ean
european academy of neurology

CONGRESS REVIEW:

8th European Academy of Neurology Congress

Contents

8th EAN Congress – Facts and Figures

ONSITE ATTENDANCE:

2736

VIRTUAL ATTENDANCE:

5363

TOP 10 COUNTRIES:

Italy	(537)
United Kingdom	(487)
Germany	(460)
Switzerland	(395)
Austria	(362)
Spain	(336)
Portugal	(259)
Romania	(228)
United States	(214)
The Netherlands	(209)

EAN 2022 Opening Session Kicks Off First Face-to-Face Congress in Three Years

After a 3-year wait, EAN President, Prof. Claudio Bassetti, was finally able to welcome the neurology community to a face-to-face annual EAN Congress at the **EAN 2022 Opening Session**. Following two virtual congresses, Prof. Bassetti made clear his pleasure at being able to convene in Vienna this year at the first hybrid EAN Congress, with online programme content available for those who were unable to attend in person.

Speaking from the main auditorium at the Austria Center in Vienna, Prof. Bassetti gave a thorough overview of EAN's recent endeavours and current direction, detailing the society's activities under the headings of four strategic priorities: science, education, membership and advocacy. The latter received particular emphasis, with Prof. Bassetti describing 2022 as a decisive year for neurology and brain health. He cited the adoption of the Intersectoral Global Action Plan on Epilepsy and Other Neurological Disorders, announced at the 75th World Health Assembly, and the emergence of neurology as a public health priority. He introduced a short video clip of figures from the field of neurology and global health speaking at the **EAN Brain Health Summit** and other events and described the ongoing support from the neurology community for brain health advocacy, following which he received a rousing round of applause.

Next to the lectern was Prof. Luca Cuffaro, Chair of the EAN Residents and Research Fellows Section, who gave a summary of the section and activities during the congress. He then handed over to Programme Committee Chair, Prof. Tony Marson, to introduce the neuroscientist, writer and broadcaster, Baroness Susan Greenfield.

In a thought-provoking talk, titled 'Where Neuroscience Meets Neurology: Blowing, Expanding and Losing the Mind', Baroness Greenfield explored the overlap between neuroscience research and clinical neurology, delving into philosophical questions on the physical basis of the mind. The message of her presentation hinged on the difference between the two basic modes of the brain: the 'feeling' mode, characterised by prefrontal under-function and higher dopamine levels; and the 'thinking' mode, characterised by prefrontal activation and lower dopamine levels. She raised the concept of a sliding scale of consciousness – likened to the effect of a dimmer switch for an electric light – and the question of a possible physical property of the brain that could correlate with degrees of consciousness.

Baroness Greenfield then introduced the research conducted by her own lab in the UK, which has been investigating the role of a novel 14-amino acid bioactive peptide (T14) as a potential key driver of neurodegeneration and is working on developing this peptide as a pre-symptomatic biomarker.

▶ WATCH THE OPENING SESSION ON OUR VIRTUAL CONGRESS PLATFORM*

Rounding out the Opening Session, Prof. Bassetti turned to the EAN's Honorary Members, offering recipients from 2020 (Prof. Charles Warlow) and 2021 (Prof. Günther Deuschl and Prof. Philip Scheltens) the chance to finally receive their awards in front of an audience.

Finally, following a warm introduction from Prof. Bassetti, this year's Honorary Member, Prof. Franz Fazekas, previous EAN President and former President of the Austrian Society of Neurology, took to the stage. In an emotional moment, Prof. Fazekas's award was accepted with the assistance of colleague, Christian Enzinger, who thanked the EAN Board, the two presidents (Prof. Deuschl and Prof. Bassetti) on stage and, notably, his family on Prof. Fazekas's behalf.

*To view any video content you will need to sign into your EAN account.

Video Interview: EAN Opening Lecturer, Baroness Susan Greenfield

EAN President-Elect, Prof. Paul Boon, took the opportunity to talk to Baroness Susan Greenfield in more depth.

Watch the video interview to hear Baroness Greenfield's thoughts on the most exciting research developments in Parkinson's disease and Alzheimer's disease, as well as non-pharmacological treatments, communicating scientific ideas to the general public and the concept of brain health.

