

EDITORIAL



As part of the NYA commitment to tackle the consequence of the COVID-19 pandemic in Africa, the project “Multifaceted Response Development from Research on COVID-19 in Africa” have seen the third (April edition) and fourth (May edition)

issues published in its series of COVID-19 Policy Briefs and related infographics under the project. In this issue of the Newsletter, these editions of the COVID-19 Policy Briefs have presented different recommendations to achieve Africa's multifaceted COVID-19 responses. In this issue, we also highlight different webinars organised to strengthen the Academy's activities.

Also, this Newsletter featured different academic articles, members and fellows news, activities of the Nigerian Academy of Science as well as other important activities of the NYA are highlighted in the newsletter.

On behalf of the Publicity Committee of the NYA, I sincerely hope you find this edition of the NYA newsletter inspiring and educative.

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MURDER COVID-19 IN AFRICA:

The NYA COVID-19 Policy Brief and Infographic

As the NYA continues its efforts to resolve COVID-19 pandemic, the Academy has published its third (April edition) and fourth (May edition) issues in the series of COVID-19 Policy Briefs and related infographics under the project, “MURDER COVID-19 in Africa”. In these editions of the COVID-19 Policy Briefs, the project identified different areas that require the full attention of African Governments to achieve multifaceted responses in maintaining research and supply of COVID-19 vaccines.

The April Edition: Reaching The Community On COVID-19 Vaccination Through Sensitisation Of Muslim Scholars and Imams



To promote community COVID-19 vaccine acceptance, an advocacy and sensitisation programme was organised by the National Primary Health Care Development Agency (NPHCDA) in collaboration with the Nigerian Supreme Council for Islamic Affairs, Northern Traditional Leaders Committee on Primary Health Care Delivery, and the Presidential Steering Committee on COVID-19. The outcomes of the programme showed that a sustained sensitisation to the public could improve vaccine acceptance in the community, allay the fear of reluctance, resistance, or even outright rejection and opposition to the COVID-19 vaccines. Hence, the need to create more strategic awareness through various routes of communication and information dissemination. This is achievable through sensitisation workshops and Town Hall meetings by the relevant agencies and religious/traditional leaders.

The May Edition: Future Pandemic Preparedness And Emergency Responses



To institutionalise policies at preventing or reducing the burden of future disease outbreaks and pandemics, the NYA identified the following various approaches and emergency preparedness designed to achieve multifaceted responses:

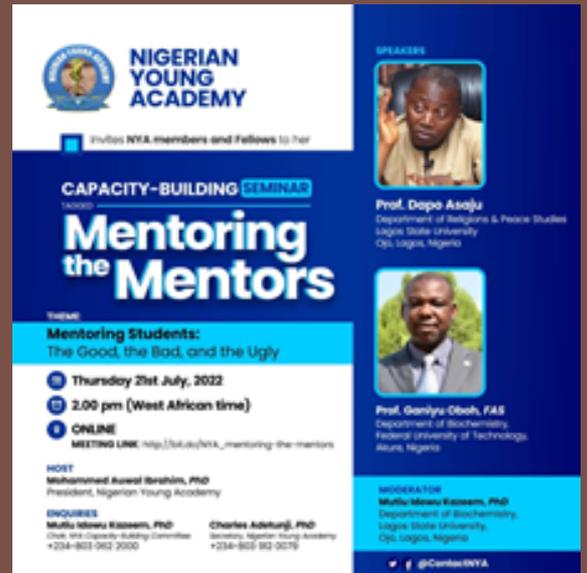
1. Regional Knowledge Hub/Pandemic Institute: The Policy Brief identifies the need to establish hands-on national and regional institutes on infectious diseases that are endemic or peculiar to Africans and the region.

2. Sentinel Epidemiological Surveillance at One-health: To enhance Africa's preparedness for seasonal transmission through the epidemiological surveillance at One-health, the Policy Brief also identifies the need to continue fostering relationships among African member states in a bid to improve sentinel surveillance and sequencing capacity for effective strain monitoring of aetiologies of the current pandemic and all other endemic diseases.

3. Biobanking and Genomic Database: The project also describes the need to establish more biobanking facilities and a database within the African region. The biobanking facilities will strongly assist in the area of the sample and isolate preservation that is crucial for laboratory diagnostics, therapeutics and vaccine seed strain selection and development.

