



InspiringTM UG

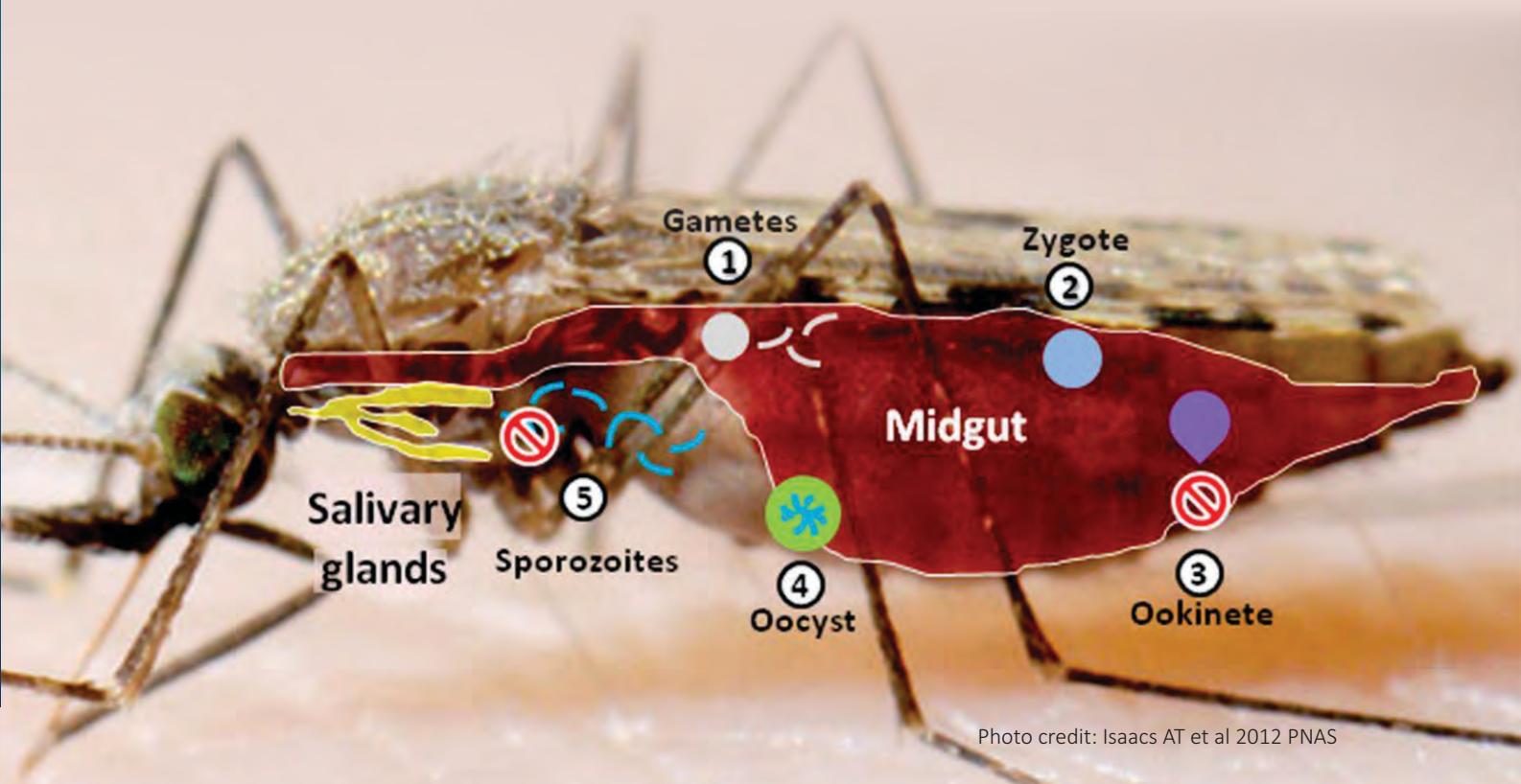


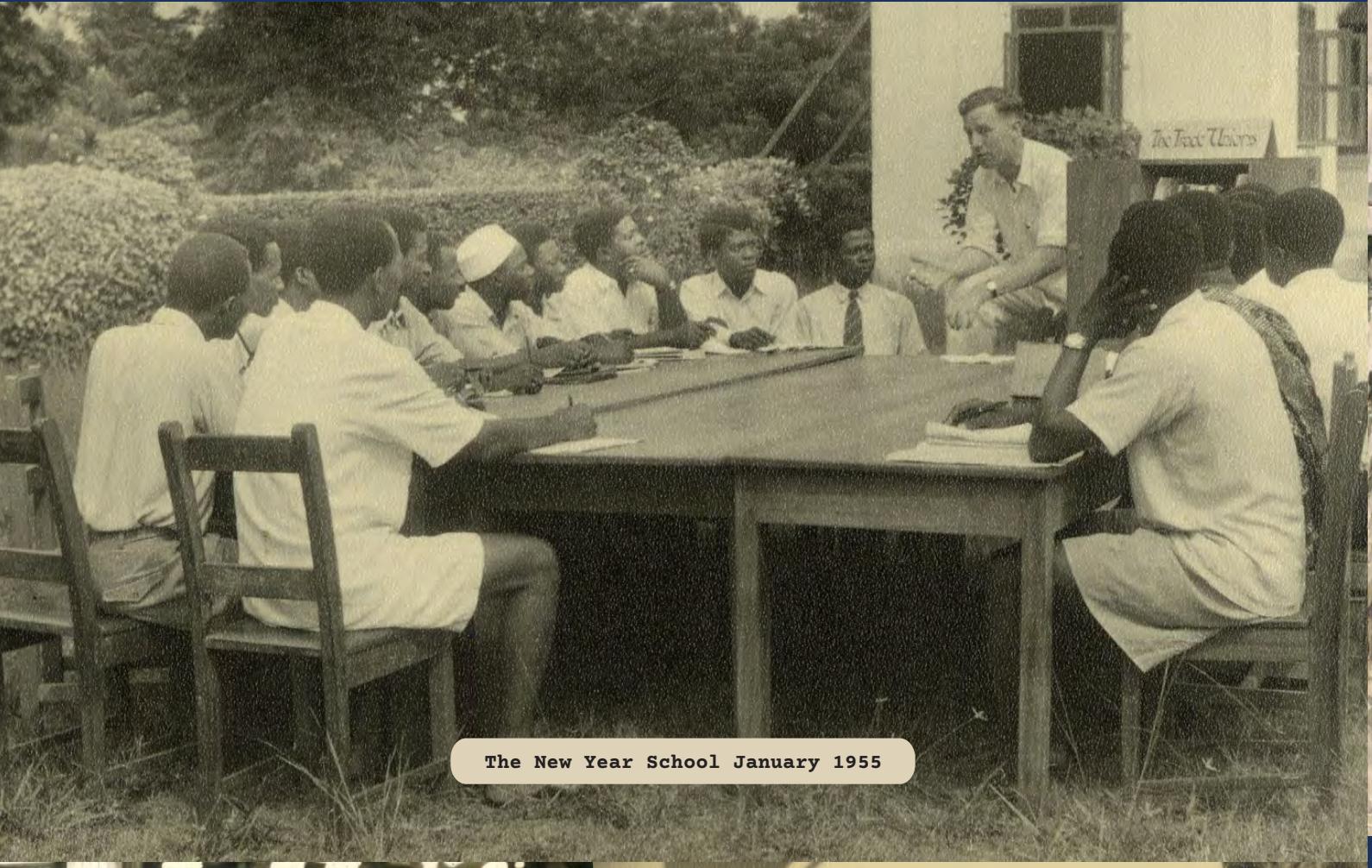
Photo credit: Isaacs AT et al 2012 PNAS

MALARIA IN FOCUS

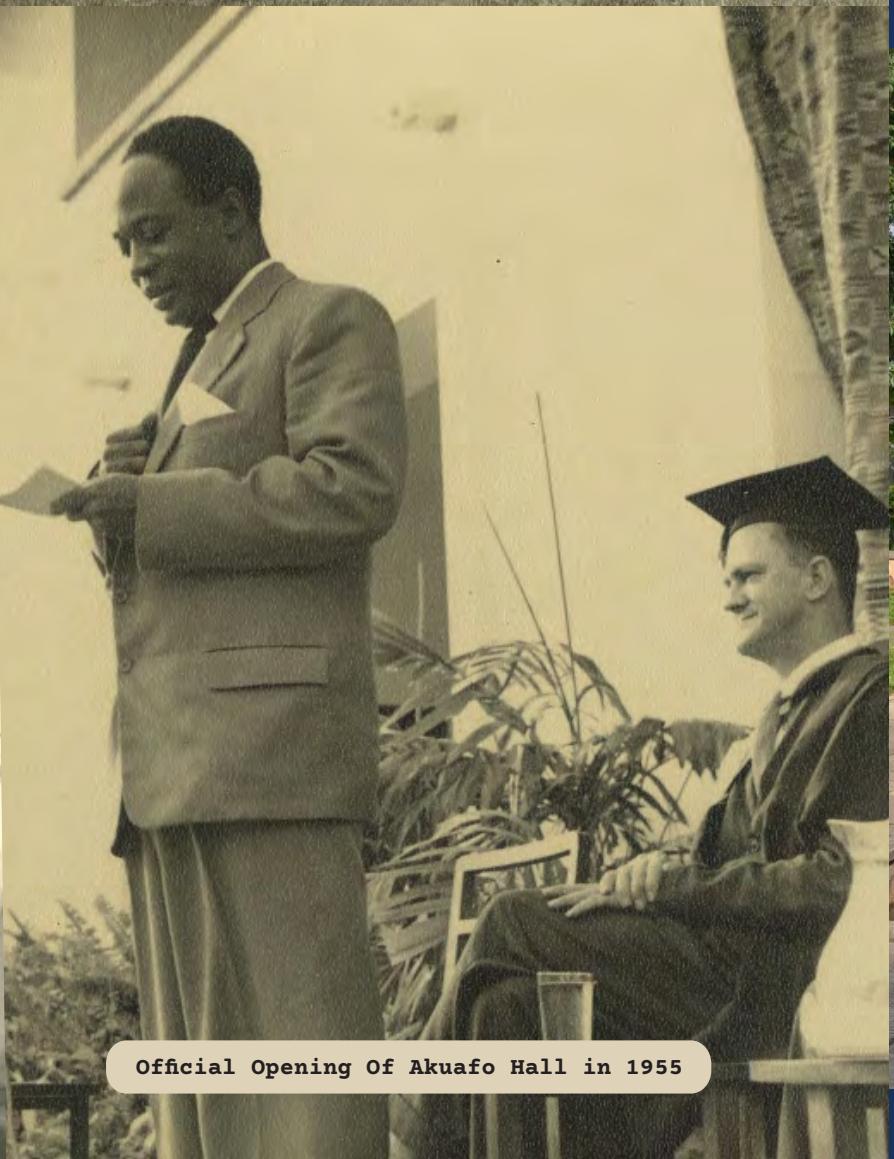
ORID

OFFICE OF RESEARCH,
INNOVATION & DEVELOPMENT





The Chancellor after the Presentation
of Representatives of other
Universities and Institutions.



Official Opening Of Akuafio Hall in 1955

MESSAGES



Research at the University of Ghana has intensified considerably in scope and volume over the past decade. As we celebrate seven decades of excellence in teaching, learning and research, we congratulate our researchers, both faculty and graduate students, who collaborate on multi-disciplinary projects across continents.

Our scientific outcomes are often disseminated in scholarly journals, that are less accessible to the majority of our stakeholders, including some of the main beneficiaries of the research.

Inspiring UG, a publication of the Office of Research, Innovation and Development (ORID), addresses this gap by showcasing our innovative endeavours at the University, and demonstrating the potential of our research to address national and global development challenges.

Research is a beneficial but costly endeavour, and the late Busumuru Kofi Annan (our former Chancellor), was particularly instrumental in opening doors to critical funding sources and that in turn has raised recognition of the University's stature. Our collaborations with partner institutions on major research projects span a host of diverse areas.

This maiden edition of **Inspiring UG** demonstrates our commitment to engaging our communities and stakeholders by sharing our research and our resolve to remain at the forefront of scholarship in Ghana, Africa and the world at large.

