



UniStem Day at the University of Cagliari, Italy, was supported by a 2019 global engagement seed grant awarded to the Italian Society for Neuroscience (SINS) to raise awareness and understanding about brain research.

2019 REVIEW

FOUNDING PARTNERS

- Australasian Neuroscience Society (ANS)
- Dana Foundation
- Federation of European Neuroscience Societies (FENS)
- International Society for Neurochemistry (ISN)
- Japan Neuroscience Society (JNS)
- Society for Neuroscience (SfN)

Global engagement activities in 2019 expanded to include a call for IBRO/Dana Brain Awareness Week grants (for activities organized in 2020) and supplemental funding for high-level engagement events at meetings such as SONA, FALAN, FAONS, FENS Forums, SfN meetings and IBRO World Congresses.

Together with the seed grants (up to €5,000 each), these additional efforts help to meet the increasing need for engagement and outreach under the current global climate in which scientific knowledge is being misrepresented and challenged by a lack of awareness, resources, understanding and support.

Seed grant activities this year have ranged from scientific meetings, symposia, public lectures, educational school activities, media events, local community engagement, courses and Brain Awareness Week activities.

They have been taking place in 11 countries in the African, Asia/Pacific, European and

Latin American regions: Argentina, Australia, Bolivia, Chile, Egypt, Ghana, Italy, Mongolia, The Netherlands, Nigeria and Panama.

In the fifth round of seed grant applications in 2019, there were a total of 76 applications (in comparison to 64 last year). There were 26 from Africa, 21 for Asia/Pacific, 17 from Latin America and 12 for Europe.

In its first year, there were 90 applications for the IBRO/Dana BAW grants (up to \$1,250 usd each): 36 from Africa; 31 from Asia/Pacific; and 23 from Latin America. Increased publicity for both grants has helped visibility, including dissemination support from partners.

The reviews for applications for 2020 activities are currently ongoing and will be concluded soon. The winners will be incorporated into this report and posted on the IBRO website and social media once confirmed.



Animal behavioural test demonstration (left) and student group presentations (right) during the 2019 Global Engagement event, Neurogirl Camp, Cape Coast edition, Ghana.

BUDGET SUMMARY

Expenses in 2019, were allocated to cover a total of 11 seed grants in 4 regions and one engagement and outreach event at the SONA Conference in Lagos, Nigeria. Eight grants of €5,000 each, two grants of €3,000 each, one grant of €10,000 and one grant of €2,700 were budgeted for an overall expenditure of €58,700 for seed grants. There was also supplemental funding approved by the Global Engagement Committee to support the Society for Neuroscientists of Africa (SONA) engagement and outreach event at its biennial conference in Lagos, Nigeria. They received €12,720. Total expenses are therefore anticipated to reach €71,420 by the end of the year.

For the year 2020, the application reviews are currently ongoing for both the seed grants and the new IBRO/Dana Brain Awareness Week grants. The final winners will be announced as soon as they conclude and the overall expenditure will then be incorporated into this report.

Funding for activities supported by the IBRO Global Engagement Initiative (formerly Global Advocacy Initiative) since 2014 has come from generous contributions made by IBRO, the Dana Foundation, the Federation of European Neuroscience Societies (FENS), the International Society for Neurochemistry (ISN), the Japan Neuroscience Society (JNS) and the Society for Neuroscience (SfN).

REVIEW PROCESS

Reviews and rankings of the Global Engagement Seed Grant and IBRO/Dana BAW grant applications are made by the IBRO Africa (ARC), Asia/Pacific (APRC), Latin America (LARC) and Pan-European (PERC) Regional Committees.

After proposals have been evaluated and ranked, they are then sent to a super reviewer, the IBRO Senior Director of Grants, who makes a final review. Once he/she completes the final assessment, applicants are notified of the decisions and awardees are officially announced through the IBRO

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Three global engagement seed grants of €5,000 each and one supplemental grant of €12,720 were awarded to the African region in 2019 to the following organizers:

- **EGYPT:** Mohamed Salama, Egyptian Network for Neurodegenerative Disorders (ENND)
www.facebook.com/EgyNND
- **GHANA:** Hephzi Angela Tagoe, GhScientific
ghscientific.com
- **NIGERIA:** Chinna Orish, Women in Neuroscience Nigeria
- **NIGERIA:** Amadi O. Ihunwo, Society of Neuroscientists of Africa (SONA)

EGYPT: Mohamed Salama, Egyptian Network for Neurodegenerative Disorders (ENND)
www.facebook.com/EgyNND