Prominent Figures in Modern Neurology Attract a Full Auditorium for the EAN 2022 Presidential Symposium

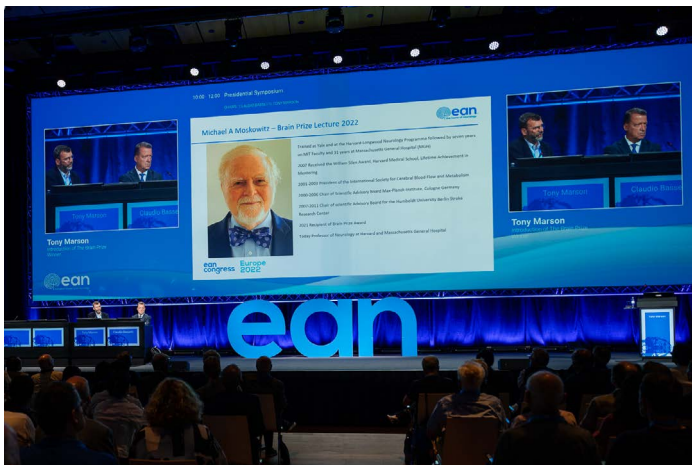
A packed main auditorium was the venue for this year's **Presidential Symposium**, one of the major highlights of every annual EAN Congress. Prof. Bassetti and Prof. Marson introduced the symposium, with Prof. Bassetti welcoming four renowned speakers whom he described as "towering figures of modern neurology".

Prof. Michael Moskowitz, Professor of Neurology at Harvard Medical School, USA, opened the symposium with his Brain Prize Lecture. He discussed the pathophysiological role of the trigeminovascular system in migraine and highlighted evidence concerning peptides and other neurotransmitters involved in the pathophysiology of migraine, indicating that these may be a target for new strategies in the prophylaxis and treatment of migraine.

The 2022 Moritz Romberg Lecture was then delivered by Prof. Bo Norrving, Professor of Neurology at Lund University, Sweden. The focus of this lecture was on stroke prevention strategies and the positive consequences of these strategies on the prevention of dementia. He provided a wide overview on the epidemiology of stroke and discussed how stroke is a field of neurology that has historically been left behind owing to the lack of a cure. He highlighted that this should be the key motivator to improve prevention strategies at the national level, encouraging collaboration between national health systems and national societies of neurology as well as the World Stroke Organization (WSO).

Watch a video interview in which Prof. Bo Norrving discusses the major breakthroughs in stroke during his career, the key to unlocking the potential of the ESA Plan and his views on how the EAN can contribute to optimising the management and treatment of stroke patients.

Prof. Kailash Bhatia, Professor of Neurology at University College London, UK, was next on stage to present the Charles Edouard Brown-Sequard Lecture on the importance of translational research. He discussed how combining clinical research and basic science is the key to success in the future of patient care. He also described the need for qualified clinical phenomenologists to guide research and direct the interpretation of research data. In parallel, clinical phenomenologists and geneticists should collaborate to provide the most appropriate genetic tests in clinical practice. He emphasised that genetic testing should remain a priority, even in the absence of curative therapies, as the genotype is a key factor in understanding the potential response of a phenotype to symptomatic treatments.



Watch a video interview with Prof. Kailash Bhatia, who discusses the major breakthroughs during his career, the role of clinical neurology in the development of novel treatment strategies for movement disorders and his views on how the EAN can contribute to optimising the management and treatment of movement disorders.

The symposium ended with the Camillo Golgi Lecture, delivered by Prof. Hans Lassmann, Professor of Neurology at the Medical University of Vienna, Austria, who spoke about the contribution of neuropathology to multiple sclerosis (MS) research. He presented an overview of the variety of neuropathological abnormalities underlying demyelinating diseases, followed by a discussion on the different aspects of autoimmune encephalomyelitis in humans. He also described the clinical features and pathology of myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD), one of the most debilitating demyelinating diseases, and highlighted the neuropathological differences between MOGAD and MS.

Watch a video interview in which Prof. Hans Lassmann discusses the major breakthroughs during his career, the role of neuropathology in the treatment of MS and his views on how the EAN can contribute to optimising the management and treatment of patients with neurological diseases.

Early Detection and Treatment of Parkinson's Disease

The **'Early Detection and Treatment of Parkinson's Disease'** session was organised in cooperation with the **International Parkinson and Movement Disorder Society – European Section** and was moderated by Prof. Carlo Colosimo and Prof. Tiago Fleming Outerio.

The first presentation, 'Imaging-based Diagnosis of Pre-motor Parkinsonism', was by Prof. Nicola Pavese, who focused on imaging biomarkers for the prodromal phases of Parkinson's disease (PD). Neurodegeneration and neuronal loss start very early in PD; therefore, the identification of biomarkers to identify PD in its early stages may be helpful in understanding the optimal time at which disease-modifying therapies should be initiated. In this context, Prof. Pavese described how neuroimaging may play an important role in elucidating early pathological changes. Studies using molecular imaging techniques have shown early involvement of the nigrostriatal pathway, decreased acetylcholinesterase density in peripheral organs, loss of cortical cholinergic function and increased activated microglia in prodromal PD. Furthermore, Prof. Pavese explained how the pre-motor stages of PD were found to present with reduced intensity of the substantia nigra on neuromelanin magnetic resonance imaging (MRI) and midbrain hyperechogenicity on transcranial ultrasound.

