

25 YEARS ANNIVERSARY

WFNR UPDATE AUTUMN 1996 – 2021

WFNR

World Federation for
Neurorehabilitation

This special edition of the WFNR Update newsletter celebrates the 25th anniversary of the organisation. The many members that have played a crucial role in the WFNR over the years discuss the influence and impact of the organisation on the development of neurorehabilitation around the world. **Please visit the WFNR's new website www.wfnr.co.uk and watch our birthday video.**

12th WORLD CONGRESS FOR NEUROREHABILITATION

14–17 December 2022 | Austria

Save the Date

www.wfnr-congress.org



CELEBRATING 25 YEARS OF THE WFNR



David Good, WFNR President.

“Congratulations to the WFNR for all that it has achieved over the last 25 years. We’re extremely grateful to all the members who have contributed to the success of the organisation in so many ways” said Professor David Good, the current WFNR President.

The WFNR is a vibrant and dynamic multidisciplinary organisation, advancing

the development and improving neurorehabilitation (NR) services across the world. In addition to over 5000 members and 37 Special Interest Groups (SIGs), the WFNR is now affiliated to 41 National Societies in various countries. It hosts a biennial World Congress for Neurorehabilitation (WCNR) that rotates around the continents with the next WCNR heading to Vienna, Austria in December 2022, followed by Vancouver, Canada in 2024.

The hub of the WFNR is in the UK, managed by the Executive Director, Tracey Mole, who has been an invaluable part of the WFNR since day 1. The Presidium provides overall leadership and addresses current and strategic issues, as well as long-term planning. The WFNR Council meets at the WCNR and comprises the Presidium, National Society Presidents, and the WFNR Regional Vice-Presidents (RVPs) who are responsible for developing NR in their parts of the world.

The SIGs are an important part of the WFNR. Led by a SIG Chair, the SIGs are dedicated to a wide range of topics and neurological conditions important in NR. They meet formally every two years and formulate their own mission and goals and provide scientific input to the WCNR.

Education and research are key drivers of the organisation. It has a unique and successful programme, the Flying Faculty, where experts travel to low- and middle-income (LMIC) countries to provide educational programmes and ‘hands on’ clinical training. The Education Committee inputs to the WCNR, hosts training courses and webinars on clinical and research topics. The Research Committee hosts webinars and has a focus on educating junior investigators.

David Good said: “The demand for NR worldwide is overwhelming and was outlined in ‘Rehabilitation 2030’ published by the World Health Organisation (WHO). The WFNR has formal and informal links with international and regional organisations contributing to invaluable information sharing and coordinated international advocacy. Today the WFNR is a true advocate for NR. We are proud to be celebrating our 25th anniversary and look forward to the next 25 years!”

A stylized, handwritten signature in green ink, appearing to read 'David Good'.

David Good, President WFNR

REFLECTING ON THE PAST

Professor Michael Barnes, founder of the WFNR



*Professor Michael Barnes,
the founder of the WFNR.*

“I prefer to look forward but sometimes it is OK to look back and see where we have come from and how far we have travelled.

In the mid-90s NR was in its infancy. There were no National Societies except I believe in Germany and the USA. There was certainly no global organisation. I thought that NR needed a clearer voice so we could gain more credibility and

coherence in sometimes, to be frank, a neurological environment that was rather hostile to the concept of neurology helping to rehabilitate people. So, I thought ‘let’s give this a go’ and we organised the first conference in Newcastle upon Tyne, UK.

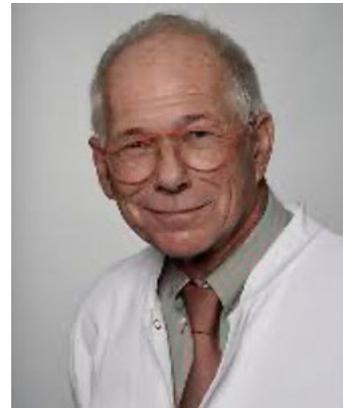
To my surprise that first conference in 1996 was oversubscribed. People kept arriving from overseas without booking and we were over the fire safety limits. We let them in on the assumption that not everyone who registered would be there all at the same time. I never counted but fortunately there were no fires! That attendance (about 800) encouraged me to form the WFNR and I was lucky to find a few like-minded people, many of whom are still running the WFNR today! A special mention to Tracey who still runs the organisation with skill, tact, and enthusiasm. Thanks also to the late and much missed Franz Gerstenbrand who offered support and advice in those early days.

I became the first President and overstayed my welcome by holding that position for 12 years! Then I turned to being Treasurer for a while before finally retiring, although recently I’m now back on the committee as a Trustee. The WFNR can’t get rid of me!

I think our original aim has been met – to create a global organisation bringing together health professionals with an interest in NR. It is now a recognised and respected subspeciality of neurology. Gone (I hope) are the days when practising in NR was considered beneath the neurology community. We now serve our patients much better than we used to and I think the WFNR has played a major role in that change. Thank you everyone!”

WHAT ABOUT THE FUTURE?

Professor Volker Homberg, President-Elect



*Professor Volker Homberg,
WFNR President-Elect.*

“We’re proud to be celebrating our 25th birthday. The WFNR has become one of the major organisations in the world in the field of NR. Over the last 25 years we’ve been instrumental in increasing the quality of science, services, and education in NR.

