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WORLD FEDERATION OF NEUROLOGY

WORLD NEUROLOGY

THE OFFICIAL NEWSLETTER OF THE WORLD FEDERATION OF NEUROLOGY

PRESIDENT'S COLUMN

WFN Targets Advocacy and Teaching in 2025

A preview of upcoming WFN projects and goals this year.

BY PROF. WOLFGANG GRISOLD

Welcome to the new edition of *World Neurology*, the newsletter of the World Federation of Neurology (WFN). Since the last issue, several projects have been announced and are forthcoming.

The deadline for applications for WFN trustee positions ended Feb. 14, 2025, and the Nominating Committee has listed the candidates for the positions of president, vice president, and one trustee. The list of nominees, short biographies, and statements from the candidates can be found in this issue as well as on the **WFN website**. *Candidate statements can also be found starting on* **Page 15** *of this issue.*

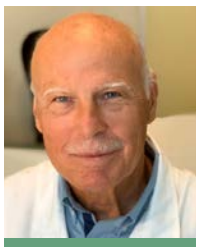
According to the bylaws, additional candidates supported by any of the five member societies can apply for any position until one month before the election. The election will be held virtually. The date and deadline will be announced on the **WFN website**. We look forward to interested and motivated candidates who will work for the WFN in the future. Traditionally, the trustees are not involved in the process of recommendation.

Individuals with experience in the tasks of the WFN will be welcomed to apply, and their expertise is needed. Information on the work of the WFN can be found on the **WFN website**, the **WFN essentials page**, and the newest *Journal of the Neurological Sciences* (*JNS*) **Service Page**.

The main WFN activities can be summarized by two letters: **A** and **T**. **A** is for advocacy and global activities, and **T** is for teaching and training.

Advocacy

Advocacy for neurology is a growing part of the WFN's activities. The importance of advocacy is implemented in the World Health Organization's (WHO) **Intersectoral Global Action Plan** (IGAP). It is the core of WFN's activities to communicate and work with the WHO and the U.N. Economic and Social Council (ECOSOC).



WOLFGANG GRISOLD

We need to increase the teaching of advocacy at all levels of health services. In addition to the WFN patient forums, we have a joint project with the American Academy of Neurology (AAN), the **Global Advocacy Leadership Program (GALP)**, which will be presented for the first time this year at the AAN Annual Meeting, the World Congress of Neurology (WCN), and virtually.

The WHO's brain health initiatives and the IGAP are supported by the WFN. The WFN community of neurologists considers the IGAP a unique opportunity to implement neurology in countries in need, to encourage all countries to invest in research and innovation, and to engage more in public health.

The U.N. ECOSOC is well defined by the **17 Sustainable Development Goals** (SDGs). In particular, SDG 3 (good health and well-being) and SDG 5 (gender equality) are important for the WFN. Health is a central, but not the only, component of the work of the U.N. ECOSOC. We are appreciative that the U.N. ECOSOC will support this year's World Brain Day (WBD) on brain health.

The GALP is a unique project of the WFN and AAN to increase awareness of

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WORLD BRAIN DAY

World Brain Day 2025: Brain Health for All Ages

A global initiative for lifelong brain health.

BY PROF. TISSA WIJERATNE, PROF. DAVID DODICK, PROF. STEVEN LEWIS, PROF. ALLA GUEKHT, AND PROF. WOLFGANG GRISOLD

We are delighted to announce the 12th World Brain Day — WBD 2025 — a landmark campaign dedicated to promoting "Brain Health for All Ages." This year's initiative builds upon the successes of previous WBD campaigns, reinforcing our commitment to brain health as a fundamental aspect of individual and societal well-being.

Our vision for WBD 2025 is to collaborate with U.N. ECOSOC and the WHO Brain Health Unit to drive a global movement for brain health advocacy. By working together, we aim to make brain

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INSIDE

WORLD NEUROLOGY

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 Media.

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FROM THE EDITORS

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

STEVEN L. LEWIS, MD

WALTER STRUHAL, MD

We'd like to welcome all readers worldwide to the April 2025 issue of *World Neurology*.

In this issue's President's Column, WFN President Prof. Wolfgang Grisold updates readers on the many evolving World Federation of Neurology (WFN) activities, including the upcoming WFN elections and critical initiatives related to advocacy, education, and publications. He also highlights the upcoming World Brain Day 2025 and the exciting plans for the World Congress of Neurology 2025 coming up in October in Seoul, South Korea.

This issue includes two reports on World Brain Day. First, Dr. Tissa Wijeratne, co-chair of World Brain Day 2025, provides a brief historical overview of the development and evolution of the themes and activities of World Brain Day over the past decade. In an accompanying report, Dr. Wijeratne and David Dodick, World Brain Day co-chair, along with Dr. Steven Lewis, Dr. Alla Guekht, and Prof. Grisold, provide an update on the theme of World Brain Day 2025, "Brain Health for All Ages," and the many activities being planned to support and enhance this global initiative.

Dr. Stefan Meng from Vienna, Austria, reports on the most recent 2-day course on nerve ultrasound. The annual event has taken place at National Taiwan University in Taipei since 2016.

This issue also includes two reports on the launch of the Brain House at Davos, Switzerland. This year, it was held in conjunction with the World Economic Forum and hosted by the Davos Alzheimer's Collaborative. In the first report, Dr. Morris Freedman, WFN treasurer, provides the official WFN report from the event, which served as a global platform to highlight the link between brain health and economic growth. In the next report, Prof. Alfred K. Njamnshi and his esteemed coauthors provide further details of this seminal multidisciplinary event highlighting the importance of brain health in productivity, resilience, and well-being.

In this issue's History Column, titled "Charcot, Impressionism, and Functional Dyschromatopsia," Dr. Peter Koehler provides his insights into an association between the artistic school of Impressionism and the Salpêtrière.

This issue includes the statements for candidates who were put forward by the WFN Nominating Committee for the positions of WFN president, first vice president, and elected trustee. You can find more about the WFN election process on our website. Editorial oversight of the candidate's statements for this section of *World Neurology* was taken over by WFN President Wolfgang Grisold to avoid any potential conflict of interest by the editors of *World Neurology*.

We also would like to draw your attention to "Neurology in the 21st Century," which provides an overview of neurology in the current century. It was published in the March 22, 2025, issue of *Annals of Neurology*. It was written by Dr. John England, editor-in-chief of the *Journal of the Neurological Sciences*, WFN's official journal, with collaborators Drs. Ann C. Tilton and Carlayne E. Jackson, immediate past-president of the AAN.[1] We think *World Neurology* readers will find this contemporary thought piece of interest.

In closing, thanks to all neurologists and neurologic trainee readers in all regions of the world for your interest in the WFN and in *World Neurology*. We look forward to your contributions to this publication and any suggestions for improvement. •

References:

1. England JD, Tilton AC, Jackson CE. *Neurology in the Twenty-First Century*. *Ann Neurol*. 2025. PMID: 40119738.

Looking Back on World Brain Day

The campaign has driven more than a decade of progress and global advocacy.

BY PROF. TISSA WIJERATNE
CO-CHAIR OF WORLD BRAIN DAY

The World Brain Day (WBD) campaigns from 2014 to 2025 have played a transformative role in advancing global awareness, advocacy, and action for brain health. Over the past decade, WBD has evolved into a powerful platform for raising awareness, influencing policies, and promoting best practices for neurological care and prevention. Each year, the campaign has focused on a key theme, driving international collaboration among health care professionals, policymakers, and the public.

The journey began in 2014 with the theme of "Our Brain, Our Future" emphasizing the critical need to prioritize brain health worldwide. This foundational campaign set the stage for subsequent years, each highlighting an urgent neurological challenge. Topics by year have included:

- 2015: Epilepsy
- 2016: Brain Health and Aging
- 2017: Stroke
- 2018: The Impact of Air Pollution on Brain Health
- 2019: Migraine
- 2020: Parkinson's Disease
- 2021: Multiple Sclerosis
- 2022: Brain Health for All – reinforcing the necessity of brain health for global well-being
- 2023: Brain Health and Disability – advocating for early intervention, rehabilitation access, and social inclusion

TISSA WIJERATNE

The 2024 campaign marked a major milestone with its focus on "Brain Health and Prevention," aligning closely with the WHO's Intersectoral Global Action Plan (IGAP) on Epilepsy and Other Neurological Disorders. This initiative underscores the importance of prevention, early diagnosis, and equitable access to neurological care, promoting the WHO IGAP toolkit to reduce the global burden of neurological diseases and improve health outcomes worldwide.

Looking ahead, the 2025 World Brain Day will champion the theme of "Brain Health for All Ages," emphasizing the lifelong importance of brain health and the need for targeted interventions at every stage of life. This campaign will be a historic effort, as it marks the first time WBD will work directly with both the United Nations Economic and Social Council (ECOSOC) and the WHO, ensuring that brain health remains at the forefront of global health policy and advocacy efforts across all six regions.

These campaigns have been instrumental in driving global action, influencing neurology policies, public health strategies, and clinical care improvements. The success of World Brain Day is a testament to the unwavering support and commitment of neurology societies worldwide, which have worked to advance brain health education, advocacy, and intervention programs.

On behalf of the global neurology community, we extend our deepest gratitude to every neurology society, health care professional, researcher, and advocate who has contributed to this movement. Your dedication has helped shape a future where brain health is prioritized for all. Together, we continue to push forward, working toward a world in which everyone, regardless of age or background, has access to the best possible brain health care and preventive strategies. •

Prof. Tissa Wijeratne is co-chair of World Brain Day and a WFN elected trustee.

PRESIDENT'S COLUMN

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the need for advocacy and to teach both advocacy and leadership skills. The course has many elements of the successful **AAN Palatucci Advocacy Leadership** courses and will add several topics of global relevance.

Twenty people from low-middle and low-income countries were selected from 100 applicants and will be fully supported to attend. After a face-to-face meeting, which took place at the AAN Annual Meeting in April in San Diego, the participants will attend a series of five virtual meetings and a final meeting and graduation at the World Congress of Neurology in October in Seoul, South Korea. Also, both the AAN and the WFN will waive the congress fees, so that participants may attend both meetings.

Teaching

The educational activities of the WFN have included a visit to all Training Centers in Africa. A visit to Mexico City is planned for this year. In addition to the numerous reports, the African Training Centers received an analysis summary of the site visits, and we hope to continue this important activity.

The financial burden of the Training Centers is almost entirely on the WFN, although we have help from the Association of British Neurologists (ABN) for the Training Center in Cairo, and our successful Specialty Group at the International Congress on Neuromuscular Diseases regularly supports a large number of trainees in Rabat on electrophysiologic and neuromuscular training.

In related news, Prof. Nahzda Birouk will take over responsibilities from Prof. El Alaoui as chair of the Training Center in Rabat. We thank Prof. El Alaoui for his longstanding support and merits from the WFN.

There are three four-year trainees in Africa and five one-year fellowships in Africa (general neurology, neuromuscular, epilepsy, and stroke). In Mexico City, we have a one-year fellowship on stroke. This is a large number for the WFN, but only a small crystal to offer for the 1.4 billion inhabitants on the African and Central and South American continents. However, crystals grow at various speeds, from minutes to many years.

