



2019

ANNUAL REPORT

NIMR

THE FOREMOST RESEARCH INSTITUTE IN NIGERIA

NIMRNIGERIA



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Nigerian Institute of Medical Research

2019 Annual Report



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President, Commander in Chief of the Armed Forces
Federal Republic of Nigeria



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Honourable Minister of Health
Federal Ministry of Health



Dr. (Senator) A. O. Mamora
Honourable Minister of State for Health
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Prof. Babatunde Lawal Salako
Director-General/Chief Executive Officer
Nigerian Institute of Medical Research

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DIRECTOR GENERAL'S FORWARD



Nigerian Institute of Medical Research (NIMR) is delivering on its mandate as a reference centre in basic, applied and operational research for the promotion of national health and development in Nigeria. This is evidenced by the series of innovations and new initiatives in translating research into tangible medical products and services recorded in 2019 filling the gaps in diagnostics and laboratory needs in the area of life science and drug development.

As a way of improving human capacity for research, intramural research awards were given to deserving junior and senior research fellows who keenly competed to get the grant. A few NIMR extramural grants were also awarded to five postgraduate students in four collaborating Universities to research into viral haemorrhagic fever especially Lassa fever which has become a perennial outbreak in Nigeria. The report of this effort will provide further insight into the peculiarity of the outbreak, management and prevention. Two workshops were held to develop the national curriculum for Grantmanship and Mentorship leading to the organization of the first National Grant writing and Mentorship workshop which provided opportunities for young researchers from Universities and research institutes to learn at the feet of local and international researchers who have made their marks in research and development.

We established NIMR Research Foundation as a public-private outfit to support Government research funding specifically in the area of training PhDs and MDs; and supporting grant writing training workshop. NIMR therefore appreciates the Chairman of the Trustee of NIMR Research Foundation, the current Honourable Minister of Works and Housing Mr. Babatunde Raji Fasola for his support at all times. In furtherance to fostering academic and research collaborations, the Institute's management visited and signed a Memorandum of Understanding (MOU) with Leeds University Ibadan and Eko

University of Medicine and Health Sciences for adjunct research positions for NIMR research staff. This initiative has led to the appointment of five NIMR top researchers as Professors in four (4) Nigerian Universities during the year.

NIMR obtained international accreditations through three Centres in the institute; the Center for Tuberculosis Research (CTBR) obtained international accreditation ISO 15189, making it the first TB laboratory in Nigeria to obtain such status, the Center for Human Virology and Genomics Research (CHVG) expanded the scope of its accreditation (ISO 15189) to include haematology assay and also got the WHO prequalification for invitro diagnostic kit testing. NIMR CHVG Virology laboratory was also designated a mega laboratory for HIV viral load measurement by the Federal Ministry of Health (FMOH). The management also established three new laboratories, namely central research laboratory and two Tissue Culture Laboratories for Malaria and arbor viruses to further strengthen laboratory capacity for basic research which has led to our current experiment in vaccine development.

It is significant to note that four research staff of the institute were recognized for various research innovations and development of innovative diagnostic products namely; NIMR Biotech DNA preparation Kit developed by Dr. Muinah Fowora, NimCure Mobile Application by Mr. Femi Amoo, Fast point of Care PCR Assays to diagnose ten common causes of fever in children by Dr. Chika Onwuamah and NIMR Electrophoretic Machines by Dr. Basse Orok and Mr. John Omohwovo. These products were also sent for external quality assurance testing.

Research projects undertaken by staff in addressing diseases of public health concern in the country included HIV/AIDS, tuberculosis, malaria, hepatitis, schistosomiasis, onchocerciasis and other communicable and non-communicable diseases. The outcome of the various research efforts are disseminated through publications in reputable national and international journals.

In the year, the Institute further strengthened collaborations with several national and international Universities, Research Institutes, Centre of Excellence, reputable laboratories, Hospitals, Governmental and Non-Governmental Organizations, State and Federal Government Agencies.

Individual scientist and research groups competed for and received grants from various bodies, organizations and institutions nationally and internationally. Several research and non-research staff received support from the institute for training within and outside the country. In terms of infrastructural development, additional state-of-the-art laboratory equipment were purchased for various laboratories in the Institute.

A new researcher's suite was also built to solve accommodation challenges of researchers from within and outside the country visiting the Institute to undertake bench work. Additional 4 vehicles were added to the fleet of project vehicles to improve field research activities. The management in its usual manner held the annual staff retreat to review 2019 activities and plan for the coming year 2020.

The management hopes to commit more funds to research and increase research output. More collaborations will be fostered to enlarge the pool of collaborators and networks. The institute hopes to establish a national biorepository for sample storage to assist researchers to keep samples and data for future use.

The management prays to the Federal Ministry of Health for improved funding to the institute in year 2020 for research, replacement of dilapidated structures with modern structures, completion of the E-Library building and purchase of more state-of-art laboratory equipment with the hope of moving research and development forward in Nigeria.



PROF. BABATUNDE LAWAL SALAKO, *MBBS (Ib), FWACP, FRCP (Lond), FRCP (Edin), mmim, FNAMed, FAS.*
DIRECTOR - GENERAL/CHIEF EXECUTIVE OFFICER
NIGERIAN INSTITUTE OF MEDICAL RESEARCH

WHO WE ARE

*The nation's foremost Institute of Medical Research

*We collaborate with several institutions nationally and internationally to facilitate enabling environment for medical research

*We attract some of the brightest and best brains nationally and internationally in research collaborations

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

CORE VALUES

Honesty, Integrity

Leadership

Excellence

Respect, Fairness, Dignity

Teamwork, Innovation

Relevance

Hardwork

Fair Reward and Recognition

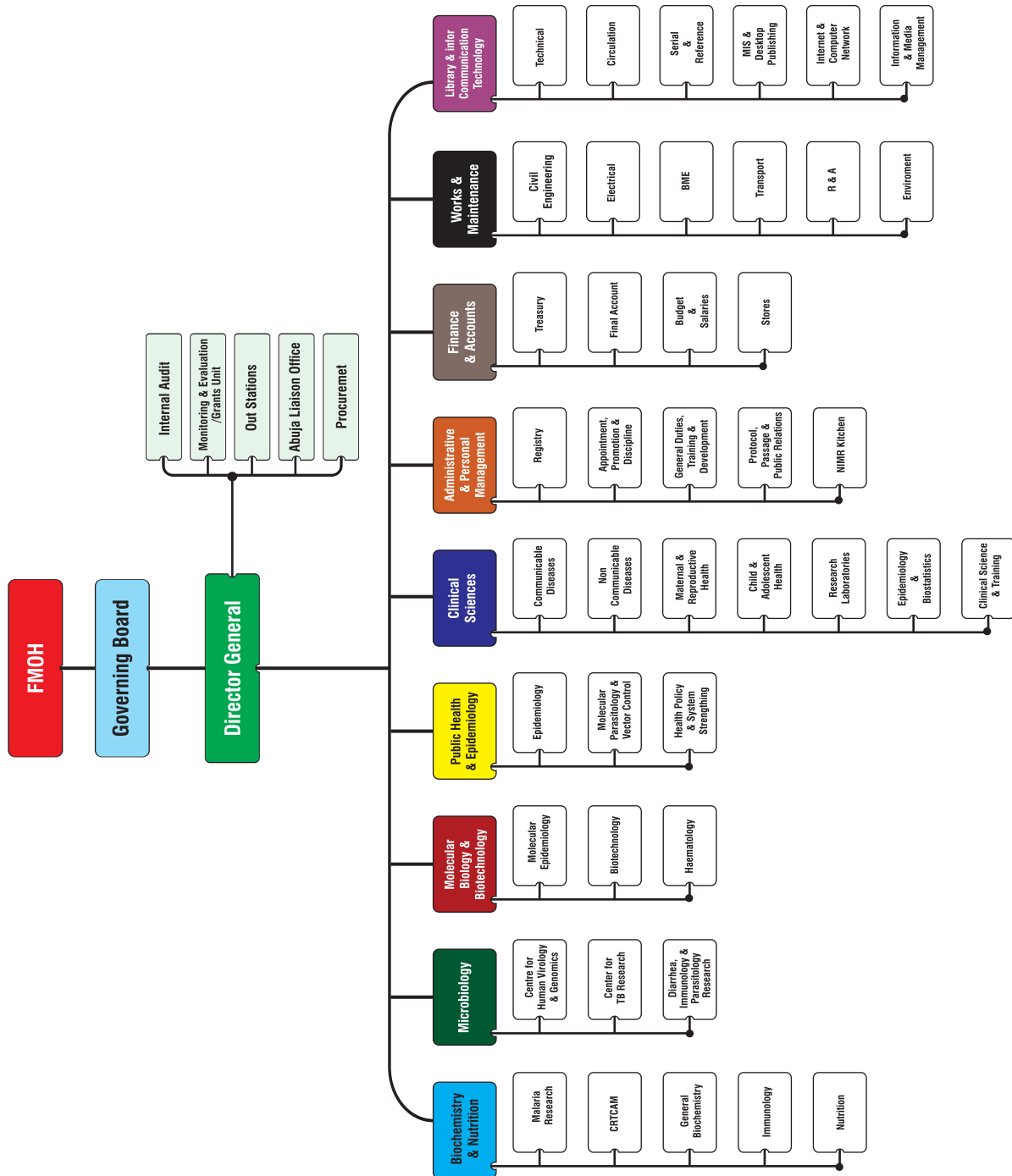
Accountability and Transparency

Communication: Internal and External

Equity



OUR ORGANOGRAM



RESEARCH ADVISORY BOARD MEMBERS

Prof. Oyewusi Gureje (University of Ibadan)	- Chair
Prof. Babatunde L. Salako (DG-NIMR)	- Member
Dr. Olajide Idris (Former Commissioner of Health, Lagos State)	- Member
Prof. Ibrahim Abubakar (UCL Institute for Global Health)	- Member
Prof. Folasade Ogunsola (University of Lagos)	- Member
Prof. Sani Aliyu (Former DG-NACA)	- Member
Prof. Alash'le Abimiku (IHV, University of Maryland, USA)	- Member
Prof. Ayo M. J. Oduola (VIRF, University of Ibadan)	- Member
Prof. Ighovwerha Ofotokun (Emory University, Atlanta, USA)	- Member
Prof. M. B. Shittu (BUK)	- Member
Prof. Oladosu A. Ojengbede (University of Ibadan)	- Member
Prof. Oni Emmanuel Idigbe (Former DG-NIMR & CEO- HUDPHI)	- Member
Prof. Martin Madu Meremikwu (University of Calabar)	- Member
Prof. Stanley N C Anyanwu (Nnamdi Azikiwe Teaching Hosp.)	- Member

PRINCIPAL OFFICERS



Prof. Babatunde Lawal Salako
Director - General / CEO



Alh. A.S. Yunusazazzau
Director & HOD
(Administration Department)



Prof. (Mrs.) N. N. Odunukwe
Director of Research
(Clinical Sciences Department)



Mr. Y. Ogaji
Director & HOD
(Finance & Account Department)



Engr. E. O. Adedeji
Director & HOD
(Works & Maintenance Department)



Dr. (Mrs.) O. A. Nwogbe
Deputy Director & HOD
(Library & Information
Communication Technology Department)



Mrs. T. Malomo
Deputy Director & HOU
(Internal Audit)

