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Dear colleagues, partners and friends,

It is our pleasure to share with you the progress we have made in 2019. Our annual report profiles many of these accomplishments. I also want to thank all who have contributed to our success and especially to all individuals, societies and industry partners who are continuous and loyal supporters of the WSO.

In the first full year of my tenure as president, I saw one priority in a need to increase communication internally and externally. This included an increased frequency of meetings of the Executive Committee to 3 monthly intervals, to have monthly work reports from our office and team (from Geneva to London, Edinburgh, Krems, and Melbourne) to install a co-chairmanship to all our committees, and to plan an increase of our newsletters from 3 monthly to monthly. I also made use of being able to install Task Forces to tackle urgent problems arising. Furthermore, increasing our presence on our social media channels was seen as a priority of our communication.

In May of 2019, the WSO leadership met in Milan to review and update the WSO Strategy and set the organization’s priorities up to 2022. We planned to build on significant achievements from 2016-2020, which include strengthening global capacity to reduce the impact of stroke, promoting knowledge and awareness, and building a robust organization. Additionally, we launched a new website in early November that is more informative and user friendly.

WSO organized a hugely successful World Stroke Day Campaign in October 2019 under the slogan ‘One in Four. Don’t be the One,’ focused on raising awareness of the top ten stroke risks and the steps to take to prevent stroke. The campaign included a total of 125 registered events around the world and substantial visibility on social media, with over 2m #DontBeTheOne mentions on Twitter. A key highlight was our new World Stroke Day relay event taking place in cities across the globe to emphasize the role of exercise in stroke prevention.
We continued our collaboration with the WHO. In July, we attended the second WHO Global Rehabilitation 2030 meeting in Geneva to discuss and manage progress towards effective stroke rehabilitation programs worldwide. The lead disease for this was stroke. We also participated in WHO Regional Congresses in Copenhagen and New Delhi on universal health coverage, followed by the United Nations General Assembly in September in New York meeting on the same topic. While in New York, we also participated in an event organized together with the Global Coalition for Circulatory Health focused on stroke prevention.

In the fall of this year, our application for the acute stroke treatment Alteplase to be included in the WHO’s List of Essential Medicines (EML) was successful, marking a major step forward for better stroke treatment worldwide. In related news, the WHO has also added a single pill combination treatment for hypertension to its list of essential medicines, which was triggered by a multisociety document which was co-signed by us. This initiative was based on the clinical experience that single antihypertensive medications rarely succeed to bring elevated blood pressure into normal ranges.

Our WSO Regional Meeting in Manila, Philippines was a success. The WSO Regional Meeting followed on from the Congress of the Asian-Pacific Stroke Organisation in Manila. At our WSO symposium on updates on prevention and therapy, we argued for the need for multi-lateral stroke prevention strategies to battle the global stroke pandemic. A need was seen to increase the rates for thrombolysis and thrombectomy in the Asia Pacific Region, especially to middle-income countries (LMICS). The first WSO-Angels Awards were presented at the meeting and reports from the prized stroke units and hospitals gave short reports on the successful management of their workloads.

Our members participated in webinars and teaching courses in many regions including in Africa. Through the World Stroke Academy, we continue to build online content to engage different segments of the stroke community, including CME accredited learning modules for our members, and an archive of case studies for stroke practitioners. Throughout 2019, the World Stroke Academy has published a series of webcasts from the 2018 World Stroke Congress.

Looking ahead to 2020, we have prepared the ESO-WSO Congress in Vienna for May but had to postpone to November 6-9. In spite of the changes forced upon us by the pandemic. It will be a large meeting with an, as yet not decided, mix of tele-technology and onsite attendance.

We will also be piloting our strategic framework to ‘Cut Stroke in Half,’ which provides a roadmap for governments and health systems to greatly reduce the incidence of stroke through improved access to preventative treatment, development of a stroke trained community health workforce, and broader public awareness of risk factors. A pilot is scheduled to start in Brazil in 2020. Other important initiatives include our new Future Leaders Program, which is planned to be launched in late 2020, and our planned Regional Congress in Vietnam end of October. Preparations are also underway for our 2022 World Stroke Congress, which is scheduled to be held in Singapore.

Michael Brainin MD,
President WSO
OUR VISION, MISSION AND STRATEGIC PRIORITIES

The World Stroke Organization (WSO) is recognized as the lead global organization for stroke by the World Health Organization. It was established in October 2006 through the merger of the International Stroke Society and the World Stroke Federation with the purpose of coordinating efforts and constituting One World Voice for Stroke. The aims of WSO are to:

- Foster the best standards of practice in stroke care
- Increase public awareness
- Influence policies for prevention of stroke and vascular dementia, improve health services
- Provide education through collaboration with private and public organizations
- Facilitate stroke research
- Advocate and foster systems for long-term support of stroke survivors and their families
In May 2019, WSO leadership reviewed and updated the organization’s strategic priorities up to 2022. WSO’s mission to reduce the global burden of stroke through prevention, treatment and long-term care was reaffirmed.

WSO has become the global voice of stroke and has extended actions and campaigns world-wide. The Board and the Committees have a global composition and represent all geographic regions. As the only world-wide organization for stroke, the Organization can witness the full geographic extent of the suffering and burden caused by stroke; WSO acts, advocates and advises to reduce this burden. More than before, we have seen the interconnections between stroke and other diseases that are summarized as non-communicable diseases and we cooperate with other organizations to fight these diseases together; thus both directly and indirectly WSO works to reduce the burden and risk of stroke. Climate change, poverty, nutritional deficits and air pollution have become strongly linked with the increasing occurrence of stroke around the world; it would be a significant mistake if we didn’t align ourselves in the fight against these challenges with other organizations. We now also have enough evidence to link the occurrence of dementia to vascular factors, therefore, the stroke dementia link must be included in our plans and actions for the coming years.
Almost 14 million people will have their first stroke this year; worldwide 80m people live with the impact of stroke. Stroke accounts for 116m years of healthy life lost each year. The individual, social and economic impact is enormous and yet, at least half of all strokes are potentially preventable with appropriate awareness and prevention interventions. Cost-effective therapies are now available that can significantly limit the consequences of stroke. However, most stroke patients in the world do not have access to these therapies.

The WSO mission is to reduce the global burden of stroke through prevention, treatment and long-term care. For this, the WSO has developed a global policy that includes the following aims:

1. **Increase stroke awareness among populations and health professionals**
2. **Influence policies for stroke prevention and improved health services**
3. **Facilitate advocacy for better care and research relevant to people with stroke**

During 2019, the WSO has been very active in participating in key global and regional policy meetings and health initiatives to advance the aims of our organization.

1. **Global Stroke Factsheet**

   - **13.7M** new strokes each year
   - **80M** stroke survivors worldwide
   - **5.5M** death due to stroke per year
   - **116M** healthy years of life lost to stroke each year
   - **1 in 4** people over age 25 will experience stroke in their lifetime
Developing Global Policy

**WHO’s Executive Board Meeting**

WSO’s representatives Bo Norrving, Patrik Michel and Mia Grupper attended the 144th session of the WHO’s Executive Board, which took place from January 24th to February 1st, at the WHO Headquarters in Geneva. The session provided many opportunities for WSO representatives to network with other NGOs, and to meet with colleagues from the World Heart Federation in order to discuss and develop our collaboration in the year ahead.

