

NIGERIAN INSTITUTE OF MEDICAL RESEARCH

Research for National Health

2023 Annual Report



NIMRNigeria



THE FOREMOST
RESEARCH INSTITUTE
IN NIGERIA



NIGERIAN INSTITUTE OF MEDICAL RESEARCH

2023 Annual Report

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Director-General/CEO

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His Excellency
Bola Ahmed Tinubu, GCFR
President, Commander-In-Chief of the Armed Forces
Federal Republic of Nigeria

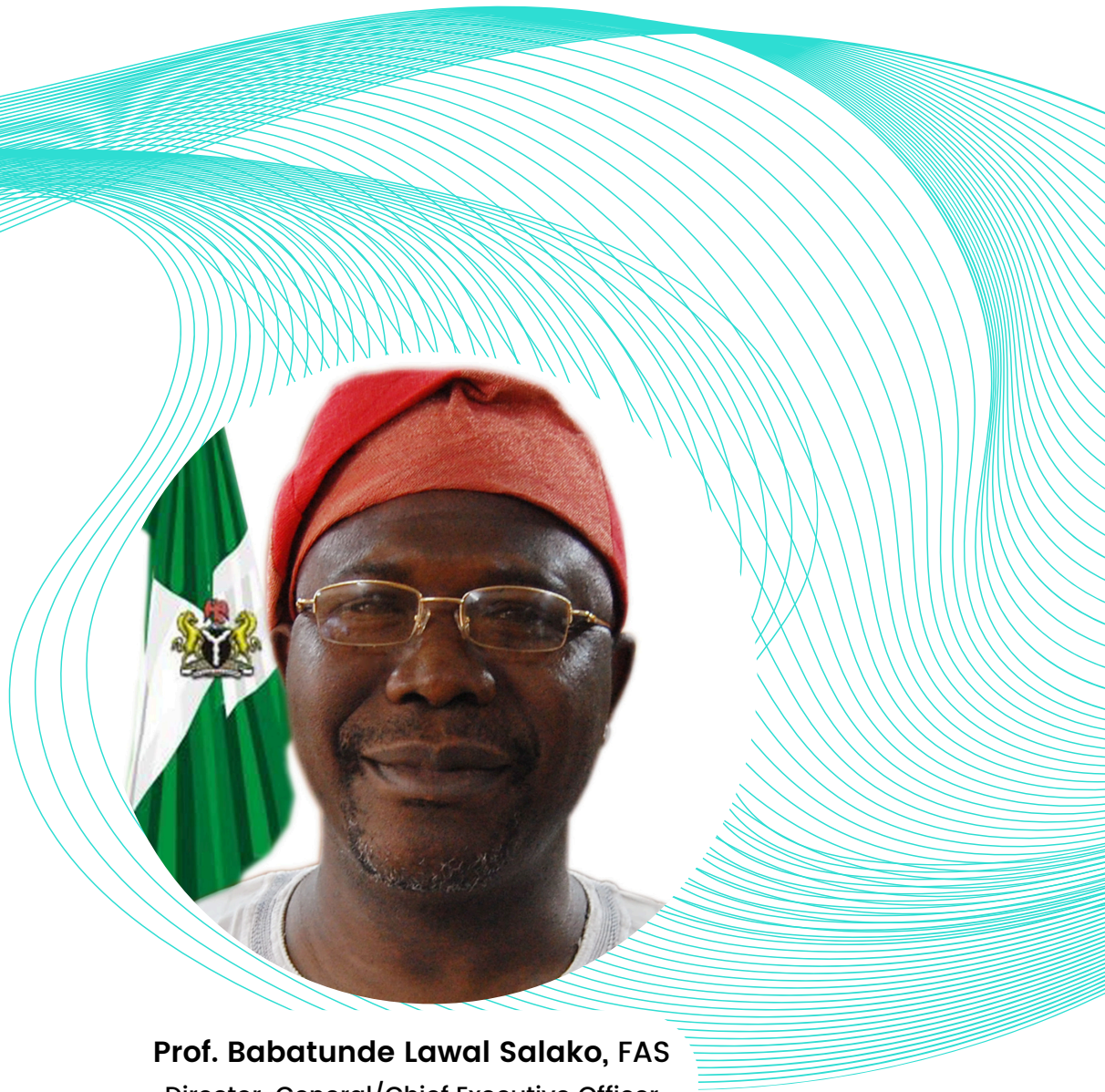


Prof. Muhammad Ali Pate
Coordinating Minister
Federal Ministry of Health & Social Welfare



Dr. Tunji Alausa

Honourable Minister of State for Health and Social Welfare
Federal Ministry of Health & Social Welfare



Prof. Babatunde Lawal Salako, FAS
Director-General/Chief Executive Officer
Nigerian Institute of Medical Research



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DIRECTOR-GENERAL'S FOREWORD



The year 2023 began with full activities and ended on a very high impressive note. The year was particularly eventful as the 2022–2026 Strategic Plan enabled the Institute to remain focused on its key mandate to improve the health status of the Nigerian populace through quality research and development. The Strategic Plan also guided the Institute appropriately in responding to the health research priorities of Nigeria as a contribution to the transformation agenda of the Federal Government for national development.



In the past year, the Institute continued to improve on implementing its mandate to conduct research into diseases of public health importance in Nigeria. Funded projects included the Study of APOLI Gene Variants and the Risk of Kidney Disease in COVID-19 in Nigeria, Safety and Antimicrobial Resistance of Mass Administration of Azithromycin in Children 1-11 months (SARMAAN), Safety & Immunogenicity of Fractional Doses of Moderna, AstraZeneca & Janssen Covid-19 Vaccines among Nigerian Adults (SIFCOVAN), Integration of Hypertension Management into HIV care in Nigeria: A Task Strengthening Strategy (TASSH), the HPLC Analysis of the quality of Artemisinin Combination Therapy (ACT) medicines in Nigeria: Malaria Omic correlates of Artemisinin-based therapy resistance in Nigeria, International epidemiology Databases to Evaluate AIDS (IeDEA), etc.

As was witnessed in the year under review, the Institute played host to scores of university students from many Nigerian Universities across the country and further afield who applied to undertake their Students Industrial Work Experience (SIWES). This included National Youth Service Corps (NYSC) members and undergraduate students for Internship and Bench Space for laboratory studies respectively. The students were educated on the contribution of research to national development and the mandate of the Institute.

The Institute's contributions to the Federal Government's efforts at addressing some of the greatest disease burdens in the country are palpable. Such diseases are HIV/AIDS, tuberculosis (TB), malaria, hepatitis and other communicable and non-communicable diseases. The HIV treatment programme continues to be among the best in the country involves a multidisciplinary team which has provided care for HIV infected patients from 2004 till date. The cumulative enrolment of HIV-positive persons since inception of the Clinic till December 2023 is 27,096 while a total of 7,282 pregnant HIV-positive women were cumulatively enrolled for PMTCT. A total number of 232 HIV-positive patients were enrolled into care from Jan-Dec. 2023 comprising of 230 adults and 2 paediatric patients. The HIV Clinic also renders PMTCT (prevention of mother-to-child transmission of HIV) services and a total of 51 HIV-positive pregnant women were enrolled for PMTCT in the year 2023. The enrolment pattern by gender and monthly is depicted in the figures below.

Collaboration and partnership between the Institute, national and international bodies and organisations have continued to grow; many more of our research staff have been offered adjunct academic positions in tertiary institutions in the country, and in addition to the existing several Memoranda of Understanding (MoUs), an MoU with Trinity University, Sabo-Yaba, Lagos was signed in the reporting year. This is in furtherance to fostering academic and research collaboration with the University. The Institute collaborated with Medical Research Council – Unit, The Gambia (MRCG), West African Node of Excellence for TB, AIDS and Malaria (WANETAM), Institute of Tropical Medicine, Antwerp, Belgium, Tuberculosis Supra Reference Laboratory, Milan, Italy, Institute de Pasteur (IPD), Dakar - Senegal, Advanced Medical and Dental Institute, Universiti Sains Malaysia, Penang-Malaysia, Centre for Discovery and Innovation in Parasitic Diseases, Department of Pathology, University of California, San Francisco, USA, University of Ghana, Legon - Ghana, University of Tokyo, Japan, Federal Medical Centre, Ebute-Metta, Lagos, Nigeria Centre for Disease Control (NCDC), University of Lagos, University of Ibadan, Lead City University, Ibadan, Federal Ministry of Health, African Centre of Excellence for Genomics of Infectious Diseases (ACEGID), Redeemers University, Ede, Osun State, and MTN Foundation.

The Institute also hosted her 13th Scientific Conference on International Conference on Health Advances, Innovation and Research (ICHAIR), with tracks on Basic Sciences, Clinical Sciences, Biomedical Innovations, Public Health One Health and Social & Behavioural Sciences. This year's edition of ICHAIR aims to bring together Postgraduate students, researchers, academic scientists, professionals, and governmental realms together, network, exchange, and share their experiences and research findings on different aspects of medical, health, and basic science research related to medical and public health. The conference has been hosted since 2011 and has become the go-to meeting for biomedical professionals across Nigeria and beyond. It also

offers a unique, professional, and cultural platform to foster personal and professional growth. The Chairman of the Conference was Prof. Ravindra Gupta, Senator (Dr.) Adeleke Olorunnibe Mamora, former Minister of Science and Technology, while the keynote Speaker was Prof. Umberto Dalessandro, Director, Medical Research Council Unit, The Gambia (MRCG).

As part of our community service and Corporate Social Responsibility (CSR), the Institute has continued to create awareness to the Nigerian public on health promotion and disease prevention. In this regard, the Institute commemorated World TB Day, World Malaria Day and World AIDs Day in addition to regularly engaging the media (both print and electronic) to disseminate some of our research findings and their implications on public health.

The welfare of our staff received prompt attention and deserving staff were promoted. We maintained our policy on reward for excellence as an incentive for improved productivity and self-actualization. Without peace, there will be little or no development; the Institute acknowledges the continued peaceful working environment which perhaps is as a result of good staff motivation. It is our wish and desire that the existing friendly and peaceful work environment in the Institute will be further improved for maximum productivity.

The Institute's main challenge is specific funding for health research which remains inadequate for any robust research that may result in groundbreaking outcomes that can contribute to advancement in science and national development. Meaningful research is capital intensive and, therefore, huge human/financial and infrastructural investment must be committed to it.

In all, the Institute performed better in terms of research activities, laboratory, infrastructural and human capital development. The commitment, dedication and support of the Management and staff of the Institute are highly appreciated as we continue to consolidate on our activities and achievements in the coming year.



Prof. Babatunde Lawal Salako, MBBS (Ib), FWACP, FRCP (Lond), FRCP (Edin), MNIM, FNAMed, FAS.
Director-General/Chief Executive Officer
Nigerian Institute of Medical Research

WHO WE ARE

- The Nation's foremost Institute of Medical Research.
- Antecedent dates back to 1920^s with the arrival of the Rockefeller Foundation Yellow Fever Commission to the West African Coast.
- Established by Act No. 5 of 1977 which was later repealed and replaced by the National Agency for Science and Engineering Infrastructure Act, 1992.
- Headquarters located in Yaba, Lagos State, Nigeria.
- We carry out Health Research in Nigeria for National Development.
- We collaborate with other similar institutions both locally and internationally.
- 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

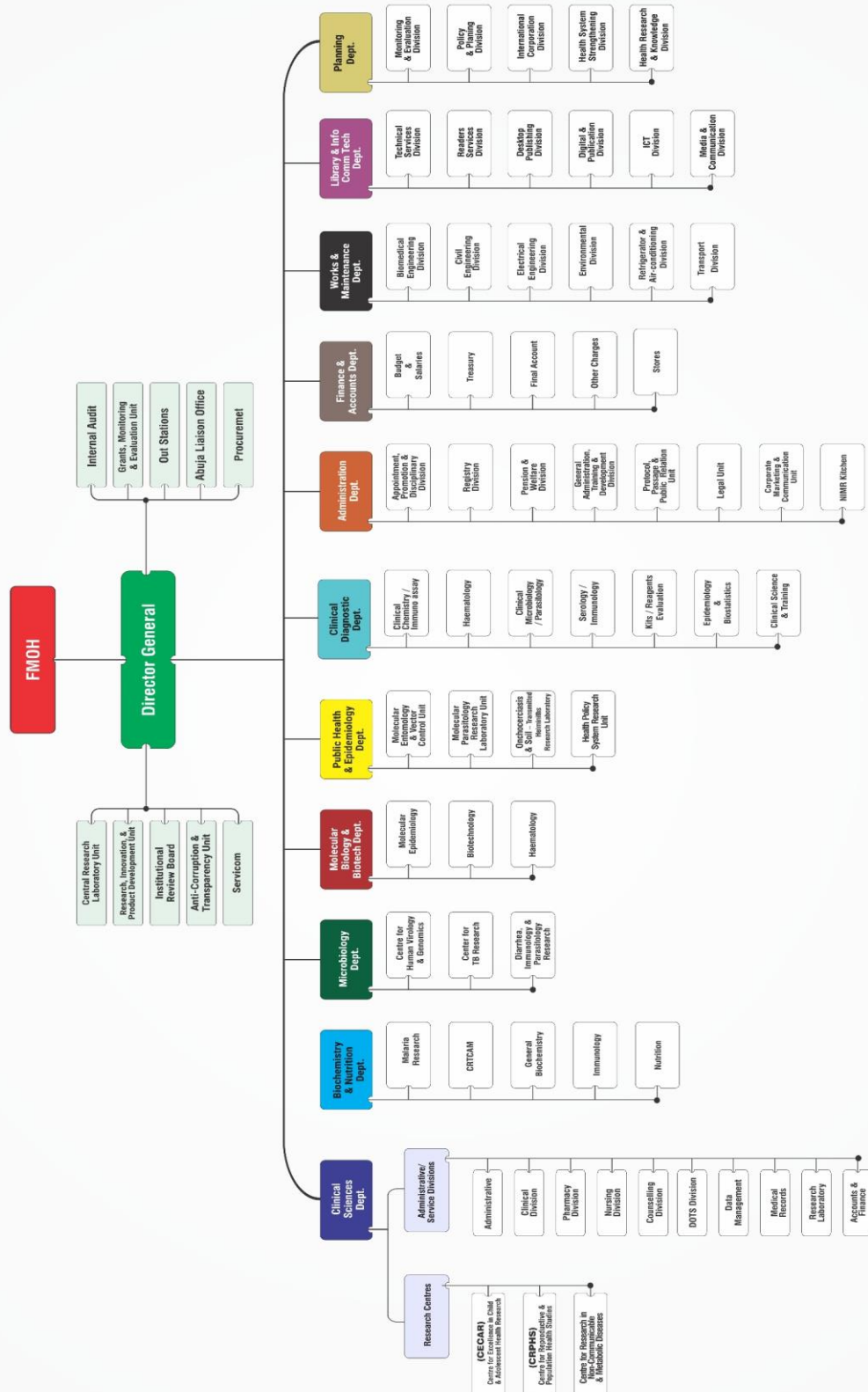
To conduct research into diseases of public health importance in Nigeria and develop structures for the dissemination of research findings while providing the enabling environment and facilities for health research and training in cooperation with the Federal and State Ministries of Health and in collaboration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

CORE VALUES


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

OUR ORGANOGRAM

NIMR ORGANOGRAM



RESEARCH ADVISORY BOARD MEMBERS

- 
- | | |
|-------------------------------------------------------------------------|--------|
| ▪ Prof. Oyewusi Gureje (University of Ibadan) | Chair |
| ▪ Prof. Babatunde Lawal Salako (DG-NIMR) | Member |
| ▪ Dr. Olajide Idris (Former Commissioner of Health, Lagos State) | 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 (Bayero University, Kano) | 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 University Teaching Hosp.) | Member |

PRINCIPAL OFFICERS



Prof. B. L. Salako, FAS
Director-General/CEO



Alh. A. S. Yunusazazzau, mni
Director & HOD
(Administration)



Prof. O. P. Akinwale
Director of Research (NTDs)
PH & E Department



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



Mr. Y. Y. Ogaji, FCA
Director & HOD
(Finance & Accounts)



Dr. O. A. Nwogbe
Director & HOD
(Library & ICT)



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

SENIOR MANAGEMENT & FINANCE COMMITTEE

- Prof. Babatunde Lawal Salako, *FAS* Director-General/CEO
- Alh. A.S. Yunusazazzau, *mni* Director & HOD (Administration)
- Prof. (Mrs.) N.N. Odunukwe Director of Research (CSD)
- Prof. (Mrs.) S.I. Smith, *FAS* Director of Research (MB & BT Department)
- Prof. (Mrs.) O.P. Akinwale, *FPPSN* Director of Research (NTDs) PH & E Department
- Prof. O.C. Ezechi Director of Research (CSD)
- Prof. (Mrs.) R. A. Audu Director of Research & HOD (Microbiology)
- Engr. E.O. Adedeji, *FNSE* Director & HOD (Works & Maintenance)
- Mr. Y.Y. Ogaji, *FCA* Director & HOD (Finance & Accounts)
- Mrs. B.N. A. Kadiri, *CNA* Chief Planning Officer & Ag. HOD (Planning)
- Dr. (Mrs.) O.A. Nwogbe Director & HOD (Library & ICT)
- Mrs. C.T. Oparaugo Director of Laboratory Services (B & N Dept.)
- Mrs. T. Malomo, *FCA* Deputy Director & HOU (Internal Audit)
- Dr. (Mrs.) A.Y. Olukosi Deputy-Deputy & Ag. HOD (Biochemistry & Nutrition)
- Mr. S.K. Akindele Deputy Director & Ag. HOD (CD)
- Dr. (Mrs.) M.A. Sulyman Chief Research Fellow & Ag. HOD (PH & E)
- Dr. D.A. Oladele Chief Research Fellow & Ag. HOD (CS)
- Dr. (Mrs.) A.Z. Musa Senior Research Fellow & HOU (G, M & E)
- Dr. T.Y. Raheem Snr Research Fellow & Coordinator (MB & BT Dept.)



NIMR 2022-2026 STRATEGIC OBJECTIVES

S/NO	THEMATIC AREAS	STRATEGIC OBJECTIVES
1	Governance	<ol style="list-style-type: none"> 1. Review the 2017-2021 strategic plan, and identify the gaps, challenges and way forward. 2. Develop, print and disseminate a strategic plan for 2022-2026. 3. Conduct an annual evaluation of the strategic plan implementation. 4. Advocate for policy and political support for the uptake and commercialisation of research products. 5. Engage policy and lawmakers to review the Act that established the Institute. 6. Strengthen and foster new strategic partnerships, networks and collaborations. 7. Develop research, operational and administrative policy frameworks. 8. Advocate for increased budgetary allocation and appropriation for research.
2	Health Research for National Development	<ol style="list-style-type: none"> 1. Determine research focus in line with national health research priority. 2. Strengthen translational research and clinical trials. 3. Establish and maintain a quality improvement system for all laboratories in the Institute. 4. Ensure ethical research compliance and the highest standard of health research. 5. Establish a functional digital library to support research. 6. Disseminate information on research outputs.
3	Resource support for Health Research and Development	<ol style="list-style-type: none"> 1. Strengthen the annual national grant writing workshop. 2. Improve the number of Direct Grant Awards. 3. Increase adjunct positions for NIMR research staff in Nigerian universities and internationally. 4. Finalize specific schemes of service for the Institute and ensure approval by the Head of Service. 5. Conduct annual promotion exercise. 6. Conduct annual needs assessment and strengthen human research capacity. 7. Equip and maintain the Central Research Laboratory to international standards. 8. Renovate, maintain and build new structures in tandem with the physical needs of the Institute. 9. Increase annual intramural and extramural research funding. 10. Strengthen the Grant Management Unit to deliver on its mandate. 11. Maintain networks for public-private partnerships and explore possibilities for research endowments.
4	Research Innovation and Entrepreneurship	<ol style="list-style-type: none"> 1. Strengthen the Research, Innovation and Product Development (RIND) Unit to be more responsive to research. 2. Strengthen the Corporate Marketing and Communication Unit (CM&CU) to increase Internally Generated Revenue (IGR).