2019 SCIENTIFIC SEMINAR PRESENTATIONS

DATE	NAME OF PRESENTER	DEPARTMENT/UNIT	TOPIC
13 th Feb	Uwalaka Chiamaka Henrietta	Public Health & Epidemiology	Occupational stress and pregnancy outcome: A case control study of all completed pregnancies in Owerri municipal
	Dr. Bamidele T.A.	Molecular Biology & Biotechnology	Targeted Metagenomic library preparation for illumine MiSeq workflow: Researcher's experience
27 th Feb	Mrs. Ogonna F.	Clinical Diagnostic Laboratory	Prevalence of Parasitic Agents Associated with Diarrhoea in Children under 5 years in Lagos Nigeria.
	Mr. Adesesan S.	Microbiology	Trends and Risk Factors of Vulvovaginal Candidiasis Among Suspected Patients in Lagos.
	Dr. Odubela T.	Clinical Sciences	Access to Youth Friendly Reproductive Health Services Among Youths in Yaba, Lagos.
13 th March	Dr. Okechukwu P.A	Clinical Sciences	Knowledge, Attitude and Preventive Practices Among TB Treatment Supporter at DOTS Centres in Lagos Mainland LGA of Lagos State.
	Mrs. Adetunji M.A	Microbiology	Tuberculosis Diagnosis: Experience in National Tuberculosis Reference Laboratory
10 th April	Mr. Henry Emmanuel Uzoma	Public Health & Epidemiology	Toxoplasma Gondii: Sero Prevalence and associated Risk Factors Among Preschool-Aged Children in Osun State, Nigeria.
	Mr. Orok A. Bassey	Biochemistry & Nutrition	The Recurrent Decimal in Malaria Intervention and Control Programs in Sub Saharan Africa.
24 th April	Mr. Dennis Abuh	Microbiology	G6PD Assay in HIV Patients on HAART Attending NIMR Clinic.
	Dr. Ezemelue P.N.	Clinical Sciences	Evaluation of the health effects of radiofrequency radiation amongst communities living close to GSM base station in Lagos.
8 th May	Mr. Bamidele M.	Molecular Biology & Biotechnology	An Assessment of the Role of Healthcare Workers, Food Handlers and Environmental as Reservoirs of Vibrio Cholerae in Lagos, Nigeria.

2019 SCIENTIFIC SEMINAR PRESENTATIONS

10 th July	Dr. Ayorinde James	Biochemistry & Nutrition	Search for new Topoisomerase-1 Inhibitors from Natural Products in Southwest Nigeria.
	Mr. Yisau Jacob	Molecular Biology & Biotechnology	Characterization of Enterohemorrhagic Escherichia Colic Isolated from Humans, Animals and Food Sources in Lagos State, Nigeria.
31 st July	Dr. Odubela O.	Clinical Sciences	Nutrition and Healthy Living
	Dr. Raheem	Clinical Diagnostic Laboratory	Laboratory Screening of Food Handlers: Our Experience in CDL – NIMR.
	Mrs. Uwandu M.	Microbiology	Total Lymphocyte Count as Surrogate Marker for CD4 Cell Count in HIV-Infected Individuals in NIMR, Lagos
28 th Aug.	Idigbe Ifeoma E.	Clinical Sciences	Social and Behavioral Factors Influencing Adherence Among HIV-Infected Adults in Lagos
	Mr. Enwuru C.A.	Microbiology	The Effect of Presence of Non-Specific Bacterial Contaminants (NSBCS) of Seminal Fluid of Men Attending Infertility Clinics in Lagos
9 th Oct.	Mr Achanya Dominic A.	Microbiology	The Impact of Laboratory Accreditation on Patient Care and the Health System.
	Mrs. Wahab M.O	Clinical Diagnostic Laboratory	Sterilization: Principles and Methods in the Laboratory.
30 th Oct	Dr. A.Z. Musa	Monitoring & Evaluation	“Survey on Early Warning Indicators of HIV in Lagos State”
	Dr. N.M Otuonye	Central Research Laboratory	The Role of Human Leukocyte Antigen-C Class - 1 in HIV-1 Transmission among Serodiscordant Couples in South West and South East Nigeria.
	Mrs. Veronica N.V. Enya	Public Health & Epidemiology	The Role of Human Leukocyte Antigens Class II in the Occurrence of Type 2 Diabetes Mellitus among HIV Patients with Tuberculosis Co-Infection in Nigeria.

NIMR SENIOR MANAGEMENT COMMITTEE

Prof. Babatunde Lawal Salako	Director - General / CEO
Alh. A.S. Yunusazazzau	Director & HOD, (Administration)
Prof. (Mrs.) N.N. Odunukwe	Director of Research/ Deputy DG
Prof. (Mrs.) S.I. Smith	Director of Research (MB&BT Department)
Prof. (Mrs.) P.O. Akinwale	Director of Research (Neglected Tropical Diseases)
Engr. E.O. Adedeji	Director & HOD, (Works & Maintenance)
Mr. Y. Ogaji	Director & HOD, (Finance & Account)
Prof. (Mrs.) R. Audu	Director & HOD, (Microbiology)
Dr. B. Adewale	Deputy Director & HOD, (PH & E)
Dr. (Mrs.) O. A. Nwogbe	Deputy Director & HOD, (Library & ICT)
Dr. B.A Iwalokun	Deputy Director & HOD (MB&BT)
Mrs. T. Malomo	Deputy Director & HOU, (Internal Audit)
Dr. (Mrs.) A. N. David	Deputy Director & HOD, (Clinical Sciences)
Dr. O. O. Aina	Chief Research Fellow & HOD, (Biochemistry & Nutrition)
Dr. T. Y. Raheem	Research Fellow 1 / HOU (CDL) Unit

BIOCHEMISTRY & NUTRITION

DEPARTMENT

The department of Biochemistry and Nutrition is a multidisciplinary entity that seeks to use cutting edge technologies and sound expertise in basic and translational research in providing impactful outputs via its units:

- **Biochemistry & Immunogenomics**- focus on the general biochemical analysis of biological molecules, polymorphisms in red blood cell related diseases, molecular mechanisms of malaria parasite infectivity and pathogenesis.
- **Centre for Research in Traditional, Complementary and Alternative Medicine (CRTCAM)** - train and conduct research into safety, and authentication of efficacy claims and compound testing of selected natural products and active ingredients.
- **Nutrition**- investigate nutritional quality, safety, and associated disorders such as deficiencies of vitamins, minerals, and in-born errors of metabolism to generate relevant scientific information.
- **Immunology**- focus on investigating cellular immune responses in some tropical diseases in humans and animals such as performance of malaria antigen detection vs parasite enumeration by microscopy.
- **Malaria Research & Epidemiology**- monitor the prevalence of malaria in communities via the use of molecular diagnosis, therapeutic efficacy, resistance detection of re-infected and recrudescence in Nigeria
- **Molecular Oncology & Diagnostics**- engage in basic and translational molecular oncology research to provide solutions in oncology research by adopting avant-garde biochemistry, pathology, computational and molecular biology tools.
- **Non-Communicable Diseases & Cosmetology**- focus on research to evaluate the composition of dangerous chemical components that may be linked to chronic diseases (Non-communicable diseases) in cosmetics and personal care products and provide safe alternative solutions.

Research Activities

- Screened twenty (20) herbal medicinal products for acute toxicity studies (NIMR Grant)
- Studied “Methylation-specific PCR Investigation of the CpG Islands of BRCA1 and BRCA2 genes in breast cancer patients in Nigeria.” A collaborative work supported by the University of Lagos, Central Research Committee Grant (CRC/TETFUND/NO.2014/04) Manuscript has been submitted for publication
- Presented public lecture on “An overview of the impact of the chemical exposures from cosmetics and personal care products”
- Investigated the adoption and use of artemisinin based combination therapies and malaria rapid diagnosis test kits in Lagos, Nigeria (WHO/TDR)
- Conducted research into the safety and authentication of efficacy claims and compound testing on selected natural products and active ingredients
- Conducted Phytochemical and proximate analysis for herbal products
- Investigated Dyslipidemia among apparently healthy adolescents in some selected secondary schools
- Conducted an assessment of the quality of artemisinin combination therapy (ACT) drugs in Nigeria
- Established a sentinel passive malaria surveillance Site at the Ijede

General Hospital

- Evaluated Anticancer drug discovery from medicinal plants
- Conducted In-silico docking studies and ADMET analysis of compounds
- Investigation of miRNA expression and detection in prostate cancer
- Examined Pharmacogenomics of docetaxel in patients with solid tumours
- Development of competent cloning strategies for protein expression in E.coli
- Provided technical support in areas of bioinformatics and molecular pathology for the NIH U54 epigenomic biomarkers of HIV-associated cancers in Nigeria (Lagos Site)
- Conducted Genomic investigation of a Novel non-Kelch-13 artemisinin resistance marker among P. falciparum isolates from Nigeria (EDCTP/WANETAM₂ GRANT)
- Serological studies of HRP2 and comparison with microscopy
- Cytokine assay in patient co-infected with malaria and intestinal helminths.
- Cytokine assay in patient co-infected with falciparum malaria and babesiosis
- Cytokine assay and hematological analysis of fresh water fish.

Achievements

- Screening of Twenty (20) herbal medicinal products for acute

toxicity studies. Seven (7) herbal medicinal products are ready for clinical studies and ethical approval for six (6) Manuscripts.

- One hundred and sixty-two (162) ACTs purchased from 137 pharmacies and PPMVs were sampled
- Setting-up of tissue culture laboratory for mammalian cell line culture to support plasmodium culture, anti-cancer drug discovery, mechanistic studies, and flow cytometry support.
- Improved molecular biology workflow by conducting repairs and training of support members of the unit.

Capacity Development

Workshops and conferences attended:

by staff: 15

Grant /Fellowship Awards: 1

NYSC Members: 4

B.Sc Students supervised: 11

M.Sc Students supervised: 9

Ph.D Students supervised: 8

Students on industrial training Program:

50

Students on internship program: 7

Research publications: 13

Collaborations

- Nigerian Universities and Research Institutes.
- MRC- Gambia
- University of Ghana, Legon.
- University of Tokyo, Japan.
- Nigerian Council of Physicians of

Natural Medicine

- Pax herbal Clinic and Research Laboratory
- Centre Pasteur du Cameroon, Yaounde

Work Plan - 2020

- Explore the acquisition and maintenance of immunity during infections especially *malaria*, in natural and experimental infections in humans and experimental mode
- Investigate how pathogens especially *Plasmodium* parasites cause disease and identify parasite and host factors that determine disease outcome
- Investigate the physiology of relevant pathogens, especially *Plasmodium* parasites, including nutrient uptake and erythrocyte invasion, and identify mechanisms of resistance to antimalarial drugs.
 - Examine the interactions between pathogens, especially *Plasmodium* parasites, and vectors that drive disease transmission
- Apply biochemistry and bioinformatics techniques and skills to understand and solve problems of infectious and non-communicable diseases pertinent in Africa.
- Conduct research into the safety and authenticate efficacy claims and compound testing on selected natural products and active ingredients.

- Phytochemical and proximate analysis
 - Training of traditional medical practitioners on the role of safety and efficacy of alternative and complementary medicine.
 - Research into Immunological studies into diseases (CD & NCD). Cellular Immune responses in some tropical diseases in humans and animals. Performance of malaria antigen detection vs parasite enumeration by microscopy.
 - Research into Prevalence of malaria in communities, Therapeutic efficacy studies and animal models. Molecular diagnosis, Resistance tracking and detection of re-infection and recrudescence of malaria parasite.
 - Establish a sentinel passive malaria surveillance site at the Ijede General Hospital in collaboration with UCH malaria research group.
 - We aim to be the backbone of basic and translational molecular oncology research to healthcare, academic institutions, and the general public by acquiring grants, publishing in high impact journals thereby providing solutions in oncology research using avant-garde biochemistry, pathology, computational and molecular biology tools.
 - Our research approach involves the use of diverse techniques such as sequencing, flow cytometry, *in-silico* biology, epigenetics, cell culture and animal models to unravel genetic mysteries, discover new biomarkers and targets for diagnostics and drug design.
- Research and foster partnership and collaborations to eliminate dangerous chemicals linked to chronic diseases (Non-communicable diseases) from consumer products especially cosmetics and personal care products and provide safe alternative initiatives and solutions using scientific based methods
- Research into nutritional questions of Nigerian food. We have focused on morbidity and mortality in infants and children but we are now looking at a shift from this to chronic non-communicable diseases.
- Training on Quality Management System (QMS)
- Introduction to quality
- Client management and customer service
- Information management

CLINICAL SCIENCES

DEPARTMENT

The Clinical Sciences Department consists of research and service divisions and units. The key focus of the department is on research, service delivery and capacity development of staff. This report reflects the activities of the department in contributing to the actualization of NIMR mandate of research for national health in 2019.

