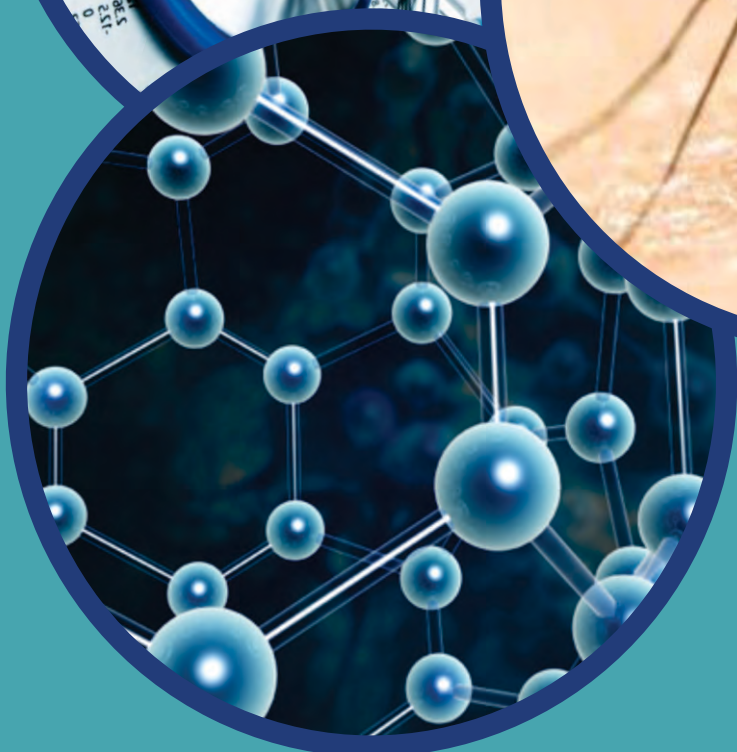




# NIGERIAN INSTITUTE OF MEDICAL RESEARCH



2016  
ANNUAL REPORT



**NIGERIAN INSTITUTE OF  
MEDICAL RESEARCH**



# 2016

## ANNUAL REPORT



...the foremost research Institute in Nigeria

**Edited by:**

Prof. Babatunde Lawal Salako  
Director-General / CEO

Produced by:  
NIMR ICT Unit

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**MUHAMMADU BUHARI, GCFR**  
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FEDERAL REPUBLIC OF NIGERIA



**PROF. ISAAC FOLORUNSO ADEWOLE**  
HONOURABLE MINISTER OF HEALTH  
FEDERAL MINISTRY OF HEALTH





**DR OSAGIE EHANIRE**  
MINISTER OF STATE FOR HEALTH  
FEDERAL MINISTRY OF HEALTH



**PROF. BABATUNDE LAWAL SALAKO**  
DIRECTOR GENERAL/CHIEF EXECUTIVE OFFICER  
NIGERIAN INSTITUTE OF MEDICAL RESEARCH

# CONTENTS

Director General's forward.....	8-9
Vision, Mission, Core Values.....	10
Organogram.....	11
Principal Officers of the Institute.....	12
Senior Management Committee.....	13
Honours & Awards.....	14
2016 Scientific Seminars.....	15
2016 Conference Communiqué.....	16-17
2016 Conference Photo speak.....	18-19
<b>Research Units &amp; Divisions</b>	
Biochemistry & Nutrition Division.....	20-21
Clinical Sciences Division.....	22-30
Human Virology Laboratory.....	31-33
Microbiology Division.....	34-39
Molecular Biology & Biotechnology Division.....	40-44
Public Health Division.....	45-50
<b>Non-Research Units &amp; Divisions</b>	
Administration Division.....	51-52
Internal Audit Unit.....	53
Clinical Diagnostic Laboratory.....	54-60
Finance & Accounts Division.....	60-63
Information & Communication Technology (ICT) Unit.....	64
Library & Documentation Unit.....	65-66
Monitoring & Evaluation Unit.....	67-68
NIMR Consult.....	69-71
Procurement Unit.....	72
Works & Maintenance Division.....	73-74
Institution Review Board (NIMR-IRB).....	75-81
Research Publications.....	82-84





## DIRECTOR'S GENERAL FORWARD

I am delighted to present to you NIMR 2016 Annual Report. This report provides narrative highlights of NIMR achievements and challenges during the year of 2016.

In the year under review, Nigerian Institute of Medical Research continues to improve on delivering the implementation of its mandate through strategic planning and implementation of research activities carried out by various research divisions, groups and units in areas of Malaria, TB, HIV/AIDS, Maternal Reproductive and Child Health, Non-Communicable Diseases (NCDs), Neglected Tropical Diseases (NTDs), Health System & Policy, Emergency and Preparedness Response, Immunology & Vaccinology.

In addition, NIMR has continued to contribute significantly to National Health Research brief for informed policy formulation and implementation of the Federal Ministry of Health. The Institute improved and increased its networking and collaboration with other health related organizations, federal and state ministries and agencies within the country.

The Institute has continued to create awareness to the Nigerian public on health promotion and disease prevention through regular Scientific Seminars, the commemoration of the World TB day, World Malaria day, World Hepatitis day, World Cancer day, and World HIV/AIDS day, as well as regularly engaging the media (both Print and electronic) to disseminate some of its research findings and their implication on public health.

The 7<sup>th</sup> Annual Scientific Conference with the theme “*Achieving Health-related sustainable development goals in Nigeria: the role of research and innovation*” was a huge success. A communiqué highlighting the outcome and recommendations of the conference is part of this report.

Furthermore, the Institute provided research support to Visiting Researchers, Research Fellows and scores of undergraduate from many Nigerian Universities across the country. During the year,

## DIRECTOR'S GENERAL FORWARD CONT'D

collaboration and partnership with several National and International Institutes, and International bodies continued to grow. All grants obtained in 2016 are included in the year report.

By mid-year in 2016, I took over the headship of the Institution sequel to my appointment as the substantive Director General and Chief Executive Officer of NIMR by the President and Commander-in-Chief of the Armed Forces, Major General Mohammed Buhari. It became imperative to mobilize the Senior Management committee on the importance of the need and decision to improve on NIMR strategic direction by convening a National Retreat in Abuja to **“reposition NIMR for its role in health research and national development in Nigeria”**.

I am very hopeful that in the year 2017, the Institute will witness many remarkable growth and achievements in the areas of research outputs, infrastructural development, finance and human resources management. The management will continue to improve on creating the enabling environment for research activities to thrive.

Finally, the commitment, dedication and support of management and staff of the Institute to health research, peace and tranquility necessary, as we strive to consolidate on our activities and achievements in the coming year is highly appreciated.

God bless the NIMR family,

God  ublic of Nigeria.

Professor Babatunde Lawal Salako  
MBBS(Ib), FWACP, FRCP (Edin), FRCP (Lond), MNIM  
Director General / CEO  
**Nigerian Institute of Medical Research**

# About Us



## Vision

To be an institution of excellence in basic, applied and operational research for the promotion of National Health and Development in Nigeria

## Mission

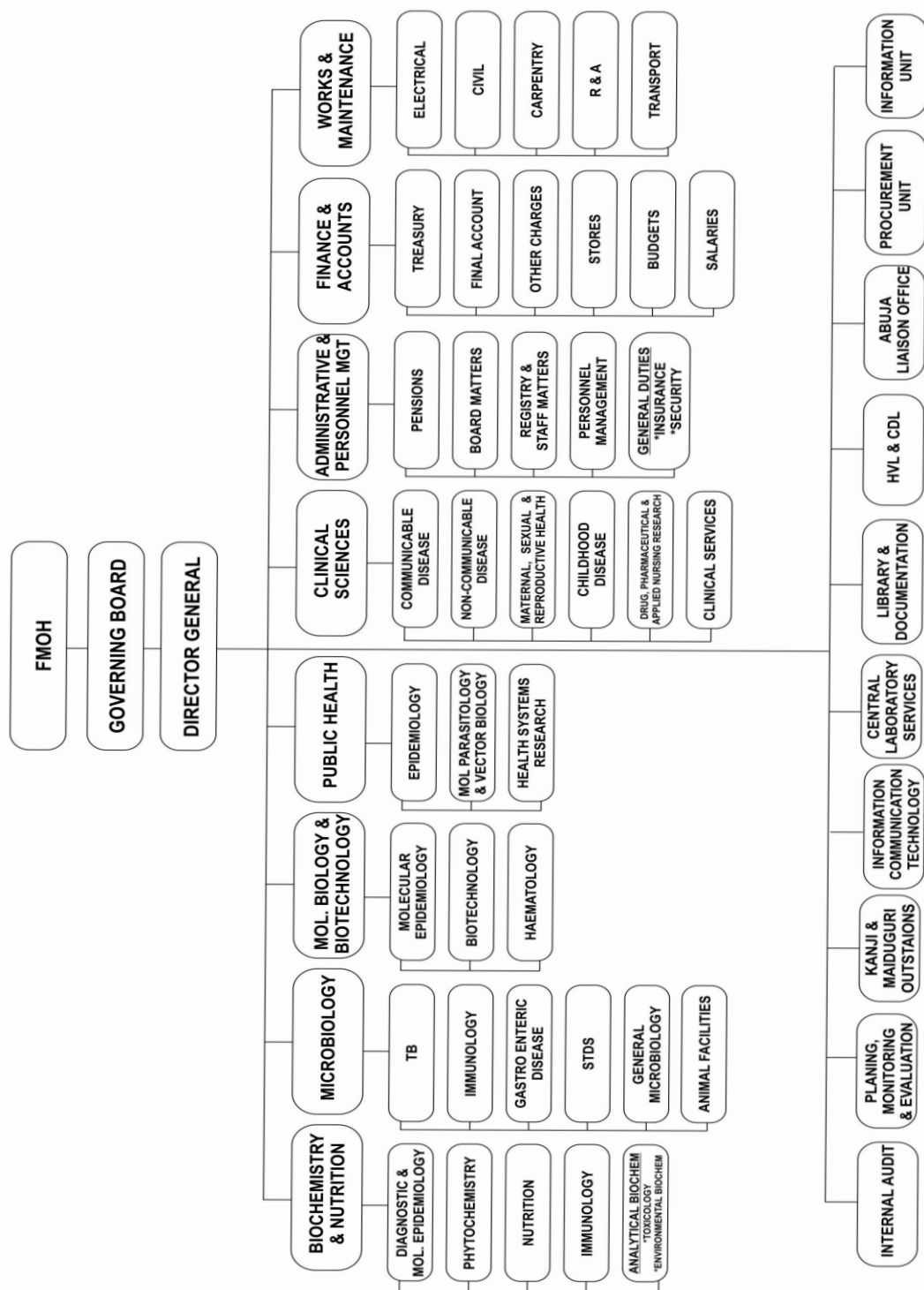
To conduct research into diseases of public health importance in Nigeria and develop structures for the dissemination of research findings while providing the enabling environment and facilities for health research and training in cooperation with the federal and state ministries of health and in collaboration with universities, allied institutions and organized private sector nationally and internationally

## NIMR Core Values

- Honesty, Integrity
- Leadership
- Excellence
- Respect, Fairness, Dignity
- Teamwork, Innovation
- Relevance
- Handwork
- Fair Reward and Recognition
- Accountability and Transparency
- Communication: Internal and External
- Equity

## OUR ORGANOGRAM

### NIGERIAN INSTITUTE OF MEDICAL RESEARCH ORGANOGRAM



## PRINCIPAL OFFICERS

Prof. Babatunde Lawal Salako	Director - General / CEO
Alh. A.S. Yunusazazzau	Director of Administration
Dr. (Mrs.) N.N. Odunukwe	Director of Research (Clinical Sciences Division)
Mr. F. Osagiede	Deputy Director & HOU (Internal Audit Unit)
Mr. S. T. Abolarinwa	Deputy Director, HOU (Library & Documentation)
Engr. E.O. Adedeji	Deputy Director & HOD (Works & Maintenance)
Mr. Y. Ogaji	Deputy Director, Ag. HOD (Finance & Account)

## SENIOR MANAGEMENT COMMITTEE

Prof. Babatunde Lawal Salako	Director-General / CEO
Dr. (Mrs.) M.A. Mafe	Director of Research (Public Health Division)
Alh. A.S. Yunusazazzau	Director of Administration
Dr. (Mrs.) N.N. Odunukwe	Director of Research (Clinical Sciences Division)
Dr. (Mrs.) S.I. Smith	Director Research (Molecular Biology & Biotechnology Division)
Dr. (Mrs.) O.P Akinwale	Director of Research (Neglected Tropical Diseases)
Mr. F. Osagiede	Deputy Director & HOU (Internal Audit Unit)
Mr. S.T. Abolarinwa	Deputy Director & HOU (Library & Documentation Unit)
Dr. Oliver C. Ezechi	Deputy Director & HOD (Clinical Sciences Division)
Dr. T.S. Awolola	Deputy Director & HOD (Public Health Division)
Dr. (Mrs.) R. Audu	Deputy Director & HOD (Human Virology Laboratory Unit)
Engr. E.O. Adedeji	Deputy Director & HOD (Works & Maintenance Division)
Mr. Y. Ogaji	Ag. Director & HOD (Finance & Account Division)
Dr. S.M.C. Ezeugwu	Chief Research Fellow & HOD (Microbiology Division)
Mrs. N.M. Otunoye	Chief Medical Laboratory Scientist/HOU (Clinical Diagnostics Laboratory)
Dr. (Mrs.) A.Y. Olukosi	Chief Research Fellow & HOD (Biochemistry & Nutrition Division)
Dr. B. A Iwalokun	Chief Research Fellow & HOD (Molecular Biology & Biotechnology Division)



## HONOURS & AWARDS IN 2016

- **Long Service Award**

Mrs. Q.M Aderounmu

Mr. M.I Ezerendu

Mr. S. Adekoya

- **Best Staff award 2015**

Senior Category- Mrs. E.C. Herbertson

Junior Category- Mrs. A.T. Asemota

- **Stakeholder's Award**

Sysmex Partec

- **Media Distinguished Reporter Award**

Mrs. Chioma Umeha - Independent Newspapers, Lagos

- **Young Scientist Award**

Miss Ifeoma Idigbe

- **Past Chairmen of Scientific Conference Committee Award**

Dr. Samson Awolola

Dr. Oliver Ezechi

## 2016 SCIENTIFIC SEMINARS

S/N	PRESENTER / RESEARCH GROUP	TITLE	DATE
1	Dr. Greg Ohihoin & Mrs. F.A. Ige	An update of lassa fever outbreak in Nigeria	January 13, 2016
2	Prof. S.A. Omilabu Dr. Greg Ohihoin Dr. O.B. Salu Dr. T.S. Awolola	Presentation on Zika Virus	February 25, 2016
3	Mr. Solomon Abiola Research Associate University of Rochester, New York NTD Group	Node: infectious disease tracking using smartphones, Nigeria Ebola case study and application to lassa fever and zika virus	March 9, 2016
4	Mrs. F. Ige & Fire Safety Prevention Unit, Lagos State EPR Group	Fire Emergency preparedness	March 23, 2016
5	Dr. Agatha Wapmuk MaRCH Group	The changing trend and pattern of sexual assaults: a ten year experience at NIMR, Lagos	April 13, 2016
6	Dr. Rosemary Audu TB/HIV Group	HIV drug resistance and implications for optimizing antiretroviral therapy: preliminary findings	May 25, 2016
7	Dr. Agatha N. David Clinical Science Division	Health Awareness	June 22, 2016

# 7TH ANNUAL SCIENTIFIC CONFERENCE

## THE COMMUNIQUE

The Nigerian Institute of Medical Research hosted researchers within and outside the Institute on her 7<sup>th</sup> Annual Scientific Conference from 6<sup>th</sup> to 10<sup>th</sup> November, 2016. The highlights of the conference were; pre-conference workshop on Scientific paper writing 6<sup>th</sup>-7<sup>th</sup>, main conference 8<sup>th</sup>-10<sup>th</sup> and the 6<sup>th</sup> distinguished lecture series which was titled *"That she may survive and bring forth an AIDS-free generation"*. The conference over the years has been a platform for researchers to disseminate their research findings, showcase their research activities and network for collaborations.

The Conference Theme: **"ACHIEVING HEALTH-RELATED SUSTAINABLE DEVELOPMENT GOALS IN NIGERIA: THE ROLE OF RESEARCH AND INNOVATION"**

has the following Sub-Themes:

- Innovative Diagnostics in the Treatment of HIV, Tuberculosis and Malaria.
- The Re-emergence of Viral Haemorrhagic Fevers in West Africa.
- Improving Maternal and Child Health using Skilled Attendants at Childbirth: the Role of Evidence.

The Conference had both local and international participants with a total of 32 participants at the pre-conference workshop, 167 registered participants at the main conference, and 320 people at the 6<sup>th</sup> Distinguished Lecture. The participants at the conference included representatives of the Federal Minister of Health, Lagos State Commissioner for Health, and others were from:

- Research institutions
- Universities (federal, state and private)
- Federal and Lagos State Ministries of Health
- National Academy of Science
- Registration Councils in the Min of Health
- National and International Donor Agencies
- Industries (Pharma and Diagnostic, etc.)
- Members of the Press

## TECHNICAL AND INTERACTIVE SESSIONS

These sessions involved plenaries, keynote speakers, oral and e-poster presentations, round table and symposium discussions.

### Highlights from the sessions

- Emphasis was placed on the importance of research in national development and a vital channel through which information can be obtained to help make decisions that are effective, appropriate and timely.
- The need to strengthen the Health Systems in order to achieve the Sustainable Development Goals (SDGs) in Nigeria and ultimately achieve universal health coverage. It was recommended that the health system in Nigeria should not only ensure healthcare delivery and prevention, but should also include health equity to promote human dignity and rights. NIMR however, is playing an active role in fulfilling Goal 3 (Good Health and Well-being) of the SDGs.
- Building research capacity in Nigeria would pave way for innovations in raising standards in health care delivery.
- Multidisciplinary approach to research is an ideal platform for the development of innovative ideas. Collaborative efforts across research agencies, shared limited infrastructure and cost-effective studies should be encouraged across all spectrum. This would involve multidisciplinary research and collaboration with industry and communities which requires a certain mindset, openness, trust and integrity and team work which are essential for effective research. However, for effective team work, it is important that the team adopts dialogue as a means of communicating/resolving issues rather than debating and as well establish a memorandum of understanding before the onset of a group research.
- There is need for increased advocacy in education and economic empowerment for the girl child and women of reproductive age group to enable them make appropriate choices for their health and that of their children.
- A rise in the incidence of sexual assault in our environment has been noted. Males are increasingly being assaulted while female victims are still in the majority.

### THE COMMUNIQUE CONT'D

- NIMR has played vital role in the management of TB/HIV over the last 15 years.
- NIMR has a Mother to Child Transmission (MTCT) of HIV rate of less than 1% which is comparable with the best practices in the world.
- Delayed switching of HIV infected patients who are adherent to antiretroviral treatment (ART) has led to increase in development of HIV drug resistant mutations.
- While AIDS related events continue to be a major source of mortality among HIV infected individuals, it is however important for clinicians to be aware of other underlying non-HIV-related conditions. It is suggested that these conditions should be aggressively screened for, monitored and treated.
- Intestinal parasites such as *Giardia lamblia* and *Entamoeba histolytica* were found to be more prevalent among HIV infected patients and constitutes potential opportunistic infections with attendant increased morbidity and mortality.
- Despite a fairly good uptake of contraception, unplanned pregnancy rate is high among HIV positive adults.
- Loss to follow up is common in programs directed at prevention of mother to child transmission of HIV in Nigeria. There is therefore a need for innovative and effective counselling techniques especially during PMTCT services to curb the trend.
- HIV infected adolescents had significantly lower growth parameters and delayed pubertal development than their HIV uninfected counterparts.
- Women were found to present to clinic at earlier stages of TB infection, than men. The uptake of the use of Isoniazid for prevention of TB (IPT) is still low in Nigeria.

### **Recommendations**

- There is need for more research to validate the effect of insecticide resistance, and also identify other cost-effective compounds that can be used as insecticides.
- Effective vector control is required to sustain the gains made against malaria.
- The Nigerian government should take absolute control of the national HIV response as well as invest in research and innovation.
- Identify the causes of disconnect between contraceptive awareness and uptake. This will help to address the issue of unplanned pregnancies and contribute to the reduction of HIV transmission in adult and paediatric populations.
- Growth and pubertal development should be routinely assessed in adolescents living with HIV to aid timely detection of problems and institution of appropriate corrective measures.
- There should be continuous monitoring and evaluation, and implementation of appropriate policies to sustain achieved gains made in health care.
- Nigeria needs to improve the practice of performing autopsy on the dead.
- There is a need for the Federal Ministry of Health (and other stakeholders) to provide copies of the Standardized Treatment Guidelines to all health facilities and put in place strategies that will ensure compliance.
- More than 50% of NIMR's budget should be used on research.
- Commitment to achieving the SDGs by the target year of 2030 should be priority.



**Dr. Titi Gbaja-biamila**  
Rapporteur Coordinator



**Rosemary Audu**  
Chair, Conference Organizing Committee

## BIOCHEMISTRY & NUTRITION DIVISION



Dr. Y.A. Olukosi

The Biochemistry and Nutrition Division conducts research to provide information on the relevance of biochemistry and nutrition in the pathogenesis, treatment, prevention and control of communicable and non-communicable diseases of public health importance in Nigeria. Biochemistry, nutrition, natural product development, phytochemistry, pharmacology, immunogenetics, immunology and animal models of diseases are some areas of interests of researchers within the Division. In the year 2016, staff of the division responded commendably to calls for grant proposals and several other research oriented opportunities which is a sign of improved commitment to capacity building for institutional development. Dr. Iwalokun BA, was transferred to Molecular biology & Biotechnology division, as the Head of Division. Another senior member of the division, Dr. Olukosi YA who was the HOD, proceeded on one-year sabbatical leave at the University of Lagos in 2016. The division was unable to hold the annual Malaria microscopy training due to inadequate funding from the government.

### Staff

Dr. O.O. Aina	Senior Research Fellow /AgHOD
Dr. K.N. Egbuna	Chief Research Fellow
Dr. Y.A. Olukosi	Chief Research Fellow
Mr. O. Ajibaye	Research Fellow II
Mr. A.B. Orok	Research Fellow II
Mrs. C. Oparaugo	Chief Med. Lab Scientist
Mr. Iniobong Essien	Principal Med Lab Scientist
Mrs. T.U Usen	Senior Secretariat Assistant I
Mr. E.E Adenu	Clerical Officer II

### Research Activities

Research activities in the Division are anchored within the different research areas of the Institutes. Each Research Fellow is a member, and

participates in research activities at of the various research groups. There are two PhD students whose research activities are domiciled within the Division.

### PhD Research Study

**Polymorphisms in *p.falciparum* apical membrane antigen-1 (ama1) and reticulocyte binding protein homolog 5 (pfrh5) genes in relation to malaria outcomes in Nigerian children towards effective vaccine development.**

Ajibaye O, Osuntoki, Ebuehi, OAT, Iwalokun, BA

### Immunobiology of Babesia with Plasmodium Co-infection

Orok, AB, Oyibo WA

### Grants

**WHO/TDR small grants - Improving adoption and use of malaria RDTs & ACTs for effective case detection and treatment: achieving high results based treatment using community health workers towards pre-elimination**

Principal Investigator: Mr. Ajibaye Olusola

**WHO/TDR-Understanding the impact of insecticide resistance on the efficacy of IRS and LLIN in 3 ecological settings of Mali, Benin and Nigeria.**

Principal Investigator: Dr. T.S Awolola  
Co-Investigator: Dr. Y.A Olukosi

### Conference / Workshops / Training

Aina, OO 2<sup>nd</sup> NIMR International Scientific Conference. Nov 8<sup>th</sup> -10<sup>th</sup> 2016

Olukosi, YA 2<sup>nd</sup> NIMR International Scientific Conference. Nov 8<sup>th</sup> -10<sup>th</sup> ,2016

Ajibaye, O International Lecture on Molecular biology and bio-informatics. June, 2016.

Ajibaye, O University of Lagos, College of

## BIOCHEMISTRY & NUTRITION DIVISION CONT'D

Conference. Nov 8<sup>th</sup> -10<sup>th</sup>, 2016

Orok, AB International Lecture on Molecular biology and bio-informatics June, 2016.

Orok, AB University of Lagos, College of Medicine, Idi-Araba.

Orok, AB 2<sup>nd</sup> NIMR International Scientific Conference. Nov 8<sup>th</sup> -10<sup>th</sup>, 2016

### Sabbatical Leave

Dr. YA Olukosi is on sabbatical leave to the University of Lagos.

### Students Portfolio

A total of sixteen (17) students on Industrial Training Programme from various tertiary Institutions from across the six (6) geopolitical zones were trained in the Division in 2016.

Miss. Obodoekwe S. Oge	Nnamdi Azikwe University
Miss. Agbo Ngozi N	Federal University Ndufawke Ikwo
Mr. Akano Peter A	Bowen University
Miss. Oluwafemi O. A	University of Ilorin
Mr. Matthew Jeffrey J	University of Lagos
Miss. Dosunmu Olabisi S	University of Lagos
Mr. Ugwu Emmanuel T	Lautech Ogbomoso
Mr. Esuola Samuel O.	University of Lagos
Mr. Okafor Odinaka D	Federal University of Technology, Owerri
Miss. Emeahu Ifeoma J.	Federal University of Technology, Owerri
Miss. Atoyebi Biola	University of Lagos
Miss. Unogu C. Joyce	University of Lagos
Mr. Olawale Akinkunmi	University of Lagos
Miss. Ayanwale Oreoluwa	University of Lagos
Miss. Arashi Amina O.	University of Lagos
Mr. Olatungi Mustapha O	University of Lagos
Miss. Adelagun Martha W.	Federal University of Agriculture, Abeokuta (FUNAAB).





Dr. Oliver C. Ezechi

Clinical Sciences Division has made remarkable progress since its creation 12 years ago. We therefore look forward to the opportunity like this to showcase what the youngest Division in the Institute has become. It is now affectionately referred to as the youngest and the best. Highlighting how it has made the best use of the very meager resources available to it.