Professor Ebenezer Odum Oduro Owusu
Vice-Chancellor



The Office of Research, Innovation and Development (ORID) presents the maiden edition of **Inspiring UG**, a publication of research activity and pioneering science emerging from the University of Ghana.

Barely a decade ago, ORID was set up in line with the renewed effort to intensify research activity at the University of Ghana. Originally a unit within the School of Research and Graduate Studies, management of research has evolved into a fully-fledged support hub at ORID, advancing the University's vision of becoming a research-intensive university.

Inspiring UG presents a sample of the research and innovation emanating from the University of Ghana and portrays the quality of our scientists, the brains behind the amazing scholarship. This maiden edition coincides with a milestone in the life of the University of Ghana: as we celebrate the 70th Anniversary of our University, this maiden issue provides the opportunity to look at some of the scholarship produced after seven decades of engagement in cutting-edge research across a vast array of disciplines, producing answers to burning questions and challenges facing the nation and the continent at large. The University recognizes the importance of disseminating these research findings in easily accessible ways and this magazine constitutes one of the efforts to achieve that goal.

In this maiden issue, we feature alternative innovative responses to the malady of malaria, as well as other ongoing interventions on our campuses.

Professor Francis Dodo
Pro Vice-Chancellor (Research, Innovation and Development)

RESTRUCTURING FOR GROWTH AND EFFICIENCY: PROVIDING HIGH QUALITY RESEARCH MANAGEMENT SERVICES

As the University of Ghana (UG) continues to gain ground as one of the continents very best research universities, and the quality and quantum of scholarship endeavours grow, it is imperative that our research support services and structures evolve to keep pace with the improved stature of the University. Consequently, UG's Office of Research, Innovation and Development (ORID)—the University's centralized research office—has been restructured to provide uniform, streamlined, high-quality research support to the University community, while also building staff competencies across the breadth of services that fall under the rubric of the research support umbrella.



Today, research management services at the University of Ghana are delivered through six teams that reflect the direction and priorities of the University, as it continues its drive to attain world-class, research-intensive status. These are:

- **Pre-and Post-Award Services Team (PPA)** responsible for the submission of grant proposals, research grants/contract management and administration, etc. (including the managing and administering of scholarship and fellowship programmes, and the coordination of research visits to UG by partners and collaborators). PPA is also responsible for helping to solicit faculty research, building research teams to apply for grants in the name of the University and mitigating risk in post-award processes. To accommodate the historical and geographical dispersion of research activity across the University, the new structure includes three satellite offices located at the University of Ghana's: (i) *Noguchi Memorial Institute for Medical Research*; (ii) *downtown Medical School*; and (iii) *Institute for Social, Statistical and Economic Research*. Working under the auspices of the PPA team, the satellite offices help streamline ORID's service provision, by making grants/contracts support services easily accessible to scientists, and ensuring that the interests of scholars and the University are protected.

- **Human and Animal Research Ethics Services Team (HARES)** ensures that uniform, high-quality ethical clearance services are available across the University. HARES' responsibility means that UG's five ethics committees must provide a uniform high standard and quality of service to the entire University community.
- **Technology Transfer and Intellectual Property Services Team (TTIPS)** manages and leads UG's intellectual property (*filing of patents, copyrights, licensing, etc.*) and technology transfer activities, with specific emphasis on developing innovative mechanisms for the growth of a sustained engagement between UG and industry at various levels.
- **Capacity Development Services Team (CaD)** organizes regular capacity development and refresher workshops, seminars and conferences for UG researchers (e.g., periodic grant proposal writing workshops), and staff working in the University's research support system.
- **Research Performance Services Team (RePS)** monitors, evaluates and interprets data on ranking, publications, etc., and develops mechanisms for fostering performance improvements among internal stakeholders. RePS is instrumental in submitting institutional ranking data to the various ranking agencies.
- **Publications, Dissemination and Translation Services Team (PDT)** ensures that UG research reaches the appropriate publics and stakeholders via the best outlets. To make the University's scholarship more visible, PDT is responsible for the publication of *Inspiring UG*, the University's research magazine, as well as other University research related material, including UG's *Research Report*. As well, PDT can facilitate mandatory dissemination workshops of UG's principal grantees, and provides support for the translation of research related stories to the University community

As research is increasingly integral to the University's continuing advancement, these teams, supported by the new ORID structure should ensure the provision of more nuanced and effective research support services, as well as guarantee that UG scientists get an equivalent level of high-quality support across the University. The University community is invited to avail itself of these services.

APPRECIATION

The publication of *Inspiring UG* has been possible with the support of the following individuals and teams:

- Professor Audrey Gadzekpo, Dean of the School of Information & Communication Studies and her colleagues; Dr Fidelis Sesenu, Dr Ivy Fofie, and Dr Gilbert Tietaah for their journalistic guidance;
- Mr John Anoku and Mr Eziekel Acquaah who initiated the process based on their experiences producing the ORID Research Report;
- Professor Andrew Anthony Adjei and members of the interim ORID Research Magazine Team who took the first cut at identifying which scholarship to showcase, during the transition of the PDT team.

The Office of Research, Innovation and Development is grateful to all stakeholders whose combined efforts have made this publication possible.





Mrs. Mary Chinery-Hesse
Chancellor

OF BROKEN GLASS CEILINGS AND RESEARCH

Mrs. Mary Chinery-Hesse, the first female Chancellor of the University of Ghana (UG) was sworn into office on 1st of August 2018. Madam Chancellor succeeds a long line of eminent personalities who have held the position, the most recent, her predecessor, being the late Busumuru Kofi Annan.

Mrs. Chinery-Hesse heads the University Council with a wealth of experience from many years of public service at the United Nations (UN), where she served as Resident Coordinator of the UN System and Resident Representative of the United Nations Development Programme (UNDP), and Deputy Director-General of the International Labour Organisation (ILO). She was the first ever African woman to be so appointed. She is also the first African woman to receive the prestigious Gusi Peace Prize for International Diplomacy and Humanitarianism, referred to as the Asia Nobel Peace Prize.

Madam Chancellor on Research...