The Department continues to conduct operational research in addition to the comprehensive care given to patients enrolled in the HIV, TB and Hepatitis Programmes of the Institute.

In order to attain the goal of maintaining highly trained and competent staff in various disciplines, the department supported staff to acquire relevant additional training for career progression. It also accommodated internship training; youth service program, clinical residency training as well as training of researchers in the department's areas of competence.

Our HIV/AIDS programme continues to be among the largest and the best in the country with cumulative enrolment above 25,000 including adults, pregnant women

and children; and a mother to child transmission (MTCT) rate of 0.0% in 2019. We acknowledged the tremendous support and contributions of Family Health International (FHI 360), the implementing partner for HIV/AIDS services. The CSD disseminated some of its research activities at the 6th International Scientific Conference of the Institute which took place in November, 2019.

Capacity Development

Conferences Presentations: 8

Trainings/Workshops: 10

Staff on Postgraduate Trainings: 6

NYSC Members : 7

Students on Internship: 7

Collaborators

- University College, London (UCL)
- Saint Louis University, Missouri; University of North Carolina Chapel Hill, and New York University, New York, USA
- Babcock University, Ilishan
- Co-Creation Hub, Microbiology Dept. NIMR
- Federal Medical Centre (FMC), Ebute Metta

Activities of the Research Divisions in CSD

Research Division	Research Work	Staff involved
Child & Adolescent Health (CAH)	<ol style="list-style-type: none"> 1. Prevalence of, and factors associated with metabolic syndrome in adolescents living with HIV in Lagos, Nigeria 2. Effectiveness and acceptability of SMS reminders for ARV adherence in Adolescents 3. Assessing the quality of life of Children and Adolescents with HIV infection in Lagos, Nigeria 4. Immunologic response to routine vaccinations among HIV exposed uninfected infants 	Drs David, Salako, Gbajabiamila, Wapmuk, Odubela, Musari-Martins, Okwuzu, Musa, Ms Idigbe and Mrs Ekama,
Communicable Diseases (CD)	<ol style="list-style-type: none"> 1. A study on hepatitis B and C virus co-infection among adults with HIV in a large HIV treatment centre, Lagos, Nigeria 2. Preliminary study of hepatitis C infected Patients on oral direct-acting antiviral Treatment in a hepatitis clinic, Lagos, Nigeria 	Drs Onwujekwe, Ezeobi, Okwuzu.
Maternal and Reproductive Health (MRH)	<ol style="list-style-type: none"> 1. Innovative tool to expand HIV self-testing (ITEST) among Nigerian youth 	Prof. Ezechi, Drs Gbajabiamila, Oladele, Musa, Ms Idigbe.
Non-Communicable Diseases (NCD)	<ol style="list-style-type: none"> 1. Prevalence of hypertension among young persons living with HIV, Lagos, Nigeria 	Prof. Odunukwe, Drs Ohihoin, Wapmuk, Mrs Ekama
Epidemiology and Biostatistics	<ol style="list-style-type: none"> 1. A cross sectional study of HIV as a risk factor for COPD in urban West Africa 2. A study of the association between water sanitation and hygiene (WASH) practices and prevalence of diarrhoeal diseases among HIV infected persons in Lagos, Nigeria 3. Impact of digital health (NIMCURE) for drug adherence enhancement in TB 	Drs Oladele, Odubela, Musari-Martins, Musa Mr Mofe Oluwasanmi

Achievements

- The department operates the most user-friendly ART Clinic in Nigeria.
- The TB DOTS Clinic recorded high cure rates for tuberculosis in Lagos State.
- The out-patient clinic continues to provide services to clients during periods of industrial actions and public holidays because of our sensitivity and responsiveness to the peculiar needs of our clients.
- Refurbishment of the HIV clinic's infrastructure commenced in 2019 courtesy of the indefatigable Director- General.
- Dedicated staff members

Challenges

- Manpower shortages in vital areas:
 - Non-replacement of staff that left the Institute
 - Need for nurse researcher, clinical psychologist, and nutritionist.
 - Reliance on volunteers
- Infrastructural Challenges:
 - Dilapidated structures
 - Space for offices/service areas
 - Equipment: computers, photocopier, air conditioner, laboratory supplies
- Unavailability of 30% of CSD IGR for Department's use

Work Plans

- The Department plans to strengthen research activities by devoting more time to research in 2020. This will be achieved through strengthening of the departmental seminars, research sessions and integration of

adjunct researchers/professors into all CSD activities to enhance capacity development and research output. Younger researchers and scientists will be paired with experienced researchers for mentoring purposes.

- We intend to continue to advocate for infrastructural and continuing human capacity development.
- We also plan to modify and improve on our mode of service delivery to satisfy our clients' needs.

MICROBIOLOGY DEPARTMENT

The year 2019 was quite exciting for us at the Microbiology Department. The department has 55 full time and 15 project staff working in three centers namely: Center for Human Virology and Genomics (CHVG), Center for Tuberculosis Research (CTBR) and the Center for Infectious Diseases Research (CIDR).

The department is saddled with the responsibility of conducting research into infectious diseases of public health importance, training postgraduate students in related fields and providing services as part of our corporate social responsibility.

Annually, each Center commemorates the relevant World Health Day as a way of enlightening and reaching out to our immediate environment. In the year, we celebrated World TB Day (March 28) and World Hand Washing Day (October 15) with much of community engagement. We introduced some new activities to stimulate team cohesion and improve staff productivity. Some of the activities included the team building events for all staff while journal club meetings and use of personal development plans were

established for research fellows.

In the year under review, research capacity was further strengthened with the employment of three research fellows with PhD and six technical support staff.

Achievements

- CTBR obtained international accreditation to ISO 15189, making it the first TB laboratory in Nigeria to obtain such status
- CHVG expanded the scope of its accreditation (ISO 15189) to include haematology assay
- CHVG, a WHO prequalification evaluating laboratory, successfully evaluated the HCV genedrive in vitro diagnostic kit
- Mrs. Kunle-Ope, the biosafety officer, obtained international certification in biosafety
- Dr. Christian Enwuru completed his PhD programme
- Dr. Emelda Chukwu won the 2019 Young Researchers' award
- Staff recognized for research innovations were:
 - Mr Olufemi Amoo – Development TB treatment adherence

monitoring tool (NIMCURE)

- Dr Chika Onwuamah – Development of a fast point of care PCR panel for infant febrile illness
- Two staff members successfully completed a 3-month training in China with improved skills in molecular diagnosis and pathogen determination techniques. They returned with high tech equipment and PCR kits.
- The first NIMR extramural grant was awarded to five postgraduate students in four collaborating institutions for research into viral haemorrhagic fever
- A functional tissue culture laboratory was established at the CHVG

Research Activities

- Surveillance of enteroviruses, Haemorrhagic viruses, HIV drug resistance, multi drug resistant-TB and antimicrobial microbial Resistance
- Febrile illness panel validation and field testing
- Diagnosis of TB and management of paediatric tuberculosis (EDCTP-WANETAM grant)
- Molecular genotyping of *mycobacterium tuberculosis* complex strain in Lagos State
- Implementation of Emory Nigeria

Research Training Awards

Capacity Development

Research Publications: 20

Conferences/Workshops/Trainings

Attended : 22

B.Sc., M.Sc., PhD students supervised : 7

NYSC/ Industrial training students : 60

Collaborations

- Institute de Pasteur, Dakar, Senegal
- Clinton Health Access Initiative, Abuja
- West African Node of Excellence for TB, AIDS and Malaria
- Institute of Tropical Medicine Antwerp Belgium
- Critical Path Institute, Tucson Arizona USA
- Tuberculosis Supra Reference Laboratory, Milan, Italy
- Tuberculosis Supra Reference Laboratory, Cotonou, Benin
- Emory University, Atlanta Georgia
- Centre of Excellence in Genomics and Infectious Diseases – RUN, Ede
- Federal Ministry of Health
- National Tuberculosis and Leprosy Programme Control
- Institute of Human Virology Nigeria
- Family Health International 360
- College of Medicine, University of Lagos
- Lagos Mainland Hospital Yaba, Lagos
- Federal Medical Center, Owo, Ondo State
- KNCV; TB REACH Nigeria

- University of Nigeria
- University of Ilorin
- University of Ibadan
- Lagos State Ministry of Health
- Lagos State Tuberculosis Control Programme

Grants/Fellowship Awards

- NIMR Grant Awards:
 - 2 Senior Category
 - 2 Junior Category
 - 1 New Innovation grant
 - 3 Pre-Doctoral Grant
- 2 Emory Training (D43) NIH Grant
- 2 China CDC Supported Studies
- 1 TrepLab award
- 1 EDCTP Fellowship Grant
- 2 NIH Fogarty D43 Emory-Nigeria Research Training Program (EN-RTP) award.
- Nigerian AIDS Impact and Indicators Study (NAIIS); HIV Drug Resistance Survey (CHVG)

Work Plan: 2020

- Write more proposals to attract grants and collaborations
- Commit more time to research and increase research output
- Improve customer satisfaction
- Strengthen existing collaborations and enlarge pool of collaborators
- Create more awareness of facilities and services available in the department


Challenges

- Competing time for research
- Staff strength not adequate for increasing scope of activities especially research staff, data officer and store officer
- Extended lead-time between request for routine consumables and supply
- Inadequate laboratory, store and office spaces
- Need to develop a biorepository for sample storage
- Increased customer complaints

Way Forward

- Restructure personnel & reorganize our activities to give more time for research and productivity
- Recruit more staff especially research staff and project staff to cope with increasing workload
- Renovate the facility designated for biorepository and equip it
- Renovate building designated for store and offices for CTBR
- Re-appraise procedures for procurement of routine laboratory items

MOLECULAR BIOLOGY & BIOTECHNOLOGY DEPARTMENT

 Our vision is to be a hub for excellence in Molecular Biology & Biotechnology Research, Workforce Development and Wealth Creation in Nigeria. And our mission is to conduct research, strengthen research capacity and support career development for national health, wealth and development.