The last 18 months of the pandemic has highlighted the importance of NR in the acute, sub-acute and now the long-term treatment of the effects of COVID-19. However, despite our best efforts, we must acknowledge the many millions of people who still lack access to NR services. A positive outcome from the pandemic has been the increased use of digital technology to deliver NR services. This technology will continue to play a key role in accessing people and ensuring treatments can be delivered.

NR has an exciting future. The WFNR will continue to play a major role as a ‘translational hub’, educating members about new science and technology. There are many new advances on the horizon; the use of brain computer interfaces, virtual and augmented reality, artificial intelligence, and better biomarkers to name just a few. The future looks bright for our patients.

The WFNR needs the continued support of its members. It also needs new members – so please be a part of our future and join the WFNR.”



INFLUENCING CAREER PATHS

In 1996 Jorge Hernandez Franco and Witsanu Kumthornthip both attended the 1st Certificate Course in Neurorehabilitation which took place in Newcastle upon Tyne, UK, organised by Professor Michael Barnes. This Certificate Course was the trigger to the formation of the WFNR - read how attending this course influenced the careers of these two young (at the time!) clinicians from Mexico and Thailand.



Jorge Hernandez Franco is now WFNR Treasurer and Regional Vice-President Central America and Caribbean.

“Professor Barnes organised that first NR certificate course in Newcastle upon Tyne, and its content reflected a young discipline, destined to rise fast. The first WCNR also detonated a non-stop series of events that have boosted academic activities making an impact in the everyday clinical practice in rehabilitation centres worldwide.

Attending the first WCNR widened my view on NR. On my return to Mexico City, motivated by this experience, I reorganised the rehabilitation facility at my institution, incorporating new treatment processes, according to my economic and cultural context. I also established the first NR course in Latin America, as a one-year postgraduate programme, sponsored by the national university in Mexico, targeted at neurologist and rehabilitation specialists. Participating in lectures at the Neurology Institute where I work, has encouraged residents from other specialties, like neurology and neurosurgery, to be aware of the importance of NR and to understand the importance of interdisciplinary work. This has now progressed to NR being a part of an integral management in my working place, allowing early contact with patients.

I joined the WFNR at its foundation as an RVP for Central America and the Caribbean, promoting three Pan American Congresses in the area. Having contact with the WFNR has meant I am updated regularly and can reflect this in my professional work. I have witnessed the WFNR grow together with NR, incorporating health professionals and researchers from different parts of the world, whose passion and commitment has allowed the WFNR to be in constant evolution, meeting the needs of an ever-changing area.”



Dr Witsanu Kumthornthip is the WFNR Regional Vice-President Southeast Asia.

“I also attended the 1st Certificate Course in Neurorehabilitation in Newcastle upon Tyne, organised by Professor Barnes. As I remember there were about twelve participants on the course which took place over four weeks. A few of the attendees have kept in touch with me over the years. It was a great time in my life. I experienced, shared and learnt things that I’d never seen apart from reading in textbooks or articles.

After the course I spent about a year with Professor Barnes at Hunters Moor NR Centre in Newcastle and had the opportunity to observe and practice NR with him and colleagues as part of a multidisciplinary team and a wide range of adult patients including those with traumatic brain injury and other acquired brain disorders, stroke, multiple sclerosis, spinal cord injury, Huntington’s disease as well as patients with weakness, spasticity, dystonia and abnormal movements. Their neurobehavioral and cognitive problems were varied and allowed me to understand and visualise how to manage such patients.

During my studies in the UK, I heard about a Thai American film star who had a road traffic accident resulting in a severe head injury. Multiple operations were required to save his life. It seemed like destiny when I finished my studies in the UK and headed back to my hometown in Bangkok, the film star was referred to me about eight months after his accident for NR. It was the best test for my expertise and qualifications. My team and I worked with his family to help him regain consciousness and recover slowly until finally he went back to university to complete his bachelor degree. Nowadays he enjoys his life and works on his own. I think that was the good start of NR in Thailand.

In my practice and academic activities, I’ve focussed on NR and musculoskeletal pain management. I love to see those kinds of individuals and feel glad to be able to improve their quality of life. My medical students and residents are increasingly fascinated by NR, and it is part of the resident training programme and becoming increasingly popular in Thailand.

The WFNR provides education to members and encourages them to network, share and learn from each other and provides a platform for research. The WFNR supports the Thai Society of NeuroRehabilitation; this is an important collaboration to expand and advocate NR in this region.”

TEACHING COURSES – KEY FOR GLOBAL NEUROREHABILITATION EDUCATION

Neurodisabilities and the years lived with disabilities are increasing in our societies globally, not only in high income countries with their ageing populations, but also in LMIC. NR can effectively reduce disability, improve independence with activities of daily living, and prevent the need for people affected to become institutionalised.