Bo Norrving participated at a roundtable discussion organized by NCDA and RESOLVE on elimination of trans fat from the food supply.

**WHO List of Essential Medicines**

Ensuring access to evidence-based treatment for stroke is a key advocacy priority for WSO, so we were very pleased to see our application for the acute stroke treatment Alteplase to be added to the WHO Essential Medicines List (EML) approved this year. This new inclusion marks a major step forward for better stroke treatment worldwide, particularly in less affluent countries. All UN-member states are now encouraged to offer thrombolysis at a reasonable cost. The new list also increases available options for stroke prevention, by listing fixed-dose dual combinations of antihypertensives and four direct oral anticoagulants (dabigatran, apixaban, edoxaban and rivaroxaban) as essential medicines. Furthermore, a WSO expert group is currently working with WHO on a list of Priority Medical Devices for stroke prevention and treatment.

**Second Global Rehabilitation 2030 meeting**

WSO’s President Michael Brainin, Katharina Stibrant Sunnerhagen and Mia Grupper attended the WHO’s second Global Rehabilitation 2030 meeting in Geneva in July. The meeting aimed to advance the implementation of the Rehabilitation 2030 initiative, improving access to rehabilitation services in the context of Universal Health Coverage (UHC). The WHO has identified stroke as an area where rehabilitation is highly important and is working to develop programs for stroke rehabilitation.

**4th Global Summit on Circulatory Health**

The 4th Global Summit on Circulatory Health, held in Paris in August, brought together stakeholders from around the world to focus on Innovations in Circulatory Care and Technologies. Hosted by the World Heart Federation on behalf of partners in the Global Coalition for Circulatory Health, the conference explored the role of established and emerging technologies in promoting circulatory health. In a session on the Implications of Digital Health for Health Systems, WSO President Michael Brainin presented evidence supporting the use of mobile technologies within an overall prevention strategy encompassing policy, community interventions and pharmacological innovation.
**WHO Regional Congresses**

We contributed our organization’s expertise to two of this year’s regional WHO meetings. At the 69th WHO Europe meeting in Copenhagen, WSO’s Prof. Hanne Christensen presented our crucial points for stroke prevention and treatment. At the 72nd WHO South East Asia meeting in New Delhi, participants discussed the need to improve diagnosis and treatment of common NCDs in the region. WSO was represented in New Delhi by Prof. Jeyaraj Pandian.

**United Nations General Assembly and High-Level Meeting on Universal Health Coverage**

As in previous years, WSO representatives attended the UN’s High-Level Meeting in New York in September, to ensure that stroke has a place in the global health agenda and is receiving the necessary attention. The theme of this year’s meeting was "Universal Health Coverage: Moving Together to Build a Healthier World".

Bo Norrving represented the WSO during the UN General Assembly, participating in the Non-Communicable Disease Alliance (NCDA) members’ policy meeting, the goal of which was to reinforce the urgency of implementing NCD policies to achieve the goals set out in UN SDG3. Additionally, the Global Coalition for Circulatory Health gathered for a side event on Sept 24th titled 'Exploring solutions for multi-morbidities prevention and control: the case for circulatory health,’ with Bo Norrving as one of the panelists. Multi-morbidity, the concept under discussion, is core to stroke, heart disease, kidney disease, and vascular diseases, which together form a strong cluster along with hypertension driving premature morbidity and disability globally.

**WSO President and Romanian Health Minister sign a Memorandum of Understanding**

On February 21, WSO President Michael Brainin and the Health Minister of Romania, Dr. Sorina Pintea, signed a memorandum of understanding to continue the country’s collaboration with WSO and the Romanian Neurological Society on improvements to stroke care. This year, Romania began a process of increasing the number of stroke units in the country, intensifying training of personnel, and providing therapy options for thrombectomy.
Building Public Awareness

World Stroke Day 2019 #DontBeTheOne

The annual focal point of WSO public stroke awareness is World Stroke Day on October 29th. This year World Stroke Day had a prevention theme which aligned the campaign to the broader organizational commitment of significantly reducing stroke incidence. The theme for the day ‘Don’t Be The One’, responded to the recent WSO analysis of the Global Burden of Disease, which found that the lifetime risk of stroke, for adults over the age of 25, now stands at 1 in 4. The campaign objectives were to increase individual awareness of their stroke risk and the urgent need for all of us to take action on prevention.

In preparation for World Stroke Day, a new World Stroke Campaign website was launched providing easy access to WSO campaign resources and advocacy resources. In addition to the campaign toolkit and campaign guide, a new suite of evidence-based leaflets, each focused on one of the 10 leading risk and prevention steps for stroke were published. All the leaflets were translated into key languages and will provide a year-round resource for our members and their communities around the world.

Speaking with One Voice for Stroke

The success of the World Stroke Campaign is contingent upon the coordination and mobilization of WSO members, partners and stroke stakeholders around the world. To support the community to speak with one voice on October 29th, WSO provided a campaign toolkit that included a campaign guide with key messaging, a high-quality campaign video, event posters, outdoor event banners, stroke infographics and off the peg social media content.

The Don’t Be the One campaign succeeded in putting stroke prevention firmly on the world map on October 29th. With the support of our members, partners and stakeholders, the WSO message about the need for urgent action to address the 1 in 4 lifetime risk of stroke reached around the world.

On social and broadcast media, as well as in communities around the world, stroke clinicians, survivors, caregivers and advocates pulled out all the stops to help raise awareness of the top ten stroke risks and the steps we can all take to prevent stroke.
We were delighted to track Facebook posts, Tweets and photos from events around the world showing the many ways members worked to make a real impact on prevention:

- Delivering large scale community events to raise public awareness of stroke and in particular our individual risk factors.
- Community health checks, using the WSO endorsed StrokeRiskometer app to help individual’s identify risks and support them to take action.
- Mobilising high profile advocates to share the message with their audiences online.
- Participating in TV discussions and press engagement.

Key Highlights

- A total of 125 World Stroke Day events were registered on the Global Action Map.

A World Stroke Day Relay event launched at the WSO Asia Pacific Regional Meeting in Manila, Philippines on 6th October. Using mass physical activity events, members relayed the campaign message ‘Don’t Be The One’ from country to country around the world - Brazil, Singapore, Malaysia, Myanmar, Vietnam, Nigeria, Ghana, Sierra Leone and Zambia all flew the flag for the campaign in 2019, establishing an initiative that we are keen to grow year on year. In total 20 member organizations from across Asia, Africa and Europe participated in the relay, creating considerable local awareness, local media coverage and social media content.

- Some high-profile ambassadors used the day to highlight stroke. Australian Prime Minister Scott Morrison shared a video on twitter highlighting the FAST message. Personal Development guru Tony Robbins posted on Instagram to raise awareness of stroke and World Champion cyclist Alberto Contador took a break from training to deliver a roadside video message to his followers and fans.

