



WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

PRESIDENT'S COLUMN

In the Midst of the COVID-19 Pandemic

Since my last column, the COVID-19 pandemic has spread through most developed countries courtesy of international travel, tourism, and high-density populations. It is now set to decimate less developed countries in South America, Asia, and Africa, consequent upon insufficient resources and less sophisticated public health services. Those least well-resourced countries face, like in epidemics of old, the twin blights of the epidemic and economic collapse and risk ensuing anarchy. Even some better-off countries have pursued different strategies in balancing the health requirements and when to re-open their economies with differing results now and no doubt differing results in the longer term.

What is different with this pandemic and the plagues and epidemics of the past, and even the more recent SARS, Ebola,



WILLIAM
CARROLL, MD

and Zika emergencies, is the concatenation of the modern world by the internet. While the world looks for a more unified inter-governmental response, peoples of the world, and in particular scientists, clinicians, and concerned citizens, have joined a multitude of international, regional, and global groups to contribute to the care, surveillance, and data collection of those affected. Through the internet and modern communications, infection rates, mortality rates, and survival rates issue daily from most countries irrespective of denominators. Most of us are involved in one or more such activities while we watch with concern — and at times with incredulity — as nations make individual decisions to minimize the human and economic costs of this pandemic. We all hope to see a successful formula develop.

The WFN also hopes that all of its

individual member neurologists have remained safe and in good health. Happily, the London office staff have done so and the same applies to the trustees and officers.

In the meantime, let me outline the WFN activities during the current situation.

Communication

The WFN has implemented a program to improve the communication between the London office and its members. In a time when communication is so important, it has been heartening to see the response of member societies to this initiative. Once complete, and this first part is almost there, the office will commence a rolling dialogue, contacting approximately 10 members each month to ensure the details are current. This will see the details for each of the 122 societies being updated annually. In addition to direct communication by email and phone, the



WFN website is now regularly updated with changes being advised by social media. More active use of social media also follows each monthly trustees teleconference on the second Thursday of the month. It is hoped that members will visit the WFN website more frequently and advise the London office of necessary changes to their contact details.

The WFN is participating with the Brain Health Unit of the WHO in its COVID-19 neuro endeavor and with other groups interested in collecting data about potential neurological involvement in the course of COVID-19 infection. The WFN's Environmental Neurology Specialty Group has advised that it will be keeping a registry of member societies of members who

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Long-Haul COVID



AVINDRA
NATH



B. JEANNE
BILLIOUX

BY AVINDRA NATH AND B. JEANNE BILLIOUX

It is becoming increasingly apparent that many patients who recovered from the acute phase of the SARS-CoV-2 infection have persistent symptoms. This includes clouding of mentation, sleep disturbances, exercise intolerance, and autonomic symptoms. (See Tables 1 and 2 on page 3.) Some also complain of temperature dysregulation and lymphadenopathy. Although there are no peer-reviewed papers at the moment on these patients, many news articles have been written about this phenomenon¹⁻⁴ and apparently there are Facebook pages where there are several thousand patients with these symptoms. They describe themselves as the “Long-Haul-COVID”

or “Long-Tail COVID.” Many of these patients are health care workers who had massive exposure to the virus early in the pandemic and describe having symptoms for 100+ days. Since many of the symptoms are neurological in nature, these patients are seeking us out for help. It is important that we characterize these patients and try to document the objective findings and then determine how best to study their pathophysiology to develop proper guidelines for treatment.

Most of these patients were in excellent health prior to getting infected with SARS-CoV-2. They all had myriad symptoms during the acute phase; however, as the fever and respiratory symptoms improved, they are left with

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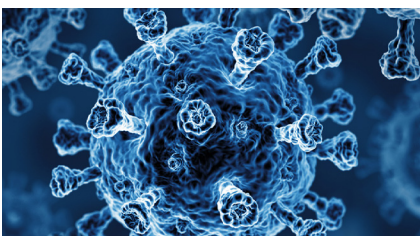
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WORLD FEDERATION OF NEUROLOGY

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

WFN London Office
Chester House Fulham Green
81-83 Fulham High St., London SW6 3JA
United Kingdom
Tel.: +44 (0)20 3542 1657/1658
Fax: +44 (0)20 3 542 1301
info@wfneurology.org

WFN OFFICERS
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First Vice President Ryuji Kaji (Japan)
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Editorial Correspondence: Send editorial correspondence to *World Neurology*, Dr. Lewis at Steven_L.Lewis@lvhn.org or Dr. Struhal at walter.struhal@akh.linz.at.

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Phone +1-913-344-1300 Fax: +1-913-344-1497

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PUBLISHING PARTNER
Ascend Media

President and CEO
Blair Johnson
Vice President of Content
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Conrad Stolze
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Tim Nord

FROM THE EDITORS

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

We would like to welcome all neurologists around the world to the June/July 2020 issue of *World Neurology*, and again hope you are all well during this trying and remarkable time.

This issue begins with the message from the president of the World Federation of Neurology (WFN), Dr. William Carroll, informing us of the ongoing activities of the WFN and our London office, particularly with regard to communication (including about informing members worldwide about COVID-19 infection), education (including an upcoming eLearning day with AFAN), promotion (especially about World Brain Day which began July 22), the upcoming Annual General Meeting (AGM) of the Council of Delegates to be held September 9, 2020, and the exciting announcement that Prof. Marianne de Visser has now been named a co-opted WFN trustee.

In this issue we are again privileged to have an update on COVID-19 written by Drs. Avindra Nath and B. Jeanne Billioux from the Section of Infections of the Nervous System at the United States National Institute of Neurological Disorders and Stroke (NINDS), who describe what is currently known and mostly unknown about the long-term sequelae of COVID-19, currently termed



STEVEN L. LEWIS, MD



WALTER STRUHAL, MD

by some afflicted patients as “long-haul COVID.”

Dr. John England, in his update as editor-in-chief of the *Journal of Neurological Sciences* (JNS), the official journal of the WFN, provides us with news of the tremendous increase in impact factor of this important journal. Please join us in congratulating Dr. England and his entire editorial team for this wonderful accomplishment. In this issue's history column, Dr. Peter J. Koehler describes 18th century historical thoughts with regard to the relationship between civilization and disease, particularly neurologic disease.

WFN secretary-general Wolfgang Grisold provides a detailed report on a conference held at the end of 2019 (and just before the COVID-19 era) in Moscow focusing on multidisciplinary strategies to prevent and combat brain diseases. Also in this issue, Dr. Vladmir Hachinski, past-president of the WFN, reviews the recently published biography on Dr. C. Miller Fisher written by Dr. Louis R.

Caplan (a remarkable combination of world-renowned stroke experts in the same sentence). Dr. Chandrashekar Meshram announces the webinar series on neuroinfectious diseases cosponsored by the Tropical and Geographical Neurology Specialty Group of the WFN in collaboration with the Forum for Indian Neurology Education (FINE) occurring from July to September 2020 and for which all interested neurologists are encouraged to participate

Finally, and importantly, this issue includes the statements from the six candidates for the next open position for elected trustee of the WFN, provided in alphabetical order.

We would like to reiterate our wishes to all for safety and health for you, your families, colleagues, and patients. For global neurology-related COVID-19 resources and information, please continue to refer to the new page on our website: <https://wfneurology.org/covid-19-and-world-neurology>.

Finally, this issue is going to press just as World Brain Day 2020, a collaboration between the WFN and the International Parkinson and Movement Disorder Society is underway. It began on July 22, 2020 and is extending for weeks thereafter, devoted to raising awareness for and ending Parkinson's Disease. We all look forward to updates from member societies in the next issue(s) of *World Neurology*. •

JOURNAL OF THE NEUROLOGICAL SCIENCES

New JNS Metrics Released

BY JOHN D. ENGLAND, MD

I am pleased to announce that new metrics have been released for the *Journal of the Neurological Sciences*, the official journal of the World Federation of Neurology (WFN). The widely cited Impact Factor (IF) has risen to 3.115, which is a +17.5% increase compared to 2018. This is an all-time high for the journal's Impact Factor. The Cite Score, which is the average citations per published peer-reviewed document, has risen to 4.9 compared to 4.4 in 2018. Moreover, the worldwide penetration, usage, and number of downloads from the journal have increased steadily. The *Journal of the Neurological Sciences* is now truly an international and well-respected journal.