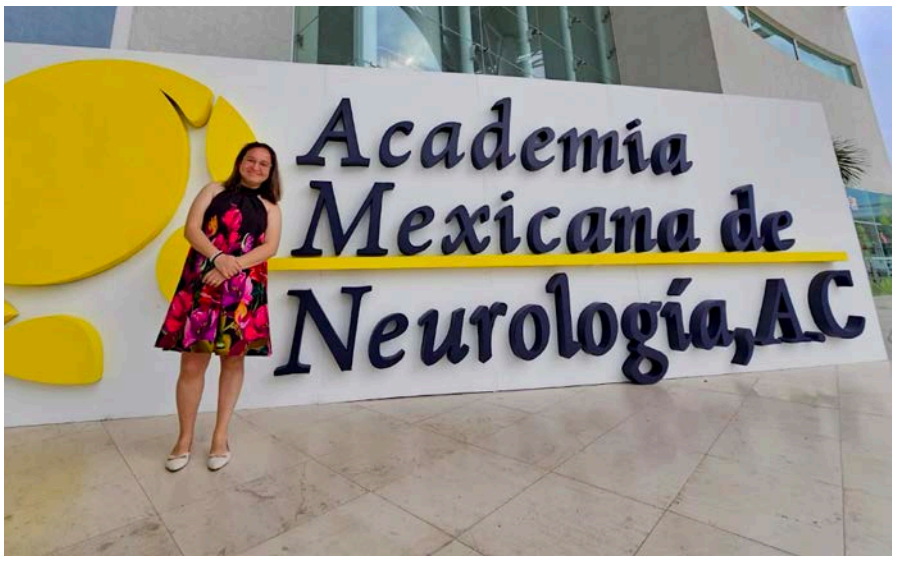
Prof. El Alaoui (left) studies the recognition certificate for the Training Center in Rabat during the WFN site visit. Prof. Nahzda Birouk (center), incoming Training Center chair, looks on with Prof. Wolfgang Grisold, WFN president.

Watching the results from the EMG machine during the WFN site visit in Rabat.

Over the last 10 years, the North African centers, along with Senegal and Cape Town, have trained additional people. Several African universities are also poised to take up neurology training. This emphasizes the need for, and the increasing efforts of, training in Africa for Africans. "Empower the regions" is not just a concept; it is producing powerful teaching instruments, which will have long and enduring effects.

The increase in the number of neurologists is hoped to be exponential. This is only the peak of a needs pyramid, requiring other health care professionals, structures such as labs, imaging, testing, and inpatient and outpatient facilities, and access for all in need.

Although trained neurologists are forming the top level of that pyramid, there is also the model of the inverted pyramid, which on its large base has the most frequent and most important content. Seeing and appreciating the large needs for neurology, our effort must be directed toward implementing neurological care and knowledge into primary care. Increasing awareness of the most frequent neurological symptoms and signs, as well as the most frequent neurological diseases, will be important.



Cynthia Marleny Aliñado Ramos, the present WFN trainee, at the Training Center in Mexico City.

Figure 1: Word bubble from the participants of the AOAN Education Day with requests for future topics.

Education Days

Education and teaching have been successfully achieved with the most recent Education Day, held jointly with WFN, the Asian and Oceanian Association of Neurology (AOAN), and the Movement Disorders Society (MDS). The quality of the course was excellent, and the topics were of worldwide importance. We had a record number of registrants, and more than 1,000 participants. We will continue to partner with AOAN on more Education Days in the future.

The past series of Education Days, which were held over several years with the International Headache Society (IHS) and the Global Patient Advocacy Coalition (GPAC) were also successful. The most recent African Education Day on neuropathies was held in 2024. The preparation, organization, and financing of these events is an important task of the WFN, which needs strong cooperating partners.

World Brain Day (WBD)

World Brain Day 2025 will feature the topic of brain health, which seems to be attracting attention worldwide. The full wording of this year's theme is "Brain Health for All Ages." This wording concurs with the United Nations SDG3 (good health and well-being) and is a fundamental part of healthy living. It will increase attention toward disease

Dr. Tedros Adhanom Ghebreyesus (left), director general of the WHO at the Geneva meeting 2025, pleading for more attention for emergency activities.

groups in different age groups and regions.

There is also a great divide between communicable and noncommunicable diseases (NCDs). Despite the global increase of NCDs, infections worldwide still present a challenge, which is often underestimated. The lessons from the COVID-19 pandemic concern all of us, and we can see that the WHO prepares and invests in emergency structures for the future.

World Congress of Neurology (WCN)

WCN 2025 will take place Oct. 12-15 in Seoul, South Korea. We are grateful to the Korean Neurological Association (KNA) and to the region for supporting this important showcase for neurology in Asia.

Asia is large in geography and population, and access to neurology varies

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WORLD BRAIN DAY

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health a recognized priority worldwide and create meaningful change at both the policy and community levels.

Aligned with the **Intersectoral Global Action Plan** (IGAP) for Epilepsy and Other Neurological Disorders (2022-2031) and the **United Nations Sustainable Development Goals** (SDGs), this year's campaign will integrate regional perspectives to foster sustainable progress in brain health.

Here are the five key messages for WBD 2025:

1. **Awareness:** Neurological disorders are the leading cause of disability-adjusted life years (DALYs) worldwide and the second leading cause of death.
2. **Education:** Brain health must be prioritized throughout life, from childhood to old age.
3. **Prevention:** Prevention of neurological disorders begins early, with healthy lifestyle choices such as regular exercise, balanced nutrition, quality sleep, stress management, control of vascular risk factors, and social engagement.
4. **Access:** Equitable access to neurological care, diagnostics, and therapies is essential for all, regardless of socioeconomic status.
5. **Advocacy:** A global framework for brain health must focus on risk assessment, early interventions, environmental risk mitigation, and equitable neurological care.

The 2025 WBD Campaign

Since its launch in 2014, World Brain Day has been a flagship initiative of the WFN, organized in collaboration with leading international societies such as the International League Against Epilepsy, World Stroke Organization, International Headache Society, World Federation of Neurorehabilitation, and Movement Disorders Society. Each year, a crucial theme is chosen to emphasize the importance of brain health and drive positive action.

For WBD 2025, we have chosen "Brain Health for All Ages," continuing our global efforts to promote brain health as a lifelong priority. This theme aligns with the WHO's mission to reduce disability worldwide, recognizing that disability can be prevented, rehabilitated, and managed through comprehensive neurological care. Neurological disorders affect individuals across the entire lifespan, with outcomes ranging from transient symptoms to long-term or permanent disability. The significant burden of chronic neurological conditions is well documented in the **Global Burden of Disease** (GBD 2021) study.

This year's WBD campaign shines a light on the full spectrum of neurological disorders across all age groups and regions of the world. Stroke remains the leading neurological condition globally, while neuro-infectious diseases like meningitis continue to make a major impact, particularly in low- and middle-income countries, as noted in recent WHO reports.

In 2025, our goal is to empower communities and primary care providers worldwide to act. We aim to raise awareness of brain health at the grassroots level, ensuring that people everywhere have the knowledge and tools to protect their brain health across the lifespan.

Over the past two years, our WBD campaigns have focused on brain health and prevention (2023) and brain health and disability (2024). In 2025, we are expanding our focus to "Brain Health for All Ages"— from pre-conception through older adulthood. This year's campaign will engage global experts across the lifespan to identify unmet needs and improve awareness, with the goal of raising awareness on "Brain Health for All Ages" and leaving no one behind.

The primary goal of WBD 2025 is to mobilize WFN member societies and the global public to address the critical issue of brain health at every stage of life.

Empowering Global Communities for Brain Health

To support WBD 2025, WFN will provide member societies with a comprehensive toolkit, including:

- Templates for press releases to facilitate local media engagement.
- Educational PowerPoint presentations for community outreach and advocacy.
- Guidelines for local activities, including public awareness campaigns, educational seminars, and collaborative events.

We encourage all participants to leverage local and global media platforms — including print, electronic media, radio, television, and social media channels — to maximize the campaign's impact.

Join Us for World Brain Day 2025

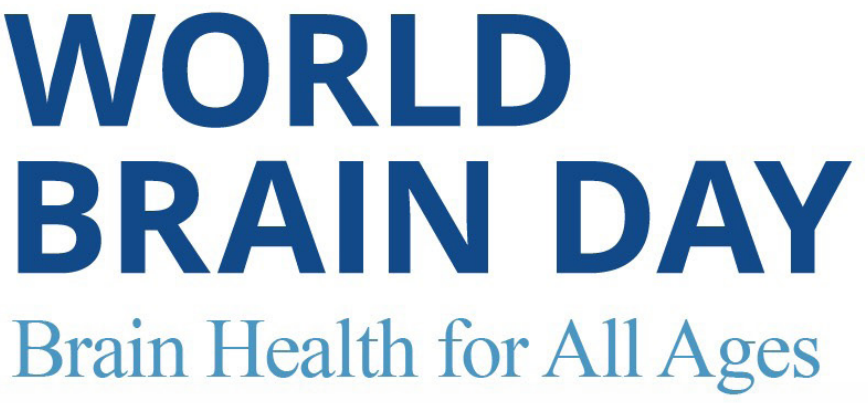
We invite neurologists, health care professionals, researchers, policymakers, and the public to take part in World Brain Day 2025. Let's unite to make brain health a universal priority, ensuring that people of all ages can enjoy healthier, more fulfilling lives.

Together, we can make a difference. Join the movement, spread the word, and champion brain health for all and for all ages. •

Tissa Wijeratne is an elected trustee of the WFN and co-chair of WBD 2025. **David Dodick** is co-chair of WBD 2025. **Steven Lewis** is secretary general of the WFN. **Alla Guekht** is past trustee of the WFN, and **Wolfgang Grisold** is the WFN president.

WORLD BRAIN DAY 2025

- World Brain Day (WBD) 2025 is a global initiative led by the World Federation of Neurology (WFN) in collaboration with six regional societies, with support from the United Nations Economic and Social Council (U.N. ECOSOC) and the World Health Organization (WHO).
- Spread the message of "**Brain Health for All Ages**" in your community, hospital, village, or city-region.
- Engage with us on the **WFN website** and social media to amplify the impact of WBD 2025.
- Regional leadership is provided by six regional societies: African Academy of Neurology (AFAN), American Academy of Neurology (AAN), Asian and Oceanian Association of Neurology (AOAN), European Academy of Neurology (EAN), Pan-American Federation of Neurological Societies (PAFNS), and Pan Arab Union of Neurological Societies (PAUNS). Each will lead region-specific activities focusing on "Brain Health for All Ages" and disability.



The Brain House at Davos 2025

Advancing brain health and economic resilience.

Prof. Freedman attended this meeting on behalf of the WFN.

BY MORRIS FREEDMAN

The launch of the Brain House was held in conjunction with the World Economic Forum in January 2025 in Davos, Switzerland. It was hosted by the Davos Alzheimer's Collaborative (DAC) under the leadership of George Vradenburg, chair of the DAC and founder of Brain House. Co-organized by Harris Eyre, who leads the Baker Institute Neuro-Policy Program at Rice University, Brain House served as a global platform to highlight the critical link between brain health and economic growth. I attended on behalf of the World Federation of Neurology (WFN) as a trustee and treasurer.