- The Lancet published an editorial highlighting the campaign and WSO’s wider strategy to ‘cut stroke in half’.
CAMPAIGN BY NUMBERS

700K people saw Don’t Be The One posts on our Facebook channel.

1,100 new Facebook followers

2M #DontBeTheOne mentions on Twitter

25K visits to our new Campaign website

Over 9,500 documents downloaded from World Stroke Campaign website

Change in Motion BBC Short Documentary

Working in partnership with our members Rede Brazil AVC, the BBC Storyworks team and the NCD Alliance, the World Stroke Campaign supported the production of a short film documenting the advances in stroke prevention and treatment in Brazil. ‘Change in Motion’ features WSO Vice President Sheila Martins and the Minister of Health for Brazil, Luiz Henrique Mandetta, demonstrating how global and local collaboration on clinical education, guideline implementation, public awareness and advocacy have successfully combined to turn the tide on stroke in Brazil.

Yay! I’m a superhero!
FAST Heroes

Recognizing the signs of stroke and getting fast access to treatment is vital in saving lives and improving outcomes for stroke survivors. Awareness of the FAST message is a core strand of World Stroke Campaign and of the WSO members around the world. But one important audience for this message - and one which has not been traditionally included in awareness programs - is children.

In 2019 WSO in partnership with the Angels Initiative, launched implementation of the FAST Heroes stroke awareness program in Brazil, South Africa and Singapore targeted at children aged 5-7. The program aims to build basic knowledge about what stroke looks like and what to do in an emergency – information that could prove life-saving. The program also builds awareness of how healthy lifestyles can help to prevent stroke and is designed to ensure that key messages and information reach out families and communities as well as schools.

The FAST Heroes program has created an animated character-based education program with a central character, Timmy, who becomes a FAST Hero by learning how to beat the Evil Clot and save the Grandheroes in his life (his grandparents). Resources for use in class are age appropriate and include learning materials such as short film animations, classroom activities and take-home materials to literally hit the message home. There are even ideas to help schools and communities raise funds to broaden participation and make the program more sustainable in the longer-term.

World Stroke Award Winners 2019

World Stroke Awards are given each year to member associations or individuals who have shown creativity and commitment in bringing the message from World Stroke Day to their communities. In 2019 two awards were made for campaigns in Argentina and India.

Best Campaign in a High-Income Country

In Argentina FLENI were selected as award winners for their innovative use of social media. Their “Stroke the Instagram” campaign aimed to raise awareness of the importance of knowledge as a key tool for the prevention, early recognition and treatment of acute stroke. To achieve this objective, they delivered an Instagram focused campaign, with approximately 16 million active accounts in the country, this is a formidable tool for real time communication with large number of people. Using the Stories feature of Instagram, FLENI invited the public to participate in trivia quizzes with simple questions about stroke risk factors, recognition of symptoms, need for rapid response in the emergency setting, and acute stroke treatment.

Best Campaign in a Low-Income Country

As stroke is rising in low & middle-income countries where disability levies a heavy individual and social cost, primary stroke prevention is of utmost importance. Award Winners the Stroke Foundation of Bengal focused on leveraging the StrokeRiskometer app as a tool well suited to mobile savvy Indians, in both urban and rural settings. The Foundation provided translations into Bengali and incorporated use of the stroke risk assessment app into a program of monthly community hypertension checks. The Foundation also worked to engage All India radio and television channel coverage and to distribute stroke information leaflets in the community.
WSO Regional Congress

Bringing global perspectives and sharing regional stroke experience was the focus of the WSO Regional Asia Pacific meeting in Manila, Philippines this past October. The meeting took place in conjunction with the APSO regional Congress and included plenary sessions from President Michael Brainin, Immediate Past-President Werner Hacke, Past President Stephen Davis, President Elect Marc Fisher, Vice-President Jeyaraj Pandian and International Journal of Stroke Editor Geoff Donnan. The scientific program covered the latest analysis of the Global Burden of Disease and clear need for multilateral strategies to reverse the global stroke pandemic, the potential for thrombolysis and thrombectomy in the Asia Pacific context and key developments in imaging and their potential in LMICs.

The first ever WSO Angels Awards were presented and a busy press conference highlighted key stroke prevention and treatment issues in the Philippines and Asia Pacific region was held.

The Manila conference also marked the start of the countdown to World Stroke Day, with around 1000 participants taking to the streets for the Run for Stroke event on October 6th. The event reflected the prevention message of the World Stroke Day ‘Don’t Be The One’ campaign by highlighting the role of exercise in stroke prevention. WSO Secretary Pooja Khatri participated in the run and presented awards to race winners.
The International Journal of Stroke is the flagship publication of the World Stroke Organization. We are now in our 15th year, with an impressive impact factor of 4.4. The journal publishes topical and systematic reviews, protocols, consensus, guidelines and original research. We have successful social media streams of Twitter, podcasts and a blog which serve to engage and build our clinical and research audience.

Over the past year the position of Editor-in-Chief has moved, from the highly regarded and renowned Professor Geoffrey Donnan, to equally impressive, Professor Hugh Markus who is based at University of Cambridge in the UK. In this time, Professor Patrick Lyden, Professor Jong S Kim, and Professor Ayrton Massaro have stepped down as Associate Editors, with a new addition of Professor Frank-Erik de Leew, from The Netherlands to the Associate Editors Committee.

Professor Markus visited Professor Donnan in Melbourne, Australia for a successful handover in January 2020.

Renewal of Editorial Board

The Editorial Board is key to the Journal’s success with members contributing ideas, articles, and helping us decide if papers meet our criteria for publication by review. We are refreshing the editorial board ensuring that we represent diversity in age and gender.

Stroke Recovery and Rehabilitation Roundtable papers and podcasts

In 2016 Julie Bernhardt and some of the world’s most prominent stroke rehabilitation and recovery clinicians, launched the Stroke Recovery and Rehabilitation Round Table. This initiated an important consensus series in this rising field. Once again in 2019 we have been honoured to co-publish this collection with NRR. In collaboration with our publisher SAGE we have collated all the articles in the following link here: https://journals.sagepub.com/page/wso/srr
In 2019 the IJS 2018 Impact factor rose from 3.859 (2017) to 4.4 and we are excited by early signs in the data that indicate another possible rise in 2020. IJS will continue to work closely with the WSO Guidelines Committee to publish internationally endorsed guidelines on stroke. High quality reviews and phase III RCT protocols also play an important part impacting the Impact Factor.

We look forward to keeping connected to you, especially during this difficult year, on social media, via our podcasts and blogs. Help us to continue building the global professional stroke community.
The World Stroke Academy (WSA) provides a broad range of interactive on-line education modules, enabling WSO members to choose items that meet their specific educational needs. The emphasis is on providing up-to-date information and guidance for busy stroke professionals from all disciplines. New materials are added regularly, covering the latest developments in treatment, prevention and rehabilitation after stroke. The WSA also offers sections on setting up stroke care systems around the world, in high-, middle- and low-income settings, global policy, guidelines and how to undertake relevant clinical research in stroke.