The second presentation, 'Biological Versus Clinical Diagnosis of PD', was given by Prof. Tiago Outerio. It was emphasised that the accuracy of clinical diagnosis in PD is not yet satisfactory and has not seen sufficient improvement in the last 25 years; therefore, biomarkers are urgently required. PD is not just a motor disorder, as non-motor features and dementia can occur at any time during the disease course. Prof. Outerio explained that several possible pathogenic mechanisms underlying neurodegeneration in PD have been identified, such as genetic mutations, neuroinflammation and mitochondrial dysfunction. Furthermore, the aggregation of pathological proteins plays a central role in PD and neurodegenerative disorders, leading to a loss of normal function and a gain of toxic function. Prof. Outerio concluded by underlining the urgent need to define biomarker-based diagnostic criteria for PD.

In the final presentation, Prof. Angelo Antonini provided an overview of the disease-modifying treatments currently under investigation for use in PD. Small molecule-based colloidal nanoparticles have been developed to inhibit pathological protein aggregation. Among these, UCB0599 is a brain-penetrant small-molecule inhibitor of alpha-synuclein misfolding and is under investigation for its potential to slow the progression of PD. Furthermore, novel engineered nanobodies specific for N-terminal regions of alpha-synuclein have been shown to recognise Lewy body pathology and inhibit in-vitro seeded aggregation and toxicity. In recent years, there has been substantial effort to develop antibodies targeting alpha-synuclein. Among these, prasinezumab, which is currently in Phase 2 trials, has been shown to slow motor progression. Furthermore, specific active immunotherapy with PD01A, a peptide targeting oligomeric alpha-synuclein, has recently been shown to be well tolerated in a Phase 1 trial, with a favourable safety profile.

Taken together, this session offered important insights into the pathological changes underlying PD and the imaging markers that may be important in the detection of prodromal PD, emphasising the urgent need for biomarker-based diagnostic criteria for PD and to promote further research on new MRI and positron emission tomography (PET) techniques. Moreover, this session gave an important overview of the potential therapeutic agents currently in development for the treatment of PD.

The Burden of Sleep Disorders in Neurology

A joint session with the European Sleep Research Society (ESRS), titled 'The Burden of Sleep Disorders in Neurology' was one of a number of sessions dedicated to sleep specialists as part of the sub-specialty track on Sleep-Wake Disorders Day at the congress. The session covered various aspects of sleep disorders and was co-chaired by Prof. Ulf Kallweit and Prof. Evelina Paedijene.

▶ WATCH THIS SESSION ON OUR VIRTUAL CONGRESS PLATFORM

The first topic was 'Sleep and Brain Health', presented by sleep specialist and EAN President, Prof. Claudio Bassetti. During his presentation, Prof. Bassetti highlighted that the most well-known definitions of general health have one thing in common: the absence of disease and disability. He pointed out the necessity of including prevention and general well-being, as all definitions should go beyond the absence of disease, as stated by the World Health Organization (WHO) in 1948. Focusing on health is essential in this approach, as emphasised by the recently published **EAN Brain Health Strategy**. Prof. Bassetti also introduced a study from China, which showed increased mortality linked to insomnia or loss of sleep three times a week. He noted that neurologists require an overall grasp of all disorders and concluded that this study also underlines the importance of sufficient sleep and its correlation with good brain health. He suggested to include sleep and brain health in the definition of general health and emphasised that good sleep and well-being should be promoted, alongside optimal brain health, throughout the course of life. He acknowledged that there is a lack of data currently available to support this approach. His presentation was followed by a short discussion on the presented topics.

The subsequent presentation, 'Sleep By and For the Brain' was given by Prof. Pierre-Hervé Luppi, President of the ESRS. He provided an overview of findings on sleep circuits, the basic mechanisms and neuroanatomy of sleep and wake and the regulation and function of the brain. As a renowned sleep-wake researcher, Prof. Luppi pointed out gaps in the literature and stated that establishing links between the variety of subjects under investigation within the field is the only way to further develop this area of research.

The next presentation, 'Epidemiology of Sleep Disorders in Neurology', was given by Prof. Elisa Baldin. Epidemiology remains a broad field, and it is important to understand that prevalence depends on the specific definitions used within a study. Prof. Baldin explained this hypothesis using the example of insomnia. There are also several methodological issues at present; these include data based on self-reported questionnaires or surveys, which have variable response rates; the use of instruments that are not validated or are of unknown sensitivity and specificity, such as non-standardised questionnaires; and varying definitions and study timeframes. Prof. Baldwin's presentation highlighted these issues and recommended the use of descriptive epidemiology by selecting the appropriate population, with specific restrictions, and identifying the setting for data collection, such as in general practitioners or hospitals.