Brain health is a key priority for the WFN, as demonstrated by its strong global engagement and advocacy efforts. Over the past four years, the WFN has dedicated consecutive World Brain Day campaigns to the theme of brain health, highlighting its critical role in overall well-being. These initiatives have focused on brain health for all, prevention, and disability, with this year's theme being **"Brain Health for All Ages."** Through international collaboration, communication, and knowledge exchange, the WFN continues to promote brain health as a global concern, aligning with initiatives such as the Brain House at Davos to further drive awareness and action.

The event featured six expert-led sessions, bringing together stakeholders from diverse sectors — including funders, policymakers, industry leaders, nongovernment organizations (NGOs), and foundations — to discuss strategies for enhancing brain health and driving systemic change on a global scale. The Brain House aimed to build a global coalition to lead transformative efforts, explore the intersections between brain health and economic resilience, and mobilize resources and innovation to address shared challenges. Throughout the discussions, the role of partnerships and research in achieving these goals was emphasized.

Much of the discussion centered on prevention and early detection of cognitive impairment. However, during one of the discussion periods, I had the opportunity to emphasize that brain health encompasses the full spectrum of cognitive function — from normal cognition to severe dementia — with the goal of maximizing function at all stages. Thus, we must include individuals who are beyond the stage of prevention and early detection (i.e., those who already suffer from dementia) in our efforts to promote brain health worldwide.

The Brain House
Hosted by DAC

Brain Capital and the Brain Economy

A recurring theme throughout the conference was the concept of brain capital, a form of human capital that integrates brain health with essential cognitive, emotional, and social skills, including analytical thinking, creativity, adaptability, and empathy. Closely related is the concept of the brain economy, an economic paradigm that positions brain capital as a core asset. This model, driven by advances in neuroscience, responds to the increasing demand for cognitive, emotional, and social brain skills in the modern workforce.[1,2]

Key Sessions

Session 1 | A Life Course Approach to Brain Health for the Future

This session explored how employers, consumers, governments, and investors can foster innovation across sectors and societies, promoting best practices and actionable models for progress. Dr. Catharina Boehme, assistant director-general of the World Health Organization (WHO), opened the panel discussion by presenting a report prepared by WHO Director-General Dr. Tedros Adhanom Ghebreyesus.

The report underscored the global challenge posed by aging populations, with over three billion people affected by neurological diseases. Given that nearly 50% of dementia cases are attributable to known modifiable risk factors, the report advocated for a life course approach to dementia prevention. Key recommendations included promoting maternal health, good nutrition, quality health care access, early education, and nurturing environments. It also emphasized the importance of a healthy workplace, access to mental health services, physical activity, social interaction, and managing risk factors such as hypertension and diabetes.

The report also outlined the WHO's priorities, urging policymakers, industry leaders, health care providers, and innovators to champion brain health, educate communities on its significance, and foster lifelong learning and social connections.

(Left to right): Prof. Morris Freedman, George Vradenburg, and Dr. Alfred Njamnshi.

(Left to right): Dr. Zul Merali, Dr. Harris Eyre, Dr. Alfred Njamnshi, and Prof. Morris Freedman.

Session 2 | Fueling Brain Health: The Innovation and Investment Imperative

The discussion emphasized the urgent need for innovation and investment in brain health to drive sustainable progress. Experts highlighted the importance of collaboration and the opportunity to leverage the convergence of emerging technologies.

Session 3 | Unlocking Global South Potential: Building Economic Resilience Through Brain Health

This session explored how brain health can strengthen economic resilience in the Global South, with a focus on Africa. Zul Merali, founding director of the Mind and Brain Institute at Aga Khan University, highlighted that Africa's older population is growing rapidly and is expected to become one of the largest aging populations in the world.

They highlighted that most dementia cases over the next 50 years will arise in regions such as Africa, the Middle East, and Asia. The discussion also underscored the importance of implementing brain resilience strategies early in life to maximize their effectiveness.

Session 4 | Brain Resilience Strategies for Emerging Global Challenges

Panelists discussed strategies to enhance brain resilience in response to global challenges, including an aging population.

Session 5 | Brain Capital: Unlocking Workforce Resilience and Long-Term Economic Growth

This session emphasized the vital role of brain capital in fostering workforce resilience and long-term economic growth. The discussion underscored the growing importance of investing in brain capital amid evolving global trends, including an aging population, shifts in the nature of work, the rising burden of neurological disorders, and an increasing understanding of early brain development.

Session 6 | Setting a Yearlong Course of Action: Launching a Global Brain Health Movement

As chair of this final session, George Vradenburg, chair and co-founder of

see **BRAIN HOUSE** *page 6*

Nerve Ultrasound Training

A report on the Neuromuscular Ultrasound in Taiwan, a two-day learning course.

BY STEFAN MENG, MD

Each year, a two-day course on nerve ultrasound takes place in Taipei. Founded and organized in 2016 by Prof. Ke-Vin Chang from the National Taiwan University, the course focuses on standards in nerve ultrasound. All main nerves, including median nerve, ulnar nerve, and sciatic nerve, are discussed with ultrasound anatomy. This includes common pathologies and ultrasound-guided interventions, using a landmark-based approach to locate the nerve with ultrasound.

The most recent course took place Dec. 14-15, 2024, in Taipei.

On the first day of the course, the theoretical base for each nerve is presented in short talks. A special topic is then highlighted for each region. (For example, in 2024, Baxter's neuralgia was discussed for the foot.) Each segment is followed by a live ultrasound demonstration of the nerves and their corresponding landmarks.

The second day of the course offers hands-on training. In small groups of five to eight people, each participant, guided by experts in the field, performs ultrasound examinations of all previously discussed nerves. This hands-on experience of ultrasound offers the virtual imaging method as well as the manual skill. These small groups also provide the opportunity for personal discussions with the experts.

STEFAN MENG

Such an ultrasound course is demanding: First, it is a comprehensive theoretical course, followed by a hands-on workshop with a tight schedule. Completing such a course requires will and determination. But the effort makes it possible to lay a sound and solid foundation for nerve ultrasound in any institution.

For more information, visit **Neuromuscular Ultrasound in Taiwan**. •

Stefan Meng, MD, is consultant radiologist, head of ultrasound at the Department of Radiology in the Hanusch Hospital, Vienna, and head of a research lab at the Department of Anatomy at the Medical University of Vienna. His clinical and research focus is on neuromuscular and head/neck imaging. Dr. Meng is the current president of the Austrian Society for Ultrasound in Medicine.

Prof. Ke-Vin Chang (center) gives attendees a hands-on look at nerve ultrasound in action.

Stefan Meng, MD, (front) gives a live ultrasound demonstration.

BRAIN HOUSE

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UsAgainstAlzheimer's, emphasized the pressing challenges posed by aging demographics and the rapid rise of chronic diseases associated with aging. He highlighted the economic burden of these conditions, projecting that associated costs will triple within the next 25 years.

Vradenburg also underscored the shrinking workforce due to declining birth rates and stressed the need to enhance brain resilience to improve productivity. He advocated for a strong focus on the Global South, where population growth will drive much of the world's future economic expansion. He further emphasized the importance of integrating technology into brain health solutions in ways that are accessible and applicable in resource-limited settings.

Drawing a parallel to the global response to COVID-19, Vradenburg called for similar energy and commitment in tackling the pandemic of brain disorders.

Claudio Bassetti, past president of the European Academy of Neurology and vice chair of the European Brain Council, was another panelist during this final session. He indicated that next steps for advancing the goals of the Brain House include partnerships, a holistic approach, and setting priorities.

Watch videos of the sessions.

Conclusion

The Brain House served as a pivotal platform to underscore the indispensable link between brain health and economic security. By bringing together leaders from government, health care, academia, business, and advocacy, the event facilitated interdisciplinary discussions to shape comprehensive strategies for improving brain health globally. •

Prof. Morris Friedman is treasurer of the WFN.

References:

1. Eyre HA, Ayadi R, Ellsworth W, et al. Building brain capital. Neuron 2021;109:1430-1432.
2. Smith E, Ali D, Wilkerson B, et al. A *Brain* Capital Grand Strategy: Toward Economic Reimagination. *Molecular Psychiatry* 2021;26:3-22.

WORLD FEDERATION OF NEUROLOGY

KOREAN NEUROLOGICAL ASSOCIATION

XXVII WORLD CONGRESS OF NEUROLOGY (WCN 2025)

12-15 OCTOBER 2025
SEOUL, SOUTH KOREA

wcn-neurology.com

Brain Health Is Brain Wealth

Greater productivity, resilience, and well-being at the 2025 World Economic Forum.

Disclaimer: We thank Prof. Njamnshi and his co-authors for this report and detailed plans for future directions. This article represents the opinions of the authors and does not represent an official report of the WFN.

BY ALFRED K. NJAMNSHI, HARRIS A. EYRE, ZUL MERALI, FRÉDÉRIC DESTREBECQ, KRISTINA ADORJAN, AND CLAUDIO L. A. BASSETTI

It has taken some time, but we have finally recognized that the brain is not only the most vital organ in the body — since anencephaly is incompatible with life — but that it is the seat of who we are as humans. What we do, feel, believe, aspire, and hope for, including a better socio-economic paradigm, is governed by the brain. Indeed, our brains carry the footprint of our past, present, and future, defining both our heritage and our legacy.

Since the inaugural World Brain Day (WBD) on July 22, 2014, the World Federation of Neurology (WFN) has been celebrating the brain each year to raise global awareness about its vital importance.[1] The celebration of WBD has been expanded in some parts of the world to a full week of activities focused on the brain. Brain Week in Cameroon and Africa (BWCA)[2,3] by the Society of Cameroonian Neurologists (SCAN) and Brain Research Africa Initiative (BRAIN) is one example.

As part of the BWCA, the first **"African high-level science summit on the brain economy, brain health, and brain capital"** was organized on July 22 and Aug. 22, 2024, and the resulting **Yaoundé Declaration on the brain economy, brain health, and brain capital** was launched on World Brain Day 2024. The deliberate choice of this date for this official launch was to align with the vision of the WFN to further celebrate the brain and mobilize more stakeholders and partners around the world to do the same. The Yaoundé Declaration, the Swiss Brain Plan, and other regional and national initiatives have since been discussed at multiple meetings. These include:

- The **United Nations General Assembly Science Summit Brain Days (2024)**
- The **European Union Parliament (2024)**
- The preparatory workshop for the G7 Summit to take place in Canada in June of this year
- The 2025 World Economic Forum in Davos, Switzerland[4,5,6,7]

The **World Economic Forum** (WEF) is held annually in Davos, Switzerland, with a mission to "bring together government, businesses, and civil society to improve the state of the world." One of the standout innovations of the WEF this year was the launch of **the Brain House**, a groundbreaking concept introduced by the Davos Alzheimer's Collaborative (DAC), under the leadership of George Vrandenburg.

