



THE REPORT OF MY VISIT TO PROFESSOR M. MORELLI'S LABORATORY

The CAEN – ISN grants (Category 1A Visit by the applicant to another laboratory) was awarded to me on June 3, 2012, but I could not travel to Italy the same year due to the fact that I was awarded IBRO/SfN travel grant to attend the Neuroscience 2012 meeting in New Orleans, US and my new job at the Department of Anatomy, Afe Babalola University Ado – Ekiti (ABUAD), Ekiti State, Nigeria, in November of the same year.

At last, I got my VISA in November 2012 and I visited Professor Micaela Morelli's laboratory at the Department of Biomedical Sciences, University of Cagliari, Cagliari, Italy between 31th of January and 11th of March, 2013. This exposure allowed me to be trained in immunohistochemical practical procedure for the first time in my carrier as a student of Neuroscience/Anatomical sciences.

I was trained in theoretical and practical immunohistochemical and neurobehavioural procedures during this short period of my stay in the laboratory and I took part in most of the research going on in the laboratory during my stay. Most importantly I was trained on how to analyze slides using available software programs and to come out with statistical relevance data.

I also spent about three to four days at the microdialysis laboratories through which I learned how to implant microdialysis cannula into the rat's brain for *in*

vivo study. In addition to this, I visited the laboratory of Professor Saturnino Spiga at the Institute of Zoology of University of Cagliari for two days in which I was taught Golgi' method for histochemical staining and microscopy.

Above all, my host provided me with some male C57BL/6J mice, 10 months old (Charles River, Italy), in which I treated them with 3, 4-methylenedioxymethamphetamine (MDMA or 'Ecstasy') with the primary aim to examine the effects of this drug of abuse on the histoarchitecture of prefrontal cortex, hippocampus and striatum.

Animal treatment

They were divided into two groups (A and B) consisting of five (5) mice each. Mice in group A were treated with MDMA (4 X 20 mg/kg, 2 hr interval, i.p.) and group B served as control group, were given normal saline, i.p. Forty-eight (48) hours after the last vehicle or drug administration, mice were sacrificed by cervical dislocation and their brains weighed and fixed in 10% formol calcium for histological preparations.

Above all, I was able to talk with my Host University authority, through the assistant of my host professor, for possible collaboration with my University at home (ABUAD) which they agreed and gave me the draft of the collaboration agreement to be handed over to the Vice – Chancellor for the completion of the process. I hope we would be able to maximize this great opportunity with this citadel of learning with over a century experience.



Fig. 1: Philip Adeniyi at microscopes' room ready to snap photomicrographs of the prepared immunohistochemical slides.

Acknowledgment

I want to use this medium to acknowledge the International Society for Neurochemistry (ISN) for giving me the grant and Prof. M. Morelli for providing space for me in her laboratory amidst her tight schedule. I will not forget to say 'grazie' to the following people Prof. S. Spiga, Dr. Nicolas, Dr Lucia, Dr Valentina, Dr Valentino, Dr Alberto, Dr Maria, Flavia and Giulia for teaching and assisting me in the laboratory. I acknowledge the support of my school, Afe Babalola University, Nigeria for granting me permission to travel. Above all, I will not forget the contributions and support of my dear wife, Mrs. Adetola Adeniyi, for the success of my trip to Italy.