The final speaker, Prof. Richard Dodel, presented preliminary information on a study named 'Economic Burden of Sleep-Wake Disorders: Assessing the Economic Burden of Neurological Diseases in Europe', due to be completed in November 2022. The project is supported by the EAN and the Lundbeck International Foundation. During his presentation, Prof. Dodel provided a brief overview of past studies, including the Global Burden of Disease (from 1992; founded by Harvard) and Cost of Brain Disorders in Europe (from 2010 by Healthcare Costs of Neurological and Psychiatric Disorders) studies. He also highlighted how the 'popularity' of certain diseases prevents others from receiving equal research attention and how there is a need for new data in this field.

Scientific Advances for Immediate Transition into Clinical Practice in Multiple Sclerosis

This joint session, in cooperation with the **European Committee for Treatment and Research in Multiple Sclerosis (ECTRIMS)**, covered a broad spectrum of important topics in MS, starting with the potential of implementing patient-related outcomes in clinical care. The session continued with updates on COVID-19 virus-related issues in MS and a summary of the upcoming new ECTRIMS/EAN guidelines on the treatment of MS. The closing presentation explained how real-world data from registries and large cohorts could bring us closer to answering important research questions.

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Dr Caroline Pot then presented an overview of the evolution of clinical outcome measures used to assess disease development and the impacts of treatment. Her presentation focused on patient-reported outcomes (PROs), based on information collected directly from patients, and highlighted the importance of patient empowerment in MS patient care. In addition to the increasing interest in using PROs, she described the challenges encountered when using these outcomes in routine clinical practice, such as their validation, standardisation and implementation in different cultures and languages.

A comprehensive presentation about the impact of the COVID-19 pandemic on MS care was then provided by Prof. Barbara Kornek. She described how in addition to the pandemic affecting the mental and emotional health of patients, it has also influenced the prescription patterns of disease-modifying treatments. She presented data on several aspects of vaccination against COVID-19, including: (i) whether vaccination was linked to a higher incidence of relapses or pseudo-relapses; ii) how immune response develops towards COVID-19 vaccines among MS patients – especially those treated with anti-CD20 therapy; (iii) the timing of vaccinations; and (iv) the safety and efficacy of re-vaccination. The impact of different variants of COVID-19 was also discussed.

Prof. Maria Pia Amato then spoke about the updated ECTRIMS/EAN treatment guidelines. The new guidelines focus on the adult population and drugs authorised by the EMA. She presented the guideline development process and the eight main treatment topics on which the expert group have provided updated recommendations, compared with the last guideline published in 2018. Dr Melinda Magyari shared data from MS registries and large cohorts addressing key aspects of MS treatment, where she showed real-world results that could impact clinical treatment approaches. Dr Magyari then described the benefits of early intervention with N-Dimethyltryptamine (DMT) and, in a subgroup of patients with MS, starting DMT early alongside a high-efficacy drug. The timing of treatment initiation was also discussed in terms of its effect on conversion from relapsing-remitting MS (RRMS) to secondary progressive MS (SPMS). She also highlighted data supporting MS doctors in decision-making regarding treatment switching versus escalation and eventual treatment cessation.

Getting Evidence into Practice: Biomarkers for the Management of CNS Tumours

This joint session with the European Association of Neuro-Oncology (EANO) provided a picture on biomarkers in neuro-oncology, including imaging, biological and clinical features; these biomarkers are important in the development of individualised and targeted therapies. The purpose of this session was to summarise the evidence in the field and promote biomarker-based decision-making for clinicians.

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In the first presentation, Dr Adelheid Worehrer provided an overview of the new content in the 2021 WHO classification for central nervous system (CNS) tumours. Brain tumours are diverse in terms of the number and diversity of cells, the function of the cells and prognosis. Until 2016, the classification was based solely on pathology; however, it now integrates molecular parameters, allowing a better understanding of pathophysiological features and treatment opportunities. The most important advance was the integration of DNA methylation profiling into the criteria. DNA methylation is an epigenetic marker that is highly conserved and heritable, reflecting cell-of-origin and epigenetic changes acquired during tumorigenesis and thus allowing more precise classification. These aspects can be applied to many tumour types and are able to refine tumour subtypes, for example, high-grade astrocytoma with piloid features has a specific DNA methylation profile. With DNA methylation, the WHO classification introduced 22 new tumour types, with 14 new gliomas/glioneuronal tumours.