For us at the Clinical Sciences Division (CSD) the year 2016 will remain an important years for us all because of a number of land mark events. Firstly, the year marked the end of an era and beginning of another, as there was a change of leadership in the Institute. An erudite Professor of Medicine and immediate past provost of College of Medicine , University of Ibadan, Professor Babatunde Lawal Salako, took over the mantle of leadership from Professor Innocent Achanya Ootobo Ujah, mni, Professor of Obstetrics and Gynaecology. Both being senior medics primarily belong to the CSD. The Division lost one staff and gained another back. Secondly, the year 2016 marked the end of the first strategic plan (2011-2016) of the institute. This report is not only an annual report, but a review of the last 5 years. Lastly, we parted ways rather reluctantly because we had no choice in the matter with our long time strategic partner and collaborator – APIN Public Health Initiative. This followed the directive from the Office of Global AIDS Coordinator (OGAC). APIN did not give us fish but thought us how to fish. We shall remain eternally grateful.

The Division has continued to conduct operational research in addition to the comprehensive care given to patients enrolled in the HIV and TB programmes. Research activities conducted in the Division were

showcased and disseminated at various the 7<sup>th</sup> Annual Conference of the Institute in which the Division produced the best Young Researcher of the year 2016 (MS. Ifeoma E. Idigbe), in addition to the awards for best oral scientific presentations (Dr. Tosin Odubela- Non-Communicable disease track and Dr. Adaobi Okechukwu –HIV/TB track) and best staff Junior category (Mrs. TAAsemota).

The 6<sup>th</sup> Distinguished Lecture series of the Institute was delivered by a researcher in the Division (Dr. Oliver C. Ezechi, the Head of Division). The lecture was titled “That She May Survive and Bring Forth an AIDS-Free Generation”.

The Division has had tremendous support from its major collaborator and partner of several years whose contributions have impacted on our achievements so far. This year, the Implementing Partner (APIN) that has supported the HIV/AIDS programme since inception was changed. Family Health International (FHI 360) is replacing APIN and we hope it will fit into the big shoes of their predecessor. Though the transition process is still ongoing and would require major readjustments and reorganization we are hoping to weather any challenges that might come with this change and still wax strong as a team.

I take this opportunity to thank the division unit heads and staff for their support, hard work and dedication. I know I did stretch you all, but be consoled that the reward for hard work is more work, meaning that you are making genuine contribution to research and national development. The number of lives you saved in 2016 and in the last decade is beyond imagination. Together we have enrolled over 25,000 HIV positive

## CLINICAL SCIENCES DIVISION CONT'D

patients in our programme, with a loss to follow of rate of less than 20% and mortality rate of 3.3%. You are simply the best. Our programme has become unarguably the largest HIV programme in the south of Nigeria and one of the largest in the country.

I am pleased to present the division annual report for the fiscal year 2016, which is a summary document highlighting the division activities, progress, challenges and projections for 2017. The year 2016 has been eventful, fulfilling and froth with significant changes and achievements.

Finally, I hope that this report will be of great help in strengthening the research activities, training and clinical services of the Division. I also hope it will provide information for all those who are interested in research, training and service for national

development.

The Division is structured into three broad sections of Research, Programme Support and Projects, Clinical and Laboratory Services. There are 9 subunits (Clinical, Admin., Medical Records, Data Management, Counseling, Pharmacy, DOTS, Nursing and Accounts) each with a unit head that reports directly to the Head of Division. The Division also work very closely with Human Virology Laboratory (HVL) and Tuberculosis reference laboratory. Both Laboratories provides laboratory support for our HIV and TB programmes respectively.

The Division has a total of 72 staff in the year under review. This staff is support by adhoc staff of project staff (4), Youth corps members (9) and volunteers (15). The Research Fellows and head of the units are shown in the table below;

### Administration

#### A. Research Fellows

##### Non communicable Disease Research

1. Professor Babatunde L. Salako
2. Dr. Nkiruka N. Odunukwe
3. Dr. Paschal Ezeobi
4. Mrs. Sabdat O. Ekama

##### Maternal and Reproductive health Research

1. Dr. Oliver C. Ezechi
2. Dr. Aigbe Greg. Ohiohoin
3. Dr. David A. Oladele
4. Dr. Chidinma V. Gab-Okafor
5. Ms. Ifeoma E. Idigbe

##### Child and Adolescent Health Research

1. Dr. Agatha N. David
2. Dr. Titilola Gbajabiamila
3. Dr. Agatha E. Wapmuk

#### Infection and Infestations

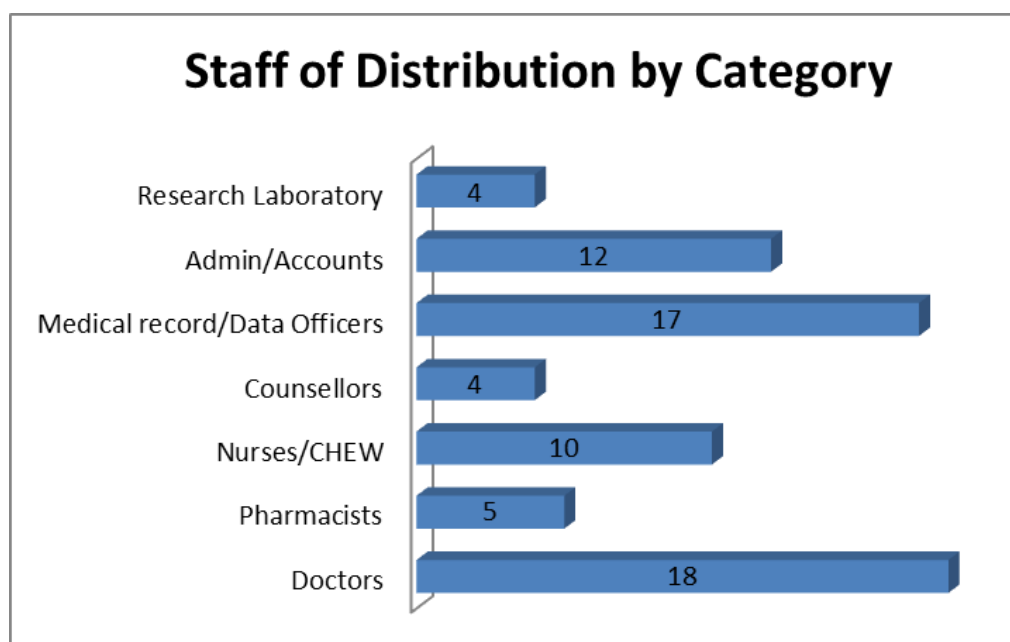
1. Dr. Dan. I Onwujekwe
2. Mrs. Jane Okwuzu

#### B. Administrative/Unit Heads

1. HOD: Dr. Oliver C. Ezechi
2. Research Coordinator: Dr. Agatha David
3. Training Coordinator: Dr. A.G. Ohiohoin
4. Site Coordinator : Dr. Paschal Ezeobi
5. Pharmacy: Pharm Ebieri Herbertson
6. Nursing Unit : Mrs. Eva Amadi
7. Counseling Unit: Ms. Ifeoma E. Idigbe
8. Medical Records: Mrs. Enejoh
9. DOTS Clinic: Mrs. Rita Nwosu
10. Data management: Mrs. Olayemi Nwogbe
11. Research Laboratory: Ms. Jane Okwuzu
12. Depart. Secretary: Mrs. Maria
13. HIV Clinic Admin. Sec: Mrs. T. Asemota
14. Finance unit : Mr. Chinedu Okolo

## CLINICAL SCIENCES DIVISION CONT'D

The breakdown of the staff in the division by category is as follows:



### Training

To achieve the goal of maintaining highly trained and competent staff in various disciplines, the Division encourages and supports staff to acquire additional relevant training necessary for career

progression. It also accommodates internship training; youth service program, residency as well as training of researchers in area of competencies.

### Postgraduate Training

S/N	Name of staff	Type of Programme	Specialty	Status
1	Dr. David Oladele	FMCPH	Public health	Ongoing
2	Dr. Chidinma Gab-Okafor	FMCPH	Public health	Ongoing
3	Mrs. Jane Okwuzu	PhD	Parasitology	Completed
4	Dr. Priscilla Ezemelue	PhD	Zoology	Ongoing
5	Mrs. Sabdat Ekama	PhD	Pharmaceutics	Ongoing
6	Mrs. Ebiere Herbertson	PhD	Clinical Pharmacy	Ongoing

## CLINICAL SCIENCES DIVISION CONT'D

### Youth Service Programme

S/N	Name	Designation	Programme
1	Dr. Joshua Jegede	Doctor	NYSC
2	Dr. Oluwafemi Ebekura	Doctor	NYSC
3	Dr. Chikodi Nebuwa	Doctor	NYSC
4	Mr. Olasubomi Lawal	Pharmacist	NYSC
5	Mrs. Abimbola Aina	Pharmacist	NYSC
6	Mrs. Janet Adegbola	Pharmacist	NYSC
7	Ms. Lilian Ilozumba	Pharmacist	NYSC
8	Mrs. Patience Ijoga	Psychologist	NYSC
9	Ms. Eberechukwu Ogunedo	Public Health Technologist	NYSC

### Research

Research activities conducted in the Division are of two category; Research work initiated by the Division or staff of the Division and research work initiated by other Division in institute or other Institutions. In each of these research activities we

bring to bear the multi-disciplinary nature of the Division. The research activities that the staffs of Division were involved in 2016 are shown in table below.

Research Unit	Title of Research work	CSD Staff involved
<b>Non communicable Diseases</b>	Multi-centre evaluation of sudden death in adult Nigerians	Drs. Odunukwe, Odubela, & Wapmuk.
<b>HIV/TB</b>	<ol style="list-style-type: none"> <li>1. HIV Drug Resistance study.</li> <li>2. Utility of telephone and SMS reminder on adherence to ARVs in adolescents living with HIV in Lagos.</li> <li>3. Role of Primary Isoniazid prophylaxis in prevention of TB.</li> <li>4. Determinants of Mortality in HIV/AIDS</li> </ol>	<p>Drs. OC Ezechi, Dr. ZA Musa Drs. David, Gbajabiamila, Wapmuk, Odubela &amp; Olojo</p> <p>Dr. TA Gbajabiamila, Mrs. SO Ekama, Dr. DI Onwujekwe and Dr. OC Ezechi Dr. PM Ezeobi, Dr. OC Ezechi</p>
<b>Maternal and reproductive health</b>	<ol style="list-style-type: none"> <li>1. Malaria and HIV co-infection</li> <li>2. Sickle in pregnancy</li> <li>3. Toxoplasmosis in Pregnancy</li> <li>4. Cytomegalovirus infection in pregnancy</li> <li>5. Sexual and reproductive health challenges of internally displaced persons</li> <li>6. Loss to follow up and determinants in a PMTCT programme</li> </ol>	<p>Dr. OC Ezechi, Mrs. Bukky Adetunji Dr. AG Ohihoin, Dr. OC Ezechi Dr. OC Ezechi Dr. OC Ezechi,</p> <p>Dr. Ohihoin, Mrs. Herbertson, Ms. Idigbe.</p> <p>Dr. Wapmuk, Mrs. SO Ekama , Dr. Ezechi</p>
<b>Child and Adolescent Health</b>	<ol style="list-style-type: none"> <li>1. Prevalence and factors associated with intestinal worm infestation in children with HIV</li> <li>2. Community survey of causes of childhood mortality in Nigeria.</li> <li>3. Growth and sexual maturation of children living with HIV in Lagos</li> </ol>	<p>Drs. OC Ezechi, David, Wapmuk, Okwuzu</p> <p>Drs. David, Gbajabiamila, Odubela, Mrs. Herbertson &amp; Ms. Idigbe Drs. David, Odubela, Gbajabiamila, Mrs. Herbertson, Ms. Idigbe</p>

## CLINICAL SCIENCES DIVISION CONT'D

1. **Ezechi OC.** 56th Annual Scientific Conference of the West African College of Surgeons, 14 – 20<sup>th</sup> Feb. 2016 Yaounde Cameroun.
2. **Ezechi OC.** HIV Research Prevention Conference in Chicago, IL. United States of America 17 – 21 October 2016.
3. **Ezechi OC.** Assisted Reproductive Technology in HIV and Hepatitis B infected couples. 6<sup>th</sup> Annual AFRH International Conference. Organized by the Association for Fertility and reproductive Health 28 -29<sup>th</sup> September 2016.
4. **Ezechi OC.** 2016 Annual Bioethics Forum in Nigeria organized by New HIV Vaccine and Microbicide Advocacy Society (NHVMAS) and the Bioethics Society of Nigeria (BESON). 13th of December, 2016. Abuja Nigeria.
5. **Ezechi OC.** 1<sup>st</sup> The National HIV Prevention Conference organized by National Agency for the Control of AIDS. 29-30<sup>th</sup> December, 2016 Abuja Nigeria.
6. **Ohihoin AG.** Annual Scientific Conference of the Society for Gynaecology and Obstetrics of Nigeria Ondo State, Nigeria.
7. **Ohihoin AG.** Annual Scientific Conference of Association for Fertility and Reproductive Health Portharcourt, Rivers State, Nigeria.
8. **David AN** 2<sup>nd</sup> annual Scientific Conference of the Nigerian Implementation Science Alliance September, 2016 Abuja, Nigeria.
9. 7<sup>th</sup> Annual Scientific Conference of the Nigerian Institute of Medical Research, November, 2016 Lagos, Nigeria.

### Paper Presented at Conferences

1. **Idigbe IE,** Ohihoin AG, Ezechi OC. Contraceptives uptake and Unplanned Pregnancies among HIV positive Nigerians. TUISOP1.Young Scientist Oral Abstract Session at the Nigerian Institute of Medical Research Annual Scientific Conference 8<sup>th</sup>-10<sup>th</sup> November 2016.
2. **Ezeobi PM,** Gbajabiamila TA, Idigbe I.E, Gab-Okafor CV, Onwujekwe DI, Odunukwe NN, Ezechi OC. Gender perspective of the sociodemographic and biological variables at presentation among adults living with HIV infection in Southwestern Nigeria (2004-2015) WEHT16B03-OP3. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th-10th November 2016.
3. **Okechukwu PA,** Ezeobi PM, Musa AZ, Onwujekwe DI, Ezechi OC. Mortality causes and predictors among a cohort of HIV-infected southwestern Nigerian women (2005-2015) WEHT16B04-OP4. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th-10th November 2016.
4. **Wapmuk AE,** Musa AZ, Gbajabiamila TA, Idigbe I.E, Ezeobi PM, Ohihoin AG, David AN, Ezechi OC. Trend and pattern of sexual assault in Lagos Nigeria. WE16E02-PP3. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th-10th November 2016
5. **Gbajabiamila TA,** Wapmuk AE, Ezeobi PM, Ohihoin A G, Ezechi OC. Prevalence, pattern and causes of infertility among persons living with HIV infection in southwestern Nigeria. THIC16E01- OP1. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th-10th November 2016.
6. **Ezemelue PN,** Ezeobi PM, Gbajabiamila TA, Ohihoin AG, David AN, Ezechi OC. Loss to follow up and predictors among women enrolled in prevention of mother-in-child transmission in Lagos, Nigeria. THIC16E06-OP2. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference. 8th- 10th November 2016.

## CLINICAL SCIENCES DIVISION CONT'D

7. **Aghahowa EE**, Wapmuk AE, Gbajabiamila TA, Ezeobi PM, Idigbe I.E, Ekama SO, Odubela O, Ohihoin AG, Musa AZ, David AN, Ezechi OC. Infant feeding practices of HIV positive mothers in Lagos: A study of pattern, associated factors and effects of changing infant feeding policy in the context of HIV infection THIC16E05-OP3. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th- 10th November 2016.
8. **Wapmuk AE**, Ohihoin AG, Ezechi OC. Semen quality of male partners of infertile couples living with HIV infection. THIC16E03- OP5. Oral Presentation at the Nigerian institute of Medical Research, Annual Scientific Conference. 8th- 10th

November 2016.

9. **Odubela O**, Odunukwe NN, Iwalokun B, Iwuora J, Orok B, Ajibaye O, Ezechi OC. Multi-Centre Evaluation of Sudden Death in Adult Nigerians THHE16F05-OP1. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th- 10th November 2016.
10. **Odubela O**, Gbajabiamila TA, Wapmuk AE, Idigbe I.E, Herbertson EC, David AN, Ezechi OC. Puberty Development in HIV infected and uninfected Adolescent in Lagos State. TH16E10-PP2. Oral Presentation at the Nigerian Institute of Medical Research Annual Scientific Conference 8th- 10th November 2016.

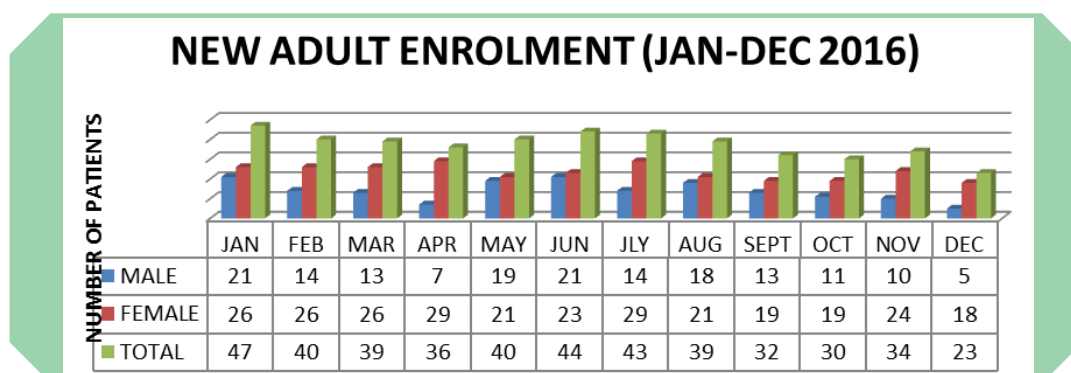
Research Group	Number of publications
HIV/AIDS	5
Maternal, Reproductive and Child health	6
Other	1

### Health Services

#### A. HIV Treatment Programme

The HIV treatment multidisciplinary team has provided care for infected patients since 2004 till date. The cumulative enrollment of HIV positive persons since inception of the clinic till 2016 is 25,076. A total of 471 HIV positive patients were

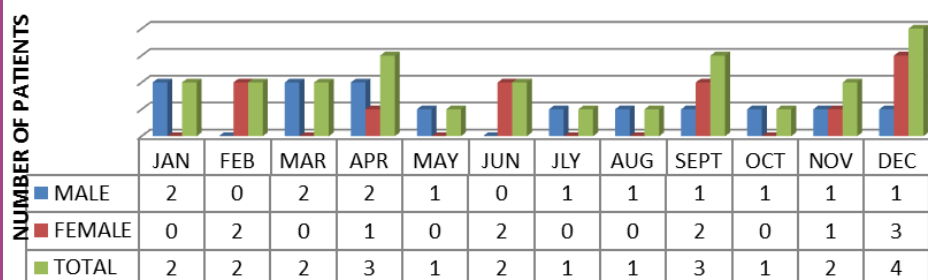
enrolled into care from Jan-Dec 2016 comprising of 447 adults and 24 children. The HIV clinic also renders prevention of mother child transmission of HIV services and a total of 339 HIV positive pregnant women were enrolled in the year. The segregation of the enrollment by gender and on monthly basis is depicted in the figures below.



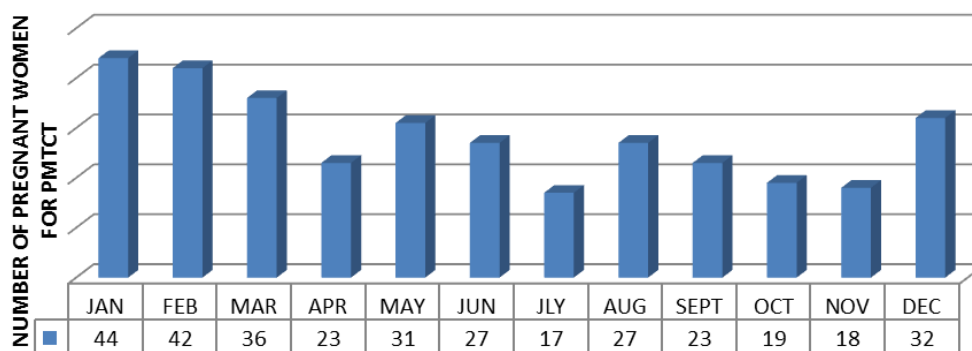


## CLINICAL SCIENCES DIVISION CONT'D

**NEW PAEDIATRIC ENROLMENT (JAN-DEC 2016)**



**PREGNANT WOMEN ENROLMENT FOR PMTCT (JAN-DEC 2016)**



### Tuberculosis Treatment Programme

A total of two hundred and fourteen patients were diagnosed and treated for tuberculosis in the year 2016. Of the 214 patients seen at the DOTS centre,

90.3 % were cases of TB HIV coinfection. The treatment completion and cure rate have remained at over 90%. The number of new TB patient by month of enrolment is shown in table below.

Table: New TB patient's enrolment by month (JAN-DEC 2016)

	JAN	FEB	MAR	APR	MAY	JUN	JLY	AUG	SEPT	OCT	NOV	DEC
MALE	5	10	19	1	7	4	11	12	7	6	5	4
FEMALE	17	11	9	12	6	10	16	11	10	4	11	6
TOTAL	22	21	28	13	13	14	27	23	17	10	16	10

## CLINICAL SCIENCES DIVISION CONT'D

### Staff and Specialized Clinic Services

The Division offers specialized clinic services to members of staff and their families as well as the general public. These specialized clinics include Gynaecology, Hepatitis and Gastroenterology,

Pediatrics, Haematology and Infectious Diseases.

With the arrival of a consultant nephrologist (Prof. Babatunde L. Salako) in the Institute, a hypertension clinic will be introduced in the coming year.

### Schedule of Staff and Specialist Clinics

Clinic	Day of the week	Consultant
Staff Clinic	Monday – Friday	Dr. OC Ezechi
Fast Track Clinic	Monday – Friday	Dr. OC Ezechi
Haematology	Monday	Dr. NN Odunukwe
Pediatrics	Tuesday	Dr. AN David
Gastroenterology Clinic	Wednesday	Dr. J Iwuorah
Gynaecology	Thursday	Dr. O C Ezechi Dr. G A Ohion
Infectious diseases/TB	Monday- Friday	Dr. D I Onwujekwe
Adolescent Clinic	2 <sup>nd</sup> Saturday of the month	Dr. AN. David

### Data Management

The data management unit of the Division has been responsible for electronic data collection, collation and analysis of patient information since inception of the clinic. The records of over 25,000 patients are stored in the database as at December, 2016. Access to this data is limited to only authorized personnel. The unit has capacity to develop research tools and make data available for research using statistical tools and programmes. The unit works closely with monitoring and evaluation and ICT units both in the Director General Office. The services of the unit is available for use at a highly subsidised rate.



Data Management Unit

### Research Support Laboratory

The Division has a laboratory that supports its research activities. It also offers select laboratory services to the specialist clinics. The laboratory has capacity for haematologic, parasitological and clinical chemistry analyses. It is staffed by a consultant haematologist, Parasitologists (2), Medical laboratory scientist (1) and Science Laboratory technologist (1).



Clinical Science Research Laboratory

## CLINICAL SCIENCES DIVISION CONT'D

### Staff Movement

Name of staff	Previous Dept	Current Dept.
Ms. Ogechukwu Ojukwu	Clinical sciences	Office of the Director General
Ms. Comfort Anyegwu	Clinical sciences	IRB Office
Mr. Akpabio Edet Asuquo	IRB office	Clinical Sciences
Mrs. Patricia Emelue	Admin	Clinical Sciences
Ms. Rosemary .....	Molecular Biology	Clinical Sciences

### Resignation

Name of staff	Designation
Dr. Bamidele Oke	Research fellow I
Dr. Esther Somefun	Research fellow II

### Challenges

- Funding: The dwindling economic fortunes of the country have negatively impacted on our research, services and training. However it has also made us to be innovate, hence our modest success in 2016. It is hoped that 2017 will be better and our Division funded better.
- Limited office space: The Division been the youngest Division in the Institute is challenged by severe space shortage. This has not only impacted on the research and research output of the staff but on the quality of service we provide. It is hoped that the Director General and Management should make a priority to provide office and service space to the Division once situation improves.

### Plan for 2017

In the coming year 2017, the Division plans to strengthen its research activities, ensure infrastructural and human capacity development, as well as provide quality service to our clients. In addition also a plan to establish a structured mentorship programme for staff and visiting scholars.

### Conclusion

The year 2016 provided us with a lot of challenges, making us to be more innovative. This has led to the moderate success the Division achieved in the year. It is hoped that 2017 will be bigger and better. We look forward to a better new year with more success stories.

## HUMAN VIROLOGY LABORATORY



Dr. R. A. Audu

Year 2016, started with some challenges with the resignation of our Quality Manager in January with limited time to train another staff to take up her responsibilities. In August, 2016, we had a mentor visit to the laboratory in preparation for accreditation. We were reassigned from our longstanding implementing partner, AIDS Initiative and Prevention, Nigeria (APIN) in the course of the year. Within the year, we had staff movement in the form of resignation and postings. Mrs. U. F. Sylvester-Ikundu and Mr. O. Ezeugwu resigned their appointments from the Institute.