Research Activities

- German Research Foundation (DFG) grant to 'Analysis of *Helicobacter pylori* infections in Nigeria, bacterial virulence factors but lack of pathology'. (HA 2697/18-1), (Dr. Smith Co-PI)
- TETFUND for project on 'Characterisation of *Haemonchus contortus* and studies of its somatic native and recombinant protein as candidate vaccine antigen in goats' (Dr. Smith, Co-PI).
- Nigerian Institute of Medical Research, Internal Grants for 'An Assessment of the role of Healthcare workers, food handlers and the environment as reservoirs of *Vibrio cholerae* in Lagos state, Nigeria. (Dr. Smith PI, NIMR Intramural grant)
- Preserving and understanding the gut

microbiome to advance human health. (Dr. Smith, Co-PI)

- Development of a new DNA purification kit called NIMR-BIOTECH. An innovative approach for DNA extraction directly from biological samples (E.g. blood, urine, CSF, wound swab) and cultures of bacteria, fungi etc, using lysis and affinity chromatography technique. (Dr. M. Fowora, PI)
- Polio virus dynamics in hard to reach areas of Lagos State (Dr. Iwalokun BA, Co-PI)

Achievements

- African Centre for Excellence on Neglected Tropical Diseases (NTD) and Forensic Biotechnology (Ahmadu Bello University Zaria, Kaduna State). (Dr. S.I. Smith Co-PI)
- African Centre for Excellence on Mycotoxins and Food Pathogens (Fed. University of Technology, Minna, Niger State). (Dr. B.A. Iwalokun Co-PI)
- NIH D71 grant. Developing Bioinformatics education and training for improved genomic research in NCD in Nigeria (Dr. B.A. Iwalokun Co-PI)
- NIMR Priority Grant for the DNA extraction and purification kits (Dr. M.

Fowora)

- Post-doctoral Research Training Grant (Dr. T.Y. Raheem, MRC the Gambia)
- Pre-doctoral Research Training Grant (Mrs. A. Adagbada)
- Pre-doctoral Research Training Grant (Mr. J. Yisau)

Collaborators

- Mathieu Groussin, MIT, US
- Institut Pasteur, Dakar, Senegal
- Andreas Zautner, University Medical Centre, Gottingen, Germany
- Rainer Haas, Max von Pettenkofer Institut, Munich, Germany
- University of Fort Hare, South Africa
- Ahmadu Bello University, Zaria
- Osun State University, Osun
- Niger State University, Niger, Nigeria
- Dr. Charlene Jackson, USDA, USA
- Prof. Frieder Shaumburg, Institut für Microbiologie, Uniklinik Munster, Germany
- Prof. H.A. Makun. Centre Leader, African Centre of Excellence in Food Safety & Mycotoxins. Federal University of Technology, Minna
- University of Lagos, Nigeria

Capacity Development

Conferences /Scientific Meetings attended
:(10)

B.Sc Students supervised: 3

M.Sc Students supervised: 7

Ph.D Students supervised: 7

Challenges / Limitations

- Inadequate staff in key areas of research:
 - 3 Molecular Biologists (Research Fellow₁)
 - 1 Computational Biologist (Research Fellow₁)
 - 1 Bioinformatician (Senior Research Fellow)
 - 2 Laboratory Technicians (Assistant Lab Manager)
- Laboratory with electrical faults
- Dilapidated / inadequate offices
- Inadequate Government Funding
- Lack of staff to help conduct the molecular biology techniques required for the various projects.
- Lack of secretarial assistance to prepare reports and so much time is taken in preparing reports and assessments.
- Delayed implementation of the new ACE project in the Department
- Delay in transfer of funds (NIH D71 and ACE FUTMINNA to NIMR)

Way forward

- Urgent need for recruitment of staff in key areas of research identified
- Urgent need of BSL₂ Biosafety cabinet & PCR hood
- Management should provide more office spaces and renovate existing ones
- Need for renovation of the Biotechnology Lab
- Need to intensify effort for obtaining intramural and extramural Research Grants

PUBLIC HEALTH & **EPIDEMIOLOGY** DEPARTMENT

The Public Health and Epidemiology Department has grown in leaps and bounds. In the last one year, it has grown tremendously in the number of grants attracted to the Institute and this has enhanced its research activities in the year under review.

The Department's areas of focus are mainly tropical diseases, health systems and bioethics. The Department approaches its primary assignment to conduct research and strengthen public health and national development through its three main laboratories in the department namely:

- Onchocerciasis and Intestinal helminths Research Laboratory
- Molecular Parasitology Research Laboratory
- Molecular Entomology and Vector Control Research Laboratory

Research Activities

- Serological assessment of the status of onchocerciasis
- Routine monitoring and resistance surveillance in five states in Nigeria

- Effect of climate change on home management of malaria in Lagos State, Nigeria.
- Evaluation of YEDI neglected tropical diseases awareness pilot project in selected secondary schools in Kosofe LGA, Lagos State, Nigeria
- Building laboratory diagnostic capacity and strengthening existing laboratory system for Buruli ulcer control and research in Nigeria since 2015.
- The END Fund Pilot NTD's Prevention Project Monitoring and Evaluation
- Mental Health Issues Among Tertiary Student Lagos
- Low birth weight, environmental exposures, and neuro development of children
- Prevalence and associated risk factors of HIV among road transport workers. The Role of Human Leukocyte Antigen Class II Alleles in the Occurrence of Type 2 Diabetes Mellitus among Patients with HIV and Pulmonary Tuberculosis co-infection in Nigeria.
- Scaling-up research and diagnosis of

Buruli ulcer to enhance intervention activities of the national control program.

- Sero prevalence survey of *Toxocara canis* in pregnant women in Osun State.
- Toxoplasma sero prevalence tested by IgG and IgM ELISA kits.
- Saro Lifecare grant on “Comparative Bio-efficacy of three aerosols against Laboratory and Field Strains of *Anopheles gambiae*”.
- Saro Lifecare grant on the “Comparative Bioefficacy of eight aerosols against Anopheline and Culicine mosquitoes”.

Achievements

- Evaluation of Immune Status, Microbial Composition, and Parasite Infection In School-Age Children
- The END Fund Pilot NTD's Prevention Project Monitoring and Evaluation Grant, 2019-2020.
- Grant on Vector Surveillance in Nigeria.
- Saro Lifecare grant on “Comparative Bio-efficacy of three aerosols against Laboratory and Field Strains of *Anopheles gambiae*”.
- Pre-Doctoral Research Development Grant under the Institute's Graduate Initiatives Programme:
 - Mrs V.N.V. Enya,
 - Mr A.K. Adeneye

- Acquisition of New Equipment:
 - Biorad iMark Plate reader through grant
 - Biorad Immuno wash through grant
 - -80 freezer

Collaborators

- Department of Molecular Parasitology and Tropical Diseases, School of Medicine & Research Center of International Tropical Medicine, College of Medicine, Taipei Medical University, Taiwan.
- Center for Discovery and Innovation in Parasitic Diseases, Skaggs School of Pharmacy and Pharmaceutical Sciences, University of California, San Diego, USA
- Advanced Medical and Dental Institute, Universiti Sains Malaysia Penang Malaysia.
- Department of Preventive Medicine, Faculty of Public Health, University of Debrecen, Hungary
- University of Pennsylvania, Philadelphia, USA
- Institute of Tropical Medicine and School of Tropical Diseases and Global Health, Nagasaki University, Nagasaki Japan
- Research Triangle Initiative, USA
- Saro Lifecare, Lagos
- ABT/PMI/USAID/Vectorlink Associates, Abuja
- Nigerian Natural Medicine and Development Agency, Lagos

- Lead City University, Ibadan
- National Tuberculosis, Buruli ulcer and Leprosy Control Programme (NTBLCP), Nigeria.
- Department of Zoology, Faculty of Science, Obafemi Awolowo University, Ile-Ife, Nigeria.
- Department of Zoology, Faculty of Science, University of Lagos, Akoka, Lagos
- Department of Geography, Faculty of Social Science, University of Lagos, Akoka, Lagos
- Department of Psychology, Faculty of Social Science, University of Lagos, Akoka, Lagos
- Biochemistry Department Faculty of Science Ahmadu Bello University, Zaria
- German Leprosy and Tuberculosis Relief Association (GLRA), Enugu
- Department of Sociology, Faculty of Social science, University of Lagos.

Work Plan: 2020

- Initiate collaborative research using interdisciplinary approach nationally and internationally.
- Seek for ethical approval of 4 research projects.
- Undertake field and laboratory research (3 projects)
- Disseminate research findings

Capacity Development

Conferences/Workshops/Training

Attended: 16.

BSc, MSc and PhD students supervised:

- BSc – 28
- MSc – 4
- PhD – 2

MONITORING & EVALUATION UNIT

The Monitoring and Evaluation Unit is saddled with the responsibility of providing statistical support, coordinating and supporting Data management and Monitoring and Evaluating activities of the various Departments and Units in the Institute.

The Unit is divided into three sub-units which include: Biostatistics, M&E and Data Management. NIMR Grants Management Unit has the full responsibility of overall oversight and monitoring of project and project funds which includes:

- Plan, budget, identify and record all funding related to projects and programs
- Ensure strict adherence to all terms and conditions of the grant
- Adherence to technical standards
- Meet the needs of the beneficiaries

Research Activities

- DTES
- Entomology Surveillance
- An investigation into the epidemic of chronic kidney disease in Hadejia, Jigawa State, Nigeria
- Burden of Lassa fever, status of its

management and prevention in Nigeria

- Investigation of the risk factors and treatment outcome in patients with multiple drug resistant tuberculosis in Nigeria
- Survey on early warning indicator of HIV drug resistance in Lagos State
- Innovative tool to expand HIV self testing (ITEST) among Nigerian Youth
- Management of departments and units that generate large datasets

Activities of the Unit

- Disseminate/Notify staff of upcoming calls
- Advertise and collate reviewed NIMR Calls
- Oversight for grants (Internal and External)
- Understand and ensure compliance with the terms and conditions of the grants
- Ensure successful achievement of the project's goals and objectives
- Oversight on submission of quality programmatic (technical) and financial reports, within stipulated deadlines
- Facilitate effective communication among all stakeholders

- Ensure that all expenditures are allowable
- Maintain project records for external audit purposes and Issue of Awards
- Responsible for monitoring and managing contracted services
- Document and maintain the records of NIMR's grants (both internal and external)

Achievements

- Acquired licensed STATA software
- New staff- statisticians and scientific officer
- New collaboration- IHME Washington DC
- New collaboration- Federal Ministry of Communication and Digital Economy-Open data portal
- New grant in collaboration with another department in NIMR
- Successfully Conducted the 2019 rounds of call
- Pre and Post Doc completed and awarded to Junior Category
- Senior awaiting feedbacks from external reviewers
- Grant renewal for 2018 Pre doc and awarded 9 new intramural grants
- Initiated Extramural Calls this year
- Update NIMR SAM, ERA Common and grants.gov

Challenges

- Late submission of reports
- Internet Issues- slows down data entry
- Not being able to meet up with the demand on statistical issues from researchers.
- Some Researchers still don't notify

the grant unit when they get grants (no documentation for such)

- Bottle necks to get reports regularly from researchers on status of grants
- Non-Submission of progress reports for external grants
- Some researchers opening grants access platforms on behalf of the Institute without notifying the institute, hence creating problems when others want to submit on that same platform
- Delays on notification of inflow of external grants
- Lack of approved NIMR grants management policy to address all contemporary issues on grants management

Way forward

- Utilize effectively the new collaboration
- Engage more with our adjunct researchers to improve productivity
- Re-organize work schedule/time management to improve productivity
- Increase training opportunity for staff
- Need for two additional data analysts
- Need to finalize NIMR grants management policy
- Proper documentation of all NIMR grants both internal and external
- Continuous maintenance of all grants access/management platforms
- Obtain a software for grants management
- Training of staff on grants management

LIBRARY & INFORMATION COMMUNICATION TECHNOLOGY DEPARTMENT

The Library and Information and Communication Technology Department operated along the divisions namely: Reader Services, Technical Services, E-resources Centre, Desktop Publishing & Website Management, Computer & Network and Communication and Media Management.

The department supported research activities, collaboration and dissemination of research findings through deployment and management of information resources and technologies across departments, divisions and units.

