

**REPORT ON THE ISN\_CAEN AWARD (VISIT TO FOREIGN LABORATORY) TO IGADO,  
OLUMAYOWA OLAWUMI (2014)**

First, I wish to express my sincere gratitude to the ISN-CAEN Committee, for the award of \$4,000 (four thousand US dollars) granted me to visit a foreign laboratory in Würzburg, Germany, for 3 months.

I arrived in Würzburg on November 2, 2015, which was later than I had earlier planned due to visa issues.

My first course of work was bio-assay guided fractionation of the methanolic extract of *Moringa oleifera* leaves in Prof. Ulrike Holzgrabe's laboratory at the Institut für Pharmazie und Lebensmittelchemie Am Hubland, Würzburg, Germany. The bioassay (Ferric Reducing Antioxidant Potential- FRAP) was carried out in Prof. Helga Stopper's laboratory at the Institut für Pharmacologie und Toxicologie, Rudolf-Virchow-Zentrum, Würzburg, Germany. I was able to isolate a compound (and also elucidate its structure), which with the tests had a high anti-oxidative property.

After isolation and structure elucidation, I carried out cell culture assays in Prof. Helga Stopper's laboratory assessing the effect of the isolate on vanadium induced toxicity in HT22 cells (immortalised mouse hippocampal cells).

The ISN grant afforded me the opportunity to learn fractionation techniques, the use of the Preparative and Analytical High Performance Liquid Chromatography (HPLC) machine, the basics of Nuclear Magnetic Resonance (NMR) in structure elucidation, basic tissue cell culture techniques, the Glutathione assay using the Flow Cytometry, Dihydroethidium assay/stain (DHE), the Micronucleus test, the COMET assay and the use of a number of softwares in imaging and result analysis, which I otherwise would not have had the opportunity of learning.

I was also able to attend a workshop at the Institut für Pharmacologie und Toxicologie, on "Genomic Changes and Damage".

I am especially grateful to the ISN-CAEN for the grant, because apart from the techniques I was able to learn and the exposure I received, I was also able to meet other PhD students and Faculty members, which is a great advantage to me, for the purpose of future collaboration.

In all publications and presentations emanating from the work done, I shall acknowledge ISN, as earlier specified when the grant was awarded.

I left Würzburg, Germany on January 27, 2015.

Below are some pictures.



At the Preparative HPLC machine in Prof Holzgrabe's laboratory



In the Microscope Room in Prof. Helga Stopper's laboratory