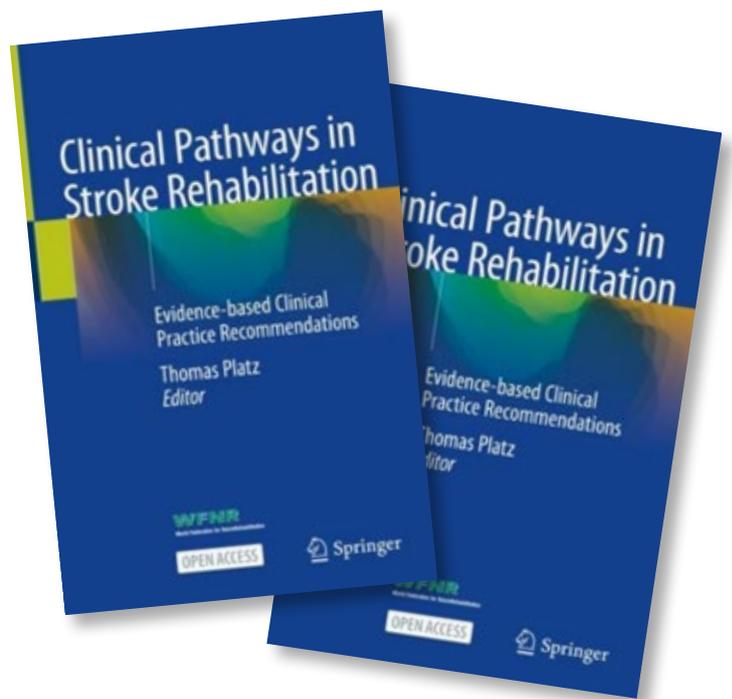
*Professor Thomas Platz, WFNR
Chair of Education Committee.*

Professor Thomas Platz, WFNR Education Committee Chair said: “The clinical benefits are achieved by dedicated and specially trained interprofessional teams of healthcare professionals working in specialised units of care. These teams need both structure and appropriate training. From a global perspective,

there is a disparity of healthcare structures and professionals with NR specific training. Furthermore, educational opportunities vary considerably across countries and regions and local institutions are often not able to provide specialised NR training to the required extent. Consequently, there is a need to fill the gap and support educational initiatives; the WFNR has taken this enormous task on board and made it a key mission for the organisation.”

An example of the many education opportunities provided by the WFNR is the recent Certificate Teaching Course (TC) on Clinical Pathways in Stroke Rehabilitation. The course was open to healthcare professionals worldwide from all disciplines involved in NR. The aim was for participants to gain knowledge in clinical decision-making for stroke rehabilitation, based on evidence-based practice, and to be able to apply such knowledge in clinical practice, but based on regional circumstances.

There were 249 registered for the course; 223 attended regularly, and 195 qualified for the WFNR certificate. Attendees came from all continents, with various professional backgrounds, and broad distribution in age and NR experience. The course comprised weekly interactive web seminars over three months; each lecture was given twice on the same day to accommodate for the individuals’ time zones. The course was certified by the host institution, i.e., the University Medical Centre Greifswald (Germany), and CME credits were given



for each lecture. To obtain the certificate attendees had to attend $\geq 80\%$ of the lectures and pass the online exam at the end.

All attendees received the WFNR book on Clinical Pathways in Stroke Rehabilitation as an e-copy (free of charge) available at: <https://www.springer.com/gp/book/9783030585044>. The interprofessional course faculty included experts for major topics in stroke rehabilitation who were book chapter authors, supported by other WFNR experts serving as regional liaison-persons and session chairs.

Commenting on the success of the course Thomas Platz said: “The feedback was very positive and overall the teaching course was a great success. My thanks to all the faculty members for providing such an excellent educational opportunity, to all the attendees for pursuing the course so persistently and diligently, and congratulations for their very remarkable course achievements!”

If you would like to be notified about a future teaching course (not scheduled yet) please register to obtain further information in due course at: https://de.surveymonkey.com/r/WFNR_TC_pre-registration



RESEARCH BULLETIN 2

This is the second bulletin in the series. Professor Nam-Jong Paik is the WFNR Research Committee Chair. He produces a series of bulletins highlighting recently published research papers with commentary from their authors. This is bulletin 2 in the series.

Baduanjin Qigong Improves Balance, Leg Strength, and Mobility in Individuals with Chronic Stroke: A Randomized Controlled Study

Yuen M, Ouyang HX, Miller T, Pang MYC. *Neurorehabilitation and Neural Repair* 2021
<https://doi.org/10.1177/15459683211005020>

Dr Pang's commentary

Traditional Chinese exercises have garnered much attention in the past decade and become increasingly popular in geriatric and NR. Some common characteristics of these exercises include slow and fluid movements that involve smooth integration of weight shifting, intralimb and interlimb coordination, which pose substantial challenge to one's balance. Our study investigated the effects of Baduanjin Qigong on balance, mobility, and strength in individuals with stroke.

One of the advantages of using Baduanjin is that it only involves eight forms of movement, which is less cognitively and physically demanding for participants to master the techniques. There is also no need to have assistive equipment for teaching or performing the Baduanjin exercises, making it an economical exercise training method that may be readily implemented in the home and community settings.

Our results demonstrated that after eight weeks of supervised Baduanjin training, there were clinically important improvements in balance, leg muscle strength and mobility among people with stroke compared with conventional fitness training. Another important finding is that following the initial eight-week supervised training period, the balance ability continued to improve with another eight weeks of self-practice of Baduanjin Qigong in the home setting. The balance, leg muscle strength and mobility outcomes in the Baduanjin group remained significantly better than those in the traditional



Dr Pang is also the Director of the University Research Facility in Behavioural and Systems Neuroscience (UBSN) at Hong Kong Polytechnic University. He is currently the Editor-in-Chief of the Hong Kong Physiotherapy Journal, Associate Editor of Physiotherapy Canada, and the President of the Hong Kong

Physiotherapy Association. A physiotherapist by training, his research focuses on issues relevant to NR, particularly fall prevention, exercise therapy and musculoskeletal health among people with stroke.