During 2019 we have been actively marketing the WSA to WSO members as a key benefit, and user numbers are growing steadily. The WSA has a significant presence on social media, and the publication of each new educational module is accompanied by a significant ‘spike’ in social media activity that promotes engagement with WSO and the WSA platform.

The WSA team works closely with the WSO Education Committee, which published its WSO Global Stroke Educational Needs report in 2019. The report recommended that WSO and WSA should offer live education sessions in an accessible form to be available worldwide. The WSA and Education Committee have been developing a program of webinars on key topics, to be delivered throughout 2020. The advent of the Coronavirus pandemic and the postponement of the WSO-ESOC World Congress has brought this need into sharp focus, and the start of the program has been brought forward to begin in April 2020.
WSO Regional and National Teaching Courses and Workshops

**Tianfu International Stroke Research Methodology Training Workshop, Chengdu, China, May 31st 2019**

Organized around the Tianfu International Stroke Conference, this workshop focused on epidemiological and clinical research for early stage researchers. It attracted over 100 clinicians and nurses, all in the early stage of their research careers, who intend to pursue clinical stroke research.

The workshop was once again organized by Professors Ming Liu and Shihong Zhang and their team from the West China Hospital, Sichuan University. The WSO Faculty members in attendance were Professor Ming Liu, Professor Craig Anderson, Professor Valery Feigin and the other Faculty were Professor Zhengming Chen, Professor Hugh Markus, Professor Shihong Zhang, and Dr Deren Wang.

Topics included 'How to get started in clinical research?', ‘Developing systems for collecting, managing and analysing big data’, ‘Genetics of stroke’, ‘Establishing large biobanks in diverse populations’ and ‘Scientific writing - what does the journal expect?’ We were delighted by the positive feedback on the course.

**30th Dubrovnik Summer Stroke School, June 2019**

Healthy Lifestyle and Prevention of Stroke and Other Brain Impairments were the topics of this year’s International Teaching Course in Dubrovnik, endorsed by the European Stroke Organization, World Stroke Organization, European Academy of Neurology and World Federation of Neurology.

The Summer Stroke School was organized by the International Institute for Brain Health, Central and Eastern European Stroke Society and was attended by residents and young specialists in Neurology from Albania, Austria, Bosnia and Herzegovina, Croatia, North Macedonia, Serbia and the Netherlands. The course was directed by Vida Demarin, WSO member and Fellow of Croatian Academy of Sciences and Arts at the University of Zagreb.

The five-day program consisted of lectures by renowned international speakers covering all aspects of stroke and related brain disorders.
**The XXII Ibero-American Stroke Organization Congress and First WSO & IASO Angels Awards, June 2019**

The XXII Congress of the Ibero-American Society of Cerebrovascular Diseases (SIECV/IASO) took place in Costa Rica on June 13-14. It was a scientific forum of great importance for Latin America where experts from the region with the support of international advisors, discussed topics ranging from the basic elements of cerebrovascular disease in teaching courses, to state of the art methods in prevention, diagnosis, treatment and rehabilitation.

The Congress also held the second “Stroke Challenge,” a contest among stroke teams to assess and acknowledge the group with the best adherence to the acute care protocol, from the arrival of the patient in the emergency department to the post-reperfusion care, in a simulated case. It involved three stroke teams from Costa Rica and had a large audience of congress participants.

The IASO Congress also launched the first WSO/SIECV - Angels Awards to recognize and honor hospitals and teams committed to improving stroke care. Out of 46 hospitals participating in Latin America, 8 were classified with the Gold status (6), Platinum (1) and Diamond (1). Awards were presented during the Congress by the WSO representatives: Prof. Marc Fisher, WSO President-Elect, and Prof. Sheila Martins, WSO Vice President and President of the Ibero-American Stroke Organization.

**St Petersburg Stroke and Neurology Congress, June 2019**

The World Stroke Organization was well represented at the Joint XI Congress of the Russian Neurological Society and the IV Congress of the Russian Stroke Organization, held in St. Petersburg on June 15-19th. President Michael Brainin, Past President Bo Norrving, and past vice president Natan Bornsteinpresented on poststroke neurocognitive disorders, depression after stroke and the recent approval of the ICD 11 by the WHO.

The Congress was well attended and provided excellent opportunities for networking among scientists in stroke and other neurological disorders. We wish to congratulate Professor Alla Guekht and colleagues for organizing a highly successful congress, and for the support of our Russian colleagues at WSO.
11th Regional Teaching Course in sub-Saharan Africa, September 2019

The 11th Regional Teaching Course in sub-Saharan Africa took place in Accra, Ghana. Dr. A. Charway Felli, President-elect of AFAN hosted the course, held at the Ghana College of Physicians and Surgeons. 80 residents took part, representing 20 countries in Sub-Saharan Africa. The course’s overarching theme “Neurology across the lifespan” addressed the following topics: Neuropathies and Myopathies, Neuro-infections, Electro-neurophysiology, Headaches and Cerebrovascular Diseases. Prof. Foad Abd-allah, President of AFAN and WSO delegate, demonstrated AFAN and WSO involvement in education through the teaching course.

In the lectures, video session, career development session, clinical grand rounds and case presentations the discussion was very lively, indicating the faculty’s vast body of knowledge and the participants’ eagerness to learn. Delegates from the supporting scientific societies took part in the course’s closing session, expressing their appreciation for the work done by the residents and fellow faculty members. On behalf of their organizations, they pledged support for future Regional Teaching Courses.

Mexican Association of Cerebrovascular Disease meeting, August 2019

In the third week of August every year, the Mexican Association of Cerebrovascular Disease (AMEVASC) hosts an Annual Meeting to train general practitioners and specialist doctors, and to offer teaching modules to nurses and paramedics, covering every element of stroke care management. The XIX Annual Meeting of the Mexican Association of Cerebrovascular Disease was carried out in Monterrey, Nuevo Leon, Mexico from August 14th to 17th 2019 with professors from Mexico and from abroad.

The Meeting included topics about the national and international epidemiology, as well as treatment and diagnostic methods in stroke. In addition to the Annual Meeting, the scientific symposium gathered original research from basic and clinical sciences, presenting results of experimental studies, registries and novel clinical experiences. On August 17th, the Neurological Endovascular Therapy Course was carried out in partnership with the International Society of Interventional Neurology (ISIN). The course addressed advances in thrombectomy techniques, indications of therapeutic procedures and high-resolution imaging advances.
Cut Stroke in Half

On World Stroke Day, October 29th, the World Stroke Organization announced the launch of an ambitious global strategic framework that has the potential to cut global stroke incidence by half.

The framework, developed by an international network of leading stroke clinicians and researchers, builds on strong evidence of impact in the prevention of stroke and circulatory disease. It provides a roadmap for governments and health systems that points prevention focus towards low- and medium-risk populations, with an approach that combines improved access to stroke preventive treatment, development of a stroke trained community health workforce, improved public awareness and mobile technologies that support the identification of risk factors and individual behavior change. A study trial that aims to prove the efficacy of the WSO strategy and the feasibility of implementation in other locations has started in Brazil, through a partnership of the Ministry of Health and the Hospital Moinhos de Vento. Other countries are expected to start pilots in 2020.