At her investiture, the Chancellor articulated a vision that is in consonance with the University's strategic thrust: that of an institution "rooted in Ghanaian and African realities, and authoritative in its research on Ghana and Africa, at the highest levels of quality by any international measure." She expected that the vision would be driven from a University that is "home to, and welcoming to, scholars of international standing from all over the world and to students from a rich variety of cultures and backgrounds". Mrs. Chinery-Hesse also reiterated the need to stimulate a dialogue that serves as a veritable conduit for 'Town-Gown' relationships. In that regard, she extolled African nations to ensure that their institutions of higher learning develop the appropriate partnerships with industry to facilitate the knowledge transfers requisite for driving development agendas.

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Understanding the Tripartite Parasite-killing Relationship between Midgut Bacteria, the Mosquito and *Plasmodium* using Transcriptomics.

Although prevalence has reduced considerably over the last few years, malaria remains a debilitating disease of immense global concern. Interventions such as the use of insecticide-treated bed nets, and indoor residual spraying, have contributed to reducing the incidence of malaria. The long-term use of these strategies is however attenuated by resistance to insecticides, emphasizing the need for alternate control mechanisms.

With the mosquito being the primary transmission source, research that explores how the development of an ingested malaria parasite can be arrested, and transmission prevented, would seem to be a profitable direction. This is the aim of **Dr. Jewelna Akorli's** research on the mosquito's gut.

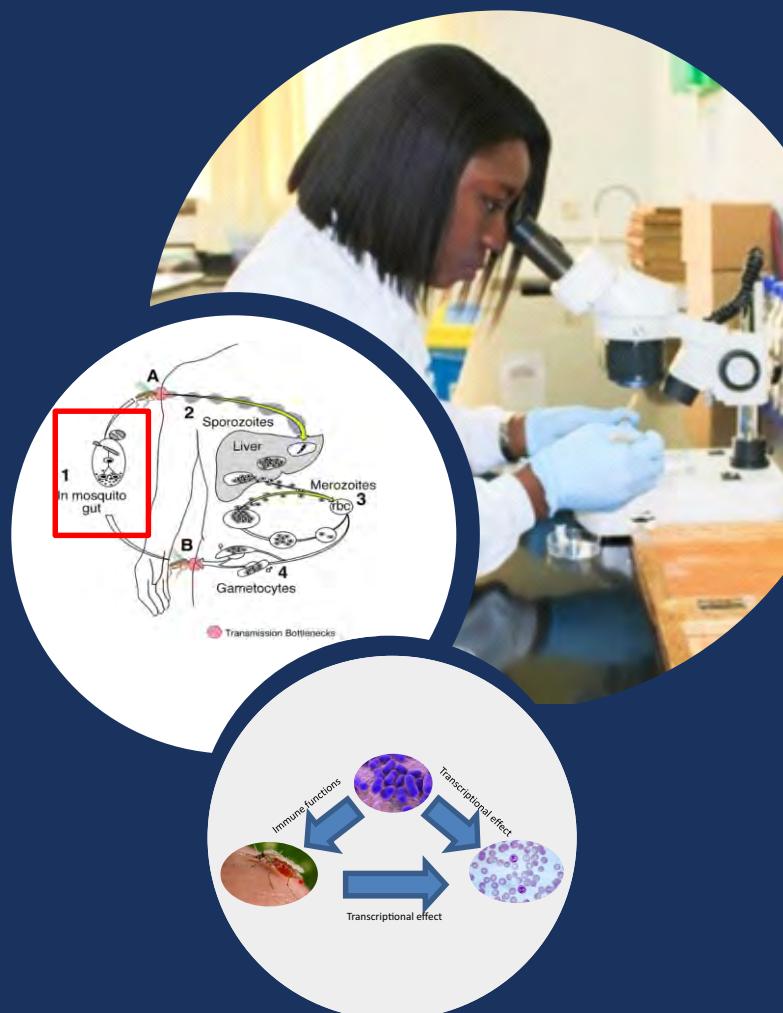
The mid-section of the mosquito's gut—referred to as the midgut—is enriched with a community of bacteria which has been identified as a critical factor associated with the 'killing' of plasmodium parasites that the mosquito ingests with its bloodmeal. This tripartite link between the mosquito, bacteria and parasite portends promise for a strategy of the transmission-blocking of parasites from mosquito to human. Leveraging this relationship calls for scientists to interrogate what species of bacteria are responsible, modes of transmission, and what happens to the parasites to make them unable to further develop.

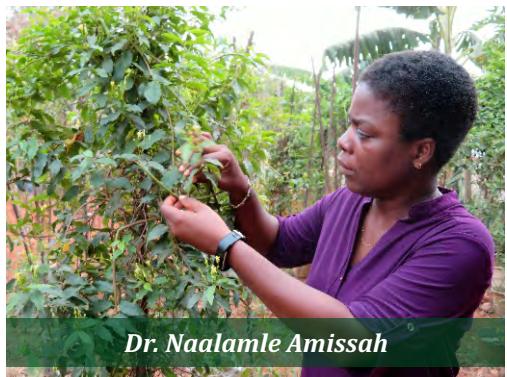
Dr. Akorli's work on the midgut has been supported by the prestigious Cambridge-Africa Partnership for Research Excellence (CAPREx) Fellowship. Her research investigates the tripartite parasite-killing relationship by comparing the expression of genes (transcriptomics) between mosquitoes that have a specific species of bacteria introduced



Dr. Jewelna Akorli

into them and those that are infected with plasmodium, with those with neither the bacteria nor the plasmodium. The results should provide first-hand information about gene and protein families that can potentially block plasmodium transmission. Ultimately, the goal of her inquiry is to reach the point where mosquito bites do not transmit the parasite; that is the ultimate goal of transmission-blocking, according to Dr. Akorli.





Dr. Naalamle Amissah

CRYPTOLEPIS SANGUINOLENTA (Cs): HERBAL REMEDY FOR MALARIA?

The World Health Organization (WHO) reported an estimated 219 million malaria cases in 2017 (WHO 2018), resulting in 435,000 deaths, 93 percent of which occurred in sub-Saharan Africa alone. Unfortunately, this heavy toll of malaria on the wellbeing of sub-Saharan Africans coincides with a stall in the progress of malaria control, after many years of success in combating the disease, because of funding limitations and increases in drug resistance among other things. Consequently, the race for a remedy persists on all fronts.