Dr Marco YC Pang is a Professor of the Department of Rehabilitation Sciences of the Hong Kong Polytechnic University.

fitness training group at the end of the self-practice period (i.e., week 16).

These findings indicated that unsupervised Baduanjin exercise also conferred benefits among individuals who were previously trained. Acceptability and adherence are important considerations when it comes to the sustainability of the exercise training protocol. Our study revealed a low attrition rate (6.9%) and a high exercise compliance rate in the Baduanjin group (94±14%).

Baduanjin Qigong can thus be considered as a sustainable form of exercise therapy for people with stroke.

Motor Cortex Activation During Writing in Focal Upper-Limb Dystonia: An fNIRS Study.

Proa R, Balardin J, de Faria D D, Paulo AM, Sato JR, Baltazar CA, Borges V, Azevedo Silva SMC, Ferraz, HB, de Carvalho Aguiar P. Neurorehabilitation and Neural Repair 2021 <https://doi.org/10.1177/15459683211019341>

Dr Aguiar's commentary

Dystonia is a disabling disorder with a very complex pathophysiology, where abnormalities of sensorimotor integration, cortical inhibition mechanisms and aberrant neuroplasticity contribute to the appearance of involuntary movements and abnormal postures. In most cases therapeutic approaches based on motor retraining or non-invasive neuromodulation show heterogeneous and short-lasting benefits.

Our team is using functional near-infrared spectroscopy (fNIRS) to access the brain activity of patients with dystonia in naturalistic and unconstrained environments. Compared to other techniques, such as fMRI, fNIRS has several advantages, such as lower cost, portability, and lower sensitivity to motion artifacts, enabling the study of movement disorders during complex motor tasks, such as writing, walking and music playing.

In this study, we compared cortical hemodynamic measures during the writing task between patients with right upper-limb focal dystonia and healthy controls, identifying a broader task-activated cortical area in dystonia, including the ipsilateral M1 cortex. Based on previous studies from our group, we observed that these abnormal activation patterns vary according to the task (i.e., finger tapping). This adds a higher degree of complexity if we aim to design rehabilitation strategies, and the lack of a consistent pattern throughout different tasks could be the reason why the results of therapeutic interventions are heterogeneous. Studying these patients in naturalistic environments increases the depth of knowledge regarding complex movements.

This is the first study to apply fNIRS during the writing task in dystonia. We believe this technology will complement standard techniques for the study of movement disorders and it will be useful to design and monitor rehabilitation trials involving motor retraining and/or neuromodulation.

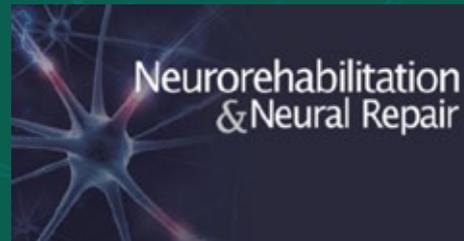


Dr Aguiar is also Professor of the graduate programme in Health Sciences at Faculdade Israelita de Ciências da Saúde Albert Einstein and of the Neurology and Neurosciences programme of the Federal University of São Paulo. Her research is focused on clinical, molecular, and

neurophysiological aspects of movement disorders, including Parkinson's disease and dystonia. Her team applies fMRI and multimodal neuroimaging techniques with EEG and fNIRS for the study of motor control in movement disorders.

Dr Patricia de Carvalho Aguiar is a Neurologist and Neuroscientist at Hospital Israelita Albert Einstein, São Paulo-SP, Brazil.

Reduced subscription to Neurorehabilitation and Neural Repair for WFNR members



In addition to the reduced subscription to Neurorehabilitation and Neural Repair, the WFNR's official journal, all members receive:

- Free membership of one or more WFNR Special Interest Groups
- Access to the WFNR Flying Faculty as speakers and trainers for national meetings
- Reduced registration fee at the WFNR World Congress
- Reduced registration fee at selected regional and national meetings
- WFNR Update newsletter produced biannually
- Regular e-alerts about WFNR activities

Individuals of the affiliated National Societies of Neurorehabilitation are automatically members of the WFNR. The national society pays an annual membership fee to the WFNR on their behalf. Individuals in those countries can also join the WFNR on a private basis.

Membership to the WFNR is open to all health professionals with an interest in neurorehabilitation. The annual subscription is £30. Just complete a membership form on www.wfnr.co.uk

WFNR INFLUENCES AND DEVELOPS NEUROREHABILITATION ACROSS THE GLOBE

The WFNR has appointed RVPs across the globe since 2006 and they have been instrumental in influencing and developing NR services around the world. The RVPs are responsible for promoting the WFNR in their own region and for providing member support

...in South America

Dr Lucia Braga is the RVP for South America, with a population of over 400 million; she discusses the impact of the WFNR in this region.