### Staff

Dr. (Mrs.) R.A. Audu	Deputy Director (Research)
Dr. C. K. Onwuamah	Research Fellow I
Mr. A. P. Okwuraiwe	Research Fellow II
Mr. O.S. Amoo	Research Fellow II
Mrs. F.A. Ige	Junior Research Fellow
Mrs. M. Uwandu	Junior Research Fellow
Mrs. F.O. Okhiku	Princ. Med. Lab. Scientist
Mrs. C. L. Okoli	Princ. Med. Lab. Scientist
Mr. G. Liboro	Princ. Med. Lab. Scientist
Mr. P.D. Jamda	Snr. Med. Lab. Scientist
Mr. E.O. Odewale	Snr. Med. Lab. Scientist
Mr. D. Abuh	Med. Lab. Scientist I
Mr. D. Achanya	Snr. Lab. Technologist I
Mrs. C. Onyeitu	Science Lab. Technologist I
Mrs. M. Igbinavbiere	Science Lab. Technologist I
Mrs. R. Omoloye	Science Lab. Technologist I
Mr. O. Olagundoye	Scientific Officer II
Mrs. B. D. Musa	Scientific Officer II
Mrs. R. O. Alesinloye	Princ. Exec. Officer I
Mr. O. Oforomeh	Princ. Sys Analyst Programmer I
Mr. M. Olatunji	Senior Exe Officer (Accts)
Mr. N. Talmon	Admin. Officer II
Mrs. E. A. Oyesola	Assistant Executive Officer
Mrs. M. Alexander	Assistant Executive Officer
Mr. C. Ochai	Assistant Exe Officer (Accts)
Mr. P. Atat	Laboratory Technician
Mrs. C. Abakpa	Clerical Officer
Mr. B. Ajenu	Motor Driver

Some postings into the unit include: Mrs. M. Fowora, Mr. O. Olagundoye, Mrs. B. D. Musa and Mrs. C. Abakpa. Two other staff, Mrs. J. Agunbiade and Mrs. B. Yusuf was posted out of the unit while Mrs. M. Fowora was also posted back to her former Division in August, 2016. The unit conducted several trainings for different organizations such as AIDS Prevention Initiative in Nigeria (APIN) and Society for Family Health (SFH). The availability of payment points in the unit for our clients has eased challenges faced with payment for tests.

### Project staff

Mr. O. Ezeugwu	Admin. Officer
Mr. A. Ujah	Admin. Officer
Mr. S. O. Ekure	Data Entry Officer
Miss F. A. Ogunji	Laboratory Assistant

### Research Projects (Completed & On Going)

- In-country validation of SAMBA Point-of-care Qualitative and Semi-Qualitative assays for early infant diagnosis and viral load monitoring of HIV-1 infection in Nigeria
- HIV Drug Resistance: Implications for optimizing Anti-retroviral Therapy.
- Nationwide Survey on Pre-Cancers/Cancers of the Cervix in Nigeria.
- Validation of DBS for viral load evaluation project

# HUMAN VIROLOGY LABORATORY CONT'D

## Training, Seminar, Workshop

S/N	No of HVL Facilitators	Topic	Sponsor/ Organizer	Date
1	6	EQA Training	SFH	6-10 June, 2016
2	1	SLMTA Workshop	CDC/APIN	20-28 Oct 2016
3	1	Viral load sample collection & management	APIN	14-16 Nov 2016

## Training, Seminar, Workshop Cont'd

S/N	Participants	Topic	Sponsor	Location	Date
1	Dr. C.K. Onwuamah	Welcome Trust Advanced Course	Self	Gambia	4-12 March, 2016
2	Mrs. F.O. Okhiku	Pre-analytical Best Practice	Becton Dickinson	NIMR	15 March, 2016
3	Mrs. M. Igbinavbiere, Mrs. R.M. Omoloye & Mrs. B. Musa	Phlebotomy training	Becton Dickinson	NIMR	21 July
4	Mr. O. S. Amoo Mrs. F. A. Ige	Basic COBAS CAP/CTM96 Analyzer PCR Technology	APIN	OAUTH, Ile-ife	23-27 May, 2016
5	Mrs. M. Igbinavbiere	Cobas C311 Operator Training Advanced	Roche	NIMR	25 to 26 Aug., 2016
6	Mr. G.O. Liboro Mr. E.O. Odewale	Molecular HIV Diagnostic Assay	IHVN	OAUTH. Ile-ife	29 Aug to 2 Sept., 2016
7	Mr. A.P. Okwuraiwe Mr. G. Liboro	HIV-1 DBS Viral Load Testing using Roche FVE protocol on Roche COBAS	APIN/ CDC	NIMR	19 to 30 Sept2016
8	Mr. A. P. Okwuraiwe Mr. N. Talmon	Logistics Management Information System (LMIS)	FHI	Lagos	14 to 16 Nov 2016
9	Mr. P.D. Jamda & Mrs. B.D. Musa	Viral load sample collection & management	APIN	Lagos	14 to 16 Nov 2016
10	Mr. E.O. Odewale Mr. A. Ujah	Logistics Management Information System (LMIS)	FHI	Lagos	17 to 19 Nov 2016

## Bench Work Experience

Name	Programme	Institution	Duration
Mr. A. D. Abah			Mar-July, 2016

## Collaborations

- Centres for Disease Control and Prevention, Abuja & Atlanta;
- Clinton Health Access Initiative, Abuja
- Harvard School of Public Health, Boston, USA
- University of Cambridge Division of Haematology Diagnostics Development Unit, UK
- Federal Ministry of Health
- AIDS Initiative & Prevention in Nigeria
- Society for Family Health
- Jos University Teaching Hospital, Jos
- University College Hospital, Ibadan

## Grant/Fellowship Funding

- The Nigerian Institute of Medical Research – Institutional Review Board received a grant of \$10,000 from Ford Foundation to conduct a study to evaluate of Operationalization of Health Research Ethics Committees (HRECs) across the country. The study focused on the performance and compliance of the HRECs with national and international guidelines. Several gaps were identified in their

## HUMAN VIROLOGY LABORATORY CONT'D

operations and a training was organized to address the observed gaps and with a view to strengthening the HRECs in country.

- With grant support from US-CDC, we sequenced HIV strains from Nigerians failing first-line therapy and determined drug resistance mutations in Nigerian strains and the impact these mutations had on treatment

response to the second-line antiretroviral therapy. Title: HIV Drug Resistance: Implications for Optimizing Antiretroviral Therapy. Supported by Centres for Disease Control and Prevention, Abuja & Atlanta (CDC) Grant Number: GH000770-03.

### Staff Postgraduate Studies

S/N	NAME	PROGRAMME	UNIVERSITY	STATUS
1	Mr. A.P. Okwuraiwe	Ph.D	University of Lagos	On-going
2	Mr. O. S. Amoo	MPhil/Ph.D	University of Lagos	On-going
3	Mrs. F. A. Ige	MPhil/Ph.D	University of Lagos	On-going
4	Mr. P.D. Jamda	FMLSCN	National Veterinary Research Institute. VOM, Jos	On-going
5	Mr. O. Oforomeh	M.Sc. Biostatistics	University of Lagos	On-going

### Financial Statements

Income: 2016: N163,195,070.00  
 Expenditure: 2016: N86,359,919.27  
 Net Profit 2016: N76,835,150.73.

### Challenges

The major challenge encountered was with the payment for goods and services abroad as a result of floating exchange rate. Epileptic supply of water to the unit resulted in several service interruptions.

### Prospects for 2017

- To devote more time to research and attract more collaborators
- To complete post graduate studies embarked upon by staff
- To attain international ISO 15189 accreditation
- To expand the scope of services provided



## MICROBIOLOGY DIVISION



DR. S.M.C. EZEUGWU

The Microbiology Division consists of Diarrhea, TB and Immunology units. The staff of the Microbiology Division continued to engage in research, training and services in 2016 in spite of the limited financial resources. The major research activities and collaboration were in the areas of Immunology, Bacteriology, Parasitology, Mycology and Virology and Tuberculosis. The National TB Reference Laboratory offers diagnostic support to the DOTs Clinic, NIMR Clinics and patients from the various geographical locations in Nigeria. TB screening as a requirement for their visa processing was also carried out by the TB Laboratory. Microbiology Division collaborated with Universities and Polytechnics to teach and supervise postgraduate (M.Sc., Ph.D) and undergraduate (B.Sc., HND, IT) students.

### Staff

Dr. S.M.C. Ezeugwu	Chief Research Fellow/HOD
Dr. D.I. Onwujekwe	Chief Research Fellow
Dr. N. Onyejebu	Research Fellow I
Mrs. C.N. Kunle-Ope	Research Fellow II
Mrs. E. Afocha	Research Fellow II
Dr. N. N. Nwokoye	Research Fellow II
Miss O. Awoderu	Junior Research Fellow
Miss L.O. Efere	Junior Research Fellow
Miss T. I. Okonkwo	Junior Research Fellow
Mr. M.B. Ajayi	Chief Med. Lab. Scientist
Mrs. U. T. Igbasi	Chief Med. Lab. Scientist
Mrs. A. A. Adetunji	Asst. Chief Med. Lab. Scientist
Mrs. I. Edu-Muyideen	Principal Science Lab. Tech.
Mrs. M. O. Akinyele	Principal Science Lab. Tech.
Mrs. N.E. Tochukwu	Principal Med. Lab. Scientist
Mr. A.A. Adesesan	Principal Med. Lab. Scientist
Rev. Sis. C.O. Ejazie	Senior Med. Lab. Scientist
Mr. S. Nduaga	Senior Med. Lab. Scientist
Mrs. M.O. Wahab	Medical Laboratory Scientist
Mrs. A.T. Abiodun	Science Lab. Technologist

Mr. S.Emegbualili	Principal Confidential Sec. 1
Miss. F.O. Onwudinjo	Administrative Officer I
Mrs G.O. lyke-Azike	Administrative Officer I
Mrs. F.O. Ikenye	Executive Officer
Mr. E. Ehikhametalo	Asst. Executive officer
Mr. T. Aje	Senior Laboratory Technician
Mr. O.D. Airekhome	Senior Clerical Officer
Mr. F.J. Sholeye	Experimental Animal Assistant
Mrs. L.M. Allen	Laboratory Assistant

### Research Activities

In addition to the research Research Groups activities, research staff in the Division also carried out research activities in the areas of Immunology, Tuberculosis, Parasitology, Virology and Mycology in the course of their pursuit of higher degrees (M.Sc. & Ph.D); and were involved in teaching and supervision of undergraduate and postgraduate students projects in various areas of Microbiology.

### Research Project

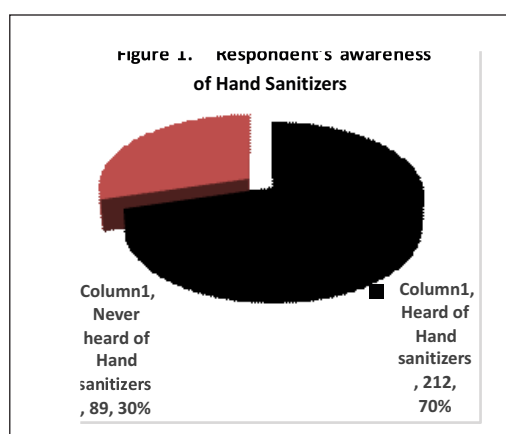
#### Current hand washing practices of respondents in Lagos

Ezeugwu SMC, Awoderu OB, Ajayi MB, Afocha EE, Adesesan AA, Ejazie CO, Kunle-Ope CN, Nwokoye NN, Abiodun AT, Edu-Muyideen IO, Onyejebu N, Akintunde GB, Efere L, Nshiogu ME, Tochukwu NE, Raheem TY, Wahab MO, Aiyedogbon AS, Sholeye JF, Aje TO, Okonkwo IT, Onwudinjo OF, Afolabi TS, lyke-Azike OG, Mbiam OS, Edosanwan E, Igbasi UT, Onubogu CC, Adeiga AA, Ujah IAO

### Background

Methods of maintaining hand hygiene is divided into hand washing and hands antiseptic which are the simplest and least expensive means of prevention of infections from environmental surfaces. The project is to determine hand washing practices and behaviors among studied population. It is cross-

sectional study from sixteen sites in Lagos. Three hundred and one (301) {164 females, 137 males} participants were randomly selected and questionnaires administered. Two hundred and twenty-two (73.8%) respondents understood that hand cleansing practice involves washing with water and soap. Fifty three percent believed that hand hygiene is to prevent transmission of germs



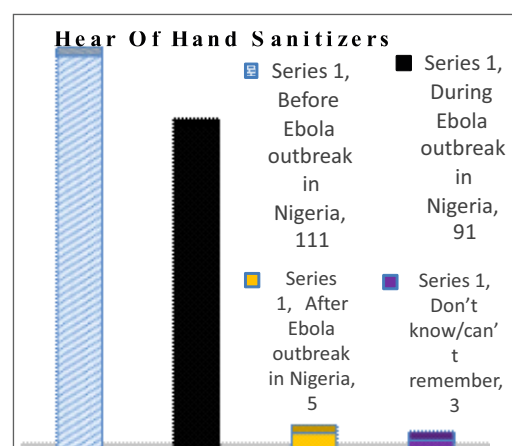
### Evaluation of antibacterial efficiency of some hand sanitizers sold in Lagos

Ezeugwu SMC, Awoderu OB, Ajayi MB, Afocha EE, Adesesan AA, Ejezie CO, Kunle-Ope CN, Nwokoye NN, Abiodun AT, Edu-Muyideen IO, Onyejebu N, Akintunde GB, Efere L, Nshioqu ME, Tochukwu NE, Raheem TY, Wahab MO, Aiyedogbon AS, Sholeye JF, Aje TO, Okonkwo IT, Onwudinjio OF, Afolabi TS, Iyke-Azike OG, Mbiam OS, Edosanwan E, Igbasi UT, Onubogu CC, Adeiga AA, Ujah IAO

#### Background

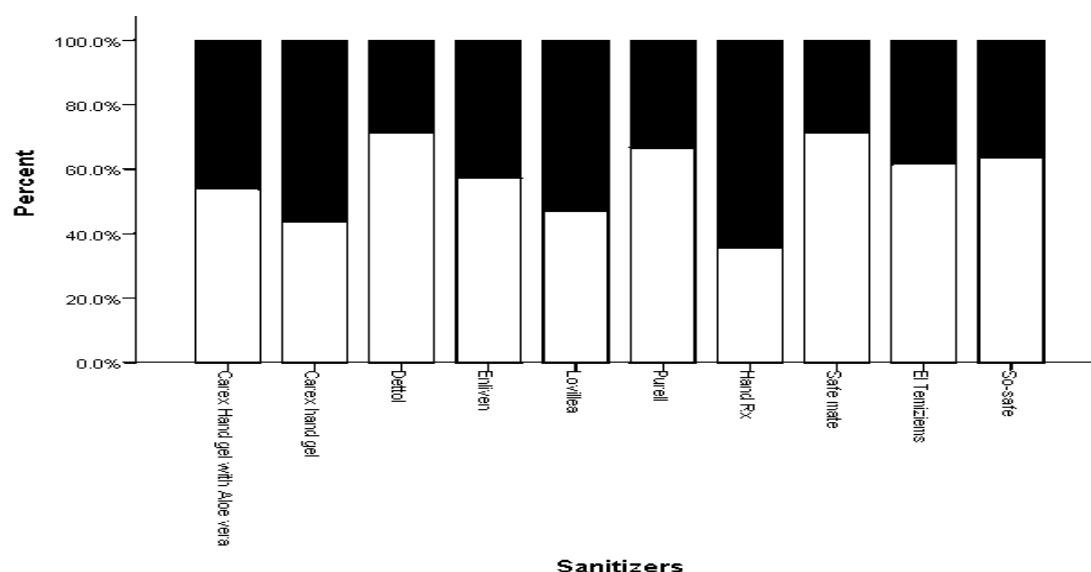
Hand sanitizers are antiseptics used to clean hands where and or when soap and water are not available and address the barriers to hand hygiene compliance. Reports had shown their efficacy but consumers were also warned against false claims. Following the outbreak of Ebola disease in Nigeria, there was campaign on the use of alcohol-based hand sanitizers as preventive measures towards its

while forty four percent identified lack of water as reason for not washing hand. The figures below identified awareness (fig1) and when the respondents heard about sanitizers (fig 2).



transmission. The campaign received positive response because it is faster and less cumbersome means of hand hygiene. To determine its efficacy, the study was to evaluate the anti-bacterial effect of commercially sold hand sanitizers in Lagos, Nigeria. Two hundred and ninety three samples were processed consisting of one hundred controls and one hundred and fifty two Test. Two hundred and thirteen samples yielded bacterial growth of Gram Positive and Negative and sixty had no growth. One hundred and five of the Test samples yielded bacterial growth before application of sanitizers while sixty samples yielded growth after application of sanitizers.

## MICROBIOLOGY DIVISION CONT'D



**Fig 1 shows the efficacy of the tested sanitizers**

It was observed that none of the sanitizers made the ninety six percent (96%) claim. However, Hand RX, Carex Hand gel and Lovilea brands were most efficacious while safe Mate, Dettol and Purell were least potent. *Status of the project: Completed*

### Immunology unit

#### Assessment of the Knowledge to Hepatitis B Virus among Students of Health Sciences and Contacts of Healthcare facilities in Ogun State.

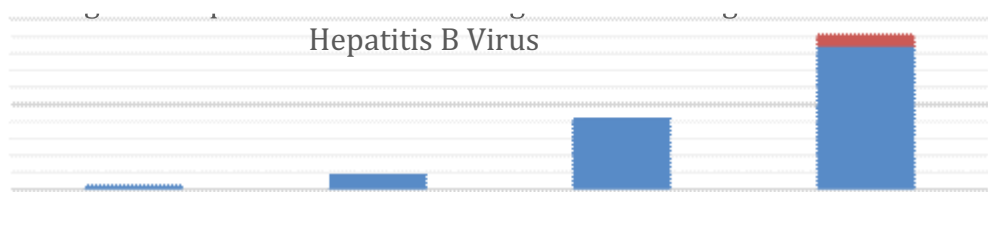
Awoderu OB, Adeiga AA, Kolawole OM

The prevalence and rate of transmitting Hepatitis B viral infection is higher in health professional than in population at large. The viral infection in health

setting is a global public health problem due to occupational exposure of Healthcare practitioner. Nigeria is an endemic Country thereby increases the exposure rates of its healthcare practitioners in various health systems setting. The knowledge of these populations to the viral agents will be key factors in prevention and management of the virus. The study was designed to determine the awareness of the respondents to Hepatitis B Virus. The study is cross-sectional involving Students, practicing Health Workers, Healthcare facilities Clients and Staff. Two hundred and fifty four respondents were included with following demographic data.

Age group N(%)	Gender	Highest level of education n(%)	Marital status N(%)
< 10 = 10(3.9)	Female = 183 Male = 71	None = 3(1.2)	Single = 97(38.2) Married = 137(53.9)
<20 = 39(15.4)		Primary = 15 (5.9)	
< 30 = 106(41.7)		Secondary = 53(20.9)	
< 40 = 56(22.0)		Tertiary = 175(68.9)	
< 50 = 29(11.4)			
>51 = 14(5.5)			

**Table 1: Demographic status of the respondents in the study**



Although, seventy four percent of the respondents know about the Hepatitis B virus vaccine, sixty one percent know what Hepatitis B virus is about and forty four percent can identify its mode of transmission.

*Status of Project: Ongoing*

### **Immunological Status of Hepatitis B vaccinated Healthcare workers in Educational and Primary Healthcare Centers in Ogun State**

Awoderu OB, Adeiga AA, Kolawole OM

#### **Background**

Nigeria with average prevalent rate of 18% is an endemic Country to Hepatitis B virus; to reduce the incidence the Federal Government recommended vaccination of Healthcare providers and infants through National Program on Immunization. There has been little information on immune status of these high risk group especially HBV vaccinated personnel. The study was to evaluate the immune status of vaccinated Contacts in healthcare facilities. It is a Cross-sectional study involving two bodies: Primary Health Centers and Health Science School in Ogun State. Data were collected using Interviewer administered Questionnaire given to consented individuals after which five milliliters of venous blood were collected, assayed and analyzed for Hepatitis B immune status biomarker. There were one hundred

and ninety six respondents recruited for the study, 126 (64.3%) females and 70 (35.7%) males; 99 (50.5%) married while 97 (49.5%) were unmarried. Although, there was high campaign by WHO for vaccination of Health workers only 32 (16.3%) were vaccinated. Of the thirty two vaccinated respondents only fifteen elicited marker of immunity and confirmed as protected.

*Status of project: Ongoing*

#### **Diarrhoea Unit**

The research staff in the Diarrhea Unit were very active in the research activities of Health Policy and Systems Research Group, Neglected Tropical Diseases Research Group and the Emergency Preparedness and Response Research Group. They also undertook the training and supervision of undergraduate and postgraduate students from Universities and Polytechnics in their various research projects.

#### **Tuberculosis (TB) Unit**

For the Tuberculosis (TB) Unit, the year 2016 had been a year of active case finding of tuberculosis (TB) particularly multi-drug resistant tuberculosis (MDR-TB) and prompt initiation of treatment with the

## MICROBIOLOGY DIVISION CONT'D

National Tuberculosis Reference Laboratory (NTBRL) of the Nigerian Institute of Medical research at the fore front of active diagnosis and monitoring of response of MDR-TB cases. The year also saw the introduction of nitrate reductive assay (NRA) for the detection of drug resistance to first line

anti TB drugs directly from processed sputum samples, diagnosis of extra-pulmonary TB (EPTB) and detection of rifampicin resistance from other at risk groups using GeneXpert technology. The staff of TB Unit has been actively involved in Research, Services and Training/Logistic support.

### Conferences & Workshops Attended

NAME OF STAFF	CONFERENCE/WORKSHOP	DATE
Most of the Staff in Microbiology Division	NIMR 7 <sup>th</sup> Annual Scientific Conference held in Lagos	8 <sup>th</sup> – 10 <sup>th</sup> November 2016
Dr. SMC Ezeugwu	16 <sup>th</sup> Annual Scientific Conference of the Society for Experimental Biology of Nigeria (NISEB) held at the University of Calabar, Cross River State. National Heart-Health Nutrition summit 2016 held in NIMR	27 <sup>th</sup> – 30 <sup>th</sup> April 2016 21 <sup>st</sup> April 2016
Mr. Ajayi M.B. Mr. Adesesan A.A	Association of Medical Laboratory Scientists Training on GSK Antibiotic discourse and the lecture on overcoming challenges to Good Laboratory practice in Resource Limited Setting – Lagos. AMLSN (NIMR Chapter) Annual Scientific Conference - Lagos.	May 13, 2016 April 25 <sup>th</sup> 2016
Mrs. Afocha E.E.	Keystone Symposia Conference: New Approaches to Vaccines for Human and Veterinary Tropical Diseases held at Southern Sun Cape Sun, Cape Town, South Africa.	22 <sup>nd</sup> – 26 <sup>th</sup> May, 2016
Mrs. Kunle-Ope	Workshop for the Preparation and Validation of EQA Panels, at NTBLTC, Zaria.	5 <sup>th</sup> – 11 <sup>th</sup> June, 2016
Mrs. Iyke-Azike, O.	LMIS competency Training for Treatment Centres and Ref. Lab., Abuja.	4 <sup>th</sup> – 7 <sup>th</sup> April, 2016.
Dr. Nwokoye, N.	Training on Culture, DST and Molecular Methods, Zaria TB Lab. Workshop organized by Global Lab. Initiative at Kampala, Uganda.	29 <sup>th</sup> Aug – 9 <sup>th</sup> Sept, 2016. 13 <sup>th</sup> – 18 <sup>th</sup> June, 2016.
Mrs. Igbaasi, U.T.	Monitoring and supervision of TB Reference Laboratories UCH Ibadan.	13 <sup>th</sup> – 18 <sup>th</sup> June, 2016
Mrs Edu-Muyideen I.O.	Annual Conference of the Nigerian Inst. Of Sc. Lab. Tech., Abuja	22 <sup>nd</sup> – 25 <sup>th</sup> Nov. 2016.
Rev. Sis. Ejezie C.O.	MEDLAB 2016 Conference at Dubai International Convention and Exhibition Centre, Dubai	25 <sup>th</sup> – 28 <sup>th</sup> Jan. 2016
Dr. Onyejebu, N.	Capacity Building Workshop for young Women Academics in Nigeria, UniLag, Lagos Q2 2016 – 2018 by WHO/TB Ref. Lab. In collaboration with IHVN and Support from Global Funds, Univ. of Port Harcourt Teaching Hospital.	15 <sup>th</sup> – 16 <sup>th</sup> June. 2016 3 <sup>rd</sup> – 8 <sup>th</sup> Oct. 2016
Mrs. Efere L.O.	Monitoring and Supervision of TB Ref. Laboratories at University Teaching Hospital Port Harcourt.	4 <sup>th</sup> – 10 <sup>th</sup> Dec. 2016

### Staff Postgraduate Studies

S/N	NAME	PROGRAMME	UNIVERSITY	STATUS
1	Kunle-Ope C. N	PhD Medical Microbiology	University of Lagos	On-going
2	Afocha E.E		Olabisi Onabanjo University	On-going
3	Igbaasi U. T	PhD Medical Microbiology & Parasitology	University of Lagos	On-going
4	Awoderu OB	PhD Microbiology	University of Ilorin	On-going

## MICROBIOLOGY DIVISION CONT'D

### M.Sc. and PhD Students supported on Bench

S/N	Name	Topic	Programmes/ Institution	Status
1.	Mr. Ogunyemi Adewale Kayode	Microbial degradation of naturally- occurring and synthetic nitrile compounds in tropical environment	Ph.D UNILAG	On-going
2.	Ibekpobeaku, A.N	Assessment of High Viginal Swab (HVS) for <i>Trichomonas vaginalis</i> in four LGA's in Lagos State	Ph.D UNILAG	On-going
3.	Mrs. Babalola Abisoye Felicia	Isolation and characterization of histamine from some commercially important fish species in Nigeria.	Ph.D UI	On-going
4.	Dr. Mary Adanma	Determination of Multidrug resistant Pulmonary tuberculosis among HIV sero-positive patients in Rivers State using Line Probe technology	FMLS UNIPORT	On-going
5.	Mrs. Ogunsanya Joy Chinonso	Molecular study of Uropathogenic <i>E.coli</i> from women in Lagos State	M.Phil/Ph.D UNIBEN	On-going

### (SIWES) IT Students Mentored at the Microbiology Division

S/N	Name	Institution/University	Programmes	Remark
1.	Nnamani Samuel Chidiebere	Enugu State University of Science and Technology	IT	Completed
2.	Nnamdi Jennifer Chisom	Enugu State University of Science and Technology	IT	Completed
3.	Amazurio, Blessing Chinaemerm	University of Nigeria, Nsukka	IT	Completed
4.	Ukandu, Wellington C	Institute of Technology and Mangement Institute of Technology and Mangement	IT	Completed
5.	Osuji Adamma Dorothy	University of Port Harcourt	IT	Completed
6.	Okeke Hope Ebere	Oduduwa University, Ile Ife , Osun State	IT	Completed
7.	Nwaturuocha Adaeze Joy	University of Benin University of Benin	IT	Completed
8.	Oraegbu, Joy Isioma	University of Port Harcourt	IT	Completed
9.	Obadimu, Oluwatosin	University of Lagos	IT	Completed
10.	Nwachukwu Nkechi Lilian	Federal University of Technology, Owerri, Imo State	IT	Completed

### Challenges

- Lack of sponsorship for conferences
- Inadequate funding for research
- Adequate and continuous safety programmes for staff are needed (regular Immunization and fitness checks)
- Inadequate sustainable equipment management (need for continuous calibration of equipment to ensure quality service).
- Inadequate equipment for storage of laboratory items
- Lack of sustainable internet services
- Intermittent power outages

### Way forward

- To continue to conduct research in line with the NIMR mandate.
- To write proposals for research grants to supplement government financial provisions.
- To write up the analysis of the sanitizer project for publication in peer-reviewed journals



## MOLECULAR BIOLOGY & BIOTECHNOLOGY DIVISION



Dr. B.A Iwalokun

During the year, members of the Division were involved in research activities in the Division and eight Research Groups namely; Malaria, HIV/AIDS and TB, Non-Communicable Diseases, Maternal Child and Reproductive Health, Emergency Preparedness and Response (EPR), Health System and Policy Research, Immunology and Vaccinology and Clinical Trials.