As to the connection between our brains and economic growth, health, and well-being, the **DAC report** states:

"At this year's Davos gathering, DAC introduced the first-ever Brain House to spotlight the vital link between brain health and global challenges. Kicking off with an inspiring reception Monday evening, the event continued Tuesday with two standing-room-only panels on Life course and Investment…The history of economic growth is defined by breakthroughs that led to previously unimaginable productivity. From the steam engine that kicked off the Industrial Revolution to the transformation AI is driving today, key breakthroughs are constantly reshaping our world. We believe the next key breakthrough isn't a tool, process, or technology. We believe it already exists in all of us — our brains. We believe by better understanding our brains, and by

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The launch of the Yaoundé Declaration on World Brain Day 2024 by SCAN, BRAIN, and the Technical Scientific Committee.

The endorsement of the Yaoundé Declaration by the Cameroon Government on Aug. 22, 2024 (left to right): Messi Atangana Luc, mayor of Yaoundé City, Prof. A.K. Njamnshi, Naseri Paul Bea, governor of the Center Region of Cameroon, Prime Minister Dr. Joseph Dion Ngute, Prof. J. Fame Ndongo, minister of higher education, Prof. R.M. Etoua, rector, Yaoundé I University, and Prof. S.B. Chumbow, president of the Cameroon Academy of Sciences.

The officiating personalities with some members of the Cameroon government present at the endorsement ceremony for the Yaoundé Declaration.

Participants at DAC Brain House launch at 2025 World Economic Forum in Davos, Switzerland. (Left to right): Prof. Zul Merali of the Brain & Mind Institute, Dr. Harris Eyre of the Brain Capital Alliance, Prof. Alfred K. Njamnshi, Prof. Morris Freedman, WFN representative, and Dr. Frederic Destrebecq of the European Brain Council.

(Left to right): George Vradenburg, Lucy Pérez, Cara Altimus, Christa Studzinski, Claudio Bassetti, and Harris Eyre.

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extension our motivations, needs, and natures, we'll unlock the next great breakthrough. The Brain House exists to expand this pursuit beyond the halls of academia and medicine and center it in the world of capital markets and innovation needed to create a healthier, more resilient, and a more productive future."

With this background, it is easy to understand why a **Forbes** article captured the spirit of Davos 2025 in these words: "Brain Health Emerges as Top Priority at Davos." In the next paragraphs, we will attempt to summarize the main themes and highlights of the three-day experience at the Brain House in Davos WEF 2025. We will hopefully convey the urgent need for neurologists to engage and connect with other stakeholders, as we all seek "to foster neurology and brain health worldwide," according to the **WFN mission statement**.

Day One

One of the major highlights of day one of the DAC Brain House on Jan. 21, was the keynote speech written by Dr. Tedros Adhanom Ghebreyesus, World Health Organization (WHO) director general, and delivered by Dr. Catharina Boehme, WHO assistant director general:

"…prioritizing brain health for ourselves, for our families, and our communities across the life course, we can build a healthier, more resilient society for generations to come…Investing in brain health is critical to individual well-being as well as to the sustainable development of all humans…our one brain is the source of creativity, resilience, and human relationships."

This speech opened the panel presentation and discussion titled "A Life Course Approach to Brain Health for the Future." This perspective from a major WFN partner organization, especially given the recent adoption of the WHO Intersectoral Global Action Plan (IGAP), aligns with the WFN mission.

(Above) Panelists at the session titled "A Life-Course Approach to Brain Health for the Future."

(Center) The audience for "A Life-Course Approach to Brain Health for the Future."

(Below) (Left to right): Prof. Alfred K. Njamnshi, George Vradenburg, Patrick Kennedy, and Daniel Kraft.

Panelists at the session titled "Unlocking Global South Potential: Building Economic Resilience Through Brain Health." (Left to right): Alexandre Cabaret, Miranda Wolpert, Zul Merali, Catarina Mastellaro, and Joe Dieleman.

The second panel discussion of the day focused on "Fueling Brain Health: The Innovation and Investment Imperative." It became evident that the brain health sector has not only emerged as a critical area for innovation, it is being recognized as a major sector for investments aimed at better productivity and well-being. This recognition will continue if current challenges are addressed.

Day Two

On day two, Jan. 22, the panel discussions focused on two themes.

The first panel was titled "Unlocking Global South Potential: Building Economic Resilience Through Brain Health." The panelists represented esteemed organizations such as the WHO Foundation, Institute for Health Metrics and Evaluation, Wellcome Trust, and the Aga Khan University Brain and Mind Institute. They shared their insights on the future of brain health in the Global South, with a particular focus on Africa.

Africa is innovating in cheap, effective, and scalable solutions to brain health problems. One such solution is the **Friendship Bench** — a community-driven approach to mental health care originally developed and scientifically tested in Zimbabwe. This approach has been adapted by several countries around the world, including the Jordan, Kenya, Malawi, United States, Vietnam, and Zanzibar.

Zul Merali presented the concept of "brainectome" as a consortium to address brain health issues across Africa. Prof. Alfred K. Njamnshi emphasized that the upcoming G20 Summit in South Africa later this year would provide an excellent opportunity for the summit leaders to be convinced to buy into and invest in brain health for the socio-economic development and well-being of Africa and the Global South in general. This would bring the region into alignment with the Yaoundé Declaration.

The issue of brain drain from the Global South was also discussed in the context of a new brain economy, which should be more brain positive, ensuring more diversity and less disparity. One favorite quote of the day by Byron Bitanihirwe from the Science for Africa Foundation was, "True progress lies in the Global North learning from the Global South's experiences and innovations."

In the second panel discussion of the day, "Brain Resilience Strategies that Address Emerging Global Challenges," there was a lot to learn from experts in venture capital, neuroscience, neurotechnology, and academia. There was encouraging news about venture capital mechanisms and state governments investing significantly in university institutions in Houston and Rice (U.S.) for the development of neuroscience, neurotechnologies, and neuropolicies. These are expected to address the emerging global challenges and promote brain resilience.

Day Three

The third and last day, Jan. 23, was devoted to two conversations. The first was titled, "Brain Capital: Unlocking Workforce Resilience and Long-Term Economic Growth."

Brain capital, simply put, is brain health plus brain skills. Some have qualified these as "soft" skills, including creativity, adaptability, emotional intelligence, and analytical and systems thinking.

The **Brain Capital Dashboard** defines it as: "a complex and productive stock composed of multidimensional factors that accumulate over the lifecycle. We consider brain capital as a multidimensional set of factors varying from physical to socio-cultural ones, enabling the brain to remain healthy, to develop, and to avoid deterioration." It identifies key drivers of brain health (i.e. neurological and mental health), including food and nutritional security, lack of parental health care and general health services, the natural and cultural environments, and education.

The conversations on this theme at the Brain House focused on how employers and organizations can prioritize

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HISTORY

Charcot, Impressionism, and Functional Dyschromatopsia

Exploring the connection between neurology's past and the artistic movement.

PETER J. KOEHLER

This year, attention to the bicentennial of the birth of one of the founders of neurology, Jean-Martin Charcot (1825-1893, see Figure 1) will be given in several places. There will be a special issue of the *Journal of the History of the Neurosciences*, covering topics around Charcot that have so far gone unmentioned. Many aspects of Charcot's career and his interest in art have been described in the past or will be discussed in the special issue.

The book *Charcot: Constructing Neurology* noted, "Charcot's tastes in art and literature revealed a preference for order and logic, but a fascination as well with the fantastic and bizarre."[1] The authors said he was "a severe critic of Modern Impressionism," and he was "fond of the Flemish and Dutch school," a preference that is understandable after reading the book. In terms of art history, however, there is more to say about this, in particular, an interesting story about an association between Impressionism and the Salpêtrière School.

Figure 1. Jean-Martin Charcot (© NIH / U.S. National Library of Medicine).

Charcot's Taste for Art

In his often-quoted article *"Charcot Artiste,"*[2] Henry Meige (1866-1940), former pupil of Charcot and future professor of anatomy at the Paris Ecole des Beaux-Arts, wrote, "with his penchant for naturalistic simplicity, Charcot did not particularly like the innovations of modern art. The complex, the elaborate, the contrived left him cold, as did the murky, the 'imprecise,' the 'vague'." And Meige continued: "He was very severe about the paintings of the Symbolists and Impressionists, and even found the praise heaped on Corot (Jean-Baptiste Camille; 1796-1875) excessive; and having had the opportunity to part with a painting by this master, he did so without regret. At no price would he have agreed to part with a Jan Steen (1626-1679)."

Indeed, Charcot and his wife Victoire Augustine Laurent (1834-1899), who was a daughter of the wealthy Paris art collector Charles Vincent Claude Laurent (1811-1886), known as Laurent-Richard, owned one of seven existing versions of *Marriage at Cana* by Jan Steen (1676, see Figure 2). It was sold a year after Madame Charcot's death in 1900. In the 1930s, it was bought by the well-known Amsterdam Jewish art dealer Jacques Goudstikker (1897-1940). After he fled to England in May 1940, the entire collection of over 1,000 works was purchased by the Nazi Hermann Göring (1893-1946) and the German banker turned Dutch art dealer Alois Miedl (1903-1970) for a fraction of its actual value. After World War II, the Jan Steen painting came back to the Netherlands. It was later bought by the Norton Simon Foundation in Pasadena, California, where it is now displayed.[3] The Norton Simon Museum narrowly escaped the recent fires in the Los Angeles area.


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LE CHARIVARI

Figures 4a and b. *Le Charivari* of April 25, 1874, including Leroy critical piece on 1874 exhibition.

Impressionist Art Born of Illness?

The story of Impressionism is well known. It played out at a time when Charcot was teaching about hysteria at the Salpêtrière. A group of artists established a cooperative enterprise named "Société anonyme cooperative à capital variable des artistes, peintres, sculpteurs, graveurs et lithographes (Cooperative limited company with variable capital for artists, painters, sculptors, engravers, and lithographers)" with the aim of organizing free exhibitions. Members included the painters Camille Pissarro, Claude Monet, Auguste Renoir, Edgar Degas, Paul Cézanne and Berthe Morisot.

Although they are well known today, this group had often been rejected for the official annual Paris Salon, where the Académie des Beaux-Arts had great influence. A new Realist Salon for their work was organized in 1874. One of paintings submitted was Claude Monet's *Le Havre: Fishing Boat Setting Sail* (1872).


L'Exposition des impressionnistes

Oh! ce fut une rude journée que celle où je me risquai à la première exposition du boulevard des Capucines en compagnie de M. Joseph Vincent, paysagiste, élève de Bertin, médaillé et décoré sous plusieurs gouvernements!

L'imprudent était venu là sans penser à mal; il croyait voir de la peinture comme on en voit partout, bonne et mauvaise, plutôt mauvaise que bonne, mais non pas attentatoire aux bonnes mœurs artistiques, au culte de la forme et au respect des maîtres. — Ah! la forme! Ah! les maîtres! Il n'en faut plus mon pauvre vieux! Nous avons changé tout cela.

Journalist Edmond Renoir (1849-1944; brother of the painter Auguste) made the catalog and suggested an alternative title, because of the canvas's hazy and indefinable nature: *Impression, Sunrise.* (See Figure 3.) The artist and critic Louis Leroy (1812-1885) gave a satirical description of the exhibition in the illustrated journal *Le Charivari* and used the title of his article "Exhibition of the Impressionists" for this reason, with a negatively intended connotation. However, the term was soon adopted by other art critics. (See Figure 4).[4] The Realist Salon became the First Impressionist Exhibition.