BIOCHEMISTRY AND NUTRITION DEPARTMENT

INTRODUCTION

The Biochemistry and Nutrition Department seeks to conduct research to provide Biochemistry and Nutrition based information on the pathogenesis, treatment, prevention and control of communicable and non-communicable diseases of public health importance in Nigeria. The Department has two research centers and several units. The centers are:

1. **Centre for Research in Traditional, Complementary and Alternative Medicine (CRTCAM):** The activities of the Centre for Research in Traditional, Complementary and Alternative Medicine (CRTCAM) majorly involve evaluating the safety and efficacy of herbal medicines in Nigeria, and the *in vivo* and *in vitro* assessment of herbal products using animal models and cell lines respectively.
2. **The Malaria Genomics Research and Training Center (MGRTC):** supports research in NIMR and the country at large, bridging gaps in research findings and implementation through best practices of translational research, into solving problems of malaria and related diseases in the region. Malaria research activities include epidemiology and parasite population genetics, malaria immunogenomics, vaccine design, malaria drug resistance and efficacy studies. The Center boasts a functional parasite culture laboratory supported by a tissue culture laboratory in the department.

OTHER RESEARCH UNITS

1. **NIMR Animal House:** Is managed by the Biochemistry and Nutrition department under the Center for Research in Traditional, Complementary and Alternative Medicine (CRTCAM). It houses experimental animals that are used for *in vivo* studies. We conduct research on safety and efficacy profiles of herbal products and plant extracts.
2. **Vaccine Research and Development Laboratory:** The Vaccine Research and Development laboratory is a crucial arm of the Department of Biochemistry dedicated to experimenting, designing, and preclinical testing of potential vaccines candidates to combat various diseases.
3. **Nutrition:** Our Nutrition Unit explores the intricate interplay between diet and health. Studies range from molecular mechanisms to population-based studies, aiming to decipher how nutrition influences human health across the lifespan. Through interdisciplinary collaboration, we investigate the role of dietary patterns and nutrient metabolism in chronic disease prevention and management with a focus on promoting health equity.

COMPLETED RESEARCH ACTIVITIES FOR 2023

1. Pre-Clinical Immunogenicity and Toxicity Testing of li-Key SARS-COV-2 Peptide Vaccine
2. Five herbal products were submitted to the Centre for safety evaluation, all of the 5 products were tested for acute and/or subacute toxicity studies.
3. Anti-malarial activities of herbal products (4)
4. Bacterial cloning and protein expression for COVID vaccine
5. *In Silico* antigen mapping & multiepitope design for pan-Lassa vaccine design
6. A Novel non-*kelch-13* Artemisinin resistance marker: Investigating Association with Artemisinin Resistance in comparison with *Kelch-13* propeller gene among *Plasmodium falciparum* malaria subjects in Lagos, Nigeria.
7. Malnutrition and innate immune responses in Malaria

ONGOING RESEARCH ACTIVITIES FOR 2023

1. Continuing Proof of Concept Study to evaluate the safety, efficacy and tolerability of Jemchi Herbal Products in Adults Patients with Prostate Cancer, Benign Prostatic Hyperplasia and Osteoarthritis
2. Evaluation of metabolite biomarkers and genetic markers for diagnosis of T2DM among HIV patients with TB co-infection in Lagos, Southwest Nigeria.
3. Placental malaria: The impact of immune responses on pregnancy outcomes among primigravidae and secundigravidae in Ikorodu, Lagos state, Southwest Nigeria.
4. Protein purification and characterization of protein by SDS-PAGE and Western Blot for SARS-CoV antigens
5. Animal studies including safety and toxicology studies with disease model
6. Expression of conserved Lassa Virus Antigens in *Escherichia coli* expression vectors
7. Production of Chicken IgY antibodies and evaluation of their immunodiagnostic potentials.
8. Malaria malariometry studies in Osun State
9. Ex-vivo and in-vitro sensitivity of Nigeria *Plasmodium falciparum* isolates from NC and SW Nigeria to various antimalarial drugs.
10. In vivo therapeutic efficacy study of artemisinin/lumefantrine therapies in Lagos and Ilorin including determination of the Omic Correlates of Artemisinin-based Combination therapies in Nigeria.
11. CRISPR/cas9 functional genomics investigation of a non-*kelch-13* ART resistance maker among lab and clinical parasites populations in Nigeria.
12. In vitro characterization of invasion pathways of Nigerian isolates of *P. falciparum*. Characterization of important population-specific *P. falciparum* vaccine candidate antigens
13. Placental Malaria: The impact of Immune Responses on Pregnancy Outcomes among Primigravidae and Secundigravidae in Ikorodu, Lagos State.
14. Materno-Fetal Transfer of Micronutrients – Iron, Zinc, and Iodine – and Vitamins – A, D, And E – among first-time pregnant women with and without placental malaria in Lagos State Southwest Nigeria
15. Consumption pattern of carbohydrate and dietary fibre among black adolescents in Sub-Saharan Africa: A Nigerian pilot study

16. Molecular and temporal survey of the emergence of resistance phenotypes following mass administration of azithromycin in six states of Nigeria.
17. Food consumption habits amongst varying stages of adolescents with metabolic syndrome in Lagos State.
18. Energy drink intake among university students in Nigeria and its effects on sleep patterns and academic performance of students during the examination period.
19. Out-of-pocket expenses for health in an urban setting in Lagos State
20. Biophysical profile of secondary students with metabolic syndrome in Lagos State

ACHIEVEMENTS

1. Successful design and validation of two vaccine constructs for Lassa fever and SARs-CoV.
2. Establishment of a Journal club comprising staff and interns where relevant articles are discussed and new knowledge obtained.
3. The unit is responsible for managing three grants, TETFUND grant and two internal NIMR grant
4. Successful conduct of annual malaria microscopy training sessions
5. Successfully hosted an international bioinformatics training successfully
6. Successful conduct of household malariometric survey amongst children aged 2 to 18 months in Osun State
7. Maintained continuous culture of Nigeria *Plasmodium falciparum* field isolates ongoing
8. Four (6) herbal medicinal products were screened for acute toxicity Three (4) herbal medicinal products are ready for clinical studies ethical approval has been given by NIMR-IRB, three (3) manuscripts are under review, and five (5) Published Papers.
9. Progress in career development of personnel
 - Dr Olukosi presented the Distinguished Lecture at the ICHAIR 2023
 - Dr Veronica Enya successfully defended her PhD dissertation
 - There were 2 promotions in the department
 - Ms Susan Holdbrooke was promoted to Research Fellow 1 and
 - Mr Oluwadamilare Bamgbose to Scientific Officer 1

10. Categories of students and personnel admitted to capacity development

Ph.D.	M.Sc.	B.Sc.	INTERNS	NYSC	SIWES
4	6	7	20	10	118

COLLABORATIONS AND PARTNERSHIPS (INTERNATIONAL AND LOCAL)

- Nigerian Universities and Research Institutes.
- MRC-Gambia
- University of Ghana, Legon.
- University of Tokyo, Japan.
- Nigerian Council of Physicians of Natural Medicine (Acute and Sub-acute toxicity of Herbal products).
- Pax Herbal Clinic and Research Laboratory (PAXHERBALS shall submit both her finished products and raw materials for any phytochemical and toxicity analysis that will give valuable information for drug discovery).

- Centre Pasteur du Cameroon, Yaoundé (*In vitro* anti-plasmodia activities of lime extract of a combination of *Picralima nitida*, *Alstonia boonei* and *Gongronema latifolium* with Chloroquine-sensitive and resistant *Plasmodium falciparum*).
- Saro lifecare Ltd. (hereinafter referred to as “SLC”) of registered address: Empire Place, 1683 Sanusi Fafunwa Street, Victoria Island, Lagos State. (Comparative Bio-efficacy of four Rodenticides against wild Rats)
- Godrej Nigeria Limited. (hereinafter referred to as “GNL”) of registered address: Plot No. 2A, Ayodele Diyan Street, off Ladipo Oluwole Avenue, Ikeja, Lagos. (Bio efficacy and Toxicity Effect of Good Knight Power Shots Multi insect killer Spray Aerosol against Field collected Anopheles Mosquitoes and Laboratory Rats and Mice).
- Health, Environment and Development Foundation (HEDF)
- MALARIAGEN
- Pathogen genomic Diversity Network Africa: PDNA
- Developing Excellence in Leadership and Genomics Training for Malaria Elimination and Antimicrobial Resistance control in Africa (DELGEME Plus)
- May and Baker BIOVACCINES – Technology Transfer for mRNA Vaccines
- Centre for Marine and Aquatic Research (CMAR), Saveetha Institute of Medical and Technical Sciences, India.

GRANT/ FELLOWSHIP AND AWARDS

1. WANETAM 3 West African Network for TB, AIDs and Malaria: Malaria work package (EDCTP) **Co-PI: Adeola Olukosi**
2. Osun State malariometric study malariometric survey amongst children aged 2 to 18 months in Osun state: a baseline study in the perennial malaria chemoprevention (PMC) effect project in Osun State. Ref no: mc-ng-abj-2023-003 **Dr. Olukosi Adeola**
3. African Research Excellence Funds (AREF), research development fund; September 2021 to April 2023. **Dr. Olusola Ajibaye**
4. Placental malaria: The impact of immune responses on pregnancy outcomes among primigravidae and secundigravidae in Ikorodu, Lagos state, Southwest Nigeria **Dr. BM Afolabi**
5. Materno-Fetal Transfer of Micronutrients – Iron, Zinc, and Iodine – and Vitamins – A, D, And E – Among First-Time Pregnant Women with and without Placental Malaria in Lagos State Southwest Nigeria **Dr B.M Afolabi**
6. Pre-Clinical Immunogenicity and Toxicity Testing of li-Key SARS-COV-2 Peptide. Dr. **Oluwagbemiga Aina**
7. Proof of Concept Study to evaluate the safety, efficacy and tolerability of Jemchi Herbal Products in adult patients with Prostate Cancer, Benign Prostatic Hyperplasia and Osteoarthritis. **Dr. Oluwagbemiga Aina**
8. NIMR Foundation Grantsmanship and Mentorship Training Programme (GMTP) Date: 9th to 28th October 2023. **Dr (Mrs.) Veronica Enya**
9. **WHO/TDR**. Enhancing One-health Surveillance and Control of Vector-borne Diseases Related to Climate Change in the West Africa Region. **2023-2024**.
Co-Investigator: Dr Kafilat O. Kareem

10. NIMR internal grant award on 'Developing Capacity to Produce Polyclonal Chicken Egg Yolk Immunoglobulin (IgY) against Conserved Recombinant Lassa Virus Antigens and Evaluation of their Immunodiagnostic Potential' 2023-2024.

Dr. Rebecca Omosimua

CONFERENCES AND WORKSHOPS ATTENDED.

1. International Conference on Health Advances in Innovation and Research, NIMR 13th -15th November 2023
2. 7-day Malaria microscopy training/ workshop from 1st – 7th May, 2023. NIMR
3. 7-day Malaria microscopy training/ workshop from 4th - 10th September 2023. NIMR
4. Understanding the reasons behind manuscript rejections in high-impact journals. Webinar by Academic and Grant Writing Enclave, 16th December 2023.
5. Transforming Parkinson's Care in Africa (TrapCAf) Live Webinar, 18th November 2023.
6. ASTMH Annual Scientific Meeting, Chicago, Illinois, USA, 18-22, November 2023.
7. International Conference on Health Advances, Innovation and Research (ICHAIR). NIMR, Yaba, Lagos, Nigeria, 13th -15th November 2023.
8. Open discussion on priority use cases for foodborne disease Genomic surveillance in Africa. Webinar by Africa CDC/Africa PGI, 25th October 2023.
9. National Competence Assessment of Malaria Microscopist (NCAMM) Course. Watbridge Hotels and Suite Uyo, Akwa Ibom state, Nigeria, 25th – 29th September 2023.
10. Creating a roadmap to Biorisk Management. Virtual training by Sandia National Lab USA to NIMR Biorisk Management Team, 14th September 2023.
11. Capacity development in malaria diagnosis: Microscopy, RDT and molecular techniques. NIMR Yaba, Lagos, Nigeria, 4th – 10th September 2023.
12. Needs assessment and positioning the Institutional Biorisk Management team. Virtual training by Sandia National Lab USA to NIMR Biorisk Management Team, 29th August 2023.
13. Biological risks: Fundamental approach to risk management and role of Institutional teams in implementing Biorisk Management. Virtual training by Sandia National Lab USA to NIMR Biorisk Management Team, 25th July 2023.
14. Capacity development in malaria diagnosis: Microscopy, RDT and molecular techniques. NIMR Yaba, Lagos, Nigeria, 7th – 14th May, 2023.
15. Biorisk management training workshop. NIMR, Yaba, Lagos, Nigeria, 4th May 2023.
16. Laboratory diagnostics, antibiotic resistance and frontline research in *Neisseria gonorrhoea* – International perspective. Webinar by International Federation of Biomedical Laboratory Science, 28th April, 2023
17. Global trends in Medical Laboratory Science Practice in the 21st century. Association of Medical Laboratory Scientists of Nigeria Lagos State CPD workshop, NIMR Yaba, Lagos, Nigeria, 30th March, 2023.
18. Nigerian Society for Microbiology (NSM) 45th Scientific Conference and Annual General Meeting: Emerging Microbial Technologies for National Economic Development, 27th November to 1st December 2023
19. NIMR International Conference 2023: Health Advances, Innovation and Research, 13th -14th November 2023

20. Faculty of Medical Bacteriology WAPCMLS 2023 Scientific Conference Theme: "Resurgence of Diphtheria, Meningitis and Cholera Outbreaks Amidst Antibacterial Resistance in Nigeria", 19th -21st April 2023
21. Setting up and Managing Biobank, 10th November 2023
22. NIMR Foundation Grantsmanship and Mentorship Training Programme, 9th to 28th October 2023
23. H3Africa Bionet Bioinformatics Virtual Training 2023, 17th July to 10th October 2023
24. Understanding and Implementing ISO 15189: 2022, 20th – 22nd September 2023
25. Basic Principles of Biobanking, 25th and 26th September 2023
26. Facilitator: Capacity Development for Identification of "Metabolite Biomarkers and Genetic Markers for diagnosis of T2DM using cutting edge technologies organized by Centre for Research in Non-communicable and Metabolic disease (CReNMD), NIMR 5th -14th July 2023
27. 11th Conference on Health Advances, Innovation, and Research, November 13-15th 2023
28. Veterinary Council of Nigeria professional continuing education: National Prosperity: The Veterinarian at the heart of livestock production and food security in Nigeria. Oct. 19 2023.

CHALLENGES

1. Urgent need for a photo documentation unit for the departmental molecular laboratory. water distiller, incubator shaker, installation of servers from MRC with a complementary workstation
2. We need a new animal house building with facilities that meets international standards
3. Unprecedented increase in costs of reagents and materials for various laboratory procedures required in our research studies
4. It takes a considerable length of time for ordered reagents to arrive resulting in long breaks in the lab work
5. Inadequate capacity in mammalian cell culture techniques, the use of flow cytometer, bioinformatics protein modelling, molecular docking and dynamics simulation methods
6. We need more staff on ground to undertake vaccine projects against many diseases

WAY FORWARD

1. Finding collaborations with Northern partners and joining consortiums
2. A simplified mechanism for orders of equipment and molecular biology supplies directly from manufacturers.
3. Agreement with manufacturers of equipment for reliable equipment maintenance and restoration process
4. Intensify grants applications
5. Upward review of fund allocated to all categories of the NIMR Grants
6. Capacity building in bioinformatics and molecular biology/biochemistry techniques for research staff.
7. Recruitment POSTDOC Research Fellows

WORK PLAN FOR 2024

1. Chemoprevention efficacy and SPAQ resistance markers prevalence studies in Kwara State
2. The impact of immune responses on pregnancy outcomes among primigravidae and secundigravidae in Ikorodu, Lagos State, Southwest Nigeria”
3. Materno-Fetal Transfer of Micronutrients – Iron, Zinc, and Iodine – and Vitamins – A, D, And E – Among First-Time Pregnant Women with and without Placental Malaria in Lagos State Southwest Nigeria
4. Publications of 5 Scientific Papers in high impact Peer Review Journal
5. Applications for Grants/Awards
6. Training on Techniques in Structural Biology (one per quarter)
7. Continuation of ongoing projects and annual training
8. Continuing of departmental vaccine project against Lassa and Covid-19
9. Continuing safety and toxicity of medicinal plants and herbal products
10. Continuing therapeutic efficacy of traditional/herbal medicines
11. Continuing organization of training in malaria microscopy



CLINICAL SCIENCES DEPARTMENT



INTRODUCTION

The Clinical Sciences Department was established in 2002 as the Clinical Sciences Division. It has undergone various changes over the years to its present status as the Clinical Sciences Department (CSD). This report reflects the year 2022 activities of the CSD which are focused on research, service delivery and capacity development.

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. Some of the research activities of the CSD were disseminated at the November 2023 NIMR International Conference on Health Advances, Innovation and Research (ICHAIR).

Heartland Alliance Ltd/GTE, our implementing Partner for the HIV/AIDS services, supported and contributed to the activities of the Department in 2023. 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 2023.

This report summarizes the structure and activities of the Clinical Sciences Department in 2023, which contributed to the realization of the NIMR overall mandate of Research for National Health.

Administration

The Department functions in three broad areas of Research, Programme Support and Projects, and Clinical and Laboratory Services. There are three Research Centres and nine administrative subunits (Clinical, Administrative, Medical Records, Data Management, Counselling, Pharmacy, DOTS, Nursing and Accounts), each with a Unit Head that reports directly to the Head of Department. The Department also works very closely with the Centre for Human Virology and Genomics (CHVG) and the Centre for Tuberculosis Research (CTBR), both of the Microbiology Department as well as the Clinical Diagnostic Department. The Clinical Diagnostic Department and the Centres (CHVG and CTBR) of Microbiology Department provide laboratory support for the HIV and TB Programmes of the CSD.

Table 1: Research Centres and Administrative Units in CSD

<p>A. RESEARCH CENTERS AND MEMBERS</p> <p>Centre of Excellence in Child and Adolescent Health Research (CECAR)</p> <ol style="list-style-type: none"> 1. Dr. Agatha N. David 2. Dr. Abideen O. Salako 3. Dr. Titilola A. Gbajabiamila 4. Dr. Agatha E. Wapmuk <p>Centre for Reproduction and Population Health Studies (CRePHS)</p> <ol style="list-style-type: none"> 1. Prof. Oliver C. Ezechi 2. Dr. Aigbe Greg. Ohihoin 3. Dr. Paschal M. Ezeobi 4. Dr. Sabdat O. Ekama 5. Ms. Ifeoma E. Idigbe 6. Dr. Adesola Zaidat Musa <p>Centre for Research in Non-Communicable and Metabolic Diseases (CReNMD)</p> <ol style="list-style-type: none"> 1. Prof. Nkiruka N. Odunukwe 2. Dr. David A. Oladele 3. Dr. Jane O. Okwuzu 	<p>B. ADMINISTRATIVE/SERVICE UNITS</p> <p>Head of Department: Dr. David A. Oladele</p> <ol style="list-style-type: none"> 1. Pharmacy Unit: Dr. Ebiere C. Herbertson (Director) 2. Nursing Unit: Mrs. Deborah D. Oladipo 3. Counselling Unit: Dr. Ifeoma E. Idigbe 4. Medical Records: Mrs. Mary Enejoh 5. DOTS Clinic: Mrs. Rita O. Nwosu 6. Data Management: Dr. Adesola Z. Musa 7. Research Laboratory: Dr. Jane O. Okwuzu 8. Dept. Secretary: Ms. Unwana A. Asuquo 9. Finance & Accounts Unit: Mr. Lawrence Ekoja <p>C. RESEARCH/TRAINING/SERVICE SUPPORT</p> <ol style="list-style-type: none"> 1. Research/Training Coordinator: Dr. Aigbe Greg. Ohihoin 2. Site Coordinator: Dr. Paschal M. Ezeobi 3. Admin. Officer: Mrs. Nmachukwu C. Nwofor
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There were 14 Research Fellows and 85 Support Staff in the CSD as listed in Table 2 below.

Table 2: Staff Cadre Strengths in CSD

S/N	Staff Category	No of Staff	S/N	Staff Category	No of Staff
1.	Research Fellows	14	8.	Records	6
2.	Medical Officers	4	9.	Research Laboratory	3
3.	Pharmacists	5	10.	DOTS	1
4.	Nurses	8	11.	Admin.	7
5.	Counsellors	6	12.	NYSC Members	15
6.	Data Officers	6	13.	Volunteers	18
7.	Accounts	2	14.	Project Staff	9
TOTAL					104

RESEARCH ACTIVITIES

Research activities of the CSD are coordinated by employing a multidisciplinary approach. The Research Projects are presented in the table below.

