

2020 AGNES Newsletter



AGNES

African-German Network
of Excellence in Science

PG 2

Message from
Chair of AGNES

PG 3

AGNES and
AGNES-PAWS Intra
Africa mobility grants

PG 12

AGNES and
AGNES-PAWS Junior
Researcher's grants

PG 19

Research initiatives of
AGNES Members on
COVID-19

PG 21

Advisory
board
meetings

PG 22

General Assembly and
Renewal of AGNES
Executive board

PG 22

Appointment of
a new advisory
committee member

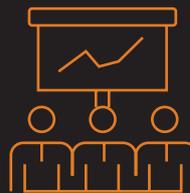
PG 23

COVID-19 related
challenges and
adaptive solutions

PG 24

Perspectives
for 2021

2020: A year
under the
stress of
COVID-19!



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Message from Chair of AGNES

The COVID-19 global pandemic has made 2020 a very stressful year for all. Most of AGNES activities have been impacted. However, adaptive strategies were used to cope with the crisis, and allowed us to continue accomplishing our goals



Prof. Romain Glèlè Kakai



Dear AGNES members and friends, it is with a great pleasure I am presenting you the 2020 Newsletter of the African-German Network of Excellence in Science (AGNES). The COVID-19 global pandemic has made 2020 a very stressful year for all. Most of AGNES activities have been impacted. However, adaptive strategies were used to cope with the crisis, and allowed us to continue accomplishing our goals. Thus, our programs to support African junior researchers (AGNES/AGNES-PAWS Intra Africa mobility grants, AGNES/AGNES-PAWS Junior Researcher grants)

were the most targeted. I am sure that individually you have also been affected and that you have been able to find solutions to face the crisis. On behalf of the AGNES Board, I would like to express my gratitude to our sponsors. I also take the opportunity to thank all AGNES members for the support in promoting excellence in science and contributing to skills development of new generation of scientists and leaders of tomorrow. I hope that AGNES can still rely on your commitment to spread its funding opportunities as well as its vision and mission.

AGNES and AGNES-PAWS Intra Africa Mobility Grants

A call for applications (in English and French) was launched on February 1st 2020. It was publicized via e-mail to AGNES members and friends (hosts, previous grantees...), on our website (<https://agnes-h.org/>), our social media (Facebook and Twitter) and via the broadcasting channel of RUFORUM. One

hundred fifty five (155) applications were received (108 for AGNES MG and 47 for AGNES-PAWS MG).

The selection meeting was held online on September 30th 2020 because of the COVID-19 global pandemic. The meeting was hosted by Prof Dr Alexander Ferrein, using the Webex network

of the University of Applied Sciences, Aachen. Overall, 8 AGNES mobility grants were awarded to young male researchers and 15 AGNES-PAWS mobility grants to young female researchers from sub-Saharan Africa for 2020. Their biographies are presented below.

AGNES Intra Africa Mobility Grantees



↓ **Derrick Dai Tometin**
Benin

My name is Derrick Dai Tometin, 31 years old, a doctoral student at the start of the second year of a thesis in Energy Efficiency and Renewable Energies at the Doctoral School of Engineering Sciences at the University of Abomey-calavi. I also hold an engineering degree and a research master's degree in the field. I am particularly passionate about research in my field, since Renewable Energies are the new energy sources towards which all of humanity is now focused. I have already published 7 articles in international scientific journals. I am knowledgeable, intelligent and very scientifically critical. Since obtaining my engineering degree, I have been an entrepreneur in the installation of solar and energy efficiency systems in buildings and industries.

My ambition is to publish more articles and to break the world record. I also want to have a concrete impact on Africa and the world through the discovery of innovative technologies in the field of Renewable Energies and Energy Efficiency.



↓ **Uzochukwu Okagu**
Nigeria

Innocent Uzochukwu Okagu is a vibrant young Nigerian with great passion for teaching and research, and a promoter of academic excellence. He is a University Lecturer at the Department of Biochemistry, University of Nigeria, Nsukka where he is teaching courses in Metabolic Integration, Medical Biochemistry, Tissue Biochemistry, Membrane Biochemistry, Toxicology,

Enzymology and Bioinorganic Chemistry. He got his first degree in Biochemistry at the University of Nigeria, Nsukka where he graduated in 2012 with second class honours, upper division (CGPA 4.36/5.0). After his one year National Youth Service Corps (NYSC) programme at the Institute of Human Virology (IHV)-Nigeria, Innocent embarked upon and completed a Masters Degree programme (M.Sc.) in Medical Biochemistry at the same Department and institution with Distinction (CGPA of 5.0/5.0) in 2016. He is currently having his doctoral training in Medical Biochemistry at the same institution. He has attended many workshops and conferences, both locally and internationally where he read papers, and has published research papers in local and international journals. He is a member of some learned society including Nigeria Society of Biochemistry and Molecular Biology (NSBMB), Breast Cancer Association of Nigeria (BRECAN), Society of Basic and Clinical Toxicology of Nigeria (SBCTN) and Nigerian Society of Experimental Biology (NISEB) among others.

Innocent has research interest in the following areas: (a) Natural Product Research (b) Dietary interventions for chronic diseases, fetal/infant development and pregnancy (c) Toxicology.



↓ **Moses Kigozi**
Uganda

I am Moses Kigozi from Uganda a PhD student in the Department of Materials Science and Engineering (Energy group) at African University of Science and technology Abuja (Nigeria). I have a Master of Science in Chemistry from Makerere University and a Bachelor of Science Technology Chemistry from Kyambogo University. I work with Busitema University, as a Chief Technician, in the department of Chemistry since 2010.

My research is in the area of conversion of Biomass and graphite into derived carbon and graphitized carbon and its related materials for energy storage application, which include super capacitors, hybrid and batteries. My research work is focusing on utilization of the biomass of maize cobs by activation for activated carbon, and graphitization of the materials for graphitized carbon using chemical treatment like oxidation and exfoliation to convert the materials into graphene materials. The research study involves using a combinatorial alkali metal oxide-graphene composites as polymeric solid electrolytes and electrodes. With focus on the stability of the reactants, reduction potentials,

rates of charge/discharge, bond formation, nucleation and intermetallic phase among others. The research aims at the identification and determination of a wide nano metal oxide-graphene composites with clean electrocatalytically active surfaces for proton exchange membrane (PEM) and electrodes. *Getting AGNES Mobility funds 2020 will help me to improve and perfect my practical skills and exposure to different instrumentation. My research visit will not only widen my knowledge and skills but also give a clear pathway to my research with positive impact on my personal life and my academic career.*



↓ **Oyebayo**
Nigeria

Oyebayo is a Ph.D. student at the Department of Zoology, University of Ibadan, Nigeria. His area of specialisation is Ecology and Environmental Biology. His research interest is on the effects of environmental contaminants on biotas. At present, he is working on quantifying heavy metals and polycyclic aromatic hydrocarbons in environmental matrices, including soil and water. He is also investigating the effects of these contaminants on small resident ruminants.

Over the years, Oyebayo, with his supervisor's mentorship, has published his findings in reputable journals and presented his data at local and international conferences. Oyebayo is one of the promising young researchers from Africa. He has represented Nigeria

and the continent on different occasions at the global stage. He is a beneficiary of numerous travel and research grants, such as the Association of Commonwealth Universities, Exceed-Swindon, DAAD, and Academy project. He plans to apply for a postdoctoral position after his Ph.D. study and pick up a job at one of the research institutes. Oyebayo is sociable and a lover of sports. He loves travelling, meeting people, cooking, and learning new languages. He is also politically inclined.



↓ **Akeem Babatunde Sikiru**
Nigeria

Akeem Babatunde Sikiru is currently a Ph.D. research student at the Department of Animal Production, Federal University of Technology, Minna, Nigeria. He was also a research scholar at ICAR – National Institute of Animal Nutrition and Physiology, Bangalore, India sponsored by The World Academy of Sciences (TWAS), and the Department of Biotechnology (DBT) of the Government of India (GoI). He currently researches in the area of Reproductive Physiology with emphasis on the molecular physiology of stress impacts on reproductive performances. For AGNES Intra – Africa Mobility Fellowship, Akeem will be working under the supervision of Prof. Dr. Johanna Lindhal at the International Livestock Research Institute (ILRI), Nairobi, Kenya. His research at ILRI titled "Assessment of Aflatoxin B1 infestation effects on performances, oxidative stress biomarkers and expression of

functional genes in Sprague Dawley rat models” which is an attempt for understanding the underlying roles of oxidative stress as a promoter of toxicogenomics complications due to aflatoxin B1 in humans and animals using rats as models.