Critics of the time derided Impressionist paintings as the product of disability and described them in terms of unfinished or bold works. Some influential critics called it an undermining of social and artistic norms or considered it a form of illness or even madness. Ophthalmic and psychological conditions were frequently suggested. At the Second Impressionist Exhibition (1876), a critic for the conservative newspaper *L'Écho Universel* wrote about "the brilliance of daylight, the purity of atmosphere, and the blue of water and sky," but added that Monet might be a dazzling landscapist if only he could be cured of the "sickness of Impressionism."[5]

It was noticed that some of the painters often applied an unnatural blue-violet color. In 1878, for instance, journalist and art critic Théodore Duret (1838-1927) wrote, "winter has come, the impressionist paints snow, he sees that in the sun the shadows cast on the snow

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Figure 2. Jan Steen, *Marriage at Cana*, 1676, oil on canvas, 79.7 x 109.2 cm, Pasadena, Norton Simon Museum. (© The Norton Simon Foundation).

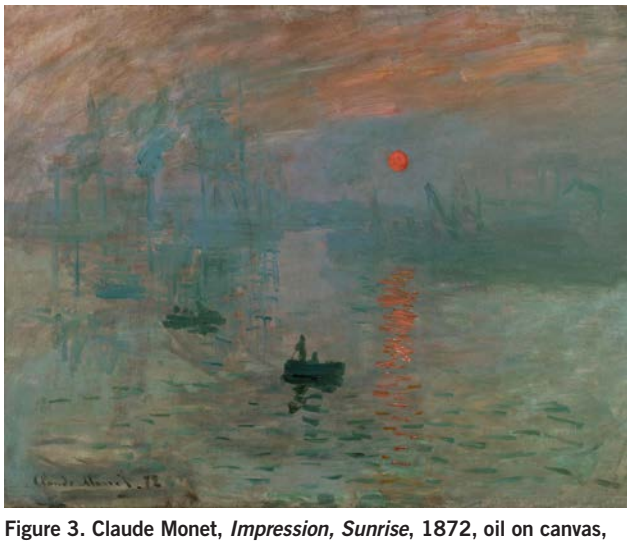

Figure 3. Claude Monet, *Impression, Sunrise*, 1872, oil on canvas, 48 x 63 cm, Muséé Marmottan Monet, Paris (© Musée Marmottan Monet).

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are blue he paints blue shadows without hesitation, so the audience laughs out loud." When discussing a painting by Édouard Manet (*Portrait of Mr. Pertuiset, The Lion Hunter*, see Figure 5), writer Jules Claretie (1840-1913), a friend of Charcot, who is shown on the famous painting *Leçon clinique à la Salpêtrière*, wrote, "I finally discovered the true color of the atmosphere. It's purple. The outdoors is purple. I've found it! In three years from now, everyone will be purple!"

Another critic wrote that the public "has decided that the proper role of the Impressionist is to paint red trees, pink grass, and lilac skies." In fact, critics accused the Impressionists of suffering from several forms of dyschromatopsia, including color blindness. Another idea was that these painters could see colors invisible to normal persons. Yet another critic suggested that the "invisible part of the spectrum is keenly felt by some people. M. Monet is certainly one of them. He and his friends see violet, the crowd sees otherwise; hence the disagreement."

In her recent study, Alessandra Ronetti, a scholar in art history, noted: "The question of the colors adopted by modern painters is progressively linked to a pathologization of the artist's body."[6]

Linking Charcot to Impressionism

Participating in the debate about these paintings was the French author Joris-Karl Huysmans (1848-1907), who played a role in the recent novel *Soumission* (2015) by the French writer Michel Houellebecq. Huysmans may have suffered from the popular disease of the time, nervous exhaustion (neurasthenia), and from neuralgia in 1881. His novel following this period, *A Rebours* (1884; translated as *Against the Grain*), has been considered the French brevier of the Decadent Movement, comparable to Oscar Wilde's *Picture of Dorian Gray* (1890).[7] Huysmans, whose father was Dutch, was a great lover of "the divine Rembrandt." Not coincidentally, the eccentric protagonist Des Esseintes of *A Rebours* takes some of Rembrandt's engravings with him to the house, in which he intends to entrench himself against modernity.[8]

Huysmans made the link between the modern paintings with the symptoms Charcot observed in patients suffering from hysteria. We do not know whether he attended Charcot's lectures at the Salpêtrière as many other writers did, including Guy de Maupassant (1850-1893) and Jules Claretie, but he was aware of Charcot's lectures. Perhaps this was related to his retreat to convalesce at Fontenay-aux-Roses in 1881. The house became a model for that of the neurotic Des Esseintes, the main character in his novel *A Rebours*.[9] Huysmans' biographer Robert Baldick (1927-1972) believed he was "suffering severely from attacks of neuralgia."[10]

Another connection could be the prolonged illness of his mistress Anna Meunier, who was once diagnosed with "neurosis" and later died from general paralysis of the insane.[10] Charcot and his clinic had an important influence on Huysmans[11] and played a role in his novel *Là-bas* (1891; translated as *Down There*).[7] Huysmans wrote about Charcot's observations "of alterations in color perception that he had noted in hysterics at the Salpêtrière and in many people suffering from diseases of the nervous system." He also mentioned ophthalmologist Xavier Galezowski (1832-1907), who had worked at the Salpêtrière and to whom Charcot often referred, and his ideas about the loss of seeing green by atrophy of certain retinal nerve fibers.[12] In a later period, Huysmans (see Figure 6) became more positive and even defended Impressionism. He was portraited by Jean-Louis Forain (1852-1931), who was an Impressionist painter in his early career.

Charcot on Dyschromatopsia in Hysterical Cases

Charcot often indicated vision problems in hysterical patients. On one occasion, when discussing visual field disorders, he said: "J'ai peut-être examiné des milliers de fois le champ visuel des hystérique et je tiens à le proclamer une fois de plus puisque l'occasion s'en présente; c'est toujours l'amblyopie double plus prononcé du côté hémianaesthésie ou unilatérale…(I may have examined the visual field of hysterics thousands of times, and I want to proclaim it once again as the opportunity arises: It is always double amblyopia, more pronounced on the hemianesthetic or unilateral side.)"[13]

In his lectures on hysteria, one of the frequent symptoms he spoke of was hysterical achromatopsia or dyschromatopsia. Probably the first lecture in which he referred to hysterical achromatopsia was given in 1872. In lecture X, "Hysterical Hemianaesthesia," we find: "*Vision* is weakened in a very remarkable manner, and if amblyopia occupy the left side, we may meet with a most noteworthy phenomenon, to which M. Galezowski has called attention, and which he designates the name *achromatopsia*…it was distinctly and repeatedly observed in one of our patients, a few weeks ago, from whom it has now completely disappeared."[14]

He did not only find the symptom in women. In the sixth lecture of *Leçons sur les maladies du système nerveux*, "De l'hystérie chez les jeunes garçons (On hysteria in young boys)," Charcot mentioned "jeune Bl…" (only the first letters of the patient's name were usually given), who presented with hemianesthesia "dans sa forme tout à fait classique (in its classic form)," including left-sided anesthesia. He pointed out that there is often a visual disturbance of the ipsilateral eye, a type of amblyopia. It was accompanied by a retraction of the visual field. In addition, visual acuity was impaired and dyschromatopsia or achromatopsia could be present.

Figure 5. Edouard Manet, *Portrait of Mr. Pertuiset, The Lion Hunter*, 1881, oil on canvas, 150 x 170 cm, Museum of Art Sao Paolo (MASP), Brazil (© MASP).

Figure 6. Jean-Louis Forain, *Joris-Karl Huysman* [his friend], 1878, pastel, 55 x 44.5 cm (© RMN-Grand Palais (Musée d'Orsay) / Hervé Lewandowski).

Visual fields for certain colors, "le cercle de violet" for instance, could be reduced to zero. Blue and yellow could be the only colors perceived, but even these could disappear, a phenomenon that was called achromatopsia. "Je dois la signaler, parce qu'elle se rencontre non seulement chez la plus grande parties des femmes hystériques que nous avons observées, mais encore chez les sujets mâles dont nous parlerons bientôt (I must point this out, because it occurs not only in the majority of the female hysterics we have observed, but also in the male subjects we will discuss shortly)" and he continued by citing a case observed by Henri Parinaud (1844-1905), one of his collaborators.[15]

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Art and Hysteria From Another Perspective

In contrast with the above, a different association between hysteria and art can be read in Louis Aragon's (1897-1982) and André Breton's (1896-1966) manifesto to celebrate the 50th anniversary (1878-1928)[16] of the invention of hysteria. (See Figure 7.) They were important founders of surrealism, for which Breton published the *Surrealist Manifesto* in 1924. In their 1928 publication "Le cinquantenaire de l'hystérie (1878-1928)," the year 1878 indicated the year in which Charcot's methodology with respect to the study of hysteria, which he studied since 1872, moved from clinical observation to experiment, applying hypnosis as a diagnostic tool:[17]

> "Nous, Surréalistes, tenons à célébrer le cinquantenaire de l'hystérie, la plus grande découverte poétique de la fin du XIXe siècle, et cela au moment même où le démembrement du concept de l'hystérie paraît chose consommée. Nous qui n'aimons rien tant que ces jeunes hystériques, dont le type parfait nous est fourni par l'observation relative à la délicieuse X.L. (Augustine — one of the patients, who became well-known) entrée à la Salpêtrière dans le service du Dr Charcot le 21 octobre 1875, à l'âge de 15 ans 1/2, comment serions-nous touchés par la laborieuse réfutation de troubles organiques, dont le procès ne sera jamais qu'aux yeux des seuls médecins celui de l'hystérie?"
>
> "(We Surrealists wish to celebrate the 50th anniversary of hysteria, the greatest poetic discovery of the late 19th century, at a time when the dismemberment of the concept of hysteria seems complete. We who love nothing so much as these young hysterics — the perfect type of which is provided by the observation relating to the delightful X.L. (Augustine — one of the patients, who became well-known), who entered Dr. Charcot's department at the Salpêtrière on Oct. 21, 1875, at the age of 15 1/2. How can we be moved by the laborious refutation of organic disorders, whose trial will only ever be, in the eyes of doctors, that of hysteria?)"

However, the year could also have been chosen for the extensive description of Charcot's patient Augustine.[18] Aragon and Breton concluded : "L'hystérie n'est pas un phénomène pathologique et peut, à tous égards, être considérée comme un moyen suprême d'expression. (Hysteria is not a pathological phenomenon and can, in every respect, be considered a supreme means of expression)."

Breton and Aragon considered hysteria as "the greatest poetic discovery of the latter part of the century." In their lyrical homage, they take distance from Charcot's pupil Joseph Babinski (1857-1932), under whom Breton had been a student before he decided to leave medicine, and who had reduced hysteria to suggestion.[19]

In Conclusion

As far as I have been able to verify, Charcot never referred to dyschromatopsia or achromatopsia as a problem among artists. The connection between supposed visual disturbances of artists and the introduction of Impressionism was made by critics, who were aware of Charcot's lectures in the Salpêtrière. Hysterical dyschromatopsia, which today we would call functional dyschromatopsia, has hardly been described after the period of the above discussion and even functional blindness is rare.