Dr Worehrer then presented the key molecular markers in glioma: mutation of the metabolic enzyme *IDH1/2*, leading to epigenetic change and DNA hypermethylation; loss of chromosomal arms 1P and 19q, specific to oligodendroglioma; and *TERT* promoter mutations linked to telomerase activation. With the introduction of this new WHO classification, three major tumour groups can now be easily distinguished: (i) astrocytoma with the presence of an *IDH* mutation at grade 2, 3 or 4 (group 4 with added *CDKN2A/B* mutation); (ii) glioblastoma *IDH*-wild type defined by a new molecular criterion, such as *TERT* mutation or *EGFR* gene amplification, and (iii) oligodendroglioma with the presence of an *IDH* mutation and 1p10q co-deletion. In summary, the 2021 WHO classification restructured existing tumour groups by introducing novel markers, such as DNA methylation profiles, and introduced the concept of histological and molecular grading.

The subsequent presentation, by Dr Andreas Hottinger, touched on molecular and imaging biomarkers and their key roles in high-grade CNS tumours. Dr Hottinger discussed some established markers used for CNS tumours: (i) MRI-based, especially contrast-uptake and spectroscopy MRI (suitable for tumours with high choline and low NAA), (ii) PET-based, using FET or choline tracers, and (iii) pathology-based markers. Molecular markers are of important predictive value in clinical practice, for example, MGMT methylation confers a better sensitivity to temozolomide chemotherapy and has been linked to improved survival. Other molecular markers have shown potential to improve outcomes, such as those seen in Phase 2 trials of dabrafenib/trametinib in patients with *NTRK* gene fusions and BRAFV600E mutations. To conclude, Dr Hottinger outlined future avenues of research, including liquid biopsy for isolation of circulating tumour markers to easily distinguish the molecular profiles of CNS tumours using blood tests.

The third presentation, by EANO Executive Board member Dr Roberta Rudà, covered molecular and imaging biomarkers in lower-grade gliomas. The 2021 WHO classification redefined the distinction between low-grade and high-grade gliomas. Two groups are described for lower grades: (i) oligodendroglioma with *IDH* mutation and 1p/19q alteration, and (ii) astrocytoma with *IDH* mutation. This guidance supports the prognostic and predictive clinical value of *IDH* mutations. Dr Rudà also mentioned a potential novel biomarker that has recently come to light: MR spectroscopy that can indirectly detect the presence or absence of the *IDH* mutation by measuring the accumulation of 2HG in the tissue. Promising anti-*IDH* therapy options are available, such as ivosidenib and vorasidenib for patients with lower-grade gliomas, with encouraging results in terms of quality of life, seizure incidence and survival rate. The presentation closed by concluding that the best approach in terms of clinical practice, for example, when determining the most appropriate choice of adjuvant chemotherapy, is now based on molecular features.

Finally, Dr Ian Law discussed the role and implications of PET-MRI in neuro-oncology. He discussed the tracers used in neuro-oncology, including FET, dopa and choline, and the technical details of PET-MRI. In gliomas, PET-MRI now achieves 80–90% diagnostic accuracy for cancer recurrence or measurement of treatment effect. This innovative imaging tool can be useful for monitoring small, equivocal MRI changes and can assist with difficult clinical problems.

Plenary Session: Highlights and Breaking News

This session was co-chaired by Prof. Claudio Bassetti, Prof. Tony Marson and Prof. Paul Boon. Prof. Bassetti welcomed the attendees and introduced the session by commending the distinguished speakers and tournament winners on the agenda, who were going to present their personal highlights across several topics, including cerebral diseases, MS, movement disorders, epilepsy and dementia.

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The tournament winners first gave their presentations. In a video recording, Basic Tournament winner, Associate Prof. Høgestøl, outlined his research on how brain age estimation with an XgBoost machine learning model outperformed brain parenchymal fraction as an imaging marker in MS. In this study, brain age correlated robustly with disease onset and duration as well as disease-modifying treatments. As the hallmark lesions currently analysed by MRI are becoming less frequent due to modern therapies, it is hoped that these findings may develop into a supplementary tool to improve future care for patients with MS by measuring subtle long-term changes.

Dr Beyeler, Tournament Clinical winner, then presented his work investigating susceptibility vessel sign (SVS) as a new biomarker for malignancy-related stroke. Dr Beyeler's results showed an association between the absence of SVS and underlying malignancy, and he noted that the low diagnostic accuracy of SVS absence was compensated for by its positive predictive value. This marker may assist in the diagnosis of acute malignancy in the future and guide secondary prevention.