In the Department of Crop Science at the University of Ghana, **Dr. Naalamle Amissah** is investigating domestication protocols for *Cryptolepis sanguinolenta* (Cs). Growing in the wild, Cs is a medicinal plant that has been traditionally used in the treatment of malaria in Ghana; its root system is the desired raw material for the production of the herbal decoctions. The root extracts contain systemic antibacterial, antifungal, anti-malarial, anti-cancer, anti-diabetic, and antiprotozoal properties. According to Dr. Amissah, the resulting heavy exploitation means Cs is likely to become extinct unless cultivation measures are adopted to prevent over-harvesting.

Dr. Amissah's research delves into the efficacy of Cs and has determined the genetic diversity and efficacy of the plant. A major benefit of the plant is related to the established anti-malarial efficacies of domesticated genotypes of Cs, which support the preparation of traditional medicines in Ghana. In addition to its anti-malarial properties, there is an increasing market for Cs to treat tick-borne diseases. As a visiting scholar at the Harvard University Center of African Studies, she presented her research at the *Integrative Medicine for the*

Treatment of Tick-Borne Diseases Conference in Baltimore, Maryland in 2018. Her findings, from a survey of 133 medicinal practitioners, show that Cs is also used to treat Lyme disease, Babesia and Bartonella, among other ailments.

Initial funding to support Dr. Amissah's work on Cs came from the Volkswagen Foundation, with subsequent support from a Cambridge-Africa Partnership for Research Excellence (CAPREx) Fellowship in 2016. Under the mentorship of Dr. Lesley Boyd, she successfully developed Cs *in-vitro* propagation protocols at the National Institute for Agricultural Botany (NIAB) in Cambridge, UK. Her laboratory is working to ensure a sustainable supply of Cs seedlings for commercial cultivation.

Dr. Amissah is currently exploring funding opportunities to scale up production of Cs planting material using the state-of-the-art tissue culture facilities at the University of Ghana's West Africa Centre for Crop Improvement (WACCI). With cropping cycles of nine months, and propagation protocols in place, the needed supply of seedlings for cultivation of Cs as a cash crop will be ensured.



ADVANCING PREDICTIVE MEDICINE IN SICKLE CELL DISEASE (SCD)



Prof. Solomon Ofori-Acquah

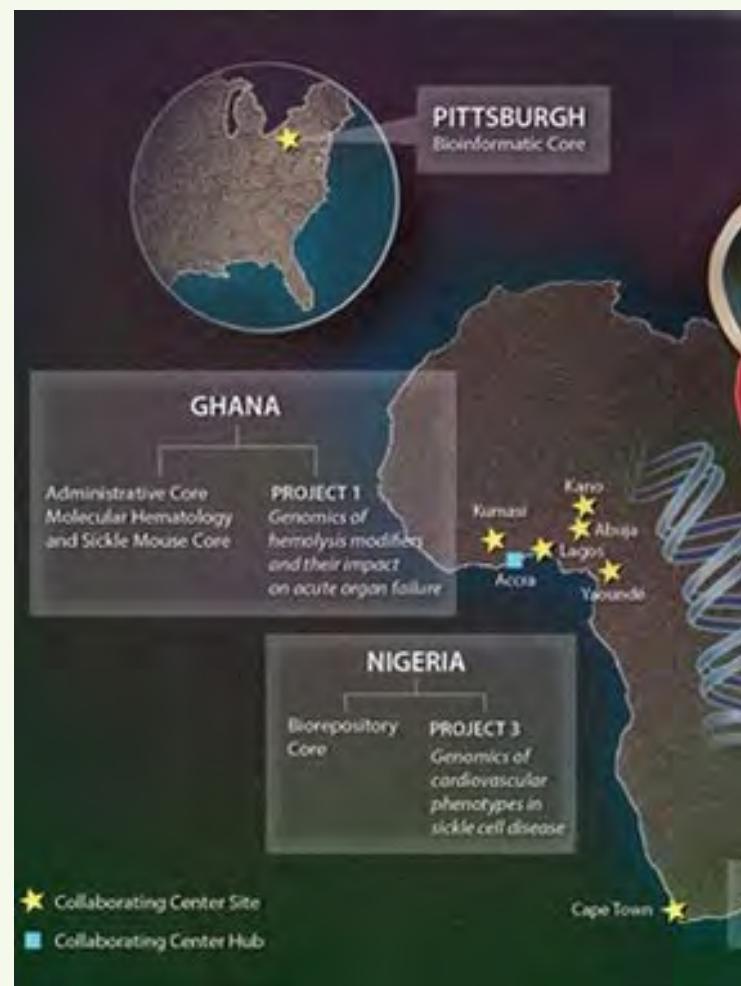
Sickle Cell Disease (SCD), an inherited condition affecting the red blood cells, is an affliction for millions of people around the world; those who inherit one sickle cell gene and one normal gene are said to carry the sickle cell trait (SCT), and typically do not exhibit symptoms of SCD. With about 75% of the global SCD burden in sub-Saharan Africa (SSA), the situation is particularly acute precisely where malaria is also endemic. The relevance of the co-location of the two diseases is that the incidence of malaria in SCD can be fatal. Conversely, SCT carriers have a survival advantage in malaria endemic areas.

Leading advances in SCD genetic medicine research at the University of Ghana is **Professor Solomon Ofori-Acquah**, Dean of the School of Biomedical and Allied Health Sciences (who also holds a joint appointment in Medicine and Human Genetics at the University of Pittsburgh). He directs the Sickle Cell Disease Genomics Network of Africa (SickleGenAfrica), a multi-country research programme that seeks to align the survival of individuals with SCD in Africa with national norms. Professor Ofori-Acquah and his collaborators across the continent are interrogating the entire human genome to identify differences in our genes that afford some patients an enhanced capacity to fight the by-products of sickle cell destruction in order to prevent potential damage to major organs.