Today, the terms dyschromatopsia and achromatopsia refer to color vision disorders caused by a retinal disorder, affecting men more than women. Cerebral achromatopsia is a rare condition characterized by loss of color vision due to a cerebral etiology and generally believed to result from significant bilateral occipitotemporal damage.[20] Despite this evolution since the late 19th century regarding the observation and interpretation of such symptoms in patients, it is interesting to see how these symptoms were then attributed to artists, who were developing a new style in the visual arts.

Finally, I would like to refer to a recent article in which medical historian Toby Gelfand describes an unpublished article by Charcot in which he put forward a psychological explanation for hysteria.[21,22] •

Nº 11 — Quatrième année — 15 Mars 1928

LA RÉVOLUTION SURRÉALISTE

LE CINQUANTENAIRE DE L'HYSTERIE

(1878-1928)

NOUS, SURRÉALISTES, TENONS A CÉLÉBRER ICI LE CINQUANTENAIRE DE L'HYSTÉRIE, LA PLUS GRANDE DÉCOUVERTE POÉTIQUE DE LA FIN DU XIXe SIÈCLE, ET CELA AU MOMENT MÊME OU LE DÉMEMBREMENT DU CONCEPT DE L'HYTÉRIE PARAÎT CHOSE CONSOMMÉE. NOUS QUI N'AIMONS RIEN TANT QUE CES JEUNES HYSTÉRIQUES, DONT LE TYPE PARFAIT NOUS EST FOURNI PAR L'OBSERVATION RELATIVE A LA DÉLICIEUSE X. L. (AUGUSTINE) ENTRÉE A LA SALPÉTRIÈRE DANS LE SERVICE DU Dr CHARCOT LE 21 OCTOBRE 1875, A L'AGE DE 15 ANS 1/2, COMMENT SERIONS-NOUS TOUCHÉS PAR LA LABORIEUSE RÉFUTATION DE TROUBLES ORGANIQUES, DONT LE PROCÈS NE SERA JAMAIS QU'AUX YEUX DES SEULS MÉDECINS CELUI DE L'HYSTÉRIE ? QUELLE PITIÉ ! M. BABINSKI, L'HOMME LE PLUS INTELLIGENT QUI SE SOIT ATTAQUÉ A CETTE QUESTION, OSAIT PUBLIER EN 1913 : « QUAND UNE ÉMOTION EST SINCÈRE, PROFONDE, SECOUE L'AME HUMAINE, IL N'Y A PLUS DE PLACE POUR L'HYSTÉRIE ». ET VOILA ENCORE CE QU'ON NOUS A DONNÉ A APPRENDRE DE MIEUX. FREUD, QUI DOIT TANT A CHARCOT, SE SOUVIENT-IL DU TEMPS OÙ, AU TÉMOIGNAGE DES SURVIVANTS, LES INTERNES DE LA SALPÉTRIÈRE CONFONDAIENT LEUR DEVOIR PROFESSIONNEL ET LEUR GOUT DE L'AMOUR, OÙ, A LA NUIT TOMBANTE, LES MALADES LES REJOIGNAIENT AU DEHORS OU LES RECEVAIENT DANS LEUR LIT ? ILS ÉNUMÉRAIENT ENSUITE PATIEMMENT, POUR LES BESOINS DE LA CAUSE MÉDICALE QUI NE SE DÉFEND PAS, LES ATTITUDES PASSIONNELLES SOI-DISANT PATHOLOGIQUES QUI LEUR ÉTAIENT, ET NOUS SONT ENCORE HUMAINEMENT, SI PRÉCIEUSES. APRÈS CINQUANTE ANS, L'ÉCOLE DE NANCY EST-ELLE MORTE ? S'IL VIT TOUJOURS, LE DOCTEUR LUYS A-T-IL OUBLIÉ ? MAIS OÙ SONT LES OBSERVATIONS DE NÉRI SUR LE TREMBLEMENT DE TERRE DE MESSINE ? OÙ SONT LES ZOUAVES TORPILLÉS PAR LE RAYMOND ROUSSEL DE LA SCIENCE, CLOVIS VINCENT?

AUX DIVERSES DÉFINITIONS DE L'HYSTÉRIE QUI ONT ÉTÉ DONNÉES JUSQU'A CE JOUR, DE L'HYSTÉRIE, DIVINE DANS L'ANTIQUITÉ, INFERNALE AU MOYEN-AGE, DES POSSÉDÉS DE LOUDUN AUX FLAGELLANTS DE N.-D. DES PLEURS (VIVE MADAME CHANTELOUVE!), DÉFINITIONS MYTHIQUES, ÉROTIQUES OU SIMPLEMENT LYRIQUES, DÉFINITIONS SOCIALES, DÉFINITIONS SAVANTES, IL EST TROP FACILE D'OPPOSER CETTE « MALADIE COMPLEXE ET PROTÉIFORME APPELÉE HYSTÉRIE QUI ÉCHAPPE A TOUTE DÉFINITION » (*Bernheim*). LES SPECTATEURS DU TRÈS BEAU FILM « LA SORCELLERIE A TRAVERS LES AGES » SE RAPPELLENT CERTAINEMENT AVOIR TROUVÉ SUR L'ÉCRAN OU DANS LA SALLE DES ENSEIGNEMENTS PLUS VIFS QUE CEUX DES LIVRES D'HIPPOCRATE, DE PLATON OÙ L'UTÉRUS BONDIT COMME UNE "PETITE CHÈVRE, DE GALIEN QUI IMMOBILISE LA CHÈVRE, DE FERNEL QUI LA REMET EN MARCHE AU XVIe SIÈCLE ET LA SENT SOUS SA MAIN REMONTER JUSQU'A L'ESTOMAC; ILS ONT VU GRANDIR, GRANDIR LES CORNES DE LA

Figure 7. Aragon's and Breton's 1928 publication in *La Révolution surréaliste* "Le cinquantenaire de l'hystérie (1878-1928)".[14] The publication was accompanied by six photographs, by Paul Regnard of Charcot's famous patient Augustine Gleizes, with the legend "Les attitudes pasionelles en 1878" (from[23]).

References:

1. Goetz CG, Bonduelle M, Gelfand T. Charcot. *Constructing Neurology*. New York, Oxford University Press, 1995.
2. Meige H. Charcot Artiste. Nouvelle Iconographie de la Salpêtrière 1898 ;11:489-516.
3. Koehler PJ. The stone of madness: Charcot's interest in a copy after Pieter Bruegel Sr. as referred to by Henry Meige. *J Hist Neurosci*. 2024 May 28:1-13. See also Marriage at Cana, Norton Simon Museum; accessed February 1st, 2025.
4. King R. De omwenteling van Parijs. Over de geboorte van het Impressionisme (original English title: The Judgment of Paris). Amsterdam, De Bezige Bij, 2006, pp.432-6.
5. Guffey E. The 'Malady' of Impressionism; How Claims of Disability Haunted the Modernist Movement. Art in America. October 2022, pp. 68–75.
6. Ronetti A. Voir violet. Les limites du visible et la violettomanie des impressionnistes. *Histoire de l'art*. 2021 : 88 : 143-56.
7. Koehler PJ. Charcot, la salpêtrière, and hysteria as represented in European literature. *Prog Brain Res*. 2013;206:93-122.
8. Smeets M. Een Parijse Hollander. Joris-Karl Huysmans. Hilversum, Verloren, 2021.
9. Academic study on Huysmans on a website by King B Biographical; accessed January 19th, 2025.
10. Baldick R. *The Life of J.-K. Huysmans*. Oxford, Clarendon, 1955, p. 62.
11. Marquer B. Les Romans de la Salpêtrière. Réception d'une scénographie clinique: Jean-Martin Charcot dans l'imaginaire fin-de-siècle. Genève, Droz, 2008.
12. Huysmans JK. L'art moderne. 2nd ed. Chapter on L'exposition des indépendants en 1880. Paris, Plon, 1908, p. 104.
13. Charcot JM. Leçons du mardi à la Salpêtrière: policliniques, 1887-1888/professeur Charcot; notes de cours de MM. BLin, Charcot [fils] et Colin. Paris, Bureau du Progrès Médical/ Delabaye & Lecrosnier, p. 294.
14. Charcot JM. Lectures on the diseases of the nervous system. Transl. by Sigerson G. Vol. I. London, New Sydenham Society, 1877, pp. 249-50.
15. Charcot JM. Leçons sur les maladies du système nerveux. Œuvres Complètes III. Paris, Lecrosnier & Babé, 1890; pp. 80-96.
16. Aragon L, Breton A. Le cinquantenaire de l'hystérie (1878-1928). La Révolution surréaliste no. 11, March 15, 1928.
17. Micale MS. Hysteria and its historiography: A review of past and present writings (II). Hist Sci 1989; 27: 319–51.
18. Bourneville DM, Regnard P. Iconographie photographique de la Salpêtrière. Vol. 2, Paris, Bureaux du Progrès Médical / Delahaye, 1878, pp. 123-86.
19. Haan J, Koehler PJ, Bogousslavsky J. Neurology and surrealism: André Breton and Joseph Babinski. *Brain*. 2012 Dec;135(Pt 12):3830-8.
20. Bouvier SE, Engel SA. Behavioral deficits and cortical damage loci in cerebral achromatopsia. Cereb Cortex. 2006 Feb;16(2):183-91.
21. Gelfand T. Dreams: Charcot's Last Words on Hysteria. *Bull Hist Med*. 2024;98(1):1-25.
22. Gelfand T. Charcot and the psychology of hysteria, with special reference to a never published final case history. *J Hist Neurosci*. 2024 Aug 26:1-11.
23. Bourneville DM, Regnard P. Iconographie photographique de la Salpêtrière. Vol. 2, Paris, Bureaux du Progrès Médical / Delahaye, 1878, pl. XIX between pp. 162 and 163.

BRAIN HEALTH

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brain health and provide a workplace environment and culture that promotes brain health and the development of brain skills. That environment will, in turn, lead to better productivity while mitigating work-related stress, burnout, and depression. In that respect, lessons from the COVID-19 pandemic should not be forgotten or ignored.

This approach of unlocking work-force resilience and providing a brain-healthy environment for employers to continue to sharpen their brain capital would result in long-term economic growth and greater well-being. We have proposed ways of understanding the economy through neuroscience and how to transit into a more brain-healthy economy and build brain capital.[7,8,9,10]

The final event of the historical week was a vibrant roundtable, "Setting a Yearlong Course of Action," moderated by George Vradenburg with interventions from Lucy Pérez, senior partner at McKinsey, Christa Studzinski of the Ontario Brain Institute, Caral Altimus of the Milken Institute, and Claudio Bassetti of the Swiss Brain Health Plan and the European Brain Council.

The participants discussed the key actions necessary in the next 12 months to accelerate the ascension of the brain health agenda into major global conversations. These include the G7 in Canada (June 2025) and G20 Summit in South Africa later this year.

