurologic diagnosis and management of common neurologic conditions, and precepting local physicians in the care of their patients with neurologic disease between lectures. Our colleagues in Haiti appreciated the courses, and I enjoyed the opportunity to think through challenges in neurologic care and education in resource-limited settings (e.g., should a patient with an acute stroke and no access to CT receive aspirin?).<sup>1,2</sup> However, the approach felt diffuse since I was giving lectures for large groups of practitioners at several hospitals, and seeing individual patients with multiple individual providers in different departments at each hospital. After several years, my colleagues in Haiti and I thought we could have a larger and more sustainable impact by focusing on a smaller group.

We decided to start a neurology rotation for the internal medicine residents at a newly opened teaching hospital in rural Haiti, Hôpital Universitaire de Mirebalais (HUM).<sup>3</sup> Instead of lecturing in various hospitals and seeing patients with providers

in different departments of each hospital, during each trip I worked with the same five PGY-2 internal medicine residents, and they worked only with me. The volume of consults we saw and the incredible progress in neurologic diagnosis and treatment made by the residents inspired us to start the first neurology training program in Haiti at HUM in 2015.

We initiated a 2-year fellowship program that accommodates one trainee each year. Applicants must be graduates of internal medicine or family medicine residencies in Haiti. A team of about a dozen U.S.-based neurology faculty spend one to 12 weeks per year in Haiti providing bedside and classroom teaching, precepting the fellows in their care of inpatients and outpatients, and mentoring them to provide CME to their colleagues in other departments and conduct research projects.<sup>4</sup>

I have always encouraged our visiting faculty to bring a few textbooks in their suitcase for the neurology program's growing library. One faculty member brought several issues of *Continuum*. Our fellows loved it:

"I was impressed with the teaching method in *Continuum* to create such a comprehensive resource on each topic and convey the material so clearly," said Dr. Roosevelt François, the program's first graduate (in 2017) and current in-country program director.

"I appreciate how each issue begins with the basics and arrives at the most up-to-date aspects of diagnosis and treatment," said Dr. Brégenet Lamour, our current second-year fellow and soon-to-be second graduate.

I wanted to subscribe our neurology fellows in Haiti to *Continuum*, but I had not had good luck mailing things to Haiti; a book donation to a Haitian medical library from a U.S. publisher we had organized was held up in Customs for nearly six months. I learned about the AAN-WFN Continuum Education Program to assist in neurologic education in low-income countries (Haiti ranks 216 out of 235 countries in GDP per capita<sup>5</sup>). The coordinators of the program kindly agreed to send the journals to me in the U.S. to transport them in my suitcase to make sure they would arrive expeditiously.



Three generations of neurology trainees at Hôpital Universitaire de Mirebalais in Haiti with issues of *Continuum* provided by the AAN-WFN Continuum Education Program. From left to right: Dr. Brégenet Lamour, Dr. Ronald St. Jean, and Dr. Roosevelt François.

Five copies of each issue are provided; we keep one in our library, give one to our first graduate/faculty member, and provide one each to our two fellows. We save one for our next fellow. The fellows use *Continuum* not only for their own education but as a teaching tool.

Some of my U.S.-based colleagues ask if *Continuum* is too geared toward high-income settings to be applicable in Haiti, given that there is limited access to many neurodiagnostic tests and modern neurologic treatments in Haiti as in most low-income settings.<sup>6</sup>

"We don't think 'just because we don't have this in Haiti, we don't need to know about it.' No!" Said Dr. Francois. "We need to know the most comprehensive up-to-date information to be prepared for the future when this technology arrives in Haiti."

"While we await advances in technological resources, we must continue to train our human resources, said Dr. Ronald St. Jean, our current first year trainee. "Neurology existed long before technology."

"Some of our patients want to travel abroad for diagnostic testing or treatment not available in Haiti, so we need to know how to advise them – is the test or procedure indicated? What are the risks and benefits of the intervention? Otherwise they could waste their time and money," added Dr. Lamour.