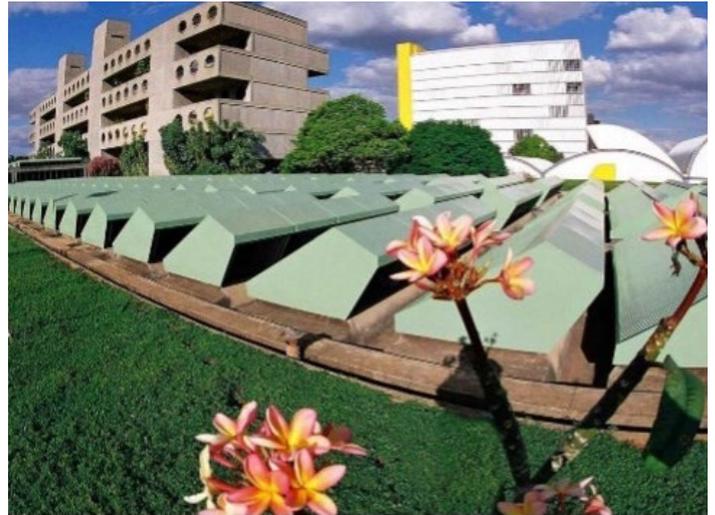
Dr Lucia Braga, WFNR Regional Vice-President of South America.

Over the course of the last 25 years, the WFNR has forged pathways and built foundations for research, education, and collaboration, with an interprofessional approach. The WFNR intensified what would become a very strong presence in South America, when it hosted its 5th World Congress in Brasilia, Brazil in September

2008. Throughout the intervening years the WFNR has broadened its support to include incentivising training and education programmes in the field of NR, in addition to hosting ongoing symposia and activities.

In 2009, the ‘Scientific Conference Series’ was created. These educational training activities consist of three-day conferences during which South American students and NR professionals present and discuss their research. The series is run in association with the SARAH Network, which has provided the auditoriums and support teams for the conferences throughout Brazil. Because South America is such a large continent, it is essential that platforms for discussing research are held in various regions, including the northern, southern and midwestern parts of the country, to enable more people from various countries to attend.

Today, six different scientific conferences have been held in Brasília, Belo Horizonte, Sao Luis, Salvador, and Rio de Janeiro. In 2019, WFNR/South America added virtual, online transmission of its events, which helped considerably during the COVID-19 pandemic in 2020.



The SARAH Network in Brasilia, Brazil run by Dr Lucia Braga.

The WFNR/South America has collaborated with the SARAH Network in another education and training programme entitled the ‘Metacognitive Dimension’ or MCD, which trains and educates students for future work in the rehabilitation of children and adolescents with brain injury. This project is in high demand and has had a very positive impact not only on the students who participate, but also on the patients who are involved. Through this SARAH-based WFNR collaboration, students acquire theoretical and practical knowledge about brain injury and neuropsychology; skills in peer-centered mediation; and engage in practical, educational activities closely supervised by qualified practitioners. The programme, which takes place in eight SARAH Network clinical centres, is offered throughout the country (Brasilia, Belo Horizonte, Rio de Janeiro, Salvador, Fortaleza, São Luís, Belém and Macapá). Several universities have shown interest in this model, further heightening WFNR’s visibility not only in South America, but in Europe and the USA.

The WFNR has directly impacted the field of NR through its twenty-five years in South America, helping prepare the region for evidence-based practice that ultimately improves patients’ quality of life.

...in Sub-Saharan Africa

Professor Mayowa Owolabi, RVP for Sub-Saharan Africa (SSA) with a population of approximately 1.14 billion people, outlines the development of NR over the last 25 years with the support of the WFNR.



Guest speakers and participants during the first and second NR conference held in Ibadan, Nigeria.



In 2010, Mayowa Owolabi, the WFNR RVP for SSA established, with support from the WFNR, the Blossom NR Centre in Ibadan, Nigeria. At the time NR was very new in SSA and raising awareness among patients, service providers and the population in general was, and still is, crucial.

The Blossom Centre recently moved to its permanent site as part of expanding its reach and impact, with 16 neuroprofessionals and a handful of young medical trainees who provide an array of services for its teeming clientele and patient base of over 1000.

The African Stroke Organisation (ASO) was established in October 2020 with over 178 people from the six continents of the world in attendance. Speaking during its inauguration, the Chair Dr Rufus Akinyemi, noted that the ASO was an important landmark in the annals of neuroscience and global health particularly in Africa. The ASO Co-Chair and Vice-President, WFNR SSA, Mayowa Owolabi noted that the formation of ASO is a great and historic event in the combined fight against stroke in the African continent.

The first webinar took place in March 2021 with the WFNR Flying Faculty, neurology experts, trainees, professionals, and allied professionals drawn from various parts of SSA and other pan-African countries in attendance. A virtual presentation, organised by the Egyptian Hypertension Society, was made by Mayowa Owolabi with online attendees and presenters as well as members of

the Egyptian NR Association led by Professor Foad Abd-Allah.

The Blossom Centre, WFNR and College of Medicine University of Ibadan hosted her maiden and second conference with over 220 people from across the six geopolitical zones of Nigeria, USA, UK, Germany, Italy, and USA.

To oversee activities in SSA and to provide member support among relevant professional bodies, the Nigeria Federation of NR has been established, as well as the Beninese Association for Physical Therapy and Rehabilitation and the Cameroon Association of NR.



The New Blossom Centre at its permanent site in Ibadan, Nigeria.

...in India and South Asia

Dr Nirmal Surya, RVP for South Asia looks back at the role of the WFNR in his region.



Dr Nirmal Surya, WFNR RVP for India and South Asia.

NR was not a specialty in India in the late 19th century. Dr Surya however had been interested in the development of NR since his specialisation residency days.