The following statements illustrate the ambiance of the day and indeed of the whole experience of the Brain House at Davos 2025:

- Lucy Pérez, McKinsey Health Institute: "Public private partnerships are the key to aligning on our collective aspiration and driving systems change."
- Claudio Bassetti, EBC-vice president and chair of the Swiss Brain Health Plan: "One brain, one life, one approach: We need to join forces to make brain matters a public health priorities."
- Amy Kennedy, The Kennedy Forum: "Businesses introduced STEM into schools by highlighting the skills they needed. Now, it's time for businesses to tell the education system that we need to invest in developing brain skills from an early age."
- Andy Moose, World Economic Forum: "Collaborative innovation is the theme this year and coming together physically and virtually under this common umbrella is critical. This allows us to do the work together to catalyze funding and find solutions."
- Sheri Bronstein, Bank of America: "Our health care costs amount to $2 billion. Every quarter, our CFO asks, 'What are we doing about this?' That's why we prioritize brain health — it directly impacts our bottom line."

In Conclusion

The three-day experience of the DAC Brain House provided everyone with a valuable opportunity to connect with business professionals, learn from their insights, and ultimately discover their genuine concern for our well-being and brain health. As neurologists, neuroscientists, and psychiatrists, we are focused on diagnosing and treating people with brain (neuropsychiatric) diseases and helping populations to have healthy brains as much as we can. We often are limited by the scarcity of resources, especially in the lower- and lower-middle income countries, and are devastated by the waste of resources in some high-income countries.

This three-day interaction with policy and lawmakers, business strategists, economic investors, communicators, innovators, academics, and civil society enabled us to understand the complexities as well as the commonalities that can be leveraged to get the brain health movement to the next gear. •

Alfred K. Njamnshi, MD, FRCP, is the World Federation of Neurology delegate for Cameroon, a member of the Society of Cameroonian Neurologists (SCAN), a convener of the 2024 Brain Research Africa Initiative (BRAIN), and serves in the Neuroscience Lab in the Faculty of Medicine & Biomedical Sciences at the University of Yaoundé I, in Cameroon. **Harris A. Eyre, MBBS, PhD**, is a Harry Z. Yan and Weiman Gao senior fellow in brain health and lead of the Rice University's Baker Institute Neuropolicy Program at the Center for Health and Biosciences, a visiting senior fellow at the Wharton Neuroscience Initiative at the Wharton School, University of Pennsylvania in Philadelphia, and founder and director of Brain Capital Alliance. **Zul Merali, PhD**, is founding director of the Brain and Mind Institute at Aga Kan University in Nairobi, Kenya. **Frédéric Destrebecq, PhD**, is executive director of the European Brain Council in Brussels, Belgium. **Kristina Adorjan, MD**, is on the Board of Directors for the Swiss Brain Health Plan and serves on the faculty of medicine at the University of Bern, Switzerland. **Claudio L. A. Bassetti, MD**, is chair of the Swiss Brain Health Plan and dean of the Faculty of Medicine at the University of Bern, vice president of the European Brain Council, and past president of the European Academy of Neurology. •

Panelists for the session titled "Brain Capital: Unlocking Workforce Resilience and Long-Term Economic Growth." (Left to Right): Lucy Pérez, Tim Lash, Sheri Bronstein, Patrick Kennedy, and Steve Clemons.

Panelists at the session titled "Brain Resilience Strategies That Address Emerging Global Challenges." (Left to right): George Vradenburg, Lucy Pérez, Cara Altimus, Christa Studzinski, and Claudio Bassetti.

References:

1. https://wfneurology.org/world-brain-day-2014.
2. Njamnshi AK; Migraine in Cameroon: From the Painful Truth to the Powerful Tribute. *World Neurology*, September 11, 2019; https://worldneurologyonline.com/article/migraine-in-cameroon-from-the-painful-truth-to-the-powerful-tribute/.
3. Njamnshi AK, Ngarka L, Njamnshi WY, Ahidjo N, Chabwine JN, Hachinski V; BRAIN-SCAN Congress 1.5 Scientific Committee and Organising Secretariat. The Brain Research Africa Initiative (BRAIN). *Lancet Neurol*. 2023 Jun;22(6):467-468. doi: 10.1016/S1474-4422(23)00164-3. PMID: 37210092.
4. Njamnshi AK, Fame Ndongo J, et al. African Leadership in Brain Diplomacy: The Yaoundé Declaration Advances the Global Brain Economy Playbook for Better Brain Health. *Neuroscience* 2024 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5018989.
5. Bassetti CLA, Heldner MR, Adorjan K, et al. The Swiss Brain Health Plan 2023-2033. *Clin Translat Neurosci* 2023; 7: 38: https://doi.org/10.3390/ctn7040038.
6. Bègue I, Flauhaut A, Bolon I, Vicedo A.M., Bassetti CLA. One brian, one mind, one helath, one planet: A call from Switzerland for a systemic approach in brain health research, policy and practice. *Lancet Public Health* 2025; 50: 101229.
7. Harris A. Eyre, Jennie Z. Young, Julian Karaguesian, Alfred Njamnshi, et al. The Brain Advantage for a Thriving Economy: A Global Call to Action. https://sciencepolicy.ca/posts/the-brain-advantage-for-a-thriving-economy-a-global-call-to-action/ (Preparatory Workshop to the G7 Summit in June 2025).
8. Eyre HA, Hynes W, Ayadi R, Swieboda P, Berk M, Ibanez A, Castelló ME, Jeste DV, Tempest M, Abdullah JM, O'Brien K, Carnevale S, Njamnshi AK, Martino M, Mannix D, Maestri K, Yu R, Chen S, Ng CH, Volmink HC, Ahuja R, Destrebecq F, Vradenburg G, Schmied A, Manes F, Platt ML. The Brain Economy: Advancing Brain Science to Better Understand the Modern Economy. *Malays J Med Sci*. 2024 Feb;31(1):1-13. doi: 10.21315/mjms2024.31.1.1. Epub 2024 Jan 15. PMID: 38456111; PMCID: PMC10917588.
9. Olivia Nail-Beatty, Agustin Ibanez, Rym Ayadi, Pawel Swieboda, Alfred K. Njamnshi, Jo-An Occhipinti, et al. Eyre Brain health is essential for smooth economic transitions: toward socio-economic sustainability, productivity, and wellbeing. *Brain Communications*, 2024 Oct 30;6(6):fcae360. doi: 10.1093/braincomms/fcae360. PMID: 39670109; PMCID: PMC11635447, https://doi.org/10.1093/braincomms/fcae360.
10. Eyre HA, Graham C, Njamnshi AK and Vradenburg G. 4 Ways to make our economy brain healthy. *The Brookings Policy Paper Series; 2024* https://www.brookings.edu/articles/4-ways-to-make-our-economy-brain-healthy/.

A successful Coffee Talk at the WCN 2023 in Montreal. Left to right: Ashley Logan (moderator), WFN President Prof. Wolfgang Grisold, with WFN past presidents Prof. Vladimir Hachinski, Prof. Bill Carroll, and Prof. Raad Shakir.

PRESIDENT'S COLUMN

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in many countries. The WCN is not only intended to discuss developments and updates, but will also have a series of brain health topics, including plenary lectures, dedicated global lectures, and regional lectures. These topics are dedicated to global health, indicating the important role for neurologists to increase and add to their activities.

The WCN will also have five plenary lectures, with topics ranging from the importance of the WHO to advances in the concept of senescence. Several joint sessions are planned with world neurological societies such as the WHO, MDS, International League Against Epilepsy (ILAE), and the Peripheral Nerve Society (PNS).

Much attention is dedicated to the Teaching Course program. Similar to the WCN in Montreal, we will expand our interactive programs, which will be a series of "coffee talks." We will also feature a program on *Continuum*, and include young neurologists from the region. We will continue the concept of a hybrid meeting as the participation in the hybrid form was great, and we had a reach of 135 countries. Costs for hybrid attendance will be kept low to allow participants from low-middle and low-income countries to participate.

There will be social programs and opportunities to network and sightsee in Seoul.

Publications

It is the determination of the WFN to be heard in as many forms of publication as possible. The **WFN website** provides information on the structure and substance of the WFN. It is also used for news and information distribution. This is supported by our **social media feeds**, where the WFN teams post information.

World Neurology is the active newsletter, collecting articles worldwide. It is free to download and also offers access to the *World Neurology* archive. The official journal of the WFN is the ***Journal of the Neurological Sciences*** (*JNS*), with John England as the editor-in-chief, and the **eNS** with Walter Struhal as the editor-in-chief.

A look at the future stage for Coffee Talks at the WCN 2025 in Seoul.

For the *JNS*, we are adding quarterly **Service Pages**, and the eNS now has **10 articles** from the WFN Digital Update (WNU) course available as open access.

We are working on a collective book on neurology called the *White Book of Neurology*. It will be edited by Prof. Alla Guekht, Steven Lewis, Prof. Riadh Gouider, and myself, and will be published by Springer. The idea is to delineate and describe the present structure of neurology, from the historical development toward the future.

Monthly Google Analysis

The monthly Google analysis shows an increase in followers and interested colleagues and parties. We want to thank our constantly leading countries — the U.S., India, and Great Britain — for their interest. •

A note from WFN President Prof. Wolfgang Grisold

The results of elections for three elected positions — the WFN president, first vice president, and one elected trustee — will be announced at the Council of Delegates Meeting in Seoul, South Korea. The voting process will be conducted electronically in September, and all WFN member societies in good standing will be able to vote. The COD meeting will take place Oct. 12, 2025.

According to the WFN guidelines, further nominations can be submitted by any individual from a member society. The nominee must be supported by at least five member societies and submitted 30 days prior to the start of electronic voting.

In addition to the candidate statements below, videos of each candidate will be posted on the WFN website prior to the election.

Additional voting details will follow on the website and in an individual mailing.

As the president, I have been acting as a guest editor for this announcement and the candidate statements to avoid any possible conflicts of interest.

MEET THE WFN 2025 PRESIDENTIAL CANDIDATES

Get to know the candidates for WFN president in their own words.

Seven candidates have been recommended by WFN's Nomination Committee for the upcoming election of president, first vice president, and elected trustee to take place by electronic voting in September.

Below are the statements for the nominees for president recommended by the Nomination Committee.

CANDIDATE STATEMENT FOR PRESIDENT: PROF. STEVEN LEWIS

Lewis

It has been a privilege serving as secretary general, and previously as acting secretary general and elected trustee, of the World Federation of Neurology (WFN). In these and other roles, I am thankful for the opportunities to use my skills as a general clinical neurologist, academician, educator, and editor to help achieve the WFN mission.

My involvement with the WFN began when I was editor-in-chief of the American Academy of Neurology's Continuing Medical Education journal *Continuum*, where a joint WFN/AAN program provides access to neurologists from low- and lower-middle-income countries. As *World Neurology* editor, I have reported on news about neurologists and neurology globally. As Education Committee chair and previous World Congress of Neurology Teaching Course and Congress Committee chair, I have helped hone neurologic educational/training opportunities worldwide.

As secretary general, I have ensured our organization's compliance with U.K. Charity laws and the effectiveness of our Secretariat. In all, I have been integral in our activities to enhance global neurologic education, training, practice, and advocacy, collaborating closely with our president, executive committee, and remarkable colleagues from regional and national societies, committees, and related organizations.

If elected, I pledge to be an effective and equitable leader and to use all I have learned thus far to:

- Help achieve and promote the WFN's mission via ongoing collaboration with all regional and member societies.
- Ensure continued representation with global health organizations.
- Emulate best practices from related world professional organizations to enhance the WFN's effectiveness, recognition, and relevance.
- Grow opportunities for quality neurologic training in any region where neurologists are underrepresented.
- React quickly to novel regional/global neurological threats to our specialty and patients.