Many individuals are responsible for the success of our journal. I especially wish to recognize our Managing Editor, Dr. Nicole Villemarette-Pittman, and our Associate Editors, Drs. Carmel Armon, Andreas



JOHN D. ENGLAND, MD

Charidimou, Hamilton Farris, Daniel Truong, and Donald Silberberg. The continued support of Elsevier and the World Federation of Neurology (WFN) has allowed our journal to prosper and improve. I am grateful to the leadership of the WFN for its continued encouragement and support.

Drs. William Carroll, Raad Shakir, Wolfgang Grisold, Marco Medina, Walter Struhal, and Steven Lewis have all provided notably important contributions to the *Journal of the Neurological Sciences*.

In addition, I wish to thank our Editorial Board Members, authors, reviewers and readers for their support and encouragement. With the help of so many, I am confident that our journal will continue to serve the global community of neurology and neuroscience. •

John D. England, MD, is editor-in-chief of the *Journal of the Neurological Sciences*, the official journal of the WFN.

INTERNATIONAL MEETINGS & EVENTS

8th Joint Meeting ACTRIMS-ECTRIMS Annual Congress
Sept. 9-12, 2020
Washington, DC, U.S.

International Congress on Neuromuscular Diseases Digital Program (ICNMDigital)
Sept. 11-14, 2020

33rd ECNP Congress
Sept. 12-15, 2020
Vienna, Austria

International Congress of Parkinson and Movement Disorders (MDS2020)
Sept. 13-17, 2020
Philadelphia, Pennsylvania, U.S.

WFN/AFAN e-Learning Day
October 10, 2020
See [WFN website](http://wfneurology.org) for further details

Joint European Stroke Organisation and World Stroke Organisation Conference (ESO-WSO 2020)
Nov. 7-9, 2020
Vienna, Austria

17th Asian Oceanian Congress of Neurology (AOCN 2021)
April 1-4, 2021
Taipei International Convention Center
Sec. 5, Taipei, Taiwan

Diseases of Civilization and Nervous Disorder in the Age of Enlightenment

BY PETER J. KOEHLER

The relation between civilization and disease has been known for centuries. Researchers found evidence that in the pre-history period, small hunter-gatherer populations tended to be less troubled by disease. With growing population density following the settlement of farmers around 12,000 years ago (in the Neolithic period), and later the start of commercial traveling and increasing mobility, pathogens could spread easier. *Yersinia pestis* (bubonic plague in the Late Middle Ages), *Treponema pallidum* (syphilis, starting around 1500), and *Variola* (smallpox, in particular during the 17th and 18th century) are well-known examples. Sometimes whole nations were associated with a disease, the best example being the “Spanish disease” and “*morbus Gallicus*,” referring to syphilis. In the Renaissance period, there was already some knowledge about the spread, and quarantine protocols were promoted in some places upon the arrival of ships (40 days, hence the word quarantine, from the French “quarant”). In periods of plague, markets and city gates were closed.

Not Only Contagious Diseases

Another type of disease of civilization was recognized in the 18th century and associated with the “secularized revamping of the Christian legend of the Fall, wherein Original Sin and the

expulsion from Paradise had inaugurated the regime of hard labor, disease, suffering, and death in the temporal world.”¹ Several physicians in this period, including the Scottish physician George Cheyne (1672-1743; Figure 1; not to be confused with John Cheyne [1777-1837]), who practiced in London and Bath, and the Swiss physician Samuel August Tissot (1728-1797; Figure 2), and also philosopher Jean-Jacques Rousseau (1712-1778) pointed to the relatively healthy hunter-gatherer and peasant people of the early days, who were engaged in physical labor, exercise in the open air, and taking healthy foods. Town life in the 18th century with its commerce, wealth, indoor work, and bad habits, including taking too much food and alcohol and too little exercise, could easily lead to health problems, which often resulted in the use of opiates, tobacco, more alcohol, and remedies.¹ According to Tissot, “gens des lettres” were particularly prone, and he even dedicated a book to the subject in 1768, *De la santé des gens des lettres* [On the health of men of learning], which was published in several editions at least up to 1826 and considered an important publication in the history of occupational disease. In his preface, the author indeed referred to the pioneer Bernardino Ramazzini (1633-1714, author of *De Morbis Artificum Diatriba* / Diseases of Workers).

Tissot's *Santé des gens des lettres*

In his *De la santé des gens des lettres* (Figure

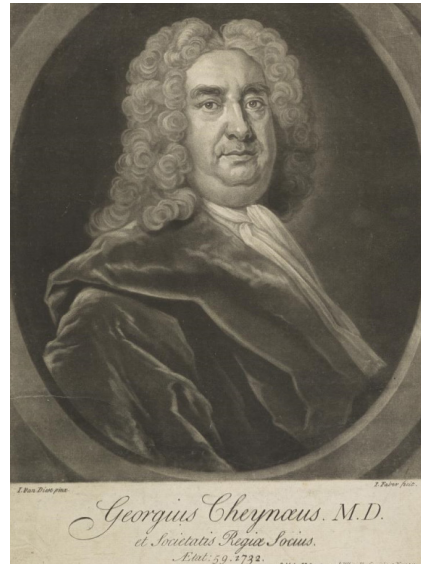


Figure 1. George Cheyne



Figure 2. Samuel-Auguste Tissot (Collection de l'université de Lausanne).

3), Tissot referred to numerous cases from medical literature described by well-known physicians. The association was already known ages ago, as for instance Galen of Pergamon (129-c210) described the history of the peripatetic philosopher Premigenes, who lived a life of reading and writing, thereby not perspiring well, for which he had to take a bath every day, to avoid accumulation of the sharps humours.² More recent physicians included Jean Fernel (1497-1558), Johann Jakob Wepfer (1620-1695), and Giovanni B. Morgagni (1682-1771), who associated mental efforts and exhaustion, which led to severe or even mortal disease. Wepfer,

for instance, mentioned the case of a young man (22 years old), who studied day and night, became delirious, hurt several people, and killed his guard.² Tissot also referred to Gerard van Swieten (1700-1772) and his *Commentaria in Hermannii Boerhaave aphorismos de cognoscendis et curandis morbis* (5 vols. 1742-72), in which he wrote about “Les Gens de Lettres qui mènent une vie sédentaire, & qui pâlisent sur leurs livres, sont souvent exposés à une apoplexie.” [“Men of learning, who live a sedentary life, and turn pale above their books, are often exposed to apoplexia.”]²

see NERVOUS DISORDER page 8

LONG-HAUL COVID

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persistent systemic symptoms, some of which are gradually improving, but not all are following that course. While some were admitted to the hospital due to pulmonary symptoms, the majority were isolated at home. Many of these symptoms overlap with those of patients with myalgic encephalomyelitis/chronic fatigue syndrome (ME/CFS). The cause of ME/CFS remains unknown despite decades of research of the syndrome. Many of these patients similarly report a viral infection as a trigger, but since they come to our attention months and years after symptom onset, it is impossible

SYMPTOMS OF LONG-HAUL COVID

- Insomnia or frequent awakenings
- Inability to concentrate and think clearly
- Easy fatigability despite normal lung function
- Anorexia or increased appetite
- Temperature dysregulation
- Lymphadenopathy
- Dysautonomia

Table 1. Symptoms.

to know what may have triggered the symptoms.

Long-Haul COVID thus represents an excellent opportunity to study the pathophysiology of ME/CFS that may have broader implications. It is unclear at present if these patients may have endocrine abnormalities, but certainly with SARS-CoV-1, hypothalamic/pituitary dysfunction and adrenal insufficiency has been reported³. It would, of course, be equally important to determine if there might be any premorbid conditions or medications that might contribute to these symptoms.

Even at this early stage, it might be important to determine what the potential pathophysiological mechanisms might be. So far there is no convincing evidence for widespread infection of the brain with the virus. The virus has been detected in CSF and the brain in very rare cases; however, there is evidence for widespread glial cell activation that may be related to metabolic dysfunction or to the massive immune activation in the periphery. Other possibilities are specific immune responses targeted against specific regions of the brain and autonomic nervous system. Depending on the predominant underlying pathophysiological mechanism at play, targeted treatment might be possible.