4. Regional Pharmaceutical and Non-pharmaceuticals Interventions: The Policy Brief further recommends the need for African countries to invest more in the establishment of molecular laboratories in major research institutions, including hospitals. External funding to support research in infectious diseases research, mobile molecular laboratories, regional laboratory equipment manufacturing and local vaccine production are among the recommendations.

5. Community Hygiene and Biosecurity: The Policy Brief recommends the need for classical intervention strategies including the discouragement and elimination of arthropods, rodents and other animal manifestations by the community to ensure a cleaner environment in different African communities. The report further recommends the need to control or prevent encroachment of the forests, animal trading, mixed transportation of animals and humans, advocacy and sensitisation programmes and strengthening transborder biosecurity to adhere to common public health practices.



The NYA on the 21st of July 2022 held its second capacity building webinar for all Members and Fellows tagged “**Mentoring the Mentors**”. The webinar, themed “**Mentoring Students: The Good, The Bad and The Ugly**”, featured two guest speakers: Professor Dapo Asaju (Department of Religions and Peace Studies, Lagos State University, and former Vice-Chancellor, Ajayi Crowther University) and Professor Ganiyu Oboh, FAS (Department of Biochemistry, Federal University of Technology, Akure, Ondo State). Moderated by the Chairman of NYA Capacity Building Committee, Dr. Mutiu Idowu Kazeem, the speakers clearly emphasized the value and importance of mentorship. They further shared valuable tips for becoming impactful and successful mentors and also discussed the complexity/difficulty associated with mentor-mentee relationships. Using a practical approach, lessons derived from previous skills and experience were discussed with the participants.

MEMBERS AND FELLOWS NEWS

MEMBERS NEWS



Dr. A. L. Ogundajo

Dr. Akintayo Lanre Ogundajo has been promoted to the rank of Associate Professor in the Department of Chemistry, Lagos State University, Ojo. Dr. Ogundajo's current research interest is in Natural Products and Organic Chemistry.



Dr Mutiu I. Kazeem

Dr. Mutiu Idowu Kazeem has been appointed to serve as Pioneer Ag. Head of the newly established Department of Science and Laboratory Technology (SLT), Lagos State University. Dr Kazeem is an Associate Professor in the Department of Biochemistry, Lagos State University, Ojo.



Dr Charles Adetunji

Dr. Charles Adetunji has been appointed to serve as Ag. Dean of Faculty of Science, Edo State University. Dr. Adetunji is an Associate Professor, Department of Microbiology, Edo State University, Iyamho.

U-Index:
A new universal metric as a unique indicator of researcher's contributions to academic knowledge

The NYA fellows have developed a proposed U-Index, a new universal indicator for measuring a researcher's scholarly impact. The U-index is the average weighted ratio of citation rates per annum of one's research works relative to the Impact Factor of the respective publication outlets. It measures a researcher's academic impact based on the contributions that such individual has made in authoring scholarly articles with or without citations. In their article, they demonstrate that U-index is a viable metric for gaging contributions to academic knowledge across the various fields of study or practice. Various advantages and limitations of the U-Index have been described in the article, which is freely accessible [here](#). The fellows, Drs. Temitope G. Jaiyeola, Ezra Gayawan, Olubunmi Atolani, and Profs. Mojisola R. Usikalu and Oluyomi S. Adeyemi are a collaboration of NYA fellows from different affiliated Institutions.

FELLOWS NEWS



Prof. U. I. Chijioke

Prof. Uzochukwu Ikemefuna Chijioke has been nominated by the President of Nigeria to serve as Resident Electoral Commissioner. Prof. Chijioke is a Professor of Medicinal Chemistry in the Department of Pharmaceutical and Medicinal Chemistry, Nnamdi Azikiwe University, Awka.



Prof. A. H. Adebayo

Prof. Abiodun Humphrey Adebayo has been elected as a Council Member and Trustee representing Constituency III into the Governing Council of the Association of Commonwealth Universities (ACU). Prof. Adebayo is of the Department of Biochemistry and the current Vice Chancellor of the Covenant University, Otta.