Research Support Activities

- Health information gathering, management & dissemination
- Compilation of annual reports, newsletters and other publications
- Management of Computer and Internet Infrastructure
- Management of institutional website, emails and social media platforms
- Management of computer software and hardware.
- Provide media coverage to conferences, seminars & training,

meetings and other events

- Engage in Desktop publishing of all NIMR publications and other news items
- Facilitate ICT trainings

Achievements

- Served over 800 Researchers and Students in the year
- Renewed subscription of HINARI Database
- Produced Staff Publication Compendium: 1970-2016
- Establishment of E-resource Center with support of Nigerian Information Technology Development Agency (NITDA)
- Distribution of 86 Laptops and 116 Computer Tablets to Staff with support of NCC
- Renovation of two reading rooms with the support of CCHUB & SHELL
- Expansion of Internet coverage: BTCR, Researchers' Suite & Medical Compound
- Facilitate institutional visibility for research collaboration
- Training of middle manpower on ICT skills

Collaborators

- Nigerian Information Technology Development Agency (NITDA)
- National Communication Commission
- Co-Creation HUB
- Nigerian National Petroleum Cooperation / Shell Nigerian Exploration and Production Company & Co-Venture Partners

Capacity Development

Conferences attended: 4

Workshops/Training attended: 2

Research Publications: 6

Challenges

- Inadequate funding to subscribe to biomedical information resources (database and e-journals)
- Fund to purchase Virtual Library Management System to start the implementation of E-library platform
- Need for additional competent professional staff in Web design & Management and Desktop Publishing
- Need for additional official laptops to work with

Way Forward

- Increased financial support to subscribe to electronic biomedical information resources
- Acquisition of Virtual Library Management System to start the full implementation of

Institutional E-library Platform

- Continue to explore Private Partnership to support the E-Library Project
- Completion of E-Library Building
- Provision of desktop computers, laptops & communication tools
- Staff training & retraining
- Provision of Laptops for official purposes

Work Plan:

- Restructuring of the Institutional website
- Implementation of the E-Library platform
- Subscription to biomedical databases
- Strengthening the internet and network infrastructure
- Organize in-house ICT training for staff

CLINICAL DIAGNOSTIC LABORATORY

Clinical Diagnostic Laboratory (CDL) provides quality and efficient clinical laboratory diagnostic services for both staff and members of the public.

The Laboratory also provides support for research and training of interns, undergraduate and post graduate students in collaboration with Universities and other higher institutions. There are seven (7) sections in CDL

Research Support Activities

- Haematology section: perform routine and specialized diagnosis of blood disorders e.g Investigation of clotting disorders (clotology), haemoglobinopathies, enzymopathies etc
- Medical microbiology (bacteriology, parasitology and mycology) section: investigate microbial causes of infectious diseases and drug susceptibility testing
- Chemical Pathology /endocrinology section: conduct investigation of hormonal disorders i.e metabolic hormones, reproductive hormones, thyroid hormones, tumour markers, etc
- Immunology section: undertake assay of alloantibodies/ isoantibodies, autoantibodies, allergens, markers of inflammatory reactions e.g alpha fetoproteins etc.
- Serology section: investigate serological markers of several infectious agents so such as Chlamydial, H. pylori, HIV, viral Hepatitis etc
- Food handlers' fitness laboratory services: screens food handlers, food companies, cafeterias, kitchens staff, and pre-employment screening of domestic staff etc
- Kits/Reagent evaluation section: validate/evaluate reliability/ suitability of kits for use in Nigerian medical diagnostic laboratories.
- CDL Staff are members of National External Quality Assurance (EQA) team for evaluation of laboratory diagnostic kits

Collaborators

Medical Laboratory Council of Nigeria

Capacity Development

Conferences & Workshops attended: 4

Students on Internship: 4

Ph.D Students supervised: 2

Grants/Fellowship

- Post-Doctoral Research Travel Grant: 1 (NIMR – PRTG 0003 – 19 – 01)

Challenges

- Irregular & delay release of imprest (revolving fund) to run the laboratory for e.g. stationery consumables and stock out reagent etc.
- Lack of power back up for most equipment.
- Inadequate office space
- Delay in attending to urgent work orders.

Way forward

- Increased Management support
- Regular release of imprest /revolving fund to run the laboratory
- Approval of the submitted 2020 Budget of the laboratory
- Management support to maintain CDL as an approved centre for training of MLS Interns

Work Plan

- Improving quality improvement

documentation.

- Rendering of quality routine and specialized lab services to Staff and the public and addition of new test menu.
- Advocacy visits and clients' satisfaction survey to clinics and hospitals.
- Increase collaborations with NIMR research departments, universities and other training Institutions.

ADMINISTRATION DEPARTMENT

Administration Department is charged with the responsibility of providing administrative and support services to the Institute.

The Department is required to create an enabling environment for the conduct of research through the discharge of its Personnel Management and Administrative functions. The number of staff in the Department are thirty-Six. The Divisions / Units in the Department include:

- Registry
- Appointment, Promotion and Discipline
- Pension & Welfare
- General Duties, Training and Development.
- Legal and Insurance matters
- NIMR Kitchen Services

Activities

- Provision of Secretarial Services to Standing Committees of the Institute and in that capacity prepare agenda and other necessary working documents for meetings as directed by the Director-General.
- Advise the Management on

administrative and personnel issues.

- Implement the Institute's personnel Management functions such as recruitment/replacement of staff, training & development, salary administration and processing of leave matters, staff disposition, discipline and withdrawal from service in the form of retirement, resignation of appointment, termination, and dismissal as the case may be as well as processing of staff Annual Performance Evaluation Reports.
- Management of staff welfare matters and implementation of approved policy on Medicare, Pension and Housing etc.
- Handling of the Institute's legal and insurance matters.
- Keeping and updating of staff records.
- Preparation of the Institute's Development Rolling Plans & Annual Budgets.
- Supervision of the Security Outfit.
- Handling of official administrative correspondence of the Institute with the public.
- Undertake other duties as assigned by the Director-General.

Conference/Workshop/Training Attended:

The Department facilitated the workshop on Implication, Interpretation and Execution of the Constitution Provision of the Code of Conduct Bureau and Tribunal Act for all staff of the Institute on 4th November, 2019 and also facilitated the workshop on Performance Improvement Training Programme for one hundred and fifty staff of the Institute on 18th November, 2019. A total of four senior staff of the administration department were trained at Center for Management Development (CMO) on Performance Improvement Training Programme. However, other staff of various Departments/Units also underwent trainings in the year 2019.

NYSC/INDUSTRIAL TRAINING PROGRAMMES

The Department had absorbed some NYSC members, enrolled students for the Industrial Training Fund (ITF) Schemes, Bench Space and Internship as follows:

Bench Space: 27

Internship: 18

NYSC: 45

IT Schemes: 191

Achievements

- **2019 Promotion Exercise** - Approval was obtained for establishment positions from the Office of Head of Service of Federation (OHCSF) for the conduct of the 2019 Promotion Exercise for qualified staff. Letters were issued to successful candidates. The number of staff promoted,

converted and upgraded in 2019 are as indicated below:

- Senior Staff Promotion: 45
- Junior Staff Promotion: 13
- Conversion: 10
- Upgrading: 5

- **Replacement of Staff** - The Administration Department sought and obtained waiver from the Office of the Head of Civil Service of the Federation through the Federal Ministry of Health to replace staff who had exited from the Institute. A total of Fifty Seven (57) different categories of staff were engaged in the process.
- **Project Staff / Adjunct Researchers**- The Department also facilitated the appointment of Forty-Three (43) Project staff and Twenty One (21) Adjunct Researchers in 2019.
- **External Relation** - The Department facilitated the signing of MoU with Lead City University, Ibadan and Eko-University of Medicine and Health Sciences, Ijanikin, Lagos for Adjunct Lectureship positions/Professorial and Adjunct Researchers. This has resulted in the appointment of five (5) Staff of the Institute as Professors in various fields of endeavours. They include:
 - Prof. N. N. Odunukwe
 - Prof. O. P. Akinwale
 - Prof. O. C. Ezechi
 - Prof. R. A. Audu
 - Prof. T. S. Awolola

- **NIMR Scheme of Service** - The Department coordinated the production of a draft copy of the Institute's Scheme of Service which has been forwarded to the

Office of the Head of Civil Service of the Federation through the Federal Ministry of Health for consideration and approval.

RETIREMENT

S/N	NAME	DESIGNATION	EFFECTIVE DATE OF RETIREMENT
1	Mrs. E. N. Amadi	Deputy Director (Nursing)	25/6/2019
2	Dr. (Miss) K. N. Egbuna	Chief Research Fellow	7/5/2019
3	Dr. L. M. Samdi	Chief Research Fellow	1/9/2019
4	Mr. S. T. Abolarinwa	Director (Lib & Info. Tech)	17/9/2019
5	Mr. A. D. Udoh	Audio Visual Officer	2/12/2019

FINANCE & ACCOUNTS DEPARTMENT

The Finance & Accounts Department has a current staff strength of thirty (30) members spread across from five (5) units namely; Budget & Salaries, Treasury, Other Charges, Final Account and Stores as well as other sub-unit in Centre for Human Virology & Genomics, Clinical Sciences Department and Clinical Diagnostics Laboratory.

The department handles all financial transactions of the Institute. All funds coming to the Institute either from Federal Government or Grants (External Donors) pass through the department. The department monitors the Institute's budgetary expenditure and ensures that there is no extra budgetary spending on each expenditure head/code

Activities

- **Revenue from contract awards:** The department ensured that charges payable by contractors were dully collected. This formed part of the IGR generated in 2019 – 100% target met.

- **Review of contractors' Registration fees:** Attempt to carry out upward review of contractors registration fees turned out to be unsuccessful. This target was unrealized.

Achievements

- **Administrative charges:** There was tremendous success recorded in terms of the number of grants attracted by members of staff in 2019.
- Reduction of operational cost through continuous review of payment documents & financial process
- **Improved Budgetary Allocation:** There was an improvement in budgetary allocation to the Institute in 2019. The Institute was able to acquire new research equipment and carryout some renovation work and hoping to acquire more equipment in 2020.
- Successful defence of 2019 budget & improved budgetary allocation
- Finalization of 2015 and 2016

audited accounts

- Conclusion of 2017 accounts
- Training of some of the staff of Finance & Accounts at CMD and ASCON
- Renovation of general accounts office (installation of workstation)

Number of Conferences and Workshops Attended: 6

Challenges

- Inadequate overhead funding thereby putting pressure on IGR
- Obsolete office furniture, fittings and working tools
- Inadequate computer system

Way Forward

- Continue to interface with National Assembly and Federal Government to improve the Institute's budgetary allocation to execute more projects especially the intramural & extramural research grant

Work Plan

The specific tasks to be executed in year 2020 includes the following scope of work.

- Defence of 2020 budget at the National Assembly (Already executed)
- Completion and submission of 2017 Audited Accounts of the Institute
- Preparation for audit of 2018 and 2019 Accounts of the Institute
- Training of staff of the department for improved productivity
- Completion of NIMR Asset Verification assignment by committee set up for that purpose
- Replacement of old office equipment, fittings and working tools in the department

INTERNAL AUDIT UNIT

The Internal Audit Unit is responsible for the internal checks of the Institute's accounts and those for the Out stations.

The main purpose of Auditing is to maintain efficient and effective internal financial control system (security and control of cash and stores, assets etc.). Auditing also guides and ensures institutional financial processes are in strict compliance with laid down government financial regulations and circulars, and that proper book keeping and reconciliations are maintained.

The ultimate aim is to ensure that all accounts and vouchers prepared or received are reconciled. This is also in addition to the normal auditing process to examine the internal control, security measures, and spot checks to ensure that adequate measures exist in observing the regulations governing the receipts, custody, e-payment and stores.