Table 3: Research Projects in the CSD and Collaborators

No	Title	Status	Funder	PI
1.	Metabolite Biomarkers and Genetic Markers For Diagnosis of Type 2 DM Project	On-going	NIMR	Prof. N.N. Odunukwe
2.	Emory Nigeria Research Training Programme (EN-RTP)	On-going	NIH/Fogarty International Centre	Prof O. C. Ezechi
3.	Sustaining Innovative Tools to Expand Youth-Friendly HIV Self Testing (SITEST)	On-going	NIH	Prof O. C. Ezechi
4.	Predictors of Antiretroviral Immune Reconstitution Bone Loss – the Gut and the Microbiome (IRBL)	Ongoing	NIH/NIAMSD	Prof O. C. Ezechi
5.	Intensive Combination Approach to Roll back the Epidemic in Adolescents in Nigeria (iCARE Nigeria)	On-going	NIH	Dr. A. N. David
6.	Health outcomes and immunologic responses in HIV exposed and unexposed infants in Lagos, Nigeria (HEIR Study)	Ongoing	NIMR	Dr. A. N. David
7.	Expanded mapping, characterization and establishment of DHS system in Ijede, Ikorodu, Lagos	On-going	NIMR	Dr. A. N. David
8.	Integration of Hypertension Management Into HIV Care in Nigeria: A Task Strengthening Strategy (TASSH Project)	On-going	NIH	Prof O. C. Ezechi
9.	Epidemiology and genotypic variants of Cryptosporidium species and other enteric coccidian parasites and its implication on diarrhoea in HIV positive under-fives and pregnant women in Southwest Nigeria	On-going	NIMR	Dr. J. O. Okwuzu

10	Use of Pharmacoepidemiology to Understand Predictors and Impact of Low-Level Viremia in Persons with HIV in West Africa	On-going	NIH, Fogarty International Centre K43	Dr E.C. Herbertson
11.	The Prevalence, Incidence, Trends, and Predictors of Hypertension, Chronic Kidney Disease, and Dyslipidaemia among People Living with HIV Accessing Antiretroviral Therapy in Lagos, Nigeria	On-going	The South African Medical Research Council (SAMRC)	Dr O. O. Odubela
12.	International Epidemiology Databases to Evaluate AIDS (IeDEA)	On-going	NIAID	Prof O. C. Ezechi
13.	Community, based home-based Education and Screening Services : A Strategy to increase Cervical Cancer Control Access for HIV positive women in Nigeria (CHESS)	On-going	NIH	Prof. O. C. Ezechi
14.	The Lagos COVID-19 Long Haulers Cohort Study (COLHACS Study)	On-going	NIMR	Dr Oladele/CSD
15.	Safety and Antimicrobial Resistance of Mass Administration Of Azithromycin In Children 1- 11 Months In Nigeria [SARMAAN Project]	On-going	Bill and Melinda Gates Foundation	Prof O.C. Ezechi
16	Actions for Collaborative Community Engaged Strategies for HPV (ACCESS HPV)	On-going	NIH	Prof O.C. Ezechi
17.	Longitudinal Evaluation of the Clinical, Immunological, and Virological Response to DTG-Containing Regimen Among PLHIV at the Nigerian Institute of Medical Research: Implication for National Policy (LED-PLHIV STUDY)	On-going	NIMR	Dr Oladele/ Dr Ezeobi/CSD
18.	Repositioning the Nigerian Institute of Medical Research to a Medical Research Council	On-going	Bill and Melinda Gates Foundation	Prof. B. L. Salako
19.	Safety & Immunogenicity of Fractional Doses of Moderna, AstraZeneca, & Janssen Covid-19 Vaccine Among Nigerian Adults (SiFCoVAN): A Randomized Non-Inferiority Double-Blind Clinical Trial	On-going	Open Philanthropy	Prof. B. L. Salako

HIV Treatment Programme

The HIV treatment programme of the Department which is one of the best in the country involves a multidisciplinary team which has provided care for HIV-infected patients from 2004 till date. The cumulative enrolment of HIV-positive persons since inception of the Clinic till December 2023 is 27,096 while a total of 7,282 pregnant HIV-positive women were cumulatively enrolled for PMTCT. A total number of 232 HIV-positive patients were enrolled into care from Jan-Dec. 2023 comprising 230 adults and 2 paediatric patients. The HIV Clinic also renders PMTCT (prevention of mother to child transmission of HIV) services and a total of 51 HIV positive pregnant women were enrolled for PMTCT in the year 2023. The enrolment pattern by gender and on monthly basis is depicted in the figures below.

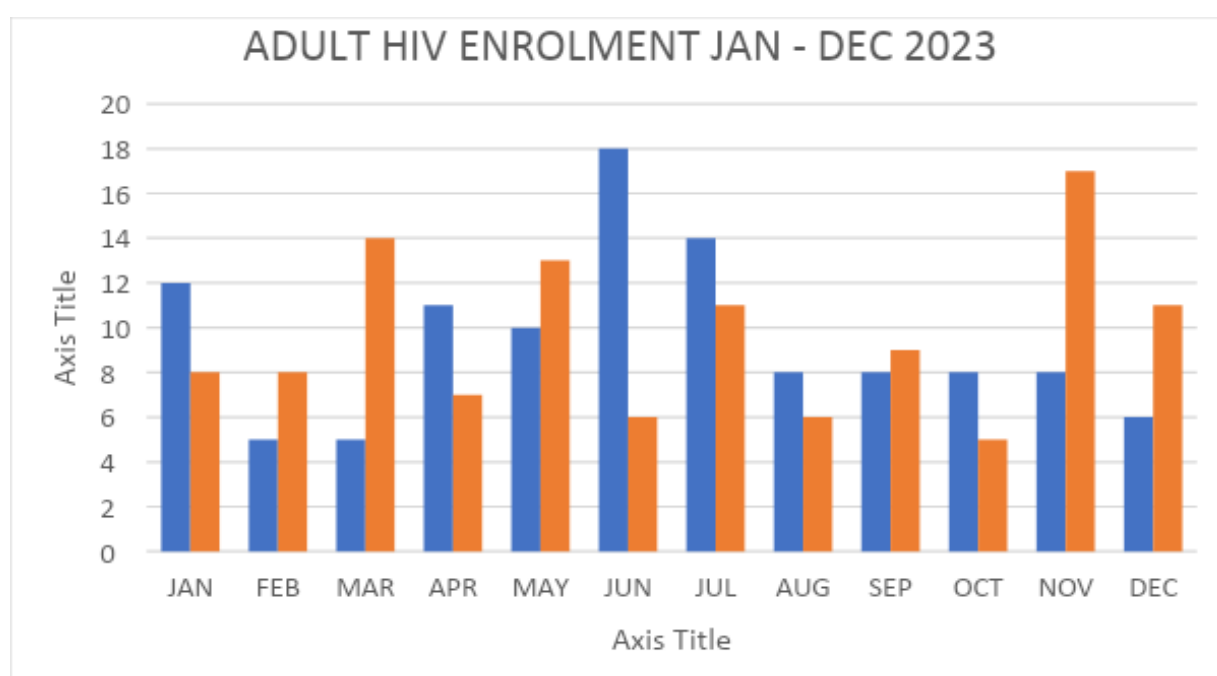


Figure 1: New Adult Enrolment

Table 4: New Adult Enrolment

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
MALE	12	5	5	11	10	18	14	8	8	8	8	6
FEMALE	8	8	14	8	13	7	11	6	9	5	17	11
TOTAL	20	13	19	19	23	25	25	14	17	13	25	17

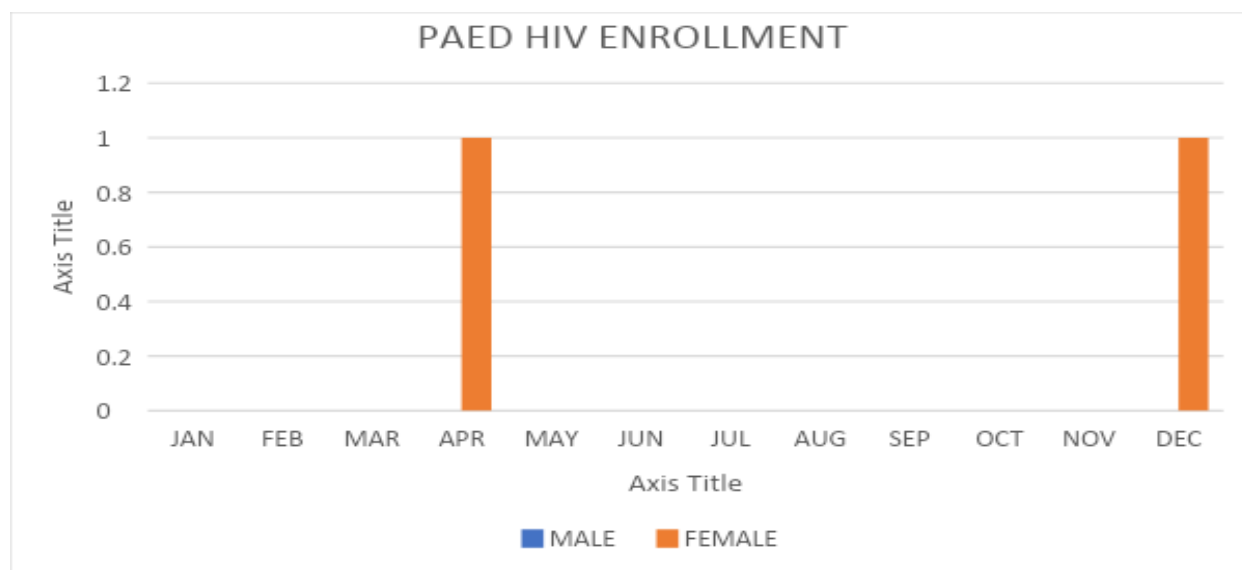


Figure 2: New Paediatric Enrolment

Table 5: New Paediatric Enrolment

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
MALE	0	0	0	0	0	0	0	0	0	0	0	0
FEMALE	0	0	0	1	0	0	0	0	0	0	0	1
TOTAL	0	0	0	1	0	0	0	0	0	0	0	1

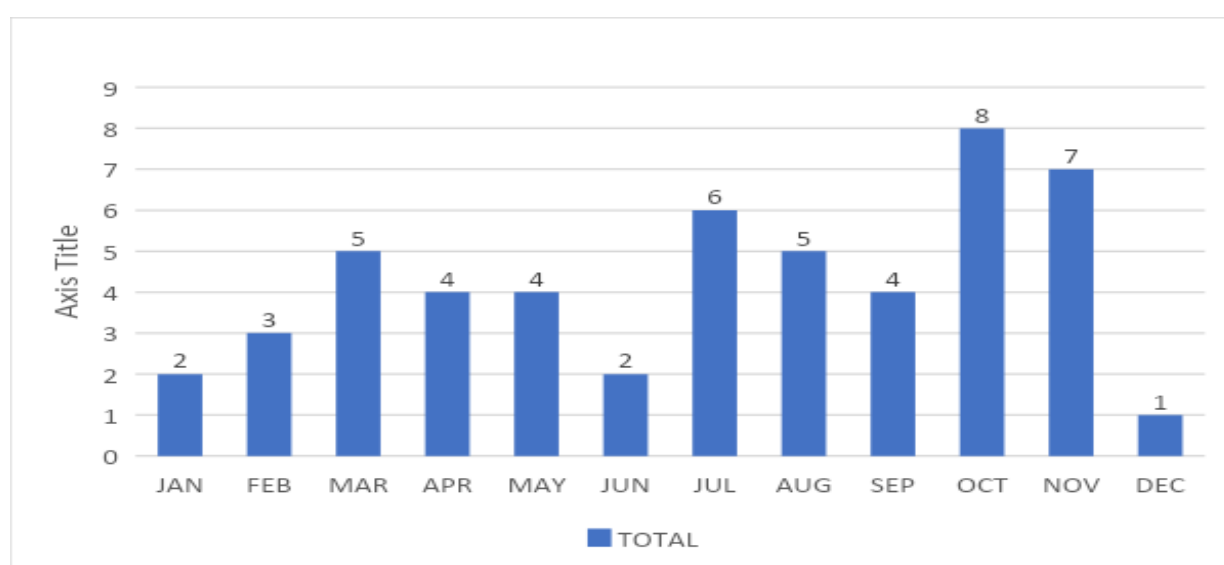


Figure 3: New PMTCT Enrolment

Table 6: New PMTCT Enrolment

	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
MALE												
FEMALE	2	3	5	4	4	2	6	5	4	8	7	1

Specialized Clinic Services

The Department offers specialized clinic services to members of staff and their families as well as the general public. These specialized services include family planning, cervical cancer screening and management of non-cancerous lesions of the cervix, fertility treatment, hepatitis B and C management and hepatitis B vaccination. Other specialized clinics are haematology as well as paediatrics and child health.

The adolescent clinic is also delivered by the CSD.

Table 7: Specialty Clinic Schedule

Specialty Clinic	Day of the week	Consultant
Haematology	Monday	Prof. N. N. Odunukwe
Paediatrics and Child Health	Tuesday	Dr. A. N. David
Hepatitis Clinic	Wednesday	Dr. P. M. Ezeobi
Hypertension/Nephrology/ Cardiology Clinic	Tuesday	Prof. B. L. Salako
Gynaecology and Women's Health	Thursday	Prof. O. C. Ezechi Dr. A. G. Ohihoin
Adolescent Clinic	2nd Saturday of the month	Dr. A. N. David

Research Support Laboratory

The Research Support Laboratory of the Department offers laboratory support for the research activities in the Department. It also offers laboratory services to patients attending the specialist clinics. The laboratory has the capacity for haematologic, parasitological and clinical chemistry analyses and is manned by a Consultant Haematologist, one Parasitologist, and one Science Laboratory Technologist.

Data Management

The Data Management Unit has been responsible for electronic data collection, collation and analysis of patient information since the inception of the Clinic. The records of over 25,000 patients are stored in the database for accessibility to authorized personnel. The Unit can develop research tools and make data available for research using statistical tools and programs. The Unit works closely with the Monitoring & Evaluation Department of the Institute and the ICT Unit of the CSD. The Data Management Unit accommodates all data personnel in the same office to ensure speedy and efficient services.

Events and Programs

The Department had a one-day retreat at the beginning of the year to deliberate on the plans and activities of the Department for the year in line with the Strategic Plan and towards the actualization of the NIMR mandate of Research for National Development. The ALHIV Clinic and Support Group activities take place on the 2nd Saturday of the month. On such days, issues about adolescence, education, career and living successfully with HIV are discussed. Resource persons are also invited to train them in various skills that could result in possible financial empowerment.

Staff Resignation and Retirement

A senior pharmacist of the CSD, Pharm. Susan Adaba resigned from the Institute. A senior member of the staff of the CSD, Dr. Kehinde Akinsinde retired from service after meritorious years of work in the Institute.

ACHIEVEMENTS

1. 19 Sponsored research projects (including 6 NIH-funded research)
2. Increased numbers of proposals developed and capacity building in grant writing
3. Increased number of publications
4. The ART Clinic of the CSD continues to be one of the most user-friendly HIV treatment and care facilities in the country.
5. Dedicated members of staff of the Department.

Training

To attain the goal of maintaining highly trained and competent staff in various disciplines, the Department supports staff to acquire relevant additional training necessary for career progression. It also accommodates internship training, youth service programs, clinical residency training as well as training of researchers in the Department's areas of competence.

Postgraduate Training

Table 10: Staff on Postgraduate Training

S/N	Name of Staff	Type of Programme	Specialty	Status
1.	Dr. A. N. David	MPhil/PhD	Public Health	On going
2.	Dr. A. G. Ohihoin	PhD	Translational Science	On going
3.	Dr. D. A. Oladele	PhD	Public Health	Completed
4.	Dr. P. M. Ezeobi	MPhil/PhD	Public Health	On going
5.	Dr. T.A. Gbaja-Biamila	PhD	Public Health	Completed
6.	Dr. A. O. Salako	MSc	Public Health and Global Child Health	On going
7.	Dr. A. E. Wapmuk	FMCPH	Public Health	On going
9.	Dr. H. O. Ohwodo	PhD	Public Health	On going
10.	Dr. O. O. Odubela	PhD	Public Health	On going
11.	Dr. P. N. Ezemelue	PhD	Environmental Toxicology	Completed
12.	Dr. I. E. Idigbe	PhD	Medical Sociology	Completed
13.	Dr. E. C. Herbertson	PhD	Clinical Pharmacy	Completed

CHALLENGES

- Manpower shortages in vital areas
 - Non-replacement of staff that have left the Institute
 - Need for nurse researcher, clinical psychologist, nutritionist
 - Reliance on volunteers
- Infrastructural Challenges:
 - ART Clinic needs urgent attention
 - Space for offices/service areas (being addressed)
 - Acute shortage of computers for EMR at the Outpatient Clinic
 - Needed equipment: computers, air conditioners, laboratory supplies

WAY FORWARD

The year 2023 was successful of challenges. We look forward to improving our activities in the year 2024.

2024 WORK PLANS

The Department plans to intensify research activities in 2023. This will be achieved through:

- Strengthening the Departmental seminars and research activities and ensuring the continuous integration of its Adjunct Researchers/Professors in all CSD activities to enhance human capacity development and research output.
- Younger researchers and scientists will continue to be paired with the more experienced researchers for mentorship.
- Continuing to advocate for infrastructural development and employment of needed staff.
- Continuing to determinedly pursue more scientific publications and the modification and improvement of our mode of service delivery to satisfy the needs of our patients and clients.

MICROBIOLOGY DEPARTMENT

INTRODUCTION

The year 2023 started at a very low key for the Microbiology department, with the unsuccessful WHO PQ audit of CHVG and CTBR. This audit steered the department into overhauling its quality management system (QMS) with several root cause analyses, training and corrective actions. Eventually, both centres had a successful SANAS accreditation assessment and subsequently transitioned their quality systems to ISO 15189: 2022.

The departmental staff were privileged to become enlisted for several funded external training, including postdoc positions, fellowships, PhD training and visiting scholar positions outside the country. Also, two of our staff successfully defended their PhD theses, enhancing the expertise in the department. We engaged in several research activities in collaboration with national and international experts, one of which resulted in the launching of the Canada-Africa Monkeypox Partnership (CAMP) project.

As has been our tradition recently, one of our researchers developed and validated an HBV quantitative qPCR Kit for patients' HBV viral load quantification. It is important to note that all the assays developed in the department are currently being used for national and international surveys of viral pathogens of public health importance. Overall, 2023 was quite an exciting and productive year for the department.

