

# SCIENCE EDUCATION WORKSHOP

## Newsletter

University of Sierra Leone, Fourah Bay College May 15 – 17 2013



### *Message from Professor Sahr Gbamanya*

**Bridget Bannerman-Chukualim** continues to be very helpful in a big way in the development of Science Education in Sierra Leone. Last year she organized very useful science quizzes among some secondary schools in the country. This year she facilitated science projects to be conducted by secondary school children the country. Each student originated his or her topic and conducted the project. These projects were displayed in the laboratories at the Fourah Bay College and closely examined by very senior lecturers from the College. The projects were classified as far above average.

A full set of desktop computer with accessories was donated to each participating school and cash prizes to each of the winners. Several computers and science equipment including laboratory coats were also donated to university of Sierra Leone. These activities were covered by various national news media. These annual events have never been carried out by any other person from the diaspora. We remain really very grateful to Bridget and we pray she obtains more funding to enable her continue this project. She is fondly appreciated in our institutions of learning.

### Science Fair/Education Workshop news 2013

Following the success of last year's science workshop, a Science Fair/Education workshop for Senior Secondary school students was organized at the University of Sierra Leone, Fourah Bay College on 15 - 17 May 2013.

The following were highlights of the workshop:

- ✚ Science Project Competition
- ✚ Practical Laboratory sessions
- ✚ Poster & Presentation designs
- ✚ Keynote Speech
- ✚ Prize Giving Ceremony

### Save the Date: Target participants: SS2

#### Proposal dates

**30 December 2014**  
Proposal for exhibiting scientific projects with real life applications.

#### Quiz dates

**April 2014**  
Science and Mathematics quiz competitions for SS2 students in Sierra Leone

#### Workshop dates

**April 2014**  
Science Fair/Education Workshop to inspire the next generation of scientists in SL



## Keynote Speeches

Professor Gbamanja, Deputy Vice Chancellor of the University of Sierra Leone, Fourah Bay College gave the opening and closing remarks of the workshop. Having re-established collaboration with the University of Durham, UK, Prof Gbamanja is keen for collaboration with the University of Cambridge.



Bridget Bannerman-Chukualim, a current PhD student of Lucy Cavendish College, University of Cambridge gave a presentation of the Cambridge in Africa programme describing the University's long-term goal of engaging with institutions of higher learning in Africa. She also gave a talk on DNA extraction preparing the students for practical demonstration in the laboratory.

## Mr S. Dumbuya, Registrar:

The registrar of the University of Sierra Leone, Mr S N Dumbuya, gave the vote of thanks. He described the participation of the government and institutions in Sierra Leone improving Science Education in Sierra Leone and thanked the various sponsors of the workshop for the cash prizes and miscellaneous equipment donated





Prof. Gbamanja awarding  
Methodist Boys High School  
1<sup>st</sup> position

### Scientific Projects

#### Biogas Project – Designed for Home Use

The First Prize position went to the Methodist Boys High School made of a team of 5 boys: David Squire, Santigie Sankoh, Alhaji A.M. Jalloh, David Koroma and Sahr Gobba. This team designed a Methane and Biogas digester with local materials to be used as a source of fuel for cooking, heating, producing light etc. The proposed project will enable Sierra Leoneans to use indigenous technology in their homes and communities with minimal cost. The supervising teacher, Mr. Ishmail dainkeh Kamara, won the Teacher prize award of a brand new laptop donated by the Jackson Laboratory, USA.

#### Design of a Prototype Car & a solar hat: Sierra Leone Grammar School

Other winning projects workshop include:

1. The Design of a prototype car with the use of locally sourced materials by Sierra Leone Grammar School (2<sup>nd</sup> Prize).
2. Demonstration of various prototypes of a solar cap to be used for charging mobile phones due to unstable electricity supply in the country (3<sup>rd</sup> Prize)

## Science Fair Competition

Practical demonstration of scientific principles in fields of Physics, Chemistry and Biology Secondary School Students in Sierra Leone as it relates to their environment.