Establishment of Research Priorities

The Research Committee has launched working groups to advance a number of projects key to our organization’s activities. These include plans aimed at showcasing the disparity in stroke burden of disease and research funding, compared with other major diseases; highlighting stroke burden for people under the age of 55; and improving the robustness of stroke data worldwide. WSO members with special interest and expertise in these areas have been invited to contribute. Also during 2019, the Research Committee began processing requests for endorsement of research activity that supports the goals of WSO.

Following our successful training workshop at WSC 2018, the WSO Research Committee began partnering with the European Stroke Organisation (ESO) and the Global Alliance of Independent Networks focused on Stroke trials (GAINS) to run the second Early Career training day ahead of the ESO WSO in Vienna, 6-9 November, 2020.

Supporting Early Career Stroke Practitioners

The World Stroke Organization is committed to developing a strong, connected global professional cohort and ensuring strong future leadership for stroke. As part of this commitment the WSO established a Young Stroke Professionals Committee in 2014. The Committee supports and promotes best practices among young stroke professionals.

The Committee established the WSO Brief Clinical Exchange Scholarship Program in January 2015. These scholarships, worth up to 2,000 USD, are designed to expose young stroke professionals from medical, nursing and allied health backgrounds to best practice clinical stroke care at international centres of excellence. At least two of the five annual scholarships are granted to applicants from developing countries. The primary purpose of the exchange should be clinical, but opportunities for collaborative research may arise and are strongly encouraged. The selection panel consider the potential benefit to the applicant and stroke patients at their institution. The host institution must have recognized status as a centre of excellence in stroke care.

In 2019, a total of five scholarships were awarded and two of the awardees from the 2018 postponed their exchanges to 2019. All of the participants in the program have now completed their brief exchanges.
Dr. Caleb Ademola Omuwa Gbiri from Nigeria chose for his Brief Clinical Exchange Ku Leuven and Uz Leuven, Belgium. His exchange included clinical orientation, a full day of clinical hands-on experience at the stroke and head injury rehabilitation ward, a clinical audit day during which he had to synergies and synchronise everything learned during the week. The second week of the exchange focused on movement disorders and geriatric rehabilitation. Dr Gbiri anticipates that participation in the program will improve his clinical practice and research in stroke as well as improving his capacity for national and regional mentorship.

Dr. Ndiaga Matar Gaye from Senegal chose the stroke unit of the University Hospital of Montreal. As part of his program he was able to observe daily visits to patients hospitalized in the stroke unit, intensive care and emergency rooms; Outpatient clinic visits (transient ischemic attack; rare cerebrovascular malformations); tele-consultation for a possible distant thrombolysis; Initial assessment of acute cases in the context of thrombolysis alert; multidisciplinary stroke meetings involving stroke neurologists, medical and surgical staff, nurses, physiotherapists, social workers, occupational and speech therapists.He strongly hopes the observership will have a positive impact on the stroke management and organization in Dakar, Senegal.

Dr. Kateryna Antonenko from Ukraine spent her exchange in the Stroke Unit of the University Hospital of Perugia (Italy) under the supervision of Dr Valeria Caso. During her stay she participated in morning ward rounds and discussions of the possible stroke subtypes, necessary diagnostic approaches, treatment options and secondary prophylaxis. One of the most enriching experiences of this exchange was the opportunity to compare Ukrainian and Italian Medical systems and their benefits to the patient.

Dr. Paramdeep Singh from India visited the Department of Neuroradiology of University Hospital Freiburg, Germany. He describes his participation to the program as a great opportunity for to build understanding of modern neuroradiology for stroke patients. The exchange experience offered to him a chance to gain core knowledge regarding imaging-based stroke management which includes diagnostic and therapeutic considerations, neuroimaging modalities, and stroke scales (including certification on the NIH Stroke Scale). The programme delivered invaluable experience in cutting edge hyperacute stroke imaging as well as stroke research that will help Dr Paramdeep improve the management of stroke patients in his institute in India and assist him to guide clinicians in the use of advanced neuroradiology imaging techniques in his home institution.

Dr. Peter Warweru from Kenya spent two weeks at Sahlgrenska University Hospital, Sweden. His clinical exchange focus was mainly on strokes admissions with diverse etiologies – from cardio-embolic, large vessel atherosclerotic disease to cardio-embolic, large vessel atherosclerotic disease to carotid/vertebral dissections. Coming from a country with no defined stroke case system, the coordinated stroke system witnessed in the hospital was mind opening. Dr. Peter Warweru looks forward to applying this knowledge to improve patient care in his own hospital and country.

Dr. Yared Yifru from Ethiopia completed his clinical exchange in Sweden at Gothenberg University, Sahlgrenska Hospital Stroke Unit. There he was able to observe stroke admission and treatment procedures, from physical examination, imaging, thrombolysis, as well as follow up on wards and medication and discharge recommendations. In his stay he was able to see around five cases of thrombolysis, and one case of thrombectomy. He was able to review educational materials that are given to patients and what alerting medical notes systems for hospital doctors.
WSO Global Guidelines and Tools

The WSO Roadmap to Delivering Quality Stroke Care is a resource to guide healthcare managers and stroke care clinicians in establishing and improving systems of stroke care. It enables users to assess the structural elements of available services, review best practice recommendations for processes of care that should be operational, and monitor their impact on patient outcomes using key quality indicators. The Roadmap is designed to improve stroke care over diverse areas, with its guidelines tailored to different resource levels across regions. WSO’s goal is to create an environment of continuous quality improvement regardless of resource availability.

We continue to make the Roadmap accessible to more people. We are pleased to share that the document has now been translated into 8 languages including Chinese, Portuguese, Russian, Spanish, Vietnamese, Persian, Arabic and Turkish.

All language versions and a series of videos to support implementation can be downloaded from the WSO website.

The Roadmap is designed to improve stroke care over diverse areas, with its guidelines tailored to different resource levels across regions.
Throughout 2019, WSO continued to grow our network of stroke support organization (SSO) members globally and worked to strengthen and support this network, particularly in low and middle-income countries.

Membership

Our SSO membership continues to grow and we welcomed 64 SSO members in 2019, a 23% increase from 2018, with 16 SSO’s brand new to WSO. 37% of SSO members in 2019 were from lower-middle-income or low-income countries (World Bank 2019).

SSO members shared their stories and examples of their support programs on our blog platform. Among the most popular stories in 2019 were stroke survivor Michael Uchunor, founder of the Michael and Francisca Foundation, working in partnership with other organizations to respond to the burden of stroke in Nigeria, and community health worker, Hussein Liobike, from the Tanzania Heart Club, sharing why he was motivated to get involved in stroke support.

In the second half of 2019 we began a project to map all SSO’s known to us globally. The aims of the project are to help us to understand how SSO’s operate, their focus and reach, and to provide insights for our ongoing SSO development activities. We will report on the mapping in 2020.