↓ **Sunday Juwon Olatunji**
Nigeria

Sunday Juwon Olatunji was born into the family of Reverend Femi Olatunji on 17th December 1989 in Ilorin, Kwara State. He hails from Omin, Yagba West local government area of Kogi State. He is the third of six (6) children. He is currently a Ph.D. student under the supervision of Professor A. C. Tella. Sunday attended New Birth nursery and primary school, Ilorin (1994 – 2000) for his basic education. Afterwards, he proceeded to Bishop Smith memorial college, Ilorin, Kwara state (2000 – 2006) for his Secondary Education. His tertiary education began in the University of Ilorin in 2006 where he studied Chemistry and was awarded a B.Sc. Chemistry (Second Class Upper) in 2010 and later proceeded for his postgraduate studies in the same school and was awarded a M.Sc. Chemistry (Distinction) in 2014. In 2016, he started his Doctorate degree in Chemistry also in the University of Ilorin. Sunday Olatunji earned several awards from his secondary school days to his postgraduate days, notable among which were the Overall best graduating student of the year (2006), Bishop Smith Memorial College, best graduating science student of the year (2006),

Bishop Smith Memorial College and Best graduating Student of the year (2014) in Chemistry Department, University of Ilorin. Sunday Olatunji is a distinguished scholar, goal oriented, focused, dynamic with an insatiable appetite for knowledge and a wide variety of research, analytical, inorganic, instrumentation and interpersonal skills, and a genuine interest to utilize quality experience to contribute effectively in capacity building and further development of Africa. He has synthesized many novel inorganic complexes/MOFs, which have been used for several environmental and biomedical applications. He has several articles in reputable local and international outlets. He has attended several professional training programmes across the globe and a member of Royal Society of Chemistry.



↓ **Stephano Tambo Tene**
Cameroon

I am Stephano Tambo Tene, Cameroonian citizen, born on January 6th, 1993 in the city of Dschang (West Cameroon Region). Now registered at Ph.D level, I hold a Master degree research in Biochemistry/ Nutrition and Food Security obtained at the University of Dschang Cameroon since July 2017. I have competences in the research domain based on infant nutrition and more precisely food transformations in order to produce weaning food at low cost. I have already carried out work on the influence of production conditions and extractions

(soaking time, extraction time, soaking temperature, maturation time) on the activities of enzymes presents in corn seeds. I also made manipulation on the evaluation of enzymatic activities, effects of inhibitory components on enzymes activities, evaluation of nutritional and functional properties of flours and starch of some germinated corn seeds. My research interests are in the sanitary structures notably the services of paediatrics, the dietiticians, nutritionists, foodstuffs industries and the NGO working on the infant malnutrition. My research aims at the improvement of the infant nutrition, the advice for a better use of food for the production of local infantile flours and the valorization of local food resources traditionally used in Cameroon and Africa to prepare the infantile mushes. It should be noted that I have already published several scientific articles in this field.



↓ **Walter Ojok**
Uganda

Walter Ojok was born on April 20, 1982 in a rural part of Gulu District, Northern Uganda. He attended Kweyo Primary School where he passed in division 1. With his good results in Primary Leaving Examinations, Walter failed to join the school of his choice as result of the Lord's Resistance Army (LRA) insurgency, which had displaced his family, robbed and destroyed his assets and livelihoods too. As a result, Walter joined Gulu Senior Secondary School where he braved the difficult times at the peak of the LRA rebellion and still

excelled by obtaining grade one result in the Uganda Certificate of Education. Walter then joined Gulu College for Advanced Level where he obtained distinctions in Uganda Advanced Certificate of Education. Consequently, Walter was admitted at Mbarara University of Science and Technology on National merit to study Bachelor of Science with Education where he obtained

Second Class Upper Division with CGPA of 4.63. He then enrolled for Master of Science in Chemistry which he also completed successfully. Due to his hard work, steadfastness and academic potential, the Department of Chemistry at Mbarara University of Science and Technology nominated him for DAAD scholarship, which he was awarded on merit to study PhD in

Chemistry. However, the limitation of inadequate laboratory has affected Walter's PhD research. Walter was awarded the AGNES Intra-Africa Mobility grant for Junior researchers for 2020 to sponsor his PhD research at an advanced laboratory at the University of KwaZulu Natal, Westville campus where he hopes to do part of his PhD research.

AGNES PAWS Intra Africa mobility grantees



↓ **Olyvia Gwladys Fadeyi**
Benin

Having completed my training in management of natural resources, I focused on the management and conservation of biodiversity. I was therefore interested of fungi kingdom, which is still poorly studied in West Africa. For this purpose, my Bachelor's works (2014) are focused on Ethno mycological study and identification of priority wild fungi in the 'Monts-Kouffè' region (central Benin). In 2018, I worked on ethnomycological study of some chemical properties and toxicity in Amanita (Basidiomycota, Fungi) in Benin as part of my Master thesis. In March, 2019 I got the price of best and young oral communicator at the international COPED6BVZ 2019 symposium organized by the Chemical Society of France in Brazzaville. In February 2019, I got the price of best student by the Rectorate of the University of Parakou (Benin) during the day

of merit of the best students of the year 2015-2017 (Master level). Since 2015 up today, I am research assistant in the Laboratory of Ecology, Botany and plant Biology (LEB), which mainly deals with monitoring and conservation of biodiversity. Mainly attached to the research unit of Tropical Mycology and Plants Soil Fungi Interactions (MyTIPS) that focuses on mycology, I worked on ongoing projects in this research unit. These are work on: (1) ecology and diversity of ectomycorrhizal fungi in the Okpara Forest, (2) monitoring of fungal diversity and evaluation of the effects of climate parameters on the temporal distribution of ectomycorrhizal fungi in 'Ouémé supérieur' forest reserve in North Benin from 2017 to 2018, (3) promotion of useful wild fungi in west Africa in partnership with the German Society for International Cooperation (GIZ). In the same laboratory, I also participated in research on the conservation of forest ecosystems and the preservation of habitats. Currently I am a PhD student to address ethnomycological, chemotaxonomic study and secondary metabolites of some macromycetes from Tropical Africa. I will engage in conservation of biodiversity and especially wild fungi in their natural habitats.

Also, I plan to involve myself in applied mycology in order to value my achievements in both environmental and social terms. When I will get opportunity, I will share my knowledge with young mycologists.



↓ **Anna Alfeus**
Namibia

Ms Anna Alfeus is a Doctoral research student in Environmental Health at the University of Pretoria in South Africa focusing on air quality management and Environmental Epidemiology. The research study aim to conduct a source apportionment analysis (PMF model) and Health risk assessment of PM2.5 in Cape Town. Another important objective in this study is to conduct a case crossover epidemiological study using the classification and regression tree analysis to determine the joint effects of NO₂, SO₂ and PM₁₀ on Cardiovascular and Respiratory

disease mortality in Cape Town, South Africa. The data collection expenses were funded by the NRF grant (UP Faculty of Health Sciences Ethics ref 36/2017). Ms Alfeus started as a self-funded student but during the second year has been nominated by PhD bursary office of the University of Pretoria to cover for the tuition fees.

Ms Alfeus is an MSc graduate in Environmental Contamination and Toxicology from the University of Porto, Portugal funded by the Kite partnership within the framework of the Erasmus Mundus Action 2. The MSc dissertation focused on exploring the Portuguese cyanobacteria as a source of compounds with potential in skin care resulting in a publication of a review article. The experimental laboratory research work was partially supported by FCT- Foundation for Science and Technology under the project UID/Multi/04423/2013 and by the Structured Program of R&D&I INNOVMAR – Innovation and Sustainability in the Management and Exploitation of Marine Resources (reference NORTE-01-0145-FEDER000035, Research Line NOVELMAR), funded by the Northern Regional Operational Programme (NORTE2020) through the European Regional Development Fund (ERDF). Ms Alfeus is a graduate of the Bachelor Honours of Environmental Health Science from the Namibian University of Science and Technology. The Bachelor Degree thesis focused on studying the Level of Carbon monoxide in Kuisebmond, Walvis Bay. Ms Alfeus is a lecturer at the University of Namibia in the School of Public Health, Department of Environmental and Occupational Health, teaching environmental

health oriented modules in undergraduate and postgraduate programs. Therefore, Ms Alfeus possess teaching, health research methodologies and computer skills.