Neuroepidemiology is a critical field of neuroscience that is underestimated in Africa and Middle East. Mohamed Salama from ENND used the Global Engagement grant to raise awareness about the importance of epidemiological research in neuroscience and neurological practice, increase acceptance of multidisciplinary and collaborative work in the field of Neuroepidemiology and increase public engagement in epidemiological studies. Supported activities had a total of 500 participants, and included the following: Session on Neuroepidemiology during the IBRO-MENA school held at the American University of Cairo; plenary lecture by Prof. Brian Lawlor (Co-director of the Global Brain Health Institute) at Horus and Mansoura universities; multi-stakeholder meetings at 5 Egyptian universities to introduce Neuroepidemiology; and the beginning of a pilot project, A Longitudinal Study of Healthy Aging in Egypt, which should begin in early 2020.

GHANA: Hephzi Angela Tagoe, GhScientific
ghscientific.com

Hephzi Angela Tagoe from GhScientific used the Global Engagement grant to support the annual Neurogirl Camp series that provides senior high school students (ages 14-19) the opportunity to engage with mentoring professionals, consider scientific career paths and try out hands-on practical neuroscience techniques. The event was held in 3 different locations in Ghana – Cape Coast, Kumasi and Accra. Each day focused on giving students practical experience in neuroscience techniques with an element of career mentoring. Two events were for girls only and the third was for both boys and girls (entitled Neuro Camp in this case). In total, 206 students participated across 3 events over a 3-month period. There were 8 partners involved, including a media house and 25 science professionals. Four videos were also produced for public consumption and 2 academic journal publications based on the experiences are in preparation.

NIGERIA: Chinna Orish, Women in Neuroscience Nigeria
www.facebook.com/Women-In-Neuroscience-Nigeria-427370704365756

Chinna Orish from the Nigerian Women in Neuroscience Group used the Global Engagement grant to empower high school girls to pursue careers in neuroscience and increase awareness on the role of diet in the management of autism and psychiatric diseases. The role of nutrition in prevention and management of autism spectrum disorder (ASD) is largely not emphasized, and early intervention in both maternal and child health is a cheap and affordable approach in prevention and management of ASD in the Niger Delta. Activities

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Included 1,200 participants and lectures on autism and other neuropsychiatric diseases in girls' secondary schools, university campuses and churches; television and radio programs; and a career lecture on neuroscience to motivate young girls to pursue careers in the field. The audience reception was excellent, resulting in possible future university collaborators and a high demand for repeat performances.

NIGERIA: Amadi O. Ihunwo, Society of Neuroscientists of Africa (SONA)
<http://sonafrica.info/>

The 14th International Conference of SONA along with the 17th Annual Conference of the Neuroscience Society of Nigeria (NSN) provided an excellent opportunity to hold an engagement event, 'Substance abuse and drug addiction: Research, Advocacy and Policy Issues', focusing on the specific needs and challenges within Africa. It was supported with supplemental funding offered by the initiative and took place on 26 March 2019. Professor William Daniels, Head of the School of Physiology at the University of Witwatersrand in Johannesburg, South Africa, gave a lecture and led a panel discussion on the topic with a question and answer period from the audience. There were 300 participants who represented at least 15 countries in Africa with some other participants from Europe, USA and Asia.

2019 Asia/Pacific REPORTS

Two global engagement grants of €10,000 and €5,000 each were awarded to the Asia/Pacific region in 2019 to the following organizers:

- **AUSTRALIA:** Linda Richards, Australian Brain Alliance
- **MONGOLIA:** Battuvshin Lkhavgasuren, Mongolian Neuroscience Society

AUSTRALIA: Linda Richards, Australian Brain Alliance
<https://www.brainalliance.org.au/>

The toll of brain disease, disorders and injury is high. Conditions intimately linked to the brain are prevalent, and many remain intractable. In Australia, 400 people die from Motor Neuron Disease every year. 32 people are diagnosed with Parkinson's Disease every day. And someone suffers from a stroke every nine minutes. The Australian Brain Alliance (the Alliance) held a significant political engagement event, 'Brains at the Dome', aimed at securing public, business and political support for a national brain initiative in Australia, and achieving closer engagement between Australian and international brain research networks, and initiatives. Specifically, the Alliance convened a one-day brain science symposium and targeted meetings with elected representatives at Australia's Parliament House during Brain Awareness Week in March 2019.