AUTONOMIC SYMPTOMS IN LONG-HAUL COVID

- Tachycardia upon mild exercise or standing
- Night sweats
- Gastroparesis
- Constipation
- Peripheral vasoconstriction

Table 2. Autonomic symptoms.

Unfortunately, it looks like the pandemic has gotten out of control. It is spreading rapidly across the globe, and even if we have an effective vaccine, we might never have enough dosages to vaccinate the eight billion inhabitants on this planet. And we also have a subset of the population that is opposed to any kind of vaccination. So COVID-19 is here for the long haul, and neurologists are going to play a critical role in the management of these “Long-Haulers.” Several efforts are underway to prospectively follow these patients with persistent symptoms, including studies at the intramural program at the United States National Institutes of Health in Bethesda, Maryland. Hopefully we can get to the bottom of these manifestations soon and find solace for these patients in a timely manner. •

Avindra Nath, MD, is chief of the Section of Infections of the Nervous System and Clinical Director, National Institute of Neurological Disorders and Stroke (NINDS), National Institutes of Health in Bethesda, Maryland.

B. Jeanne Billieux, MD, is staff clinician and head of the program in International Neuroinfectious Diseases within NINDS. Her research focus is on emerging infectious diseases and conducting research on the neurological consequences of infections in an International setting.

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CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. KAILASH BHATIA



Prof. Kailash Bhatia

I am honored to be nominated for the position of the WFN trustee. The Association of British Neurology (ABN) nominated me as an elected World Federation of Neurology (WFN) trustee, and I am privileged to be considered as one of the candidates for this post. I hope to be able to contribute to the accomplishment of the WFN mission — to foster quality neurology and brain health worldwide — based on the background of my clinical, academic, and administrative expertise and the experience gained while being involved in clinical practice, research, and teaching in movement disorders and general neurology.

The recent COVID-19 pandemic has made us again aware that disease knows no boundaries, and the world is a connected place, and that strategies for health care and education have to be worldwide. Given that my initial training in medicine and neurology was in India, and I subsequently trained further and specialised in my field of movement disorders in the U.K., I thus have the experience on both sides with regard to needs and requirements as well as expertise and assets in different parts of the world in neurology. I also have the desire to foster communications and collaborations for education and make

equitable services possible everywhere. Neurology has been a passion all my life, and I had the privilege of having great mentors both in India and in the U.K.. In turn, I have been able to teach and train over 40 fellows from all over the world. They have in turn appraised me of the situation in their respective countries in neurology and will be contacts for development of new initiatives for education and the WFN projects worldwide.

My main area of research has been in movement disorders in a translational way, merging clinical, genetic, and electrophysiology to understand pathophysiology. I have been honored to be the associate editor of *Movement Disorders Journal* and the current founding editor of *Movement Disorders Clinical Practise Journal* and have authored more than 600 papers in peer-reviewed international journals and several book chapters and books, including the BMA-award-winning *Marsden's Book of Movement Disorders*, a large reference tome. I have led or participated in various international task forces for setting up new diagnostic guidelines for tremor, dystonia, and others.

It's the endeavor of the WFN to develop cooperative strategies, and I can help promote these through my associations at senior levels with the European Academy of Neurology, ABN, and the International Movement Disorders Society.

I have been involved in spreading neurological education throughout the world, teaching in local symposia not just in Europe but also in India and the rest of Asia and also Africa on several occasions recognizing and tailoring to the available resources, which can vary — and these experiences will help me address specific needs and implement the charter of WFN.

It would be a tremendous privilege to be elected as trustee by the delegates of the WFN to implement the WFN strategy. My goals would be communication, education, and partnership and fostering new developments and collaboration with member societies and neurologists all around the world. •

CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. MUSTAPHA EL ALAOUI-FARIS



Prof. Mustapha El Alaoui-Faris

I am Mustapha El Alaoui-Faris, professor of neurology at the University of Mohamed-V and director of the Alzheimer's Centre of Rabat. I graduated with an MD from Mohamed-V University and trained in neurology and psychiatry in Rabat and in neuropsychology in France. I have taught neurology and neuropsychology and taken care of patients since 1981. My main interests in neurology are dementia, neuropsychology, stroke, Parkinson's disease, multiple sclerosis, and neuro-epidemiology. I pioneered the translation of "Neuropsychological Tests in Arabic" and established the first master's degree on clinical neuropsychology in Morocco.

In 2008, I developed deep brain stimulation for Parkinson's disease at Rabat's University, and in 2009, I led a national study on "Stroke Epidemiology, Risk Factors, and Genetics in Morocco." I am past president of the Moroccan Society of Neurology and of the Maghreb Federation of Neurology and current president of the Moroccan Foundation Against Neurological Diseases.

I am a founding member of the African Academy of Neurology (AFAN), for which I actively participate in the drafting the bylaws, and I also draft the bylaws of

the Pan Arab Union of the Neurological Societies (PAUNS). I was a member of the WHO board for the "Revision of the International Classification of Diseases 10 (ICD 10) of the Nervous System" and the WHO Zika Committee.

My commitment for the World Federation of Neurology (WFN) started with the organization of the 20th World Congress of Neurology (WCN) held in Marrakech in November 2011, of which I was the president. This congress was a great success with more than 3,500 participants worldwide; several African neurologists were able to participate in the congress thanks to the scholarships of the Moroccan Society of Neurology.

Since 2011, I have been the WFN Moroccan delegate, and I was involved in different activities of the WFN. Among others, I was a member of the Educational and Grant Committees. In 2013, I established the first WFN Training Center in Rabat, where several African neurologists have been trained in clinical neurophysiology. In 2014, I initiated the WFN Applied Research Group (ARG) on "Neurology in Migrants," whose scientific work will be published by Springer this year. In order to perfect the continuing education of Moroccan neurologists, I coordinate, since 2016, three annual sessions to work on the AAN *Continuum* books.

In the last years, I was actively involved in the organization of the 24th WCN held in October 2019 in Dubai, as a co-chair of the Teaching Course Committee and also by preparing the Tournament of Minds material. I am currently a member of the WFN Finance Committee.

In the Dubai Congress, I was honored to receive the prestigious WFN Medal for Service to International Neurology.

I will be honored, if I am elected as a WFN trustee, to participate in the development of neurology worldwide, particularly in low- and middle-income countries. I will also campaign for the needs in neurological care of migrants and ethnic minorities to be recognized as a priority by international health authorities. •

CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. MORRIS FREEDMAN



Prof. Morris Freedman

I am honored to have served as WFN chair of the Membership Committee, Canadian delegate, Education Committee member, co-chair of the eLearning Task Force of the Education Committee together with Prof. Riadh Gouider, and trustee. I have also served as president of the Canadian Neurological Society, Canadian Congress of Neurological Sciences, and Federation of National Specialty Societies of Canada. My clinical, research, and education foci are on dementia. During the COVID-19 pandemic, I have been actively involved in providing virtual care to patients in long-term care facilities and acute care hospitals who are suffering from severe agitation and aggression associated with dementia. In many cases, this has prevented transfers to acute care hospitals. Thus, COVID-19 has taught us the power of virtual care for patients in need, including those who cannot attend an in-person visit. As a result, I have become a strong advocate for physician education and training in virtual assessment and management, especially as applied to dementia.

I am pleased that the Canadian Neurological Society has nominated me for election as a WFN trustee. I am proud that Canada developed a WFN Department Visit program for young neurologists from Central and South America through the efforts of Prof.

Guy Rouleau, director of the Montreal Neurological Institute and Canadian delegate to the WFN, and that the Canadian Open Neuroscience Platform, which has its base at the Montreal Neurological Institute, is well positioned to serve as an integrator and facilitator of education worldwide.

Achievements

I have taken an active international leadership role in neurological education. I have advanced international e-learning with a focus on dementia through weekly videoconferencing of behavioral neurology rounds that bring together health care professionals from across the globe within a virtual classroom. The goal is to develop greater international communication and knowledge transfer in dementia. I was awarded the prestigious Colin Wolf Award from the Faculty of Medicine, University of Toronto, for this initiative. The international rounds are now recorded and can be accessed through a link on the WFN website. More recently, I have facilitated expansion of international rounds to include general neurology.