↓ **Christiana Cudjoe**
Ghana

Christiana Cudjoe, Dapuliga is a Microbiologist at the prestigious Kwame Nkrumah University of Science and Technology, Ghana. For her doctoral degree, she is considering the use of lytic phage cocktail as biocontrol for food borne pathogens including Salmonella and E. coli. Miss Dapuliga is a WiSTEM advocate and a local member in her institution. She is goal oriented and passionate about research. She worked closely with Phages for Global Health, a USA based organization in 2019 to host the first West African Phage workshop in Ghana. She is a beneficiary several trainings and workshops including Wellcome Genome Campus: advanced courses on Antimicrobial Resistance, WACCBIP- Neglected Tropical Diseases, Toxicology Internship Program, NEF-NVRI and a recipient of the 2019 WARA fall grant. She is a member of the International Society of Infectious Diseases. Christie, as fondly called enjoys singing, traveling, reading, dressing smart and drinking tea. She is excited to commence her fellowship under AGNES-PAWS junior researcher program.



↓ **Aude Dougue Ngueguim**
Cameroon

Aude Dougue Ngueguim is a Cameroonian, born in Bafou (Cameroon) on March 7, 1992. She is a PhD student still 2018 at the University of Yaoundé I, under the supervision of Prof Fabrice FEKAM BOYOM (University of Yaoundé I) and Prof Jean-Paul DZOYEM (University of Dschang). She obtained her Bachelor and Master of Science in Biochemistry respectively in 2013 and 2016 at the University of Dschang (Cameroon). Aude is interested by the genotyping of *Candida* species isolated from at risk patients and isolation and identification of bioactives metabolites produced by endophytic fungi. She has a scientific expertise on isolation of bioactive metabolites from endophytic fungi or plant extract and screening of their biological properties and isolation and identification of *Candida* species and endophytic fungi.

Member of Laboratory for Phytobiochemistry and Medicinal Plants studies of Biochemistry Department at University of Yaoundé I (Cameroon), Aude is also member of HIGHER Women Consortium and she had participated to the conference taking place every years. She is awarded of some fellowship such as AGNES Grant, sponsored by BMBF (the German Federal Ministry of Education and Research), with support of the Alexander von Humboldt

Foundation (AvH), AUF of collège doctoral « Mathématiques, Informatiques, Biosciences et Géosciences de l'environnement » Afrique Central et Grands lacs and TWAS fellowship of Research and Advanced Training (Pakistan). Aude has as future projects Sequencing of resistance genes of *Candida* cryptic species, susceptibility test of endophytic extract on *Candida* resistance genes and quorum sensing studies of endophytic fungi of medicinal plant.



↓ **Gosaitse Tubatsi**
Botswana

Ms Gosaitse Tubatsi is a 2nd year PhD student in the Department of Biology and Biotechnology at Botswana International University of Science and Technology (BIUST). She has passion for health and environmental research. Her current project is on 'Cytotoxicity and proteomics analysis on the interactions of nAg and Ag⁺ with *Bacillus subtilis* in fresh water systems". The project employs proteomic approaches to study toxicity of engineered nanoparticles in a natural environment, and aims to develop biomarkers for assessment of nanoecotoxicity. Ms Tubatsi holds a Masters in Biology (Environmental Virology) from BIUST where she was quantitatively detecting enteric viruses (Rotavirus, and Norovirus GI and GII) in wastewater and river water. Ms Tubatsi serves as a Teaching and Research Assistant at the same university.



↓ **Hambeleleni Davids**
Namibia

Trained as an astrophysics researcher, I graduated in Physics from the University of Namibia with a Bsc (Honours) degree in Physics and Geology. I gained obtained an MSc from the North-West University in 2017, and I am currently finalising a Ph.D. from the same university at the Centre for Space Research. My research is on the modelling of emission of high-energy gamma-rays from Galactic globular clusters. My MSc and Ph.D. were both funded by the German Academic Exchange Service (Deutscher Akademischer Austauschdienst or DAAD) and the North-West University. I have keen interest in astronomy and astrophysics, and would like to understand the physical phenomena governing our solar system, our home Galaxy and the Universe as a whole. I am a member of the internationally acclaimed High Energy Stereoscopic System (H.E.S.S.) and has been conducting both data analysis as well as providing theoretical input on the topic of globular cluster modelling within this international collaboration. H.E.S.S. is a system of Imaging Atmospheric Cherenkov Telescopes, and it detects cosmic gamma-rays from outer space. The exposure to the giant H.E.S.S. telescopes, its technology and software made me interested in Astrophysics. These interests reflects on my research publications. I have two research papers published in Monthly Notices of the Royal

Astronomical Society (MNRAS) and the Astrophysical Journal (ApJ). I also have one proceeding paper. In addition to that I have one paper in review for publication by MNRAS. During my MSc and Ph.D. research, I have participated in several conferences, both local (Namibia) and international (SA and USA). I was funded by the Newton's Fund to visit Prof. G Cotter research group at the Department of Physics, University of Oxford, for one month during July 2018. The visit formed part of my Ph.D. research work. Furthermore, I am a Physics Lecturer at the University of Namibia teaching Physics Foundation. Hambeleleni Davids MSc.



↓ **Ines Ngoh**
Cameroon

Ines Ngoh is an Assistant Lecturer in the Department of Biomedical Sciences at the University of Buea, Cameroon where she is currently studying for a PhD in Cellular and Molecular Parasitology.

Ines PhD research focuses on characterizing *Plasmodium falciparum* genes and proteins that are involved in parasite invasion of human red blood cells. The goal of her project is to identify potential drug and vaccine targets against the blood stage malaria infection. She received her MSc in Integrated Health Physiology and Pathology from the University of Nottingham, United Kingdom where she studied as a Commonwealth shared

scheme Scholar. She is equally a mother of three beautiful kids, an Organization for Women in Science for the Developing World (OWSD) Scholar and a committed member of the OWSD Cameroon National chapter. Via her later role, she is a part of a subunit of Women that empower college girls in the field of Science, Technology, Engineering and Mathematics via outreach, mentorship and training workshops. Her overall goal is to continue to be a role model to many and provide the best evidence-based teaching to her students.



↓ **Affoué Bénédicte Koffi**
Côte d'Ivoire

Ms. Affoué Bénédicte Koffi is a PhD student at the Training and Research Unit of Earth Sciences and Mining Resources of the University Félix Houphouët-Boigny, at the laboratory of Soil, Water and Geo-materials Sciences (SSEG). She is a hydrogeologist specializing in Hydrogeology and GIS. Her doctoral research focuses on the understanding of the origin and health consequences of high levels of fluorides in drinking water in the view of sustainable planning and prevent human health.

Beyond her research activities, Ms. Koffi is currently Deputy Treasurer of the youth section of the African Association of Women in Geosciences (AAWG) in Côte d'Ivoire. She is also the deputy head of the Climate Change and Water Resources Network of the CAMES Thematic Research Program

(PTR Climate Change) Since January 2020. She participated in seminars related to capacity building with leading research institutions like the Swiss Center for Scientific Research in Côte d'Ivoire. These have allowed her to get knowledge on the concept of sanitation such as the valorization of human waste. Ms. Koffi intends to become a recognized leader in sciences with research interests in water resources, climate change, and public health.



↓ **Ngwene Hycentha Diengou**
Cameroon

Ngwene Hycentha Diengou, is a Cameroonian researcher holding a BSc (Microbiology) and MSc (Epidemiology and control of Infectious Diseases) from the University of Buea. She is a Microbiology PhD student in the University of Nigeria, Nsukka under the DAAD In region/In country scholarship scheme. She has lectured in the renowned National Polytechnic University Institute, Bamenda and has experience in research on prevention of infectious diseases in and out of Cameroon. She presented her research findings in the Africa Health Agenda International Conference in Kigali and she is an ICMR/AU-STRC International fellow. In 2016, Ngwene was an NEF fellow in the National Veterinary Research Institute, Vom, Nigeria. Following this fellowship, she joined the Clinton Health Access Initiative, identifying HIV-exposed infants and linking them to care.

Ngwene is currently working in the Institute of Medical Research and Medicinal Plant studies in Yaounde, Cameroon.



↓ **Faith Toluwanimi Olayiwola**
Nigeria

My name is Olayiwola, Faith Toluwanimi and I am a PhD student in the Department of Botany, University Ibadan. My research works centers on Management of selected rot pathogens of cassava (*Manihot esculenta*) using certain integrated approaches. I am interested in providing a framework information to understand the antagonistic potentials of the different selected *Trichoderma* species in managing *Fusarium solani* cassava root rot pathogen.



↓ **Omojufehinsi Moyonda**
Nigeria

Omojufehinsi Moyonda's experience in manufacturing, research and academic environments has helped her develop excellent analytical, communication and problem solving skills which she uses in her interactions with students and colleagues at Nasarawa State Polytechnic Lafia, Nasarawa

state and Community Secondary School, Asuna, Etinan, Akwa Ibom State, Nigeria.