### Participating Schools

- Albert Academy
- Annie Walsh Memorial School
- Methodist Boys High School
- King Fahad Islamic School
- Sierra Leone Grammar School
- St Josephs Convent
- Sierra Leone Muslim Congress



Methodist Boys High School  
1<sup>st</sup> position



Sierra Leone Grammar School  
2<sup>nd</sup> position



Mr Dainkeh Kamara, Methodist Boys High School receiving a desktop computer on behalf of participating school (left) & a laptop (right) donated by the Jackson Laboratory, USA.



Farmanga Ngobeh, volunteer administrator for the Science Education Workshops received a laptop to help co-ordinate future workshops locally.

Courtesy: Dr Cynthia Moore, Blundell Laboratory, Department of Biochemistry, University of Cambridge, UK.



All participating schools received a full desktop computer following the Science Education Workshop:

In addition all participating students received a lab coat and a complimentary maths set or calculator.



Students of Annie Walsh Memorial School observe microscopy techniques during the workshop. 2 Microscopes were received from the Medical Research Council (Nick Barry & Paul Loveday) and the Department of Pathology (Lucy Gardner), Cambridge for the Department of Biology, University of Sierra Leone.

# Launching of SLAWISE & a new Computer Laboratory



## The Launching of the Sierra Leone Association of Women in Science and Engineering (SLAWISE)

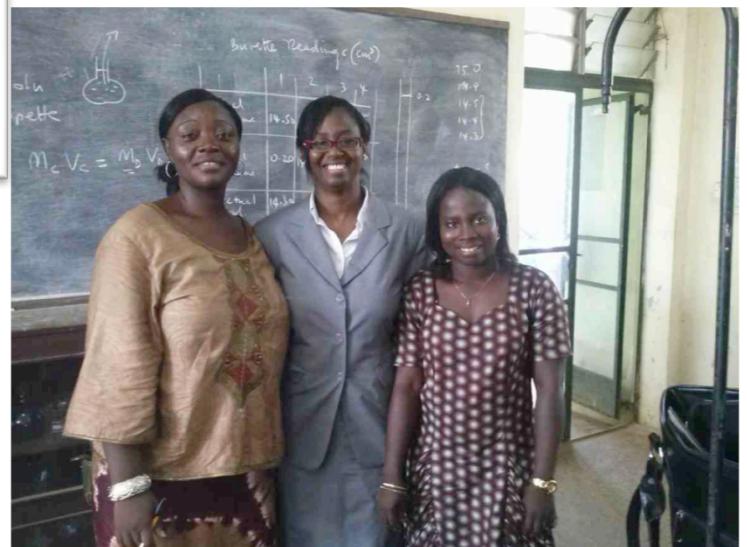
President: Fatmata Kaiwa  
 Secretary: Ms Sam  
 Treasurer: Isata Sesay  
 Patrons: Dr Ronnie Williams and Mr. Macaulay  
 Grand Patrons: Prof Gbamanja and Prof Kamara

### SLAWISE & Mentees



## The Launching of the Festus Bannerman Computer Lab

This is the first computer room to be set up at the Fourah Bay College, University of Sierra Leone. It is hoped that this will be used for training purposes, facilitation of workshops and online meetings with various collaborative partners in Cambridge, UK and in USA.



## Acknowledgements

The Science Fair/Education workshop 2013, Freetown, Sierra Leone was made possible by contributions and sponsorships from various sources:

- Cambridge-Africa Alborada Research Fund
- Biochemical Society, UK
- Marshall Aerospace and Defence Group, Cambridge, UK
- Medical Research Council, Cambridge, UK
- The Jackson Laboratory, Maine, USA
- Departments of Biochemistry, Pathology, Chemistry & Medicine, University of Cambridge
- Festus Bannerman Education Foundation
- Schlumberger Foundation, Faculty for the Future Programme

More details - <http://scienceresourcesafrica.com/>

## SLAWISE

The newly launched Sierra Leone Association of Women in Science and Engineering will play a key role in facilitating future workshops as well as mentoring young girls in science and engineering.