MONGOLIA: Battuvshin Lkhavgasuren, Mongolian Neuroscience Society
<http://neuroscience.mn/>

To address the importance of establishing a brain science institute in Mongolia, the Mongolian Neuroscience Society organized a National Forum for Brain Science, 'Honored Public Lectures - National Forum for Brain Science', in the House of Parliament. There is a prevailing lack of career opportunities for neuroscience researchers in the country even though the prevalence of psychiatric and neurological disorders including stress-related behavioral disorders, stroke, and epilepsy, has been dramatically increasing. The government currently supports 21 academic national institutes, none of which is relevant to brain science and the government did not allocate any funding for brain research in 2018. This year's Forum focused attention on this concern and was attended by 1200 participants. An official request to the government for establishing a national Brain Science Institute has resulted in order to support basic research on neurological and psychiatric disorders, training of young scientists and integration of scientists into a multidisciplinary research platform.

2019 Latin America REPORTS

Four global engagement seed grants – three at €5,000 each and one at €2,700 - were awarded to the Latin American region in 2019 to the following organizers:

- **ARGENTINA:** Silvia Kochen, Institute for Studies in Neurosciences and Complex Systems, ENyS-CONICET
- **BOLIVIA:** Mohammed Mostajo Radji, Clubes de Ciencia Bolivia
- **CHILE:** Patricio Rojas Montecinos, Chilean Society of Neuroscience
- **PANAMA:** Jagannatha Kosagisharafi, Institute of Scientific Research and Technological Advances

ARGENTINA: Silvia Kochen, Institute for Studies in Neurosciences and Complex Systems, ENyS-CONICET
<https://enys.conicet.gov.ar/>

Silvia Kochen from ENyS-CONICET organized a series of one-day seminars, 'Neuroscience & Art', that brought together researchers and local artists with the aim of disseminating scientific knowledge in neuroscience and highlighting the importance of neuroscience in public health and education, among others. The seminars were targeted at a wide range of audiences, university students, health care practitioners, educators, policymakers and the public interested in understanding brain function. Each seminar included 6 talks given by experts in the field that work in one specific topic (for example: Memory Reconsolidation). At the end of the talks, a group of artists presented their artwork to show how Art understands and interprets the findings of science. The audience had the opportunity to reach neuroscience from two different perspectives: from the scientist itself and from conception of the artist.

BOLIVIA: Mohammed Mostajo Radji, Clubes de Ciencia Bolivia
<https://clubesdecienciabolivia.com/>

Despite over a decade of government stability, the plurinational state of Bolivia persists as the Latin American nation with the highest income inequality. Ranked last in the region for innovation and health, Bolivia demonstrates a clear need for effective science outreach and its rich natural resources position the nation to greatly benefit from scientific literacy and policy implementation. In order to meet this need, the nonprofit Clubes de Ciencia Bolivia has planned to use the global engagement grant to run workshops with neuroscience lab sessions for students that exposed them to cutting edge findings (such as optogenetic techniques and how these have been used to implant false memories in rodent brains to understand hippocampal function) that would not otherwise be accessible under current educational conditions. This activity has yet to be confirmed as completed.

CHILE: Patricio Rojas Montecinos, Chilean Society of Neuroscience

The Chilean Society of Neuroscience has planned to develop educational material and organize a two-day symposium on the impact of drug use on the developing and adult brain. It will

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include key presentations and discussions among researchers, clinicians and policymakers, that aim to address the general public, with special emphasis on high school and university students.

Chile is the second highest consumer of cocaine and marijuana in Latin America according to the 2015 World Drug Report elaborated by the UN Office of Drugs and Crime. It is only surpassed by Uruguay, which legalized the use of marijuana last year. The main rise in marijuana consumption in Chile has occurred among adolescents and young adults. The CSN is organizing their event in order to educate and generate a deep awareness among this population. This activity has yet to be confirmed as completed.

PANAMA: Jagannatha Kosagisharafi, Institute of Scientific Research and Technological Advances

Panama has a unique aging population unlike other Spanish groups because of genetic diversity due to the Canal, etc. Diet, stress, alcohol and exercise are major issues in the country which all affect mental health. Brain disorders are the second major disorder in Panama. The Institute of Scientific Research and Technological Advances therefore will use the global engagement grant to advocate evidence-based information on the role of nutrition, stress, alcohol and exercise on healthy brain aging. They will conduct a special session based on the mixing of young and aged groups to understand the social relations on health aging. During the sessions, they will conduct mini-mental, blood pressure and glucose tests, and a demonstration of EEG and Doppler in collaboration with doctors. They will focus on 75 aged and 75 young student communities. They will also invite diplomats for this activity so that they are more motivated to invest in brain research in the near future. This activity has yet to be confirmed as completed.