RESEARCH ACTIVITIES

Some of the research activities conducted in the department include the following:

S/N	TITLE OF PROJECT	SPONSOR	PRINCIPAL INVESTIGATOR (LEAD)
1.	Surveillance of Viral Haemorrhagic Fevers and their Reservoirs in Nigeria	NIMR	Prof. R. A. Audu
2.	Enhancing One-health Surveillance and Control of Vector-borne Diseases related to Climate Change in the West Africa region	WHO/TDR	Prof. R. A. Audu
3.	Characterising transmission dynamics and evaluating medical countermeasures to inform the clinical and public health response to Monkeypox (Mpox) in Canada and Nigeria	CIHR/IDRC	Prof. R. A. Audu
4.	Predictors of Antiretroviral Immune Reconstitution Bone Loss - the Gut and the Microbiome	NIH	Prof. R. A. Audu

5.	Emory-Nigeria HIV Research Training Program (EN-RTP)	NIH	Prof. R. A. Audu
6.	HUGLOCIN Study: Human genomic loci associated with COVID-19 in Nigeria study	NIMR	Dr. C. K. Onwuamah
7.	HiPWaN2 Study: Mitigating HIV drug resistance in pregnant women and their newborns study	Thermofisher	Dr. C. K. Onwuamah
8.	Oral HPV profile and risk indicators for HPV carriage in HIV-positive patients at the Nigerian Institute of Medical Research	NIMR	Dr. C. K. Onwuamah
9.	Clinical and Genetic Risk Factors for Chronic Kidney Disease in HIV-infected Patients in Nigeria	NIMR	Dr. C. K. Onwuamah
10.	Metabolic biomarkers and genetic markers for diagnosis of T2DM among HIV patients with TB co-infection in Lagos, Southwest Nigeria	NIMR	Dr. C. K. Onwuamah
11.	Developing capacity in bioinformatics to understand chronic HBV mutagenesis	AREF	Dr. A. P. Okwuraiwe
12.	Development of a low-cost and reliable isothermal HIV multidrug nucleoside reverse transcriptase inhibitor (NRTI) testing platform.	C-THAN	Dr. A. P. Okwuraiwe
13.	Interaction between ARVs and Female sex hormones in Women Living with HIV in Nigeria: implication in Menopause and Ageing	NIMR	Dr. A. P. Okwuraiwe
14.	A Genetic Association Study to Identify Specific KIR Gene Variants Associated with an Increased Risk of Preterm Birth in Women Living with HIV	NIMR	Dr. O. S. Amoo
15.	The Role of Immunogenetics in disease acquisition and transmission among pregnant HIV women and their infants in Nigeria	EMORY	Dr. O. S. Amoo
16.	The Role of Immunogenetics in Lassa Fever Disease Susceptibility among Nigerians (TRILSAN)	Peter Piots	Dr. O. S. Amoo
17.	Enhancing Blood Donation Systems: A Digital Approach for Donor Retention and Disease Surveillance Among Blood Donors in Nigeria	NIMR/NACETEM	Dr. O. S. Amoo
18.	The Role of Genetics and Oral Microbiota in Hypertension, Obesity and Diabetes among HDSS IJEDE Community Dwellers (GOMIHOD).	NIMR	Dr. O. S. Amoo
19.	Genetic detection and characterization of porcine circovirus type 2 in Swine herds of Southwestern region of Nigeria	SfAM	Dr. O. S. Amoo
20.	SIFCoVAN: Clinical trial on Vaccine effectiveness. A multi-centre study on the	Open Phil	Dr. F. A. Ige

	effectiveness and safety of fractionated SARS CoV 2 vaccines across Nigeria		
21.	Development and validation of PCR HBV assay	NIMR	Dr. J. O. Shaibu
22.	Prevalence and Drug Susceptibility Profile of Non-Tuberculous Mycobacteria Infections among Cases of Bronchopulmonary Disorder in Lagos State	NIMR	Mrs C. N. Kunle-Ope
23.	Sequencing of Drug Resistant TB (REST HUB) Project (Phase 1) - In collaboration with NTBLCP/IHVN/US CDC	IHVN/US CDC	Mrs C. N. Kunle-Ope
24.	Whole Genome Sequencing of multidrug-resistant Mycobacterium tuberculosis Complex isolates from Lagos, Nigeria	NIMR	Mrs C. N. Kunle-Ope
25.	Clinical and Molecular Epidemiology of Drug-Resistant Tuberculosis in Lagos State, Nigeria – A Pilot Study	NIMR	Dr. N. N. Onyejebu
26.	Triage Test for All Oral DR-TB Regimen (Triad) Operational Study	US CDC	Dr. N. N. Onyejebu
27.	Sequencing of Drug Resistant TB (REST HUB) Project (Phase 2)	US CDC	Dr. N. N. Onyejebu
28.	Genomic Surveillance of Poverty-Related Diseases and Emerging Pathogens (PANGens Project)	EDCTP	Dr. N. N. Onyejebu
29.	Prevalence and Clinical Epidemiology of Drug-Resistant TB in Lagos State, Nigeria	NIMR	Dr. N. N. Onyejebu
30.	Molecular surveillance of Plasmodium falciparum drug resistance	NIMR	Dr. U. T. Igbasi
31.	Safety and Antimicrobial Resistance of Mass Administration of Azithromycin Among Children 1-11months in Nigeria (SARMAAN Project)	Bill and Melinda Gates	Dr. E. E. Chukwu
32.	Designing and Piloting a Mobile App for Tracking Antibiotic Use in Lagos, Nigeria	NIMR	Dr. E. E. Chukwu
33.	The Epistemology of Evidence-Based Policy: How Philosophy Can Facilitate the Science-Policy Interface	CIR/ZIF	Dr. E. E. Chukwu
34.	Elected Trainee, International Network for Government Science Advice (INGSA) Science Advice Skill Development Program (SASDP) 2023- Cohort 2 (6 months) Project: Impact of Climate change on AMR	INGSA	Dr. E. E. Chukwu

ACHIEVEMENTS

- Successful launch of the CAMP Project
- Some staff graduated from the EN-RTP
- Two staff completed their PhD
- CHVG and CTBR were successfully re-assessed by SANAS for ISO 15189 accreditation
- A staff member was a visiting scholar at Emory University, USA.

- CIDR organised a five-day Intensive training workshop on Neglected bacteriological procedures.
- A staff facilitated and mentored in the DUCIT blue - NIMR AMR Pan-African Internship programme.
- CIDR marked the World Antimicrobial Resistance Awareness Week (WAAW) with an Outreach program to three junior secondary schools in Lagos State.
- CTBR marked World TB Day
- CHVG marked World Hepatitis Day

CAPACITY DEVELOPMENT

- Number of Conferences/Workshops/Training Attended - 29
- Number of B.Sc., M.Sc., and Ph.D. students supervised - 4
- Number of NYSC/Industrial Training Students - 131

COLLABORATIONS AND PARTNERSHIPS

INTERNATIONAL COLLABORATORS

- West African Node of Excellence for TB, AIDS and Malaria (WANETAM)
- Institute of Tropical Medicine Antwerp Belgium
- Tuberculosis Supra Reference Laboratory, Cotonou, Benin
- MRC the Gambia
- Noguchi Memorial Institute of Medical Research Ghana
- Institut Pasteur Dakar
- EMORY University
- World Health Organization HIVDR ResNET
- China CDC, Beijing, China.
- Thermofisher Scientific for the HiPWan2 study

NATIONAL COLLABORATORS

- Federal Ministry of Health
- Federal Medical Centre, Ebute-Metta, Lagos
- Nigeria Centre for Disease Control (NCDC)
- NASCP
- National Tuberculosis and Leprosy Control Programme (NTBLCP)
- University of Lagos, Akoka
- University of Ibadan, Oyo State
- Obafemi Awolowo University, Osun State
- Lead City University, Oyo State
- Redeemers University, Osun State
- US-CDC Nigeria
- Institute of Human Virology, Nigeria (IHVN)
- Slum and Rural Health Initiative (SRHIN)
- Heartland Alliance
- Lagos State Tuberculosis Control Programme

- Lagos Mainland Hospital, Yaba, Lagos
- Ducit Blue Foundation (DBF)
- DRASA (Dr. Ameyo Stella Adadevoh) Health Trust

GRANTS/FELLOWSHIP AWARDS

The grants currently being implemented by staff in the department as principal investigators include the following:

External grants

- Nobert Elias postdoctoral fellowship award 2023 (Dr Emelda Chukwu)
- African Research Excellence Fund (AREF), Research Development Fellowship (Dr Azuka Okwuraiwe)
- The Role of Immunogenetics in Lassa Fever Disease Susceptibility among Nigerians (TRILSAN) funded by Peter Piot Fellowship (Dr Amoo)
- West African Network of Excellence for TB, AIDS, and Malaria (WANETAM3) (Dr Nneka Onyejebu)
- Pan African Network for Genomic Studies on Poverty-related Diseases and Emerging Pathogens (PANGenS) funded by EDCTP (Dr Nneka Onyejebu)
- Mitigating HIV drug resistance among HIV-positive pregnant women and their newborns across West Africa (HiPWaN2 Study) funded by Thermo Fisher Scientific (Dr Chika Onwuamah)
- Improving the Detection and Response to Drug-Resistant Tuberculosis in Nigeria. Regional Sequencing Hub for Drug-Resistant Tuberculosis (TB-REST Hub), funded by the US CDC, Atlanta [Global Health Security Agenda]. (Dr Chika Onwuamah)
- Enhancing One-health Surveillance of Vector-borne Diseases funded by WHO/TDR (Prof Audu)
- Canada Africa Monkeypox Partnership funded by CIHR and IDRC (Prof Audu)

NIMR Internal Grants

Junior Category

- Whole Genome Sequencing of multidrug-resistant Mycobacterium tuberculosis Complex isolates from Lagos, Nigeria (Mrs Kunle-Ope)
- Gene Variants Associated with Preterm Birth in HIV (Dr Amoo)

Senior Category

- Clinical and Molecular Epidemiology of Drug-Resistant Tuberculosis in Lagos State, Nigeria – A Pilot Study (Dr Nneka Onyejebu)

- An evaluation of human genomics loci associated with COVID-19 among people living in Nigeria (Dr Chika Onwuamah)

Innovation Grant award

- Development of HBV quantitative qPCR Kit (Dr. Joseph Shaibu)
- Viral Hemorrhagic Fevers and Their Reservoirs in Nigeria (Prof. Audu)

Departmental Grant award

- Burden and Molecular Characterization of Respiratory Syncytial Virus Infection Among Under-five Children in Lagos and Delta, Nigeria. (PI -Mrs. Afocha)

CHALLENGES

- Inadequate Research and Technical Staff
- Inadequate office and store space
- Lack of modern automated machines for bacterial identification and resistant genotyping.

WAY FORWARD

- Provision of Research and Technical Staff
- Renovate the building allocated to CTBR for office use and store
- Increase networking and collaborations
- Apply for more grants

2024 WORK PLAN

- Improve effective implementation of QMS
- Encourage more staff to complete their PhD programme
- Stimulate staff to apply for more grants and write more manuscripts

PHOTO ALBUM



Review meeting with Adjuncts in January 2023



Commemoration of World Tuberculosis Day in March 2023



SANAS Re-assessment of CHVG and CTBR in November 2023

MOLECULAR BIOLOGY & BIOTECHNOLOGY DEPARTMENT

INTRODUCTION

The Molecular Biology and Biotechnology Department has six (6) units. Five Research and one Administrative Unit

The Research units are:

- Molecular Epidemiology & Food Safety Research Unit- Headed by **Prof. S.I Smith FAS**
- Nano Technology and Apoptosis Research Unit- Headed by **Dr. B.A. Iwalokun**
- Probiotics Science & Gut Microbiome Research Unit- Headed by **Dr. T.A. Bamidele**
- Respiratory Diseases Research Unit- Headed by **Dr. T.Y. Raheem**
- Molecular Diagnostics Research Unit- Headed by **Dr. M.A. Fowora**
- Klebsiella Research Unit- Headed by **Mrs. A. Adagbada and Mr. J.I. Yisau.**

The Administrative Unit: Headed by Ag HOD (Dr. T.Y Raheem) while Mrs TS Adebiyi is Admin Officer II

Human Resource in the Department:

There are seven (7) Research Fellows in the Department and one (1) active Adjunct Research Professor in the Department.

Other categories of staff in the Department are:

Medical Laboratory Scientists	3
Science Laboratory Technologist	1
Admin Officer	1
Secretarial Assistant	1
Project Staff	3

Notable achievements of our Department (MB & BT) in the above are:

- 1) Research Activities/achievements
- 2) Human resource development/ capacity building/ strengthening
- 3) Infrastructural upgrading
- 4) Grants: Research/Travel Grants/Participation in international conferences and workshops
- 5) Ad hoc/Standing Committee activities: Membership of Institutional Bio risk Management Committee
- 6) Administrative activities

RESEARCH ACTIVITIES

(COMPLETED AND ONGOING)

1(a) Research achievements (Health Research For National Development)

S/N		STATUS	PI
1	Continuation of the food safety & Food-borne pathogens project	Ongoing	Prof SI Smith
2	Gut/nasal dysbiosis	Ongoing	Dr T.A Bamidele
	SNPs in ACE-2 in COVID-19 and its association with Disease Severity	Ongoing	Dr T.Y Raheem
3	Occurrence of <i>Klebsiella pneumoniae</i> infection in people presenting for COVID- 19 testing in testing centers in Lagos State (on going) 271 samples collected and processed bacteriologically	Ongoing	Mrs A. Adagbada / Mr Jacob Yisau
4	Food-handlers Research processed clinical samples collected from the food handlers. Covered 3 LGAs in Lagos State.	Ongoing	Prof SI Smith / Dr T.Y Raheem
5	Investigating anthrax toxin-producing environmental <i>Bacillus</i> spp in selected cattle/sheep market communities and farms in selected states in Nigeria	Ongoing	Dr TA Bamidele
6	Evaluation of antibacterial activities of selected plant extracts against multi-drug resistant <i>Escherichia coli</i> O157:H7	Ongoing	Prof SI Smith
7	Nanoparticles as interventional strategies in MDR ESKAPE Pathogens	Ongoing	Dr B.A Iwalokun
8	Metagenomic profile of the blood and stool samples of septicemic children	completed and final decision on the publication is awaited	Prof SI Smith
9	Genetic factors that mediate carbapenems and fluoroquinolones resistance in <i>E. coli</i> isolated from clinical samples, <i>Helicobacter</i> spp transmission dynamics in food animals in Lagos state, Nigeria, Co-infection of <i>Helicobacter pylori</i> and parasites in children of selected low-income communities in Lagos state Nigeria	completed in the 1 st quarter of 2023) and a draft of this publication is being prepared	Prof SI Smith
10	Scoping review on enteric infections in the slum and non-slum communities in Lagos	Departmental Project)-ongoing	Dr TY Raheem
11	Development of diagnostic kit for Cholera		Dr M.A Fowora
13	Nasal Carriage of virulent and MDR <i>Staph aureus</i> as a comorbid factor in COVID-19	completed; manuscript published.	Dr MA Fowora

14	Vitamin D Levels, Liver Enzymes and Markers of Kidney Function in SARS CoV-2 infected and non-infected individuals in Lagos Nigeria	COVID-19 Intervention Grant - completed, manuscript ongoing	Dr TY Raheem
15	BRM Institutional Training on Advocacy and Implementation of Bio risk Management (BRM) in NIMR	completed- abstracts presented	Dr TY Raheem

(b) Scientific Publications: 33 publications were produced in the department and eight (8) abstract presentations at scientific conferences.

2. Human Resource Development:

- a) **Adjunct Lectureship positions in Universities:** Members of the department secured six university adjunct positions at Mountain Top University (MTU), Caleb University, Lead City University (LCU), Eko University of Medicine and Trinity University (TU).
- b) **Training of students:** Students from many Universities in Nigeria have completed the Students' Industrial Work experience in our department. 85 IT/SIWES/ undergraduate/postgraduate research students in the department trained.
- c) **Capacity building for Staff:** Participation in Grantsmanship and Mentorship Training Program in October 2023, participation in training on genomics methods in Ibadan (Nov 2023) and conferences and workshop participation

3. Administrative Unit: Infrastructural upgrading: additional office space, conference rooms and projectors were provided to enhance departmental research activities.

4. Grants:

1. Analysis of P53 and its Interaction with *Helicobacter pylori* in Patients with Gastroduodenal Diseases From 8 African Countries. Adoption number 2023B10. Oita University funding. Period April 1, 2023 ~ March 31, 2024. Joint research fund
Role: Principal Investigator.
2. Food Safety Surveillance of Vended Foods in Lagos and its Environs in Nigeria: the VIDAS Enzyme-Linked Immunofluorescent Assay Detection Method. 2023-2025. NM-IGF-23-0084. Role: Principal Investigator
3. Molecular Epidemiology of Salmonella enterica Typhi and their Antibiotic Resistance Pattern in North Central Nigeria. Role: Co-Researcher: TETF/DR&D-CE/NR/NRF2021/SET/HSW/00527
4. Molecular surveillance of cholera in two states of Nigeria. In collaboration with the University of Florida. Role: Collaborator.
5. Sandia/DTRA external Grant for Training and Advocacy on Bio risk Management

Travel Grants: Some staff from our department were invited and sponsored by international organizations to attend and participate in international conferences and workshops to countries. There are about five of such international conferences/workshops in countries such as Zimbabwe, Zambia, Belgium, Kenya, South Africa, Germany, France and the Gambia.

Awards/Recognition

- Prof S.I. Smith was elected Fellow, Academy of Medicine Specialties (FAMedS)
- Prof. S.I. Smith was certified in BioRisk Management by the International Federation of Biosafety Association (IFBA)

COLLABORATIONS, RESEARCH PUBLICATIONS, CAPACITY DEVELOPMENT (CONFERENCES/WORKSHOPS/TRAINING ATTENDED/STUDENTS SUPERVISION)

S/N	ACTIVITIES	NAME OF RESEARCHERS/INSTITUTION	DEPARTMENTAL STAFF INVOLVED
1	Collaborators	African Centre for Excellence on Neglected Tropical Diseases and Forensic Biotechnology, ABU-Zaria, Kaduna State	Prof. S.I. Smith FAS
		University of Venda South Africa	
		Walter Sisulu University of Health Sciences, South Africa	
		Emerging Pathogen Institute University Florida, USA	
		University of Lagos	
		University of Benin	
		Lagos State University (LASU)	
		Obafemi Awolowo University, Ile-Ife	
		Ibrahim Babangida University, Lapai	
		LMU, Munich, Germany	
		1. African Centre for Excellence on Neglected Tropical Diseases and Forensic Biotechnology, ABU-Zaria, Kaduna State	Dr. B.A. Iwalokun
		Caleb University, Imota, Lagos State	
		African Centre of Excellence on Mycotoxins and Food Pathogens-Federal University of Technology, Minna, Niger State: Theses supervision, Molecular Biology hands on training.	Dr. T.A. Bamidele
		Dr. Bamidele Odumosu Dept of Microbiology, Unilag	
		Prof. Oliver Ezechi (NIMR)	
		Dr. Ameh James: School of Vert Science, Australia	Dr. T.Y. Raheem
		Lead City University, Ibadan	
		Trinity University, Yaba-Lagos	Dr. T.Y. Raheem Dr. M.A. Fowora Mrs. A. Adagbada Dr. B.A. Iwalokun
		Prof M.A. Muhibi- Edo State University Uzare, Edo State	Dr T.Y Raheem
		Eko Uni Med	Dr. T.A. Bamidele Dr. M.A. Fowora

- 3 Computational Biologist (Research Fellow 1)
- 2 Bioinformaticians (Research Fellow)

WAY FORWARD

- Recruitment of staff in Molecular/computational biology, Bioinformatics
- Urgent need of a BSL2 Biosafety cabinet
- Need for renovation of workbenches in MBBT laboratories
- Need for provision of additional furniture in the HOD's Office
- Need for more office spaces for staff

2024 WORK PLAN

In addition to the continuation of the above projects, the following projects indicated below will be implemented in the department:

- Assessment of Human Host-SARS-CoV-2 Interplays for Improved Vaccination, Control and case Management of COVID-19 in Nigeria (COVID-19 Intervention Grant)
- ACE-2 Genetic Polymorphism in SARS COV-2 individual infected and uninfected individuals in Lagos, Nigeria (COVID-19 Intervention Grant)
- Department Project on Enteric Infections in Slum and non-Slum communities in Lagos (Scoping Review and Primary study)

Activities of the Department are under the following thematic areas:

- Thematic area 1: (Governance Structure in the Department)
- Thematic area 2: (Health Research for National Development)
- Thematic area 3: (Human Resource Support for Health) i.e. continuous training of students for SIWES, Internship, MSc, PhD etc.

PUBLIC HEALTH AND EPIDEMIOLOGY DEPARTMENT

INTRODUCTION

The department had a total of nine research staff with eight adjunct researchers, and also eight research support staff. Laboratories in the department are:

- Molecular Parasitology Research Laboratory
- Molecular Entomology and Vector Research Laboratory
- Onchocerciasis and Soil-Transmitted Helminths Research laboratory
- Epidemiology/Health Policy and Systems

RESEARCH ACTIVITIES (ONGOING)

- Male genital schistosomiasis, pathological abnormalities and association with infertility in Nigeria
- Exploration of the Diversity of Multi-drug Resistant *Mycobacterium tuberculosis* Complex in Nigeria using WGS: Distribution of Lineages, Drug Resistance Patterns and Genetic Mutations.
- Enhancing the fundamentals for effective control of Buruli ulcer through sequencing and mutation analyses of drug resistance in the era of global spread of antimicrobial resistance.
- Molecular epidemiology of urinary schistosomiasis and characterization of human and animal infective schistosome species in three endemic areas of Ogun State southwestern Nigeria.
- Epidemiological study and molecular characterization of cryptosporidium infections in cattle and nomadic pastoralists in Abeokuta North and Odeda LGAs, Ogun State, Nigeria.
- Molecular epidemiology and characterization of human and animal schistosomiasis in a putative hybrid zone in Ogun state, Nigeria.
- Understanding the Burden of Neurocysticercosis and Neurotoxocariasis among Persons with Epilepsy in Nigeria: An Epidemiological Study.
- Scaling Safe Water Practices to Reduce Child Mortality
- Knowledge and perception of the influence of climate change on home management of malaria among mothers and other caregivers of children under five years in Lagos State, Nigeria.