Activities

- Carry out Pre-payment audit of all Institute's expenditures.

- Verification and inspection of all supplies to all stores.
- Audit of various revenue generation centres.
- Post-payment audit of NIMR main accounts.
- Annual stock-taking exercise for main store and sub-stores.
- Verification and ascertainment of efficiency of the e-payment system
- Ensure all payment vouchers followed due process and errors reduced to the barest minimum.
- Assess all procurement items to meet standard and users' specification are adhered to.
- Apply internal controls check and balances to meet up with standard.
- Ensure errors and loopholes are ruled out through post payment audit

Achievements

- Increase in productivity as official time no longer wasted in the banks to collect cash.
- Routine Audit/spot checks of

CHVG/CDL/NIMRCMC

- Routine audit of APIN Clinic (CSD) spot checks
- Field inspections of premises/equipment and staff quarters/vehicles.
- Inspections/verifications of supplies to main stores, CHVG stores Clinic stores and pre-stock-taking
- Routine post payment audit of NIMR main accounts
- Routine Audit of CHVG/CDL/NIMRCMC
- Routine audit of the Clinic accounts
- End of the year annual stocktaking exercise.

Challenges

- Non training of Auditors which greatly hampered the speed, volume and quality of our audit.
- Inadequate office equipment.
- Shortage of skilled manpower.

Way Forward

- Auditors are appealing to Director-General/ CEO to use his good office to look into our

challenges mentioned above.

Work Plan

- To examine on regular basis, the financial records of the Institute and report to management whether or not such records (Accounts) represent a true and fair view of the affairs of the Institute.
- To safe-guard the assets of the Institute by ensuring that management's policies and regulations (Internal Control System) are strictly adhered to by members of staff and other stakeholders.

PROCUREMENT UNIT

The Procurement Unit was created in the year 2012 with the sole mandate to take over the Public procurement functions of the Institute in accordance with the Public Procurement Act, 2007 which promulgates the establishment of institutions, policies and procedures governing and regulating public procurements in Nigeria, in particular Federal Government ministries, departments and agencies (MDAs), as well as other entities outside the foregoing description which derive at least 35% of the funds appropriated or proposed to be appropriated for any type of procurement described in the Act from the Federation share of Consolidated Revenue Fund, except special procurements involving national defence or national security unless the President's express approval has been first sought and obtained.

Activities

- Collection of contract briefs and submission of the Institute's yearly Procurement Plan based on needs assessment supported by prior budgetary appropriations to the Tenders Board for approval in line with the BPP's requirement.
- Preparation and submission of tender

notices/notifications and requests for expressions of interest for publication to advertising media for solicitation of bids, proposals or pre-qualification.

- Issuance of tendering/pre-qualification documents and Standard requests for proposals to prospective eligible contractors, suppliers and service providers (or consultants) for bidding of contract jobs in the Institute.
- Receipt of bids/pre-qualification documents and proposals in response to solicitations; examination of bidding documents; maintenance of appropriate documentation of same; and making arrangement for official bids opening.
- Collection and confirmation of the validity of any performance guarantee submitted by contractors.
- Submission of evaluation Sub-Committees' reports (both technical and financial) to the Institute's Tenders Board for consideration and, or approval.
- Forwarding of the summary of Tenders Board's decision on award of contracts to the Director-General for approval.

- Announcement/publication and conveyance of contracts awards to successful bidders.
- Debriefing of bid losers; responding to complaints; and resolution of conflicts or disputes arbitrarily.
- Arrangement for and participation in contract negotiations and signing.
- Maintenance of an appropriate data and records of proceedings of the meetings of the Tenders Board.
- Production of reports on a range of procurement related activities, documenting processes, procedures, decisions and recommendations as appropriate.
- Carrying out of appropriate market and statistical surveys and preparation of analysis of cost implications of proposed procurements.
- Liaising with stock verifier/user departments to ensure that works, goods or services delivered are in conformity with specifications or set standards and terms of contract and in line with procurement time-frame; assisting in managing and monitoring the time-scales in every stage of the procurement process; execution of all contracts agreements.
- Maintaining highest ethical standards and strict adherence to all extant laws, regulations and guidelines on procurement in every stage of the procurement process.
- Monitoring supply markets and trends

(example, material price increases, shortages, changes in suppliers, etc.) and interpreting the impact of these trends on the Institute's strategies, developing supply options and contingency plans that support the Institute's procurement plan.

Achievements

- Facilitating the following: Construction, equipping & furnishing of new NIMR Researchers' suite at Yaba, Lagos (85% Completion)
- Rehabilitation of Asaba and Maiduguri Outstations (On-Going);
- Renovation of NIMR main laboratory complex at Yaba, Lagos;
- Rehabilitation of road/packing lots and ashphalting at Yaba, Lagos;
- Procurement and installation of laboratory equipment
- Procurement of operational vehicles
- Procurement and installation of office equipment & furniture
- Execution of leadership training courses and annual grant writing & mentorship for junior & senior staff

Challenges

- Lack of familiarity and understanding of extant laws, regulations and guidelines that govern the process of public procurement by staff of other departments/units which, in most cases, leads to unnecessary

interference in the procurement process.

- Delays in the release of budgetary allocations from appropriation by government which in most cases, leads to consequential delays in projects completion in the Institute;
- Delays in the processing of payments to contractors;
- Problem of documentations; and
- Under-staffing which affects the sufficiency of staff in the Unit that are essential to good procurement administration.

Way Forward

- Enlightenment of staff on procurement guidelines and processes
- The Management is to continue to, as usual, push on unrelentlessly to draw down funds or get early release of budgetary allocations in pursuance of the implementation of the Budget of the Institute.
- There is need to improve on turn-around time of payments to contractors
- The Unit is appealing for Management's assistance in the provision of additional qualified staff/Clerk to ease the carrying out of normal procurement tasks.

Work Plan

- Preparation and submission of 2020 Procurement Plan by the Procurement Planning Committee.
- Consideration, review and approval of the 2020 procurement plan by the Tenders Board
- BPP's certification, advertisement, bid opening & pre-qualification, bid evaluation (Technical & Financial) and submission of technical & financial evaluation sub-committee's report
- Consideration of bid evaluation sub-committee's report, tenders board approval, award of contract, signing of contract documents/execution, Project implementation & monitoring, certification, handing over & commissioning

WORKS & MAINTENANCE DEPARTMENT

The Works and Maintenance Department comprises of Civil, Electrical/Electronics, Refrigeration and Air-conditioning, Transport, Environmental and Biomedical Engineering Divisions.

The Works and Maintenance Department is saddled with the responsibilities of ensuring the servicing and maintenance of all the existing Institute's Infrastructures.

Activities

As a research support department, the department:

- Ensures constant power supply to the institute, routine servicing of all the air conditioners, refrigerators, freezers and ultra-low freezers. The routine service cuts across all the building infrastructures in the Administration Block, Auditorium Building, Main Laboratory Complex, Works and Maintenance, Centre for Human Virology Genomics, Molecular Biology and Biotechnology, Clinical Science, Centre for TB Research, Clinical Diagnostic Laboratory, Residential Buildings etc.
- Supervise the maintenance service of

the entire Institute's plants e.g. generators, water pumps, biomedical waste incinerator, cold rooms, automobile vehicles, electronic equipment, cleaning and gardening services.

Achievements:

Civil Engineering Unit

- Completion of major renovation work in the old animal house, upgrading the animal house into a single story building where more scientific animals can be kept and with two offices for staff.
- Painting and decoration works were carried out on 4th floor of the Administration block.
- Renovation of the biomedical incinerator building and roof.
- Civil works and repainting of main laboratory complex.
- Reconstruction of the sewerage in medical compound was carried out.
- Repair of transport division roof and repainting.

Electrical Engineering Unit

- Load balancing on transformers for power sustainability.

- Proactive, preventive, corrective and general services of the institute's plants in line with the manufacturer's recommendations.
- Rectification of all electrical faults in the institute's laboratories, offices and staff quarters including the equipment.
- 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 through supervision of contractors 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.
- Replacement of all non-functional electric bulbs in the lab complex.
- Constant maintenance of the security lightings.

Transport Unit

- All Institute's vehicles were serviced as at when due throughout 2019
- Some vehicles with expired tyres had their tyres replaced.

Environmental Unit

- All waste generated by the institutes be it solid, domestic, garden or medical wastes were evacuated as at when due.
- All the overgrown plants /grasses in NIMR compound were trimmed.
- The drainage networks in NIMR were taken care of.
- Cleaning of in-house existing facilities and public toilets in the Institute.
- All over grown trees /plants under the high tension were trimmed.
- We ensured the environments were kept clean and conducive for everyone.

Refrigeration & Air Conditioning Unit.

- Routine services of all the air conditioners in the institute.
- Repairs of all the faulty air conditioners.
- Installations of any newly purchased air conditioners.
- Repair of any faulty fridges.
- Repair of any faulty freezers
- Repair of all faulty ultra-low freezers.
- Attended to all work orders issued to the unit.

Biomedical Engineering Unit.

- Preventive and corrective Maintenance in research and diagnostic laboratory equipment.
- Inspection and installation of newly procured laboratory equipment.

- Calibration of laboratory equipment.
- Participation in ad hoc activities assigned by Management.
- Certification and verification of laboratory equipment.
- Incineration of laboratory wastes and contaminated devices.
- Servicing research and diagnostic laboratory equipment.

Number of Conferences Attended: 2

Hands-on Training:

All Staff in the department

Landmark Achievements (Capital Projects)

- Internal and External Renovation of the institute main Laboratory Complex.
- Resurfacing/Asphalting of the institute internal drive Roads/parking lots.
- Reconstruction of House 4 to Researchers' suite continued.
- Renovation of the Medical compound and Essential Blocks 1& 2
- Upgrading of existing Animal colony to vertical development.
- Routine Maintenance Services.
- Annual Maintenance Service Contracts
- Cleaning Services – RANSTOJAN Nig. Limited

- Biomedical Wastes Incinerating – EMIS Engineering Limited
- Priority feeder line/equipment – DAT Investment
- Fumigation of NIMR premises – Hamtec Abraham Ventures.
- Evacuation of the central waste bin – Lawman/PSP-cleaners Royal

Challenges

- Delay in payment to LAWMA/Psp.
- Lack of team work
- Insufficient budget allocation to maintenance due to many priorities.
- Lack of modern tools for maintenance.
- Lack of stock of spares in the store leading to delay in maintenance.

Way Forward

- Recruitment of technical personnel paramount.
- Training and re-training of technical staff.
- Bulk purchase of maintenance material should be encouraged as previously done.
- Need for working tools and safety wears for staff of works & maintenance as a proactive/preventive measure against any form of accident or casualty during work hours.

Work Plan

- Hands-on-training for all the craft men and leadership training for senior staff of the department.
- Restore, improve or replace every infrastructural facility that will enhance enabling environment for basic, applied and operational research studies going on in the Institute.
- Cart away all the wastes generated by the Institute solid, domestic and medical waste twice in a week.
- Clear and trim all the overgrown flowers, plants / grasses in the NIMR environment.
- Clean all the institute's drainage networks.
- Routine services and repair of faulty air conditioners in all departments of the institute
- Repair of any faulty fridges, freezers and ultra-low freezers
- Attend to all work orders issued to the department.
- Routine servicing of all the Institute generator and transformers.
- Maintenance of the Institute priority feeders, ring main unit, and 11kv Breaker.
- Maintenance and servicing of all Institute vehicles.

CORPORATE MARKETING & COMMUNICATION UNIT

NIMR Corporate Marketing

€ Communication Unit is saddled with the responsibilities of facilitating the linkages that will ensure the transmission of research innovations / products of the Institute from laboratory-to-the market.