2019 Pan- Europe REPORTS

Three global engagement seed grants – two at €3,000 each and one at €5,000 - were awarded to the Pan-European region in 2019 to the following organizers:

- **ITALY:** Micaela Morelli, Italian Society for Neuroscience
- **ITALY:** Giuseppe Pignataro, Italian Society for Neuroscience
- **THE NETHERLANDS:** Bert Lenaert, Brain Injury Center

ITALY: Micaela Morelli, Italian Society for Neuroscience
<http://www.sins.it/EN/index.xhtml>

During UniStem Day at the University of Cagliari, Micaela Morelli from the Italian Society for Neuroscience (SINS) helped raise awareness and understanding about brain research and grow networks of researchers through the following activities: Supported two speakers to describe the basis of cell duplication and what stem cells are; produced and showed a kick-off video and an audio connection within participating European countries; supported talks by scientists and researchers about their everyday life in science; conducted educational activities including visits to neuroscience laboratories; and organized games, discussions, films and open workshops with science communicators.

ITALY: Giuseppe Pignataro, Italian Society for Neuroscience
<http://www.sins.it/EN/index.xhtml>

The Italian Society for Neuroscience (SINS) would like to start, encourage and foster the interest of pre-university students in the professional world of neuroscience. It proposes an amendment to the Statutes of the Italian Society of Neuroscience (SINS) in order to make it possible to enroll high school students as SINS members. These members, coordinated by a Regional Coordinator, will be called Junior Members. The seed grant will help support Junior Members to meet in conjunction with the National Convention of SINS. During the conference, they will be able to visit local institutions of scientific importance and attend conference sessions. An ad hoc data-club symposium will also be organized for Junior Members. This activity has yet to be confirmed as completed.

THE NETHERLANDS: Bert Lenaert, Brain Injury Center
<https://www.hersenletsellimburg.nl/nl>

In the province of Limburg (The Netherlands), one out of four people will be confronted with brain injury caused by accident, stroke, surgery, or disease in their personal environment. The mission of the Brain Injury Center Limburg (BICL) is to improve the quality of life of individuals who sustained brain injury and their environment by acquiring, applying, and spreading scientific knowledge. During the 2019 Brain Awareness Week, BICL organized its third symposium covering a broad range of topics related to research on and care for individuals with brain injury. The seed grant allowed patients, families and caregivers to enroll at strongly reduced admission fees. This has increased public awareness and will help put long-term needs of patients and their environment on the agenda of policymakers.

2020 AWARDS

Reviews are currently ongoing. Winners will be announced and incorporated into this report once confirmed.



The 14th International Conference of SONA held an event, 'Substance abuse and drug addiction: Research, Advocacy and Policy Issues', supported by a 2019 Global Engagement Initiative supplementary grant.

2020 LOOKING AHEAD

Next year will be the sixth year that the Global Engagement Initiative will offer seed grants and the first year that activities will be organized with support from the IBRO/Dana BAW grants.

It is expected that application submissions and initiative visibility will increase as there was much interest generated during this year's IBRO World Congress in Daegu, Korea, and the demand for brain outreach, engagement and advocacy is increasing worldwide, attracting more global attention and support.

The International Basic Sciences Programme at UNESCO funded the global engagement and outreach event at the World Congress in order to encourage discussions about the continuing importance of supporting research in the basic sciences, with a special focus on the coordination, engagement and outreach efforts in the brain sciences. Featured speakers came from policymaking and scientific communities who are directly involved in addressing awareness and funding challenges.

There was also a groundbreaking high-level ministerial forum on the

neuroscience of learning, co-organized with the International Bureau of Education, another division of UNESCO. It highlighted the need for increased engagement between neuroscientists, policymakers and teachers in order to address the current global learning crisis and the future of learning.

There is no doubt that the efforts of the Global Engagement Initiative are creating bridges and filling gaps in awareness and understanding of brain research. They are also providing essential support in developing multi-disciplinary and multi-scale partnership networks, communicating research advances and attracting more funding and policy support for brain research.

IBRO thanks its current funding partners – the Dana Foundation, the Federation of European Neuroscience Societies (FENS), the Japan Neuroscience Society (JNS) and the Society for Neuroscience (SfN) – and all our awardees for their dedicated commitment to brain engagement, outreach and advocacy around the world.