- Survey on Knowledge, Perception of And Willingness To Take Malaria Vaccine Among Mothers Of Children Aged 5-36 Months In Selected States Of South West Nigeria.
- Evaluating transmission potential and risk of mechanical transmission of parasitic infections by house flies in Nigeria.
- Longitudinal survey on the distribution and abundance of yellow fever vector: *Aedes aegypti* in Lagos and Ogun states.

CAPACITY DEVELOPMENTS (CONFERENCES/WORKSHOPS/TRAINING ATTENDED)

- Annual meeting of American Society of Tropical Medicine and Hygiene 18 – 22 October, Hyatt Regency Chicago. 2023
- 47th Annual Scientific Conference of Parasitology and Public Health Society of Nigeria held at Grand Amari Hotels and Resort, Graceland Estate Egbeada, Owerri 11th – 14th October 2023
- International Conference on Health Advances, Innovation and Research, Lagos, November 13-15, 2023
- 5th Annual meeting of the Network Buruli Ulcer PCR Laboratories 23rd- 25th October, Accra, Ghana, 2023.
- 18th Annual Meeting of the African Network on Vector Resistance in the WHO African Region at Accra City Hotel, Accra, Ghana, 6th – 8th December 2023
- 9th Pan-African Mosquito Control Association (PAMCA) Conference and Exhibition, Addis Ababa, Ethiopia 17th – 21st September 2023
- International Conference on Health Advances, Innovation and Research (ICHAIR) , NIMR, Nigeria, 13th - 15th NOV.2023
- Workshop on molecular surveillance of malaria (WANETAM 3) at Medical Research Council (MRC), The Gambia (26th February - 4th March 2023)
- Training Workshop on Bioinformatics and Applications by Malaria Genomic Research and Training Centre at the Nigerian Institute of Medical Research, Nigeria (18th – 22nd September 2023)
- Pandemic Modelling for Public Health Institutions in Nigeria.

Number of students supervised

- BSc students = 0
- MSc students = 3
- PhD students = 2

Number of NYSC, SIWES, Interns

- NYSC = 12
- SIWES = 91
- Interns = 4

Collaborations & Partnerships (International & National)

- Department of Pure and Applied Zoology, Federal University of Agriculture, Abeokuta.
- Biology Department, Faculty of Basic Medical and Applied Sciences, Lead City University, Ibadan, Nigeria.
- Department of Preventive Medicine, Faculty of Public Health, University of Debrecen, Hungary.
- Advanced Medical and Dental Institute, Universiti Sains Malaysia Penang Malaysia.
- Integrative Pharmacogenomics Institute, Universiti Teknologi Mara Selangor, Malaysia.
- Center for Discovery and Innovation in Parasitic Diseases, Department of Pathology, University of California San Francisco.
- Federal Medical Centre Abeokuta

GRANTS/FELLOWSHIPS AWARDS

- Cambridge-Africa ALBORADA Research Fund 2023/2024.
- Nigerian Institute of Medical Research (NIMR) Grant Award 2023-2025 (Grant No. NM-SRGT-23-0092).
- The History Project Grant Award, Harvard University Center for History and Economics, Cambridge, Massachusetts, USA 2023-2024
- NIMR Project Development Grants Program (PDGP) Grant (Grant Number 1NM-JRGT-23-0088) 2023-2024
- Nigerian Institute of Medical Research Grant Award 2022-2024 (Grant No. 5NM-ADJGT-22-0081).
- Nigerian Institute of Medical Research Grant Award 2021-2023 (Grant No. 3NMG-SRGT-20-0055).
- DFG (German Research Foundation) Grant for Initiation of International Collaborations (2022-2023). Project No. 508752744.
- Scaling Safe Water Practices to Reduce Child Mortality
- United States of America Naval Medical Research Unit (NAMRU-3) grant 2021-2023
- Tropical Health Grant 2021-2023.

CHALLENGES

- Shortage of staff
- Need more office and laboratory spaces
- Need for increased funding

WAY FORWARD

- Focus attention on securing funding for research
- Increase training opportunities and sponsorship of staff

2024 Work Plan

Area/Theme	Targets
1 Governance	
Strategic objective 1.6.2	
Establish new public-private partnership	20
2 Health Research for National Development	
Strategic objective 2.1	
Number of research proposal to be submitted	20
2.3.1 Conduct quality assessment of labs	1
2.3.2 Training of laboratory personal	10
2.3.3 Number of quality improvement systems for laboratories	1
2.4 Number of proposals with ethical compliance to be submitted	20
2.6.4 Dissemination of NIMR research	
Number of Manuscripts	30
Number- seminars/webinars/Conferences	20
3 Resource Support for health and development	
3.6.1 Review and conduct annual training needs assessment	
Assessment to be done	1

ADMINISTRATION DEPARTMENT

INTRODUCTION

The Administration Department ensures the efficient performance of all Departments/Units in the Institute. It is charged with the responsibility of providing administrative and support services to the Institute's research activities. 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 Department has a total number of twenty-five (25) Staff

Divisions and Units in the Department include:

- Registry
- Appointment, Promotion and Disciplinary
- Pension and Welfare
- General Duties, Training and Development
- Legal Matters
- NIMR Kitchen
- Corporate Marketing and Communication

ACTIVITIES OF THE DEPARTMENT IN 2023

The activities of the Administration Department in 2023 include:

- i. Provision of Secretarial Services to Standing and Ad hoc Committees of the Institute and in that capacity prepare agenda and the necessary working documents for committees' meetings as directed by the Director-General/CEO.
- ii. Advised Management on administrative and personnel issues.
- iii. Responsible for effective understanding of the Institute's personnel management functions such as recruitment of staff, training and development, salary administration including allowances, leave matters, staff posting, discipline and withdrawal of service in the form of retirement, resignation of appointment, termination, dismissal from service as the case may be as well as the processing of staff Annual Performance Evaluation Report.
- iv. Responsible for staff welfare matters, implementation of approved policy on Medicare, Pension and Housing etc.
- v. Handling of the Institute's legal and insurance matters.

- vi. Keeping and updating staff records.
- vii. Liaising with the Finance and Accounts Department and the various Research Departments in the preparation of the Institute's Development Rolling plan and Annual Budgets.
- viii. Supervision of the security outfit.
- ix. Handling of official administrative correspondence of the Institute with its public.
- x. Undertook any other duties as may be assigned to the Department.

ACHIEVEMENTS OF THE ADMINISTRATION DEPARTMENT IN 2023

1. 2023 Promotion

The Department obtained approval for establishment positions from the Office of the Head of Civil Service of the Federation (OHCSF) for the conduct of the 2023 promotion exercise for qualified staff. Letters were issued to successful candidates.

The number of staff promoted in 2023 and converted are as indicated below:

Senior Staff	-	63
Junior Staff	-	4
Conversion	-	4

2. Institute's Schemes of Service

The Department is following up on the draft copy of the Institute's Schemes/conditions 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.

3. Retirees

The Administration Department facilitated the smooth retirement of seven (7) members of staff in 2023 with details as shown below:

S/N	NAME	DESIGNATION	EFFECTIVE DATE OF RETIREMENT
1.	Alh. A.S. Yunusazazzau	Director of Administration	27/10/2023
2.	Mr. P.O. Ejiga	Director of Planning	01/01/2023
3.	Dr. (Mrs). M.N. Otuonye	Deputy Director, Laboratory Services	22/07/2023
4.	Mr. M.B. Ajayi	Deputy Director, Laboratory Services	24/03/2023
5.	Dr. K.A. Akinsinde	Deputy Director, Laboratory Services	02/10/2023
6.	Mr. A. B Essien	Senior Store Officer	28/03/2023
7.	Mrs. T.A. Olaomo	Chief Clerical Officer	12/12/2023

4. **Departmental Meetings**

Monthly meetings is being held in the Department regularly and the staff of the Administration Department wishes to commend the Director-General for introducing this practice.

5. **Death in Service**

Through the Pension and Welfare Unit of the Department, the Institute was able to arrange for the burial of one (1) staff of the Institute, Mrs. Veronica Ejaife who passed on and ensured the payments of her burial rites to her Next of Kin.

6. **Project Staff**

The Department also facilitated the appointment of fifty-eight (58) project staff in the Institute.

7. **Adjunct Researchers**

Five (5) Adjunct Researchers were appointed in 2023.

8. **External Relation**

The Administration Department has continued to ensure that the MoU between the Institute and other organizations remains operational.

9. **Replacement of Exited Staff**

The Department was able to get a waiver from the Office of the Head of Civil Service of the Federation and Budget Office for the replacement of twenty staff out of the 127 exited staff the institute requested

NYSC/INDUSTRIAL TRAINING PROGRAMMES

The Department had absorbed some National Youth Service Corps (NYSC) members, and enrolled students for the Industrial Work Experience Scheme (SIWES), Bench Space and Internship within the period under review as follows:

The breakdown is as follows:

Bench Space	-	36
Internship	-	93
NYSC	-	75
SIWES	-	193

CHALLENGES

The Department was able to identify the major challenges that militated against the smooth running of administrative duties within the year under review. These are:

- Shortage of Secretarial and Clerical Officers.
- General shortage of manpower in the Institute especially the research staff.

WAY FORWARD

- The Administration Department will continue to perform its functions as expected and will ensure that the Institute operates within the extant rules and regulations guiding the Public Service. In addition, it would continually render Support Services to all arms of the Institute and attend to staff matters, such as appointments, promotion and disciplinary with dispatch.
- The Department would like to thank the Director-General for his unflinching support and understanding since his assumption of duty in the Institute for providing the enabling environment to achieve all that was achieved in 2023. We extend our olive branch to other Departments/Units in the year ahead.

2024 WORK PLAN

As part of the way forward, the Department will continue to handle all the Institute's activities on administrative matters and any other duties that may be assigned to the Department in the year 2024.



CENTRAL RESEARCH LABORATORY UNIT



INTRODUCTION

The mission of CRL is to give researchers the edge to compete with international counterparts. We aim to provide access to state-of-the-art equipment, facilities the technical expertise essential for the thriving of medical research in Nigeria. The laboratory will promote scientific thinking and experimental exposure for biochemical and clinical researchers. It will also provide students with hands-on experience with advanced research and training.

The CRL is equipped with modern equipment to service the research needs of the relevant research departments of the Institute and the public. It intends to advance research in most health research disciplines including Biological and Clinical Sciences and complement other specialized departments of the Institute.

CRL Staff

- Dr. Ngozi Otuonye - Laboratory Manager
- Mr. Nyam Yusuf - Laboratory Technician
- Project Staff
 - Rukayat Jimoh
 - Adeeko Oluwaseunfunmi
 - Ochuko Christopher
 - Utibeima Udo Essiet
- Ad-hoc Staff
 - Omorilewa Ebunolowa
 - Oluwasegun Gift
 - Amarachi Ihechukwu

CRL Technical Team

- Dr. Bamidele Iwalokun - Director
- Dr. Chika Owuamah - Deputy Director
- Dr. Azuka Okwuraiwe
- Dr. Olusola Ajibaye
- Dr. Adenike Fowora
- Mr. Itse-Nyam Yussuf - Secretary

ACHIEVEMENTS BASED ON 2022-2026 THEMATIC AREAS 1, 2 & 3

Thematic Area 1: To improve the funding available to CRL

1. The Central Research Laboratory acquired a new research grant for the research on genome sequencing on minION platform, equipment maintenance and training in the unit for the 2023/2024 implementation period. The disbursement of the fund is being awaited.
2. During the year 2023, a total of 26 undergraduate and postgraduate students (10 males, 16 females) were trained. in cRL and other affiliated laboratories in the institute
3. A total of 4 internal training workshops were done. They were as follows:
 - The use of quantitative PCR, qPCR (SYBR Green Chemistry) for the detection of *Candida* detection using IT2, ITS1 & ITS3 primers and genomic DNA template recovered from candida culture on Saborraud Dextrose agar (SDA). using infected blood samples extracted from blood samples (Quarter 1: March 5 -7, 2023)
 - The use of qPCR (SYBR Green Chemistry) for the detection of bacterial pathogen detection using species-specific primers genomic DNA template recovered from bacterial culture on Mueller Hinton broth (MHB) using the NIMR BIOTECH Kit (Quarter 2: June 12 -14, 2023)
 - Melting curve analysis to determine the purity of detected ITS genes and bacterial species-specific genes (*mecA*, *S. aureus*, *invA*, *Salmonella*, *gluD*, *e coli*, *toxA*, *Pseudomonas aeruginosa*) (Quarter 3 : August 15 -17, 2023)
 - Assay protocol and Standard Operating Procedure (SOP) Development (Quarter 3: September 15 -16, 2023)
 - The use of qPCR for monitoring expression of drug-resistant genes (*mdr1* and *erg11*) among fluconazole-resistant *Candida* isolates using β -actin as a house-keeping gene and $2^{-\Delta\Delta Ct}$ calculation method. (Quarter 3 September 15 -17, 2023)
4. During the year 2023, CRL provided research services to 44 external clients and 2 internal research platforms (Molecular Entomology & Vector Control Research Laboratory, & Malaria Genomics and Training Centre) in the institute. The support provided led to the discovery of *Anopheles stephensi* and urban malaria vector (GenBank: ON856140.1) and Artemisinin potential resistance mutations in the coronin gene (GenBank: OR344935.1).
5. Other research services provided included GC-MS analyses of medicinal plants and cosmetics products, ICP-OES heavy metal analyses of environmental samples and HPLC quantitation and detection of antimalarial metabolites, vitamins and related analytes in food and biological matrices
6. On the whole, a total of fourteen million three hundred and sixty-nine thousand one hundred and ninety-two naira (₦14, 369, 172:75) was generated from research service in 2023. This surpassed 2 million naira (₦2.0 M) generated in 2022.

Operation Thematic Area 2: To upgrade and maintain CRL for the institute's strategic needs

During the year 2023, CRL acquired a 4-laser flow cytometer (Attune™ NxT Flow Cytometer, blue 1 each Flow Cytometers | Fisher Scientific) for cellular immunological studies and clinical trials as well as research services. The equipment installation and calibration has been completed. It is now ready for use. The Capital Research Equipment Database (CRED) database established in 2022 has also been updated to reflect the new acquisition.



(Attune™ NxT Flow Cytometer, blue 1 each Flow Cytometers | Fisher Scientific)

Thematic Area 3: To establish new networks and collaborations, maintain old ones at all levels and make NIMR nationally and globally relevant for research.

In 2023, CRL hosted three visiting researchers as follows:

- Prof Paul Kappo (University of Johannesburg)
- Prof David Sack (Johns Hopkins Bloomberg School of Public Health)
- Prof Paul Carson (University of Pittsburg) / US Embassy delegates on Fullbright Fellowship

The above researchers provided an opportunity to establish research collaboration with their respective institutions. A paper review on Cancer has recently been published with Prof Kappo from the University of Johannesburg.

Other achievements made by CRL in 2023 based on the selected thematic areas

- **Four Project staff gained postgraduate admission into Nigerian Universities**
- Two of our project staff who commenced their MSc degree programme in Biochemistry in the 4th quarter of 2022 have now completed their bench work, awaiting final exams
 - Oluwaseunfunmi Adeeko – MSc Biochemistry (UNILAG)
 - Ochuko Christopher – MSc Biochemistry (UNILAG)

- Rukayat Jimoh has now received an appointment as a Junior Research Fellow in the Department of Biochemistry and Nutrition (NIMR)
- PhD Biochemistry (LASU)
- Mrs Joy Akinbami has been seconded to the Nigerian Centre for Disease Control & Prevention (NCDC).
- Dr. Ngozi Otuonye retired from active service and a send-forth party was held to honour and appreciate her servitude in NIMR.
- Four members of CRL gained promotion to higher levels in their respective cadres.
 - i. Dr. Iwalokun A. Bamidele - now Director of Research, Molecular Biology & Biotechnology
 - ii. Dr. Onwuamah Chika – now Deputy Director of Research, Human Virology & Viral Genomics
 - iii. Dr. Ajibaye Olusola - now Chief Research Fellow, Biochemistry & Nutrition Department
 - iv. Mr Itse-Yam Yussuf - now Laboratory Technician 1
- A total of 22 scientific papers in local and international journals were published by the research staff of CRL

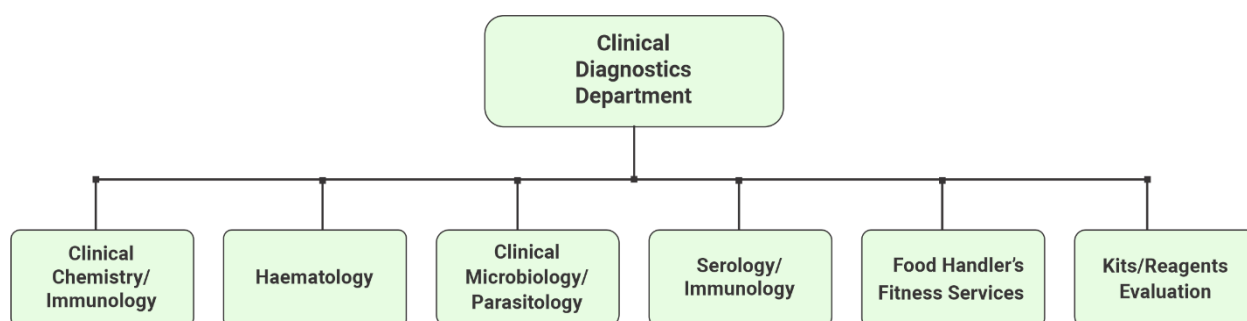
CLINICAL DIAGNOSTICS DEPARTMENT

INTRODUCTION

The Clinical Diagnostic Department (CDD) formerly Clinical Diagnostic Laboratory (CDL) was upgraded to a department on the 16th of September 2021 by the Director General and the members of the Senior Management and Finance Committee (SMC & F) of the Institute.

The clinical Diagnostics Department was saddled with the responsibility of providing laboratory services to the public, training and research activities in line with the NIMR mandate.

There are six (6) divisions in CDD namely, CDD provided and still providing quality internship training for eligible graduates of Medical Laboratory Science and others through collaboration with universities and training institutions.



RESEARCH / ON GOING ACTIVITIES

- **Implementation of Quality Management System (QMS) and internal lab audit:** Aimed at quality services and eventual accreditation of the laboratory.
- **Maintaining and providing un-interrupted essential services**
- **Involved in interdepartmental research collaborations:**
 - Health and wellness project for Food handlers and Consumers in Lagos State, Nigeria.
 - Safety, efficacy and to liability of virucidine herbal extract in the treatment of adults infected with Covid-19 in Lagos, Nigeria.
 - Safety and Immunogenicity of fractional doses of Astrazeneca, Pfizer & Janssen Covid -19 Vaccines among Nigerian Adults (SIFCOVAN).
 - COVID-19 Sero-epidemiology Study in Nigeria Using Abbott i1000.
 - Vitamin D, Liver enzymes and Kidney function Assessment in SARS COV-2 infected and uninfected individuals in Lagos, Nigeria.
 - Molecular Epidemiology of Carbapenem-Resistant Enterobacteriaceae (CRE) infections.

- Support to Polio containment programme of FMOH: CDD was one of the sites selected for handling/treatment of faecal samples as potential polio virus containing samples.
- Proof of concept study to evaluate the safety, efficacy and tolerability of JEMCHI herbal products in adults' patients with prostate cancer, benign prostatic hyperplasia and osteoarthritis.
- Molecular expression and Diagnostic markers of risks of cardio-vascular diseases among ARV Naive and HAART experienced individuals with HIV infection at a treatment centre in Lagos, Nigeria (NIMR GRANT).