### Staff

Dr. B.A Iwalokun	Chief Research Fellow / HOD
Dr. S. I. Smith	Director (Research)
Mr. T. A. Bamidele	Research Fellow II
Mrs. A. O. Adagbada	Research Fellow II
Mr. J. I. Yisau	Junior Research Fellow
Mr. M. Bamidele	Assist Chief Sci Lab Technologist
Mrs G. Akintunde	Assistant Chief Lab Scientist
Mrs. M. A. Fowora	Principal Sci Lab Technologist
Mrs. G. Igbuan	Chief Secretarial Assistant
Mrs. T. S. Adebisi	Assistant Executive Officer

### Papers Presented In Conferences/Workshops

#### Dr. S. I. Smith:

Two Stepwise Molecular Approaches of Separating *Staphylococcus aureus* from Coagulase Negative Staphylococci Isolated from Clinical Samples in Ibadan South-West, Nigeria. Accepted for poster presentation at the ASM microbe 2016, Boston Massachusetts, June 16 - 20, 2016.

Ezeamagu CO, Fagade OE, **Smith SI**, and Ogunjobi AA (2016).

Analysis of *Helicobacter pylori* infections in Africa, bacterial virulence factors but lack of pathology. 6<sup>th</sup> DFG sponsored conference on Partners of German-African grant in Cameroon. June 1<sup>st</sup> - 4<sup>th</sup> 2016.

#### Oral presentation.

Njom H Akum, Idowu A Akindele, Ute Breithaupt, Rainer Haas, Jolaiya T Funbi, **Stella I Smith** and Anna M Clarke.

Molecular Diagnosis of *Helicobacter pylori* in Nigeria. Nigerian Society for Microbiology, 39<sup>th</sup> Annual Scientific Conference, UNN, Nsukka, 19<sup>th</sup> to 23<sup>rd</sup> September 2016. Guest Speaker,

#### Dr. B.A Iwalokun:

European Bioinformatics Institute (EMBL-EBI) Training on In Silico System Biology. Wellcome Trust Genome Campus, Hinxton, Cambridge, CB101Sd, United Kingdom. July 3–8, 2016

San Francisco Division of Public Health & AVAC online Training course on Good Participatory Practice (GPP). March 21<sup>st</sup>– July 1st, 2016

Plenary Speaker at AvHKollege. Replacing Magic Bullet with Genetic Bomb: No Escape for Drug Resistant Bugs. University of Lagos. Oct. 11 – 16, 2016

#### Dr. T. A. Bamidele

Training of participants in Association of clinical chemist's conference, LASUTH 2016

7<sup>th</sup> NIMR Annual Scientific Conference, 9<sup>th</sup> - 11<sup>th</sup> November, 2016

Dr. S. I. Smith, Dr. B. A. Iwalokun, Mr. T. A. Bamidele, Mrs. A. O. Adagbada, Mr. J. I. Yisau, Mr. M. Bamidele, Mrs. M. A. Fowora

### Study Proposals

- Identification, risk factors and molecular characterization of Bacteriologic agents of diarrhea in major Nigerian slums.
- Five proposals were completed awaiting funding.



# MOLECULAR BIOLOGY & BIOTECHNOLOGY DIVISION CONT'D

## Staff Postgraduate Studies

S/N	NAME	PROGRAMME	UNIVERSITY	STATUS
1	Dr. BamideleTajudeen	PhD Phamarceutical Microbiology	University of Ibadan	Completed
2	Mr Jacob Yisau	PhD	University of Benin	On-going
3	Mr. Adagbada	PhD		On-going

## Research Collaborations

- Centre for Proteomics and Genomics Research (CPGR),
- Cape -Town, South Africa
- National Institute of Cholera and Enteric Diseases, Kolkata, India
- FioCruz, National Institute Infectious Diseases, Rio De Jainerio, Brazil
- Robert Koch Institute, Berlin, Germany
- Institute of Tropical Medicine, Tubingen University, Germany
- Albany State University, USA

## Grants

- German Research Foundation (DFG): 'Analysis of *Helicobacter pylori* infections in Nigeria, bacterial virulence factors but lack of pathology'. (HA2697/18-1)  
Co-Principal Investigation: Dr. S.I. Smith
- African Centre for Excellence on Neglected Tropical Diseases (NTD) and Forensic Biotechnology (Ahmadu Bello University Zaria, Kaduna State).  
  
Role: Collaborating Partner and Institution
- TETFUND for project on 'Characterization of *Haemonchuscontortus* and studies of its somatic native and recombinant protein as candidate vaccine antigen in goats'  
Co-Investigator: Dr. B. Iwalokun

## Project Students Trained In 2016

NAMES	PROJECT TITLE	PROGRAMME	STATUS
Yussuf Nabeelah.	Plasmid analysis of carbapenemase carrying Clinical and Environmental Enterobacteriaceae.	BSc.	Completed
Mujitaba Sukurat	Plasmid analysis of carbapenemase carrying Clinical and Environmental Enterobacteriaceae.	BSc.	Completed
Asuelimen Francis	Plasmid analysis of carbapenemase carrying Clinical and Environmental Enterobacteriaceae.	BSc.	Completed
Dr.Tuta Kemi	Community methicillin resistant <i>Staph aureus</i> carriage among children in Ibadan	Fellow	Completed
Adenike Olanrewaju	Typing of clinical isolates of <i>K. pneumoniae</i> by RAPD	MSc	Completed
Solanke, A	Genotyping of carbapenemase producing gram negative pathogens from orthopaedic patients.	MSc	Completed

## MOLECULAR BIOLOGY & BIOTECHNOLOGY DIVISION CONT'D

### IT Students in MB&BT Division in 2016

NAME	INSTITUTION	STATUS
Ogwuche Monica	Federal University Lokoja, Kogi State	Completed
Essien Edidung Nkiruka	Bells University of Technology, Otta	Completed
Sule Rashidat	University of Lagos	Completed
Oginni Olugbemi	University of Lagos	Completed
Oluwole Stephen	Federal University, Oye Ekiti	Completed
Obadeyi Bibilola	University of Lagos	Completed
Animashaun Toyosi	University of Lagos	Completed
Folivi David	University of Lagos	Completed
Eko Hanif	University of Lagos	Completed
Oluokun Faith	University of Lagos	Completed
Amajuoyi Glory	University of Lagos	Completed
Oparandzie Bright	University of Lagos	Completed
Hadizah Adenike	University of Lagos	Completed
Ojiakofo Ikenna	University of Lagos	Completed
Agu Chioma	University of Lagos	Completed
James Faith	University of Uyo	Completed
Okolo Gbenga	University of Ibadan	Completed
Emechebe Onyinye	University of Lagos	Completed
Sule Rashidat	University of Lagos	Completed
Okpala Chisom	University of Lagos	Completed
Aliyu Abduquadri	University of Lagos	Completed
Iyanda Saheed	University of Lagos	Completed
Awopegba Oluwatosin	University of Lagos	Completed
Ademiju Oluwatosin	Federal University of Technology, Owerri	Completed
Amazuno B. C	University of Nigeria, Nsukka	Completed
Udorji Netochukwu	Nnamdi Azikwe University, Awka	Completed

# MOLECULAR BIOLOGY & BIOTECHNOLOGY DIVISION CONT'D

## Msc / PhD Students' Supervision

Name of Student	Project Title	Status
Mike Esse	Plasmid profile and antibacterial activity of honey on <i>E. coli</i> and <i>S. aureus</i> isolated from wound sepsis	M.Sc. 2016 - Completed
AbiodunSeriki	Correlation of <i>Helicobacter pylori</i> virulence factors with gastro-duodenal diseases: improvement of diagnosis and treatment	PhD, 2012 - On-going
Abraham Ajayi	Virulotyping and Antimicrobial analysis of <i>Salmonella Enterica</i> Isolated from Humans and Animals in Nigeria: Improvement of Diagnosis and Treatment.	PhD, 2014 - On-going
Tolulope Jolaiya	Analysis of <i>Helicobacter pylori</i> infections in Nigeria, bacterial virulence factors but lack of pathology.	PhD, July 2016
Abimbola Ezeh	Phenotypic and genomic characterization of <i>Cronobacter sakasakii</i> isolated from powdered infant formula milk in Nigeria.	PhD, University of Lagos, Akoka March 2008 - Ongoing.
Felix Alao	Molecular epidemiology of <i>Staphylococcus saprophyticus</i> virulence genes isolated from patients presenting with urinary tract infections in Lagos, State	PhD, University of Lagos, Akoka, December 2010 and ongoing
Enwuru Lawrence	Study of <i>E. coli</i> pathotypes and Methicillin resistant <i>S. aureus</i> in the pathogenesis of infertility among Nigerian males.	Olabisi Onabanjo University, Ogun State 2013 and Ongoing
Akinsinde Kehinde	Molecular characterization of outbreak and environmental isolates of <i>Vibrio cholera</i> in Nigeria.	2013 and ongoing
Adenipekun Eytayo	Community and Hospital Acquired <i>E. coli</i> infections in Lagos: Molecular Epidemiology and Role of Food animals in Clonal Dissemination	Completed in 2016

## Achievements

- The Division in collaboration with the Centre of Proteomics and Genomic Research (CPGR), South-Africa will soon finalize material transfer agreement and capacity building on genomics of *Mycoplasma genitalium* involving a PhD student from NIMR (Mrs C.T. Oparaugo).
- Successfully concluded research collaboration and infrastructural development arrangement with Los Alamo National Laboratory, USA
- Acquisition of a remote-controlled multi-PCR reactions enabled SimpliAmp Thermal Cycler (MAN0009889) from Applied Biosystems, USA through Katchey Company Limited, Lagos) to the Biotechnology Laboratory.
- Additional Sodium dodecyl Polyacrylamide gel electrophoresis (SDS-PAGE) system

- Acquisition of a fluorescent microscope through funding from the DFG.

Fluctuating voltage supply to the Biotechnology Lab was also corrected to avert damage of the newly acquired equipment

## Student Portfolio

During the year under review, the Division hosted a total of 14 project students from various institutions across the country – B.Sc. (3), M.Sc. (2) and Fellow (1) project students.

The students that carried out their projects in the Molecular Biology and Biotechnology Division during the year under review are as listed below:

## MOLECULAR BIOLOGY & BIOTECHNOLOGY DIVISION CONT'D

### Challenges

(A) Funding gap:

- Self-funding of Scientific publication
- Lack of funds in implementing division-specific research activities to complement those of NIMR research groups.

(

B) Equipment decay:

The Biotechnology Unit of the division needs the following items to be fully functional.

- Real Time PCR machine
- Deep freezer
- Micro centrifuge (10,000 rpm – 15,000 rpm)
- Agars gel electrophoresis System
- Photo documentation system for visualizing and recording DNA bands of gel
- Heating block

(C) In need of funds to repair some of the non-functional equipment and the purchase of new ones such as;

- Photo documentation system (currently non-functional)
- PCR machine (TechNet, non-functional)
- Micro centrifuge (10,000 rpm, non-functional).
- Real Time PCR Machine
- DNA sequencer
- Pulsed-field gel electrophoresis

### Capacity Building and Staff Strength challenge:

In the era of Genomics, Bioinformatics and Molecular Diagnostics, the Division has not been able to key into these areas as it should due to lack of opportunities to further build research capacity of staff.

The Division is currently short of research fellows due to transfer of service to the universities of six research fellows between 2013 – 2016.

### Future Plans:

- Implementation of 2017 workplan developed by the Division
- Strengthening of collaboration with CPGR, LANL and Nigerian Universities
- Organising training workshops on Proteomics and Bioinformatics
- Improving on the number of proposals submitted for funding per year
- Organising training workshops in molecular biology
- Organising scientific paper writing workshops

## PUBLIC HEALTH DIVISION



DR. T. S. AWOLOLA

Staff in the Division of Public Health includes seven Research Fellows, two Scientific Officers and six supporting staff working mainly on neglected tropical diseases, non-communicable diseases, malaria and health system strengthening. Most of these activities are based at the Institute headquarter in Lagos and to a lesser extent at the Institute outstation in Kanji, Niger State.

### Staff

Dr. T. S. Awolola	Dep. Director & HOD
Dr. (Mrs.) M. A. Mafe	Director of Research
Dr. (Mrs.) O. P. Akinwale	Director of Research
Dr. B. Adewale	Chief Research Fellow
Dr. (Mrs.) M. A. Sulyman	Chief Research Fellow
Mrs. J. O. Wilhelm	Asst. Chief Conf. Sec.
Mr. A. K. Adeneye	Research Fellow II
Dr. P. V. Gyang	Research Fellow II
Mrs. P. Uwajeh	Chief Secretarial Assistant
Mr. H. Uzoma	Scientific Officer
Mr. T. Nwafor	Scientific Officer
Mrs. E. O. Adelaja	Conf. Secretary III
Mrs. I. E. Adegboruwa	Senior Clerical Officer
Mrs. C. Iwegbu	Senior Clerical Officer
Mr. M. Nshiogwu	Senior Lab. Assistant
Miss. I. Akpan	Clerical Officer

### Research

#### Community knowledge and perception of buruli ulcer in Ogun State, Nigeria

Adeneye AK, Akinwale OP, Ezeugwu SMC, Olukosi YA, Adewale B, Sulyman MA, Okwuzu J, Mafe MA, Gyang PV, Nwafor T, Henry UE, Musa BD and Ujah IAO.

*Source of funding: Nigerian Institute of Medical Research*

Buruli Ulcer (BU) remains a neglected tropical disease globally including Nigeria despite its severe health and socio-economic consequences. It is consequent to paucity of data on community knowledge and perception of BU in Nigeria that this study was conducted. Method: The study was conducted in Yewa North and Yewa South local government areas (LGAs) of Ogun State, Nigeria.

Study population included community members selected using multi-stage sampling techniques. Focus group Discussions (FGDs), indepth interviews and household survey using semi-structured questionnaire were used for data collection. Qualitative and quantitative data were analysed using Text base Beta and SPSS (version 20) software respectively. Results: A total of 236 respondents were interviewed (Yewa North 76.7% vs. Yewa South 23.3%; males 48.7% vs. females 51.3%) with an average age of 33.1 years. Only 39.0% had a minimum of secondary education. A little over half (128; 54.2%) reported having knowledge of BU in their communities. However, only 35.6% adjudged BU a common disease in their communities while 56.0% perceived it as a serious health challenge. About 40.0% affirmed that BU affects people of all ages regardless of gender. Few (14.0%) of respondents had household members who had or have BU. Most (64.8%) claimed not to know the cause of BU. Of those who knew, their perceived causes of BU included Olobutu (9.7%), bacteria (4.2%) and poor hygiene (3.0%). Gender had no significant influence on respondents' knowledge of the cause of BU ( $p>0.05$ ). The most preferred treatment options usually sought for BU included traditional medicine (57.6%), going to hospital (35.2%) while a few (5.9%) combined both. Conclusions: Pervasive knowledge of BU and its health implications in the communities exist. Nonetheless, there is need for more public health education on BU using different communication channels. Overall, results provide insights for BU programme planning and operationalization.

### **Modifiable risk factors of Buruli Ulcer in communities of two endemic Local Government Areas of Ogun State, Nigeria**

Adeneye, A.K., Akinwale, O.P., Ezeugwu, S.M., Olukosi, Y.A., Adewale, B., Sulyman, M.A., Mafe, M.A., Okwuzu, J., Gyang, P.V., Nwafor, T., Henry, U.E., Musa, B.D., Ujah, I.A.,

*Source of funding: Nigerian Institute of Medical Research*

The study was conducted bridge knowledge gap on community knowledge and risk factors of Buruli Ulcer in Nigeria. The study was conducted in BU-endemic Yewa North and Yewa South local government areas (LGAs) of Ogun State, Nigeria. Study population included community members selected using multi-stage sampling techniques. Household survey using semi-structured questionnaire was used for data collection. Data were analysed using SPSS (version 20) software.

A total of 236 consented respondents were interviewed (Yewa North 76.7% vs. Yewa South 23.3%; males 48.7% vs. females 51.3%) with an average age of 33.1 years. Only 39.0% had a minimum of secondary education. A little over half (128; 54.2%) reported having knowledge of BU in their communities. However, only 35.6% adjudged BU a common disease in their communities while 56.0% perceived it as a serious health challenge. Few (14.0%) respondents had an average of one household member who had or have BU. Most (64.8%) did not know the cause of BU while 9.7% attributed it to witchcraft/Olobutu, bacteria (4.2%), water contact (3.0%) and poor hygiene (3.0%). 53.4% visit riverbanks for activities that were predominantly: washing (37.3%); swimming (35.7%); fetching water (19.8%); and agricultural activities (4.0%). Gender and age had no significant influence on respondents' knowledge of the cause of BU ( $p>0.05$ ). Swimming and other activities on the riverbanks associated with BU had significant correlation with report of BU cases in the household ( $p<0.05$ ).

**Conclusion:** Pervasive knowledge of BU cases and high perceived seriousness of the disease in the

study communities exist. Nonetheless, there is need for more public health education emphasizing common modifiable risk factors and actual cause of BU. Overall, results provide insights for BU programme planning and operationalization.

### **Building Laboratory Diagnostic Capacity and Strengthening Existing Laboratory System For Buruli Ulcer Control and Research in Nigeria**

Akinwale O.P., Gyang P.V., Nwafor T., Henry E., Adeneye A.K.

*Source of Funding: UNICEF/UNDP/World Bank/WHO/Special Programme for Research and Training in Tropical Diseases (TDR).*

The World Health Organization (WHO) assessment mission in 2006 reported that Buruli ulcer (BU), a neglected mycobacterial disease, might be more prevalent in Nigeria than had been previously thought. Consequently, a phased nationwide scale-up is being implemented by the National Tuberculosis, Buruli ulcer and Leprosy Control Programme (NTBLCP), the official body that organizes and implements BU control in Nigeria. According to WHO recommendations, at least two laboratory tests should be carried out for diagnostic confirmation and at least 50% of cases should be laboratory confirmed by polymerase chain reaction (PCR), hence, it makes PCR-confirmed diagnosis of BU a priority. However, continued absence of in-country capacity for PCR diagnosis of BU for case confirmation remains a big challenge to the National Control Programme. The specific objectives of this 12-month project therefore, were to organize a two-day train-the-trainer workshop on case identification, clinical sample collection (swab and fine needle aspirate), storage and transport for laboratory diagnosis of BU, for 27 Health Workers from Adamawa, Akwa Ibom, Anambra, Benue, Cross River, Ebonyi, Enugu, Ogun and Oyo states in Nigeria where BU cases have been reported, organize hands-on practical training for six laboratory personnel from the Molecular



Parasitology Research Laboratory (MPRL), Nigerian Institute of Medical Research (NIMR), in clinical sample preparations, standardization procedures, microscopy and IS2404 PCR assay for BU diagnosis and conduct an external quality assessment (EQA) of laboratory diagnosis of the trained laboratory personnel. These were achieved in collaboration with NTBLCP and Scientists from Noguchi Memorial Institute of Medical Research (NMIMR) Ghana, Mycobacteriology Reference Laboratory Benin Republic and the Institute of Tropical Medicine (ITM) Belgium.

The train-the-trainer theory workshop participants were positive in their feedback and they considered the workshop to have met its objectives and the schedule and administrative arrangements to be well organized. They were then encouraged to train their other colleagues in their respective states and also to maintain contact with each other and the facilitators after the workshop. Following the hands-on practical training, laboratory personnel understood procedures of molecular detection of *M. ulcerans* by PCR of the IS2404 sequence, microscopy and laboratory quality control. However, one main challenge encountered during laboratory analysis was PCR contamination resulting in an unacceptably high level of false positives as shown by the EQA assessment report. The problem was traced to the use of manual method of DNA extraction in the laboratory, which involved several steps of reagents preparations and sample manipulation. The challenge was overcome gradually following advice from the overseas collaborators and by taking the following steps: Using molecular grade water for sample preparation and bacterial DNA extraction kits following manufacturers' instructions for DNA extraction. In addition, there was separation of work space and a unidirectional workflow to reduce the potential for contamination. Four separate rooms were created - reagents, sample preparation, amplification and post-amplification analysis rooms within the laboratory complex. For instance, to prevent

contamination, personnel would not return to the reagent preparation room after working in the sample preparation room. In addition, required equipment, reagents, and supplies including laboratory coats were put in each of the rooms to help maintain a unidirectional workflow. Positive and negative quality control samples were analysed on a routine basis to determine adequate performance of the extraction method and the PCR. A continuous improvement in laboratory performance was observed afterwards, but there was still room for improvement. Overall, the project was able to achieve all its objectives.

### **Parasitic infections among pregnant women attending primary health care facilities in Lagos mainland Lagos State**

Adewale B., Aina O.O., Sulyman M.A., Akinsanya B., Olalekan R.

Source of Funding: Dr. Adewole B.

A cross sectional survey was conducted among pregnant women using semi-structured questionnaires for information on their socio-demographic characteristics, risk factors, knowledge of malaria and STH, and hygiene practices. Soil-transmitted helminth infections were identified and quantified in stool samples using Kato-Katz method. Finger-prick blood samples were used for RDT to determine *Plasmodium* spp. infection, and hemoglobin concentrations. The data was analyzed by Statistical Package for Social Sciences (SPSS) version 21.0.

A total of 202 pregnant women participated in the study aged 18 – 42 years. The mean age of the participants was 28.16±0.379 years while the mean weight was 70.4± 0.961kg. The prevalence of malaria among the studied population was 1.98%. Among 120 participants who provided a stool samples, 8.3% were infected with at least one soil transmitted helminth: 7.5% with *Ascaris lumbricoides*, 0.8% with hookworm. Infection while 0.8% had *Schistosoma mansoni* infection. Anaemia was significantly associated with STH infection in



pregnant women ( $P < 0.05$ ). Low malaria infection among pregnant women could be connected with the intermittent preventive treatment with sulphadoxine pyremethamine (IPTp-SP) which is a policy in all government health facilities. Soil transmitted helminthes could be regarded as a major cause of anaemia in these pregnant women having ruled out malaria infection using RDT. This finding confirms the public health impact of soil transmitted helminthes and schistosomiasis infections in pregnancy. This may necessitate initiation of preventive treatment of helminth infections during pregnancy.

### **Laboratory and experimental hut evaluation of chlorfenapyr for indoor residual spraying**

Awolola T.S., Adeogun A., Olakiigbe A., Oyeniyi T.

*Source of Funding:* PMI/ABT Associates

The study aims to assess the efficacy of Chlorfenapyr (a pyrrole class of insecticide) for indoor residual spray (IRS) application against malaria vectors as substitute for resistant pruned-IRS insecticides. The field study carried out the Institute outstation in Kanji (New Bussa) under experimental huts condition for a period of six months involves monthly assessment of the efficacy of Chlorfenapyr in relation to currently used IRS insecticide such as carbamate and pyrethroids.

The data showed no significant difference in repellency (reduction in the number of mosquito entering huts sprayed with chlorfenapyr compared to other insecticides), but significant high mosquito mortality was found in rooms sprayed with chlorfenapyr when compared to the standard control. Taken together, the study suggested an improved repellent effect of chlorfenapyr as a potential effective replacement for currently used IRS insecticides.

### **Ongoing Research**

#### **Understanding the impact of insecticide resistance on the efficacy of long lasting insecticide nets**

Awolola T.S., Olukosi., Adeogun A., Olakiigbe A., Oyeniyi T., Aina O.O

*Source of Funding:* UNICEF/UNDP/World Bank/WHO/Special Programme for Research and Training in Tropical Diseases (TDR).

This multi-centre study funded by WHO-TDR was designed to assess the possible role of insecticide resistance on malaria control in Nigeria, Benin and Mali. The Nigeria study sites include six villages in Ikorodu Local Government Area of Lagos State. The first phase of the study including review of insecticide resistance data, baseline entomological and parasitological assessment were concluded in September 2016. The second phase started in October 2016 with post intervention case assessment, socio-anthropological evaluation, laboratory analysis and compilation of entomological parameters.

#### **Appraisal of health insurance schemes in Nigeria**

Mafe M.A., Ezeugwu S.M.C., Adewale B., Raheem T.Y., Adeneye A.K., Sulyman M.A., Musa Z.A., Afocha E.E., Otuonye N.M., Akande D.O., Akindele S.A., Yisau J.