SSO achievements

National Stroke Survivors’ Day was celebrated in Ghana on 16th March 2019, and the Stroke Association Support Network Ghana (SASNET Ghana), ensured that the day was full of hope and support for people affected by stroke. SASNET Ghana promoted the message that there is life after stroke and that with the right information, treatment, care and support, people affected by stroke can have improved outcomes.

Over the past 10 years, the Japan Stroke Association has been advocating for a national stroke strategy and has worked in collaboration with the Japan Stroke Society, Japanese Circulation Society, Japan Heart Foundation, concerned citizens, patient groups, family members, and academics. Their dedicated work culminated in the Stroke and Cardiovascular Disease Control Act, which passed the Japanese legislature in December 2018 and came into law in December 2019. The next steps include the development of the Basic Plan to Promote Stroke and Cardiovascular Disease Control Programmes with the engagement of patients, family members, professionals in emergency transport, public health, medicine and social welfare, and researchers.
Stroke Foundation Uganda is very grateful to be a member of World Stroke Organization. This has not only enabled us to have unlimited access to information on stroke prevention, management and control but also expanded our network to collaborate with other stroke support organizations globally. This has contributed to our vision of empowering stroke survivors and rebuilding lives.

Ibrahim Bukenya, Principal Physiotherapist, Stroke Foundation Uganda

Membership of the World Stroke Organization offers support and protection that is essential in order to grow and expand our activities as an SSO in Cyprus. Our annual participation in the World Stroke Campaign and World Stroke Day gives us the resources and orientation to organize very successful stroke awareness and prevention events. Maintaining our membership gives us prestige and kudos alongside the scientific society of our country and promotes the fulfilment our objectives.

Marina Charalambous, President, Cyprus Stroke Association
The National Stroke Association of Malaysia (NASAM) held the second Stroke Games as part of their commemoration of World Stroke Day in October 2019. The Games are an inspiring and motivating approach to supporting stroke survivors in their recovery, and to demonstrate that there can be life after stroke. Over 800 participants from different states across Malaysia participated in 25 events over two days.

SSOs have an important role in supporting public awareness and advocacy on stroke. A third of World Stroke Day events registered on our Campaign website were led by SSOs.

The Stroke Games are NASAM’s contribution to the stroke community around the world. We wish that this fighting spirit of a stroke champion is ignited into every person affected by a stroke no matter where they are.

Janet Yeo, Founder Chairman, National Stroke Association of Malaysia

"The Stroke Games are NASAM’s contribution to the stroke community around the world. We wish that this fighting spirit of a stroke champion is ignited into every person affected by a stroke no matter where they are."
Membership

We are very proud to have among our members, eminent stroke clinicians and allied health professionals, distinguished research and young scholars, as well as major stroke societies, research institutes and patient groups.

In 2019, we recorded 2,549 individual members and 96 society members. We welcomed many new SSO members thanks to our Linking initiative. Through this cooperative initiative, smaller organizations with limited resources are supported to join and connect with our global network of stroke organizations to advance stroke care globally.

We thank our members and hope that we can rely on your continuous support in 2020 as well. In 2020 we are planning to launch some new initiative for members.
**Scientific Organizations**

Stroke Society of Australasia, Australia  
Belgian Stroke Council, Belgium  
Brazilian Stroke Network, Brazil  
Brazilian Stroke Society, Brazil  
Canadian Stroke Consortium, Canada  
University of British Columbia, Canada  
Chinese Stroke Association (CSA), China  
Central and Eastern European Stroke Society, Croatia  
Middle East North Africa Stroke & Interventional Neurotherapies Organization, Egypt  
Finnish Neurological Association, Finland  
Greek Society of Cerebrovascular Diseases, Greece  
Asia Pacific Stroke Organization (APSO), Hong Kong  
Indian Stroke Association, India  
NH Institute of Neurosciences, India  
Iranian Stroke Association, Iran  
Neurosciences Research Center (NSRC), Iran  
The Japan Stroke Society, Japan  
Korean Stroke Society, Korea  
INNECeV (Instituto de Neurologia, Neurocirugia y Enfermedad Cerebrovascular), Mexico  
Mexican Stroke Association, Mexico  
Sociedade Portuguesa do Acidente Vascular Cerebral, Portugal  
Romanian National Stroke Association, Romania  
Spanish Society of Neurology, Spain  
National Stroke Association of Sri Lanka, Sri Lanka  
European Stroke Organisation, Switzerland  
European Society of Neuroradiology - Diagnostic and Interventional, Switzerland  
Swiss Stroke Society, Switzerland  
World Heart Federation, Switzerland  
Turkish Cerebrovascular Disease Society, Turkey  
British Association Of Stroke Physicians (BASP), United Kingdom  
American Stroke Association, United States  
Society of Neurinterventional Surgery, United States  
World Hypertension League, United States

**Support Organizations**

National Stroke Foundation Australia, Australia  
Bangladesh Stroke Association, Bangladesh  
Brazilian Stroke Association, Brazil  
Latin American and Caribbean Stroke Network, Brazil  
Mineira Stroke Association, Brazil  
Heart to Heart Foundation, Bulgaria  
Cameroon Stroke Association, Cameroon  
Heart and Stroke Foundation of Canada, Canada  
March of Dimes, Canada  
Luck Medicare China, China  
Red Bracelet Volunteers Corps, China  
Cyprus Stroke Association, Cyprus  
Counterstroke, Fiji  
Finnish Brain Association, Finland  
Stroke Aid Foundation, Ghana  
Stroke Association Support Network, Ghana  
Bangalore Stroke Support Group, India  
Dr Bindu Menon Foundation, India  
Stroke Foundation of Bengal, India  
Stroke Support Organization- East Azerbaijan, Iran  
Cro Ireland, Ireland  
Neeman Association for Stroke Survivors, Israel  
Jamaica Stroke Alliance, Jamaica  
Japan Stroke Association, Japan  
Stroke Association of Kenya, Kenya  
Association for fight against stroke North Macedonia, Macedonia  
National Stroke Association, Malaysia  
Asociación Nacional Contra el Infarto Cerebral, Mexico  
Nepal Stroke Association, Nepal  
Stroke Central Region, New Zealand  
Stroke Foundation of NZ Limited, New Zealand  
Acha Memorial Foundation, Nigeria  
IDA Stroke Awareness Foundation, Nigeria  
Michael and Francisca Foundation, Nigeria  
Road 2 Recovery Foundation, Nigeria  
Stroke Awareness Initiative, Nigeria  
Stroke Action Nigeria, Nigeria  
Stroke Care International Initiative, Nigeria  
Stroke and Aneurysm Support, Philippines  
Seychelles Stroke Foundation, Seychelles  
The Singapore National Stroke Association, Singapore  
Porazka.sk, Slovakia  
Slovenian Stroke Support Organization, Slovenia  
Helderberg Stroke Support Group, South Africa  
Stroke Support Group Pretoria, South Africa  
The Heart and Stroke Foundation, South Africa  
The Stroke Survivors Foundation, South Africa  
Stroke Support Organization for Sri Lankans, Sri Lanka  
Malmö Strokeförening, Sweden  
Heart Club Tanzania, Tanzania  
SSO Tanzania, Tanzania  
Stroke Foundation, Uganda  
A stroke of Luck UK, United Kingdom  
Stroke Alliance for Europe, United Kingdom  
Stroke and Diabetes Education and Aid Foundation, United Kingdom  
The Stroke Association, United Kingdom  
Healings in Motion, United States  
International Alliance for Pediatric Stroke, United States  
Stroke Focus, United States  
Stroke Recovery Foundation, United States  
Survivors 4 Survivors, United States  
YoungStroke, Inc, United States  
National Stroke Aid, Zambia  
Stroke Organisation Zimbabwe, Zimbabwe
Endorsed Events