NIMR-CMC also manages the Institute's facilities such as the researcher's suite, auditorium, conference rooms, car parks, and other open ground facilities. The Unit consists of marketing & operational arms.

Services

Rentage of conference facilities:

- 300 Capacity Auditorium
- 120 Capacity Conference Room
- 40 Capacity Conference Room
- 10 Capacity syndicate Room
- Open space within the Biomedical Training and Cancer Research Centre for conferences, exhibitions etc.

The patronage of the facilities increased relatively in 2019 compared to the previous year. This is because many institutions such as WACPC, LSPHCB, HOCAL NIMR SUITE, NIKOM and NIMASA used the facilities for trainings, conferences, workshops and seminars.

Strength

- Strategic Location
- Strong Brand
- Committed Staff
- Strong Marketing Drive

Challenges

- Lack of spacious/ bigger facilities to match client needs
- Outstanding bill with Health Management Organizations (HMOs)

Way Forward

- Develop and Maintain partnership with institutions and external training organizations.
- Renovation of facilities such as the Auditorium and Cancer Research Centre for improved service delivery.
- Improve partnership with Health Management Organizations with a view to enhance patronage of the institute Laboratories.
- Maintain productive working relationship with (RIND) with a view to achieve management objective.
- Trusting in NIMR strength and hoping that NIMR personnel would partner with CMC in building capacity in the health related areas for public enlightenment on fee basis.

RESEARCH, INNOVATION & **PRODUCT DEVELOPMENT (RIND)** UNIT

MISSION STATEMENT:

To deploy research and innovation towards addressing local need for diagnostic kits, reagents and medical equipment

VISION STATEMENT:

To transform research ideas into end products of value for national development.

In today's research world, the changing paradigm focuses on translation of research ideas into tangible products and services. This will boost growth and create job opportunities and development. NIMR's Research Innovation and Product Development (RIND) unit established in 2017 is solely **geared towards translation of research ideas through creative and quality innovations and affordable medical products and services.**

In Research Innovation and Product Development (RIND) Unit of Nigerian Institute of Medical Research, the fulcrum of our research priorities is to

identify gaps in laboratory and diagnostic needs, and fill it by innovative research products. The goal is to help change the narrative of over-dependence on importation, and advance the course of research and medical diagnosis in Nigeria.

Our focus is to meet diagnostic needs of Nigerians through the production of *Proudly Nigerian Products and Proudly NIMR BIOTECHNOLOGICAL Products and Services.*

We explore the huge resources available in Nigeria to produce cost-effective solutions and save the much-needed foreign exchange for the country as regards production and availability of basic medical equipment and reagents. NIMR-RIND has developed some medical products as well as rendered services.

▪ Objectives of RIND

To identify gaps in medical diagnostic needs and produce local and standardised solutions through research and innovation

To validate and conduct quality controls on products developed.

To render services of medical needs in and outside NIMR

Products and Equipments

The following equipment and diagnostic test kits were designed, produced and launched by the Director-General of NIMR:

Medical Equipment:

- NIMR BIOTECH-Electrophoretic Machines Model I&II
- NIMR BIOTECH-Hematocrit Centrifuge
- NIMR BIOTECH -Biological Incubators
- NIMR BIOTECH-Laboratory fitted Oven
- NIMR BIOTECH-Bucket Centrifuge

Reagents & Laboratory Consumables

- NIMR BIOTECH- Haemoglobin Genotype buffer

Diagnostic Kits:

- NIMR BIOTECH- DNA/RNA extraction kits:

Ongoing Activities:

- NIMR BIOTECH Point-of-Care Diagnostic Kits.
- NIMR BIOTECH NimCure Project.

RIND SERVICES:

Repairs and servicing of medical equipment such as microscopes.

Research Activity:

Validation of diagnostic accuracy and performance of NIMR-made Electrophoretic Machine in

determination of haemoglobin genotypes in Lagos, Nigeria.

This study was carried out to validate the performance characteristics of NIMR-made electrophoretic machine for hemoglobin determination using standard machines currently in use in respective medical facilities in Lagos State.

Results: Of all the parameters evaluated, the sensitivity and specificity agreements between NIMR-made electrophoretic machine and those used by the centers (foreign made brands) was 100%. Others were: Time of band separation [11.54mins: 6.69mins with P-value of 0.00], Neatness of band separation [92.03%: 92.43% with P-value of 0.702], Accuracy of band separation [92.68%: 92.68% with P-value of 1.00], Consistency of band separation [93.24%: 93.24% with P-value of 1.00], Ease of use of machine [96.19%: 97.19% P=0.166] and % agreement at 100% respectively.

Conclusion: The ultimate goal of test validation is to provide evidence that the evaluated method or product will show acceptable reproducibility and accuracy so as to be clinically acceptable and applicable according to international standards. In this study, our result shows diagnostic agreement between NIMR-made electrophoretic machine and the standard imported ones.

Achievements: Our finished products are as shown below



Work-plan for 2020

- Patenting, Licensing and Product registration with relevant authorities
- Validation and Product Testing in centres outside Lagos State
- Re-designing and Packaging of product
- SOP Design & Development
- Grant writing & Publications
- Production of more Reagents & laboratory Consumables E.g.: -NIMR BIOTECH-Antibiotic Sensitivity Disc, Catalase and Oxidase test strip -NIMR BIOTECH-Distilled water and Buffered saline -NIMR BIOTECH-Giemsa stains & Field stain A & B, -NIMR BIOTECH-Saline, Distilled and De-ionized water -NIMR BIOTECH- Methylene blue -NIMR BIOTECH- Carbol Fushin
- Handing over our products for Marketing by NIMR Marketing and Cooperate Unit

NIMR RIND Committee Members

Prof. N. N. Odunukwe -Chairperson/Head of RIND

Prof. S. I. Smith

Prof. O. P. Akinwale

Prof. Oliver Ezechi

Prof. Sam Awolola

Dr. Greg. Ohihion

Dr. A. Z. Musa

Mr. Orok AB -RIND Focal Person

Technical Team Members

Prof. Nkiruka. N. Odunukwe	- Head of NIMR RIND
Dr. Greg Ohihion	- Deputy Head
Mr. Orok A. Basse	- RIND Focal Person NIMR
Dr. Fowora Muniat	- NIMR Biotech DNA/RNA extraction kits Innovator
Dr. Chika Onwuamah	- Isothermal PCR Point-of-care Innovator
Mr. Femi Amoo	- NimCure Project Innovator.
Dr. Ngozi M Otuonye	- Quality Control
Dr. Jane Okwuzo	- Researcher
Mr. Adeneye Adeniyi	- Researcher
Dr. Esther Ohihoin	- Researcher
John Omovohwo	- Equipment Design, Fabrication, Production & Servicing

INSTITUTIONAL REVIEW BOARD (IRB)

NIMR-Institutional Review Board remained a pacesetter and in the forefront of providing support to research in the country and to other individuals and institutions internationally. The Secretariat coordinates the activities of the Board as well as ensuring timely processing and approval of submitted protocols.

Meetings

NIMR-IRB held a total of three meetings between 11th March 2019 and 5th September 2019.

Research Protocols Received and Approved in 2019

A total of sixty (60) proposals were received by NIMR-IRB in the year 2019. The research protocols reviewed and approved within the set turnaround time of six (6) weeks were of five categories;

- NIMR Staff Protocols: (33)
- Non NIMR Staff (individuals) protocols: (25)
- NGO/CSO and multinational organizations protocols: (2)
- Students from various universities

and polytechnics: (12)

Collaborations

The Board collaborated with the following organizations and bodies:

- New HIV and Microbicides Advocacy Society (NHVMAS)
- Brown University
- West African Bioethics Training Programme (WABTP)
- National Health Research Ethics Committee (NHREC)
- Federal Medical Centre (FMC) Ebutte-Metta

Challenges

- Undue delay of protocol reviews
- Poor knowledge of researchers on good research and ethics practices

Way Forward

- Automation of the IRB process
- Organize more training on research ethics

Work Plan

- Capacity building of members and researchers
- Computerization of administrative/secretariat procedures
- Increase awareness on ethics of good research practice

Members of NIMR-Institutional Review Board

S/N	Names	M/F	Profession	Organization	Position on Board
1	Dr. O. C. Ezechi	M	Gynecologist & Obstetrician	N.I.M.R	Chairman
2	Dr. (Mrs) A. N. David	F	Pediatrician	N.I.M.R	Vice Chairman
3	Mrs. O. A. Nwogbe	F	Information Scientist	N.I.M.R	Admin Secretary
4	Dr. Tajudeen Bamidele	M	Microbiologist	N.I.M.R	Asst. Admin Secretary
5	Alh. A. S. Yunusazazzau	M	Administrator	N.I.M.R	Member
6	Dr. R. A. Audu	F	Virologist	N.I.M.R	Member
7	Dr. B. Adewale	M	Bioethicist	N.I.M.R	Member
8	Dr. G. Ohihoin	M	Gynecologist & Obstetrician	N.I.M.R	Member
9	Rev Ariire Bankole	M	Cleric	Anglican Church, Lagos	Member
10	Dr O. B. Awoyomi	M	Orthopedic Surgeon	F.M.C Ebutte-Metta	Member
11	Alh. T.Y. Raheem	M	Med. Laboratory Scientist	N.I.M.R	Member
12	Dr. O. O. Aina	M	Pharmacologist	N.I.M.R	Member
13	Ms. Olayide Akanni	F	Media/Journalist	Journalist Against AIDS (JAAIDS)	Member
14	Barr. Olatunde Daudu	M	Lawyer	Olatunde Daudu & Co Lagos	Member
15	Dr. A. Z. Musa	F	Biostatistician	N.I.M.R	Member
16	Ms. Ifeoma Idigbe	F	Sociologist	N.I.M.R	Member
17	Alh. T.Y. Raheem	M	Med. Laboratory Scientist	N.I.M.R	Member
18	Alh. B. A.T. Lawal	M	Imam	Muslim Society	Member

GRANTS

NIMR 2019 (External) Grants					
S/N	GRANTOR(S)	PROJECT TITLE	PRINCIPAL INVESTIGATORS	AMOUNT	DURATION
1	ABT-PMI DEVELOPMENT FOUNDATION	MALARIA VECTOR SURVEILLANCE AND INSECTIDE RESISTANCE	DR. S.T AWOLOLA	₦ 31,923,498.00	
2	GLOBAL FUND	ENTOMOLOGICAL SURVEILLANCE 1	DR. S.T AWOLOLA	₦43,493,495.00	2 YEARS
3	FIND	EVALUATION STUDY OF RAPID DIAGNOSTIC TESTS (RDTs) DETECTING ANTIBODIES AGAINST HEPATITIS C VIRUS.	DR. R.A AUDU	\$63,943.00	6 MONTHS
4	GLOBAL FUND	ENTOMOLOGICAL SURVEILLANCE 2	DR. S.T AWOLOLA	₦38,741,660.00	2 YEARS
5	GENEDRIVE	PERFORMANCE EVALUATION OF THE GENEDRIVE HCV ID KIT FOR DECENTRALISED DIAGNOSIS OF ACTIVE HEPATITIS C FROM HUMAN PLASMA IN NIGERIA.	DR. R.A AUDU	\$73,474.67	6 MONTHS
6	BOCA BIOLISTIC LLC	HUMAN IMMUNODEFICIENCY VIRUS (HIV) CLINICAL SAMPLE COLLECTION- INCREASED RISK FOR HIV COHORT.	DR. OLIVER .C EZECHI	\$26,250.00	
7	SFH	HIV RESISTANCE MADE EASY WORKSHOP FOR DOCTORS AND PHARMACISTS AND VIRAL FAILURE WORKSHOP FOR PROFESSIONAL NURSES.	DR. R.A AUDU	₦5,207,055.75	
8	FHI 360	STRENGTHEN INTEGRATED DELIVERY OF HIV/AIDS SERVICES (SIDHAS)	DR. DAVD NKIRU	₦70, 240 023	
9	CKD HADEJIA		PROF. B.L SALAKO	\$99,227.00	ONE YEAR
10	HDR	HIV DRUG RESISTANCE TESTING FOR SHIELD PROJECT	DR. CHIKA ONWAMAH	₦4,500,000.00	