As the daughter of pastors and educationists, good virtues and excellence have been her watchword from the onset. While education is her focus, she has interest and love for natural foods especially fruits and strongly believes in the prevention and treatments of diseases using natural products. She obtained her Bachelor and Master of Science Degrees (Biochemistry) from Lagos State University and University of Lagos respectively and currently a Doctorate Degree student in the Department of Biochemistry, University of Jos, all in Nigeria. During the course of her study in Lagos State University, she was awarded Lagos State Government Scholarship and Lagos State University Scholar Award as a mark of her distinction. She is an avid researcher and her work has been published in African Journal of Food, Agriculture, Nutrition and Development and FASEB Journal. As part of her thesis, she is currently investigating the anticancer activity of *Syzygium malaccense*, an apple which grows in Nigeria. Moyonda is married and lives with her husband and two young children in Abuja.

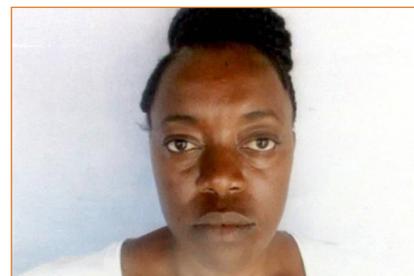


↓ **Jesugnon Fifamè Murielle Féty Tonouewa**
Benin

Jesugnon Fifamè Murielle Féty Tonouewa was born at August, 25, 1988 in Benin, West Africa. In high

school, I did the scientific series and I obtained my BAC series D in 2005. Then, I joined (with a double registration) the Faculty of Agronomy and the Faculty of Law and Political Sciences of the University of Parakou where in 2011, I obtained my agricultural engineering diploma with the mention very good and highest praise (highest honors) and my master's degree in law with the Honorable mention. In 2011, I obtained an Excellence scholarship from the University of Parakou to continue my DEA (Advanced Studies Diploma) studies. From 2012 to 2014 I did a DEA in sustainable management of natural resources at the (Pluridisciplinary Doctoral School of the University of Parakou). For my end-of-training research work I obtained a scholarship from ITTO (International Tropical Timber Organization) to do my laboratory works at CIRAD-Montpellier (France). In 2014, I defended my DEA thesis with very good and highest praise (highest honors). Between 2013 and 2015, I obtained research grants from the ONAB (national timber office of Benin) to conduct research on the technological properties of the main species of ONAB forests such as *Cedrela odorata*, *Gmelina arborea*, *Terminalia superba*. I am currently doing a doctoral thesis in Biodiversity, Monitoring and Conservation. I had support from IFS (International Foundation for Science), L'Oréal Unesco For Women in Science Sub-Saharan Africa young talents program and IDEA Wild (to obtain field materials). AGNES Mobility grant allows me to perform laboratory tests on the wood at KNUST / Kumassi (Ghana), these tests are not yet possible at my university in Benin. I take the opportunity to thank AGNES for the research opportunity it offers me. In the field of scientific research, I have

six published scientific articles, 9 scientific communications to national and international scientific conferences and days, 3 technical reports and several scientific training courses. Among other things, I am married and mother of two children.



↓ **Yolande Feudjio Ndemanou**
Cameroon

I am Yolande Feudjio Ndemanou a PhD student in the faculty of Sciences, department of Biochemistry, university of Dschang, Cameroon. My PhD thesis work is in the area of cancer chemoprevention and precisely involves the evaluation of the ability of edible fruits of Cameroon to prevent cancer by enhancing the immune system and killing Cancer stem cells. Our quest for foods that can increase the quality of life started at the M.Sc level and was sanctioned by a publication on protein early malnutrition. My Ph.D studies on cancer chemoprevention are still on going and two paper have already been published entitle; "Cytotoxic Effects of Spondias cytherea fruit extract in murine melanoma model in vivo and in vitro" and Antioxydant potential and the effects of the aqueous of Spondias cytherea fruit pulp on B16-F10 melanoma cell cycle". Pursuing this research frame, I have been visiting scholar under the program Research Training Fellowship for Developing Countries (RTF-DCs) in Kolkata, India (at Chittarajan National Cancer Institute from November 2016 to may 2017).

I am hardworking and I had the chance to be awarded the price of Best African Woman Researcher Award by the Merck Foundation, at a ceremony held in Mauritius in 2017. Been an alumni of the Merck foundation, I joined the program of Merck oncology fellowship program in Mumbai (at Advanced Centre for Treatment, Research and Education in Cancer (ACTREC) from the first September to 18 October 2018. My determination is to contribute in the reduction of cancer cases and in Africa and in Cameroon and to improve quality of cancer patients life.

(Centre-West of Cote d'Ivoire). I am a member of the research group in landscape ecology and environment (GRIEPE). I am also reviewer in three MDPI journals (Forest, Sustainability, Agronomy).



↓ **Becky Nancy Aloo**
Kenya

Becky Nancy Aloo is a Tutorial Fellow in the Department of Biological Sciences at University of Eldoret in Kenya. She holds a Bachelor of Science Degree in Microbiology from Moi University, Kenya and a Master of Science Degree in Microbiology from University of Eldoret, Kenya, and is currently a doctorate student at Nelson Mandela African Institution of Science and Technology in Arusha Tanzania where she is researching on the 'Characterization of Rhizobacteria and Formulation of Biofertilizers for Potato (*Solanum tuberosum* L.) Growth Promotion in Tanzania' under German Academic Exchange Service (DAAD) scholarship. Becky's research interests revolve around sustainable environmental management

and being a Microbiologist, she is passionate about research that leads to solving some of the current environmental challenges using microorganisms and other natural resources. She has widely disseminated her research in Science Indexed Journals and international conferences. Her complete research profile can be found at https://www.researchgate.net/profile/Becky_Aloo. She has won several awards and recognitions for excellence in Science. In 2018, she was one of the 25 Green Talents that were by the German Federal government for Research and Education as high potentials in sustainability research. She was also one of the 3 winners of the 2018 Barilla Centre for Food and Nutrition Young Earth solutions (BCFN-YES!) competition that recognizes research linked to the sustainability of agri-food systems globally, and in 2019, she was one of 20 women who were awarded by L'Oreal-UNESCO For Women in Science as the rising Young Talents in sub Saharan Africa. Becky is very passionate about mentoring young girls and women into Science, Technology, Engineering and Mathematics (STEM) careers and has already launched mentoring activities in a number of schools in Kenya. Her dream is to become one of the renowned women scientists in Africa and help other women to excel.



↓ **Golou Gizèle Zanh**
Côte d'Ivoire

My name is Golou Gizèle Zanh, 32 years old and of Ivorian nationality. I am preparing a PhD in Plant Ecology at the Laboratory of Biodiversity and Tropical Ecology (BioEcoTrop) at the University Jean Lorougnon Guédé, Côte d'Ivoire. I am interested in the land saturation and agricultural practices adopted by populations on the periphery of protected forests in Côte d'Ivoire: Case of the classified forest of Haut-Sassandra

Grantees research stay and report

The COVID-19 crisis has also affected the mobility schedule. In order to guarantee that the mobility will be effective, AGNES has requested that grantee's host provide official travel authorization

letter before transferring the award to the grantee's bank account. To date, most of the grantees have joined their host institutions and reported the beginning of their

research activities. Only few of the grantees have not yet joined their host institutions but they will do it before the end of the first semester of 2021.

AGNES and AGNES-PAWS Junior Researcher's grants

The call for nominations for the 2020 AGNES and AGNES-PAWS Junior researcher's grants was launched on October 5th, 2020 for one month duration. At the time of this deadline, 31 nominations were received

for AGNES-JRG, while only 8 nominations were received for AGNES-PAWS JRG. An extension of the deadline has been exceptionally decided for AGNES PAWS and yielded 10 additional nominations.