13th Portuguese Stroke Congress
January 2019, Porto, Portugal

Joint Congress of the Neurological Association of South Africa (NASA) and The African Academy of Neurology (AFAN)
February 2019, East London, South Africa

Stroke Summer School ("Escuela de Verano de Enfermedades Cerebrovasculares")
March 2019, Buenos Aires, Argentina

13th Indian National Stroke Conference
March 2019, Gujarat, India

11th Iranian Stroke Congress
March 2019, Tehran, Iran

Lisbon Stroke Summit
April 2019, Lisbon, Portugal

Clinical Trials Development and Management Workshop
May 2019, Heidelberg, Germany

ESO EAST 5th Annual Workshop
May 2019, Milan, Italy

Tianfu International Stroke Research Methodology Training Course
May 2019, Chengdu, China

30th Summer Stroke School - Healthy Lifestyle And Prevention Of Stroke And Other Brain Impairments
June 2019, Dubrovnik, Croatia

8th Kuopio Stroke Symposium
June 2019, Kuopio, Finland

15th International Conference on SubArachnoid Hemorrhage (ISAHI) 2019
June 2019, Amsterdam, The Netherlands

5th Annual Scientific Session of Chinese Stroke Association & TISC 2019
June 2019, Beijing, China

XIX Annual Congress of the Mexican Stroke Association (AMEVASC)
August 2019, Monterrey, Mexico

4th MENA-SINO Congress
August 2019, Cairo, Egypt

Canadian Stroke Congress 2019
October 2019, Ottawa, Canada

3rd Turkish Stroke Academy
October 2019, Bodrum, Turkey

15th Congress of World Federation of Interventional and Therapeutic Neuroradiology (WFITN)
October 2019, Naples, Italy

Colombian Stroke Conference
November 2019, Bogota, Colombia

6th International Symposium on Collaterals to the Brain
November 2019, Los Angeles, USA

Stroke and Neurovascular Masterclass ANVI 2019
November 2019, Haryana, India

UK Stroke Forum Conference 2019
December 2019, Telford, UK
Working in Partnership for Lives Free from Stroke

Achieving our vision of a life free of stroke is a task that WSO cannot achieve alone. We are committed to building our partnerships at global, regional and national level to scale up and deliver improvements in prevention, treatment and support to reduce the burden of stroke.

**Working with WHO as an implementing partner**

WSO is a formal implementing partner for WHO, contributing our stroke expertise to WHO global guidance, programs and collaborations. A key area in which WSO continues to contribute stroke expertise is in the assessment of evidence for inclusion of stroke treatments and technologies in the WHO Essential Medicines List. The Essential Medicines List describes treatments that all UN-member states are encouraged to offer, at a reasonable cost, or free through local healthcare provision.

**Working together to accelerate action on NCDs**

We work closely with our partners in the NCD Alliance, coordinating our policy advocacy efforts to ensure that the voices of stroke experts, survivors and caregivers are heard, and that the specificity of stroke is articulated with the overall NCD policy agenda.

Our President and Executive Director participate in the Global NCD Alliance Forum and the Secretariat engage with the NCD Alliance Member Advocacy Network. We also worked with our SSO members to ensure the needs and issues of stroke survivors are represented in the Alliance’s ‘Our views, Our Voices’ program that aims to highlight the experiences of people living with NCDs in global policy advocacy initiatives. This year, Michael Uchnor, a stroke survivor and founder of the Michael and Francisca Foundation in Nigeria was nominated by WSO to attend the Forum where he was able to share the reality of working on stroke in Nigeria and to connect with members of both global NCD community.

**The Global Coalition for Circulatory Health**

WSO continued to contribute to the Leadership Group of the Global Coalition for Circulatory Health. The Coalition hosted by the World Heart Federation, is focused on advancing the principles and commitments outlined in the Mexico Declaration. Through this partnership we work to develop collaborative and innovative approaches to improve CVD and stroke prevention.

**Our members, our partners**

Our engagement in external partnerships is informed and driven by our working partnerships with our Member Associations, who contribute their expertise and work with us to raise awareness and advocate around key issues in stroke treatment, prevention and support.
Our Corporate Sponsors in 2019

We are most grateful to our supporting partners who play critical role in supporting WSO’s work towards a world free from stroke.

We welcome and actively seek new partners and will continue to work to broaden our industry, NGO and philanthropic partners to strengthen our programs in 2020.
We are pleased to announce that WSO finished the year 2019 in a position of growth.

This is demonstrated by an increase in the general reserves compared to 2019. However, WSO received more than USD 300,000 USD in sponsorship between November and December 2019 which were not spent during 2019. Due to the timing of the receipt of the sponsorship income, and in line with the principles of accounting generally accepted for associations registered in Switzerland, these funds had to be recognized as 2019 revenue even though they will support projects in 2020 and 2021.

As a result, WSO leadership considers that the net position for the financial year 2019 is better represented by the figure of USD 199,246.

WSO’s main income continues to be derived from the congress and from donations from partners. Other income sources are the membership fees and income from the International Journal of Stroke.

The main operational expenses are related to project costs, mainly for the Campaign, Education and Journal.

The detailed financial report for all WSO activities in shown below, this includes the operations of both WSO Switzerland and WSO USA.