ACHIEVEMENTS

- **Upgrading of CDL to a department:** The benefit and gains of being a department continues, thanks to the exemplary leadership of our Director General and for his continued support. More equipment was purchased, extension of the laboratory was done to make the environment more conducive for our clients. Our data room was also upgraded to a standard level.
- **WHO Certification:** One of our staff (**Mr S.K. Akindele**) was certified as **level 1** expert in malaria microscopy for the **second time** by WHO on the 16th November, 2022 in Abuja.
- We provided uninterrupted Laboratory services to our client from morning to 8.00pm Monday to Friday. Call duty services was also available on weekends.
- Sustained implementation of Quality Management System (QMS) and internal laboratory audit.
- Improved on the turn-around time, quality of laboratory services and prompt dispatch of results through e-mails to clients.
- Improvement on inter-unit and inter-departmental relationships and research collaborations.
- Purchased new equipment that performs some specialized tests such as Tumour markers, Alfa fetoprotein, Vitamin D and E test, hormonal profile, coagulation studies, D Dimer etc.

CAPACITY DEVELOPMENT

- Involvement of CDD Staff in National Programmes of FMOH/other agencies: malaria elimination programmes of FMOH and the Kit validation by MLSCN:
- Involvement in National Therapeutic Efficacy Test (TES) through our **LEVEL 1 WHO** malaria microscopist.

- CDD was also involved with the collaboration of FMOH and Henry Jackson Foundation for Medical Research International, Walter Reed Program Nigeria and Nigerian Ministry of Defence in the training of Medical Laboratory Scientist and other health workers in malaria diagnosis in the Country.
- No of conferences, trainings & workshop Attended: (8)

Ph.D.	M.Sc.	INTERNS	NYSC	IT
2	2	5	2	10

CHALLENGES

- No preventive maintenance agreement plan for the laboratory equipment
- No enough personnel to work:
- Inadequate laboratory space
- Inadequate office space for our staff

WAY FORWARD

- A preventive maintenance agreement plan for the laboratory equipment is necessary
- We need more personnel to work:
- There is a need for expansion of our laboratory and office space

2024 WORK PLAN

Implementation of NIMR 2022 -2026 Strategic Plan. The department has chosen to implement thematic areas 2 and 3 which are:

- Health Research for National Development
- Resource support for Health Research and Development
 - To continue implementation of the quality management system and specialized laboratory services.
 - To increase research collaborations with NIMR research departments and other tertiary institutions.
 - Advocacy and wellness programme/training of food handlers/vendors/consumers.
 - To increase internally generated revenue in the department



WHO CERTIFICATION IN ABUJA NIGERIA

CORPORATE MARKETING AND COMMUNICATION UNIT

INTRODUCTION

The Corporate Marketing and Communication Unit is the commercial arm of the Nigerian Institute of Medical Research which started operations with the business name NIMR Consult in August 2014. The essence is to build on a quick system of revenue generation, find areas of possible continuous revenue drive, and canvass for the patronage of the various NIMR facilities such as the Auditorium, Researchers' Suite, Parking Lot, and Conference Rooms.

CM&CU Team Composition

Administrative Officers	Clerical staff	Housekeepers
1	3	3

ACTIVITIES

ONGOING

The unit is into Facilities marketing and management of Auditorium, Car park, conference rooms which are been used for Workshop, Training, Seminar, etc.

Then we have the Lodging facility for the accommodation of guests which entails making reservations/client communication reception, registration, assigning rooms cleaning/maintaining the rooms, and lastly, settlements of bills of the resident guest.

ACHIEVEMENTS

- Improved patronage
- Retainership of clients
- Upgrade of facilities
- Improved income generation
- Capacity building – External and In-house training.

CHALLENGES

- Inadequate skilled staff
- Delay in response to maintenance-related issue after work order.

WAY FORWARD

- Increase staff strength
- Improved synergy among Units and Departments for improved flow of communication.
- Training of staff

2024 WORK PLAN

- Improve service delivery (Ensuring feedback)
- Increase patronage of facilities (Parking Lot)
- Improve facilities marketing and management strategies.
- Reduce the frequency of Maintenance Issues



FINANCE AND ACCOUNTS DEPARTMENT



INTRODUCTION

The Department handles all financial transactions of the Institute, as well as management of its financial resources. It has four main units and three sub-units which include – Other Charges, Treasury, Budget & Salaries, Stores, Centre for Human Virology & Genomics (CHVG), Clinical Sciences Department (CSD), and Clinical Diagnostics Department (CDD).

All the Units and Sub-Units report directly to the Head of Finance and Accounts. The department performs a wide range of accounting functions to support the Institute in the execution of its mandate.

ACTIVITIES

The major activities undertaken during the year under review include the following:

- Maintenance of relevant books of accounts of the Institute
- Budget compilations for Capital, Overheads and Personnel expenditures
- Management of Internal and External Grants
- Supervision and Control of Stores
- Oversight and monitoring of internal revenue generation
- Performance of banking-related functions
- Other functions delegated by Management

CONFERENCES/WORKSHOPS/TRAINING

Some of the staff attended the Annual Accountants' conference conducted by the Institute of Chartered Accountants of Nigeria (ICAN) as part of continuous improvement training.

ACHIEVEMENTS

The achievements of the department include the following:

- Completion of audit of Accounts of the Institute for the year 2022 and submission of copies of the AUDITED ACCOUNTS to Relevant Bodies.
- Successful defence of the 2023 budget at the National Assembly leading to the release of funds for Operational Activities and Capital Projects execution.
- Rehabilitation and furnishing of Final Accounts Unit of the department
- Sustenance of improved Capital Funding and a slight improvement in Overhead budgetary allocation.

CHALLENGES

- Overhead allocation remains grossly inadequate for the efficient running of the Institute.
- Costs of outsourced services and energy consumption continue to put heavy toll on available financial resources.

- Frequent oversight visits to the Institute with attendant costs caused major disruptions and slow downs in services during the period.

WAY FORWARD/RECOMMENDATIONS

- Continuous interface with the National Assembly to attract government funds to the Institute should be sustained in the coming years.
- Improved collaborations with home and overseas stakeholders should continue to be used as means of attracting more funds to the Institute.
- The Management should consider recruitment of experienced accounting staff at the Junior and Intermediate levels to address manpower shortage and improvement in service delivery.

2024 WORK PLAN

- Arrangement for the continuation of payment of unspent Capital Funds (if any) brought forward from the previous fiscal year.
- Revenue Collection monitoring in all four (4) quarters of the year 2024
- Preparation for audit of 2024 accounts of the Institute
- Defence of Annual Budget at National Assembly
- Sustenance of payment processing throughout the year.

GRANTS, MONITORING AND EVALUATION UNIT

INTRODUCTION

The Grants, Monitoring and Evaluation Unit is saddled with the responsibility of providing grants, statistical support as well as coordinating and supporting data management, monitoring and evaluating (M&E) activities of various Departments and Units in the Institute. The Unit is divided into four (4) Sub-Units which include: Grants, Biostatistics, M&E and Data Management.

STAFF

1. Dr. Adesola Z. Musa	Chief Research Fellow/Head of Unit
2. Dr. K.A. Osuolale	Senior Research Fellow
3. Mrs. A.M. Adedeji	Assistant Chief Statistician
4. Mrs. Ihotu M. Alaku	Programme Analyst
5. Mr. Abiodun Olakiigbe	Senior Data Processing Officer
6. Ms. Khadijat Azeez	Scientific Officer II /Grant Officer
7. Mrs. Wakilah Tijani	Junior Research Fellow
8. Mr. Nathaniel Akinfenwa	Chief Clerical Officer
9. Mr. Adesina Omotayo	Grants Officer
10. Ms. Priscilla Osagiede	Project Staff
11. Mr. Kabiru Dele	Project Staff
12. Dr. Hakeem Osho	Grants Officer
13. Mr. Bashir Jimoh	Project Staff
14. Mr. Segun Awesu	Project Staff
15. Miss. Aramide Tokosi	Project Staff
16. Dr. Latifat Ibisomi	Adjunct Researcher

FUNCTIONS OF THE UNIT

The **Grants Management** sub-unit has full responsibility for overall oversight and project funds which includes:

- Ensuring strict adherence to all terms and conditions of the Grant
- Disseminate/Notify staff of upcoming calls
- Collate reviewed NIMR Calls

- Issue Awards
- Meet the needs of grant beneficiaries
- Facilitate effective communication among all stakeholders
- Document and maintain the records of NIMR's grants (both internal and external)

The Biostatistics sub-unit provides statistical support for the institute, which includes; study designs, participation in protocol development, sample size calculation, validation of data collection tools, statistical analysis, interpretation of results, statistical training for staff members, IT students and interns and generally, solving statistical issues as the need arises.

The Monitoring and Evaluation sub-unit collaborates with departments and units in the institute, to formulate Specific, Measurable, Assignable, Realistic and Time-bound (SMART) performance indicators necessary to assess the progress of work by units and departments of the institute, to achieve the goals and objectives of NIMR strategic plan. Hence, this sub-unit tracks ongoing project activities about work plan, set objectives and goal(s). The bottlenecks in project implementation processes are identified and solutions are proffered to rectify identified gaps. Project activities are then evaluated bi-annually.

Data Management sub-unit supports studies, departments and units in the institute that generate survey data, laboratory and routine data. The roles of this sub-unit include:

- Database design and architecture
- Remote monitoring of the data collection process
- Database maintenance
- Data cataloguing
- Data backup and security

ONGOING RESEARCH EXTERNAL GRANTS ACTIVITIES/SUPPORT

- Database Management for research studies, departments and units that generate large data sets
- Entomology Surveillance
- Mass drug administration in the management of trachoma in northern Nigeria: Implications on child survival
- Innovative Tool to Expand HIV Self Testing (ITEST) among Nigerian Youth
- Safety & immunogenicity of fractional doses of moderna, AstraZeneca & Janssen Covid-19 vaccine among Nigerian Adults (SIFCoVAN)
- Correlates of Resistance to Artemisinin-based combination therapies in Nigeria.
- Mathematical models of Covid-19 pandemic in Nigeria predictions and impact
- Emory-Nigeria HIV Research Training Program (EN-RTP)
- Integration of Hypertension Management into HIV Care in Nigeria. (TASSH)
- Carry Out Targeted Support for Research on Sulphadoxine-Pyrimethamine (Sp) Resistance Studies in Ebonyi and Osun State Under the IPTI Effect Study Project
- The Prevalence, Incidence, Trends, and Predictors of Hypertension, Chronic Kidney Disease, and Dyslipidaemia among People Living with HIV Accessing Antiretroviral Therapy in Lagos, Nigeria.

- Actions for Collaborative Community Engaged Strategies for HPV (ACCESS HPV).
- The CHES (Community, Home-based Education, Screening Services) Strategy to increase cervical cancer control access for HIV-positive women in Nigeria.
- Enabling Environments for NCD Risk Reduction in Ethiopia (ENABLE)
- Innovative Tools on Expand Youth-engaged Stroke Preparedness (I-TEST-Stroke)

ONGOING RESEARCH INTERNAL, INNOVATIVE AND DEPARTMENTAL GRANTS ACTIVITIES / SUPPORT

INTERNAL GRANTS

PRE-DOCTORAL GRANTS

- Generalized Linear Mixed Models Inference for Two-Stage Outcome in Health Survey Data.

JUNIOR CATEGORY

- Survey on Knowledge, Perception of and Willingness to take Malaria Vaccine Mothers in Selected States of Southwest, Nigeria.
- Whole Genome Sequencing of Multidrug-Resistant Mycobacterium Tuberculosis Complex Isolates from Lagos, Nigeria.
- A Genetic Association Study to Identify Specific KIR Gene Variants Associated with an Increased Risk of Preterm Birth in HIV-Positive Women.
- Developing Capacity to Produce Polyclonal Chicken Egg Yolk Immunoglobulin (IgK) against Conserved Recombinant Lassa Virus Antigens and Evaluation of their Immunodiagnostic Potential

SENIOR CATEGORY

- Investigating Anthrax Toxin-Producing Environment Bacillus Spp. In Selected Cattle / Sheep Communities and Farms in Lagos, Nigeria.
- Materno-Fetal Transfer of Micronutrients among Primigravidae and Secundigravidae with and without Placental Malaria in Lagos, Nigeria.
- Male Genital Schistosomiasis, Pathological Abnormalities and Association with Infertility in Nigeria.
- Epidemiology and Genotypic Variants of Cryptosporidium Species and Other Enteric Coccidian Parasites and its Implication on Diarrhea in HIV Positive under-fives and Pregnant Women in Southwest, Nigeria.
- Clinical and Molecular Epidemiology of Drug-Resistant Tuberculosis in Lagos State, Nigeria: A Pilot Study

ADJUNCT CATEGORY

- Oral Human Papilloma Virus (HPV) Profile and Risks Indicators for Oral HPV Carriage in HIV Positive Patients at NIMR.
- Oral Microbiome and Human Papilloma Virus Genotypes among Persons Living with HIV (OrMiH).
- Population-Based Interventions towards Reducing the Burden of Hypertension in Nigeria (PoBIRH Study).
- Placental Malaria: The Impact of Immune Responses on Pregnancy Outcomes among Primigravidae and Secundigravidae in Ikorodu, Lagos State, Southwest, Nigeria.

- Acceptability and Efficacy of HPV Self-Sample Based Testing in Nigeria Women Living with HIV.

INNOVATIVE GRANTS

- Viral Haemorrhagic Fever and their Reservoirs in Nigeria.
- Expansion of Mapping and Characterization of Ijede and Consolidation of NIMR HDSS Site.
- Development of a Rapid Diagnostic Test Kit for Cholera Diagnosis and Surveillance in Nigeria.
- Development of Microbicide Vaginal Gel Containing Maraviroc and Tenofovir Microspheres for Pre-Exposure Prophylaxis of HIV-1: A Preclinical Safety and Pharmacokinetic Evaluation in Animal Model.
- Development of Hepatitis B Virus Quantitative RT-QPCR.
- Food Safety Surveillance of Vended Foods in Lagos and its Environs in Nigeria: The VIDAS Enzyme-Linked Immunofluorescent Assay Detection Method.
- Extramural Research Grant for Development of Ijede Clinical Trial Sentinel Site.
- Design and Development of a Pan-Lassa Fever Vaccine Candidate Using Glycoprotein Precursor (GPC).
- Remodification of Genotype Electrophoresis Machine and Re-Designing and Packaging of NIMR Biotech Product.

DEPARTMENTAL GRANTS

- Longitudinal Evaluation of the Clinical, Immunological and Virological Response to DTG DTG-containing regimen among PLHIV at the Nigeria Institute of Medical Research: Implication of National Policy.
- Evaluating Transmission Potential and Risk of Mechanical Transmission of Parasitic Infection by House Flies in Nigeria.
- Burden and Molecular Characterization of Respiratory Syncytial Virus among Children under five years old in Nigeria.
- Occurrence and Frequency of Genetic and Non-Genetic Mediators of Preventable Diarrheal Diseases in Slum Communities in Lagos, Nigeria: A Pilot Study.
- Gaining Insights on the Impact of Infectious Diseases through Mathematical Modelling.
- Whole Genome Nano Pore Sequence Analysis of Multidrug Resistant Enteric and Respiratory Pathogens from Children and Immunocompromised Adults in Nigeria.
- Molecular Expression and Diagnostic Markers of Risks of Cardio-vascular diseases among ARV Naïve and HAART Experienced individuals with HIV Infection at a Treatment Centre in Lagos, Nigeria.
- Conduct of Bi-annual Grantsmanship Training Program
- Evaluation of the Efficacy of Herbal Remedies: (Jemchi Herbal Products) as Treatment for Benign Prostatic Hyperplasia, Prostate Cancer and Arthritis.
- Drug Abuse in North-Eastern Nigeria: A Comprehensive Epidemiology and Neurobiology.
- Extramural Research Calls for MSc, PhD and Part-2 Fellowship Candidates.

ACHIEVEMENTS

- Successfully rendered statistical and data management supported to ongoing research activities in 2023

- Attracted more new grants both within and outside the country.
- Award grants to Adjuncts in collaboration with NIMR researchers
- Successfully Conducted the 2023 rounds of call, award letters issued and researchers already accessing funds

CAPACITY DEVELOPMENT (CONFERENCES/WORKSHOPS/TRAINING ATTENDED)

- University of Cambridge Computational Challenges and Emerging Tools Workshop (24 – 28 April 2023), Isaac Newton Institute for Mathematical Sciences, University of Cambridge, United Kingdom (**Dr. K.A. Osuolale**).
- Advanced Implementation Science in Global Health August 14-18, 2023, Seattle, WA USA (**Dr. A.Z. Musa**)
- Introduction to Infectious Disease Modelling and its Applications, LSHTM, UK 19th -30th June 2023 (**Dr. A.Z. Musa**)
- 2023 Polygenic Risk Score Training in Kampala, Uganda (1 July, 2023 through Friday, 7th July) (**Dr. K.A. Osuolale**).
- International Conference on Health Advances, Innovation and Research, Nigerian Institute of Medical Research, 2023 (November 2023) (**Dr. A.Z. Musa, Dr. K.A. Osuolale, Mr. Abiodun Olakiigbe**).
- Fundamentals of Implementation Science, offered by the University of Washington's Department of Global Health, E-Learning Program (25 September to 3 December 2023): **Mr. Abiodun Olakiigbe**
- A 6-Day Training Workshop on Pandemic Modelling on Strengthening Nigeria's Capacity for Pandemic Preparedness (SNCaPP) through Enhanced Surveillance, 4th- 9th December 2023 | Bolton White Hotel, Garki, Abuja. **Mr. Abiodun Olakiigbe**
- A 2-Day Software Training Workshop on Advanced Research Methods and Data Analysis for Academics, Postgraduate Students and Researchers at the Federal University of Agriculture Abeokuta, November 1st -2nd 2023. **Mr. Abiodun Olakiigbe**
- Geo-computation, Generalized Linear Model and Random Forest Machine Learning for Modelling Vector-borne Disease for Blackfly habitat suitability modelling project (October 11, 2022 – February 10, 2023) Organized by The Nigerian Federal Ministry of Health and MARGOSA Environmental Solutions, held in Nairobi, Kenya and sponsored by Bill and Melinda Gates Foundation_ **Mrs. A.M. Adedeji**
- Training on application of Machine Learning, Support Vector Machine, Perceptron, Feed Forward Neural networks convolutional Neural Network algorithms for disease modelling (March – June) 2023 Organized by The Nigerian Federal Ministry of Health, and MARGOSA Environmental Solutions, held online and sponsored by Bill and Melinda Gates Foundation_ **Mrs. A.M. Adedeji**

Number of B.Sc. Students supervised: None

M.Sc. Students supervised: 4 (Dr. A.Z. Musa)

PhD Students supervised: 3 (Dr. A.Z. Musa)

PhD Students supervised: 1 (Dr. K.A. Osuolale)

Number of NYSC, SIWES, Internship: 1

Ms Hameedah Raheem — SIWES

Collaborations and Partnerships (International & National)

UCL, LSHTM, University of Washington, SLU, Shell Nigeria, MRC Gambia, Sightsavers, eHealth Africa and BMGF

Grants/Fellowship Awards

- Developing a novel contact tracing mobile application for coronavirus disease 2019 (COVID-19) for improving testing capacity and controlling the spread of COVID-19 in Nigeria, Nigerian Institute of Medical Research Project Development (PI: Dr. A.Z. Musa).
- Empowerment models for Improving Human Immunodeficiency Virus Patients' Adherence to Antiretroviral Drugs in the Era of COVID-19 Pandemic, Nigerian Institute of Medical Research Project Development (PI: Dr. K.A. Osuolale) -Completed 2023.
- Generalized Linear Mixed Models Inference for Two Stage Outcome in Health Survey Data (PI: Mr. A.K. Olakiigbe).

