



**FACULTY OF CLINICAL SCIENCES**  
**COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS**



# **13<sup>th</sup> Annual Scientific Conference & Gathering**

## **THEME**

**Environmental Virology,  
Exposomics and Epigenetics**

## **VENUE**

Old Great Hall, College of Medicine,  
University of Lagos, Idi Araba,  
Lagos State

## **DATE**

WEDNESDAY 8<sup>TH</sup> JUNE 2016

## **TIME**

8.00 am - 5.00pm

• **PROGRAMME & BOOK OF ABSTRACTS** •

# PROGRAMME & BOOK OF ABSTRACTS

FACULTY OF CLINICAL SCIENCES,  
COLLEGE OF MEDICINE, UNIVERSITY OF LAGOS

## 13th Annual Scientific Conference and Gathering

*THEME*

**Environmental Virology, Exposomics and Epigenetics**

*SUBTHEMES*

**Non-communicable diseases: environmental and genetic influences  
Public health financing and resource limitation**

*CHAIRMAN*

**Professor Rahamon A. Bello**

Vice Chancellor, University of Lagos

*SPECIAL GUEST OF HONOUR*

**Dr. Olajide Idris**

Honourable Commissioner for Health, Lagos State

*GUEST SPEAKER*

**Professor Sunday Aremu Omilabu**

Professor of Virology  
College of Medicine, University of Lagos

**VENUE**

Old Great Hall, College of Medicine, University of Lagos, Idi Araba

**DATE:** Wednesday June 8<sup>th</sup> 2016    **TIME:** 8:00 am – 5:00 pm

**Conference website**

[www.cmulfcconference.com](http://www.cmulfcconference.com)



**COMPARATIVE ANALYSIS OF THE RELATIONSHIP OF ADMISSION HYPERGLYCEMIA TO SEVERITY AND 30-DAY OUTCOME IN ACUTE HEMORRHAGIC AND ACUTE ISCHEMIC STROKES AT THE LAGOS UNIVERSITY TEACHING HOSPITAL.**

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**Background and Objectives:** Admission hyperglycemia has been associated with greater stroke severity and poorer outcome in acute ischemic stroke (AIS). The relationship to intracerebral hemorrhage (ICH) is less consistent. The aims of the study were to compare the frequency of admission hyperglycemia in AIS and ICH, and determine the relationship to severity and short term outcome (case fatality) of AIS and ICH.

**Methods:** A cross-sectional comparative study of first ever computerized tomography (CT)-confirmed AIS and ICH presenting within 72 hours of symptom onset to the Lagos University Teaching Hospital, Lagos State was conducted. Hyperglycemia was defined as admission RBG  $\geq 140$ mg/dl). Stroke severity on admission was determined using the NIH stroke scale (NIHSS). Outcome was assessed as 30 day case fatality.

**Results:** The study recruited 85 AIS and 85 ICH. The mean age of stroke cases was  $59.0 \pm 11.4$  years. The frequency of admission hyperglycemia overall was 23.5% (AIS - 24.7% and ICH - 22.4%;  $p=0.72$ ). The frequency of elevated admission HbA1c in AIS (18.8%) was higher than in ICH (9.4%) ( $p=0.08$ ). There was a significant positive correlation between stroke severity (NIHSS score) and admission RBG in AIS ( $R=0.47$ ;  $p=0.0001$ ) but not in ICH ( $R=0.19$ ;  $p=0.08$ ). Hyperglycaemia was associated with a 30-day case fatality rate (CFR) of 42.5% in contrast to CFR of 24.6% in strokes with normoglycaemia. This difference was only significant in AIS (CFR 42.9% with hyperglycemia, 12.5% with normoglycemia;  $p=0.003$ ). In ICH CFR was 42.1% with hyperglycaemia and 36.4% with normoglycemia ( $p=0.65$ ).

**Conclusions:** Admission hyperglycemia is frequent in AIS and ICH and significantly correlates with severity of AIS but not of ICH. The effect of hyperglycaemia on CFR is more pronounced in AIS.

**Key words:** stroke, hyperglycaemia, ischaemic stroke, intracerebral haemorrhage, outcome