Highlights of the topics were then presented. Prof. Markus from the University of Cambridge, UK, presented highlights on the topic of cerebrovascular diseases. He noted that there were a number of papers on stroke and cancer presented at the EAN Congress and stated how many patients with embolic stroke of undetermined causes may, in fact, have occult cancers. He mentioned the previous presentation by Prof. Høgestøl, as well as that by Dr Schwarzenhofer, which found that patients with embolic stroke of undetermined source ESUS shared similar clot features to those with cardio-embolic strokes, raising the question of whether these patients should undergo anticoagulation. He noted the surprising lack of thrombectomy content at the congress and discussed results from a global study showing revascularisation safety in patients with COVID-19.

Highlights relevant to MS were then provided by Dr Bsteh, who began by mentioning the joint EAN/ECTRIMS discussion on the four prominent topics in the MS community: digital PROs, vaccination, the new disease-modifying therapies guidelines and real-world evidence. The first papers discussed focused on updates on prognostic markers, including cortical lesions at diagnosis as a predictor of secondary progressive MS, as well as cognitive impairment as a predictor of physical disability progression measured by time to wheelchair. Dr Bsteh also covered notable content on detecting noise in data, personalising treatment and de-risking treatment in pregnancy.

Highlights on the topic of movement disorders were provided by Prof. Colosimo, who noted the many interesting talks on the subject at this year's congress. Most of his chosen highlights were from the session on early detection of prodromal Parkinson's disease, including a discussion on the important differences in mortality in monogenic Parkinson's disease by mutation and one assessing the correlation of diagnostic yield in whole-exome sequencing and dystonia.

Prof. Colosimo finished by discussing a talk from the Multiple Sclerosis symposium about the Emerald radio-wave monitor for passive monitoring in the home, emphasising the potential for multiple device applications and collaboration between those working with different neurological disorders.

Next, Prof. Vonck opened her highlights on epilepsy by stressing the burden on patients, with data from the ESBACE Consortium showing high prevalence rates in the elderly and high annual costs, alongside data highlighting the lack of available neurologists in developing countries. A presentation was shown emphasising how immediate treatment in the emergency room for newly diagnosed cases is associated with significantly improved long-term prognosis, promoting the implementation of 'first seizure units' in emergency departments. Several topics in drug-resistant epilepsy were also covered, involving data for non-invasive devices in seizure forecasting, new drug therapies (such as cenobamate), immunological treatments in temporal lobe epilepsy and neuromodulation using the new, semi-invasive EASEE device for transcranial electrical stimulation. Prof. Vonck ended with a call for papers for the *European Journal of Neurology*, of which she is an Associate Editor.

Dr Frederiksen then gave his personal highlights on dementia, opening by praising the exciting research presented by junior researchers this year. Dr Frederiksen discussed developments in diagnosis and disease mechanisms, choosing studies on the utility of plasma ptau-181 for predicting amyloid status and the potential for therapies targeting carriers of progranulin mutations.

He then moved on to speak about disease management, describing a study on the impact of sleep-disordered breathing on visual memory after stroke, illustrating the importance of being mindful of comorbidities even in patients with cognitive impairment. He finished with results from the S14CARE Project, highlighting the need for telemedicine designed for different patient groups, such as those with dementia.

Finally, the *European Journal of Neurology (EJoN)* Award was received by Dr Coutinho on behalf of the research team, who gave special mention to his co-principal investigator, Prof. Ferro, and three PhD students for their work analysing the data. Dr Coutinho, who had just recovered from COVID-19 himself, provided an overview of the project, an analysis of cases notified to the EMA of cerebral venous sinus thrombosis (CVST) following SARS-CoV-2 vaccination. The CVST Consortium published papers in the *Journal of the American Medical Association* on the frequency of thrombocytopaenia in patients with CVST prior to COVID-19, the characteristics and outcomes of those with CVST in vaccine-induced thrombocytopaenia and an analysis of EMA EudraVigilance database cases of CVST. The Consortium research had three key conclusions: CVST was more frequently reported after AstraZeneca vaccination than the other COVID-19 vaccines; half of patients with CVST following AstraZeneca vaccination had concomitant thrombocytopaenia; and these patients had a higher mortality rate than those with CVST after mRNA vaccination.