An important development modeled on the international behavioral neurology videoconference rounds was the Neurology International Residents Videoconference and Exchange (NIRVE) that promotes international collaboration among neurology trainees.

Goals

My major goal in education through e-learning is directly related to the mission of the WFN to foster quality neurology and brain health worldwide. I will work hard to achieve this goal through innovative virtual programs. This will involve both developing and developed countries with a view to transferring knowledge in both directions with all participants as equal partners.

I have a vision, a clear sense of direction, and the focus to facilitate knowledge transfer for enhancing brain health globally. This will require extensive collaboration involving many people with diverse needs, and across many countries. Those who know me say that I am an excellent team player and organizer, qualities that are essential for success in promoting education in neurology worldwide. •

CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. BEOMSEOK JEON



Prof. Beomseok Jeon

It is an honor and privilege to be considered for the position of elected trustee by the World Federation of Neurology (WFN). I am a professor of neurology at Seoul National University Hospital in Korea. My participation in WFN dates back to 2008, when I became the Korean delegate to WFN, and I now serve as the president of the Asian Oceanian Association of Neurology (AOAN).

A WFN trustee bears responsibilities requiring serious time, effort, and thorough understanding of the Federation's workings. More fundamentally, a trustee must be committed to the WFN mission "to foster quality neurology and brain health worldwide." Having served WFN in various capacities, I am fully prepared to carry out the duties of the position and overcome challenges in a pragmatic manner based on my experiences in various scientific, financial, organizing, and steering committees. I currently serve as the international executive committee member of the Movement Disorder Society and am an active contributor to other numerous

international societies and journals. Moreover, my years with WFN have strengthened my belief in its core values. If elected as the trustee, I would like to help WFN realize its mission by pursuing the following objectives.

First, prioritize the development of educational programs. Through MDS, I have extensive firsthand experience lecturing in underserved regions as well as in establishing educational programs that cater to the specific needs of such regions. I also have years of experience through WFN, having been on the scientific and organizing committees of the World Congress of Neurology. With awareness and appreciation for the scope of WFN's educational activities, I believe we can further develop training programs to improve the quality of brain health care worldwide.

Second, expand collaborations with compatible academic organizations. We can be even more productive and increase WFN's impact by taking advantage of the Global Neurology Alliance to identify and partner with other brain-related research institutions around the world.

Last, reinforce our support for under-resourced parts of the world in accordance with WFN's avowed ideals. This means focusing on training and education so that people in underserved regions can receive better treatment for neurological disorders. I would like to offer my experiences with medical infrastructures in such regions to act as a bridge between WFN and regions in need.

What unites my experience as a neurological researcher, educator, editor, and administrative executive is my belief in the importance of brain health for all. I have had the pleasure of working with like-minded colleagues from around the world through WFN and hope we can achieve more in the years ahead. I am confident that I can fulfill the responsibilities of trustee and ask for your support. •

CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. CHANDRASHEKHAR MESHAM



Prof. Chandrashekhhar Meshram

I am grateful to the Indian Academy of Neurology and the WFN for considering me worthy for the position of elected trustee.

Services to the WFN

My involvement with the WFN began in 2009 as the national delegate. The WFN balances its thinking and action very well, and I found that I have the experience, enthusiasm, and passion to work in such a milieu. I have served for three terms as a member of the Constitution and Bylaws Committee and for two terms as a member of the Scientific Program Committee. The tropical neurology subsection had been dormant for many years, and I took the challenge to resurrect it by successfully organizing the first International Tropical Neurology Conference in India in 2017. I was then given the responsibility to take it further as president of the Tropical and Geographical Neurology Specialty Group (TGNSG). I was co-chair for INTROPICON II held in Brazil. TGNSG now is one of the most vibrant specialty groups of WFN. I am co-editor for a special issue of *JNS* on tropical neurology. I am also involved in activities of the Global Neurology Alliance and the Environmental Neurology Specialty Group.

The World Brain Day initiative of WFN is highly praiseworthy. The public education campaign is close to my heart due to its importance in prevention and timely treatment of neurological

disorders. I have been actively organizing World Brain Day activities. I have published a book of paintings by children about their perception of the brain. Taking inspiration from WFN, we started National Brain Week for public education in India. I have been the national convener of it for the last five years. In addition, for the last 20 years, I have been organizing public education activities on the occasion of World Parkinson's, Alzheimer's, Epilepsy, Rabies, Stroke, Autism, and Environment Days. I have published about 300 articles in various publications. The recent COVID-19 pandemic has emphasized the importance of public awareness in disease control and prevention.

The global burden of neurological diseases is massive, and there is a shortage of neurologists to deal with it. Therefore, for the last 12 years, through WFN *Continuum* activity and other CMEs, I have been organizing educational programs for neuroscientists and general physicians, so that they become more confident in handling neurological problems.

Goals

The core mission of the WFN, fostering quality neurology and brain health worldwide, fascinates me. There is a glaring inequality in neurology care and education worldwide. The developing and underdeveloped countries lag behind in both these aspects, and WFN is making every attempt to help them catch up. I have experienced this firsthand, and I am committed to addressing it. We need to focus on the management and long-term care of diseases in settings with poor resources where the lack of manpower and funding remain as major obstacles. This has been brought into sharp focus by the COVID-19 pandemic. We need to emphasize to all countries that health, and especially brain health, is a priority and needs higher attention and budgetary allocation. Public participation and health education is important in improving the outcome of patients with neurological diseases and, as mentioned earlier, I have participated in this enthusiastically.

The WFN Executive Committee needs representation from developing countries. This need and a passion to work for the WFN are my reason for standing for the post of an elected trustee. I would be grateful for your support. •

CANDIDATE STATEMENT FOR ELECTED WFN TRUSTEE: PROF. MOHAMMAD WASAY



Prof. Mohammad Wasay

I am currently a professor of neurology at Aga Khan University in Karachi, Pakistan; past president of the Pakistan Society of Neurology and Pakistan Stroke Society; president of the Neurology Awareness and Research Foundation; editor of the *Pakistan Journal of Neurological Sciences*; chief editor of *Jahan e Aasab* (a neurology public awareness magazine), and a member of the Technical Advisory Committee for Pakistan Health and Research Council (PMRC) and the Prime Minister's Task Force on Science and Technology. I have also served as director of the World Stroke Organization (WSO) and currently serve as a fellow of the Pakistan Academy of Medical Sciences and the Pakistan Academy of Sciences and secretary of the Environmental Neurology Speciality Group (ENSG) of the WFN.

I have worked with WFN for more than a decade as an active neurology advocate and researcher from South Asia. I was trained at the Palatucci Forum and then received an Advocacy Leader of the Year Award by the American Academy of Neurology for my global advocacy contributions. I served as chair of the World Federation of Neurology Advocacy Committee for four years. This committee was instrumental in starting and organizing World Brain Day activities and promoting brain health across the globe. We organized many advocacy workshops during the Asian Oceanian Association of Neurology conferences, the Asian Pacific Stroke Conference, and the World Congress of Neurology.

I started the Afghan neurology

initiative, secured funding from the American Academy of Neurology and the French Medical Institute in Kabul, Afghanistan, and trained three neurologists from Afghanistan at Aga Khan University in Karachi, Pakistan. These trained neurologists have started neurology training programs, education, and research in Afghanistan and established the Afghan Neurology Association (AFNA). We are working at Aga Khan University to establish a network of neurology training and research in Kenya, Tanzania, Afghanistan, and Central Asia. We established an Asian stroke network with more than 20 centers in 10 Asian countries. This network has published many multicenter and multinational studies related to stroke in young and Asian women, stroke in pregnancy, and cerebral venous thrombosis in Asia.

I have trained more than 40 neurologists under my supervision. Some of my trainees are now heads of departments and program directors not only in Pakistan but in the Middle East, United States, Canada, and the U.K. I have published more than 170 papers in peer-reviewed medical journals with impressive publications metrics (IF: 466; citations=4276, H-index 33 and I10 index 85) for a clinical neurologist in a developing third world country. I have received many awards, including the Teacher Recognition Award by the American Academy of Neurology, a gold medal from the Pakistan Academy of Medical Sciences, a gold medal from the Pakistan Academy of Sciences and Research, and productivity awards by the Pakistan Council of Science and Technology. I have received 27 research and training grants (intramural and extramural) as principal investigator and co-principal investigator. I have been an invited speaker at more than 120 conferences in 70 countries.