The project comprises three interrelated research programmes including:

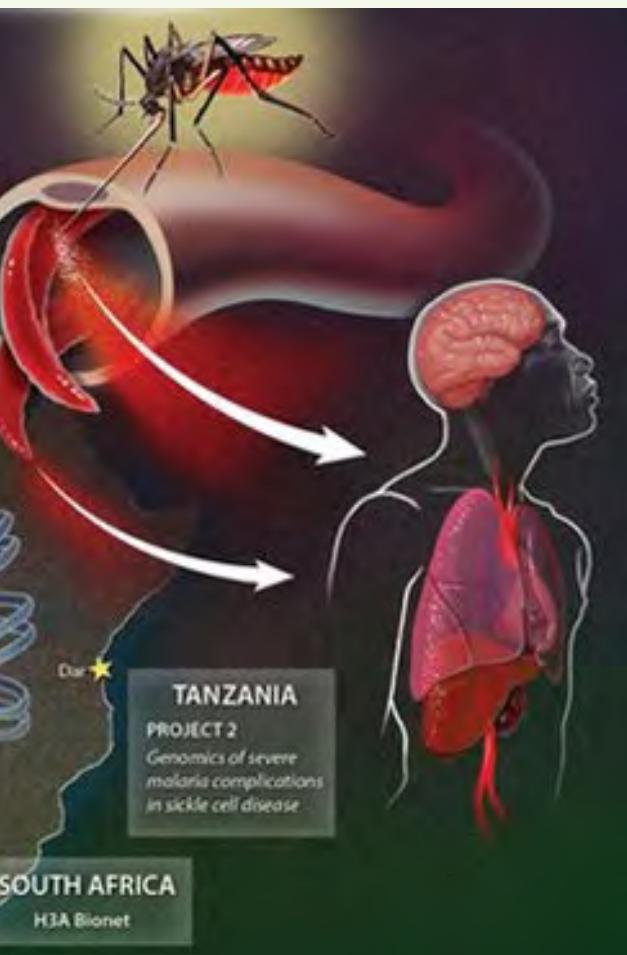
- a primary genomics research project that is a genome-wide association study of hemolysis-modifying factors and their role and mechanism in acute organ damage in SCD patients, led by

- Professor Ofori-Acquah;
- a study of the genomics of severe malaria complications in SCD led by Professor Julie Makani of Muhimbili University of Health and Allied Sciences, Tanzania and Professor Gordon Awandare, Director of University of Ghana's West African Centre for Cell Biology of Infectious Pathogens (WACCBIP); and
- an examination of the genomics of cardiovascular phenotypes in SCD led by Professor Mahmoud Sani of Bayero University, Nigeria.

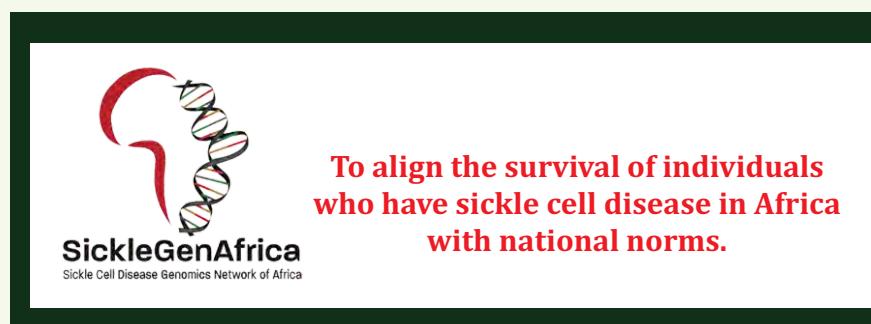


The establishment of six project sites in three countries (Ghana, Tanzania, and Nigeria) is supported by an initial grant of US\$5.5 million from the US National Institutes of Health (NIH). These sites are studying participants with varying forms of SCD, from the age of one, and who are enrolled at sickle cell clinics (paediatric and adult clinics) in the study sites.

- Ultimately, SickleGenAfrica has as its eight main objectives, to:
- Phenotype 7,000 SCD patients and controls in four SSA countries (i.e., 7,000 SCD patients will be sampled by phenotype);
- Perform three collaborative genetic research projects, each with a sub-aim of using transgenic sickle mouse models;
- Establish a molecular hematology and transgenic sickle mouse core in Ghana;



- Establish a SCD bio-repository core;
- Establish a network-wide data-management/bio-informatics core that will integrate with H3ABionet;
- Establish a community engagement core to assess the impact of the network on local communities;
- Establish a cross-cutting administrative core enabling synergy and coordination of individual projects and cores and develop a mentor-to-mentor model to train future science leaders in Accra;
- Develop a robust sustainability plan to include establishment of a new center of Genomics to fulfill the long-term aspirations of SickleGenAfrica.





Dr. Kwadwo A. Kusi

THE SEARCH FOR AN EFFECTIVE SUBUNIT MALARIA VACCINE CANDIDATE

The identification of malaria parasite antigen targets of immune responses that can protect against clinical malaria is the focus of **Dr. Kwadwo Asamoah Kusi's** inquiry in the Immunology Department of Noguchi Memorial Institute for Medical Research. His goal is to combine these antigen targets into a sub-unit malaria vaccine.

Dr. Kusi's search for essential parasite antigens focuses mainly on the non-symptomatic liver stage parasite and the disease-causing asexual blood stage parasites. A component of his team's work, conducted in collaboration with scientists from the Naval Medical Research Centre under the US Military Malaria Vaccine Program (USMMVP), screens individuals who have a history of natural infection by *Plasmodium falciparum*, the most deadly form of the malaria parasite, for immune cells that can identify and destroy infected liver cells.

Dr. Kusi and his colleagues have, so far, identified portions of some key liver stage parasite antigens that elicit immune responses with significant enough potency to potentially stop the growth of the parasite in

liver cells. Ultimately, the goal of this body of work is to identify many such parasite antigens and combine them into a multi-target malaria vaccine that should effectively halt the parasite and prevent the development of malaria symptoms.

There are numerous variants of malaria parasites in all malaria endemic areas. An immune response that is effective against one variant is usually only partially so against others. The majority of vaccine development efforts, however, focus principally on identifying immune targets in a single parasite variant. There is no definitive evidence that a vaccine with components from a single parasite variant will offer the same level of protection against the many circulating variants in endemic areas. Thus, Dr. Kusi's research further seeks to develop strategies for innovating vaccines that will be simultaneously effective against many parasite variants by inducing cross-reactive immune responses.