I would be honored to be elected WFN president, working diligently to serve our delegates and all neurologists, whether subspecialists or generalists from very early to late career phases, and to improve access to the highest quality of neurology and neurological health worldwide. •

CANDIDATE STATEMENT FOR PRESIDENT: DAME PAMELA SHAW

Shaw

I am Prof. Dame Pamela Shaw, professor of neurology at the University of Sheffield in the United Kingdom. I am also director of the Sheffield Institute for Translational Neuroscience (SITraN), where we were honored to be awarded the Queen's Anniversary prize, the highest national honor for U.K. universities, for improving outcomes for patients with conditions such as motor neuron disease, Parkinson's disease, dementia, and stroke.

My specialist area is in the field of neurodegenerative disorders, especially motor neuron disease/amyotrophic lateral sclerosis (ALS/MND). My research developing neuroprotective therapies and multidisciplinary care for ALS/MND has produced more than 600 papers with approximately 60,000 citations, and improved life expectancy and quality of life for patients facing this devastating condition, which is increasing globally along with other age-related neurodegenerative disorders.

Addressing global disparity in patient access to neurological care and specialist expertise is crucially important in the current era where new treatments are being developed for hitherto intractable neurological conditions. The World Federation of Neurology (WFN) has a central role to play in increasing educational and training opportunities and widening patient access to care and clinical trials.

If appointed as the first female WFN president, I would increase the visibility of women neurologists within our global community, explore with clinical teams and trial sponsors ways of developing new trial sites in underserved areas with training opportunities, and further the development of our training centers and e-learning courses.

I would like to explore opportunities to increase income generation for WFN activities, including philanthropic support to underpin fellowship and training opportunities for early career neurologists/neuroscientists. I would promote patient participation in the executive team and take advice on patient priorities and, together with WFN partners, build consensus on the most important, feasible, and urgent priorities to deliver for global neurological communities. •

MEET THE WFN 2025 FIRST VICE PRESIDENT CANDIDATES

Get to know the candidates for WFN first vice president in their own words.

Two candidates have been recommended by WFN's Nomination Committee for the upcoming election of first vice president to take place by electronic voting in September. Results will be presented in October at the Annual General Meeting of the Council of Delegates Oct. 12, 2025, in Seoul, South Korea. Each candidate has presented their statement for your review.

Below are the statements for the nominees for first vice president recommended by the Nomination Committee.

CANDIDATE STATEMENT FOR FIRST VICE PRESIDENT: PROF. RIADH GOUIDER

Gouider

My dedication to neurology began with my training in both Tunisia and Europe. This diverse educational foundation instilled in me a deep appreciation for global neurological collaboration and shaped my commitment to advancing neurology worldwide.

Since attending my first World Congress of Neurology in Vancouver (1993), I have remained engaged with the World Federation of Neurology (WFN). Serving as the Tunisian Society of Neurology's delegate (2005–2015) reinforced my belief in the vital role of national societies in strengthening international neurology networks.

As WFN regional director for the Pan-Arab Region (2008–2010) and Africa (2012–2015), I witnessed WFN's impact in regions with limited neurological resources. I contributed to accrediting three WFN teaching centers in Africa, reinforcing WFN's mission to improve neurological education.

Serving as two-term WFN elected trustee (2014–2020) and later as co-opted trustee (2022–2023) gave me valuable insight into WFN's strategic direction.

I am still trying to contribute within WFN as co-chair of the Education Committee and the WCN 2025 Teaching Course Committee and, more recently, as a member of the WFN-American Academy of Neurology Global Advocacy Leadership Program (GALP) Steering Committee. I have been devoted to e-learning since 2009 by co-chairing WFN e-Health Task Force and actively contributing to WFN regional e-Learning Days, including WFN-African Academy of Neurology, Education in Headache to Healthcare Providers in Africa, and WFN-Asian and Oceanian Association of Neurology.

With my experience and dedication, I am honored to stand for first vice president. If elected, I pledge to:

- Enhance WFN's partnerships with global organizations, including the World Health Organization, to advocate for neurology as a public health priority.
- Expand educational access through WFN-accredited training centers and e-learning.
- Strengthen global collaboration so all neurologists, especially in underserved regions, benefit from shared expertise.

I am committed to advancing neurological education, research, and advocacy worldwide. I humbly ask for your support and pledge to work tirelessly toward our shared vision — a world where no one is left behind. •

CANDIDATE STATEMENT FOR FIRST VICE PRESIDENT: TISSA WIJERATNE

Wijeratne

Thank you sincerely for the trust you placed in me as an elected trustee of the World Federation of Neurology (WFN). It has been an honor to serve our global neurology family, united by one shared vision — better brain health for all.

Today, I humbly seek your support once again — this time as a candidate for first vice president.

This is a defining moment. One in three people lives with a brain disorder. Behind each number is a person, a family, a community. I have witnessed this burden firsthand growing up in rural Sri Lanka, and now working in western Melbourne's richly diverse communities, where over 165 languages are spoken.

Diversity at its best demands leadership that is inclusive, bold, and human.

If elected, I will bring energy, compassion, and clear action to translate global strategies into local impact. We must lift education, equity, and research, especially in underserved regions. I will work with member societies, support emerging leaders, and build lasting partnerships to advance our mission.

As co-chair of World Brain Day, I've seen the power of collective action. I have trained over 450 physician trainees and 60 neurologists across three continents, mentored 42 PhD candidates, and currently supervise 12 PhD students. My clinical work has focused on stroke, migraine, and headache — some of the world's most disabling conditions.

I have authored over 300 peer-reviewed papers, with an h-index of 86 and over 136,000 citations. I remain a full-time clinician, just as you, while voluntarily contributing to education across disciplines.

But I am not driven by numbers. I am driven by people.

WFN needs leadership that listens, unites, and delivers. I am ready to serve in that spirit. •

MEET THE WFN 2025 ELECTED TRUSTEE CANDIDATES

Get to know the candidates for WFN elected trustee in their own words.

Three candidates have been recommended by WFN's Nomination Committee for the upcoming election for the position of trustee to take place by electronic voting in September. Results will be presented in October at the Annual General Meeting of the Council of Delegates Oct. 12, 2025, in Seoul, South Korea. Each candidate has presented their statement for your review.

Below are the statements for the nominees for elected trustee recommended by the Nomination Committee.

CANDIDATE STATEMENT FOR WFN ELECTED TRUSTEE: CHANDRASHEKHAR MESHRAM

Meshram

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

I am indebted to WFN for giving me the opportunity to serve as co-opted trustee, elected trustee, and president of the Tropical and Geographical Neurology Specialty Group (TGNSG). In these roles, I have contributed to the mission of WFN: fostering quality neurology and brain health worldwide. Through TGNSG, I organized 16 webinar sessions on neuro-infections and gave opportunity to trainees from different regions of the world to sharpen their clinical skills. The series "Inspiring People in Neurosciences" was a step in the same direction.

I contribute timely updates for the "Spotlight on COVID and Current Global Neuro-Infections" blog on the WFN website. I was instrumental in starting the WFN Department Visit program in India. In 2024, the president of India conferred on me Padma Shri, one of the highest civilian honors in India.

I have served as a member of the Constitution and Bylaws and Scientific Program Committees. I am a member of the Infectious disease panel of the European Academy of Neurology. I am section editor of the *Encyclopedia of Neurological Sciences* and assistant editor of *eNeurologicalSci*.

World Brain Day is the most eminent public awareness initiative of WFN. As part of that initiative, I organize public education campaigns throughout the year. I have published about 500 articles for public education, including several in *World Neurology*.

WFN is making every attempt to take care of inequality in neurology care and education worldwide, and I am committed to addressing it. Collaboration with WHO and other societies is important for brain health. My passion to work for the WFN is the main reason I am standing for the post of elected trustee. I would be grateful for your support. •

CANDIDATE STATEMENT FOR WFN ELECTED TRUSTEE: GHAZALEH TABATABAI

Tabatabai

My name is Ghazaleh Tabatabai. I am a neurologist, a physician scientist, and a professor of neurology and neuro-oncology at the University of Tübingen in Germany. I am honored to be nominated as a candidate for elected trustee of the World Federation of Neurology (WFN) by the German Society of Neurology.

My work in different leadership roles has provided me with deep insights into international health care challenges and disparities in neurological care. These disparities are a global threat and will lead to an unmanageable global disease burden caused by neurological disorders. This burden is particularly heavy in low-income countries where even access to routine neurological care is restricted, as is access to modern diagnostic measures and clinical trials.

These global challenges require dedicated regional activities and concerted support from the international community. The WFN and its member societies, together with the World Health Organization and the United Nations, can make a significant difference here. We can learn from each other and combine forces to empower the next generation of neurologists, ready to face these global challenges. I will consider it a privilege to contribute to this WFN mission.

Examples of activities that I envision include:

- Action plans for implementing low threshold interventions for prevention, as well as specific training in multiprofessional rehabilitation and palliative care that can be implemented globally.
- The development of strategic concepts and implementation plans toward a globalization of access to clinical trials.
- Empowerment strategies of international research collaborations.

These activities require strategic thinking, analytical skills, high level expertise in neurology, and intercultural competence. Based on my intercultural socialization, I have acquired a high level of empathy. I am convinced that tolerance and flexibility, particularly when facing ambiguity and controversy, combined with a growth mindset and high frustration tolerance will finally help us to make significant contributions to push boundaries. •

CANDIDATE STATEMENT FOR WFN ELECTED TRUSTEE: MAYELA RODRIGUEZ-VIOLANTE

Rodriguez-Violante

I am honored to be considered for the role of elected trustee of the World Federation of Neurology (WFN). As a movement disorder neurologist and head of the Clinical Laboratory of Neurodegenerative Diseases at the National Institute of Neurology and Neurosurgery in Mexico City, I have dedicated my career to improving the care of individuals with Parkinson's disease and related disorders, particularly in Latin America, where access to specialized neurological care remains a challenge.

With a strong foundation in both clinical practice and academia, I have trained numerous neurologists through my role as a full professor in the Parkinson's disease and movement disorders high-specialty course. My international experience, including movement disorder training at the Hospital Clinic de Barcelona and advanced degrees from the University of Murcia, has strengthened my ability to collaborate across cultures and disciplines, ensuring that diverse perspectives contribute to the advancement of our field.

Beyond my clinical and educational work, I have been actively involved in international neurological organizations. This includes serving on committees within the International Parkinson and Movement Disorder Society and mentoring in the MDS LEAP program. My research contributions, reflected in over 180 peer-reviewed publications and an h-index of 29, underscore my commitment to advancing scientific knowledge and fostering collaboration across regions.

As an elected trustee of the WFN, I would advocate for greater inclusion of neurologists from Latin America and other underrepresented regions, ensuring that their expertise and challenges are part of the global conversation. I am also committed to strengthening opportunities for women in neurology, supporting mentorship initiatives, and expanding access to neurological education worldwide.

I look forward to the opportunity to serve and collaborate with colleagues from diverse backgrounds to advance neurological care, education, and equity on a global scale. •

WORLD FEDERATION OF NEUROLOGY

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