In 1996, during the 1st WCNR in Newcastle upon Tyne organised by Professor Michael Barnes, Dr Surya recalls

that he was one of just two neurologists from India and he was presenting a paper. He was 'quietly influenced' by Professor Barnes and in 2006 was appointed RVP of South Asia.



Previous WFNR Presidents such as Professors Stephanie Clarke and Leonard Li have had a significant impact in raising awareness of NR in the low- and middle-income countries.



In 2010 with the support of the WFNR Dr Surya and his team organised the 1st International Conference of NR (ICNR2010) in Goa with several faculty members from the WFNR, and this led to an increase in the awareness of NR in India. In 2012 the Indian Federation of NR (IFNR) became affiliated to the WFNR, and the following year the first IFNR conference was organised and attended by Professor Stephanie Clarke, then WFNR President-Elect. She was instrumental in guiding the development of the IFNR and NR services in India. The IFNR now has an annual conference.

As RVP, Dr Surya has worked hard developing NR services in Pakistan, Bangladesh, Sri Lanka, and Nepal, with the NR Society of Pakistan formed in 2015 with WFNR support.



Michael Selzer, WFNR President for the WCNR 2012 in Melbourne at which Nirmal Surya launched his new SIG – the Developing World Forum SIG – to address the many NR issues in that part of the world.

As Dr Surya says: "The development of services in India and South Asia would not be possible without the constant trust and support bestowed upon me by the WFNR Presidium. In 2018, India successfully organised the 10th WCNR with the support of Professor Leonard Li and other members of the Presidium. We

organised an outstanding and well attended Congress which led to a huge boost in the development of NR services in India, and the other developing countries in South Asia."

Dr Surya is also the Developing World Forum SIG Chair and with the WFNR's support is training and developing NR services in LMIC. Recently this has involved webinar series and courses on NR as well as workshops organised jointly by the WFNR/IFNR. He concluded: "The WFNR has been instrumental in providing not only development of services, but also education of the young professionals which has led to increase in the quality of NR care. I would like to congratulate the WFNR on its 25th anniversary and request continued support for south Asian countries to improve the quality of services in this region."



and finally, to the Gulf

Dr Sabahat Asim Wasti is the WFNR RVP for the Gulf where the WFNR has been active since 2008.



Dr Sabahat Asim Wasti, WFNR RVP for the Gulf.

The presence and academic activities of the WFNR in the Gulf region, with a population of approximately 54 million, have contributed to the promotion of NR as a clinical specialty.

Over the last 25 years there has been an exponential rise in the knowledge, practice, and availability of NR, with services now widely available in the Gulf countries, most notably in the Kingdom of Saudi Arabia, United Arab Emirates and Kuwait.

These services are of a high standard with hyperacute, acute, post- acute, long-term, and community-based NR services, with many providers offering condition specific rehabilitation. There are stroke-specific accredited services, that are now operational and provide full spectrum of stroke rehabilitation continuum.

The number of trained neurologists, rehabilitation physicians, neuro-physical therapists, occupational therapists and speech and language therapists has been growing and the knowledge of NR nursing has increased incrementally. In most countries there is now structured case management and follow up care that is available to survivors of neurological insults.



The United Arab Emirates has hosted one of several regional NR conferences in the Gulf region.

Alongside service development there has been an increase in training opportunities and educational activities. Several rehabilitation conferences have been held in the region over the past decade and indeed these have become a regular part of annual academic calendar. The NR component of Physical Medicine and Rehabilitation Congress has become very strong in ‘Arab Health’, the largest medical show of the region. Some countries have started post-graduate training in Physical Medicine and Rehabilitation with a strong emphasis on NR.

The universities have started research programmes, particularly in the field of neurotechnologies. The programmes are run in partnership with rehabilitation clinicians. The bioengineering students are carrying out research in robotics and haptic devices and pursuing MSc and PhD degrees. There have been several publications out of the region.

The most important development, however, is the acknowledgement by the authorities that NR is an essential component of the overall neurological care of a neurological patient and that it must be provided. Furthermore, the awareness amongst the population has increased substantially, and patients and their families now expect that NR will be, and must be, made available.

The WFNR Gulf region remains active and continues to promote the practice and expansion of the specialty, and the continued growth of high-quality NR services is anticipated over the next decade. Alongside, there will be an incremental increase in training opportunities and academic and research activities.



Abu Dhabi hosted a Presidium and SIG Chair meeting in 2015.

SPECIAL INTEREST GROUPS STEERING THE ORGANISATION



Barbara Wilson has steered the growth of the WFNR SIGs over many years.

The WFNR established the concept of SIGs in 2003, and there are currently 37 SIGs. Barbara Wilson, who stepped down as SIG Chair this year has steered the growth of the SIGs over many years, and Robyn Tate, the new SIG Chair reflect on the importance and influence of the SIGs...



Professor Robyn Tate is the new WFNR SIG Committee Chair.

At a WFNR Presidium meeting in London in 2003 the formation of SIGs was discussed and agreed. The idea behind their formation was to broaden the scope of the WFNR and to represent the many specialty interests within NR. Consistent with the mission of the WFNR, it was expected that the SIGs would be inclusive, with the role of advancing research, education, and clinical practice to promote NR.