The goal of this research is to combine identified malaria parasite antigen targets into a sub-unit malaria vaccine



OUR LANGUAGE, MY RESEARCH: INTERROGATING AN INDIGENOUS LANGUAGE IN GHANA

Accomplishments in academia are largely measured by contributions to knowledge, with emphasis on the impact of scholarship. Equally important, but generally underrated, is the language medium through which research is conducted, channeled and ultimately applied. As Ghanaian indigenous culture and language are overtaken by "modernity", investigating how Akan indirectional strategies (such as proverbs, metaphors, innuendoes, etc.) are employed in public discourse was the focus of **Dr. Nana Anima Wiafe-Akenten's** research at the University of Ghana.

Following her PhD thesis at the Department of Linguistics titled:

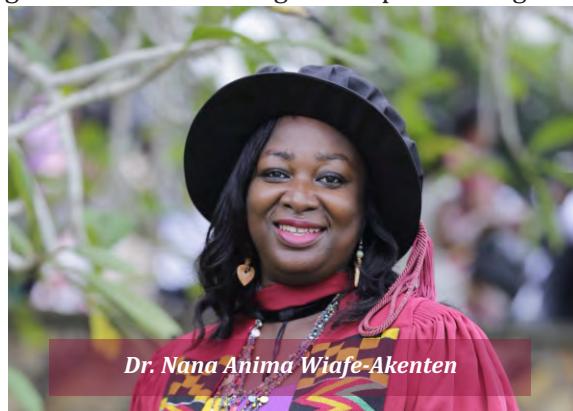
**“Sedeɛ wɔde
Akan kasa di
dwuma wɔ
ɛnne mmere
yi radio ne TV so ”**

**“Use of Akan language in
contemporary political and
sociocultural media discourse”**

Dr. Wiafe-Akenten has posited that the lack of alternative academic perspectives and contributions to knowledge, and research conducted and written in the Akan language, are a barrier to the tenets of research as ethnographic research on language and culture of even indigenous groups has largely been written in the English language.

According to Dr. Wiafe-Akenten, the review of literature and the explanation of theoretical frameworks are the most difficult problems posed by the barrier of language. Foreign literature—with western concepts, theories, terminologies, registers, etc.—must be interpreted and translated into the indigenous language equivalent, while retaining their original meaning and relevance. The nativization and localisation of concepts must be conveyed in accordance with academic and globally acceptable standards, and she relates the following as examples: Statement of problem (Farebae), Literature review (Dwumadie no nsesoo bi mpensempenseñmu), Methodology and Data collection (Dwumadie no ho akwankyeré ne Nsemmoano), Theoretical Framework (Nnyinasoo), Critical discourse analysis (Kasa mfeefemu nyinasoo), Politeness Theory (Opo Nnyinasoo), Directness and Indirectness (Penpenkasa ne Kwatikwan kasa), etc. The work and Akan publications of Professors Kofi Agyekum and Kweku Osam, also of the University of Ghana, and those of other scholars in linguistics are particularly useful in this regard.

In the absence of the appropriate Akan word, an English word which fits the phonotactics (CV structure) of the Akan language must be borrowed. For example, terms such as tone and pitch are borrowed and nativized as 'toonu' and 'peekye' (Akan), rather than using the word 'enne' (Akan) to represent the two terms. Knowledge of phonology and morphology is therefore essential, and a focus on the ethnography of communication, sociolinguistics, media discourse without delving into other aspects of linguistics such as, syntax, semantics, pragmatics, literature, stylistics, cultural studies, and psycholinguistics can be intellectually costly. Essentially, the ability to produce a body of scholarship in an indigenous language, such as Akan, requires indepth knowlegde and understanding of all aspects oflinguistcs.



Building Research Capacity in Human Genetics



The problem of the low contribution of African scholars to global scientific discourse is frequently linked to the paucity of scientific capacity as well as to the lack of technological equipment and resources. To address these bottlenecks, the University of Ghana's West African Centre for Cell Biology of Infectious Pathogens (WACCBIP) has established the first graduate and professional human genetics programme in Ghana, following a £5.3 million grant from the Wellcome Trust's Developing Excellence in Leadership, Training and Science (DELTAS) Africa programme.

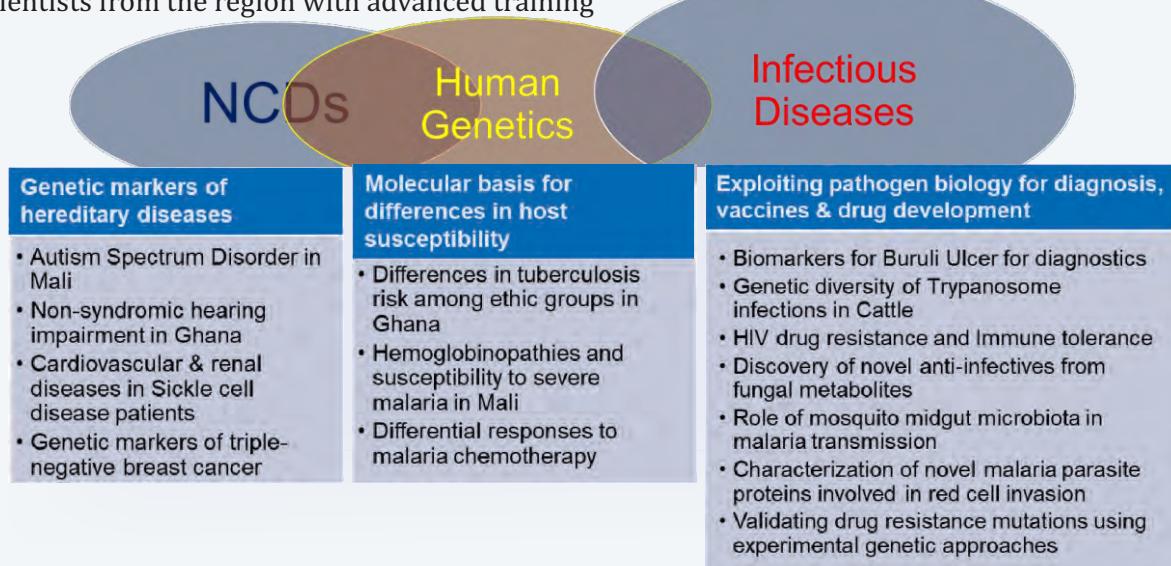
The DELTAS Africa programme supports Africa-led development of world-class scientific researchers and leaders. The award is enabling WACCBIP extend and augment its existing training programmes and provide young scientists from the region with advanced training

in disease diagnosis, prevention, and control. Under this holistic research-intensive regime, WACCBIP is training Masters and PhD students from across the continent, and has instituted a post-doctoral programme to mentor qualified PhDs in Africa, while attracting African scientists who have completed their PhDs abroad to return home.