CHALLENGES

- Poor Internet connectivity- Most of our activities are online, once there is no/poor connectivity this limits our productivity
- Non-submission of progress reports for external grants
- Delays on notification of inflow of external grants
- Need for grant management software to manage grant management cycle-
- Inadequate manpower
- Tools to support proposal development (Grammarly, Turnitin)

WAY FORWARD

- Utilize effectively the new collaborations
- Engage more with our adjunct researchers to improve productivity
- Increase training opportunities for staff
- Commission the development of an Institutional data sharing, use and transfer policy
- Periodic submission of progress reports of ongoing grants (both internal and external)
- Continuous documentation of all NIMR grants both internal and external
- Continuous maintenance of all grants access/management platforms
- Obtain software for grants management
- Training of staff on grants management
- Commission the development of a comprehensive Institutional grants management policy

2024 Work Plan

Thematic area	Objectives	Activities	Expected Outcomes	Indicators	Means of Verification	Timeline Jan - Dec 2024				Key Responsible
						1st Qtr	2nd Qtr	3rd Qtr	4th Qtr	
Governance	Review and consolidate existing partnerships, networks and collaborations	Track existing partners, networks and collaborators with NIMR from Depts/Units Document details of the association between NIMR and existing partners	List of partners, networks and collaborators with NIMR compiled Report on details of association between NIMR and existing partners generated	# of existing partners Report generated on details of existing partnerships with NIMR (Yes/No)	Documents that established the relationships between NIMR & existing partners		X		X	Mrs. Adedeji /Ms. Osagiede
	Establish new public-private partnership.	Track new public-private partnership with NIMR from Depts/Units Document details of the association between NIMR and new partners	List of new public-private partners with NIMR compiled Report on details of association between NIMR and existing partners generated	# of new public-private partners established Report generated on details of new public-private partnership with NIMR	Documents that established the relationships between NIMR & new public-private partners		X		X	Mrs. Adedeji /Ms. Osagiede
	Review existing policies and identify gaps and needs.	Track review meetings on existing policies Track gaps and needs identified on existing policies	Review meetings on existing policies monitored Details of gaps and needs identified on existing policies	Policy review meeting held (Yes/No) Gaps and needs identified on existing policies (Yes/No)	Minutes of review meetings on existing policies Report on identified gaps and needs in existing policies		X		X	Mrs. Adedeji /Ms. Osagiede
	Prioritize and develop new policies	Track new policies being developed	New policies developed Highlights of new policies generated	# of new policies developed Highlights of new policies generated (Yes/No)	Copies of new policies developed Copies of new policies developed		X		X	Mrs. Adedeji /Ms. Osagiede

Health Research	Advertise NIMR calls based on identified priorities of National Health Research.	Publish calls for proposals. Shortlist candidates that apply for calls for proposals.	Calls Advertised	# Of call for proposal	15 awards (pre-doctoral, post-doctoral, junior and senior categories).	X	X	X	X	Ms Azeez Khadijat/Mr. Adesina Omotayo
Resource Support for Health and Development	Strengthen the annual national grant writing workshop.	Review the current status of the award.				X	X	X	X	Ms Azeez Khadijat/Mr. Adesina Omotayo
	Improve the number of Direct Grant Awards.	Identify and maintain key guidelines and platforms required for accessing grants.				X	X	X	X	Ms Azeez Khadijat/Mr. Adesina Omotayo
	Increase annual intramural and extramural research funding.	To provide additional funds for annual intramural and extramural research		# Of intramural and extramural awards.	10 (5 intramural and 5 extramural)	X	X	X	X	Ms Azeez Khadijat/Mr. Adesina Omotayo
	Increase adjunct positions for NIMR research staff in Nigerian universities and internationally.	Track review meetings held on the current status of adjunct positions in NIMR from Dept/Units Follow up on dept/units on new adjunct staff engaged	Review meetings held on the current status of adjunct positions Challenges with adjunct positions in NIMR identified New MOUs and appointments of adjunct positions	# of review meetings held Challenges with adjunct positions in NIMR documented # of New MOUs and appointments of adjunct positions	Minutes of review meetings held on the status of adjunct positions Documents on identified challenges with adjunct positions Copies of MOU and appointment letters of new adjunct staff		X		X	Mrs. Adedeji / Mr. Dele
	Conduct annual needs assessment	Track collation of annual training needs	Annual training needs collated	# of training needs collated	Documents on annual training needs from Depts/Units		X		X	Mrs. Adedeji / Mr. Dele

nts and strengthen human research capacity.	assessments from Depts/Units	Staff trained in relevant courses Staff job performance enhanced	# of staff trained in relevant courses % of Job performance enhanced	List of staff trained and courses attended Survey on job performance for trained staff only					
Increase annual intramural and extramural research funding.	Monitoring visits to track the progress of research work: Intramural/Extramural and Innovative research	Research targets met within the stipulated time frame	% of research targets met	Progress report of research work		X	X	X	Mrs. Adedeji/ Ms. Osagede/ Mr. Dele
To provide biostatistical support to researchers	Design and pre-test data collection tools	Data collection tools designed and pre-tested	# of data collection tools designed and pre-tested	Paper data collection tools Electronic data collection tools	X	X	X	X	Dr. Musa A. Z. /Mrs Ihotu Alaku
	Training and supervision of data entry	Data entry supervised	# of data entry process supervised	Data imputed	X	X	X	X	Dr K.A. Osuolale
	Data analysis	Data analyzed	# of projects analyzed	Data analysis reports	X	X	X	X	Dr. A. Z Musa/Dr K.A. Osuolale/Mr. Olakiigbe A. /Mrs Tijani W.
	Identify trends and relationships within routine data generated in the Institute	Routine data analyzed	# of data analyzed	Data analysis reports generated		X	X		Dr. A. Z Musa/ Dr K.A. Osuolale/ Mr. Olakiigbe A. /Mrs Tijani W.
	Biostatistics Course training					X			Dr. A. Z. Musa/Dr. K.A. Osuolale
	Database design & maintenance for departments, units and research projects. Create and Test-run data entry template in RedCap	A database designed and maintained RedCap data entry templates utilized	# of databases designed/maintained # of templates created	Database Designed/Maintained RedCap data entry templates created	X	X	X	X	Mrs Ihotu Alaku
Database design & maintenance using RedCap and File Maker Pro applications					X	X	X	X	

Research Innovation and	Explore opportunities to interface with the private sector as well as the Federal Ministry of Science and Technology.	Track created opportunities with the private sector and the Ministry of Science and Technology for innovative research	Opportunities with the private sector and the Ministry of Science and Technology created	# of opportunities created	•Documents on opportunities created for innovative research					
			Opportunities utilized	Details of created opportunities documented (Yes/No)	Report on utilization of opportunity created					
							X	X		Dr. Musa A. Z. /Dr K.A. Osuolale
							X	X		



INTERNAL AUDIT UNIT



INTRODUCTION

The Internal Audit Unit of the Nigerian Institute of Medical Research, Yaba is responsible for the internal checks of the Institute's accounts and those for the Out-stations. The main purpose of the Audit is to enable the Internal Auditor to satisfy the Director-General/CEO that an efficient and effective system of Internal Control (internal check, security and control of cash and stores, assets etc.) and adequate system of accounting as laid down by Financial Regulations and other financial extant circulars are maintained and the books reconciled.

The ultimate aim is to ensure that all accounts and vouchers prepared or received are complete themselves. It should also in addition to the normal auditing process, examine the internal control, security measures, spot checks thereby satisfying itself that adequate measures exist and regulating system are observed.

INTERNAL AUDIT UNIT TEAM

- | | | |
|------------------------------|---|------------------------------------------|
| 1. Mrs. Taibat A. Malomo | - | Deputy Director/HOU |
| 2. Mrs. Margaret A. Akhigbe | - | Chief Executive Officer (Accounts) |
| 3. Mr. Kenneth O. Ologwu | - | Asst. Chief Accountant |
| 4. Mrs. Florence M. Okusaga | - | Asst. Chief Executive Officer (Accounts) |
| 5. Mr. Daniel E. Egwu | - | Principal Accountant |
| 6. Mrs. Funmilola A. Adebayo | - | Senior Accountant |
| 7. Miss Yemisi F. Akintomide | - | Senior Executive Officer (Accounts) |
| 8. Mr. Gabriel N. Stephen | - | Executive Officer (Accounts) |

Secretariat

- | | | |
|------------------------------|---|------------------------------|
| 9. Mrs. Theresa J. Usen | - | Chief. Secretarial Assistant |
| 10. Miss Elikadesh Edosonwan | - | Chief Clerical Officer |



Group Picture of the Internal Audit Unit Staff During The 2023 Year Retreat

ACHIEVEMENTS

- Ensured supplies to the Institute were in good condition as at the time of delivery
- Ensured all generated revenue was duly posted to the NIMR Account
- Verification of Internally Generated Revenue (IGR) of all the Revenue Revolving Fund Centres
- Numbering and labelling of NIMR assets, when procured
- Ensured all due processes of payments were followed
- Errors/loopholes have been reduced to the barest minimum by ensuring compliance with laid-down financial regulations
- Stock-taking of store items in the Clinical Sciences Department, Main Stores and CHV&G
- The Internal Audit Unit has successfully processed and passed all payment vouchers that were brought to the Unit
- The Internal Audit Unit has submitted quarterly and annual Internal Audit Reports to the Office of the Auditor-General of the Federation and the Office of the Accountant General of the Federation.
- The Internal Audit Unit has also interfaced with both the External Auditors and Federal Auditors in the last year.
- The Head of the Internal Audit Unit has participated in the Retreat organized by the Auditor-General of the Federation in the last year.

CAPACITY BUILDING

S/N	NAME	DESIGNATION	TRAINING	COURSE TITLE	DATE
1	Mrs. T. A. Malomo <i>FCA</i>	Deputy Director/HOU (IA)	Internal Audit Retreat	Annual Summit of the forum heads of Internal Audit of the Federal Health Institutions	6 th -10 th Nov, 2023
2	Mr. K. O. Ologwu	Assistant Chief Account	Annual Accountant conference	Nigeria: Imperative for Inclusive Development	9 th -13 October, 2024

CHALLENGES

These are: -

- Staff failing to retire advance(s) as at when due, thereby causing the Unit to waste scarce human hours chasing staff to clear advances.
- Shortage of skilled manpower.
- Inadequate training opportunities.

WAY FORWARD

- The Management to minimize the quantum of advance given to staff, and more of the registered contractors in the Institute.
- Deploy more qualified personnel to the Unit to serve the Institute better.
- Approve more training opportunities for staff of the unit.

2024 WORK PLAN

- The Unit plans to liaise with the Scientific Research Committee to use the platform of their research seminars to enlighten staff on some pitfalls in the course of vouching of payment and other activities that include imprest expense, supplies, the raising of requisition, etc.
- The Unit plans the numbering of project assets in the Institute.
- The Unit is currently designing a form for Asset movement to be used for the relocation and disposal of Assets
- Continue our routine prepayment and post-payment audit processes



INSTITUTIONAL REVIEW BOARD (IRB) UNIT



INTRODUCTION

This report provides a summary of the activity of the NIMR-Institutional Review Board in 2023. The number of protocols received and reviewed in the year 2023 is higher than the previous year (79 in 2022 and 107 in 2023). All recommendations for approval were presented and reviewed at the full Board meeting of the REC and considered for final approval for the studies.

INSTITUTIONAL REVIEW BOARD (IRB) MEMBERSHIP

The Members of NIMR-IRB consist of the Chairman, the Secretary and their Assistants. Other members consist of twelve (12) Scientists appointed from within the Institute and other Health Institutions. Social Scientists, Lay Members and Community Advocates such as Lawyers and Religious Leaders are part of the Ethics Board Members.

MEETINGS

The Board policy stipulates a total of 6 face-to-face meetings per year (Bi-monthly) to provide members with the chance to meet in person for conference review, discussion and consideration to rectify all approved protocols. NIMR-IRB held a total of three (3) meetings between Tuesday, 30th March 2023, Friday, 28th July 2023 and Thursday, 21st December 2023

ACTIVITIES

(PROTOCOLS RECEIVED AND APPROVED IN 2023)

A total of seventy-nine (107) proposals were received by NIMR-IRB in the year 2023. The research protocols reviewed and approved within the set turn-around time of six (6) weeks were of five (5) categories.

- NIMR Staff Protocols: (33)
- Non-NIMR Staff (Individuals) Protocols: (32)
- NGO/CSO and Multinational Organizations Protocols: (3)

- Students' Protocols from various Universities and Polytechnics nationally and internationally: (39)

COLLABORATIONS AND PARTNERSHIPS

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) Ebute-Metta

2024 WORK PLAN

- Capacity building of members and researchers
- Computerization of administrative/secretarial procedures
- Increase awareness of ethics of good research practice
- Automation of the IRB process
- Organize more training on research ethics



LIBRARY AND INFORMATION COMMUNICATION TECHNOLOGY (ICT) DEPARTMENT



INTRODUCTION

The Department of Library and Information Communication Technology (ICT) facilitates knowledge generation, dissemination and efficient deployment of technology to enhance the conduct of research and operational endeavours in the institute. The information communication and technology supports are offered via library services, computer software and hardware management, internet and network administration, digital publishing, web content management, and media communication.

STAFF

1. Dr. Olayemi Adefunke Nwogbe	Director/ HOD
2. Dr. Omobola Olufunke Adewoyin	Deputy Director (Library & Info)
3. Mrs. Juliana Patrick Michael	Chief Librarian
4. Mr. David Taiwo Johnson	Principal Programme Analyst
5. Mrs. Queen Dike	Principal Library Officer I
6. Dr. Olalekan Moses Olayemi	Principal Librarian
7. Mr. Emmanuel Ogbanje Ijoga	Senior Programme Analyst
8. Mr. Abiola Bayonle	Programme Analyst I
9. Mrs. Chiamaka Madu	Senior Information Officer
10. Mrs. Gloria Osuji	Librarian I
11. Mr. Sampson Okeke	Programme Analyst I
12. Mrs. Adenrele Obalengele	Programme Analyst I
13. Mrs. Ibukun Adegboruwa	Information Officer I
14. Miss. Mariam Abdulkareem	Information Officer I
15. Mrs. Loveth Onuigbo	Librarian I
16. Mrs. Victoria Chidinma Iwegbu	Programme Analyst I
17. Ms. Ansa Cobhams	Senior Confidential Secretary
18. Mrs. Juliet Agubiade	Executive Officer (GD)

ACTIVITIES

- Library Services
- Production of Reports, Policies and other Information Materials
- Digital Services
- Management of Computer Software and Hardware Systems
- Management of Internet, Networks and Intercom Systems
- Multimedia coverage of the Institute's events: conferences, workshops, and seminars
- Management of institute social media platforms (Twitter, Facebook, YouTube, Instagram, LinkedIn)

ACHIEVEMENTS

- Optimization of internet connectivity to research laboratory building and Cancer Research Center
- Extension of internet through fibre optics connections to Biobank and Emerging Viral Diseases Facilities
- Contributing to NIMR IGR

CHALLENGES

- Inadequate funds to subscribe to many biomedical databases.
- Lack of Library Management Software to improve and extend library services
- Inadequate office equipment.
- Inadequate financial support for professional training.

WAY FORWARD

- Provision of basic working tools and office equipment.
- Engage Management to support training and explore in-house training.
- Contribute more to NIMR IGR.

PLANNING DEPARTMENT

INTRODUCTION

Planning is the process of deciding the objectives to be achieved and selecting the ways and means of achieving the pre-determined objectives. In other words, it is a fundamental management function which decides beforehand what is to be done, when, how and who is going to do what.

The Planning Department is saddled with the discharge of unique duties and functions as enshrined in the National Scheme of Service. In fact, it is one of the service Departments in all the MDAs, an attestation to its relevance.

Therefore, the Planning Department is essentially responsible for the articulation, analysis, projection and implementation of development plans of the organization in terms of annual, medium- & - long-term plans.

The Department is to provide accurate and reliable information for effective planning and ensuring that due process is followed in the execution of the programs and projects in the Institute.

STAFF MEMBERS:

- | | |
|-------------------------------------------------|------------------------------------------------|
| 1. Mrs. Benedette Nkem Ajoke Kadiri, <i>CNA</i> | Chief Planning Officer/ Ag. Head of Department |
| 2. Mrs. Grace Amarachi Charles | Chief Confidential Secretary |
| 3. Mrs. Njideka A. Ako-Okoli. | Principal Administration Officer |
| 4. Mr. Ralph Ndubuisi Iwegbu | Assistant Chief Executive Officer (GD) |
| 5. Mrs. Ujunwa Florence Egbuaba | Planning Officer II |
| 6. Mrs. Joy Obi | Chief Clerical Officer |

FUNCTIONS/ACTIVITIES OF THE DEPARTMENT

The Department performs among other assignments, the following functions/responsibilities:

- Coordination of the Institute's strategic development plans.
- Coordination, preparation and production of the Institute's Annual Progress Report.
- Plays host to both local and international schools/students that visit NIMR for its ambience, state-of-the-Art Laboratories, Equipment, Experts and Excursion purposes.

- Coordinates the implementation of the Institute's strategic plan. This involves monitoring the implementation of plans in collaboration with the Monitoring and Evaluation Unit through joint annual reviews, mid-term reviews and periodic evaluations.
- Seldomly involved in the planning of the Institute's programmes, projects and activities like annual retreats, conferences, etc.
- Liaises with relevant bodies and organizations outside NIMR on policy and planning matters for relevant updated information for the notification of the Management.
- Compiles monthly reports of activities from the Departments/Units in the Institute to highlight the achievements of each Department/Unit including their challenges and the way forward.
- Routine handling of necessary official matters as deemed fit by the Director-General.

ACHIEVEMENTS

- Successfully organized, produced and distributed the 2023 Annual Report.
- Handled correspondences from the Federal Ministry of Health, Office of the Head of Civil Service of the Federation and other organizations as assigned by the Director-General.
- Successfully participated in the hosting of visiting organizations, agencies and parastatals.
- promoting the image of NIMR through good representation at the stakeholder's forum.
- Ability to formulate and prepare long-term, medium-term and short-term institute development plans.

CHALLENGES

- (a) Non-inclusion of the Planning Department in the program of most projects and events in the Institute hinders the effectiveness of the Department.
- (b) Inadequate skilled staff. The Department is in dire need of competent hands to excel in the discharge of its core competent duties.
- (c) Lack of adequate logistics and adequate funds among other facts to have the desired in-house training as recommended.

WAY FORWARD

- Staff motivation through on-the-job/in-house trainings and re-trainings to master sufficient technical skills required for excellent discharge of all assigned duties.
- Constitution of a Central Monitoring and Evaluation Committee for the Institute with members drawn from Departments/Units with related monitoring functions as well as a representative from the project implementing department. This Committee will have the responsibility for monitoring the execution of projects as well as evaluating the outcome of such initiatives and advising the Management accordingly.
- To ensure the availability of an appropriate complement of essential/skilled personnel that will enhance the Department's capacity to grow and function efficiently and effectively.

- Adequate technical staff, it could be (Corps members) should be deployed or employed in the Department.

2024 WORK PLAN

- Regular training of Planning Department's staff for improved understanding of its core mandate and performance of same efficiently.
- Continuous monitoring and review of the implementation of the strategic plan.
- Liaise with relevant Ministries on policy and planning matters for the update of the management's information.
- Designated M&E focal person(s) from the Grants Unit to liaise with the Planning Department to enhance the Planning Department's activities and results.
- Carry out any other assigned duties by the management.

SCHOOLS & STUDENTS THAT CAME FOR EXCURSION IN 2023.

- Kings High School, Lagos (5 June 2023).
- Will and Grace International Schools, Ikorodu Lagos (21st & 22nd February 2023)
- 400 level students from the College of Medicine and Allied Health Sciences, University of Sierra Leone (Alh. Juma Swaray & Mr. Michael Sieh Turay)
- Prof. Phillip and his PhD student (Mr Adewale) from the University of Wisconsin - Madison, USA.

Anchor University, Lagos (1st February 2023).



Trident Secondary School, Ikorodu, Lagos (16th February, 2023).



**Dream Park Montessori School, Surulere, Lagos
(9th November 2023).**



Bowen University, Iwo (12th April 2023)



**National Association of Science & Technology Students, (NASTES) (SPTSD),
Lagos State University of Science & Technology, Ikorodu, Lagos (19/10/2023)**



Dobar Comprehensive College, Ikorodu, Lagos (25th October 2023)



PROCUREMENT UNIT



INTRODUCTION

The Procurement Unit is saddled with the responsibility of procuring public goods, works and, or services (consulting and non-consulting) for the Institute through a third party on behalf of the Federal Government for national development. It is the government's way of buying inputs for vital public-sector investments in physical infrastructure and in strengthened institutional and human capacities that lay the foundations for national development, following government statutory and regulatory policies, principles and guidelines.