Out of the 49 grantees, 8 and 10 nominees were selected to respectively benefit AGNES and AGNES-PAWS Junior Researchers' grants. The biographies of the selected nominees are presented below:

AGNES Junior researcher



↓ **Charles Okeke Nnadi**
Nigeria

Charles Okeke Nnadi is a Nigerian; born in Southeastern Nigeria on 23rd April 1978. He obtained a Bachelor of Pharmacy and Master of Pharmaceutical and Medicinal Chemistry from the University of Nigeria Nsukka. He holds a doctoral degree (*Dr. rerum naturalium*) in Phytochemistry and Pharmaceutical Biology from the Westfälische Wilhelms Universität, Münster, Germany under the mentorship of Prof. Dr. Thomas J. Schmidt in April 2018. Dr. Nnadi won many travel and research awards and grants, including the Wellcome Genome Campus Advanced Courses (WGCAC) Practical Aspect of Drug Discovery Travel Award (Cape Town, 2019), EU Cooperation in Science and Technology Action CM 1307 grant for short term scientific mission (Glasgow, 2017) and doctoral research support grant from Sybille Hahne-Stiftung (2016). He is currently a Senior

Lecturer in the Department of Pharmaceutical and Medicinal Chemistry of the University of Nigeria Nsukka since October 2018. He has worked extensively in the lead compound identification against NTDs and has published 35 scientific articles, 2 book chapters and one book in both local and international peer-reviewed journals. Currently, he is working on a drug discovery project from Nigerian medicinal plants with activities against some parasitic infections ravaging the African continent and envisages a game-changing remedy for malaria, trypanosomiasis and leishmaniasis.



↓ **Juvenal Giogetti Deutou Nemaleu**
Cameroon

I am Juvenal Giogetti Deutou Nemaleu, aged of 39 from Cameroon, holding a PhD in Materials Engineering from the university of Ngaoundéré-

Cameroon since 1st June 2019. I am a researcher officer at the Laboratory of the Materials Analysis-MIPROMALO- Ministry of Scientific Research and Innovation/ MINRESI, Cameroon. My research field is the valorisation of readily available natural resources (kaolin, bauxite, kyanite etc.) and waste bi-products (oyster shell, egg shell, beef horn etc.) for the development of low-cost ceramic matrices-based materials with improved properties. These include refractory materials, porous mullite, porous inorganic membranes and geopolymer materials.

I have rich experience in several operations such as sample collection methodology, sample characterization and writing of scientific research papers, which have enabled me to submit and publish 21 articles in international peer-reviewed journals and 02 conferences papers.

With this grant, I will be looking forward to disseminating knowledge, fostering long-lasting value on a larger local scale, to other colleagues and young scientists. This will have a lasting impact on promoting sustainable technologies that use local materials for the

construction sector, to tackle some of Cameroon's most urgent problems resulting from a lack of suitable housing and other infrastructural offering.



↓ **Fortunatus C. Ezebuo**
Nigeria

Fortunatus C. Ezebuo is 38 years old Nigerian and obtained Bachelor of Science (B.Sc) and Master of Science (M.Sc) Degrees in Biochemistry with special interest in Enzymology and Protein Structure. He obtained a PhD in Pharmaceutical and Medicinal Chemistry with research interest in Medicinal Chemistry and Drug Design on 27 August 2018 from Nnamdi Azikiwe University, Awka. He is currently a faculty member in the Department of Pharmaceutical and Medicinal Chemistry, Faculty of Pharmaceutical Sciences, Nnamdi Azikiwe University, Awka. Fortunatus has been involved in several research projects including "Drug Repurposing for Lassa Fever Virus: A New Treatment Option" and "Drug repurposing/discovery for ebola virus" with Prof. Ikemefuna C. Uzochukwu as the Principal Investigator, Drug repurposing/discovery for schistosomiasis and flaviviruses. He has published 21 research articles, One (1) book chapter and one (1) book. Fortunatus has ambition of conducting cutting-edge research/being part of research team that will contribute to better/improved medicines for some emerging/re-emerging

and neglected tropical diseases/ conditions (e.g schistosomiasis, ebola virus, lassa virus, flaviviruses).



↓ **John Ohiolei**
Nigeria

John Ohiolei, born 18/01/1989 in Benin City, Nigeria, graduated in Zoology and Parasitology from Ambrose Alli University and University of Ibadan, Nigeria, respectively. He recently (July 2020) completed his PhD in Preventive Veterinary Science at the Chinese Academy of Agricultural Sciences, Beijing, China. He is a recipient of the Chinese Government Scholarship (CGS)-University Program, Bill and Melinda Gate Foundation Young Investigators Award, and Outstanding Graduate Student Award of the Chinese Academy of Agricultural Sciences. He currently holds a postdoctoral position at Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences, China. His research interest is in the molecular epidemiology and genetic diversity of tapeworms and recently, epigenetic mechanisms in tapeworms. He has published 28 articles as first (11) and co-author (17) (24 in international peer-reviewed journals and 4 in local journals). In the future, he intends to conduct collaborative research to address transboundary transmission of cystic echinococcosis and other tapeworms of zoonotic importance in West and Central Africa (Benin, Cameroun, Chad, Niger and Nigeria).



↓ **Olubayo Babatunde**
Nigeria

Olubayo Babatunde was born in Ibadan, Nigeria in the year 1984. In 2005, he enrolled for a Bachelor's degree programme in Electrical Electronic Engineering at the University of Ibadan, Nigeria, before undertaking a Master degree programme in Electrical Engineering (Power system option) at the University of Lagos in 2011. He completed a doctoral degree in Electrical Engineering at the Tshwane University of Technology South Africa, in 2020. He is a registered Engineer in Nigeria and also a member of American Energy Association. He was a beneficiary of the NRF-TWAS doctoral fellowship (2017-2020), Wind Africa (2017 & 2018) travel grant, and a host of others. He is presently a Lecturer at the department of Electrical Electronic Engineering, University of Lagos, Nigeria. Babatunde's research revolves round the issues of sustainability in the adoption of green energy in Sub-Saharan Africa with focus and special interest on low-income communities. Based on his research interests, he has been able to publish 42 papers in international journals, 5 in local journals, 8 book chapters and 11 presentations at international conferences. Babatunde's future research aims to focus on the multi-dimensional aspects of energy access and climate change on the African continent.



↓ **Chiemela Peter Nwogwugwu**
Nigeria

Chiemela Peter Nwogwugwu is a Nigerian, aged 38 years. He obtained a BSc degree in Animal Science from Ebonyi State University, Nigeria; MSc, Animal breeding at Hawassa University, Ethiopia (by Intra-ACP Academic Mobility Scheme). He got a Ph.D in Animal Science (Animal Breeding & Reproduction) from Chungnam National University, South Korea in August 2020 (by Global Korea Scholarship [GKS]). He worked as a Guest Scientist at Chungnam National University in 2020 and his achievements were groundbreaking especially, he proposed different selection and evaluation methods that can influence the accuracy of genomic prediction; developed a bio-economic model to derive economic values for genetic improvement and simulation studies in Korean Hanwoo cattle. He conducted a lot of researches on a comprehensive study on different methods of genetic evaluation in Korean Hanwoo cattle. Considering different selection and evaluation methods that can influence the accuracy of genomic estimated breeding value (GEBV). He argues that heritability, training population size, marker density, selection methods, evaluation procedures and pedigree errors could influence the rate of genetic change. Dr Chiemela is a member of Korean Animal Breeding and Genomics. He has over 15 journal publications in very reputable journals to his credit. He intends to unfold and improve untapped animal genetic resources in African Universities or research institutions.



↓ **Chukwuebuka Christopher Okolo**
Nigeria

Chukwuebuka Christopher Okolo, 35, Nigerian, is an agricultural Soil Scientist, with a PhD in Soil science from Mekelle University Ethiopia, obtained in August 2020. Chukwuebuka is currently a CLIFF-GRADS fellow at the University of Bangor, UK and a current recipient of the prestigious Ernst Mach Grant at the University of Vienna, Austria. Chukwuebuka's research interest centers on the accurate quantification of soil organic carbon and measurement of N₂O, CH₄ and CO₂ concentrations down the soil profile in different cropping systems in relation to climate change. Presently, Chukwuebuka has 31 peer-reviewed scientific research articles in circulation (in 3 local and 28 international reputable journals), 4 book chapters and over 23 conference papers/proceedings/abstracts. Dr. Okolo is an active member of Agricultural Society of Nigeria, Soil Science Society of Nigeria, Ethiopian Society of Soil Science and International Union of Soil Science. Through his research, Chukwuebuka aims to provide scalable framework information towards the understanding of the dynamics of greenhouse gases (GHGs), carbon capture, their distribution and transfer vital for supporting ecosystem services, improving soil health and boosting agricultural productivity among smallholder farmers in Africa.