The AAN-WFN Continuum Education Program provides an excellent resource for practitioners in low-income settings who may have limited access to internet in the field to provide up-to-date information on neurologic disorders. In the words of my colleague Dr. Francois, the first neurologist

to be trained in Haiti:

"Thank you to my professors for helping me to discover *Continuum*, this inexhaustible resource of neurologic information, and thank you to the AAN-WFN for providing us with this resource. *Continuum* offers an enormous opportunity to continue my neurologic education with the most up-to-date information, and make sure my practice is current. *Continuum* is a crucial part of the continuity of my neurologic education." – Dr. Francois •

#### References

- Berkowitz AL, Westover MB, Bianchi MT, Chou SH. Aspirin for acute stroke of unknown etiology in resource-limited settings: a decision analysis. *Neurology*. 2014 Aug 26; 83(9):787-93
- Berkowitz AL. Managing acute stroke in low-resource settings. *Bull World Health Organ*. 2016 Jul 01; 94(7):554-6.
- Berkowitz AL, Martineau L, Morse ME, Israel K. Development of a neurology rotation for internal medicine residents in Haiti. *J Neurol Sci*. 2016 Jan 15; 360:158-60
- Israel K, Strander S, Martineau L, Pierre S, Morse ME, Berkowitz AL. Development of a neurology training program in Haiti. *Submitted*
- The World Bank. GDP per capita 2017 (US\$). [https://data.worldbank.org/indicator/NY.GDPPCAP.CD?year\\_high\\_desc=true](https://data.worldbank.org/indicator/NY.GDPPCAP.CD?year_high_desc=true) Accessed July 5, 2018
- McLane HC, Berkowitz AL, Patenaude BN, McKenzie ED, Wolper E, Wahlster S, Fink G, Mateen FJ. Availability, accessibility, and affordability of neurodiagnostic tests in 37 countries. *Neurology*. 2015 Nov 03; 85(18):1614-2

Aaron Berkowitz, MD, PhD, is the director of the global neurology program at Brigham and Women's Hospital, and associate professor of neurology at Harvard Medical School.

## PRESIDENT

continued from page 3

committed to provide the personnel and resources required to ensure its success.

The WFN has also recommitted to ensure all alliance members have the opportunity to participate in the biennial World Congress of Neurology; a practice developed by the immediate WFN past President. Finally, it is hoped that the WFN will be able to offer to GNA members free advertisements in *World Neurology* and on its website.

The immediate benefits of establishing

the GNA are recognizable and have little or no risk to it or its members. These include a more influential voice in matters of advocacy, a more rapid response to global government and non-government calls for action, the provision of specialist task forces, the promotion of brain health in general, and the continued evolution of World Brain Day (WBD) in partnership with other GNA members.

WBD themes have been epilepsy and stroke in previous years, the environment this year, and headache for next year. Indeed, the risk of not proceeding to establish the

GNA are possibly a greater threat to the common goals than doing so. Most importantly among tasks suitable for the GNA is the ability of the GNA to provide greater support for the WHO in its NCD and Air Pollution and Health initiatives, its global action plan for dementia, in addition to the call by the WSO for the WHO to increase awareness, treatment access, and removal of inequities in stroke care.

From my position, it is to be hoped that the ability to interact successfully at this global level will be facilitated by the WFN retaining "official relations" status with the