*Source of Funding:* NIMR

The project has two components: National Health Insurance Scheme (NHIS) which focuses on Federal Civil Servants in the States and Community Based Health Insurance Schemes (CBHIS). The study evaluates the success and draw backs in the implementation of Health Insurance Schemes in Nigeria and seeks to identify best practices that can be inbuilt in future plans for the anticipated massive roll-out for the attainment of Universal Health Coverage in Nigeria. The project has been completed in Kwara, Ogun, and Lagos States. The CBHIS and NHIS surveys are outstanding in Cross river, Anambra, Gombe, and Sokoto representing

the South-South, South-East, North-West and North-East. The Institutional survey of Federal capital territory is yet to be completed.

A Proposal on 'Appraisal of Primary Health Care Scheme in Nigeria' is currently being developed with the objective of generating data that will contribute to improving implementation of the primary health care in Nigeria, especially on maternal and child health.

### Training, Conferences and Workshops

**Awolola T.S:** Resistance Sim Workshop, 7-9<sup>th</sup> January 2016, Liverpool, UK.

**Awolola T.S:** WHO-TDR Consultative Forum for resistance Management April 2016, Johannesburg, South Africa.

**Awolola T.S., Adeneye A.K., Adewale B.** 3<sup>RD</sup> Pan-African Mosquito Control Association (PAMCA) Annual Conference, Lagos, Nigeria, 6-9 September 2016.

**Akinwale O.P.:** Symposium for International Research and Innovations in Schistosomiasis (SIRIS). Washington DC, USA, February 3 - 4, 2016.

**Pam V. Gyang:** Train-The-Trainer Workshop on Microscopy of Buruli Ulcer at the Mycobacteriology Reference Laboratory, Cotonou, Benin Republic. May 30<sup>th</sup> to June 3<sup>rd</sup> 2016.

**Adewale B & Adeneye A.K.:** Eighth EDCTP Forum: Defeating Poverty-Related and Neglected diseases in Africa: Harnessing Research for Evidence-Informed Policies. 6 – 9 November, 2016. Lusaka, Zambia.

**Adewale B. :** 40<sup>th</sup> Parasitology and Public Health Society of Nigeria conference 21–24, September, 2016. Federal University of Agriculture, Abeokuta. Paper Presented at Parasitologic investigation of Malaria and the Use of Herbal Remedies among Pregnant Women in Lagos west senatorial district.

### Collaborations

- National Tuberculosis, Buruli ulcer and Leprosy Control Programme (NTBLCP)
- Noguchi Memorial Institute of Medical Research (NMIMR), Ghana
- Mycobacteriology Reference Laboratory, Cotonou, Benin Republic

- Division of Control of Neglected Tropical Diseases, World Health Organization, the Institute of Tropical Medicine (ITM), Belgium
- German Leprosy and TB Relief Association (GLRA), Nigeria
- National Institute of Communicable Diseases, Johannesburg South African: Collaboration on insecticide resistance with Prof. Maureen Coetzee group.
- UK Medical Research Council Laboratory, The Gambia: Collaboration with Dr. Alfred Nwanga on Malaria parasites population genetics
- Malaria Research and Training Centre Bamako: Collaboration on multicentre study on insecticide resistance (Dr. Nafomon Sagno)
- International Institute of Tropical Agriculture Benin Republic: Collaboration with DR. Rousseau Djouaka on Entomological Training and capacity development.
- National Malaria Control Program on integrated Vector Management
- University of Jos: Collaboration with Prof. Georgena Mwanzat on Capacity building on entomological research
- University of Ilorin: Collaboration with the Department of Zoology (Dr. Adedayo Oduola) on WHO-TDR Impact Grant (2015-2017)

### Grants and Fellowship Awards

#### Grants

**Awolola T.S (PI):** Small Grant: Evaluation for residual efficacy of long lasting insecticide nets. Awarded by Tropical Health International (2016)

**Awolola T.S (PI):** Semi-field experimental hut evaluation of insect repellent IR3535® against *Anopheles gambiae* s.s. and *Culex quinquefasciatus* in Nigeria. Grant awarded by Merck KGaA Frankfurter Straße 250, 64293 Darmstadt, Germany (2016-2017)

#### Fellowships

**Adewale B:** Travel fellowship of the EDTCP for the eighth EDCTP forum in Lusaka, Zambia. 6 – 9 November, 2016.

## PUBLIC HEALTH DIVISION CONT'D

**Adeneye A.K.:** Travel fellowship of the EDTCP for the eighth EDCTP forum in Lusaka, Zambia. 6 – 9 November, 2016.

**Pam.V. Gyang:** Burroughs-Wellcome Fund Collaborative Research 2016/2017 Travel Award, USA.

### Postgraduate and students on Industrial attachment

Training of students from tertiary Institutions is a periodic activity in the Department. In line with the mandate of the Institute The Department offered postgraduate (M.Sc. and PhD) training to postgraduate and HND candidates. The Department also hosted an intern from the West African Health Organization and three students on industrial attachment.

Name	Institution	Program	Duration
<b>Gilbert A.</b>	West Africa Health Organization, Ouagadougou, Burkina Faso	Internship program	6 months
<b>Adewale Oke</b>	Dept. of Biological Sciences, Redeemer's University, Ede	PhD laboratory analysis: Buruli ulcer epidemiology and organism speciation	3 months
<b>Alexander Suzan Ijeoma</b>	Department of Zoology, University of Lagos	PhD Laboratory work on urinary schistosomiasis	3 months
<b>Boyle Oluwabusayo Grace</b>	University of Ibadan	Zoology	3 months
<b>Aboyade-Cole Adedapo</b>	Dept. of Biological Science Yaba College of Technology, Lagos	HND laboratory analysis	6 months
<b>Izuka Chinasa Lilian</b>	Dept. of Biological Science Yaba College of Technology, Lagos	HND laboratory analysis	6 months
<b>Nwankwo Ikechukwu Chidiebere</b>	Department of Zoology, University of Lagos	Industrial attachment	3 months
<b>Ojadiran Stephen Sunday</b>	Dept. of Pure & Applied Biology Ladoko Akintola University, Oyo State	Industrial attachment	6 months

### Financial Statement

As at December 2016, there was no specific account dedicated to the Division. Funds that accrued to the Division through the 3% allocation from overhead charges of external grants awarded to staff of the Division is yet to be accessed.

### Challenges and prospects

Of the seven Research Fellows in The Division, five are Parasitologists by training. For the Division to remain competitive in the Grant application front; there is a dire need for recruitment of new cadre of staff including Epidemiologist, Entomologist, Immunologist, Public Health Economics and Biostatistician.

The Division depends mostly on external funding

which at times do not address the immediate area of health research need of the country. The poor Government funding therefore remains a major challenge of the Division. There is a need for specific Government project to be commissioned in the Division. The Health System project funded by the Institute for instance if carried on a large scale could impact on health policy in the country.

There is also a need for a dedicated Generator set for the laboratory complex where expensive reagents are being stored. This has not been a priority over the year. Even with the use of UPS, the incessant power outage often results in damage of expensive equipment.

## ADMINISTRATION DIVISION



Alh. A. S. Yunusazazzau

The Administration Division continued, during the period under review to provide the support services required for the implementation of the Institute's mandate. This involves routine administrative functions of appointment, promotion, discipline, the interpretation and enforcement of the Public Service Rule (PSR), provision of secretarial services to the Institute's Management Committee, provision of legal services, security and insurance cover for all assets, keeping of policy files and updating of staff records. In 2016, other activities of the Administration Division includes Staff promotion, Transfer of Service / Resignation of Appointments, Dismissals from service, Retirement from Service, Training and Development, Industrial Training/Internship/NYSC, NIMR Pension Board of Trustees.

### Staff Promotion

The Institute short listed 46 junior staff for Promotion Exercise in the Institute while 13 Research Fellows and 69 non Research staff were short listed to various grades in 2016.

### Staff Training and Development

During the year under review, management/senior staff of the Institute attended 38 Conferences/Seminars within Nigeria and abroad in the year 2016.

### Staff

Alh. A. S. Yunusazazzau	Director Administration
Mr. P. O. Ejiga	Deputy Director (Admin)
Mrs. G. O. Ihenwengwa	Chief Executive Officer
Mrs. A. E. N. Okoye	Chief Admin Officer
Mr. N. N. Bitrus	Chief Admin Officer
Miss. N. A. Nneji	Asst. Chief Executive Officer
Mr. B. N. Osuji	Asst. Chief Executive Officer
Mrs. Q. M. Aderounmu	Asst. Chief Executive Officer
Mrs. N. C. Nwofor	Principal Executive Officer I
Mrs. N. I. Akintan	Principal Admin Officer
Mr. M. K. Idris	Principal Executive Officer II
Miss. M. T. Okon	Principal Confidential Secretary II
Mrs. N. N. Ekpo	Chief Secretarial Assistant
Miss. U. Asuquo	Senior Confidential Secretary
Mrs. F. J. Adeniyi	Higher Executive Officer
Mr. O. O. Ugwu	Administrative Officer II
Mr. M. A. Danjuma	Administrative Officer II
Mr. J. O. Oyibo	Administrative Officer II
Miss. C. P. Ukeji	Executive Officer (GD)
Mr. I. O. Benjamin	Asst. Executive Officer (GD)
Mr. J. Audu	Asst. Executive Officer (GD)
Mrs. M. A. Olowoyeye	Asst. Executive Officer (GD)
Mr. O. A. Sunmola	Senior Clerical Officer
Mr. A. R. Raheem	Senior Clerical Officer
Miss. U. M. Luke	Senior Clerical Officer

### Confirmation of Appointment

NAME	DESIGNATION	DATE OF CONFIRMATION
Mr. I. P. Ogbuji	Biomedical Engineer II	2/2/2016
Mr. Y. Ahmodu	Higher Executive Officer	3/2/2016
Mrs. O. G. lyke-Azike	Admin. Officer I	3/2/2016
Mr. O. Olayemi	Senior Librarian	2/2/2016

### Voluntary Resignation of Appointment and Withdrawal From Service

1. Dr. B. O. Oke Senior Research Fellow I, resigned his appointment from the Institute with effect from 14<sup>th</sup> January, 2016.
2. Mrs U. F. Sylvester-Ikundu, Senior Medical Lab. Scientist resigned her appointment with the Institute with effect from 31<sup>st</sup> January, 2016.
3. Mrs P. V. Brown, Asst. Executive Officer, voluntary

retirement from the Institute with effect from 12<sup>th</sup> February, 2016.

4. Dr. E. O. Somefun, Junior Research Fellow, resigned her appointment with the Institute with effect from 3<sup>rd</sup> May, 2016.
5. Mrs Y. A. Oyelakin, Senior Executive Officer, withdrawn her appointment with the Institute with effect from 26<sup>th</sup> September, 2016.

## ADMINISTRATION DIVISION CONT'D

### Termination of Appointment

NAME	DESIGNATION	EFFECTIVE DATE
<b>Miss I. S. Mokogwu</b>	Senior Information Officer	19/2/2016
<b>Mr. C. Okpowhor</b>	Information Officer II	23/5/2016

### Death In Service

NAME	DESIGNATION	SALARY GRADE LEVEL	DIVISION/UNIT	EFFECTIVE DATE
<b>Mr. I. P. Udoh</b>	Asst. Executive Officer	CONHESS 5 /1	Human Virology Laboratory	1/6/2015

### Retired officers in 2016

NAME	DESIGNATION	LEVEL	EFFECTIVE DATE
<b>Mr. S.R. Olagundoye</b>	Director Finance and Accounts	CONHESS 15/9	22/5/2016
<b>Mrs. R. N. Okoye</b>	Dep. Director (Lab. Services)	CONHESS 14/9	22/2/2016
<b>Mr. S. N. Akaka</b>	Chief Conf. Secretary	CONHESS 13/9	7/1/2016
<b>Mr. B. I. Ohanusi</b>	Chief Exec. Officer	CONHESS 13/4	20/8/2016
<b>Mrs. B. O. Okafor</b>	Prin. Exec. Officer	CONHESS 9/11	3/8/2016
<b>Mr. J. Okonkwo</b>	Higher Exec. Officer	CONHESS 7/15	5/10/2016
<b>Mr. H. O. Sanni</b>	Executive Officer	CONHESS 6/14	1/9/2016
<b>Mrs. A. A. Dike</b>	Snr. Lab Technician	CONHESS 6/12	2/1/2016
<b>Mr. S. O. Ezeigbo</b>	Executive Officer	CONHESS 6/11	6/10/2016
<b>Mr. M. A. Oladosu</b>	Chief Motor Driver	CONHESS 6/6	12/10/2016

Ten (10) staff retired from service of the Institute on the attainment of 60 years of age and mandatory retirement age of 35 years in service respectively

### Corps Members and IT Students in the Institute

The Institute as at December 2016 had 12 Corps members for the compulsory National Service, 81 Industrial Training (IT) students were granted opportunity to do their IT in the Institute and 5 Bench Space students during the year under review.

### Conclusion

The year 2016 was a successful year for the Administration Division as it carried out all its activities with little or no problem.



## INTERNAL AUDIT UNIT



Mr. F. Osagiede

Internal Audit as a managerial control tool measures and evaluates the effectiveness of internal control systems within the Institute. It carries out independent appraisal activities which involves routine and continuous audit operation. In 2016, the unit objectively examined, evaluated and reported on some inadequacies in internal control which bothers on economic, efficient and effective use of resources.

### Staff

Mr. F. Osagiede	Deputy Director & HOD (IA)
Mr. Richard.S. Adah	Asst Chief Internal Audit
Mr. Nkem B.A. Kadiri	Prin. Internal Audit
Mrs. Margaret. A. Akhigbe	Prin. Executive officer
Mrs. F.M. Okusaga	Higher Executive officer
Mr. Daniel Egwu	Auditor II
Mrs. Yemisi Akintomide	Asst Executive officer

### 2016 Work Plan

- Routine and post Audit of HVL revenue /expenditure from January-September 2016.
- Inspection and Verification of supplies to main stores, HVL Stores and APIN.
- Stock-taking exercise of main stores, HVL, Clinic, pharmaceutical and stationeries stores.
- Determination and examination of obsolete and unserviceable items before boarding.
- Field inspection of equipment, premises and staff quarters.
- Evaluation of Reagent and Kits in HVL.
- Field work for price survey of quoted prices by contractors.

### Activities

The Internal Audit unit as a management tool rendered extensive services on financial advice, economy, efficiency and value for money. The

recently introduced cost saving measures to negotiate of all invoices approved by Director General paid off and had substantially brought down cost of procurement of goods and services. Investigation and other activities as directed by management were carried out. Timely response to request and mails hastened decision making and goal realization.

### Boarded Items

The Internal Audit unit for the period under review carried out physical and comprehensive check on all items listed for boarding. The unserviceable and obsolete items were recommended for boarding through public auction. The proceeds were duly lodged into the consolidated Revenue account after deduction of relevant cost.

### Outstation Visits

The Internal Audit visited the newly acquired outstation (Asaba) for inspection. Also a visit to Liaison office Abuja for inspection and verification of Items for Boarding was carried out.

### External Visitors

The Internal Audit played hosts to inspectors from offices of Auditor General of the federation and Audit monitoring unit from the Accountant General of the federation, their visits were part of their oversight functions of ensuring adherence to financial guidelines in the operation of government business.

### Challenges

- Inadequate staffing due to retirement of two staff and increased workload necessitated the need to increase staff strength.
- Inadequate and poor state of office furniture and equipment has been a major challenge in the past year.



Mrs. M.N. Otuonye

The mandates of Clinical Diagnostic Laboratory are basically Services, Research and Training.

CDL is in collaborative research work with other divisions in NIMR and has contributed immensely in the training and supervision of projects of students from tertiary institutions in the country in 2016, CDL began to work in collaboration with NIMR Hepatitis Clinic and so developed a liver Panel Tests for the clients at a discounted rate. The income being generated in this laboratory has added to the Institute's internally generated revenue as revolving fund. Other test carried out in the unit in 2016 includes the following;

- Liver Function Tests (Mini)
- AFP-Alpha Feto Protein – (Serum)
- Prothrombin Time (PT) – (Plasma)
- Anti HBS and HBsAg
- Full Blood Count & ESR
- Medical Fitness tests
- Pre-Marital tests
- Pre-employments test
- Occupational Health screening tests
- Full comprehensive tests
- Renal Function tests
- Food handlers tests

## Staff

Mrs. M.N. Otuonye	Chief Med Lab. Scientist (Haematology)
Mr. T.Y. Raheem	Chief Med Lab. Scientist (Medical Microbiology/ Haematology)
Ms. O. Ojerinola	Chief Med Lab. Scientist (Clinical Chemistry)
Mrs. V.N.V. Enya	Chief Med Lab. Scientist (Microbiology)
Mr. S. K. Akindele	Chief Med Lab. Scientist (Parasitology)
Mr. D. O. Akande	Asst. Chief Med. Lab. Scientist (Parasitology)
Mrs. M. N. Aniedobe	Asst. Chief Med. Lab. Scientist (Microbiology)
Mrs. F.N. Ogbonna	Principal Med. Lab. Scientist (Microbiology)
Mr. O.E. Fasela	Principal Medical Lab. Scientist (Clinical Chemistry)
Mrs M.O. Wahab	Medical Laboratory Scientist (Haematology)
Mrs. T.A. Olaomo	Laboratory Assistant
Mrs. G.A. Charles	Principal Confidential Secretary II
Mr .N. Iwegbu	Higher Executive Officer
Mrs. B.O. Yusuf	Clerical Officer

## Clinical Diagnostic Laboratory Activities

### Quality services

CDL provides efficient and quality clinical diagnostic services for staff, their family members and members of the public at affordable costs. The staff of CDL are committed to providing excellent quality services to their clients. At present the laboratory is undergoing the process of national and international accreditation.

### Research activities

The medical laboratory scientists in CDL are members of the different research groups in NIMR where they actively participate in research activities. There are other researches studies conducted in the unit retrospectively, prospective or cross sectional using consenting clients attending the unit. CDL is also involved in some collaborative research work with researchers within and outside the country.

### Students Training

Undergraduates and post graduate students from universities and allied institutions within the country on Industrial Attachments (IT) were trained in the unit during the year. While some students paid familiarization visits to the institute.



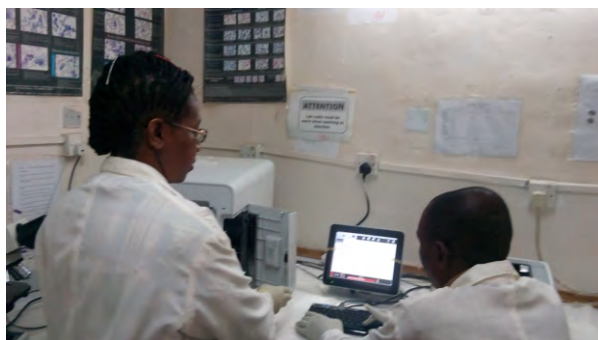
## CLINICAL DIAGNOSTIC LABORATORY CONT'D

### Kits Evaluation

CDL evaluated rapid diagnostic test kits and mandatory food handlers' tests for companies and institutions

### Haematology Unit

**The tests done include:** Full blood count (FBC), Prothrombin Time Test, International Normalized Ratio (INR), D-, fibrinogen test, Blood Group, Haemoglobin genotype, Erythrocytes Sedimentation Rate (ESR), Clotting time, bleeding time, Malaria parasite test, Film reading, etc



Haematology Unit

### Serology Unit

**The tests done by the unit includes** Helicobacter pylori test (blood and stool Ag), Widal reaction, Hepatitis virus antibody test (B and C), Mantoux, Pregnancy test (Blood & Urine), Treponema pallidum Human Antigen and Venereal Disease Research Laboratory (VDRL) test and Rheumatoid factor assay.

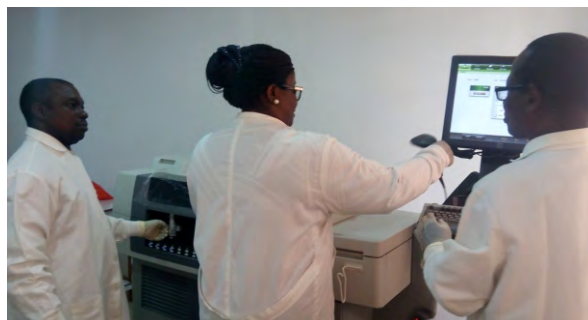
### Clinical Chemistry Unit

Tests such as Fasting and Random Blood Sugar, 2HrPP, Oral Glucose Tolerance Test (OGTT), Alkaline Phosphatase (ALP AMP), Liver Function

Test (LFT), Renal function test, Lipid Profile, Calcium, Uric acid, Alpha-feto protein, PSA, thyroid function test, Infertility profile, Ovulation Profile, Electrolytes ( $\text{Na}^+$ ,  $\text{K}^+$ ,  $\text{CL}^-$  &  $\text{HCO}_3^-$ ), HBS Ag, (Quantitative), anti HBS (HBsAb), HbA1c (glycosylated haemoglobin) etc.

### Microbiology & Parasitological Section

**The tests done in this section include** Microfilaria ( skin snip & blood), Occult Blood in stool , Urinalysis, Blood culture, Seminal Fluid Analysis, urethral swab, endocervical swab, HVS, throat, ear, stool, wound swabs for microscopy, culture and sensitivity etc, Fungal culture, Chlamydia



trachomatis Antibody detection test etc

**Clinical Chemistry Section Projecting Architect i1000 SR Immunoassay Analyzer**

### Kit Evaluation

Rapid test for the qualitative detection of anti TB antibodies test (Isotypes, IgG, IgM & IgA) in whole blood/serum/plasma specimens

## CLINICAL DIAGNOSTIC LABORATORY CONT'D

### Designated tests in CDL

#### Tests Conducted January – December, 2015 & January – December, 2016

In 2016, CDL began to work in collaboration with NIMR Hepatitis Clinic and so developed a liver Panel

Tests for the clients at a discounted rate. They are:  
Liver Function Test (Mini)  
AFP-Alpha Feto Protein – (Serum)  
Prothrombin Time (PT) – (Plasma)

Anti HBs and HBs Ag  
Full Blood Count & ESR  
Other Panel of tests done include:

Medical Fitness tests  
Pre-Marital tests  
Pre-employments test  
Occupational Health screening tests  
Full comprehensive tests  
Reduced comprehensive test  
Food handlers test  
Tests for house help

Units	Tests Done in 2015	Tests done in 2016
Microbiology	1985	496
Chemistry including Immunoassay	1318	1264
Serology	1135	1780
Haematology	1356	1582
HCT	3097	
<b>TOTAL</b>	<b>8, 892</b>	<b>5,122</b>

Benches	Income Generated 2015 ( ₦ )	Income Generated 2016 ( ₦ )
Microbiology	1,739,624	1,002,850.00
Chemistry including immunoassay tests	4,310,910	3,174,175.00
Serology	2,399,101	2,144,220.00
Haematology	950,650	1,921,275.00
HCT	72,850.00	
<b>TOTAL</b>	<b>₦10, 128,785.00</b>	<b>₦8, 242,520.00</b>

### Equipment

**Acquisition/placement of Architect i1000 SR Auto analyzer by Abbot/AMD** The equipment was placed by Abbott on 10<sup>th</sup> of October 2016. It is an immunoassay automated analyser.

Due to space constraint, NIMR Management gave CDL a laboratory extension and an office at the NIMR Cancer Training Centre where the equipment was installed as well as approved the acquisition two new computers and one printer.

### Conferences and Workshops Attended Staff

#### Otuonye M.N

25<sup>th</sup> Annual Canadian Conference on HIV/AIDS Research, Winnipeg Manitoba, Canada 12<sup>th</sup> -15<sup>th</sup> May, 2016.

7<sup>th</sup> Annual Scientific Conference: Achieving the Health-Related sustainable development goals in Nigeria: The role of research and Innovation. NIMR 8<sup>th</sup>-10<sup>th</sup> November, 2016.

National Microbiology Laboratory, Canadian Public Health Agency Winnipeg Canada. Annual Divisional Presentations Oral Paper presented: The Role of Human Leukocyte Antigen Class 1 in HIV-1 Transmission 21<sup>st</sup> April, 2016.

2016 NIMR Retreat held at Reiz Continental Hotel, Abuja from 1<sup>st</sup>-3<sup>rd</sup> December, 2016.

#### Raheem TY:

A 2-Day International Biotechnology Conference, Exhibition and Workshop (IBCE &W) 2016 organized by the Division of Biological Sciences, Covenant University Canaan Land Ota, Nigeria in Collaboration with AMLSN from 6<sup>th</sup>-7<sup>th</sup> June, 2016

## CLINICAL DIAGNOSTIC LABORATORY CONT'D

Training of Trainers (TOT) Workshop on Foundations of Laboratory Leadership and Management (FLLM) Conducted in Lagos by American Society for Microbiology (ASM) from 16<sup>th</sup>-25<sup>th</sup> August, 2016.

52<sup>nd</sup> National Scientific Conference and Workshop of the Association of Medical Laboratory Scientists of Nigeria (AMLSN). Theme: Tumour Microenvironments: Basic and advanced Strategies for Quality health Services. Date: 2<sup>nd</sup> – 8<sup>th</sup> October, 2016 at Jalingo, Taraba State.

7<sup>th</sup> Annual Scientific Conference: Achieving the Health-Related sustainable development goals in Nigeria: The Role of Research and Innovation. Held in NIMR from 8<sup>th</sup>-10<sup>th</sup> Nov, 2016.

2016 NIMR Retreat held at Reiz Continental Hotel, Abuja from 1<sup>st</sup>-3<sup>rd</sup> December, 2016.

3<sup>rd</sup> International Conference organized by African Society for Laboratory Medicine (ASLM) Held at the Cape Town International Convention Centre, Cape Town from 4<sup>th</sup>-8<sup>th</sup> December, 2016. Theme: Combating Global Health Threats in Africa.