The growing burden of neurological diseases in the world has established WFN as an important stakeholder in global health. We plan to establish brain health as a top agenda for WHO and the United Nations. There is an inequity in neurology training and care across the globe. South Asia, Central Asia, and Africa should be a center point for our future interventions. As a trustee, I could play a valuable role in promoting both of these agendas. Our advocacy committee and ENSG could play an important role in establishing WFN as a key player in global health. •

PRESIDENT'S COLUMN*continued from page 1*

are doing this at a national level. Links to members of the Global Neurology Alliance, who are posting information related to their specialty and COVID-19, are available on the WFN COVID-19 website and undergo regular updating. WFN member societies also have available a bulletin board on the WFN website to post news on the pandemic situation in their countries.

Education

Like most global or large regional organizations, the WFN had been moving to a more electronic base for education. The COVID-19 pandemic has provided an additional spur to this direction. With the cancellation of the African Sub-Saharan Regional Teaching Course for 2020, which had been scheduled for Kampala in September, AFAN and the WFN have proposed an e-learning day. Plans are advancing for this to occur as the WFN/AFAN e-Learning Day focused on "Stroke: A Treatable and Preventable Disease." It is likely that the EAN and AAN will contribute to this very necessary alternative. More information will be found on the WFN website. Plans for the XXV WCN in October 2021, at the new state-of-the-art La Nuvola Conference Centre in Rome, are advancing with the valuable assistance of the Society of Italian Neurology. The scientific and teaching course programs are now being finalized with additional flexibility to permit virtual programming if required.

Promotion

There are a number of other activities engaging the WFN at present which, while

being broadly educational, also promote the visibility and good name of the WFN. World Brain Day is the most imminent of these. As most will know, World Brain Day (WBD) has continued to evolve. It typically begins on July 22 each year, the anniversary of the founding of the WFN, which partners with a member of the Global Neurology Alliance closely representing the WBD topic. WBD runs for two to three months to provide greater dissemination and authority of its message. This year the WFN is excited to partner with the International Parkinson Disease and Movement Disorder Society and believes that the 2020 WBD will achieve similar goals as those that the International Headache Society brought to the 2019 campaign.

A second promotional activity being developed is the Brain Health Initiative. This will focus on the importance of brain health in general and at present will comprise five modules of related topics. The Brain Health Initiative is a matter that dates from the GNA meeting held during the Lisbon EAN meeting in 2018. Several members of the Global Neurology Alliance expressed a desire for the WFN to consider such a campaign. The initiative is planned to run in parallel with the more disease-specific WBD campaign.

Other WFN Activities

There are other activities engaging the WFN at present which I will enumerate. First, the Annual General Meeting (AGM) of the Council of Delegates will be a virtual meeting on a Zoom platform commencing at 12 p.m. on Sept. 9, British Summer Time. Details of this important meeting and its agenda will be disseminated directly to member societies by email and

MARIANNE DE VISSER NAMED CO-OPTED TRUSTEE

The WFN welcomes Prof. Marianne de Visser to the position of co-opted trustee.

De Visser is an adult neurologist at the Amsterdam University Medical Center in Amsterdam, Netherlands, and emeritus professor of neuromuscular diseases at the University of Amsterdam.

She was trained as a neurologist at the University Hospital of Amsterdam. In 1988 and 1989, she was a visiting scientist at Andrew Engel's lab at Mayo Clinic in Rochester, Minnesota, where she performed ultrastructural studies on skeletal muscle in dermatomyositis.

Her research interests are neuromuscular disorders and, in particular, myositis, ALS, post-polio syndrome, and hereditary

neuropathies. Because of her work in ALS, she became interested in palliative care. Previously she was the president of the Netherlands Society of Neurology, and she served with distinction as a WFN elected trustee under Presidents Jun Kimura and Johan Aarli. Recently she stepped down as the secretary-general of the European Academy of Neurology.

De Visser will bring her extensive experience and her value of teamwork to the benefit of the WFN. •



to the membership at large on the website. Second, the election of a new trustee to fill the vacancy created by Prof. Riadh Gouider after completing his term will be undertaken in the week before the AGM, in order not to disadvantage member societies in time zones where the AGM might be occurring at unsociable hours.

While on the topic of WFN trustees, it is with much pleasure that I welcome Prof. Marianne de Visser as a co-opted trustee. Her experience, wisdom, and integrity will complement the work of the WFN. (See box above.)

Third, notification has been sent to

member societies in the Asian and Oceanian Association of Neurology requesting expressions of interest in hosting the 2025 (XXVII) WCN. To date four member societies have done so.

Let me also, on behalf of the trustees and all member societies, express my gratitude to the work of the London office during the pandemic. They have been locked down, out of the office, but their output and the quality of work has remained exemplary.

Finally, I wish all members of the WFN, their families, and patients a safe passage through this pandemic. •

WFN/FINE Neuroinfection Series

BY CHANDRASHEKHAR MESHARAM

Neuroinfections form a large group of disorders commonly seen by neurologists as well as other physicians. Old, new, and emerging infections, their patterns of presentations, and imaging features as well as therapies pose challenges in practice. There are not many meetings that address these issues. Therefore, the Tropical and Geographical Neurology Specialty Group of World Federation of Neurology (WFN) in collaboration with the Forum for Indian Neurology Education (FINE) and under the aegis of the World Federation of Neurology has organized a neuroinfection webinar series. This program is dedicated to Prof. Jagjit Singh Chopra.

The webinar-based meeting began on July 18, 2020, and will run every Saturday 7-9 p.m. Indian Standard Time (IST)/1:30-3:30 p.m. Coordinated Universal Time (UTC). There will be a weekly lecture by a renowned neuroinfection expert, covering many aspects followed by presentation and discussion of three cases.

Registration is free, and the link for registration can be found here: <http://neurologycourses.com/user/registration>.

The program can be accessed at <https://us02web.zoom.us/j/801815712> using the password "ilovefine" with no punctuation.

The event was formally inaugurated on July 18 by Prof. Raad Shakir, former president of the WFN and chair of the specialty groups. Prof. Hector Garcia, from Peru, delivered the first talk in the series on neurocysticercosis. Participants had the opportunity to interact with the speaker through a question and answer session after the talk. This was followed by presentation and discussion on three interesting and challenging cases.

Subsequent talks will be on Saturday, July 25, by Prof. Erich Schmutzhard (Austria) on cerebral malaria, on Aug. 1 by Prof. Marco Tulio Medina (Honduras) on Zika and other arbovirus infections, on Aug. 8 by Prof. Riadh Gouider (Tunisia) on neurobrucellosis, on Aug. 15 by Prof. Serefnur Ozturk (Turkey) on encephalitis, on Aug. 22 by Prof. Jeremy Day (Vietnam)

on cryptococcosis, on Aug. 29 by Prof. Avindra Nath (USA) on the approach to neuroinfections, and on Sept. 4 by Prof. Joseph Berger (USA) on fungal infections of the CNS.

Interesting and challenging cases of dengue, chikungunya, rabies, ebola virus, nipah encephalitis, neuroschistosomiasis, neurognathostomiasis, trypanosomiasis, onchocerciasis, neuroangiostrongylosis, amoebic encephalitis, sarcocystosis, CNS TB, HIV, and other diseases will be

presented and discussed during the series.