↓ **Dr. Edéya Orobiyi Rodrigue Pelebe**
Beninese

Agronomist and biologist, Dr. Edéya Orobiyi Rodrigue Pelebe is a 28-year-old Beninese. Since 28 December 2019, he holds a PhD in Animal Production (Fisheries and Aquaculture) from the University of Parakou in Benin and a PhD in Biodiversity and Ecosystem Valorization (Hydrobiology) from the Félix HOUPOUET-BOIGHY University of Ivory Coast. He has been a valedictorian for his Bachelor's and Master's degrees. He is a Research and Teaching Assistant at the Research Laboratory in Aquaculture and Aquatic Ecotoxicology (LaRAEAq) of the Faculty of Agronomy, University of Parakou. He won several grants, scholarships and prizes from the well-known international organizations such as, Belgian National Focal Point to the Global Taxonomy Initiative, African-German Network for Excellence in Science, International Foundation for Science, West African Economic and Monetary Union, Embassy of France in Benin and University Agency of Francophonie. He has participated in the implementation of three research-development projects at LaRAEAq. Currently, he co-authored 27 publications in both national and international peer-reviewed journals, and has given more than 30 scientific communications. Dr. Rodrigue Pelebe has a strong commitment to develop sustainable aquaculture practices to meet the population's protein needs, and to contribute to the conservation of aquatic resources in Africa countries, especially in Benin.

AGNES PAWS Junior researchers



↓ **Dr. Adekemi Titilayo Adesulu-Dahunsi**
Nigeria

I am Dr. Adekemi Titilayo Adesulu-Dahunsi, aged 37 years, a Nigerian and an Assistant Professor in the Food Science and Technology Programme, Bowen University Nigeria, since October 2020 with specialization in Food Microbiology and Biotechnology. I obtained Ph.D in Microbiology from the University of Ibadan, Nigeria in 2018. I have researched on the role of food grade microorganisms (especially lactic acid bacteria) during food production and development of starter culture for controlled fermentation. I have received many awards/fellowships some of which include, TWAS-DBT fellowship (2014), and recently in 2020, I was awarded L'Oréal-UNESCO for Women and Science Prize for Young Talents in Sub-Saharan Africa. I have my membership in the following professional bodies: Organization for Women in Science for the Developing World [OWSD], American Society for Microbiology [ASM], International Scientific Association for Probiotics and Prebiotics [ISAPP-SFA], Nigerian Institute of Food Science and Technology [MNIFST] and Nigerian Society of Experimental Biology [NISEB]. I have 18 scientific publications in high impact journals and 3 published book chapters. To achieve SDG 1 and 2 ('No poverty' and 'Zero hunger'), my interest is in the developing safe food for my community and Africa, seeing myself transforming lives and having positive impacts.

Find below my publication metrics/weblinks:

<https://www.scopus.com/authid/detail.uri?authorId=57191991475>

<https://scholar.google.com/citations?user=d8K2MxQAAAAJ&hl=en>

https://www.researchgate.net/profile/Adekemi_Dahunsi

<https://orcid.org/0000-0003-2917-0188>

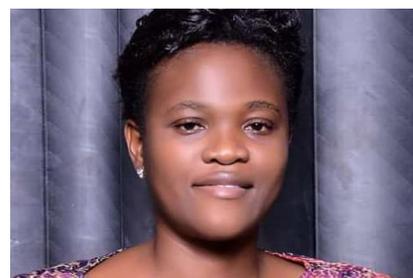
<https://www.linkedin.com/in/kemi-adesulu-dahunsi-02290569/>



↓ **Dr. Umulkher Ali**
Kenya

Dr. Umulkher Ali is a lecturer and Chairperson of the Department of Economics at Masinde Muliro University of Science and Technology in Kakamega, Kenya. She holds a Bachelor of Arts in Education (Economics and Geography), M.A Economics from Masinde Muliro University and a PhD in Economics from Universidad Azteca in Austria. She is a fellow of the UNESCO/Poland co-sponsored fellowship and the recipient of the AGNES junior researcher grant, 2017. She has worked as a research assistant for the Ministry of Tourism and the Retirement Benefits Authority in Kenya and is currently the Co-principle Investigator for the project "Enhancing Adoption of Climate Smart Agricultural Technologies and Innovations through Effective Dissemination and Market Linkages for Improved Livelihoods in Kenya (KCSAP) 2019-2021" funded by the World Bank and the Government of Kenya. She was also the Lead Consultant for the project "Greening Agriculture Value Chain for Sustainable Post-

Harvest Losses Management in East Africa Community, 2020" funded by UNESCO. Her research interests is in development economics including development research, policy analysis, financial development, foreign investment, agriculture value chain analysis, gender mainstreaming, political economy and public choice. She has peer reviewed publications including journal articles, a book, a book review and two refereed learning modules. Her academic research ambition is to provide evolving meaningful and optimal solutions to various problems of Africa's economies through research, dissemination of findings and public policy decision-making. She is a member of Association for the Advancement of African Women Economists (AAWE), Association for Women's Rights in Development (AWID) and Kenya DAAD Scholars Association (KDSA).



↓ **Dr. Bukola Temitope Omena-Okpowe**
Nigeria

Dr. Bukola Temitope Omena-Okpowe (Nee Fabunmi) is a 37 years old Nigerian and a Microbiologist. A conscientious and result-oriented researcher with a highly professional attitude. She holds a Ph.D. degree in Environmental Microbiology, awarded by the Federal University of Technology, Akure, Nigeria in November 2018. Bukola holds a lecturing position at Achievers University,

Owo since 2019. A Performance-driven and dedicated educator and researcher, offering extensive experience in conducting in-depth molecular biology and environmental microbiology research by developing strategies for converting agricultural waste into useful products and producing industrially useful microbial enzymes. She has a professional affiliation with Organization for Women in Science for the Developing World (OWSD), Nigerian Society of Microbiology (NSM), Society for Applied Microbiology (SFAM), American Society of Microbiology (ASM), and Nigeria Association of University Women (NAUW). Three local and eight international journals are accredited to her name. Her research aspiration is to utilize environmental microorganisms and their metabolic products as tools in medical diagnostics and therapeutics to fight against Antibacterial Resistance associated with healthcare infections in Nigeria.



↓ **Dr. Essoung Ehawa Flaure Rosette**
Cameroon

I am Dr. Essoung Ehawa Flaure Rosette from Cameroon and I have 33 years old. I'm working on Natural product chemistry, especially plant extracts. I did my Ph.D. in organic chemistry at Kenyatta University, Kenya, where I graduated. My studied was related on identification of bioactive constituents from plant species against tomato pest, *Tuta*

absoluta. During my graduation studies, I taught as a part time lecturer at the University of Yaoundé I (Cameroon) and Kenyatta University (Kenya). After obtaining my Ph.D., I was recruited as assistant Lecturer at University Institute of Technology, University of Ngaoundere (Cameroon), where I am working now. During my Ph.D. work, I was working on *Tuta absoluta* Project at the International Centre of Insect Physiology, granted to Dr. Samira Mohamed, one of my supervisors by the BMZ foundation. Presently, I am working on natural product substances with insect properties and the other hand, with antimicrobial, antibacterial and other human diseases. I am a member of several scientific association such as the AAIS (African Association for Insect Scientists) and ABC-DAAD (association of former DAAD holder from Cameroon). Up to now, I co-authored five publications and one chapter on book in invasive pest in Africa. Being a female scientist, I have a dream to more encourage African student, especially young Cameroonian ladies to do more sciences subject through my diverse experiences charring with them during my teaching due to the difficult access of women to go far with school in my country.



↓ **Hermione Koussihouede**
Benin

Hermione Koussihouede was born on March 22, 1988 in Cotonou, Benin. She completed her primary

and secondary studies from 1991 to 2005 where she obtained a scientific baccalaureate. Already in 2008, she was enthusiastic about agronomy and joined the faculty of agronomic sciences of the University of Abomey-Calavi for her graduate studies. In 2012, she was rewarded for the best bachelor's thesis prize awarded by the Beninese Centre for Scientific and Technological Research. Lead by the passion, she continued her master's degree and was engaged in several projects experimenting and developing methods to improve food crops. In 2016, she was a recipient of three years' salary bursary monthly granted by the French Institute of Research for Development (IRD). Thanks to this funding, she carried out a research on interspecific interactions in the oil palm-based agroforestry systems in smallholdings and their impact on the performance of the associated species. She defended her PhD on November 19, 2020 at the University of Abomey-Calavi in Benin. For the time being, she authored five scientific publications. Currently, she is dedicating her research to the sustainable management of agroecosystems aimed to promote agroecology and climate smart practices under the rural development framework in Africa.



↓ **Dr. Temitayo Olayemi Ajayi**
Nigeria

Temitayo Olayemi Ajayi graduated with Bachelor of Pharmacy (B. Pharm) degree in 2000. She earned her Master's and Ph.D degrees in

Pharmacognosy in 2008 and 2017 respectively from the University of Ibadan, Nigeria. She also bagged a Doctor of Pharmacy Degree from the University of Benin, Nigeria in 2019. She is a member of the Pharmaceutical Society of Nigeria PSN and trained Natural Products Scientist.