Three years later 14 SIGs had been approved by the Presidium, including SIGs with overarching remit (e.g., Clinical Pathways, Ethics, Paediatric NR), focused intervention approaches (Cognitive NR, Driving, Neurologic Music Therapy, Neuropsychological Rehabilitation, Robotics, Telerehabilitation), as well as specific populations with neurological conditions and disorders (Autonomic NR, Communication Disorders, Mild Brain Injury, Neuropathic Pain, Spinal Cord Injury).

The SIGs are now an integral part of the WFNR and are open to any WFNR member. Each SIG has its own mission statement, objectives, goals and sets an annual action plan. SIGs are self-directed, but governed by a set of rules, and these, along with procedures to apply to form a new SIG, are available from the WFNR website (www.wfnr.co.uk/special-interest-groups/). Setting up a new SIG requires WFNR Presidium approval.

The SIG activities are many and varied, drawing upon the strengths of their membership. They work closely with the WFNR in contributing SIG-led plenary lectures, symposia, and workshops at the WCNR, and each SIG is required to hold a SIG meeting at the WCNR. SIGs also participate in the education and training arm of the WFNR, with webinars, lectures, and training programmes. In recent years, the Neuropsychological Rehabilitation SIG has contributed to the WFNR Flying Faculty, conducting two training workshops in India, and two master classes in Russia.

The WFNR forms task forces on various issues with external organisations, such as the WHO, and those SIGs with content expertise contribute. Cross-SIG collaborations are a fruitful way of pooling resources e.g., the recently developed Certificate TC in Stroke Rehabilitation which involved more than 10 SIGs. A collaboration between the Clinical Trials and Stroke Rehabilitation SIGs published consensus guidelines for stroke recovery and rehabilitation.

In addition to contributing to WFNR activities, several SIGs produce their own newsletters for their members and convene annual conferences separate from the WCNR. In 2013 the first formal two-day meeting of the SIG Chairs Committee at Pavia, Italy took place, to learn about the work of other SIGs, discuss how they might work together and consider submissions for the WCNR. Subsequent biennial meetings have been hosted by Abu Dhabi, Shanghai and Genoa with wonderful support and hospitality provided by the host country. These meetings are followed by a national conference where many SIG Chairs are faculty.

The future of the SIGs looks bright: there are areas of NR that are not yet represented by SIGs, and it would be advantageous to fill those gaps. The SIGs have proved to be important in the development of the WFNR, especially in terms of covering a rich diversity of NR perspectives and raising awareness of many aspects of NR. They are a productive, vibrant, relevant, and innovative part of the WFNR, bringing together clinicians, researchers, students, and educators across the world.

Acknowledgement: We thank Tracey Mole, Executive Director of WFNR, for her archival work in providing information on the early development of the SIGs



Dr Elia Fischer is the new Chair of the Young WFNR SIG.

The 'young WFNR' SIG – connecting young people in neurorehabilitation

Every organisation needs 'young' health professionals to contribute and drive its growth. In March 2021, Dr Elia Fischer from Berne, Switzerland was asked to chair the 'young WFNR' SIG.

In the months following his appointment, the WFNR Presidium and Elia defined the key goals of the SIG. Its primary aim is to ignite interest in the field of NR among young professionals from various healthcare backgrounds (e.g., physicians, therapists, researchers). By building a global community of young people, the SIG offers a unique opportunity for networking and establishing long-lasting and fruitful collaborations. Furthermore, creating a group of young professionals will promote the exchange between generations, ultimately being mutually beneficial for both junior and more senior WFNR members.

The core aims of the SIG are to promote education and clinical research in NR. The SIG will collaborate with existing programmes within the WFNR and establish new initiatives to foster education and stimulate research activity.

In the following months, the SIG will focus on recruiting new members, agree specific projects and build taskforces to achieve them. Readers are invited to join the effort by referring junior members or participating themselves. Together building a strong SIG will help to shape the future of the WFNR and of NR in general.

**For further information please contact:
Elia Fischer elialuca.fischer@insel.ch**



Professors Giorgio Sandrini and Heinrich Binder, Co-Chairs of the new Neurophilosophy SIG.

Newly formed SIG – neurophilosophy

Professors Heinrich Binder and Giorgio Sandrini are the co-Chairs of the newly formed Neurophilosophy SIG.

The aim of this new SIG is to encourage cooperation between neuroscientists and philosophers regarding, in particular, the field of neural correlates of consciousness, free will/making decision mechanisms, emotion/empathy/mirror neurons, ethics/behaviour and semiology. The SIG aims to strengthen the development of bi-directional linkage between philosophical theories and neuroscientific hypothesis, in particular the pistemological/ontological approach in the different fields of neurophilosophy.

There will be meetings, teaching activities and research looking at the impact of neuroscientific evidence concerning plasticity, brain lesions and degeneration, recovery mechanisms on philosophical theories and vice versa, in particular in the field embodied cognition and neuroethics .

The background to the SIG takes its lead from Patricia Churchland's 1986 book 'Neurophilosophy: Towards a Unified Science of the Mind-Brain' which states that close cooperation between neuroscience and philosophy with mutual exchange of concepts and experiences is important for successfully studying brain and mind. For decades, Patricia Churchland has contributed to the fields of philosophy of neuroscience, philosophy of the mind and neuroethics.

If you are interested in joining this new SIG please contact: Heinrich Binder heinrich.dr.binder@outlook.com or Giorgio Sandrini giorgio.sandrini@unipv.it



The WFNR Presidium and SIG chairs met in Shanghai in 2018.