### **Ojerinola Oluranti**

Achieving Health Related Sustainable Development Goals in Nigeria. The Role of Research and Innovation NIMR 8<sup>th</sup> – 10<sup>th</sup> November, 2016

Introduction to Safety Practices, Fire prevention, Quality Management System & Laboratory Accreditation Requirements CDL, NIMR, 10<sup>th</sup> – 15<sup>th</sup> February, 2016.

### **Enya Veronica Nnenna Victor**

NIMR 7<sup>TH</sup> Annual Scientific Conference 8<sup>th</sup> – 10<sup>th</sup> November, 2016

AMLSN, Lagos State branch 51<sup>st</sup> Annual Conference 2016 10<sup>th</sup> – 15<sup>th</sup> July, 2016 The Pavilion National Orthopedic Hospital, Igbobi, Lagos.

Andrology Workshop: Basis Course in Semenology and Intra Uterine Insemination (IUI) 10<sup>th</sup> – 12<sup>th</sup> Dec. 2016 Excellence Hotel, Ogba, Lagos

Bio-safety workshop: Beyond infection Control: Health and safety at work place. 30<sup>th</sup> November, 2016. National Orthopaedic Hospital, Igbobi, Lagos.

Africa Inspiration Meeting WEBCAST (GSK/AMLSN) Overcoming Challenges to Good Laboratory Practices in Resources Limited Setting Friday 3<sup>rd</sup> May, 2016. Golden Tulip Hotel, FESTAC, Lagos

### **Akindele Samuel Kayode:**

Quality Management System Laboratory Accreditation & Equipment Inventory CDL, NIMR on 15<sup>th</sup> February, 2016.

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Accredited Laboratories in Management of Public Health emergencies organized by AMLSN, NIMR Chapter 28<sup>th</sup> April, 2016

Good Phlebotomy practice Training by BD – 21<sup>st</sup> July, 2016.

### **Akande David Olaleye:**

Spongiform Encephalopathics: Disorders of Economic and Public Health Importance; Wither Nigeria (AMLSN), 5<sup>th</sup> February, 2016, Calabar, Cross River, State.

Accredited Laboratories in Management of Public Health Emergencies organized by AMLSN, NIMR Chapter 28<sup>th</sup> April, 2016

Spread of Infectious Diseases in an Increasing Population: Effects and the way forward. AMLSN, 12<sup>th</sup> July, 2016 at National Orthopaedic Hospital, Igbobi, Lagos.

Tumour Micro-Environments: Basic and Advanced Strategies for Quality Health Services AMLS. 2<sup>nd</sup> – 8<sup>th</sup> October, 2016 Jalingo, Taraba State.

Scientific Manuscript writing course organized by 16<sup>th</sup> – 17<sup>th</sup> November, 2016

Achieving Health Related Sustainable Development Goals in Nigeria. The Role of Research and Innovation. 8<sup>th</sup> – 10<sup>th</sup> November, 2016

## CLINICAL DIAGNOSTIC LABORATORY CONT'D

### **Aniedobe Nkem Maureen:**

Antibiotic Discourse and Lecture on Overcoming Challenges good Laboratory Practice in Resource Limited Setting at the Golden Tulip Hotel, Festac Lagos on 13<sup>th</sup> May, 2016.

Orientation training of the Quality Assurance team, manufacturers and vendors representatives in preparation for the Laboratory Evaluation of HIV 1 and 2 Rapid test kits June 30<sup>th</sup> to July 2<sup>nd</sup> 2016 at the Teejay Palace Hotels, GRA, Zaria.

National Evaluation of HIV rapid test kits for the development of new HIV testing in Nigeria, at the National External Quality assurance Lab. Saye Zaria, Kaduna State, 4<sup>th</sup>-22<sup>nd</sup> July, 2016.

Maiden Conference of the Female Association of Medical Laboratory Scientists (FAMLSN) titled 'Cancer in the Life of a woman, not a death Sentence' 8<sup>th</sup>-10<sup>th</sup> September, 2016 at Adeyemi Bero Hall Alausa, Ikeja.

Introductory course on Medical Negligence and Mediation organized by the Medical Disputes and Conflicts Resolution Ltd. on 12<sup>th</sup> October, 2016.

7<sup>th</sup> Annual Scientific Conference of the Nigerian Institute of Medical Research, 8<sup>th</sup>-10<sup>th</sup> November, 2016 at NIMR.

### **Ogbonna F. N:**

The Challenges of TSA Policy implementation on patients came in NIMR. A survey from patient's perspective 25<sup>th</sup> February, 2016.

Zika Virus: Virology, Image and Laboratory Diagnostic NIMR 25<sup>th</sup> February, 2016. Achieving Health Related Sustainable Development Goals in Nigeria: The Role of Research and Innovation. NIMR 8<sup>th</sup> – 10<sup>th</sup> November, 2016.

Accredited Laboratories in Management of Public Health emergencies organized by AMLSN, NIMR Chapter 28<sup>th</sup> April, 2016

Overcoming challenges to Good Laboratory Practices in Resource Limited Setting. AMLSN by GSK – 13<sup>th</sup> May, 2016

Missed Diagnose of Universal Parasite viz-a-viz effective malaria treatment 16<sup>th</sup> – 17<sup>th</sup> November, 2016

Good Phlebotomy practice Training by BD – 21<sup>st</sup> July, 2016.

### **Fasela Emmanuel:**

MLSCN/AMLSN) Phlebotomy Nigeria Web-based CPD Programme March 4<sup>th</sup> 2016. Overcoming Challenges to Good Laboratory Practices in Resource Limited Setting. AMLSN by GSK – 13<sup>th</sup> May, 2016.

Introduction to Laboratory Quality Management System, MLSCN/AMLSN, Nigeria based CAD programme, 27<sup>th</sup> December, 2016.

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Phlebotomy Competence Skill Training, CDL, NIMR on 7<sup>th</sup> March, 2016

### **Wahab Maureen Obioma**

Quality Management System Laboratory Accreditation & Equipment Inventory Training CDL NIMR on 15<sup>th</sup> February, 2016.

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Overcoming challenges to Good Laboratory Practices in Resource Limited Setting. AMLSN by GSK – 13<sup>th</sup> May, 2016.

Good Phlebotomy practice Training by BD – 21<sup>st</sup> July, 2016.

### **Charles Grace Amarachi**

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

## CLINICAL DIAGNOSTIC LABORATORY CONT'D

Quality Management System Laboratory Accreditation & Equipment Inventory Training CDL, NIMR on 15<sup>th</sup> February, 2016

### Iwegbu Ralph Ndubuisi:

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Quality Management System Laboratory Accreditation & Equipment Inventory Training CDL, NIMR on 15<sup>th</sup> February, 2016

### Olaomo Titilola Alice

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Quality Management System Laboratory Accreditation & Equipment Inventory Training CDL, NIMR on 15<sup>th</sup> February, 2016

### Yusuf Basirat Omowunmi:

Introduction to Safety Practices, Fire Prevention, Quality Management System and Laboratory Accreditation Requirements CDL, NIMR on 10<sup>th</sup> February, 2016.

Quality Management System Laboratory Accreditation & Equipment Inventory Training CDL, NIMR on 15<sup>th</sup> February, 2016

### Achievements

- CDL is contributing to NIMR internally generated revenue.
- Quality, reliable and reproducible results are generated in CDL for patients Management.
- CDL is contributing to the internship training of newly graduated Medical Laboratory Scientists.
- CDL is the first public laboratory to be accredited by the Medical Laboratory

Science Council of Nigeria

- Improved public health by screening food handlers and domestic staff.

### Major Challenges

- The introduction of TSA policy early in 2016 and towards the end of the year actually affected the patronage by clients. Clients were directed to go to commercial banks around to pay for the tests. That discouraged most clients, some sent to the banks outside NIMR never returned to complete their tests. The approval given by NIMR management for e-payment and POS points within NIMR later in 2016 has improved the patronage subsequently.
- Interrupted supply of reagent to Sysmex Hematology analyser in the unit. This has drastically reduced the number of tests done in haematology Unit.
- Supply of reagent for use with TC Matrix (Chemistry analyser) was not regular. Regular service work on the analyser needs to be contracted to competent service engineers to ensure reliable and optimal performance.
- Inadequate Space. Both CDC and SLIPTA auditors have commented on the laboratory not having enough space

### Way Forward

- To have at least two laboratory technicians. There has been no replacement since Mrs Aisha Issa and Mr Ezra left CDL in 2015
- Expansion of CDL offices and laboratories
- Training and retraining of staff both locally

## CLINICAL DIAGNOSTIC LABORATORY CONT'D

and internationally to be abreast with modern technology

### **Work Plan for 2017**

- To establish an Andrology laboratory
- To establish an HLA laboratory for organ/tissue transplant and Gnostic DNA Child Paternity dispute Test
- To have equipment service agreement with a company especially for T C Matrix to service the TC matrix to facilitate the continuation of chemistry test so that we do not expensive reagent
- To have un-interrupted reagent supply for T C Matrix analyser in Chemistry Unit.
- To have un-interrupted reagent supply for Sysmex Haematogy analyser in Haematology section
- To reduce the Turn Around Time of test results
- To increase number of tests menu done in CDL and increase revenue through aggressive marketing
- To increase our customers satisfaction
- To improve the staff productivity through man power development (Ph.D, M.Sc, Fellowship, CPD, Local Regional and International Trainings and conferences)
- To communicate more of our research findings through publications in peer review journals
- To fully computerize test results.



## FINANCE & ACCOUNTS DIVISION



Mr. Y. Y. Ogaji

The Performance of the Division in year 2016 was quite impressive as core functions were performed despite numerous challenges. The main functions carried out by the Division includes maintenance of the Institute's financial records/books of accounts, budget compilations and defence, handling of banking related activities and other duties assigned to the Division by the Management. Despite inadequate accounting personnel and limited funds, the Division was able to ensure that all necessary research, administrative and other special activities of the Institute were lubricated with funds.

The Division had at the first quarter of the year mapped out strategies to resolve reconciliation problems caused by the introduction of Treasury Single Account (TSA) and also replace the out-dated version of "Great Plains" accounting software of the Division. It was hoped that execution of these plans would fast-track preparation of final accounts but this was met with limited success. However, the bold step taken and the partial success recorded constitute achievements that could be improved upon.

### Objectives achieved during the period under review include:

- ❖ Improved service to the Institute through better management of its financial resources and timely provision of accurate and reliable financial data for management decisions.
- ❖ Improved transparency and accountability for the use of public funds.
- ❖ Improved management of external grants

through strict implementation of relevant rules, procedures and budgets.

- ❖ Implementation of internal control measures aimed at eliminating wastages and blocking loopholes for frauds and misuse of funds.

### Staff

Mr. Y. Y. Ogaji	Deputy Director/Ag. HOD
Mr. S. B. Kadiri	Chief Accountant
Mrs. T. A. Malomo	Chief Accountant
Mr. B. O. Aina	Chief Accountant
Mr. O. D. Abiola	Principal Confidential Secretary
Mr. C. Okolo	Principal Accountant
Mr. S. Adekoya	Principal Executive Officer
(Accts)	
Mr. B. E. Bekeboh	Senior Accountant
Mr. C. Otuakpaikhian	Principal Executive Officer (Accts)
Mr. N. O. Iwegbu	Senior Executive Officer (Accts)
Mr. M. Olatunji	Senior Executive Officer (Accts)
Mr. K.O. Ologwu	Accountant I
Mrs. M. A. Olatunji	Higher Executive Officer (Accts)
Mrs. E. O. Ajape	Higher Executive Officer (Accts)
Mr. A. Adebayo	Higher Executive Officer (Accts)
Mr. C. Uzuh	Higher Executive Officer (Accts)
Mr. P. A. Kudi	Higher Executive Officer (Accts)
Mr. Esseien Asuquo	Executive Officer (Store)
Mr. C. A. Ojonugba	Asst. Exec. Officer (Accts)
Mr. G. C. Oyelaran	Confidential Secretary III
Mr. P. O. Olaleye	Asst. Exec. Officer (Accts)
Mr. C. G. Ochai	Asst. Exec. Officer (Accts)
Mr. P. U. Uchenna	Clerical Officer
Mr. E. Edomsomwan	Clerical Officer

It should be noted that three (3) members of staff retired from active service during the year. They were Mr. S. R. Olagundoye (who was the former Director of Finance and Accounts), Mr. I. Nwaneri (Asst. Chief Executive Officer (Accts) and Mrs. B. O. Okafor. (Asst. Exec. Officer (Accts)).

### Staff Training and Development

The Division attaches much importance to on-the-job-training of its staff in order to ensure increased productivity. In this regard, three (3) members of staff were selected to attend trainings on International Public Sector Accounting Standards (IPSAS) and Procurement Procedures. The additional knowledge



## FINANCE & ACCOUNTS DIVISION CONT'D

and skills acquired from the trainings will not only boost their Morales but also keep team abreast of the latest information about their jobs, thereby increasing productivity of the staff.

### Financial Highlights

The Institute continued to rely more on its own

internally generated funds to sustain its programmes and activities and the year 2016 was not an exception. The table below depicts a poor level of funding by the Federal Government as it relates to 2016 budget performance.

### 2016 Budget Performance

Budgets	Appropriation (₦)	Amount Released (₦)
<b>Overheads</b>	33,563,468.00	24,678,245.00
<b>Capital</b>	56,087,508.00	36,128,488.00
<b>Personnel</b>	726,311,410.00	724,342,006.00
<b>Total</b>	815,962,386.00	785,148,739.00

From the table above the overheads and capital budgets can be seen to be grossly inadequate for running of the Institute and carrying out meaning research and core capital projects. The releases in 2016 were 73.53% and 64.42% of approved budgets for overheads and capital. The personnel is cost 100% financed by the government.

The Institute generated N39.4 million from internal sources which was used to argument inadequate funds from the government. In order to address the persistent funding problem, the institute initiated a special intervention funding programme under the auspices of the new Director – General. The dividends of this programme are still being expected.

Funds from External Grants did not make much impact in 2016 owing to Treasury Single Account problem which persisted in most period of the year.

However, with completion of Domiciliary Accounts opening in Central Bank of Nigeria towards end of the year, improvement in funding of research activities from external collaborators would be expected in the subsequent years.

It must be noted that a total of N19.2million was borrowed from internal sources to Principal Investigators to fund research activities because of inability to access external grants in TSA.

### Achievements

The Division was able to accomplish the following assignments during the year.

- ❖ Opening and activation of new Domiciliary Accounts in dollar, pound and euro with the Central Bank of Nigeria. This achievement has put an end to the difficulty in receiving funds from external collaborators.
- ❖ System upgrading: The Division embarked

## FINANCE & ACCOUNTS DIVISION CONT'D

on upgrading of selected PCs and the accounting software as part of measures to resolve reconciliation and posting problems which lingered on from September 2015 to 2016 due to operation of Treasury Single Account.

- ❖ Others include human capital development through trainings, seminars, workshops to make staff more productive.

### Challenges and Prospects

The major challenges of the Division were inconclusive account reconciliation and posting problems and preparation of final accounts which were all caused by the newly introduced Treasury Single Account with mixed up of funds. However, measures have been taken to address these challenges and it is hoped that, in no distant future, the challenges would be overcome.

# INFORMATION COMMUNICATION & TECHNOLOGY UNIT



Mrs. Olayemi Nwogbe

In the past one year, the Information Communication Technology Unit continued to invent ways of providing range of ICT support to strengthen NIMR capacities for research; promote visibility and foster research collaboration nationally and internationally. The core ICT support in 2016 includes repair and maintenance computer systems, Internet provision & security, network administration, web management, multi-media support, desktop publishing.

Also in the year, the full responsibilities of troubleshooting, repair and maintenance of computer and network systems in the Institute fell squarely on the shoulder of the ICT Unit. This is as a result of the decision made by senior management to lower our overall costs of computer systems repair and maintenance by discontinuing the engagement of external consultant.

The unit has initiated plan to conduct a critical assessment of ICT skills requirement of different cadre of staff with a view to design and conduct basic and intermediate in-house, and on-the-job training for employees to improve staff ICT skills for enhancement and timely delivery of job responsibilities. We also plan to look into developing Management Information Systems applications that will aid organizational efficiencies in data and information management.

## Activities in 2016

- Management of Institutional Website
- Network configuration, administration and maintenance
- Installation, diagnoses, repair and maintenance of computer systems and accessories
- Database Design and Management
- Publishing of Institutional Annual Report
- Publishing of NIMR Newsletter
- Design and produce Books, Manuals, Booklets,

Handbooks, Banners, Posters, cards and other information products

## Staff

Mrs. Olayemi A. Nwogbe	Chief Librarian/Information Scientist
Mr. David T. Johnson	Principal Data Processing Officer 1
Mr. Abiola Bayonle	Programme Analyst 1
Mr. Emmanuel O. Ijoga	Programme Analyst 1
Ms. Chiamaka Okeke	Information Officer II
Mrs. Tessy Oshibamowo	Information Officer II
Mr. Gabriel N. Stephen	Assistant Executive Officer

## Training and Conferences attended Nwogbe O.A

Bioethics Training. January, 2016

7<sup>th</sup> NIMR Annual Scientific Conference, 8-10th November, 2016

## All Staff

7<sup>th</sup> NIMR Annual Scientific Conference, 8-10th November, 2016

## Staff Movement

The following officers were posted from Information Unit to the ICT Unit following the merger of Information Unit with the Information Communication Unit.

Mrs. Tessy Oshibamowo	Information Officer II
Miss Chiamaka Okeke	Information Officer II

## Staff Redeployment

The under listed staff were redeployed from DG's office and Clinical Sciences Division to the ICT Unit.

Mr. Emmanuel O. Ijoga Programme Analyst 1  
Mr. Abiola Bayonle Programme Analyst 1

## 2017 Plan

- Extension of Internet coverage in the Institute
- Organize of in-house Computer and ICT training for staff
- Acquisition Computer and network tools.

# LIBRARY & DOCUMENTATION UNIT



Mr. Shola Abolarinwa

## Staff

Mr. S. T. Abolarinwa	Deputy Director
Mrs. C.E. Uzohue	Chief Librarian
Miss. O.O. Adewoyin	Chief Librarian
Mrs J. P Michael	Principal librarian
Mr. O.M. Olayemi	Senior Librarian
Mrs Q. Dike	Principal Library Officer II
Mrs. B. Awosika	Senior Library Officer
Mr. Oyeleye	Higher Library Officer
Mr. A. D. Udoh	Audio Visual Officer
Mrs. A. D. Ubah	Assistant Library Officer
Mrs. G. Osuji	Assistant Library Officer
Mrs. Duker	Senior Confidential Secretary

## Introduction

Information provision and dissemination is the primary function of the library. Thus, the library serves staff of the Institute, students, and other scientists from allied institutions in this capacity. The library, which is open for use from Mondays to Fridays, 8.30am - 4.00pm houses printed and electronic information resources. The print resources include Textbooks, periodicals (Journals, magazines, Newspapers, Technical reports, Pamphlet, monographs) while the electronic resources include CD-ROM, Medline, Online database; Pubmed, Ajol, and HINARI. Hinari remains the most used database. The three major sections in the library are; Serial section, Technical section and Circulation section.

## Serial Section

The serial section manages periodicals and ensures that they are accessible to end users. Journals trickle in by donation from mainly international organizations. This has affected the acquisition of books and journal negatively.

The section has been able to manage the few resources available to meet the information needs of the researchers. The section has gone further by digitizing data entries of journals with its full bibliographic information to enable library users access information electronically. In addition, the section was involved in compiling and updating NIMR staff publication compendium. The staffs of the section provides information services to the various research groups they are attached to, as well as

compilation of bibliography on topical subject.

## Technical Section

The activities in the technical section include:

### 1. Classification and cataloguing of library materials:

The section was responsible for the processing of all textbooks received in the library. Textbooks that were received in the library were accessioned, classified and catalogue for easy retrieval. The classification scheme in use in the library is the Library of Medicine Classification Scheme.

2. **Electronic literature search:** The internet was the major means that was used to provide this service. Searches were made for patrons in order to meet their information need.

### 3. Current Awareness Service:

- Sourcing for information on grants for research staff.
- Compilation of bibliographies: Bibliographies such

as Diabetes, Diarrhoea and Ebola were compiled to add to the existing bibliographies in the library

4. **Receipt and processing of dailies:** The library subscribed to two National dailies which were the Punch and the Guardian

## Circulation/Readers Services Section:

This section functions as the main service point for the library users. It performs its traditional roles of lending services and it provides facilities for returned of loaned items as well as providing reading space for the readers. Reserved book service, Reference services, shelf maintenance and keeping of statistical records of users are done routinely in the unit. Very important is that major shelving is done from time to time to facilitate easy and quick access to information. So far, all the books in the unit have been captured ready for the e-library realization. In house trainings to meet up with global trends were conducted for the staff in order to improve their skills and job performance.

There is on-going compilation of bibliographies to meet the needs of our researchers on various

## LIBRARY & DOCUMENTATION UNIT CONT'D

subjects. Collaboration was made with the various research groups to meet their information need.

### Challenges

- The library does not have annual budget hence poorly funded.
- Obsolete items: most print resources are old.
- Inadequate subscriptions to journals, Books, databases etc.
- Inadequate space for library resources and staff.

- No functional photocopier in the library.
- The library application software requires update.
- Inadequate ICT hardware: such as computer, scanner, multimedia projector, printers e.t.c.
- Training and retraining of staff is a big challenge

If the challenges are addressed; the library would be in a better position to serve its users.

### LISTS OF JOURNAL RECEIVED IN JANUARY 2016 – DECEMBER, 2016 SERIAL SECTION

S/N	TITLES	VOL	NO	MONTH	YEAR
1.	Proceedings of the Nutrition Society	33	4	Nov	2014
2.	Public Health Nutrition	17	10	Oct	2014
3.	Journal of the Brazilian Society	47	4	July-Aug	2014
4.	Annals of Saudi Medicine	34	2	Mar-Apr	2014
5.	Nutrition Research Reviews	27	2	Dec	2014
6.	Nutrition Research Reviews	27	1	June	2014
7.	Public Health Nutrition	17	7	July	2014
8.	Public Health Nutrition	17	12	Dec	2014
9.	Public Health Nutrition	18	1-3	Jan-Feb	2015
10.	Proceedings of the Nutrition Society	74	1	Feb	2015
11.	Annals of Saudi Medicine	34	3	May/June	2014
12.	Africa Health	37	1	Nov	2014
13.	Africa Health	37	3	March	2014
14.	Africa Health	37	1	Nov	2014
15.	Proceedings of the Nutrition Society	73	4	Nov	2014
16.	International Journal of Paediatrics Adolescent Medicine	1	1	Sept	2014
17.	Africa Journal of Reproductive Health	18	4	March	2014
18.	Africa Journal of Reproductive Health	18	2-4	Jun-Dec	2014
19.	Public Health Nutrition	17	10	Oct	2014
20.	Public health Nutrition	18	4-6	Mar-Apr.	2015
21.	The Nigerian Medical Practitioner	66	3-6	Sept-Dec	2014
22.	Pharmanews	37	5	May	2015
23.	Annals of Saudi Medicine	34	6	Nov/Dec	2014
24.	Public Health Nutrition	18	8-10	June-July	2015
25.	Proceedings of the Nutrition Society	74	2	May	2015
26.	Africa Health (Nigeria)	37	5	July	2015
27.	Journal of the Brazilian Society of tropical Medicine	48	2-3	Mar-June	2015
28.	Nutrition Research Review	28	1		2015
29.	Public Health Nutrition	18	11-12	August	2015
30.	Proceedings of the Nutrition Society	74	3	Aug	2015

## MONITORING & EVALUATION UNIT



Dr. (Mrs.) A.Z. Musa

The Monitoring and Evaluation Unit coordinates and supports Data management and Monitoring & Evaluation activities of Divisions, Units and Research groups in NIMR. These include design of data collection tools, database design, data collection, data entry, provide M & E indicators for the management of projects and research activities and grant management. Furthermore, we support these groups in the generation of their reports, analysis of data, use of data generated to improve their activities and achieve their set objectives.

### Staff

Dr. (Mrs.) A.Z. Musa Research Fellow  
I/Biostatistician

Mrs. A.M. Adedeji Asst. Chief Statistical Officer

Miss Ihotu Agbo Programme Analyst

### Unit Activities

**Statistical support:** The unit provides statistical consulting and collaborative support to the researchers and research groups within and outside the institute.

**Data and database management** – We provide data management support to divisions and units that have large dataset (HVL, CSD and DOTs Clinic) and Research groups

- Cleaning, updating and organising data generated from different Divisions and units
- Management of data generated from field work for research groups
- Backup databases (on site and off site)

**Reports:** The Unit prepares bi-annual and annual M

& E reports of the Institute on Projects, Programme Divisional / Unit's activities to both NIMR management and FMOH.

**Grant management:** The unit supports the Institute on

- Grant management compliance
- Drafting, negotiating, interpreting and executing contracts with sub recipients and consultants
- Evaluation of grant performance, regular technical reports to funders and liaising with sub awardees
- Maintain NIMR's SAM, Grant.gov and eRA-Commons registration updates

### Research Projects Supported

•**Assessment of challenges faced by Internally Displaced persons in Nigeria. Ongoing**

•Evaluation of Antimicrobial activities of some commercially available hand sanitizers in Lagos (*Completed*)

•**Community survey of causes of Childhood Mortality in Nigeria. (Ongoing)**

•Mortality Survey in Nigeria: Investigating and identifying the causes of sudden death in adult Nigerians. (*Ongoing*)

•National HIV prevalence study. (*Ongoing*)

•HIV Drug Resistance: Implication for Optimizing Antiretroviral Therapy. (*Ongoing*)

•A Self-Evaluation of guidelines and functionality of in-country IRBs in compliance with National and International standards. (*Completed*).

•Three-monthly analysis of NIMR Manpower Statistics.

### Training and Conferences attended



## MONITORING & EVALUATION UNIT CONT'D

### **Dr. A.Z. Musa**

Bioethics Training. NIMR. **January, 2016**

7<sup>th</sup> NIMR Annual Scientific Conference, 8-10th November, 2016.

