

REPORT ON ISN-CEAN SUPPORT FOR

ACURET ACTIVITY;

July 2018

Introduction

ACURET.ORG is a Multinational, Interdisciplinary professional organization promoting humane animal care and use for scientific purposes in developing countries through Training, Education and Forum. The ultimate aim is to instigate attitudinal change amongst those who handle lab animals in order to improve on the quality of the science they work upon for better outcomes. This report provides information on the support of the International Society for Neurochemistry Committee for Aid and Education in Neurochemistry (ISN – CEAN) for the training program of ACURET held in July 2018 in Lagos, Nigeria.

Activity: A 5-days Intensive Course/Workshop with Hands-on practical

Title of Activity: Essentials of Responsible Animal Experimentation: RANEXT Basics- Brain Tissue processing, Sectioning and Staining.

Dates and Venue: July 23rd -27th 2018; Nigeria Institute of Medical Research, 6 Edmund Crescent, Yaba, Lagos, Nigeria.

Course Consultant: Prof. FA Fakoya; **Course Administrator:** Dr. OO Aina; **Course Secretary:** Dr. Olusola Ajibaye

ACURET.ORG collaborated with the Nigeria Institute of Medical Research [NIMR] to implement the second edition of its ETHRANET Series of courses, the ETS 005, on Essentials of Responsible Animal Experimentation: RANEXT Basics, from Feb. 23rd – 27th 2018 at NIMR premises, Yaba, Lagos Nigeria and received additional support from the International Society of Neurochemistry Committee for Aid and Education in Neurochemistry (ISN-CEAN).

OUTCOME

The Five-days Intensive Workshop was facilitated by Prof. Francis Fakoya (Principal, ACURET.ORG), Dr Abdussamad M. Abdussamad (Bayero University, Kano), who stepped in for Dr. Cynthia Pekow (Seattle, USA), Dr Oluwagbemiga Aina (Senior Research Fellow, NIMR), and Stanley Izobo (Chief Lab Technologist, Benue State University College of

Health Sciences). Only 8 participants (out of the 26 online registered applicants) from various Institutions across Nigeria and NIMR could attend the course, including Lecturers, Clinicians, Research fellows, Postgraduate students, Research Assistants, and Lab Technologists. The Workshop was designed to facilitate a re-orientation of participants with regards to their perception about research using lab animals, humane principles and hands-on practical protocols, including animal restraining techniques, substance administration and sample collections, aseptic techniques and basic suturing techniques. A unique interjection in this training was the emphasis on the Nervous System morphological assessment with Lectures/demonstration on working with the rodent brain, from methods of euthanasia, whole body perfusion for in-situ fixation of the brain; stereological opening of the rat skull and extraction of the entire brain plus the olfactory lobe cranially and the brain stem caudally. Students were however not allowed to individually conduct this aspect of the labs for ethical reasons, being yet unskilled.

The main modules covered in the 5-day workshop include: Introduction to Responsible animal experimentation, Ethical issues in Animal Welfare and the 3Rs, Biomethodology of rodents, Animal care health and management, Occupational Health and Safety measures for working with lab animals, Analgesics, anesthesia and Euthanasia, The Rodent Brain; Microtechniques of Brain tissue processing and sectioning; Design of research protocol and projects, Scientific writing and reporting in Animal Experimentation. All presented lectures and practical notes were compiled in a 92-paged printed program manual provided to each participant, who also received personal protective equipment for lab sessions.

The Workshop involved study groups by participants, randomly distributed to collaborate on selected statement of problems. They worked at the end of each day to design experimentations suitable to answer the questions in addition to an Animal ethical committee role-play presentations, assessed by of the Course Faculty, Chaired by the Course Consultant. All participants passed the Course test and demonstrated confidence in their abilities

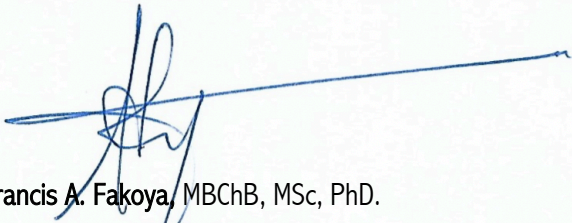
- to humanely hold and restrain the lab rat
- to administer substances as well as obtain blood samples from lab animals during the course,
- to score the welfare of a lab animal under husbandry in addition to understanding the principles of experimental design
- to extract an entire whole brain from a lab rat for morphological studies
- The use of the stereological mold for coronal sectioning was demonstrated with references to identifiable brain structures.

Course Planning

This event received support from the International Society of Neurochemistry Committee for Aid and Education in Neurochemistry (ISN-CEAN) to facilitate International speakers for the course and support for local participants. However only one of the speakers could make it to Lagos due to visa processing challenges, since both speakers were scheduled for presentations in a related ACURET Training Program, back-to-back at the University of Cape, Coast, Ghana. The cause for the low participation turned out be due to a conflict with new examination period taking place in many Institutions, after a prolong academic strike across the country. The few participants that attended reported this situation, who themselves were of the notion that the workshop would have been postponed, but turned up to check. They claimed to know many others who had indicated interest to participate in the workshop, however, with the resumption following the nation-wide academic strike, many were either administering (Academic staff) or sitting (students) examinations.

In summary, the participants were highly satisfied with the experience of the workshop and suggested a repeat of the same workshop before the end of the year 2018 in their feedback evaluation, to enable many others gain the benefits of the knowledge and skills they have acquired. ACURET is immensely grateful to ISN-CEAN for its significant contribution, which enabled improvement of the training program in many aspects, with an opportunity to offer travel support to at least fifteen (15) students to attend the next Workshop, early next year in Lagos from outstanding funds. We are also thankful for the continued contributions of NIMR for the workshop. The final program is provided as attachment together with various pictures from the workshop and list of participants.

The next Course is scheduled for Feb/March 2019 at the same venue.



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