GRANTS

NIMR 2019 (External) Grants					
S/N	GRANTOR(S)	PROJECT TITLE	PRINCIPAL INVESTIGATORS	AMOUNT	DURATION
11	MAGIC NIG	HIV DRUG RESISTANCE TESTING FOR SHIELD PROJECT	DR. CHIKA ONWAMAH	₦28,504,000	ONE YEAR
12	I.TEST	INNOVATIVE TOOLS ON EXPANDING YOUTH FRIENDLY HIV SELF-TESTING I-TEST.	DR. OLIVER .C EZECHI	\$155,373.00	5 YRS
13	UNIVERSITY OF GHANA, SCHOOL OF PUBLIC HEALTH.	PRINCIPLES OF IMPLEMENTATION RESEARCH.	DR. S.T AWOLOLA	\$8,399.80	ONE OFF SERVICE
14	UNIVERSITY OF PENNSYLVANIA, PHILADELPHIA	EVALUATION OF IMMUNE STATUS, MICROBIAL COMPOSITION AND PARASITE INFECTION IN SCHOOL-AGE CHILDREN	DR. B. ADEWALE	\$23,342.00	2 YEARS & SIX MONTHS
15	UNIVERSITY COLLEGE LONDON	CROSS SECTIONAL STUDY OF HIV INFECTION AS A RISK FACTOR FOR COPD IN URBAN WESTERN AFRICA	DR. OLADELE	£2,187.00	ONGOING
16	XCENE	A MULTICENTRE, DOUBLE BLIND, RANDOMIZED, PARALLEL GROUP, CLINICAL TRIAL TO COMPARE THE SEXUAL PLEASURE, PERFORMANCE, ACCEPTABILITY AND SAFETY OF GRAPHEME INCORPORATED NATURAL RUBBER LATEX CONDOMS AND NATURAL RUBBER LATEX CONDOMS IN HEALTHY HUMANS.	DR. GREG. OHIHOIN	₦208,538.00	
17	SARO	COMPARATIVE BIO-EFFICACY OF THREE NEW AEROSOLS AGAINST MOSQUITOES AND COCKROACHES.	DR. ADEOGUN DAPO	₦2,292,000.00	3 MONTHS
18	MEDBURY		DR. AINA OLUGBENGA	₦1,925,000.00	

GRANTS

NIMR 2018 INTERNAL RESEARCH GRANTS

S/N	DATE OF ISSUE	PROJECT TITLES	AWARD NO:	PRINCIPAL INVESTIGATORS / GRANTEES	AMOUNT (₦)	DURATION
2018 JUNIOR CATEGORY						
1	08-01-19	IMPACT OF DIGITAL HEALTH FOR ADHERENCE ENHANCEMENT IN TB THERAPY	2NIMRGA-0011-18-01	MR. FEMI AMOO	1,500,000.00	1 YEAR
2	08-01-19	UTILITY OF ELECTRONIC REMINDERS ON ADHERENCE TO ANTIRETROVIRAL DRUGS IN ADOLESCENTS INFECTED WITH HIV: A RANDOMIZED CONTROLLED TRIAL	2NIMRGA-0012-18-01	DR. AGATHA WAPMUK	1,500,000.00	1 YEAR
3	08-01-19	SURVEY ON EARLY WARNING INDICATORS OF HIV DRUG RESISTANCE IN LAGOS STATE.	2NIMRGA-0013-18-01	DR. A.Z. MUSA	1,500,000.00	1 YEAR
2018 SENIOR CATEGORY						
1	08-01-19	PLACENTA PLASMODIUM PARASITAEMIA AND DEVELOPMENT OF RESISTANCE USING SULFADOXINE / PYRIMETHAMINE (SP) OR MEFLOQUINE IPT/ITN INTERVENTION AMONG HIV POSTIVE PREGNANT WOMEN IN LAGOS NIGERIA: A RANDOMISED CONTROLLED TRIAL"	2NIMRGA00 24-18-01.	DR. OHIHOIN A. GREGORY	5,000,000.00	2 YEARS
2	08-01-19	THE PREVALENCE AND IMPACT OF HIV DRUG RESISTANCE AMONG DRUG-NAÏVE HIV POSITIVE PREGNANT WOMEN AND THEIR NEW-BORNS IN LAGOS, NIGERIA.	2NIMRGA00 25-18-01.	DR. CHIKA ONWUAMAH	5,000,000.00	2 YEARS
3	22-01-19	NEW INNOVATION GRANTS- POLIO AND ARBOVIRUS RESEARCH	2NIMRGA0017-18-01	DR ROSEMARY AUDU	5,000,000.00	2 YEARS
4	22-01-19	NEW INNOVATION GRANTS ALTERNATIVE MEDICINE RESEARCH	2NIMRGA0016 18-01	DR. OLUGBENG AINA	2,000,000.	2 YEARS
5	22-01-19	NEW INNOVATION GRANTS MAPPING AND INITIAL DEMOGRAPHIC AND HEALTH SURVEY OF IJEDE, IKORODU,LAGOS	2NIMRGA0020 18-01	DR. NKIRU DAVID	2,000,000	2 YEARS
6	22-01-19	NIMR RESEARCH ADVISORY BOARD	2NIMRGA00 18-01	GRANTS UNIT	1,000,000.	1 YEAR
7	11-08-19	BURDEN OF LASSA FEVER, STATUS OF ITS MANAGEMENT AND PREVENTION IN NIGERIA	2NIMRGA00 26-18-01.	DR. (MRS.) AUDU ROSEMARY	5,000,000.00	2 YEARS

GRANTS

NIMR 2019 INTERNAL RESEARCH GRANTS						
RENEWALS						
S/N	DATE OF ISSUE	PROJECT TITLES	AWARD NO:	PRINCIPAL INVESTIGATORS / GRANTEES	AMOUNT (₦)	DURATION
1	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0001-18-01.	MS. IFEOMA IDIGBE	500,000.00	1 YEAR
2	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0002-18-01.	MRS. NGOZI OTUNOYE	500,000.00	1 YEAR
3	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0003-18-01.	MRS. SABDAT EKAMA	500,000.00	1 YEAR
4	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0008-18-01.	MRS. ENYA VERONICA	500,000.00	1 YEAR
5	12-11-18	ISSAC FOLORUNSO ADEWOLE FAS - LIBRARY OF TOMORROW (IFA - LOT)	2NIMRGA0015-18-01.	PROF. AYOADE ODUNOLA	1,000,000.00	1 YEAR
2019 CALL (JUNIOR CATEGORY)						
6	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	2NIMR-PRDG-0009-18-01.	DR. WAPMUK AGATHA	500,000.00	1 YEAR
7	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	2NIMR-PRDG-0010-18-01.	MRS. HERBERTSON EBIERE	500,000.00	1 YEAR
8	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	2NIMR-PRDG-0011-18-01.	MRS. KUNLE-OPE CHIOMA	500,000.00	1 YEAR
9	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	2NIMR-PRDG-0012-18-01.	MRS. ANIEDOBE M. NKEM	500,000.00	1 YEAR
10	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	2NIMR-PRDG-0013-18-01.	MRS. OPARAUGO CHINEDUM	500,000.00	1 YEAR
11	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0014-18-01.	DR. EZEMELUE PRISCILLA	500,000.00	1 YEAR
12	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0015-18-01.	DR. GAB-OKAFOR CHIDINMA	500,000.00	1 YEAR
13	11-08-19	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0016-18-01.	MRS. AFOCHA EBELECHUKWU	500,000.00	1 YEAR
14	11-12-2019	PRE-DOCTORAL RESEARCH DEVELOPMENT GRANT	1NIMR-PRDG-0017-18-01.	MRS. FEHINTOLA IGE	500,000.00	1 YEAR
15	11-08-19	POST-DOCTORAL RESEARCH TRAINING / TRAVEL GRANT	1NIMR-PRTG-0001-18-01.	DR. RAHEEM T. YEKEEN	500,000.00	6 MONTHS
16	10-03-19	AWARD RESEARCH MEETING AT NIGERIAN ASSOCIATION OF NEPHROLOGY (NANCON) '20	2NIMRGA0027-19-01	NANCON	1,000,000.00	ONE-OFF

NIMR 2017-2021 STRATEGIC OBJECTIVES

S/N	Thematic Areas	Strategic Objectives
1	Five year development plan	<ol style="list-style-type: none"> 1. Review previous strategic plan and identify gaps. 2. Develop, print and disseminate SP by first quarter of 2018. 3. Conduct a regular review of the strategic plan implementation.
2	Leadership and Governance	<ol style="list-style-type: none"> 1. Establish an institutional research advisory board. 2. Engage policy makers, lawmakers and stakeholders to review the Act that established the Institute. 3. Strengthen and maintain existing strategic partnerships, networks and collaborations.
3	Development of Human Resources required for health research	<ol style="list-style-type: none"> 1. Establish quarterly national grant writing workshops for researchers. 2. Improve number of grant applications submitted and being awarded including patents and innovations. 3. Increase research output 4. Facilitate adjunct positions for NIMR research staff in the Nigerian universities. 5. Pursue opportunities to collaborate with universities to award academic certificates and degrees. 6. Conduct periodic relevant training/workshops for research support staff. 7. Produce NIMR specific scheme of service, ensure approval by Head of Service and implementation in the institute. 8. Conduct yearly promotion.
4	Infrastructural development to support human resources	<ol style="list-style-type: none"> 1. Create a state-of-the-art central laboratory accessible to all Researchers. 2. Establish a functional biorepository accessible to researchers in and outside NIMR. 3. Develop and implement SOPs for all laboratories and calibrate and maintain existing laboratory equipment. 4. Renovate and build new structures in tandem with the physical needs of the institute.
5	Strategic resource mobilization (finance/capital)	<ol style="list-style-type: none"> 1. Improve available opportunities for intramural funding and establish extra-mural funding to universities and other relevant Institutions yearly. 2. Strengthen Grants Management Unit to attract more funding. 3. Establish networks for private sector funding 4. Lobby policy makers for increased budgetary allocation to and appropriation for, research in subsequent years. 5. Explore possibilities of endowments

PUBLICATIONS

1. Abutu P, Amuda O, Osinaya O and Babatunde B (2019). Regulatory Activity of Ethanol Leaves Extract of *Moringa Oleifera* on Benzene Induced Leukemia in Wister Rat Using TNF- α Analysis. *American Journal of Medical and Biological Research (AJMBR)* Volume 7.
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PHOTOSPEAK

2019 INTERNATIONAL CONFERENCE



2019 RETREAT



Memorable activities in Microbiology Department



Member of staff with invited school pupils at the 2019 World Handwashing Day organized by the Center for Infectious Diseases Research.



Members of staff rendering Christmas carol songs at the 2019 departmental end of year/Christmas carol event.



Members of staff at the June 2019 departmental team building event: tug of war.



Heads of Division with the Head of Department cut cake for the end of the year/Christmas carol event.



DG NIMR, SANAS assessors and staff of Microbiology Department after a successful audit and expansion of scope at the CHVG and CTBR, November 2019.

COLLABORATORS & PARTNERSHIP

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