We welcome delegates from different countries to participate and present the cases. Those interested in presenting cases should write to the moderators of the program. Chandrashekhara Meshram, president of the Tropical and Geographical Neurology Specialty Group, is the program director. Gagandeep Singh and Rahul Kulkarni are moderators, while Sudhir Kothari and Roop Gursahani are advisors. •

WFN FINE NEUROINFECTION SERIES

| Date | Speaker | Country | Topic |
|---------|--------------------|----------|------------------------------|
| July 18 | Hector Garcia | Peru | Neurocysticercosis |
| July 25 | Erich Schmutzhard | Austria | Cerebral Malaria |
| Aug. 1 | Marco Tulio Medina | Honduras | Zika and Other Arboviruses |
| Aug. 8 | Riadh Gouider | Tunisia | Neurobrucellosis |
| Aug. 15 | Serefnur Ozturk | Turkey | Encephalitis |
| Aug. 22 | Jeremy Day | Vietnam | Cryptococcosis |
| Aug. 29 | Avindra Nath | U.S. | Approach to Neuro Infections |
| Sept. 4 | Joseph Berger | U.S. | Fungal Infections of CNS |

NERVOUS DISORDER

continued from page 3

Hypochondria was also a well-known ailment, Tissot believed. “Parmi les maux que la vie sédentaire de Hommes des Lettres produit presque inévitablement en dérangent la circulation dans les viscères du bas-ventre & y produisant un principe d’obstructions, on doit compter l’hypochondrie.” (“Among the ailments that are almost inevitably caused by the sedentary life of men of learning by deranging the circulation of the bowels of the abdomen and there producing a source of obstructions, one has to reckon hypochondria.”)² Tissot not only wrote on men, but also mentioned women, for instance a 50-year-old woman, who had read books at night in her youth and then started suffering from insomnia and fluxions. With respect to the causes, he mentioned the air around these persons that was rarely freshened, in contrast to the pure and fresh air from the fields, continuation of the work during a part of the night, and lack of exercise leading to “cardialgia,” which had already been noted by Aretaeus of Cappadocia (first century CE) and Aetius of Amida (mid-fifth and mid-sixth century).²

Rousseau

At the time, a well-known critic of civilization was Rousseau. An interesting section of Tissot’s book deals with the preface of Rousseau’s play *Narcisse ou l’amant de lui-même* (“Narcissus or the lover of himself;” 1753). Reading the original text, Rousseau indeed wrote about his concerns with respect to “Le goût des lettres, de la philosophie & des beaux arts amollit les corps & les âmes.” (“The fondness of letters, philosophy, and fine arts, weaken the body and soul.”) He continued, noting that “Le travail du cabinet rend les hommes délicats, affoiblit leur tempérament, & l’âme garde difficilement sa vigueur quand le corps a perdu la sienne. L’étude use la machine, épuise les esprits, détruit la force, énerve le courage, et cela seul montre assez qu’elle n’est pas faite pour nous : c’est ainsi qu’on devient lâche et pusillanime, incapable de résister également à la peine & aux passions.” (“Office work makes people delicate, weakens their temperament, and the soul can keep its strength more difficult, when the body has lost it. Study wears out the machine, exhausts the spirits, destroys the power, weakens courage, and just that sufficiently shows that it has not been made for us: This is how one becomes unresisting and faint-hearted, incapable to resist distress as well as passions.”)

Seated in the Nervous System

Several physicians, including the mentioned Cheyne and Tissot, believed that these modern diseases from abundance and sedentary life had their seat in the nervous system, writing about a nervous tone. These physicians did not always apply contemporary

humoral pathophysiological theories that still reigned, at the time (although Cheyne was still writing in terms of “interruption or interception of the vibrations of the nerves by the viscosity of juices”). The excessive food and alcohol, in combination with a lack of exercise, would result in obstruction of nervous fibers that led to all kinds of complaints that were not observed in people who led a healthier life in the countryside. The term “nervousness” became fashionable for physicians as well as patients. Physicians came to believe that many of the current diseases had a nervous origin. Remarkably, nervous disorders had a positive connotation as it was believed to be observed in particular in intelligent and rich people, the *beau monde*. Interestingly, gout, at the time, was another disease that had the same connotation and was associated with wealth, food, and alcohol.

In this way a psychosomatic paradigm seemed to play an important role in the age of Enlightenment. Not only organic causes, but also ideas, imagination, and emotions were taken into consideration. Much more could be said about the further development of this concept during the 19th century — degeneration ideas, social Darwinism, nervous exhaustion, and neurasthenia with the work of George Beard (1839-1883) and Silas Weir Mitchell (1829-1914) — and 20th century — eugenics starting with Francis Galton (1822-1911) and ending in the Nazi cruelties — but let us keep to the 18th century here.

Cheyne's English Malady

Not only the mentioned part of society was susceptible for these diseases, but even whole nations were associated with it. Cheyne’s book was named *The English Malady* (Cheyne, 1733; Figure 4). In the preface he noted that “all our Neighbors on the Continent, by whom nervous Distempers, Spleen, Vapours, and Lowness of Spirits, are in Derision called [it] the English Malady. And I wish there were not so good Grounds for this Reflection.” He continued to mention the reasons for this, including “the Moisture of our Air, the Variableness of our Weather ... the Rankness and Fertility of our Soil, the Richness and Heaviness of our Food, the Wealth and Abundance of the Inhabitants (from their universal Trade), the Inactivity and sedentary Occupations ... and the Humor of living in great, populous and consequently unhealthy Towns.”⁴ Furthermore, it is of interest to write out the whole title of the book, as it occurs on the title page, *The English Malady: or, a Treatise of Nervous Diseases of all Kinds, as Spleen, Vapours, Lowness of Spirits, Hypochondriacal, and Hysterical Distempers*, as well as the titles of the three divisions of the book, notably Part I. Of the Nature and Cause of Nervous Distempers; Part II. Of the Cure of Nervous Distempers; Part III. Variety of Cases that illustrate and confirm the Method of Cure; to which Cheyne added “With the Author’s own case at large.”

DE LA SANTÉ
DES GENS
DE LETTRES

PAR M. TISSOT,

D. & P. en Médecine,

De la Soc. Roy. des Scienc. de LONDRES;
de l’Acad. Méd. Phys. de BASLE; de la
Soc. Oeconom. de BERNE.

A LAUSANNE,

Chez FRANÇ. GRASSET & Comp.
Libraires & Imprimeurs.

M. D. C C L X V I I I.

Figure 3. Title page of Tissot’s book [On the health of men of learning].

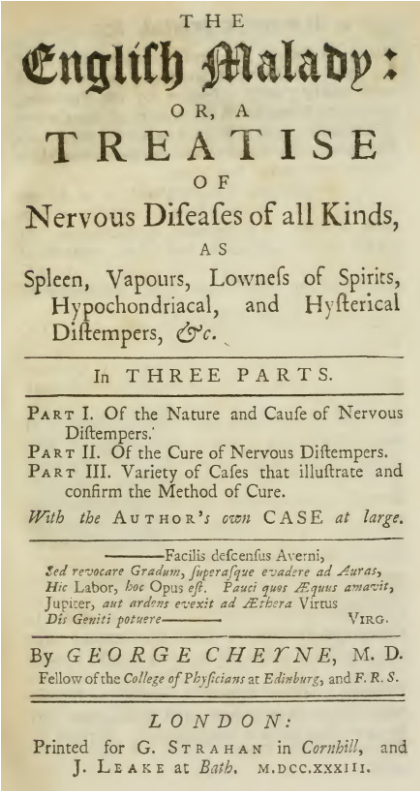
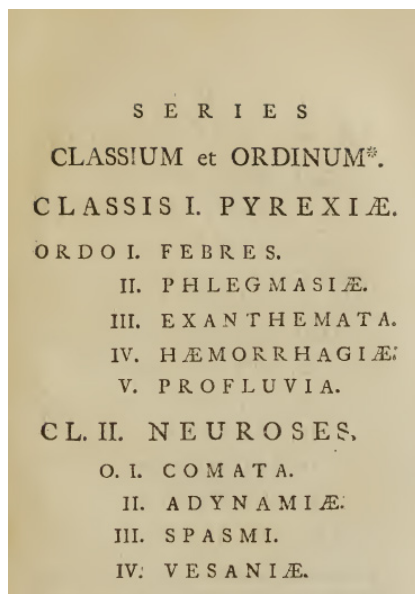
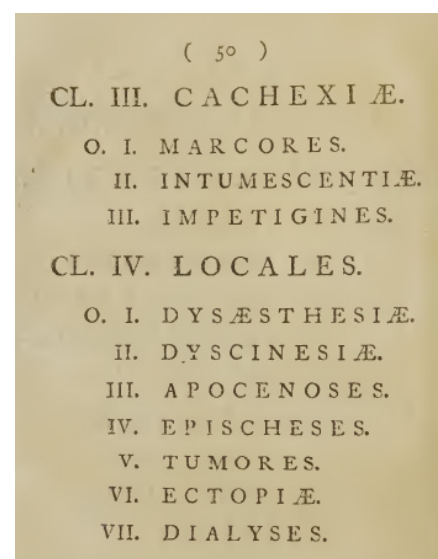


Figure 4. Title page of Cheyne’s book.