Bottom row from L to R: Ellen Merete Hagen, Tamsin Reed, Tracey Mole, Barbara Wilson, Stephanie Clarke, Caterina Pistarini, Carol Hawley, Matilde Leonardi

Middle row: Jorge Hernandez Franco, Nirmal Surya, Jozef Opara, David Good, Volker Homberg, Apoorva Pauranik, Paolo Tonin

Back row: Leonard Li, Michael Barnes, Michael Thaut, Humberto Cerrel Bazo, Alessandro Giustini, Nam-Jong Paik, Maximilian Mehdorn, Gerard Francisco, Eduard Auff, Gilles Rode, Thomas Platz and Sabahat Asim Wasti.

Neuromodulation SIG launches newsletter

The Neuromodulation SIG, chaired by Wayne Feng has recently launched its own newsletter. This quarterly publication will be distributed to SIG members to keep them updated on the latest research.

This first issue outlines a study on Subthreshold Electrical Stimulation (STES) for stroke rehabilitation showing that it can serve as an energy-saving but viable option in post-stroke neurorecovery, when combined with early rehabilitation. The newsletter also provides a summary of 2021 biomodulation research papers that impact NR.

NATIONAL SOCIETIES – WORKING TOGETHER

The WFNR is an umbrella organisation for the National Societies of NR as well as for individuals working in countries without their own national society. Professor Volodymyr Golyk is the President of the Ukrainian Society for NR and joined the WFNR in 2013. He outlines the benefits of belonging to the WFNR and influencing change in the Ukraine.

Ukrainian Society for Neurorehabilitation

The Ukrainian Society for NR was established in 2013 after an initial collaboration with the WFNR during WCNR 2010 in Vienna, Austria.

The Ukrainian Society united neurologists and rehabilitation therapists, practicing in Ukraine in the

field of NR, and in 2014 the Society officially joined the WFNR. This international input induced further collaboration and support of the newly established Ukrainian Society for Physical and Rehabilitation Medicine, Ukrainian Society of Ergotherapists, as well as Ukrainian Society of Speech and Language Therapy. The alliance of these professional NGOs is endeavouring to grow a modern rehabilitation system in the country, including establishing new rehabilitation professions and building modern frameworks for service delivery. The collaboration is successful because the group of Parliamentary Deputies and high-level officials from the Presidential Office and Ministry of Health of Ukraine is supporting the changes.

The Law of Ukraine “About rehabilitation in health care” was adopted by the Ukrainian Parliament and came into the force on 31st December 2020. Recent achievements and challenges of the development of a modern rehabilitation system in Ukraine were published in Journal of Rehabilitation Medicine (<https://pubmed.ncbi.nlm.nih.gov/33527144/>).

Japanese Society for Neural Repair and Neurorehabilitation

“The WFNR has provided a window for the Japanese Society for Neural Repair and Neurorehabilitation to the outside world” said Izumi Kondo, the Society’s representative.

In Japan, Professor Takagi (1889-1963) is said to be the founder of NR. He coined the term ‘Ryoiku’ which means rehabilitation in a suitable environment and the facilitation of motor learning development for children with cerebral palsy. He also established the first nursery school in Japan and it is still a central institute of rehabilitation for children. Subsequently in Japan’s long history of NR a number of intervention and evaluation methods have been introduced from abroad. However, the country has also begun to utilise its own cutting edge technology such as robotics and virtual or augmented reality and become a pioneer in this field.

Commenting, Izumi Konod said: “It is important to have the place of mutual stimulation in order to continue our development and contribute to the advance of NR globally. The WFNR provides us with the opportunity to network with prominent researchers in the world, and contribute to education in developing countries through the Flying Faculty. It is important for us to be a member of WFNR in order to sustain the development of our society and to support the growth of the WFNR.”

DIARY DATES

2021

WCN2021: 25th World Congress of Neurology

3-7 October 2021 – Rome, Italy

<http://2021.wcn-neurology.com>

36th Congress of SOFMER

14-16 October 2021 – Lille, France

<http://www.sofmer.com>

13th World Stroke Congress

28-29 October 2021 – Virtual

<http://www.worldstrokecongress.org>

European Congress of Neurorehabilitation 2021 jointly with 27th Annual Meeting of the German Society of Neurorehabilitation

8-11 December 2021 – Berlin, Germany

<http://www.efnr-congress.org>

2022

15th Symposium of the International Neurotrauma Society

10-13 July 2022 – Berlin, Germany

<http://www.neurotrauma2022.com>



12th World Congress for Neurorehabilitation

14-17 December 2022 – Vienna, Austria

<http://www.wfnr-congress.org>

2023

32nd World Congress of the IALP

20-24 August 2023 – Auckland, New Zealand

<http://www.ialpauckland2023.org>

2024

13th World Congress for Neurorehabilitation

21-25 May 2024 – Vancouver, Canada

E: traceymole@wfnr.co.uk

<http://www.wfnr-congress.org>

For enquiries about WFNR and editorial please contact:



Tracey Mole
Executive Director, WFNR
Tel: +44 (0) 7806 560167



WFNR
11 Rake House Farm, Rake Lane,
North Shields, NE29 8EQ, UK



Email: traceymole@wfnr.co.uk
Website: <https://wfnr.co.uk>

Edited and produced by:



Louise Blakeborough MSc
Chapter Five
Tel: +44 (0) 7831 444789



Email: lblakeborough@chapterfive.co.uk