### **Industrial Training**

Mrs. Wakilah Lawal: Department of Statistics, University of Ibadan, Nigeria.

### **Technical support**

- Analysis and report writing for Lagos State AIDs Control Agency on Lagos State AIDs Spending Assessment for year 2013, 2014 and 2015. 23rd-27th May, 2016, Lagos.

- Supported the Liberian Government on the development of a one year operational and financial plan for their proposed National Public Health Institute. 17<sup>th</sup>-20<sup>th</sup> March, 2016, Liberia.

### **Challenges**

- Inadequate office space to function effectively
  - Inadequate Manpower
  - Lack of document storage space / facility.

### **Way forward**

- Provision of additional office space
- Employment of competent staff
- Purchase of licensed statistical packages.

The recession made the first quarter of year under review, bleak and uneventful, but with the tide of time the economy saw a gradual bounce back only to be pummeled by high exchanged rates, retrenchment in the private sector, poor income flow to mention a few, this saw a paradigm shift in the economy to self-sustenance. The Consult was able to meander its way by clinging on to its activities as stated in the immediate strategic plans. The essence is to build on a quick system of revenue generation and find areas of possible continuous revenue drive. The Consult did not perform badly in its activities, but there is still room for improvement. We hope year 2017 will be better than the previous years.

### Staff

Oscar Airiohuodion	Manager, NIMR Consult
John Ujah	Commercial Officer
Osas Izevbizua	Facility Officer /E-Marketing
Yahaya Ahmodu	Marketing Officer
Bamidele Oluwagbemi	Admin Officer

The following staff retired in the month of March and July 2016, Patience Brown (Mrs.) – AEO and Joseph Okonkwo – HEO, while Margret Akhigbe (Mrs.) was reposted to Internal Audit of the Institute in the month of September 2016.

### Facilities Marketing and Management

The Consult team in an attempt to improving on the previous income embarked on aggressive marketing of the Institute facilities via direct marketing and via the internet.

#### Facilities for Hire

- Auditorium;
- Conference rooms; and
- Open ground for Car park and events

### Laboratory Product Marketing

Several approaches were made to a number of hospitals, Health Maintenance Organizations' (HMOs'), NDLEA, Psychiatric Hospital Yaba, Lagos State Sport Commission, Nigerian Institute of Sports, Fed Min. of Youth & Sport Development etc. for possible relationship with the various NIMR Laboratories and Clinical services, interest were activated from prospects of which NIMR would benefit on the long run. The Consult's effort in its marketing drive yielded some results in the year under review.

The Consult went for a number of programmes, one of such was the Interactive session that took place with Lagos State Nurses of which the Consult used the opportunity to inform them of the need to partner with NIMR by sending their patients to NIMR laboratories for quality diagnostic investigations and results.

A relationship was concluded with SOS Children's Villages Nigeria, to have their wards and staff alike, have access to various "NIMR Care", those are Lab investigations, treatment and management. There were other avenues opened up in the course of our marketing and it is hope that NIMR would take advantage of some of the prospects, such as with Merck, Union Diagnostic, Medexia HMO, *et cetera*.

### Relationship management

Keeping clients is essential in business, there are other companies rendering the same services as NIMR does but because they have good customer service relations they have been able to increase

## NIMR CONSULT CONT'D

their customer base likewise through goodwill and incentives such as discounts and monetary reward. Thus we are trying to build relationship and partner with other organizations that would further improve the Labs revenue via NIMRCONSULT input. Findings have it that these Hospitals would rather send their patients to other rival service providers such PathCare, Mecure, Union Diagnostics, Clina-Lancet *et cetera* than NIMR because of the benefits derived by these Hospital Lab Technicians. The Consult will continue to fashion out ways to improve business relations and output.

### Fund Sourcing

During the period under review, the Consult was involved in few finance/sponsorship committees within NIMR, the reason for this, was to enable the Consult concentrate on its core area of competence and improve on its deliverables.

### Income Profile

Description/Year	Aug 01 to Dec 31, 2014 (N)	2015 (N)	2016 (N)
<b>Total Park Collection</b>	791,800.00	865,400.00	1,617,700.00
<b>Total Auditorium</b>	2,775,000.00	3,849,200.00	3,470,000.00
<b>Total Conference Room</b>	130,000.00	938,000.00	3,407,500.00
<b>Total PAS/Projector/Chairs/Tables</b>	100,000.00	97,000.00	98,800.00
<b>Grand Total</b>	3,796,800.00	5,749,600.00	8,594,000.00

### Expenditure

During the period under review, the expense incurred was N4, 927,963.00. This amount was spent on office and facility maintenance, salary and other logistics necessary for the Consult to kick off

### Projects in pipeline

Possible collaboration with other institutions and organizations in the area of capacity building may commence in this financial year. Planned collaboration between NIMR and NDLEA; NIMR and Psychiatric Hospital Yaba with HVL having greater input, in the area of Drug abuse testing, Therapeutic monitoring, is worth looking up to.

The commencement of the septic tank evacuator truck business venture in year 2017, considering the fact that a service provider had been appointed, it is hope that other items remaining such as new tires and batteries are put in place to enable It ply the road for business and income generation for the Consult.

Rental income from the use of the ATM post near the staff quarters for grocery will shore up income.

Planed conversion of the Institutes Conference

on a sound note to capture the target audience. 2016 expenditure is lower than the expense incurred in year 2015 (N7, 886,428.00k), the need to maximize profit and minimize cost of operations prompted this.

## NIMR CONSULT CONT'D

### Statement of Account

Description/Year	2014 (₦)	2015 (₦)	2016 (₦)	Total (₦)
<b>Total Expenditure</b>	1,582,758.44	7,886,428.00	4,927,963.00	14,397,149.44
<b>Total Facility Income Generated</b>	3,796,800.00	6,109,600.00	8,594,000.00	18,500,400.00
<b>Net Position</b>	2,214,041.56	(1,776,828.00)	3,666,037.00	4,103,250.56

### Challenges

- Misconceptions on the 10 Million Naira seed grant issued NIMR Consult was addressed;
- The cost incurred in putting an already faulty car in order was high and results were not achieved, the alternative was to manage the vehicle to recoup what had been spent initially considering the depreciating value of the car.
- We still await Hocal Suite management to comply with the NIMR management's directive to park their visitors' vehicles at NIMR paid car park during events to avoid congestion on the access road and quarters. The rules of engagement and fees had been communicated during our meetings with Hocal management.
- Infrastructural decay, thus maintenance of income generating facilities such as the auditorium toilets need face-lifts by changing the wall tiles and placing floor tiles as well
- The need for the Consult to be assigned a permanent Driver

### Way Forward

- The use of IT students or Youth Corp will assist the Consult in its operations.
- Prompt repair of the two faulty air conditioning units in the Auditorium
- Prompt repair of the 230 KVA generating set and replacement of its exhaust pipe.

### Overall Performance

The contribution of the Consult to NIMR's bottom-line during the period under review was

**N 19,506,150.00k.**

### Prayer

Our belief is to improve on our current performance and achieve set targets. We use this medium to thank the Director General, Management and NIMR staff in general for their support while the Consult would work better to improve on the Consult's deliverables.

## PROCUREMENT UNIT



Mr. Daniel Ochigbo

The procurement unit was established in 2012 and commenced full operation in 2013. The objective of the Procurement Unit is to obtain the best possible value for money on behalf of the Federal Government of Nigeria while rigorously maintaining the procuring entity's business principles and agreement under which it operates. It is the bureau's policy that services, materials and equipment should be acquired by procuring entities at the most favourable terms compatible with desired quality delivery requirements, taking account of total life cycle costs and in a manner that safeguards and preserves the reputation of the procuring entity.

### Staff

Daniel Ochigbo            Procurement Officer I/ HOU  
Musa Kyari Bukar       Procurement Officer II  
Ekpo Christiana David    Secretarial Assistant I

### Achievements

The unit ensures standardized operational process in the procurement of goods, works and services such as;

- Procurement of Laboratory equipment.
- Procurement of other office furniture, equipment and other consumables.
- It ensures zero tolerance on white elephant project, deception, avoidable delays and non-transparency in the procurement of goods, works and services.
- Procurement laid down threshold is followed as spelt out in the procurement Act.
- Improved procurement documentation.

### Challenges

The key challenge in the procurement process is delay in the release of budget allocation.

### Recommendations

The need to enlarge the pool of contractors that compete for public contracts so as to produce competent contractors who can provide the desired needs, works and services at the best price, right quality, right quantity, from the right source and at the right time.

### Conclusion

Total compliance with the procurement process will help the Institute in cutting cost, get value for money, and ensure competitiveness, transparency and professionalism in procurement of goods and equipment.

## WORKS & MAINTENANCE DIVISION



Engr. E.O Adedeji

### Staff

Engr. E.O Adedeji	Deputy Director /HOD
Engr. J.C. Nwokeji	C.T.O. (Elect)
Mr. E.A. Udofia	C.T.O. (Civil)
Mr. T.O.Kokumo	A.C.T.O. (Civil)
Mr. A.M. Yahaya	A.C. Biomedical Engineer
Mr. S. Emebualili	Principal Conf. Sec.1
Engr. Edomwonyi Osaro	Snr. Engineer. (Elect)
Mr. K. Akiode	P.T.S
Mr. D.Ugochukwu	Snr. Technical Officer
Mr. J. Opara	T.S.T 1
Mr. Prince Ogbuji	Biomedical Engineer 1
Mr. M.A. Balogun	T.S.T 1
Mr. C. U. Offor	SFM Elect
Mr. L. Dauda	SFM Plumber
Mr. Ekeocha Victor	SNR Foreman Elect
Mr. Ayodeji Oyedeji	Foreman Elect.
Mr. Patrick Akabueze	H. T. O. (Elect)
Mr. Salawu Ayokunle	Craftman Elect
Mr. Adeyanju E.O	SNR Foreman Plumbing
Mr. Ogunyelu . T	Craftsman
Mr. Christopher Odimba	Craftsman
Mr. Adesanya Stephen	Foreman Mason
Mr. Ekpobia S. A	Foreman Mason
Mr. Adekoya S.A	Snr. Foreman
Mr. Abu Joseph	Craftman
Mrs. Joy Obi	Snr. Environmental Assist.
Mr. Olasupo Dauda	Snr Foreman Carp
Mr. Chioma Alaribe J	Snr. Higher Environmental
Assis	
Mr. Agboola .T.S	Snr. Lab. Assistance
Mr. Alao Olajide John	Snr Foreman
Mr. Olu Oluwasesan	Snr. Foreman R/A
Mr. Hassan Salifu	Snr. Foreman R/A
K. Akintunde	Transport Superintendent
G. Udomkpa	ransport Superintendent
Ishola Olusegun	Motor Driver
Salami Abiodun Wahab	Motor Driver
Joseph Washi	Motor Driver
Umannah Ezekiel	Senior Motor Driver Mechanic
Emmanuel Okpe	Motor Driver
Ajenu Boniface	Motor Driver
Okoli Tooohukwu G.	Senior Technical Officer
Shopitan O. O.	Senior Clerical Officer

### Maintenance Service Contracts

The Service Contracts through signed agreements existing between the Institute and professional private participators (Vendors) are as follow:

- I. Cleaning Services – Ranstojan Nig. Limited

- II. Biomedical Wastes Incinerator / Autoclaves– Emis Engineering Limited
- III. Sewage Septic/Inspection Chambers Dislodgement by Hamtec-Abraham Ventures
- IV. Priority Feeder Line/Equipment-DAT Investments Coy Ltd.
- V. All the above mentioned services were excellently executed to satisfaction throughout the year 2016

### Routine Maintenance Services

The routine maintenance services undertaken cut across the entire Civil, Electrical/Electronics, Biomedical, Transport, Environmental and Refrigeration/Air-conditioning Units making up the Division. The activities of each Unit for the year 2016 are as given below.

- (i) Civil
- (ii) Electrical
- (iii) Transport
- (iv) Biomedical
- (v) Air Conditioning/Refrigeration.
- (vi) Environmental

### Activities in the Civil Engineering Unit

- 1 House 6 Building and its Guests' chalet were renovated and painted.
- 2 Painting and decoration of both internal and external building were done in Auditorium building.
- 3 Felting work was carried out on Administration building roof slab to check the serious leakages that had been persistent for a long time.
- 4 Major plumbing work on servicing of some major sanitary chambers like filled up septic tanks and the corresponding under- ground soak-away chambers within residential quarters and offices premises.
- 5 The Administration Building Elevator/lift was repaired and serviced, and is working now.



## WORKS & MAINTENANCE DIVISION CONT'D

- 6 Replacement of some bad and obsolete office furniture and equipment with new and modern ones were done in DG's and in his principal officer's offices.
- 7 Three new submersible pumps were procured to replace the old malfunctioning ones.
- 8 In addition to the above, our daily basic routine checks and maintenance services are closely observed and carried out for the necessary serviceability of the entire estate.

### Electrical Unit

This unit is in charge of all the electrical equipment used to generate, Transmit and distribute power to the offices, laboratories and residential quarters. They also maintain the lighting system in the above mentioned areas including the security lightings.

- Electrical renovation and rectification of house 6, the DG's residential building.
- The replacement of burnt armored cable supplying power from the 275Kva clinical sciences generator to Administrative block.
- Servicing of the Institute Transformer, maintenance of busbar, feeder pillar, and changeover switch etc.
- Trimming of trees along the High Tension and low tension lines to avoid possible explosion as regard wind blowing.
- Carrying out proactive, preventive, corrective and general services of the institute generators in line with the manufacturer's recommendation.
- Rectification of all electrical faults in the institute laboratories including the equipment.
- Ensuring continuous functionality and adequate maintenance of the electrical gadget of Bio Safety Laboratory Level three (BSL3).
- Replacement of the change-over switch in the power house from 800A to 1250A.
- Maintenance of existing generator diesel data base.
- Monitoring and supervision of the institute

priority feeder contractor in the maintenance of the High Tension (H.T) line, High Tension circuit breakers, Transformers, and the ring main unit

- Maintenance and Servicing of all the Generators for continuous and optimal performance.
- Ensuring steady Power Supply to all offices, Laboratories and Residence.
- Reducing response time to fault rectification.
- Ensuring electrical load balancing in each phase etc.
- Constant monitoring of the Low Tension lines to effect repairs as regard the constant burning of load lines, jumpers, power surge, and lose on contacts in the system.

### Activities in the Transport Unit

- All Institute's vehicles were serviced as at when due throughout 2016
- All faults were cleared with vehicles designated as broken down mechanically throughout the year

### Refrigeration & Air Conditioners

All refrigerators, Air conditioners and Deep Freezers in all Laboratories, and Offices reportedly faulty were repaired throughout the year 2016. Routine services of all the Air Conditioners in the offices and laboratories were carried out as shown below for the first half of 2016

DIVISIONS	START	END
HVL	08/02/2016	29/01/2016
W&M	01/03/2016	04/03/2016
CDL	07/03/2016	21/03/2016
Molecular Biology	22/03/2016	29/03/2016
TB lab	30/03/2016	08/04/2016
Lab complex	11/04/2016	11/05/2016
Admin Block	12/05/2016	13/06/2016
Auditorium	Once quarterly across the year	

## INSTITUTIONAL REVIEW BOARD (NIMR-IRB)



Dr. Oliver C. Ezechi

The Director General approved the reconstruction of NIMR Institutional Review Board after dissolving the former Board. The current NIMR-IRB was inaugurated into office on the 1st Sept., 2016 by the Director-General of NIMR, Prof. B. L.

Salako. The Board consists of sixteen (16) members with Dr. O. C. Ezechi as the new Board Chairman and Mrs. O.A. Nwogbe as the Administrative Secretary. The table below aptly depicts the composition of the new Board:

### IRB Board Members

S/N	Names	M/F	Profession	Organization	Position on Board
1.	Dr. O. C. Ezechi	M	Gyne & Obstetrician	N.I.M.R., Yaba	Chairman
2.	Dr. B. Adewale	M	Bioethicist	N.I.M.R., Yaba.	Member
3.	Dr. Tajudeen Bamidele	M	Microbiologist	N.I.M.R., Yaba	Member
4.	Dr. O. O. Aina	M	Pharmacologist	N.I.M.R., Yaba	Member
5.	Ms. Olayide Akanni	F	Media/Journalist	Journalist Against AIDS	Member
6.	Barr. Olatunde Daudu	M	Lawyer	Olatunde Daudu & Co,	Member
7.	Dr. R. A. Audu	F	Virologist	N.I.M.R., Yaba	Member
8.	Alh. A.S. Yunusazazzau	M	Administrator	N.I.M.R., Yaba	Member
9.	Dr. A. Z. Musa	F	Biostatistician	N.I.M.R., Yaba	Member
10.	Dr. N. David	F	Pediatrician	N.I.M.R., Yaba	Member
11.	Msgr. P. Nwaezeapu	M	Cleric	Catholic Church, Lagos	Member
12.	Dr. G. Ohiohin	M	Gyne & Obstetrician	N.I.M.R., Yaba	Member
13.	Mrs. O. A. Nwogbe	F	Information Scientist	N.I.M.R., Yaba	Admin Secretary
14.	Ms. Ifeoma Idigbe	F	Sociologist	N.I.M.R., Yaba	Member
15.	Alh. T.Y. Raheem	M	Med. Lab. Scientist	N.I.M.R. Yaba	Member
16.	Alh. B. A.T. Lawal	M	Imam	Muslim Society	Member

The Desk Officers to the Board  
Mrs. N. A. Ako-Okoli B.A. (Hons) &  
Mrs. C.. M. Idoko-Joseph

Research Protection (OHRP), the Federal Wide Assurance Number (FWA) and National Health Research Ethics Committee (NHREC) in Nigeria.

### Vision

To promote high ethical standards and ensure that the rights, health and welfare of potential research participants are protected and researchers are guided in conducting ethical research.

### Mission

To ensure that research conducted in the Institute and in the health sector is independently reviewed in a fair and consistent manner that will ensure ethical conduct of research.

To develop guidelines for human research subject protection, identify ethical principles to guide the conduct of research.

To organize training workshops and seminars for IRB members and build capacity for researchers in research ethics and methodology.

### Registrations with National & International Bodies

The Board is registered with the Office of Human

### Standard Operating Procedures

NIMR-Institutional Review Board Standard Operating Procedures (SOPs) comprise of the following sub-headings:

- Constituting Institutional Review Boards
- Management of Protocol Submission
- Review of Application Protocol
- Review of Medical Device Study
- Clinical Trial
- Indemnity for Research
- Training and Continuing Education of Ethics Members and Personnel
- Report of Monitoring Visit
- Adverse Event Reporting Procedures

These Standard Operating Procedures were reviewed and modified by the Board in March 2016.

### Meetings

The Board held three statutory meetings to discuss issues on health research ethics, research protocols, and review process and protocol

## INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

approvals.

### Protocols

A total number of forty-one (41) proposals were submitted to the Board in the year 2016. These protocols range from projects from NIMR,

Multinational organizations and students projects from various universities and polytechnics.

Among the forty-one(41) protocols, thirty-six (36) were approved, three dropped, one expunged on allegation of plagiarism. The protocols received in the year are listed below:

PROTOCOL NUMBER	TITLE	DATE RECEIVED	DATE APPROVED	STATUS
IRB/16/320	THE UTILIZATION OF GENEXPERT IN THE TIMELY DIAGNOSIS AND TREATMENT OF PTB PLHIV IN NIGERIA	07/01/16	26/05/16	APPROVED
IRB/16/321	ASSESSING THE ALIGNMENT BETWEEN COMMUNITY PERCEPTIONS OF URBAN HEALTH AND RESILIENCE NEEDS IN THE LAGOS METROPOLIS AND STATE, FEDERAL AND GLOBAL PRIORITIES	22/01/16	02/03/16	APPROVED
IRB/16/322	FACTORS AFFECTING TUBERCULOSIS TREATMENT ADHERENCE AMONG TB/HIV CO - INFECTED PATIENTS IN NIGERIAN INSTITUTE OF MEDICAL RESEARCH, LAGOS STATE, NIGERIA	22/01/16	02/03/16	APPROVED
IRB/16/323	ROTAVIRUS DIARRHEA IN NIGERIAN CHILDREN: PREVALENCE, VIRULENCE, DIVERSITY AND EMERGENCE OF NEW STRAINS	02/02/16	26/04/16	APPROVED
IRB/16/324	HEALTH RELATED QUALITY OF LIFE OF TUBERCULOSIS PATIENTS ATTENDING DOTS CLINIC IN LAGOS, NIGERIA.	20/02/16	05/05/16	APPROVED
IRB/16/325	THE USE OF E-JOURNALS BY HEALTH RESEARCHERS: A CASE STUDY OF THE NIGERIAN INSTITUTE OF MEDICAL RESEARCH ( NIMR)	20/02/16	26/04/16	APPROVED
IRB/16/326	AN EVALUATION OF THE ETHICAL CONCERNS OF RESEARCH ETHICS COMMITTEES IN NIGERIA, USING THE PRINCIPLES AND BENCHMARKS PROPOSED BY EMANUEL ET AL. (2004).	20/02/16	07/06/16	APPROVED
IRB/16/327	OCCUPATIONAL EXPOSURE OF BTEX COMPOUNDS TO AUTOMOBILE MECHANICS AND PETROLEUM STATION ATTENDANTS .	DROPPED	DROPPED	DROPPED
IRB/16/328	ASSESSMENT OF DOSE REFERENCE LEVELS FOR COMMON RADIO-DIAGNOSTIC PROCEDURES IN SOUTHWESTERN NIGERIA	02/02/16	29/11/16	APPROVED
IRB/16/329	INVESTIGATION OF THE POTENTIAL BENEFICIAL EFFECTS OF CANNABIDIOL IN THE MANAGEMENT OF TARDIVE DYSKINESIA USING ANIMAL STUDIES AND A CLINICAL TRIAL .	06/03/16	03/05/16	APPROVED
IRB/16/330	THE PREVALENCE AND DETERMINANTS OF ANAEMIA AMONG HIV POSITIVE P REGNANT WOMEN ATTENDING ANTENATAL CLINICS IN LAGOS	EXPUNGED	EXPUNGED	EXPUNGED

## INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

IRB/16/342	INTEGRATED BIOLOGICAL AND BEHAVIORAL SURVEILLANCE SURVEY (IBSS) AMONG TRUCK DRIVERS, THEIR APPRENTICES AND SEX WORKERS PATRONIZING THE PORTS OF APAPA, COTONOU, LOME, TEM A AND ABIDJAN	28/07/16	03/08/16	APPROVED
IRB/16/343	EVALUATING PROVISION OF THE LNG -IUS IN NIGERIA AND POTENTIAL FOR SCALE -UP OF THE METHOD	19/07/16	29/10/16	APPROVED
IRB/16/344	HUMAN IMMUNODEFICIENCY VIRUS (HIV) - CLINICAL SAMPLE COLLECTION	27/07/16	09/02/17	APPROVED
IRB/16/345	MUTATIONS IN THE <i>rpoB</i> GENE OF RIFAMPICIN RESISTANT <i>MYCOBACTERIUM TUBERCULOSIS</i> ISOLATES IN LAGOS, NIGERIA.	29/07/16	29/11/16	APPROVED
IRB/16/346	THE KNOWLEDGE AND PERCEPTION OF TEACHERS ON HEALTHFUL SCHOOL LIVING IN TWO SELECTED SECONDARY SCHOOLS IN IKORODU LAGOS, NIGERIA	DROPPED	DROPPED	DROPPED
IRB/16/347	GENOME WIDE SEARCH OF ANTIBODY CORRELATES OF SERA 5, MSP -3, AND PFRH5 VACCINE CANDIDATE ANTIGENS AMONG INFECTIOUS POPULATION OF NIGERIA AND ITS IMPLICATION FOR MALARIA VACCINE DEVELOPMENT	01/09/16	28/10/16	APPROVED
IRB/16/348	UNDERSTANDING THE PERSPECTIVES OF PARENTS REGARDING THE USE OF HPV VACCINE FOR THE PREVENTION OF CA CERVIX FOR THEIR DAUGHTERS AGED 9 -14 YEARS IN LAGOS NIGERIA	30/09/16	26/10/16	APPROVED
IRB/16/349	PREVALENCE OF <i>PNCA</i> MUTATIONS AMONG RIFAMPICIN-RESISTANT <i>MYCOBACTERIUM TUBERCULOSIS COMPLEX</i> IN SUB-SAHARAN AFRICAN COUNTRIES	04/10/16	13/12/16	APPROVED
IRB/16/350	HIV-1 DRUG RESISTANCE IN ANTIRETROVIRAL <small>NAME AND EXPERIENCE PREVIOUSLY</small> <small>WORKS AND COLLEGE</small>	06/10/16	22/03/17	APPROVED
IRB/16/351	EPIDEMIOLOGY OF COCCIDIAN INFECTIONS HIV POSITIVE WOMEN AND CHILDREN IN LAGOS STATE	10/10/16	08/11/16	APPROVED
IRB/16/352	OCULAR FINDINGS AMONG COHORTS OF ADULT PATIENTS WITH PULMONARY TUBERCULOSIS. A MULTICENTRE STUDY	17/10/16	13/12/16	APPROVED
IRB/16/353	SONOGRAPHIC CORRELATION OF ABDOMINAL ADIPOSE TISSUE THICKNESS WITH BIOCHEMICAL AND ANTHROPOMETRIC PARAMETERS IN OBESE YORUBA TRIBE IN	31/10/16	06/12/16	APPROVED

## INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

IRB/16/331	<b>RAPID ASSESSMENT OF POLICY GAPS, TRAINING NEEDS AND MENTORSHIP APPROACHES FOR CHILDREN AND ADOLESCENT HIV SERVICES IN NIGERIA</b>	08/04/16	03/06/16	APPROVED
IRB/16/332	EFFICACY AND SAFETY OF TRADITIONAL POLYHERBAL REMEDIES IN THE TREATMENT OF MALARIA IN SOUTHERN NIGERIA	08/04/16	26/05/16	APPROVED
IRB/16/333	PREVALENCE OF SCHISTOSOMA HAEMATOBIIUM AND EVALUATION OF DIFFERENT DIAGNOSTIC METHODS AMONG SCHOOL CHILDREN IN IPOGUN AKURE NORTH LOCAL GOVERNMENT OF ONDO STATE	13/04/16	26/10/16	APPROVED
IRB/16/334	LESBIANS, GAY, BISEXUALS AND TRANSGENDER (LGBT) ACCESS TO HEALTHCARE PROJECT	13/04/16	20/05/16	APPROVED
IRB/16/335	MYSTERY CLIENT SURVEY OF PROPRIETARY PATENT MEDICINE VENDORS (PPMVS) IN BENUE, KEBBI, ABIA, AND NASARAWA STATES, NIGERIA	09/05/16	26/05/16	APPROVED
IRB/16/336	PREVALENCE AND PATTERN OF SCHISTOSOMIASIS INFECTION AMONG PRIMARY SCHOOL CHILDREN IN EPE, LAGOS STATE	DROPPED	DROPPED	DROPPED
IRB/16/337	CO - INFECTION OF MALARIA AND SOIL TRANSMITTED HELMINTH IN PREGNANT WOMEN ATTENDING PRIMARY HEALTH CARE CENTRES IN LAGOS MAINLAND LOCAL GOVERNMENT, LAGOS STATE.	12/05/16	29/11/16	APPROVED
IRB/16/338	CHALLENGES OF ADHERENCE TO ARV DRUGS AMONG PEOPLE LIVING WITH HIV/AIDS (PLWHA): INSIGHT FROM NIGERIAN INSTITUTE OF MEDICAL RESEARCH YABA, LAGOS.	03/06/16	16/08/16	APPROVED
IRB/16/339	ACCEPTABILITY OF ASSISTED REPRODUCTIVE TECHNOLOGY (ART) AMONG WOMEN IN LAGOS, NIGERIA	07/06/16	01/02/17	APPROVED
IRB/16/340	COMPARISON OF BLOOD CONCENTRATION OF VITAMIN D, LIPID PROFILE AND GLUCOSE IN PREECLAMPTIC AND NON-PREECLAMPTIC PREGNANT WOMEN ATTENDING ANTENATAL CLINICS AT SOMOLU GENERAL HOSPITAL AND ISLAND MATERNITY HOSPITAL, LAGOS	08/06/16	13/12/16	APPROVED
IRB/16/341	MOLECULAR EPIDEMIOLOGY OF TUBERCULOSIS IN ABIA STATE	DROPPED	DROPPED	DROPPED

## INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

<b>IRB/16/353</b>	<b>SONOGRAPHIC CORRELATION OF ABDOMINAL ADIPOSE TISSUE THICKNESS WITH BIOCHEMICAL AND ANTHROPOMETRIC PARAMETERS IN OBESE YORUBA T RIBE IN LAGOS MAINLAND NIGERIA.</b>	<b>31/10/16</b>	<b>06/12/16</b>	<b>APPROVED</b>
<b>IRB/16/354</b>	PREVENTION OF MOTHER TO CHILD TRANSMISSION OF HIV PROGRAMME IN NIGERIA: EFFECTIVENESS EVALUATION STUDY IN 7STATES	26/11/16	13/01/2017	APPROVED
<b>IRB/16/355</b>	THE KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTH CARE WORKERS TOWARDS MEN WHO HAVE SEX WITH MEN LIVING WITH HIV IN LAGOS, NIGERIA :IMPLICATIONS FOR ACCESS TO HIV PREVENTION AND TREATMENT SERVICES	07/12/2016	10/01/20-17	APPROVED
<b>IRB/16/356</b>	ENVIRONMENTAL AND OCCUPATIONAL HEALTH HAZARDS AMONG AUTOMECHANICS IN AUTOMOBILE WORKSHOPS LOCATED IN SELECTED LOCAL GOVERNMENT AREAS OF LAGOS STATE, NIGERIA	09/12/2016	/08/02/2017	APPROVED
<b>IRB/16/357</b>	PREVALENCE OF ASYMPTOMATIC BACTERIURIA IN HIV POSITIVE AND NEGATIVE PREGNANT WOMEN ATTENDING ANTENATAL CLINICS IN LAGOS STATE UNIVERSITY TEACHING HOSPITAL AND NIGERIAN INSTITUTE OF MEDICAL RESEARCH	16/12/2016	10/01/2017	APPROVED
<b>IRB/16/358</b>	ANTIRETROVIRAL PHARMACOGENETICS SCREENING TO REDUCE ART ADVERSE DRUG REACTIONS IN HIV PATIENTS IN SOUTH EAST AND SOUTH WEST NIGERIA	21/12/2016	18/04/17	APPROVED
<b>IRB/16/359</b>	NUTRITIONAL STATUS AND PREVALENC E OF NON-COMMUNICABLE DISEASES AMONG RURAL AND URBAN ADOLESCENTS	20/12/2016	08/02/2017	APPROVED
<b>IRB/16/360</b>	INCIDENCE OF TB, ADVERSE DRUG REACTIONS AND OUTCOMES OF PHARMACEUTICAL CARE IN A COHORT OF HIV PATIENTS ON SECOND LINE ART	21/12/2016	08/02/2017	APPROVED



# INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

## Funding

The ethics committee is funded partly by NIMR management and mainly through processing fees received from the review of protocols.

### NIMR-IRB: STATEMENT OF ACCOUNTS (1<sup>ST</sup> JANUARY – 31<sup>ST</sup> DECEMBER, 2016)

Income				Expenditure			
Date	Particulars		Amount	Date	Particulars	Folio	Amount
15/1/16	Dr. Akudo Ikpeazu	IRB/16/320	200,000.00	03/03/16	Hosting of Statutory meeting		159,600.00
22/1/16	Ms. Ebele Mogo	IRB/16/321	5,000.00	01/09/16	Hosting of Statutory meeting		159,600.00
01/2/16	Dr. Folashade Idowu	IRB/16/322	5,000.00	22/12/16	Hosting of Statutory meeting		159,600.00
	Mrs. Ebele Afocha	IRB/16/323	5,000.00	30/09/16	Honorarium to Reviewers		318,000.00
16/2/16	Dr. Oladele Rita	IRB/16/324	5,000.00	8-10/08/16	NIMR-IRB Training		777,750.00
19/2/16	Mr. S. T. Abolarinwa	IRB/16/325	5,000.00				
15/3/16	Dr. Alimasunya Joseph	IRB/16/326	10,000.00				
22/04/15	Mrs. Egbederu Oghene	IRB/16/327	5,000.00				
09/03/16	Miss Achuka Justina	IRB/16/328	5,000.00				
15/03/16	Dr. Joseph Kajero	IRB/16/329	5,000.00				
22/01/16	Dr. Owhe Emmanuel	IRB/16/330	5,000.00				
03/05/16	Dr. Chidi Nweneka	IRB/16/331	200,000.00				
11/4/16	Mrs Pass Chijindu	IRB/16/332	10,000.00				
13/04/16	Mrs.Adeyanju Adejumo	IRB/16/333	5,000.00		<b>TOTAL EXPENDITURE</b>		<b>₦1, 574, 550</b>
	Dr. Iwuagwu Stella	IRB/16/334	200,000.00				
17/05/16	Dr. Banke Kathryn	IRB/16/335	100,000.00				
17/06/16	Mr. Olasanmi Mayowa	IRB/16/336	5,000.00				
17/06/16	Mr. Rahman Nurudeen	IRB/16/337	5,000.00				
03/06/16	Mr. Simon Maxwell	IRB/16/338	5,000.00				
07/06/16	Dr. Akinniyi Olusola	IRB/16/339	5,000.00				
08/06/16	Mrs. Owodunni Munirat	IRB/16/340	5,000.00				
28/06/16	Mr.Okonkwo Ugochituru	IRB/16/341	5,000.00				
08/07/16	Dr. Zekeng Patrice	IRB/16/342	200,000.00				
19/07/16	Dr. Eluwa George	IRB/16/343	200,000.00				
	Dr. O.C Ezechi	IRB/16/344	<b>Yet to Pay</b>				
01/08/16	Mrs.Ukachi Udeh	IRB/16/345	5,000.00				
01/08/16	Mr.Ayomipo Jegede	IRB/16/346	5,000.00				
01/09/16	Miss Oboh Mary	IRB/16/347	5,000.00				
30/09/16	Dr. Muomalu Chinwe	IRB/16/348	10,000.00				
04/10/16	DrNneka Onyejebu	IRB/16/349	10,000.00				
05/10/16	Dr. Olusola Fiyinfoluwa	IRB/16/350	5,000.00				
10/10/16	Miss Chidi Dibiajuba	IRB/16/351	5,000.00				
18/10/16	Dr. OyendeTitilayo	IRB/16/352	5,000.00				
31/10/16	Mr. Bakre Abdulfatai	IRB/16/353	5,000.00				
	Dr. Oleribe Obinna	IRB/16/354	180,000.00				
07/12/16	Phrm M. Mabawonku	IRB/16/355	5,000.00				
09/12/16	Miss. Eunice Omigie	IRB/16/356	5,000.00				
15/12/16	Dr. Badirat Yusuf	IRB/16/357	5,000.00				
14/12/16	Mrs. NgoziOtuonye	IRB/16/358	10,000.00				
20/12/16	Mrs. Atewe Stella	IRB/16/359	5,000.00				
20/12/16	Mrs. Ebieri Herbertson	IRB/16/360	10,000.00				
03/05/16	Dr. Rosemary Audu	IRB/15/300	200,000.00				
04/03/16	SAMBA (Prof. Idigbe)	IRB/14/241	50,000.00				
14/03/16	NACA Amendment fee	IRB/14/254	100,000.00				
	<b>TOTAL INCOME:</b>		<b>1,825,000.00</b>				
	<b>2015 B/F</b>		<b>3,913,661.60</b>				
	<b>Grand Total</b>		<b>5,738,661.60</b>				

# INSTITUTIONAL REVIEW BOARD (NIMR-IRB) CONT'D

## Financial Analysis

2015 B/F:	N3,913,661.60
2016 CASH INFLOW:	N1,825,000.00
2016 EXPENDITURE:	N1,574,550.00
ACCOUNT BALANCE:	N4,164,111.60

## **Memorandum of Understanding**

Memorandum of Understanding between NIMR-IRB and AIDs Preventive Initiative in Nigeria (APIN Gte Ltd) was renewed. The MOU is for NIMR-IRB to serve as the official IRB to APIN Gte Ltd for all the latter's research studies.

## **Collaborations**

During the year the IRB collaborated with several organizations including civil societies, ethics training initiatives, New HIV and Microbicides Advocacy Society (NHVMAS), South African Research Ethics Training Initiatives (SARETI), West African Bioethics Training Programme (WABTP), National Health Research Ethics Committee (NHREC}

## **Challenges**

Prolonged turn-around on review of protocols.

## **Prospects**

- i. Capacity-building for member of the Board
- ii. Appointment of new external reviewers
- iii. Training for Secretariat staff
- iv. Computerization of administrative/secretariat procedures
- v. Fund-raising
- vi. Increase awareness for NIMR-IRB

## 2016 RESEARCH PUBLICATIONS

- Adedoyin D, Ojokuku SA, Okwuraiwe AP. (2016). Purification and Partial Characterization of a  $\beta$ -Galactosidase from *Cajanus cajan*s (Pigeon Pea). *British Biotechnology Journal* Article no. BBJ 21345
- Adeneye A, Oyedeji KS, Niemogha MT, Nwaokorie FO, Bamidele TA, Ochoga M, Akinsinde KA, Brai BI, Oladele D, Omonigbehin EA, Bamidele M, Fesobi TW, Musa AZ, Smith SI, Ujah IA (2016). Risk Factors Associated with Cholera Outbreak in Bauchi and Gombe States in North East Nigeria. *J Public Health and Epidemiology*. 8 (11), pp. 286-296, DOI: 10.5897/JPHE2016.0865
- Adeneye AK, Adewale B, Musa AZ, Afocha EE, Ezeugwu SMC, Yisau J, Raheem TY, Akande DO, Akinremi AO, Runsewe OA, Sulyman MA, Adewoyin OO, Mafe MA, and Ujah IAO (2016). Major Diseases among Underserved Population of Ogun State, Nigeria. *International Journal of Tropical Disease and Health*, 16(3): 1-11.
- Adeneye AK, Musa AZ, Oyedeji KS, Oladele D, Ochoga M, Akinsinde KA, et al. (2016). Risk factors associated with cholera outbreak in Bauchi and Gombe States in Northeastern Nigeria. *J. Public Health Epidemiol*; 8(11):286-296
- Adenipekun EO, Jackson CR, Ramadan H, Iwalokun BA, Oyedeji KS, Frye JG, Barrett JB, Hiott LM, Woodley TA, Oluwadun A (2016). Prevalence and multidrug resistance of *Escherichia coli* from community-acquired infections in Lagos, Nigeria. *J Infect Dev Ctries*; 10:920-931.
- Adewale B, Rossouw T, Schoeman L. (2016). Assessing Participants' Understanding and Voluntariness of Informed Consent in a Clinical Trial in Nigeria. *J Clin Res Bioeth* 7:4 [doi.org/10.4172/2155-9627.100027](https://doi.org/10.4172/2155-9627.100027).
- Adewale B, Adedeji A, Folorunsho S, Demehin P, Akinsanya B. (2017). Soil-transmitted helminth infections and risk factors among primary school pupils in Lagos, Nigeria. *BMJ Glob Health* 2: A61-A62 doi: 10.1136/bmjgh-2016-000260.165.
- Adewale AK, Pazhani GP, Iwalokun BA, Afolabi O, Kolawole OD, Mukhopadhyay AK, Ramamurthy T. Unique Clones of *Vibrio cholerae* O1 El Tor with Haitian Type ctxB Allele Implicated in the Recent Cholera Epidemics from Nigeria, *Africa. PLoS One*. 2016; 11(8):e0159794.
- Adewale B, Adeneye AK, Ezeugwu SMC, Afocha EE, Musa AZ, Enwuru CA, Yisau JI, Raheem TY, Sulyman MA, Adeiga AA, Olayemi OM, Mafe MA, Ujah IAO. (2016). Enrollees' perception of National Health Insurance Scheme (NHIS) in Lagos, Nigeria. *International Journal of Tropical Disease & Health*; 18(3): 1-14.
- Ahumareze RE, Rankin J, David A, Wapmuk A, Disu E, Balogun Y, Adetunji A, MacArthur E, Amoo O (2016). Prevalence of anaemia and the relationship between haemoglobin concentration and CD4 count in HIV positive children on highly active antiretroviral therapy (HAART) in Lagos, Nigeria. *Curr Pediatr Res* 2016; 20 (1&2): 29-36
- Ajibaye O., Osuntoki AA, Ebuehi AO, Iwalokun BA, Balogun EO, Egbuna KN (2016). Pro-inflammatory cytokine response and genetic diversity in merozoite surface protein 2 of *Plasmodium falciparum* isolates from Nigeria. *Advanced biomedical Research*. 10.4103/2277-9175.192631.
- Anejo-Okopi AJ, Audu O, Adaiche AR, Okojoku OJ, Ali M, Adekwu A, Lar P, Smith SI (2016). Prevalence of *Helicobacter pylori* infection among HIV-1 infected patients using Stool Antigen Tests in Jos, North-Central, Nigeria. *Govaresh J21* (1): 57 – 62.
- Anejo-Okopi AJ, Isa ES, Audu O, Fagbamila IO, Okojoku OJ, Iornenge CJ, Augustine BB, Pam L, Ali M, Zumbes HJ, Mohammed M, Lar P, Smith SI (2016). Isolation and Polymerase Chain Reaction detection of Virulence invA gene in *Salmonella* spp from Poultry farms in Jos, Nigeria. *J Med Tropics* 18 (2): 98 - 102.
- Adesida SA, Ezenta CC, Adagbada AO, Aladesokan AA, Coker AO (2016). Carriage of multidrug resistant *Enterococcus faecium* and *Enterococcus faecalis* among apparently healthy humans". Accepted for publication in *African Journal of Infectious Diseases (AJID)*.
- Aseffa A, Chukwu JN, Vahedi M, Aguwa EN, Bedru A, Mebrahtu T, Ezechi OC, Yimer G, Yamuah LK, Medhin G, Connolly C (2016). Efficacy and Safety of 'Fixed Dose' versus 'Loose' Drug Regimens for Treatment of Pulmonary Tuberculosis in Two High TB-Burden African Countries: A Randomized Controlled Trial. *PLoS One*. 20;11(6):e0157434.

## 2016 RESEARCH PUBLICATIONS CONT'D

- Bamidele TA, Adeniyi BA, (2016). Evaluation of organic acids, anti- Salmonella activities of lactic acid bacteria isolated from Nigerian grown salad vegetables. *British Biotech Journal*. 11: 1- 10.
- Chukwurah JN, Idowu ET, Adeneye AK, Aina OO, Agomo PU, Otubanjo AO (2016). Knowledge, attitude and practice on malaria prevention and sulfadoxinepyrimethamine utilisation among pregnant women in Badagry, Lagos State, Nigeria. *Malaria World Journal*. 7(3): 1-6.
- Enwuru, CA; Iwalokun BA; Enwuru, VN; Ezechi, O; Oluwadun, O (2016). The effect of presence of facultative bacteria species on semen and sperm quality of men seeking fertility care. *African Journal of Urology*. 22: 213 – 222
- Ezechi OC, Wapmuk AE, Ohihoin AG, Ujah IA, Das TK (2016). Semen quality of male partners of infertile couples living with HIV infection. *International Journal of Reproduction, Contraception, Obstetrics and Gynecology*. 5 (5):1423-7.
- Ezechi L, Brai B, Osifeso G, Mbah P, Ezechi OC (2016). Nutritional Knowledge, Attitude and Practices of Women Living with HIV/AIDS in Lagos Southwest, Nigeria. *Malaysian Journal of Nutrition*. 22(1):1-5
- Ezechi LO, Musa ZA, Ootobo VO, Idigbe IE, Ezechi OC (2016). Trends and risk factors for obesity among HIV positive Nigerians on antiretroviral therapy. *Ceylon Medical Journal*. 23;61(2).
- Ezechi OC, Musa ZA, David AN, Wapmuk AE, Gbajabiamila TA, Idigbe IE, Ezeobi PM, Ohihoin AG, Ujah IA (2016). Trends and patterns of sexual assaults in Lagos South-Western Nigeria. *Pan African Medical Journal*. 20;24(261).
- Ezechi OC, Musa ZA, Onwujekwe DI, Ezeobi PM, Gbajabiamila TA, Gab-Okafor CV, Odunukwe NN, Idigbe EI and Ujah IAO (2016). Gender perspective of the demographic and biological profiles of southwestern Nigerians living with HIV infection at presentation (2004 – 2015). *International Journal of Advanced Research* 4(7): 2097-2105
- Ezechi OC, Petterson KO, Gbajabiamila TA, Idigbe IE, Gab-Okafor CV, Okolo CA, Ootobo IA (2016). Evaluation of Direct Visual Inspection of the Cervix in Detecting Cytology Diagnosed Squamous Intraepithelial Lesion in Women of known HIV Status. A Randomized Trial (CANHIV Study). *African Journal of Reproductive Health*. 20(4):77.
- Ezeh AR, Aboaba OO, Murray BE, Tall BD, Smith, SI (2016). Phenotypic and genotypic characterization of Cronobacter isolated from powdered infant formula
- Dupke S, Akinsinde KA, Grunow R, Iwalokun BA, Olukoya DK, Oluwadun A, Velavan TP, Jacob D (2010). Characterization of Vibrio cholerae Strains Isolated from the Nigerian Cholera Outbreak in 2010. *J Clin Microbiol*. 54:2618-2621
- Hassan OA, Amoo OJ, Akinwale OP, Adeleke MA, Gyang PV (2016). Molecular Characterization and Detection of Infection in Vector Snails of Urinary Schistosomiasis around Erinle and Eko Ende Dams in South West Nigeria. *British Microbiology Research Journal* 14(1): 1-10. DOI: 10.9734/BMRJ/2016/9019.
- Iwalokun BA, Oluwadun A, Aina OA (2016). Plasmodium falciparum Merozoite Surface Protein-1 Polymorphisms among Asymptomatic Sick Cell Anaemia Patients in Nigeria. *Acta Medical Iranica*. 54: 44 – 53
- Jolaiya TF, Smith SI, Coker AO (2016). Knowledge and Assessment of Parents on Diarrhoea and its Management in Lagos, Nigeria. *International Journal of Health Sciences and Research* 6: 138 - 143.
- retailed in Nigeria. *J Food Research* 5: 65-78. doi:10.5539/jfr.v5n4p65.
- Kanyi OL, Ajayi MB, Ezeugwu SMC, Afocha EE, Iwalokun B (2016). Comparison of Rapid Diagnostic Test (RDT), Polymerase Chain Reaction (PCR) and Microscopy methods in the diagnosis of Malaria among Airport workers in Lagos. *Nigerian Journal of Science and Environment*. 13 (1): 18-24.
- Kolawole O, Mokuolu OA, Olukosi YA, Oloyede TO (2016) Population genomics diversity of Plasmodium falciparum in malaria patients. *Africa Journal of Health Sciences* 16(3) 704-711.

## RESEARCH PUBLICATIONS CONT'D

- Königer V, Holsten L, Harrison U, Busch B, Loell E, Zhao Q, Bonsor DA, Roth A, Kengmo-Tchoupa A, Smith SI, Mueller S, Sundberg EJ, Zimmermann W, Fischer W, Hauck CR, Haas R. (2016). *Helicobacter pylori* exploits human CEACAMs via HopQ for adherence and translocation of cagA. *Nat Microbiol*; 2:16188. doi: 10.1038/nmicrobiol.188.
- Obaseki DE, Forae GD, Iyawe DU, Akinwale O, Obahiagbon I. (2016). A First Reportable Case of Fatal Granulomatous Amoebic Encephalitis in an Immunocompetent Nigerian Confirmed by Molecular Studies-Polymerase Chain Reaction (PCR). *International Journal of Medicine and Public Health* 6 ( 3 ) : 1 4 8 - 1 5 0 . D O I : 10.5530/ijmedph.2016.3.11.
- Odunukwe NN, Okwuzu JO, Okwuraiwe AP, Gbajabiamila TA, Musa AZ, Ezeobi PM, Somefun EO, Kalejaiye OO, Onwujekwe DI, Salu OB, Onwuamah CK, Audu RA, Ezechi OC (2016). Selenium as Adjunct to Highly Active Antiretroviral Therapy (HAART) in the Management of HIV/Hepatitis B Virus Co-Infection: A Randomized Open Label Study. *African Journal of Clinical and Experimental Microbiology*; 17(3): 197-204.
- Ohihoin AG, Herbertson EC, Anyasi E, Gbajabiamila TA, Idigbe EI, Ezechi OC, Ujah I (2016). Pattern of contraceptive uptake among Clients in an HIV Clinic. *Trop J Obstet Gynecol*. 33:284-7.
- Olotu A.A., Oyelese A.O., Salawu L., Audu R.A., Okwuraiwe A.P. and Aboderin A.O. (2016). Occult Hepatitis B virus infection in previously screened, blood donors in Ile-Ife, Nigeria: implications for blood transfusion and stem cell transplantation. *Virology Journal*; 13(76); 8 pages.
- Oluyemi A, Anomneze E, Smith SI, Fasanmade O (2016). Influence of *Helicobacter pylori* infection on the Prevalence and Patterns of Upper Gastrointestinal Symptoms in Nigerians with Diabetes Mellitus. *Nig. J. Clin. Pract.* 0:0 DOI: 10.4103/1119-3077.183257.
- Osue HO, Abenga JN, Lawani FAG, Falope O, David KM, Ezebuoro OGC, Akinwale OP, Edeghere HI (2016). Status of Anaemia, Semen and Ejaculate Characteristics in Experimental Trypanosomosis Infections in Yankassa Rams After Berenil, Novidium and Samorin Treatment. *Journal of Agriculture and Veterinary Science* 9(6): 60-68. DOI: 10.9790/2380-0906026068.
- Otuonye MN, Oladele DA, Oparaugo CT, Okwuzu J O, Okoye R N, Anyan VN, Adeneye AK, Uwandu MO, Okhiku FO, Nwaokorie FO, Onwuamah C, Adesesan A, Akintunde G, Fowora MA (2016). The Role of Male Circumcision in HIV Prevention and Intervention in Southwest Nigeria. Accepted for publication. *Nigerian Journal of Clinical and Biomedical Research*.
- Smith S, Smith SI (2016). Media coverage of the Ebola virus disease in four widely circulated Nigerian newspapers: lessons from Nigeria. *Health Promotion Perspectives* 6 (2): 92 - 95.
- Otuonye NM, Nwaokorie FO, Suprumont D, Halidou T, Otuonye E. Health Research Ethics Committees and Capacity building of Human Resources and Infrastructure in Nigeria. (In Press).
- Smith S, Braun S, Akintimehin F, Fesobi T, Bamidele M, Coker A, Monecke S, Ehricht R. (2016). Serogenotyping and antimicrobial susceptibility testing of *Salmonella* spp. isolated from retail meat samples in Lagos, Nigeria. *Molecular and Cellular Pharmacology*. <http://dx.doi.org/10.1016/j.mcp.2016.04.001>
- Smith SI, Seriki A, Ajayi A. (2016). Typhoidal and non-Typhoidal *Salmonella* infections in Africa. *European Journal of Clinical and Microbiology and Infectious Diseases*, 35(12), 1913-1922. DOI: 10.1007/s10096-016-2760-3.
- Smith SI, Nwaokorie FO, Adagbada AO, Yisau JI, David NA, Adeboye MAN, Adesida SA, Bamidele M, Adeneye A, Fowora MA, Musa ZA, Adedeji MA, Omonigbehin EA, Iroha E, Adedoyin OT, Eneh A, Ibeziako N, Jiya N, Oguiche S, Bello M, Olowu AO, Ujah IAO (2016). Leading causes of childhood mortality in tertiary hospitals. *Ind J Child Health*. 3: 281 - 285.



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