It encompasses a sequence of related activities which start with assessment of needs through to contract award, management and culminate to final payment. Public Procurement is a global system adopted by both developed and developing nations on how to derive value for money and improve efficiency in the use of scarce resources.

The Main objectives of the Procurement Unit are:

- i To support the Institute in achieving her goals and objectives as envisaged in her vision and mission statements through an understanding of the Institute's business requirements/mandate by procuring the critical inputs required to pursue her policies and programs of nation-building through effective and efficient management of the procurement process and the supplies market, thereby ensuring prudent use of public funds while rigorously maintaining the Institute's business principles, mandate and the agreements under which it operates;
- ii To develop and maintain strong relationships with user departments/units, as well as other relevant stakeholders and external bodies for better understanding and work harmoniously towards achieving the set objectives of the Public Procurement Act, 2007, extant laws, regulations and guidelines.
- iii To position the Unit towards effective and efficient service delivery in line with NIMR's Strategic Plan (2022 - 2026).

ON-GOING ACTIVITIES

The role of the Procurement Unit as defined by the Act establishing it encompasses 9 basic related activities or functions that make and complete the public procurement circle, vis-a-vis efficient procurement planning driven by needs assessment; appropriation; advertisement; transparent pre-qualification; bid opening; bid evaluation (technical and financial); executive approvals; contract award and execution; as well as project implementation, monitoring and evaluation. The Unit is engaged constantly in the processing of all departmental contract procurement requests - both research and non-research through a set of related activities aimed at expediting the achievement of the Institute's cardinal objectives in compliance with the Public Procurement Act, 2007 and Procurement Regulation while obtaining the best possible value for money on behalf of the Federal Government by ensuring that goods, works and, or services needed by the Institute are acquired at the most favourable terms compatible with the desired quality and delivery schedules, taking into account the total life cycle costs and in a manner that safeguards and preserves the reputation of the Institute.

ACHIEVEMENTS

- The Unit has been able to successfully implement over 95% of the requests received and has awarded a total number of one Hundred and Ninety-Eight (198) contracts to date across all funds for both research and non-research projects which cut across civil works, such as building construction, renovation and rehabilitation; goods, which typically include medical supplies, furniture and fittings, equipment, office consumables, stationeries and materials, etc., as well as consulting/non-consulting services, like training, equipment maintenance, expert advice, capacity building, shipment, clearing and logistics.
- The Unit was able to secure all executive approvals for and has successfully implemented almost all the Institute's projects under the 2023 Capital Budget Appropriation (both Capital and Constituency). A clear example is the ongoing construction of the New Center for Human Virology and Genomics (CHVG) Laboratory and Office Complex at Yaba, a Constituency project which is at its final stage of completion.
- Two of the Unit's members of staff have successfully attended an on-the-job or professional skills acquisition training to improve their performances and productivity in the face of new challenges in line with the Institute's policy on investments in human capacity development.

CHALLENGES

- Improper documentation and presentation of requests by the end-users
- Unnecessary interferences in the procurement functions by those not statutorily responsible.
- Delays in the processing of payments to contractors after successful completion of projects and submission of requests for claims.
- Delay in budget implementation due to delays in the release of capital and securing higher executive approvals/processing of memos to Council, MTB, etc., where applicable.
- Inadequate staffing. The Unit is presently in need of a clerk.

WAY FORWARD

- End-users could always liaise with the Procurement Unit to be guided on public procurement principles and procedures which govern government procurement when making contract procurement requests in order to prevent delay in projects implementation.
- There is a need for those who illegally interfere with the responsibility of the Procurement Unit to desist and be guided. On matters of government procurement, a breach or an infringement of the Public Procurement Act and procurement regulation cannot be validated by any personal opinion or internal policy.
- Those concern with payments should try to reduce bureaucratic bottlenecks which result to delay in one or more stages of the payment process that makes the whole process of payment longer to complete.
- There is need for Management to draw the attention of those in authority concerning approval/drawing down of funds matters that need their urgent attention to take note of projects timelines and to treat all matters relating to budget implementation expeditiously.

RESEARCH, INNOVATION AND PRODUCT DEVELOPMENT UNIT

VISION

To Transform research ideas into end Products of value for National Development.

MISSION STATEMENT

To deploy research innovations towards addressing public health needs for biomedical products and interventions.

TECHNICAL / PRODUCTION TEAM

1. Prof. N. N. Odunukwe FNAMed	-	Director of Research/ Head of RIND
2. Dr. C. K. Onwuamah	-	Chief Research Fellow
3. Dr. N. N. Onyejebu	-	Chief Research Fellow
4. Dr. J. O. Okwuzu	-	Senior Research Fellow
5. Dr. M. A. Fowora	-	Senior Research Fellow
6. Dr. O. S. Amoo	-	Research Fellow I
7. Mr. A. B. Orok	-	Research Fellow II/RIND Focal Person
8. Mr. A. K. Adeneye	-	Research Fellow II
9. Engr. O. Edomnwoyi	-	Chief Electrical Engineer
10. Mr. P. I. Ogbuji	-	Senior Biomedical Engineer
11. Mrs. A. T. Asemota	-	Chief Clerical Officer
12. Mr. J. K. Omowhovo	-	Equipment Production Technician

INTRODUCTION

NIMR Research Innovation and Product Development Unit (RIND) is among the newly established units in the Institute. It was established in 2017 through a committee under the able chairmanship of Prof. N. N. Odunukwe, Director of Research, Clinical Sciences Department. The all-inclusive committee members were drawn from various departments here at NIMR.

Our goal right from inception focuses on changing or translating research ideas into tangible products and services by providing in-country solutions to basic laboratory needs.

Our priority is geared towards the translation of research ideas through creative and quality innovations into affordable medical products and services. The fulcrum of our research priority

is to identify gaps in laboratory and diagnostic needs and fill them with innovative research products viz: in-country. Ultimately, there will be a change in the narrative of over-dependence on the importation and advancement of research and innovations in Nigeria.

The operational dynamics of Research & Innovation is a multifaceted affair that ranges from conceptualization, experimentation, and actual product development to validation. **NIMR-RIND intends to create a paradigm shift in the diagnostic needs of Nigerians** through the production of ***“Proudly Nigerian Products and Proudly NIMR BIOTECHNOLOGICAL Products and Services”***. Most of our products have been patented and some are undergoing the process as well.

In NIMR-RIND, we explore the huge resources of Nigeria to provide cost-effective solutions and save the much-needed foreign exchange for the country as regards the production and availability of basic medical equipment and reagents.

RIND started operations as a full Unit in 2019 and is **progressively growing to be a Centre** to execute the following objectives: -

- Creating an enabling environment to nurture innovative ideas.
- Liaising with the NIMR Community towards securing viable translational research ideas and findings as patentable/ registrable products.
- Articulating processes that will engender the commercialization of NIMR products.
- Implementing frameworks for sharing of benefits of research commercialization.
- Providing support for applications by innovators and inventors for the protection of the
 - property rights of innovations/inventions.
 - Identify innovations and inventions that are of high potential for commercialization, and develop operational prototypes of such innovations and inventions in the national
 - technology parks.

RESEARCH ACTIVITIES (COMPLETED AND ONGOING)

S/N	Research Activities	Completed	On-going
1.	Redesigning and developing a digital oven and incubator as well as packaging of NIMR Biotech products.		On-going
2.	Design and development of NIMR Biotech Solar electrophoretic machine		On-going
3.	Development of Policy Document	Completed	
4.	Production of more reagents and laboratory consumables		On-going
5.	Publication on validation of NIMR Biotech Electrophoretic machine	Completed	
6.	Validation of more of our machines		On-going
7.	Design and development of a digital Colorimeter for blood chemistry analysis		Yet to start
8.	Development of Hepatitis C quantitative kit & Yellow fever IgG ELISA assay		On-going

ACHIEVEMENTS

- Developed, printed and launched a RIND Policy document.
- Publication in a peer-reviewed journal of a validation report of NIMR BIOTECH-Electrophoretic Machines.
- Commercialization of RIND products
- Repairs and servicing of medical equipment in NIMR
- Development of new proposals on POINT-OF-CARE BIOSENSOR FOR EARLY CANCER DETECTION PROPOSAL

CAPACITY DEVELOPMENT (CONFERENCES/ WORKSHOPS/PIECES OF TRAINING ATTENDED

- NOTAB WORKSHOP; Workshop training on **Intellectual Property (IP) Management, Patent Information Search, Patent Drafting Procedures, and other IP issues** for Researchers and Inventors. (Sept. 22, 2023)
- INTERNATIONAL CONFERENCE ON HEALTH ADVANCES INNOVATION RESEARCH (7-9TH NOVEMBER 2022)
- 5th LASU Research and Innovation Fair (12th & 13th) September 2023. NIMR -RIND received “the Best Innovation Award”

NUMBER OF BSc, MSc, PH.D. STUDENTS SUPERVISED

Two Ph.D. students

NUMBER OF NYSC, SIWES, INTERNSHIP

None

COLLABORATIONS AND PARTNERSHIPS (INTERNATIONAL AND LOCAL)

The RIND public-private partnerships include but are not limited to the under-listed organizations:

Public Partnership

1. Nigerian Center for Disease Control (NCDC)
2. Center for Human and Zoonotic Virology (CHAZVY), CMUL – Lagos
3. Biorepository Clinical Virology Laboratory (BCVL), UCH-Ibadan
4. National Office for Technology Acquisition and Promotion (NOTAP)
5. Obafemi Awolowo University (OAU), Ile-Ife
6. The University of Lagos, Dept of Cell Biology and Genetics
7. Usman Danfodio University Teaching Hospital, Sokoto, Dept of Haematology and Blood Transfusion
8. The University of Nigeria Teaching Hospital Enugu, Dept. of Haematology and Blood Transfusion
9. Nigerian Institute of Oceanography & Marine Research, Lagos, Dept. of Biotechnology
10. Microbiology Department of NIMR.

Private Partnership

1. Biologix
2. 54Gene
3. Clina-Lancet Laboratories
4. CCHub
5. Opolo Global Innovation Ltd

GRANTS / FELLOWSHIP AWARDS

1. GRANT NUMBER: NM-IGF-23-0086-02

CHALLENGES

- Absent or Inappropriate Showroom
- Deficiency of dedicated fit-for-purpose permanent RIND Unit staff
- Lack of funding and dedicated office space for innovative Researchers
- Misconception of the position of RIND Unit by NIMR Community
- Lack of conducive office space for RIND Unit personnel
- Inadequate office equipment for RIND Admin. Office/ Secretariat
- Inadequate budget line for RIND which affects the current performance
- Non-uniformity/ poor finishing of our hand-fabricated products concerning size, shape, width, etc.

WAY FORWARD

- RIND should start operating as a Centre with various Units as detailed on the Organogram to fulfil her mandate.
- A dedicated budget line should be established and given to RIND for innovation
- Establishment of resource mobilization and accountability mechanism
- Providing a dedicated Accountant who is not overwhelmed with work to handle RIND's accounts for prompt response when accounting issues are raised.
- Create a conducive office space and workshop for RIND staff

2024 WORK PLAN

Work Plan for the year 2024				
Research Activity per Quarter	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Patenting of products				
Setting up of IPTTO Office in NIMR				
More Validation and Product Testing of NIMR Biotech Products				
Re-designing and Packaging of products				

SOME OF OUR FINISHED PRODUCTS

**NIMR Biotech Biological Incubator****NIMR Biotech Biological Oven****NIMR Biotech Genotype Machines- Model 1
NIMR Biotech Genotype Machine Model II****Blood Genotyping Electrophoretic
Machine. Made in Nigeria. Model I:**

Haemoglobin Genotypes can be determined using the cellulose acetate electrophoresis technique. A small quantity of blood is placed on a tile and mixed with two drops of saponin to lyse the blood. With the aid of an applicator stick, the hemolysate is placed on the cellulose acetate paper and electrophoreses in Tris buffer solution for 15-20 minutes at 220v. Controls from hemolysate from blood samples of known HbAS and HbAC are used as control.

MODEL II:

Haemoglobin Genotypes can be determined using the cellulose acetate electrophoresis technique. A small quantity of blood is placed on a tile and mixed with two drops of saponin to lyse the blood. With the aid of an applicator stick, the hemolysate is placed on the cellulose acetate paper and electrophoreses in Tris buffer solution for 15-20 minutes at 220v. Controls from hemolysates from blood samples of known HbAS and HbAC are used as controls.



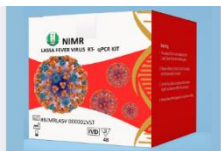
NIMR Biotech Bucket Centrifuge



NIMR Biotech Hematocrit Centrifuge



- The NIMR Biotech DNA and Total RNA purification kits are formulated for the rapid isolation and purification of DNA or Total RNA from different specimens.
- The kits are based on silica-gel membrane adsorption for DNA or RNA purification, which allows the removal of impurities and inhibitors from nucleic acid. DNA and Total RNA purification kits are formulated for the rapid isolation and purification of DNA or Total RNA from different specimens.
- The extracted nucleic acid using these kits is suitable for several downstream applications.

Products by Joseph Shaibu

WORKS AND MAINTENANCE DEPARTMENT

INTRODUCTION

Works and Maintenance Department as usual provides support services on infrastructures such as Buildings, Electric power supply, Plumbing, Air-Conditioning, Repairs of Biomedical Equipment, Environmental cleaning, Transport and Logistics.

STAFF

S/N	NAME	DESIGNATION
1	Engr. E.O. Adedeji	Director of Engineering
2	Engr. Edomwonyi Osaro	C.E.E.
3	Mr. E.A Udofia	C.T.O. Civil
4	Mr. Yahaya Abdulmumuni	C.T.O. Bio. Med.
5	Mr. P. Akabueze	P.T.O. Electrical
6	Engr. Esuola Docas	Senior Engineer (Civil)
7	Mr. Prince I. Ogbuji	BME 1
8	Mrs. G.T. Okoli	P.T.O. Environment
9	Oluwagbemi Dele	CCO
10	Osunleke Dolapo	Ass Exc Officer li
11	Mr. Abu Jospeh	Senior Foreman Carpentry
12	Mr. Godwin Udomkpa	CMDM
13	Mr. E. K. Akintunde	CMDM
14	Mr. Ogunyelu O.	SFM Mason
15	Mr. Oluwakoya.O.	SFM R/A
16	Mr. Hassan. S.	SFM R/A
17	Mr. Ekpobia S. A	SFM Mason
18	Mr. Adeyanju E.O.	SFM Plumber
19	Mr. Owolabi Lateef	Craftman Electrical
20	Mr. Agunlejika Adedare	Motor Driver Mech
21	Mr. Salawu Ayokunle	Foreman Electrical
22	Mr. Olasupo Dauda	SFM Carpentry
23	Mr. Habeeb Fawole	Motor Driver Mech
24	Mr. Adesanya Stephen	SFM Mason
25	Mr. Okpe Emmanuel	Senior Driver Mech
26	Mr. Sodimu Nafiu	Motor Driver Mech

27	Mr. S.A. Adekoya	SFM Carpentry
28	Mr. Agboola Tosin	Ass. Lab. Technologist
29	Mr. Alao J.O.	Senior Foreman Plumbing
30	Mr. Kadir Ayomide	Craftman Electrical
31	Mr. V.E. Ekocho	SFM Electrical
32	Mr. Ajenu Boniface	Motor Driver Mech
33	Mr. Adeniyi Bukola Gbenga	Motor Driver Mech
34	Mr. Ezeubolo Donatus	Senior Foreman Electrical
35	Mr. D. Oluwagbemi	Chief Clerical Officer
36	Mr. A.W. Salami	Senior Motor Driver Mech
37	Mr. Jonah Yourwill. Bassey	Craftman Electrical
38	Mr. Ayodeji Ayo	SFM Electrical
39	Oyelekin Olanrewaju Ola	Motor Driver Mech
40	Mr. Akinsanya Oluwaseun	Motor Driver Mech
41	Oyelakin Lanre	Motor Driver Mech
42	Joseph Babatunde	Craftman Civil
43	Ubong Boniface	Motor Driver Mech

ANNUAL MAINTENANCE SERVICE CONTRACTS

The service contracts through signed agreements existing between the Institute and Professional Private Participators (Vendors) are as follows:

- 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 venture.

All the above-mentioned services were excellently executed to satisfaction throughout the year under review.

ROUTINE MAINTENANCE SERVICES

The routine maintenance services undertaken cut across the entire Civil, Electrical/Electronics, Biomedical, Transport, Environmental and Refrigeration/Air-Conditioning Divisions making up the Department. The activities of each Division and Unit for the year 2023 are as shown below:

ACTIVITIES

The activities of each Division/Unit in the Department for the year 2023 are as shown below:

CIVIL ENGINEERING UNIT

- Supervise the Construction of New CHVG laboratory.
- Supervise Renovation of NIMR Asaba outstation.
- Supervise Renovation of NIMR Maiduguri outstation.
- Design of NIMR Foundation Building.
- Design of New HIV Research Building.
- Rehabilitation of various offices/laboratory buildings.
- Furnishing of various offices.
- Attend to all work orders relating to civil, carpentry and plumbing.
- Regular fumigation of the Institute compound to prevent reptiles and rodents.

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 laboratories 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 for continuous and optimal performance.
- Ensuring steady Power Supply to all offices, Laboratories, Guest house and Residences.
- 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 lighting.
- Attend to all work orders relating to Electrical repairs.

TRANSPORT UNIT

- All Institute's vehicles were serviced as at when due throughout the year 2023.
- Some vehicles with expired tyres and bad batteries had their tyres and batteries replaced.
- Expired vehicle particulars were renewed.

ENVIRONMENTAL UNIT

- All waste generated by the institutes be it solid, domestic, gardener or medical wastes were evacuated as at when due.
- All the overgrown plants /grasses in the NIMR compound were trimmed.
- Regular cleaning of the drainages.
- Cleaning of in-house existing facilities and public toilets in the Institute.
- All overgrown 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.
- Training of IT students, interns and NYSC members.
- Incineration of Laboratory wastes and contaminated devices.
- Servicing Research and Diagnostic Laboratory equipment.

ACHIEVEMENTS

- Purchase and installation of 800KVA Mikano Generator.
- Renovation of NIMR Maiduguri outstation.
- 80% completion of the New CHVG Building.
- Routine services – Generators, Institute vehicles, Transmission lines, cleaning, incinerator/autoclaves, refuse disposal, fire extinguishers/other safety devices and fumigation done.

- Maintenance of high-tension line.
- Renovation of NIMR Asaba outstation.
- Design of NIMR Foundation Building.
- Design of New HIV Research Building.

CAPACITY DEVELOPMENTS

Number of conferences/trainings organized within the year under review - None

NYSC/INDUSTRIAL TRAINING/INTERN PROGRAMS

NYSC - 1 Industrial Trainees - 3

CHALLENGES AND WAY FORWARD

- Insufficient budget allocation to maintenance due to many priorities.
- Lack of modern tools for maintenance so there is need to purchase modern tools for maintenance purpose.
- Lack of stock of spares in the store leading to delay in maintenance.
- Recruitment of Technical personnel is paramount.
- Training and re-training of technical staff is needed.
- Bulk purchase of maintenance material should be encouraged as previously done.
- Planned or proactive maintenance is highly recommended.

2024 WORK PLAN

- Installation of Elevator in the Medical E-Library and Administration Building.
- Conversion of Motor garages to driver's lodge and scaling up of the medical compound fence wall.
- Renovation of the Residential Boys' quarters.
- Renovation of NIMR Abuja Outstation.
- Construction of NIMR foundation building.
- Construction of a New HIV Research Clinic and office complex.
- Completion of renovation work in Asaba Outstation.
- Equipping of the New CHVG Building.
- Routine servicing of all the Institute's generators, Transformers, Transmission Line, Feeders, Air conditioners, freezers, Autoclaves, incinerators and All Institute vehicles as and when due.
- Completion and commissioning of the New CHVG research lab building.



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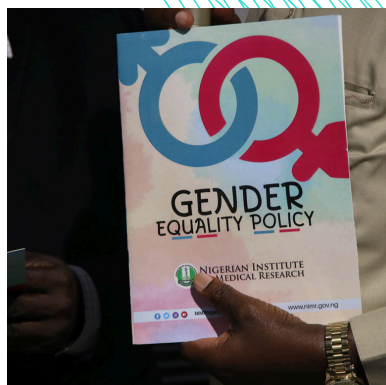
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