Figure 5a & b. From Classification of diseases from William Cullen’s *Synopsis Nosologiae Methodicae* (American edit. of 1783).

In chapter six, “of the Frequency of Nervous Disorders, in later Years, beyond what they have been observed in former Times,” we find information on the three main causes, including 1) luxury; 2) an inactive, sedentary, or studious life; and 3) living in great and populous cities. Most, if not all, of the cases described came from the higher classes, indeed finishing with an extensive description of his own condition, with intermittent fever and “vertiginous Paroxysm, so extremely frightful and terrible, as to approach near to a Fit of an Apoplexy ... I found after this, some small Returns of my Vertigo (in Bed especially) on lying on a particular Side...” (This episode seems to have been benign paroxysmal positional vertigo.) Later he suffered from headache, depression, and anxiety, as he “went about like a Malefactor condemned, or one who expected every Moment to be crushed by a ponderous Instrument of Death.”⁴

In general, the nervous distempers were usually treated by medicaments, diet, and exercise. The author himself



resorted to omitting suppers, eating less animal food at dinners, “and drinking very little fermented Liquor,” which resulted in losing several of his friends. He retired to the countryside “into the fine Air,” took medicaments, had setons made in the neck, and took gentle purges. He suffered from melancholy, lost weight, and called it a “Nervous and Scorbutical Disorder.”⁴ In his *Essay on Regimen* (1740), which is often quoted by vegetarians, as he advised vegetables rather than animal food, he even provided a number of aphorisms “to instruct and ease the Memory of the Valetudinarian.” Among the regimens, he emphasized horseback riding in aphorism no. 25: “Riding is the best of all Exercises to get Health, and to promote the Digestions, especially in nervous Distempers.”³ He believed “Hypochondrics are thereby most shaken and exercised.”⁴ In a letter to writer and printer Samuel Richardson (1689-1761), Cheyne advised “riding on the new Chamber Horse so well known in London. It is certainly an

see NERVOUS DISORDER page 11

BOOK REVIEW

C. Miller Fisher: Stroke in the 20th Century

by Louis R. Caplan, Oxford University Press 2020

BY VLADIMIR HACHINSKI

“Who was the greatest contributor to the field of stroke in the 20th century?” If you answer the question, you risk displeasing somebody somewhere with a different opinion. On being asked that question after a lecture in Moscow, I answered: “The greatest contributor to the understanding of the common causes of stroke is C. Miller Fisher.” Few would disagree. He established the relationship of carotid disease to ischemic stroke, characterized the clinical and pathological feature of lacunar syndromes, and proved that atrial fibrillation can cause stroke in the absence of cardiac valvular disease.

Lou Caplan is one of Miller Fisher’s most distinguished pupils and colleagues. He describes these and others of Miller Fisher’s contributions in historical context.

Carotid Disease

Hans Chiari in 1905 described the relationship of carotid stenosis to stroke. If the implications were ever appreciated, they were soon forgotten. Transient ischemic attacks (TIAs) were recognized, but most physicians accepted the explanation offered by the great Canadian/American/British physician William Osler, who attributed them to “vasospasm.” The explanation of vasospasm as a cause of TIAs proved

plausible, convenient, and wrong. Miller Fisher observed the transient platelets and other materials through the retinal arteries during a TIA and concluded that embolism from the extracranial arteries was the common cause of TIAs. It was Miller Fisher who established that carotid disease could lead to stroke and laid the scientific bases for carotid endarterectomy.

Lacunar Syndromes

Miller Fisher described five classical lacunar syndromes based on extensive clinical observations and meticulous brain dissections. As atherosclerotic large vessel disease decreases with better treatment, small vessel disease gains greater prominence.

Atrial Fibrillation

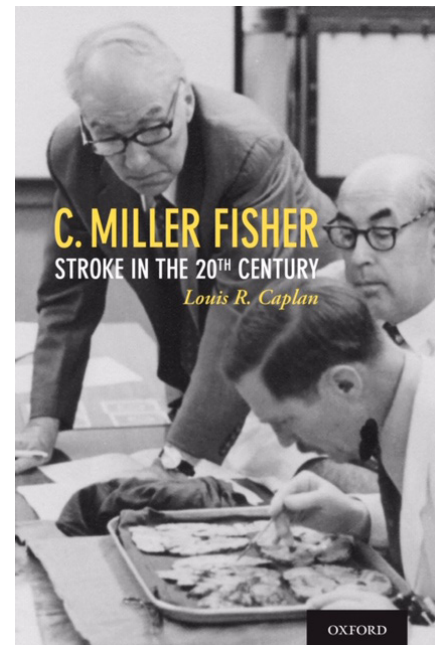
When Miller Fisher began his career, atrial fibrillation as part of rheumatic heart disease was recognized as being associated with stroke, but not as a cause by itself. In 1977 he published a study that left no doubt that atrial fibrillation by itself could cause stroke though cardiac embolism. Even before his definitive study, he had been advocating prophylactic anticoagulation in atrial fibrillation, still the mainstay of prevention.

Caplan’s own clear writing is enhanced by quotes from Miller Fisher’s detailed memoirs spanning a long life. The main headings make for easy reading and scanning.

Caplan’s direct knowledge of the field, of the main players and his own contributions allow him to state: “This book is also in many ways a biography of a disease (stroke) as it evolved during the 20th century.” This is not to deny the contribution of others, as Caplan has documented himself in his co-edited book on stroke syndromes, nor the fact that advances in the field increasingly are made by contributions from all around the world.

Caplan manages to convey a sense of the times and how a field dominated by therapeutic nihilism became one of a growing array of treatments and interventions. Caplan’s scene-setting illustrated by Miller Fisher’s own words also convey a sense of the man: Miller Fisher as a doctor, naval officer, survivor of a torpedoed ship, prisoner, prison physician, neurologist, neuropathologist, teacher, mentor, and thought leader. He, along with his many pupils and the pupils of pupils, has played a major role in transforming the field. These include Robert Ackerman, Lou Caplan, Steven Cramer, Stephen Davis, Geoffrey Donnan, Phillip Kissler, Walter Koroshetz, JP Mohr, Alan Ropper, Martin Samuels, and Philip Wolf, among many others.

Seldom has a medical story been told so well, so credibly, and so accurately by someone who has been a partner



and participant in the advances that he describes. It is a delight to read by anyone with a health sciences background, and a must for those in the field of stroke. George Santayana wrote, “Those who cannot remember the past are condemned to repeat it.” We do want all those involved in stroke to remember the past, so that we can have many repeats of Miller Fisher’s inspiring example in the multiplying subfields of stroke. •

Vladimir Hachinski, MD DSc is Distinguished University Professor, University of Western Ontario London, Canada, and a past president of the WFN.

Notice From the Chair of the WFN Specialty Group on Neuroepidemiology

BY CARLOS KETZOIAN
CHAIRMAN, SPECIALTY GROUP
ON NEUROEPIDEMIOLOGY

On June 4, 2020, David Strug, a professor emeritus at Wurzweiler School of Social Work at Yeshiva University in New York, passed away after a long, heroic battle against COVID-19. David was the beloved husband of our dear friend Ruth Ottman, PhD, a professor of epidemiology (in neurology and the Sergievsky Center) at Columbia University in New York.

David was born in Philadelphia and had a wide variety of work experiences. He obtained a PhD in anthropology from Columbia University, specializing in Latin America, and later obtained a master’s in public health and a master’s in

social work. He worked both as a social science researcher and a psychotherapist.



David Strug

He spoke Spanish fluently and conducted research in many countries, including Mexico, Peru, Bolivia, and Cuba.

Ruth and David planned to take part in the II Latin American Course of Neuroepidemiology in Uruguay in March 2020, organized by the Specialty Group of Neuroepidemiology of the World Federation of Neurology. As you know, the course had to be postponed due to the pandemic situation. Unfortunately, we missed the opportunity to interact with David in this activity.

