

TReND Neuroscience Outreach

TReND's neuroscience outreach programme aims to increase public awareness of brain-related disorders and motivate young students and scientists in neuroscience.

We hope to introduce the field of neuroscience, aspects of brain diseases and why neuroscientists are needed in a society to primary, secondary and university students, young scientists and the general public.

This is particularly important as, despite the major contribution of brain-related disorders to morbidity and mortality across the globe, public education and awareness in disciplines such as neuroscience are not widespread in Africa. This is partly because there are very few trained and active neuroscientists in the region. Neuroscience remains almost completely absent from school syllabi.

How it all began

The idea of a dedicated outreach programme followed a talk by TReND volunteers during an [“A* Masterclass”](#) at Mbarara University, Uganda, in April 2013. This was an expert talk on “Neuroscience as a possible career option for secondary school students”, but it inspired us to develop further outreach events.

In June 2013, Nigerian TReND volunteers, in collaboration with volunteers from Gombe State University and Ahamdu Bello University, proposed a series of outreach events entitled “Neuroscience as a Career Option for Young Nigerian Scientists and Students” in the Nigerian states of Yobe and Gombe.

The outreach was originally designed for high school and university students but after the first event at Yobe Children's Academy we realised that high school teachers also had a very strong interest in the subject. Both students and teachers asked questions, some of which only future scientific discoveries could answer. Consequently, the second and third events at included both students and teachers.

All three of the events in the June 2013 series were highly commended, inspiring TReND to develop future outreach days.

Our outreach format

TReND's original outreach covered basic introductory lectures on neuroscience, recent exciting developments in neuroscience, neuroscience research models suitable for the nature of African research and the impact of neuroscience on law. We use video presentations, brain dummies and cardboard hand-drawn cartoon images. Dana Alliance were especially helpful in donating outreach materials to be distributed during the events.

Recently the outreach has evolved to also include a basic practical session. Backyard Brains' “Spikerbox” is employed to demonstrate simple electrophysiological techniques such EMG recording of the locust extensor tibiae.

Achievements so far

To date we have organised seven events, reaching over 800 students, teachers and scientists.

The largest of these was a 'mega outreach' in collaboration with the Nigerian Association for the Promotion of Education and Youth Development (APEYD), covered by Nigerian Television Authority (NTA) in the Nigerian city of Jos. Over 250 students and teachers from ten high schools in Jos were reached at once!

Next steps

Thus far, many Nigerian young students and scientists have been motivated into the neuroscience, and more volunteers are being recruited to take outreach events to other regions in Africa.