MOLECULAR RESEARCH COULD HELP NIGERIA SOLVE A HOST OF HEALTH PROBLEMS



A member of the NYA, **Dr Chinwe Chukwudi** explores how molecular research could help solve many indigenous/peculiar and global health challenges ravaging Nigeria and Africa, and calls on all

stakeholders to invest in funding to increase capacity and access to the facilities necessary to improve this important area of research. In her recent article published in "The Conversation", she highlights the need for molecular research in Africa for the possible personalisation of medicine based on a patient's DNA and the genetic composition of microbes, which may be key to progress in the treatment of diseases such as sickle cell anaemia, diabetes and cancer, as well as numerous infectious diseases. She notes that performing molecular research requires expensive specialised equipment and reagents, which remains an impediment to African researchers. In her concluding remarks, she lays emphasis on the need to invest in molecular research in Africa through various national and international funding bodies by increasing funding allocation to molecular research, and urges universities and research institutions to encourage researchers by providing them with easy access to the equipment and facilities needed. Dr. Chukwudi is a Postdoctoral fellow at NIH and a Senior Lecturer in Molecular Pathology and Microbial Genetics, University of Nigeria. Her full article can be found [here](#).

NYA WEBINAR SERIES

June Edition



Mathematical Modelling and the COVID-19 Pandemic - Past, Present and Preparedness for the Future

Future Pandemic Response: Application of Geospatial Data in Nigeria for COVID-19 Response

The NYA Webinar 3.6 held on Thursday 30th June 2022 hosted Mr. Nazir Halliru of the Center for International Earth Science Information Network (CIESIN) and Professor Daniel Okuonghae of the Department of Mathematics, University of Benin as the guest speakers at the webinar.

Speaking on the topic, **“Future Pandemic Response: Application of Geospatial Data in Nigeria for COVID-19 Response”**, Mr. Halliru highlighted Nigeria's core geospatial data layers, the geospatial data approach to COVID-19 response in Nigeria, how preparedness/response to future pandemics can be strengthened through geospatial data as well as the need for comprehensive data streams from various organisations. Professor Okuonghae, on the other hand, discussed mathematical modelling concerning the COVID-19 pandemic in his presentation titled, **“Mathematical Modelling and the COVID-19 Pandemic-Past, Present and Preparedness for the Future.”** In his presentation, he discussed the cost-effective method to understand transmission dynamics and control of infectious diseases through mathematical modelling and showed how mathematical modelling has helped in epidemiology before COVID-19. He, further, discussed its application in different stages of the COVID-19 pandemic. In the course of the discussion, diverse lessons which could help in strengthening the nation's healthcare system and preparedness for future disease outbreaks were drawn. The discussion session witnessed contributions and questions from the participants. The webinar, which was moderated by Dr Isaac L. Animasaun of the Federal University of Technology Akure, is available on the [NYA YouTube Channel](#) and it is part of a series of webinars under the NYA project, “Multifaceted Response Development from Research on COVID-19 in Africa.”



As part of the NYA project, “MURDER COVID-19 in Africa”, the Academy held its fifth webinar series on 28th May 2022 with the topics, “**Mental Health Impact of COVID-19**” and “**Lessons from Issues Surrounding COVID-19 Pandemic in Northern Nigeria: Animal Surveillance as Future Preventive Strategy.**” The webinar hosted Dr Olayinka Atilola, an Assoc. Prof. at the Department of Behavioural Medicine of Lagos State University College of

Medicine, and Dr Nusrat Elelu, an Associate Professor at the Department of Veterinary Medicine of the University of Ilorin. Using relevant data in his presentation, Dr Atilola discussed the disease burden of COVID-19 – the fears, anxieties and disruptive social changes caused by the COVID-19 lockdown during the pandemic. He, further, showed various ways the pandemic led to increased mental health problems and his recommendations include improving mental health such as enhancing population mental health literacy, expanding tele-psychiatry services, among others. On the other hand, Dr Elelu brought to light diverse issues surrounding COVID-19 and proffered recommendations including the need for increased animal disease surveillance and adopting/strengthening of the One Health collaborative approach. The webinar, which was moderated by Dr Mutiat Ibrahim of the University of Lagos is available on the [NYA YouTube Channel](#).

GRANTS

Merck KGaA Darmstadt Germany Research Grants

The application phase for the 2022 research grants has started for projects on Artificial Intelligence, Drug Discovery, Chemical Synthesis and Sustainability. The deadline for submission of a research proposal is **31st August 2022**. Click [here](#) for more information and how to apply.

Wellcome Early-Career Awards

This scheme offers to fund early-career researchers from any discipline who are ready to develop their research identity and deliver shifts in understanding that could improve human life, health and wellbeing. The application closes on **18th October 2022**. Click [here](#) for more information and how to apply.

Wellcome Career Development Awards

This scheme offers to fund mid-career researchers from any discipline who have the potential to be international research leaders. They will develop their research capabilities, drive innovative programmes of work and deliver significant shifts in understanding that could improve human life, health and wellbeing. The application closes on **1st December 2022**. Click [here](#) for more information and how to apply.