World Stroke Organization Income and Expenses for the Year Ended December 31, 2019 (in United States Dollars)

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cash &amp; Other Assets</td>
<td>2,293,136</td>
<td>1,966,124</td>
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<tr>
<td>Liabilities</td>
<td>252,977</td>
<td>426,062</td>
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<tr>
<td>Reserves</td>
<td>2,040,160</td>
<td>1,540,063</td>
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<tr>
<td>Total of Income</td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Membership dues</td>
<td>102,181</td>
<td>121,189</td>
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<tr>
<td>Donations</td>
<td>731,401</td>
<td>695,064</td>
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<tr>
<td>Congress</td>
<td>386,234</td>
<td>19,994</td>
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<tr>
<td>Bank interest</td>
<td>19,483</td>
<td>196</td>
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<tr>
<td>Journal royalties</td>
<td>50,361</td>
<td>55,176</td>
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<tr>
<td>Contribution IJS Editorial Office</td>
<td>94,832</td>
<td>122,460</td>
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<tr>
<td>Miscellaneous</td>
<td>19,738</td>
<td>95,827</td>
</tr>
<tr>
<td>Total of Income</td>
<td>1,404,230</td>
<td>1,109,906</td>
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<tr>
<td>Expenses</td>
<td></td>
<td></td>
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<tr>
<td>Staff and office costs</td>
<td>196,467</td>
<td>200,273</td>
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<tr>
<td>Marketing and promotion</td>
<td>29,184</td>
<td>16,191</td>
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<tr>
<td>Meetings</td>
<td>50,380</td>
<td>76,319</td>
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<td>Administration costs</td>
<td>36,499</td>
<td>28,341</td>
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<td>WS Academy</td>
<td>76,395</td>
<td>99,465</td>
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<td>WS Campaign</td>
<td>140,817</td>
<td>139,506</td>
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<tr>
<td>Regional congress</td>
<td>32,469</td>
<td>190</td>
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<td>SSO development officer</td>
<td>39,000</td>
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<tr>
<td>IJS Editorial Office</td>
<td>96,160</td>
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<tr>
<td>Journal subscription</td>
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<tr>
<td>WSO projects</td>
<td>99,788</td>
<td>136,552</td>
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<td>WSO grants and scholarships</td>
<td>44,081</td>
<td>49,491</td>
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<tr>
<td>WSO strategy workshop</td>
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</tr>
<tr>
<td>Total of Expenses</td>
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<td>940,483</td>
</tr>
<tr>
<td>Result for the year</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reserves brought forward</td>
<td>1,540,063</td>
<td>1,370,640</td>
</tr>
<tr>
<td>Reserves carried forward</td>
<td>2,039,309</td>
<td>1,540,063</td>
</tr>
</tbody>
</table>

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The main operational expenses are related to project costs, mainly for the Campaign, Education and Journal.

The detailed financial report for all WSO activities in shown below, this includes the operations of both WSO Switzerland and WSO USA.
The current Executive Committee and Board of Directors took office in October 2018.

The Executive Committee and Board of Directors is composed of outstanding and committed individuals, representing all spectrums of stroke prevention, care and rehabilitation from across the world. 10 board members are representing stroke support organizations and 10 are representing scientific organizations.

Michael Brainin will remain President until November 2020 when Marc Fisher will take over the leadership until 2022.

The Executive Committee and Board of Directors had three face to face meeting in 2019. The members of the Executive Committee also meet regularly via phone conferences.

Elections for the Board of Directors and Executive Committee are held every two years and the next election will be held in 2020.

The 2018 – 2020 Executive Committee and Board of Directors are shown below:

### WSO EXECUTIVE COMMITTEE MEMBERS

- **President** – Michael Brainin, Austria
- **President-Elect** – Marc Fisher, USA
- **Vice President** – Jeyaraj Pandian, India
- **Vice President for SSOs** – Sheila Martins, Brazil
- **Immediate Past President** – Werner Hacke, Germany
- **Treasurer** – Bernard Yan, Australia
- **Secretary** – Pooja Khatri, USA
- **Member at large** – Valery Feigin, New Zealand
- **Member at large** – Patrice Lindsay, Canada
- **Ex-officio Member** – Bo Norrving, Chair of Global Policy Committee, Sweden
- **Ex-officio Member** – Geoffrey Donnan, Editor of JAMA, Australia
- **Ex-officio Member** – Stephen Davis, Past President, Australia

### WSO BOARD OF DIRECTORS

#### INDIVIDUAL MEMBERS

- **Sub-Saharan Africa, Middle East/East Mediterranean**
  - Foad Abd-Allah, Egypt
  - Natan Bornestein, Israel
  - Ad Adams Ebenezer, Ghana
  - Gloria Ekeng, Nigeria
  - Mehdi Faroudi, Iran
  - Abayomi Ogun, Nigeria

- **Americas**
  - Argye Hillis, USA
  - Pooja Khatri, USA
  - David Liebeskind, USA
  - Michelle Nelson, Canada
  - Claudio Sacks, Chile
  - Gisele Silva, Brazil

- **Europe**
  - Philip Bath, UK
  - Stephanie Debette, France
  - Kennedy Lees, UK
  - Atte Meretoja, Finland
  - Else Charlotte Sandset, Norway
  - Joanna Wardlaw, UK

- **Asia/Oceania**
  - Craig Anderson, Australia
  - Julie Bernhardt, Australia
  - Epifania Collantes, Philippines
  - Deirdre de Silva, Singapore
  - Valery Feigin, New Zealand
  - Keun Hwa-Jung, South Korea
  - Kazuo Kitagawa, Japan
  - Jeyaraj Pandian, India
  - Anna Ranta, New Zealand
  - Norihiro Suzuki, Japan

#### SCIENTIFIC SOCIETIES

- Gabriel Rodriguez de Freitas, Brazilian Stroke Society
- Vida Demarin, Central and Eastern European Stroke Society
- Jose Ferro, European Stroke Organization
- Gerd Gubitz, Canadian Stroke Consortium
- Teruyuki Hirano, Japan Stroke Society
- Jong Sung Kim, Korean Stroke Society
- Patrik Michel, Swiss Stroke Society
- Ralph Sacco, American Stroke Association
- Roland Veltkamp, German Stroke Society
- Bernard Yan, Stroke Society of Australasia
- Yongjun Wang, Chinese Stroke Association

#### STROKE SUPPORT SOCIETIES

- Mary Kay Ballasiotes, International Alliance for Pediatric Stroke
- Jon Barrick, Stroke Alliance for Europe
- Juliet Bouverie, UK Stroke Association
- Amy Edmunds, YoungStroke Inc.
- Patrice Lindsay, Heart and Stroke Foundation
- Sheila Cristina Ouriques Martins, Brazilian Stroke Network
- Sharon McGowan, Stroke Foundation Australia
- Pamela Naidoo, Heart and Stroke Foundation South Africa
- George Scola, The Stroke Survivors Foundation
- Haruko Yamamoto, Japan Stroke Association

#### Co-opted members

- Liping Liu, China
JOIN US
AND DELIVER
A WORLD FREE
FROM STROKE

ACT NOW!

By making a donation on:
https://www.world-stroke.org/about-wso/make-a-donation

By using the WSO advocacy Toolkit to support your local Stroke Advocacy Events:
https://www.world-stroke.org/world-stroke-day-campaign/world-stroke-campaign/advocacy-toolkit

By using the Global Stroke Guidelines and Action Plan to establish and implement stroke systems of care globally:

By becoming our members and joining our global team to fight against stroke:
http://wso.multiregistration.com/

By learning and promoting the Global Stroke Bill of Rights to stroke care providers and governments:

By marking your dates for World Stroke Congress 2020 in Vienna, Austria:
https://eso-wso-conference.org/

Follow us on Twitter @WorldStrokeOrg, @WStrokeCampaign, @WorldStrokeEd and @intjstroke

Add us on Facebook - World Stroke Campaign

Check out our Website
https://www.world-stroke.org/ (and sign up for updates)

Contact us admin@world-stroke.org