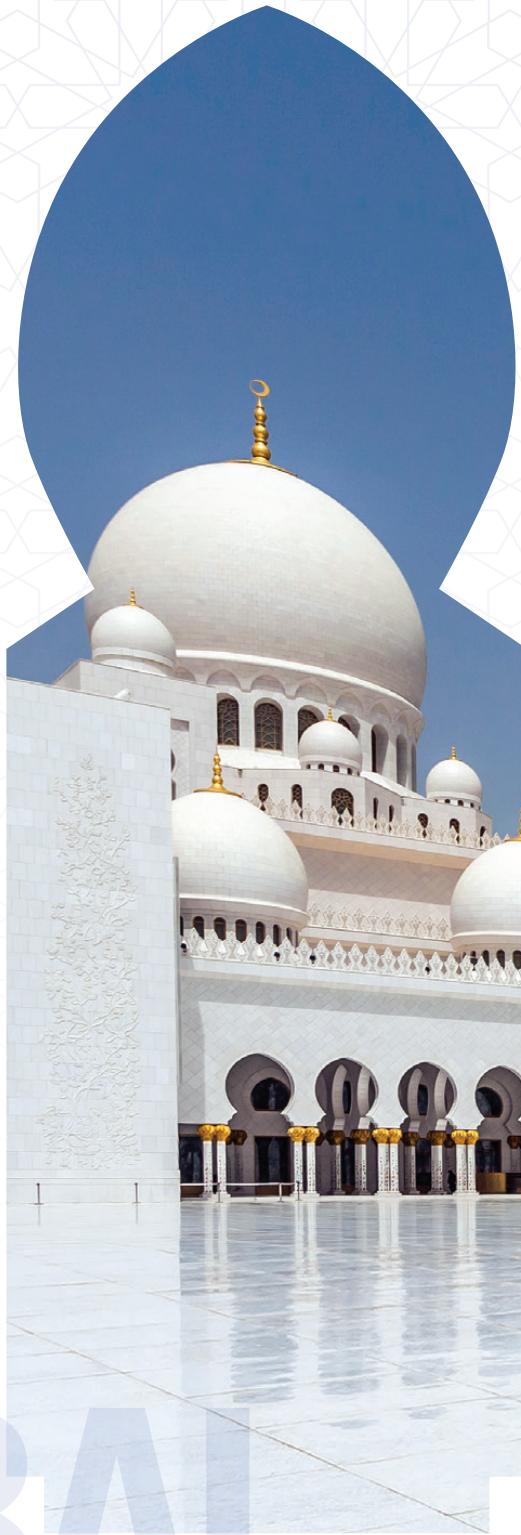
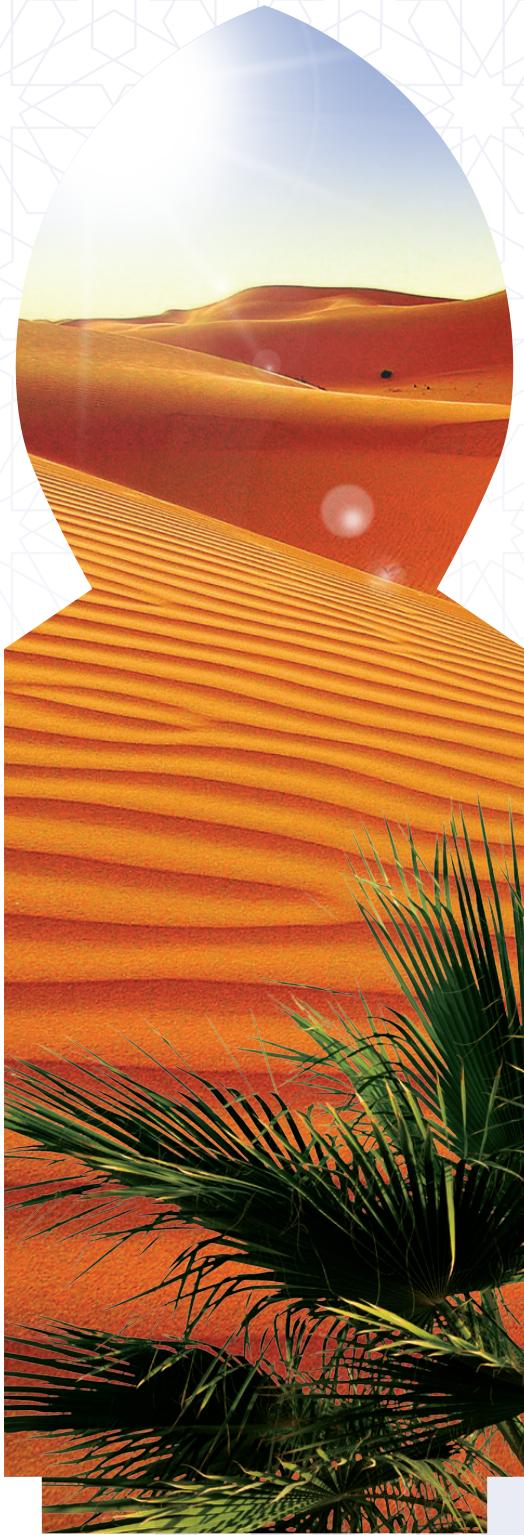
WHO to pursue areas of common interest mentioned above and in the other major concern for us, that of the inequities of access to health care in general and neurological care in particular.

In closing, let me remind all member societies of the WFN AGM and COD meeting to be held 1 p.m. on Tuesday, Oct. 9 2018, in the Ulm room City Cube Messedamm 26 in Berlin. A draft agenda for this meeting is provided on page 3. We must have sufficient member society delegates to be quorate in order to elect a trustee from the four excellent candidates. •



ACCELERATING THE PACE OF CHANGE

دبي



DUBAI

دبي

# WCN 2019

XXIV WORLD CONGRESS OF NEUROLOGY

DUBAI, UNITED ARAB EMIRATES, OCTOBER 26-31 2019



WWW.WCN-NEUROLOGY.COM