FELLOWSHIPS, GRANTS & AWARDS

FELLOWSHIPS

Harvard Radcliffe Institute Fellowship 2023

Radcliffe welcomes applications from exceptional scholars, artists, and practitioners proposing innovative work that confronts pressing social and policy issues and seeks to engage audiences beyond academia. The deadline for applications in humanities, social sciences, and creative arts is **8th September 2022**. The deadline for applications in science, engineering, and mathematics is **29th September 2022**. Click [here](#) for more information and how to apply.

The Research Development Fellowship (RDF) Scheme

Research Development Fellowship (RDF) scheme supports researchers in Africa who are emerging leaders and are working on important challenges for human health to develop their skills as a researcher. The duration of the fellowship is a three to nine-month placement at a leading research institution in Europe or Africa, with additional support at your home institution before and after the placement, up to a maximum of £40,000. The application closes on **22nd September 2022**. Click [here](#) for more information and how to apply.

TWAS Postdoctoral Fellowships

2022 TWAS fellowships offer a series of unique opportunities to boost scientist research activities and advance their global network through:

[TWAS-CUI fellowship programme](#) tenable in Pakistan. Apply by **31st Aug 2022**.

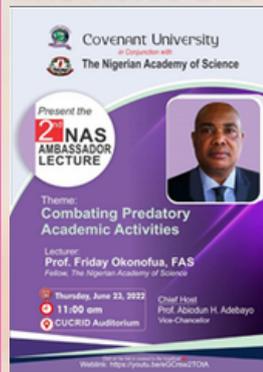
[TWAS-DBT fellowship programme](#) tenable in India. Apply by **15th September 2022**.

World Bank Group Africa Fellowship Program

The Africa regions of the World Bank Group (WBG) calls for application for the 2023 WBG Africa Fellowship Program. Through the fellowship, WBG aims to build the capacity of the next generation of African change makers in development research, policy making and promote the goals of reducing poverty in the region. The application closes on **25th August 2022**. Click [here](#) for more information and how to apply.

NAS CORNER

NAS Holds 2nd Ambassadorial Lecture



The Nigerian Academy of Science (NAS) held its 2nd Ambassadorial Lecture at the Auditorium of Covenant University Centre for Research, Innovation and Discovery (CUCRID), Covenant University, Ota, Ogun State, Nigeria. In its lecture held on Thursday 23rd June 2022 titled, “Combating Predatory Academic Activities”, Professor Friday Okonofua discussed the scopes, prevalence and emergence of predatory journals in academic practices.

He, further, discussed useful recommendations for combating the problem. The recording of the event is available [here](#).

Celebrating the Insulin Centennial - An Enduring Legacy for Science

The Nigerian Academy of Science, on the 8th of June 2022, hosted a webinar to commemorate the centennial celebration of insulin discovery. Moderated by Prof. Gabriel Ogunmola (Chancellor, Lead City University, Ibadan), discussions at the webinar focused on topical issues relating to the discovery of insulin in diabetes management, the burden of diabetes in Nigeria, trends in insulin availability, and current trends in anti-diabetes research. The webinar witnessed Prof. Abayomi Akanji, FAS (Professor of Medical Sciences Quinnipiac University, USA), Dr Sunny Kuku, FAS (Co-founder, Eko Hospital, Lagos) and Dr Gabriel Uwaifo (Ochsner Clinic, Louisiana, USA) as members of the panel. The webinar recording is available here on [NAS YouTube Channel](#).

AST PLATFORM

Call for Submission of Manuscripts

The Annals of Science and Technology (AST), a journal of the Nigerian Young Academy (NYA), hereby calls for the submission of manuscripts for publication in its next issue. The journal is indexed and abstracted by many reputable outlets including Google Scholar, EBSCO Discovery Service, J-Gate, ReadCube, Baidu Scholar, CNKI Scholar (China National Knowledge Infrastructure), Naviga (Softweco), KESLI-NDSL (Korean National Discovery for Science Leaders), Naviga (Softweco), Promi Central (ExLibris), Summon (Serial Solutions/ProQuest), TDNet and WorldCat (OCLC).

AST publishes both theoretical and experimental high-quality articles twice a year. It publishes research articles, state-of-the-art reviews and short communications in the field of biological, health, chemical, mathematical and physical sciences, as well as engineering and technology. More information on the journal including guidelines on submission can be found in the link below: <https://sciendo.com/journal/AST>.



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