Temitayo joined the University of Ibadan as a researcher in 2012. She is a member of many professional bodies, which include Organization for Women in Science for the Developing World (OWSD), Nigerian Society of Pharmacognosy (NSP), International Society of Ethnopharmacology (ISE), American Society of Pharmacognosy (ASP) and Society of Environmental & Public Health Professionals of West Africa (SEPHPWA) among others. Dr Ajayi is a specialist in Natural Product Research that focuses on Phytochemistry, drug discovery & development. She has publications in reputable journals and has won many awards which include the 2018/19 Postdoctoral fellowship of the American Association of University Women (AAUW), which took her to the University of Mississippi, USA, for a study as a visiting Scholar. In 2015, she won the Association of Commonwealth Universities Early career academic grants award and the 2018 USAID PEER mentorship program award.

Dr. Temitayo O. Ajayi is married to 'Yomi and blessed with children.



↓ **Oluwayemisi Olusola Adebomi**
Nigeria

I am Oluwayemisi Olusola Adebomi (nee Akinmameji), a 36 year old Nigerian who is passionate about the academia. My field of research lies in Applied Linguistics. I got a PhD in English language (political discourse analysis/political culture) from the University of Ibadan in 2017. As an undergraduate, I was a beneficiary of the Ondo State government scholarship. In my final year, I was awarded the most brilliant student by the English Students' Association of the University of Ado-Ekiti. I also emerged as the best graduating student which fetched me three awards at the University convocation. I am, currently, a Lecturer I in the General Studies Department of the Federal University of technology, Akure. I have conducted/still conducting a number of researches on women and their political, social and linguistic representations. I am a member of the National English Scholars association (NESA) and the National Association of Teachers and Researchers of English as a Second Language (NATRESL). I have six papers published in international peer-reviewed journals, three papers in local journals and three book chapters. I see myself breaking new academic grounds in digital political cultures and investigating the implications of the underrepresentation of women on African political debates.



↓ **Gbotemi Bukola Babatunde**
Nigeria

Gbotemi Bukola Babatunde has a Bachelor of Science degree in Psychology from the Obafemi Awolowo University, an Honours degree in Psychology, a master's degree (cum laude) in Health Promotion and recently a doctoral degree in Public Health from the University of KwaZulu – Natal, Howard College. She is a member of the South Africa Association for Child and Adolescent Psychiatry and Allied Professions (SA-ACAPAP), Mental Health Innovation Network (MHIN), Public Health Association of South Africa (PHASA) and the Golden Key International Honour Society. She is currently a postdoctoral fellow at the Centre for Rural Health, College of Health Science, University of KwaZulu-Natal. Dr Babatunde's area of research interest includes Mental Health Promotion, Child and Adolescent Mental Health, Community and school-based health services, mental health systems strengthening and intervention planning. She has published five articles in local and international journals, five presentations at international conferences and currently has one book chapter in press. Her future research will focus on strengthening CAMH systems, improving access to CAMH services, facilitating intersectoral collaboration, developing community and school-based psychosocial interventions to improve mental health literacy, facilitating early identification and effective management to mitigate the lifelong impact of CAMH conditions.



↓ **Dr. Omowunmi Fred-Ahmadu**
Nigeria

Dr. Omowunmi Fred-Ahmadu is an Environmental/Analytical Chemist and presently lectures at the Department of Chemistry, Covenant University Ota, Nigeria where she also obtained her PhD in 2020. Her research interests concern the tackling of plastic pollution in Africa and the use of marine hydrodynamic modelling for ecological risk prediction. She received the Association of Commonwealth Universities Blue Charter, UK fellowship in 2019 to conduct part of her PhD research on microplastics pollution at the University of Newcastle, Australia. She is a co-investigator and collaborator in the MARSHEs-Microplastic-Pollution-Research-in-Southeast-Atlantic-Marine-Ecosystems project. Dr. Fred-Ahmadu has published

seventeen scientific articles in Scopus-indexed journals. She is a recipient of several awards, which includes the best undergraduate student in Chemistry of the University of Lagos in 1998, the best graduating M.Sc. student from Covenant University in 2016 and travel grant award of USD 800 from SETAC-Asia-Pacific in 2018. She has attended local and international conferences with 13 conference papers presented. She is a member of the Chemical Society of Nigeria (CSN), American Chemical Society (ACS), SETAC and Royal Society of Chemistry (RSC). She has a strong passion for women empowerment using science.



↓ **Dr. Christelle Noelle Dzesse Tekou**
Cameroon

Dr Christelle Noelle Dzesse Tekou is a lecturer of Inorganic Chemistry

within the Mineral Engineering Department of the School of Chemical Engineering and Mineral Industries of the University of Ngaoundere, Cameroon. She obtained her BSc and MSc degrees from the University of Dschang in Cameroon, while her PhD was from the University of Buea, Cameroon and the University of Cape Town, South Africa, thanks to a sandwich OWSD fellowship. Her research interest focuses on the syntheses of metal-organic frameworks (MOFs) and the exploitation of their various applications viz as sensors, for gas sorption/separation, as drug carriers for cancer therapy and in water treatment. This research has led to publication of different articles in peer-reviewed journals and has also been presented to various national and international conferences. Dr Dzesse is also a member of various organizations including the Cameroon Professional Research Oriented Women Network (CAPROWN), the Royal Society of Chemistry (RSC, as AMRSC), the Organization of Women in Science for the Developing World (OWSD) and the Cameroon Crystallography Association (CCrA).

Partnership with BAYER

A partnership has been concluded with BAYER with the support of the Alexander von Humboldt Foundation (AvH). In the framework of this partnership, an AGNES-BAYER Research Grant for Biodiversity Conservation & Sustainable Agriculture in sub-Saharan Africa has been developed. This grant is generously funded by the BAYER Foundation

with support of the Alexander von Humboldt Foundation (AvH). This Grant for Junior Researchers (PhD students) aims to strengthen the scientific capacity of young researchers in sub-Saharan Africa. The call for application for this call will be launched very soon. It will enable doctoral students from sub-Saharan African countries to undertake outstanding

research activities in the field of Biodiversity conservation and sustainable agriculture. The Grant aims at being a financial support to African PhD students for fieldwork activities. A maximum Grant amount of EUR 7000 will be provided to each selected applicant.

Research initiatives of AGNES Members on COVID-19

As researchers, several AGNES members undertook initiatives on the COVID 19 pandemic. More than ten research initiatives undertaken on COVID-19 in Africa were carried out by AGNES members. Several scientific papers have already been published by AGNES members from these research activities. The most important are as follows:

- 1 Lokonon, B. E., Alia, M. G., & **Glèlè Kakaï, R.** (2021). COVID-19 and Scientific Research Interests and Findings in Epidemiology and Social Sciences: A Systematic Review. *Preprints*.
<https://www.preprints.org/manuscript/202103.0509/v1>

- 2 Tovissode C F., Doumatè J., **Glèlè Kakaï R.** (2021). A Hybrid modelling technique of epidemic outbreaks with application to COVID-19 dynamics in West Africa. *Biology (Section:Biostatistics)*, 10, 365.
<https://doi.org/10.3390/biology10050365>

- 3 Gnanvi J., Salako V. K., Kotanmi B., **Glèlè Kakaï R.** (2021). On the reliability of predictions on Covid-19 dynamics: a systematic and critical review of modelling techniques. *Infectious disease modeling*, 6: 258-272.
<https://doi.org/10.1016/j.idm.2020.12.008>

- 4 **Amzat, J.**, Aminu, K., Kolo, V. I., Akinyele, A. A., Ogundairo, J. A. & Danjibo, C. M. (2020). Coronavirus Outbreak in Nigeria: Burden and Socio-Medical Response during the First 100 Days. *International Journal of Infectious Diseases*, 98, 218-224.
<https://doi.org/10.1016/j.ijid.2020.06.067>

- 5 Tovissodé Chénangnon Frédéric, Bruno Enagnon Lokonon, **Romain Glèlè Kakaï** (2020). On the use of growth models to understand epidemic outbreaks with application to COVID-19 data. *PloS ONE* 15(10). e0240578.
<https://doi.org/10.1371/journal.pone.0240578>

- 6 Taboe Hémahô B., Salako Kolawolé V., Tison James M., Ngonghala Calistus N. and **Glèlè Kakaï Romain** (2020). Predicting COVID-19 spread in the face of control measures in West Africa. *Mathematical Biosciences* 328.
<https://doi.org/10.1016/j.mbs.2020.108431>

- 7 Sam Smith, **Stella Smith** & Abraham Ajayi (2020). Content analysis of mass media reportage on coronavirus-19 (COVID-19) in Nigeria from six widely circulated Nigerian newspapers. *Journal of Studies Social Sciences and Humanities* 6 (3):088-099.