On behalf of the WFN Specialty Group on Neuroepidemiology, we extend our condolences to Professor Ruth Ottman. •



World Brain Day

A reminder to all readers that World Brain Day 2020, a collaborative effort between the WFN and the International Parkinson and Movement Disorder Society, and devoted to raising awareness for—and ending—Parkinson’s disease, is underway just as this issue is going to press. It began on July 22, 2020 and will extend for weeks thereafter. Please look to the next issue(s) of World Neurology for reports of the many efforts from member societies around the globe devoted to this important event. •

INTERNATIONAL CONFERENCE REPORT

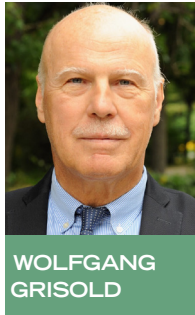
Multidisciplinary Strategies to Prevent and Combat Brain Diseases-Moscow

BY WOLFGANG GRISOLD

An international conference, focusing on “multidisciplinary strategies to prevent and combat brain diseases,” took place in Moscow on November 27-28, 2019, and followed the concept of integration and multidisciplinary. The organization was smoothly run by Prof. Alla Guekht and her team and linked neurology to neurosurgery, internal medicine, and psychiatry. The meeting was held in the Buyanov’s city hospital, and needless to say was equipped with all facilities, including press briefings before the meeting.

The opening ceremony gave greetings from the Russian health care minister, Veronica Skvortsova, the Moscow head of the health care department, Alexey Khripun, the president of the All-Russian Society of Neurologists, Y.I. Gusev, and from the leading international neurological organizations — WFN, EAN, and ELAE. A short presentation about the WFN activities in regard to education, global networks, and cooperation with the WHO was made.

Dr. J. Breda, as the chair of the European regional NCD bureau of



WOLFGANG GRISOLD

WHO, gave an initial presentation on the work of the WHO, primary care, and also aspects of environment and nutrition, which are eminently important for many non-communicable diseases (NCDs). This talk and statements are important for the mutual understanding of the specialization of neurology and the activities of the WFN. This was followed by a talk focusing on the historic role of Russian neurology. The impressive figure of the beginning of the 20th century, Bekhterev, was discussed, including his longing for innovation and his successful achievements in neurology, psychiatry, and health care organization and education.

During the first day of the conference, several other topics, such as stroke, rehabilitation, the autonomic nervous system, and neurooncology, were presented. Although these topics have defined contents being discussed at many occasions, the keynote speakers were able to pick out exciting developments and add valuable information.

The second day entered the often-neglected chapter of neuropsychiatry, which reemerges in international fields and undergoes a metamorphosis from conversion into functional disorders. This lecture by Prof. W. Curt LaFrance Jr. (U.S.)

made two important points: functional disorders exist and may be more frequent than we admit, and several concepts of explanation and treatment were available. Another message was that a society for functional disorders has been recently established.

A complex of lectures discussed epilepsy and seizures. Epidemiology and the complex meaning of incidence and prevalence were beautifully and carefully explained by Prof. W. Allen Hauser (U.S.), who shared his insights into this important basis of his work and considerations. Several other lectures addressed epilepsy and seizures, and were supported by excellent videos of patients, EEG recordings, and imaging.

The end of the second day was devoted to carefully prepared case presentations, which focused on several topics, such as complicated cerebrovascular disease, genetic diseases, complex seizures, neuroinfections, and rare neuropathies. In several cases, speakers from other disciplines were invited to make valuable comments and give diagnostic clues. The spirit of these case presentations was enthusiastic and also made it clear that neurology is deeply rooted in multidisciplinary and multiprofessional work. From the engagement of speakers and the audience, these short case presentations seemed to become a

well-accepted format.

On the third day, there was a meeting in the Moscow Research and Clinical Center for Neuropsychiatry within the international advisory board of the center. The members of international and Russian faculty discussed ongoing collaborative projects on comorbidity of epilepsy and mental disorders, self-harm behavior, the role of neuroinflammation in stress, and some others. Junior researchers of the center presented their papers and interesting cases.

Research labs and clinical facilities of the center were presented. The members of the board appreciated the high level of the technologies in the labs and the clinical wards of the center.

The size and the spirit of the meeting also allowed many personal and professional interactions, and faculty members interacted with local neurologists, allowing the platform for advice and cooperation to continue.

Having attended these meetings for brain diseases for several years, the interaction of attendees with the faculty is increasing, the magnitude of interaction and discussion during the meeting is developing, and the impression is that young neurologists and psychiatrists are increasingly fluent in English, which helps increase cooperation and communication. These types of integrative meetings, with a strong educational accent, are valuable not only from the point of content, but also from communication. •

Wolfgang Grisold is Secretary General of the WFN.



Opening ceremony
From left to right: Prof. M .Hilz (Germany), Prof. D. Muresanu (Romania), V.N. Buzin (Ministry of Health of the Russian Federation), Prof. A.B.Guekht (Russia), Dr. J.Breda (Portugal), Prof. W. Grisold (Austria), Prof. N.A. Shamalov (Russia), Dr. A.V.Salikov (Russia).



Advisory board meeting: Prof. A. Guekht presenting the achievements of the Moscow Research and Clinical Center for Neuropsychiatry.



Prof. Hilz and Prof. Mkrтчan discussing the study on autonomic dysfunction in epilepsy.



J. Breda, the head of the European Office for the Prevention and Control of Noncommunicable Diseases (NCDs) in Moscow.

NERVOUS DISORDER

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excellent Contrivance for the Sedentary, Studious, and Thinking Part of Mankind except the fresh Air." He was using the device himself an hour every day and "do more when the Weather will not permit me to walk in the Garden or ride my Coach."

Nosological Systems and Neurosis

The importance of the nervous system as the origin of diseases was also recognized by Robert Whytt (1714-1766), professor of the theory of medicine at the University of Edinburgh, although he had a different approach. He noticed that nervous diseases may mimic somatic conditions and can be strongly influenced by emotions, sometimes being triggered by intense imagination. His successor William Cullen (1710-1790), who drew up an important nosological system, believed that the category of nervous diseases — he coined the term neurosis — was the most important among four categories (although historian of science Dyde pointed to the differences of view with this respect between Whytt and Cullen). In this age of nosology, in which diseases were classified in a similar way as Carl Linnaeus (1707-1778) did with the plant world (he also made a nosological system of diseases), Cullen classified diseases into 1) pyrexiae (fevers); 2)

neuroses; 3) cachexiae; and 4) locales (Figure 5). His classification influenced the French physician Philip Pinel (1745 - 1826), who recognized neuroses of the senses, cerebral function, locomotion and voice, nutrition, and sexual function. It may be regarded a mixture of diagnoses from modern neurology and psychiatry, although other diseases were still classified within this category. The class of neurosis mainly included diseases that Pinel considered "functional," and this contained more diseases than we would call psychiatric nowadays (and the term cannot be equated with its later use by Freud). This functional orientation of neurosis remained during almost the whole 19th century, though the category of neuroses became smaller in the course of the century as more diseases were found to have a neuropathological substrate. In the 1880s, for example, William Gowers (1845-1915) mentioned the following functional disorders: chorea, paralysis agitans, tremor, tetanus, tetany, occupation neurosis, etc.

Conclusion

In conclusion, the 18th century disease of civilization, associated with abundance and sedentary life, and its treatment looks familiar to us today. The association these physicians made with the nervous system is of interest against the background of the psychosomatic perspective. The concept of nervous disorder or neurosis

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at the time, however, was much broader than today, a kind of repository, and cannot be compared with its use in the early 20th century (psychoneurosis). •

WFN/AFAN e-Learning Day

The World Federation of Neurology and the African Academy of Neurology are delighted to announce to you their first virtual one-day teaching course, the WFN/AFAN e-Learning Day, which will be held on Saturday, October 10, 2020.

This educational event will include speakers from the European Academy of Neurology (EAN), the American Academy of Neurology (AAN), and the World Stroke Organization (WSO). It will bring together neurologists and residents in neurology in Africa and around the globe.

The main topic will be "Stroke: A Treatable and Preventable Disease." It will be treated in four scientific sessions.

Through this initiative we will discuss stroke from bench to bedside with a collection of educational lectures that will be presented by a group of experts capable of providing deep insight into the latest developments in their field.

More details regarding the first WFN/AFAN e-Learning Day and registration will be announced soon on the [WFN website](http://www.wfn.org). •

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