

**REPORT OF IBRO VLTP NEUROSCIENCE COURSE,
LAGOS, NIGERIA
JULY 18-26, 2007**

**By
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Introduction

This VLTP course follows one given in Benin City in 2000. That course seemed to have been useful and successful to the instructors, to the faculty and, most important of all, to the students. Indeed, Prof Tony Ebeigbe, who had been the organizer at Benin, was sufficiently impressed and enthusiastic to propose a second Nigeria course to be held in Lagos. An overt sign of the success of the earlier Benin VLTP programme was that Prof Ebeigbe and his colleagues were able to set up an innovative BSc course that has proved to be extremely popular among undergraduate students wishing to study neurobiology.

What were the aims of this Lagos course? In Nigeria, there are more than 25 Federal and State medical schools. In those universities and medical schools, the students, their instructors, as well as the biologists and clinicians are keenly interested in finding out about recent advances in neurobiology at both fundamental and clinical levels. In countries like Nigeria, books, equipment and running supplies for experiments are difficult to come by because of the high cost. Hence, it is not easy to keep up with fields in which few experts are available with direct experience of newer techniques and new concepts, often difficult to grasp, that are being developed day by day. Another key feature of VLTP courses is that they provide an opportunity for establishing links that can help participants to pursue their further education abroad and to collaborate in future experimental projects. The timing of the Lagos course was particularly opportune since Prof Tony Ebeigbe had recently founded a new non-governmental organization, "GEIFON" (Global Educational Initiative for Nigeria), dedicated to increasing the interactions of Nigerian students working in USA and Europe with their colleagues at home. Lagos, for all the organizational difficulties in a huge city, seemed to provide the best location to ensure that students at different levels from different regions of Nigeria could attend.

Organizers and Faculty

The plan of the course was devised by Prof Tony Ebeigbe, a physiologist of distinction with a commitment to improving the teaching of neurobiology in Nigeria, and U.J. McMahan, who was later unavoidably prevented from taking part. His place was taken by J.G. Nicholls. The Deputy Vice Chancellor of Lagos University, Prof O.A. Sofola also provided essential help at every stage. Owing to a number of drastic last minute problems, the final group of instructors was four rather than five people: Alasdair Gibb (UCL, London, who generously agreed to come to teach at short notice), John Nicholls (SISSA, Trieste, Italy), Noreen Reist (UC Colorado, Fort Collins) and David Weisblat (UC Berkeley). Prof Tony

Ebeigbe selected students from all over Nigeria, arranged for their accommodation and for that of the faculty, provided refreshments and lunches for all participants, found a fine lecture hall with excellent facilities, and made sure that transport to and from the hotel ran efficiently. This achievement represents no trivial task in Lagos, but one fraught with difficulties and complications. From what I have seen in this course and in Benin, I strongly recommend that IBRO should make use of this dedicated scientist and organizer, especially since in addition to being so competent, Tony Ebeigbe has a delightful personality and a great talent for getting things done in extremely difficult circumstances with good humour and great skill.

Program

As in other VLTP courses, each day consisted of three main components :– five lectures, - informal conferences with small groups of students, - and tutorials to small groups on how to give a ten minute presentation. All lecturers attended every lecture and ran conferences and tutorials every day (with one day off on the Sunday). The topics covered reflected the interests and research experience of the teachers. Subjects included: cellular and molecular properties of channels, synaptic transmission, transmitter release, development of the nervous system, invertebrate neuroscience, synapse formation, visual system, sensory deprivation, integrative mechanisms, respiratory rhythmicity, spinal cord injury. Numerous other problems raised by students were discussed during conferences. A key feature of the course was the continual discussion of an issue of importance for Nigerian students, namely how to decide which university to go to for a PhD or post-doctoral position. At a dedicated session on the last day, an open forum was held to answer questions about funding, the choice of advisor, and the relative advantages and disadvantages of training in the USA and Europe. The complete program is attached.

Students

About 57 students attended from start to finish. Students came from interesting backgrounds: medical students, PhD students, lecturers, physiotherapists and senior university teachers from many different universities throughout Nigeria (see attached list of students). While on the first two days students tended to be shy, day by day they not only began to ask numerous questions after each lecture, but would actually interrupt during the lecture itself. Such questions often showed keen insight and imagination. (Two examples: in a lecture on development of the visual system in early life, one student asked what effect closure of the lids of one eye would have. Second, a student asked whether there were pathways comparable to magno and parvo in other sensory systems). A remarkable feature of this course was that a large number of students who voluntarily attended tutorials on techniques for presenting a ten minute talk at an open meeting. The student commits a major amount of time and effort by deciding to give a talk to the whole group on the last day of the course. At the end of the day, at 5.30pm, instead of going home, the tutorial takes an extra hour and on each day new problems in the presentation are set to be worked on for

the following day. Usually we get perhaps 20 percent of students wishing to undertake this exercise but in this case more than half of the students committed themselves and gave excellent talks. Another difference from many other courses was the large proportion of students who were already teachers of physiology, anatomy or biochemistry, who told us that the course had helped them to think in new ways about their teaching.

Evaluation

We have no objective criteria for measuring the success of our teaching. A measure of success is probably provided by the fact that numbers actually increased rather than decreased during the progress of this intensive and demanding course. A questionnaire distributed to students was returned with comments. We formed the opinion that students became seriously interested in the material we discussed with them and were keen to build on what they had learned. Many expressed the desire to attend laboratory courses in neurobiology in order to learn new techniques. An overt sign of the success of the earlier Benin VLTP programme was that Prof Ebeigbe and his colleagues were able to set up an innovative BSc course that has proved to be extremely popular among undergraduate students wishing to study neurobiology.

Conclusions

Courses such as ours seem to fulfill a real need for students and teachers working in Nigerian universities in which little money is available for research. The desire to contribute by doing research is passionate in young and old, in experienced and naïve students in spite of the difficulties. We hope that our efforts may open new lines of thought about what is possible and what pathways could be followed in their careers.

We are extremely grateful to the students for their keen dedication and unrelenting hard work and to Prof Tony Ebeigbe, for his selfless and skillful organization.