

**Report on the 8<sup>th</sup> Teaching Tools Workshop, Addis Ababa, Ethiopia  
Submitted by Sharon Juliano, PhD for the ISN**

The 8<sup>th</sup> Teaching Tools Workshop (TTW) occurred in Addis Ababa Ethiopia from September 17 – 22, 2015. The Workshop included 26 attendees who originated from 10 African countries including Ethiopia, South Africa, Burundi, Nigeria, Ghana, Kenya, Uganda, Democratic Republic of the Congo (DRC), Morocco, and Cameroon. All the participants were young faculty at their respective Universities; nine were women. As has been our custom since the initiation of these Workshops, we included a participant from a past Workshop to participate as faculty. This year, we asked Dr. Beatrice Bora from the DRC, who presented an excellent lecture on the neuromuscular junction. We were expertly hosted by Tesfaye Tolessa, chair of the Physiology Department of the University Addis Ababa, and Teketel Eritsu, a member of that department. Our faculty included Drs Jack Martin, Janis Weeks and Sharon Juliano from the USA, Evelyne Sernagor from the UK, Nilesh Patel from Kenya, and Amadi Ihunwo from Nigeria/South Africa.

We focused on “The Fundamentals of Neuroscience” presenting lectures, laboratories, and interactive activities. Many of the lectures and labs focused on the neurotransmitters involved in signaling processes related to nervous system function such as those involved with electrophysiological transmission, pain, the neuromuscular junction, and cerebellar function and dysfunction. Our workshop importantly included presentations on pedagogy and how to teach effectively. (A schedule of the program is attached.) An important aspect of the TTW is to strongly encourage learner centered teaching; several of our sessions include aspects of learning in groups and each session is interactive. We also recently integrated tools for learning and teaching neuroradiology and medical imaging. The participants leave with all the tools they were exposed to including lectures, interactive laboratories, resources for teaching, pedagogy, atlases, other materials and software (e.g., *Neurons in Action* for teaching and understanding electrophysiology).

We additionally had several sessions of organized discussion, which focused on a series of questions where the participants were arranged in groups. They then prepared formal presentations at the end of the Workshop on a range of issues related to teaching in Africa. These included items such as infrastructure, class size, learning and teaching styles, and corruption and prejudice. The TTW participants engaged in active discussion about these issues, as well how to integrate a program of Neuroscience into their curriculum, influence their heads of department, and motivate their students and colleagues. This year each group of students also presented on the best way to integrate what they learned in the TTW into their own curricula at their home Universities. So far we received several reports from this year’s participants indicating their plans to communicate and promote change at their home institutions.

The 8 TTWs have evolved and changed with each presentation. The course duration expanded from 4-6 days; more time would be welcome as the students always ask for longer sessions in their course evaluations. The number of sessions on “how to teach effectively” increased along with overall discussion sessions. The discussion sessions are now more structured as we present the attendees with specific questions to address and an order of progression. The overall scientific content of the Workshop is continually reviewed to include topics essential to understanding Neuroscience. This year we also included a presentation and discussion about curriculum design. The TTWs show a consistent process of change and growth by expanding and changing the curriculum, the activities of the students, and the growth of the faculty in learning how to be more effective and interactive teachers. This last feature is especially important as the faculty learn to approach teaching with new energy and new interactive skills.

The TTWs receive support from IBRO, and The Grass Foundation, and the International Society of Neurochemistry.

These are a few of the comments sent to us by the participants:

*The deep involvement, the visible enthusiasm and the unconditional commitment that we showed during the 8<sup>th</sup> TTW were clear evidence that our common desire is to contribute to the widespread of neurosciences in the world and in Africa in particular. This common goal is a dream that needs to be continued for more African university instructors to benefit from the Teaching Tools Workshop.*

*It is with great pleasure and humility that I really appreciate your ability towards making us a better NeuroScientist and Teacher. I promise to make the best use of what we were taught and materials given.*

*I am so grateful to you and other faculty for the opportunity you gave me. It's been a wonderful experience. I am so lucky to be part of this workshop and able to learn best practices of teaching neuroscience. I have genuinely enjoyed the experience of this workshop. You are really inspirations for me.*

*I wish to thank you once more for all the efforts and care you put in place for our training recently during the recent Teaching Tools Workshop in Ethiopia. Under your skilled leadership, we reviewed the Fundamentals of Neuroscience and the discussions were equally very educative. I am already applying the skills acquired in the bedside teachings and will start will include them in the classroom lectures as from next semester. Thank you very much and hope that more African junior faculty will benefit from this experience in the future.*

**Financial report:**

We received from the ISN:

\$10,000

These funds were spent on the airfare and rooming and board for our students. A statement of the individuals funded and the amounts are attached.

We also received funds from IBRO

\$11,120

These were spent of faculty airfares and local expenses on site in Ethiopia (such as copying and local transport).

Funds were also received from The Grass Foundation.

\$31,224

They provided support for the remainder of the participants' airfare, room and lodging, the hotel conference facility, additional local expenses, software and materials to distribute to the students, faculty lodging and goodbye dinner.

**Total**

**\$52,344**