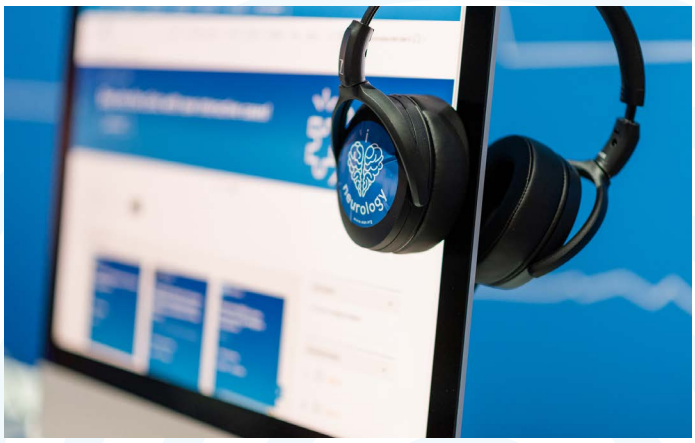
Challenges for Women in Neurology

Prof. Elena Moro and Dr Antonella Macerollo welcomed in-person participants to the 8th edition of the **Challenges for Women in Neurology** networking event, a regular feature of the EAN Congress since its first meeting in 2015.

Prof. Maria Judit Molnar, Director of the Institute of Genomic Medicine and Rare Disorders at Semmelweis University in Budapest, discussed her journey from neurology to neurogenetics, focusing on the importance of openness to change in the healthcare field to reach treatment goals. Prof. Molnar also spoke about her experiences in the field that encouraged her to persevere, even in difficult circumstances.

The second speaker was Prof. Barbara Tettenborn, Head of the Department of Neurology at Kantonspital St. Gallen, Switzerland. Prof. Tettenborn highlighted the essential role of believing in what we do as a fundamental part of the process in reaching our achievements and the importance of making the work environment a comfortable place for all. She also spoke about her passion for sporting events as an example of extra-professional activities, which play a key part in maintaining a good work-life balance.

The networking event was closed by a presentation by Baroness Susan Greenfield, with a therapeutic focus on neurodegenerative diseases. She discussed with the audience her journey within neuroscience, as a woman in times when there was a larger gender discrepancy within the field. She also talked about building confidence from childhood, the need to provide education on the changes necessary to improve the gender gap and the importance of "just be[ing] yourself, not what the others want you to be!"



New EAN Board Elected at Assembly of Delegates

The EAN is pleased to announce that our Assembly of Delegates elected several new EAN Board members. At the first in-person meeting of delegates since 2019, two existing board members were elected to new positions, one was re-elected for a further term and two entirely new members were elected.

Elena Moro (previously Secretary General) was elected as President-Elect of the EAN, while Tony Marson (previously Chair of the Programme Committee) was elected Secretary General. Antonio Toscano was elected as the new EAN Treasurer and Matilde Leonardi was elected as Chair of the Communication Committee. Thomas Berger was elected to serve an additional term as Chair of the Scientific Committee.

The new composition of the EAN Board is as follows:

President

Paul Boon, Belgium

President-Elect

Elena Moro, France

Past President

Claudio Bassetti, Switzerland

Secretary General

Tony Marson, UK

Treasurer

Antonio Toscano, Italy

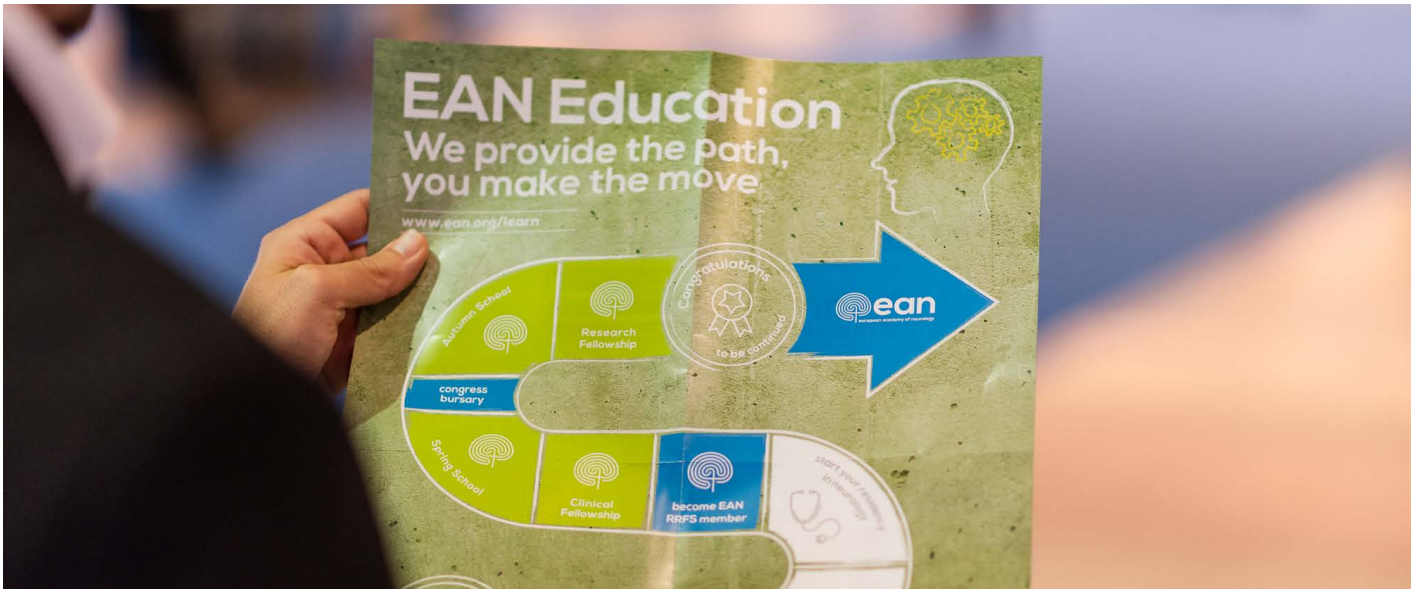
Communication Committee Chair

Matilde Leonardi, Italy

Scientific Committee Chair

Thomas Berger, Austria

The Chairs of both the Education Committee and Programme Committee will be appointed by the EAN Board over the summer.



Everyone's a Winner at the EAN 2022 Brain Challenge!

The Brain Challenge is the annual quiz show at the EAN Congress, taking place between two rival teams. Of course, there is an educational aspect, as patient cases are presented, a fast diagnosis is required, and the case explanation is needed to round off each scenario.

In the first round, the teams win points in multiple choice rounds; in the subsequent battle round, teams have to be the fastest to hit the buzzer and make the right diagnosis without a selection of answers to choose from.

The moderator of the show was, as in previous years, Prof. Marie Vidailhet from Paris, France. This year, to honour the host city, the two opposing teams were named after two of Austria's most famous cultural exports.

The competing teams were:

TEAM 1: FALCO	
	Tatiana Bremova-Ertl (Switzerland)
	Loucif Ouyahia (France)
	Anne Bruijnes (The Netherlands)
	Jacopo Pasquini (Italy)
	Mihai Radu Lonescu (Romania)
	Tommaso Russo (Italy)

TEAM 2: MOZART	
	Ludo Vanopdenbosch (Belgium)
	Stanley Lyadurai (USA)
	Catarina Bernardes (Portugal)
	Christo Bratanov (France)
	Mariana Isabel Muñoz García (Spain)
	Sreenivas U Meenakshisundaram (UK)

Both teams were challenged, and the score after round one was tied at 600 points apiece. Following the battle round, one team was in a slightly better position, but due to some technical problems and to be fair to all, it was decided to declare both teams the winners! Both on-site and online audience members also took part via online voting, and three lucky on-site winners were awarded prizes.

We would like to thank all scientific panels who submitted cases for the EAN Brain Challenge 2022.

The selected contributors for 2022 were:

- **Pedro N Alves**, Scientific Panel on Higher Cortical Functions
- **Elsa Azevedo**, Scientific Panel on Neurosonology
- **Sylvia Boesch**, Scientific Panel on Neurogenetics
- **Marina Boziki**, Coordinating Panel on Rare Neurological Disease
- **Massimo Filippi**, Scientific Panel on Multiple Sclerosis
- **Rolf Fronczek**, Scientific Panel on Sleep Wake Disorders
- **Elisabetta Indelicato**, Scientific Panel on Neurogenetics
- **Markus Kneihsl**, Scientific Panel on Neurosonology
- **Federica Montagnese**, Scientific Panel on Muscle and NMJ disorders
- **Roberta Ruda**, Scientific Panel on Neuro-oncology
- **Gabriele Siciliano**, Scientific Panel on Muscle and NMJ disorders
- **Urszula Staromłyńska**, Scientific Panel on Infectious diseases
- **Martje van Egmond**, Scientific Panel on Movement disorders
- **Simone Vigneri**, Scientific Panel on Pain
- **Gorsev Yener**, Scientific Panel on ALS

Thank you to everyone who took part and contributed cases in the 2022 EAN Brain Challenge!

Task Force:
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EAN Tournament Finals

This year's Tournament Finals, consisting of both clinical and basic segments, were hosted by Prof. Tony Marson, alongside jury members Sten Fredrikson, Caroline Pot and Dan Healy. Speakers were allowed just 5 minutes on stage, with 3 minutes for the study summary and 2 minutes of Q&A time. Scoring was based on scientific interest, relevance, methodology and statistical analysis, quality of results, presentation quality, logical build-up and the presenter's ability to answer questions. The winners received free registration to EAN 2023, with hotel accommodation and travel included.

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