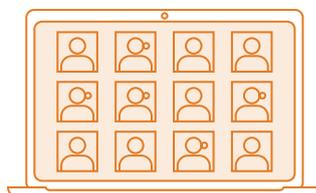
- 8 **Rine Christopher Reuben**, Margaret M.A. Danladi and Grace Rinmecit Pennap. (2020). Is the COVID-19 pandemic masking the deadlier Lassa fever epidemic in Nigeria? *Journal of Clinical Virology*, 128, 104434.
<https://doi.org/10.1016/j.jcv.2020.104434>

- 9 **Rine Christopher Reuben**, Margaret M.A. Danladi, Dauda Akwai Saleh and Patricia Ene Ejembi (2020). Knowledge, attitudes and practices towards COVID-19: An epidemiological survey in north-central Nigeria. *Journal of Community Health*,
<https://doi.org/10.1007/s10900-020-00881-1>

- 10 Olubukola Olayemi Olusola-Makinde and **Rine Christopher Reuben** (2020). Ticking bomb: Prolonged faecal shedding of novel coronavirus (2019-nCoV) and environmental implications. *Environmental Pollution*, 267, 115485.
<https://doi.org/10.1016/j.envpol.2020.115485>
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- 11 **Rine Christopher Reuben**, Silas Dogara Gyar and Margaret M.A. Danladi (2020). COVID-19: Probable involvement of insects in the mechanical transmission of novel coronavirus (2019-nCoV). *Microbes and Infectious Diseases*, 1(3), 111-117
<https://doi.org/10.21608/mid.2020.41443.1059>
-
- 12 **Aderemi Suleiman Ajala**, Kayode Akinsete, Idayat T Gbadamosi and Sam K. Olaleye (2020). Local Perception of Coronavirus Disease Care in Southwestern Nigeria. *Archive of Pharmacy and Pharmacology* 5(3).
<https://doi.org/10.23880/apct-16000179>
-
- 13 **Aderemi Suleiman Ajala**, Kayode Akinsete, Idayat T. Gbadamosi, Sam.K, Olaleye (2020). Local Understanding of Microbial Infections and the Implication on Care of Coronavirus and Disease. *Journal of Herbal Medicine Research* 5 :1-20.
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- 14 Ayodele Jegede, IkeOluwapo Ajayi, Simisola Akintola, Catherine Falade, Isaac Oluwafemi Dipeolu, Simeon Cadmus, **Ajala Aderemi**, Abayomi Olaiifa, Olufemi Olatoye and Odunayo Akinyemi (2020). Ethical issues in the COVID-19 pandemic control preparedness in a developing economy. *The Pan African Medical Journal* 35 (Supplementary 2).
<https://doi.org/10.11604/pamj.supp.2020.35.23121>
-
- 15 Honfo S. H, Taboe B. H., **Glèlè Kakai R.** (2020). Modeling COVID-19 dynamics in the sixteen West African countries. *Preprint*. MedRxiv.
<https://doi.org/10.1101/2020.09.04.20188532>
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Advisory Board Meetings

From January 2020 to February 2021, several meetings were held by the Advisory board, but most of them were virtual because of the COVID-19 global pandemic.



January 21st, 2020

Selection meeting of grantees for the 2019 AGNES and AGNES-PAWS junior research grant followed by the board meeting at BIUST, Botswana. At this meeting, 13 and 11 nominees were selected to benefit AGNES-PAWS and AGNES GNERAL Junior Research Grants, respectively.

September 30th, 2020

Selection meeting (online) of AGNES 2020 mobility grantees (AGNES MG & AGNES-PAWS MG). The first item on the agenda of the meeting was the organization of the election of the executive committee members. The second item was the selection of AGNES 2020 mobility grantees. As a result, fifteen (15) applicants were awarded the AGNES-PAWS mobility grant while eight (8) applicants were awarded the AGNES mobility grant for 2020.

January 21st, 2021

Advisory Board Meeting (online) for preparation of JRGs selection meeting, General Assembly and election meeting. At this meeting, dates and Agenda were proposed for these two important activities.

June 25th, 2020

AGNES Follow-up Covid Strategic Planning workshop" at the AvH digital meeting. This virtual meeting was held in place of the workshop planned on the strategic plan of AGNES at the Humboldt colloquium in Yaoundé Cameroon, March 2020, which was cancelled. Various issues linked to AGNES activities and its network improvement were discussed. The discussion was organized around four topics:

- **Topic 1:** AGNES in brief (Prof. Dr. Romain Glèlè Kakaï)
- **Topic 2:** AGNES membership (Prof. Dr. Alexander Ferrein)
- **Topic 3:** Visibility of AGNES and financial sustainability, (awareness activities on AGNES and AVH programmes, AGNES ambassador scientists, members fees potential donors) (Prof. Dr. Remi Sonaiya)
- **Topic 4:** Challenges for African research systems and researchers during and after the pandemic (Prof. Dr. Clement Adebooye)

February 17th, 2021

Selection meeting (online). The following items were discussed at this meeting: i) Selection of grantees for AGNES-PAWS JRG and AGNES General, ii) Cooperation with the Bayer Foundation: launch of the new programme, iii) Miscellaneous (Application by Prof. Uken to serve as member of the Advisory committee, other businesses).

General Assembly and Renewal of AGNES Executive Board

AGNES members held a general meeting (online) on the 18 January 2021. The meeting was hosted by Prof. Dr. Alexander A. Ferrein and was chaired by Prof. Dr. Glèlè Romain Kakaï. At this meeting, three items were discussed: i) Annual Report, ii) Election of officials to the Executive Board, and iii) Miscellaneous. As the second item on the agenda was concerned, new members of the Governing board were elected. As a result, Prof. Romain Lucas Glèlè Kakaï, Prof Alexander Ferrein, and Prof. Zachary Getenga were elected, respectively, as President, Vice-President and Secretary of the governing board for a period of 2 years (2021-2023).

Executive Members of AGNES: 2021-2023



President

Prof. Dr. Romain Glèlè Kakaï
Benin



Vice-President

Prof. Dr. Alexander Ferrein
Germany



Secretary

Prof. Dr. Zachary Getenga
Kenya

Appointment of a New Advisory Committee Member

During the general meeting (18 February 2021), Prof. Ernst Uken (South Africa) was appointed to join the advisory committee. This appointment was unanimously accepted by all members present (online) and therefore, duly confirmed. Current members of AGNES advisory board are as follows:

Advisory Committee



Prof. Dr. Christa Rautenbach
South Africa



Prof. Dr. Remi Sonaiya
Nigeria



Dr. Romaric Vihotogbe
Benin



Prof. Dr. Jens Gebauer
Germany



Prof. Dr. David Simo
Cameroon



Prof. Dr. Gebre-Mariam Tsige
Ethiopia



Prof. Dr. Uken Ernst-August
South Africa

COVID-19 related Challenges and Adaptive Solutions

Most of the activities of AGNES were negatively affected by the COVID-19 global pandemic in 2020. With this global health crisis, it was quite impossible to hold physical meetings, because international travels were banned in several countries. This led, for example, to the cancellation of the AGNES meetings scheduled to be held in Yaoundé during the AvH Colloquium. Also, the pandemic has seriously disrupted the mobility grant process. Indeed, with the lockdowns in several cities, most of universities were closed, and it was quite difficult for applicants to reach their potential hosts during the application period. In order to allow applicants to be able to apply, the deadlines for calls for applications

were extended, particularly for the Intra-Africa mobility grant. In addition, after the award notification to the grantees, AGNES ensured the effectiveness of the mobility before proceeding with the transfer of the amount of the grant to the beneficiary. For that, AGNES asked hosts of grantees to provide an official statement of travel authorization and confirmation of the possibility of hosting the grantee, with regard to the pandemic. Finally, considering the travel ban, the executive committee found other solutions for interaction among members. For that, online meetings were adopted to ensure the continuation of the network's activities in this context of health crisis.

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Perspectives for 2021

The year 2021 will surely be a great for AGNES since several perspectives are foreseen. For instance, the partnership with BAYER Foundation will be effective and it will allow the support of PhD students for fieldwork activities. Also, several outreach activities will be proposed in order to increase the visibility of AGNES.

Strengthening our network requires that you continue your support towards AGNES and your personal commitment is desired to spread our funding opportunities as well as our vision and mission.