Human genetics will be incorporated to facilitate research into host-pathogens interactions, while serving as a bridge between infectious diseases and non-communicable diseases. WACCBIP aims to drive three major objectives:

- Exploiting pathogen biology for developing novel disease diagnostics, vaccines and drugs;
- Determining the molecular bases for differences in host susceptibility to infectious diseases to guide better disease prevention and management; and
- Identifying genetic markers to inform molecular diagnostic approaches for early detection of non-communicable diseases.

According to **Professor Gordon Awandare**, the Director of WACCBIP, the new programme also features a more robust mentoring system, with doctoral and postdoctoral scholars having access to mentors, both local and international. Additionally, these young scientists enjoy funded six-month research tours in laboratories of co-mentors in the UK and USA.



ZEBRAFISH, RATS AND RESEARCH: THE NEW LAB RAT...THE 'Zebrafish'

Photo credit: Prof. Gerlai, University of Toronto

The search for an effective drug for epilepsy and other neurological conditions has led **Dr. Patrick Amoateng**, a europharmacologist in the University of Ghana's School of Pharmacy's Department of Pharmacology and Toxicology, to screen three plant extracts for their anti-convulsant properties, and a further five plant extracts for their anti-psychotic effects.

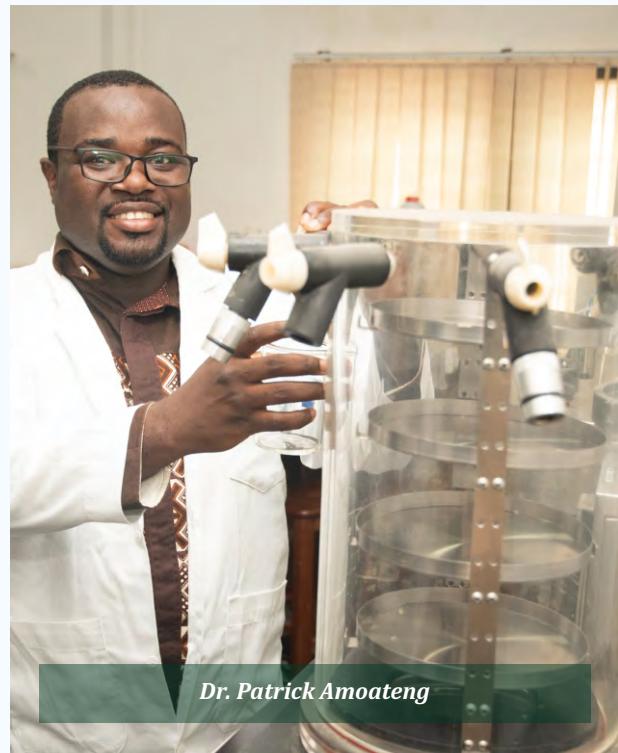
Over the years, his tests have been mainly carried out on mice and rats. With the increasing number of rodents required in the business of primary drug discovery, his ethical considerations about the rodent subjects, and concerns about escalating costs, have led him in search of a new lab rat, the Zebrafish.

Danio rerio, the scientific name for the Zebrafish, is a fresh water fish which presents multiple advantages. These include its high physiological and genetic homology to mammals, external fertilization, rapid development, transparency of embryos and larvae as well as ease of genetic and other experimental manipulations.

Other benefits accrue from its relatively low cost, space effectiveness, and ease of breeding and husbandry, all of which make the Zebrafish a viable lab rat alternative. Major research centres worldwide have established Zebrafish facilities, where adult and larval Zebrafish are used for cardiovascular, cancer, inflammation, infectious diseases, epilepsy, pain, anxiety and depression research as well as for drug discovery.

Despite the advantages of this easy to breed species, there is little utilization of the Zebrafish in this sub-region. Following his postdoctoral fellowship at the University of Oxford, funded by the University of Ghana (UG) BANGA-Africa project in 2017, Dr. Amoateng was able to further his research by leveraging the efficacy of Zebrafish as an alternative to rodents.

He is establishing a Zebrafish facility at the University of Ghana, which would be the first of its kind in West Africa. The facility, donated by the Max F. Perutz Laboratories in Vienna, Austria will facilitate research and training of the next generation of biomedical scientists.



AWARDS/APPOINTMENTS



The Vice-Chancellor, **Professor Ebenezer Odum Oduro Owusu** has received the 2018 United Nations Gold Star Award in Education, in recognition of his relentless and immense

contribution towards the Sustainability of Global Leadership and Development on the continent of Africa. The UN Gold Star Honor of Excellence is awarded to leaders and individuals for their extraordinary contributions to their countries or regions in nation building, security and development.



Professor Eric Yirenkyi Danquah, a plant geneticist from the University of Ghana, has been awarded the 2018 World Agriculture Prize in Nanjing, China, October 28, in

recognition of his success in founding and directing the West Africa Centre for Crop Improvement (WACCI) from 2007 to 2018.

Professor Eric Yirenkyi Danquah, Director of the University of Ghana's West Africa Centre for Crop Improvement (WACCI), has been appointed to the Academic Board of Planet Earth International (PEI). Professor Danquah will join other internationally renowned academics and experts to provide strategic direction to PEI's work of identifying and addressing the most pressing challenges facing the African continent. PEI is a prestigious charity committed to the application of science, technology and innovation.



Dr. Elsie Effah Kaufmann, a Senior Lecturer at the Department of Biomedical Engineering, has received the 2018

Golden Torch Award for International Academic Leadership. Dr. Kaufmann, who received the award at the 44th Annual National Society of Black Engineers (NSBE) Conference in Pittsburgh, USA, is the first female recipient of this International award. The award is given to a leader and strong advocate of NSBE International who demonstrates excellence in support of academics on an international level and exhibits a commitment to the Science, Technology, Engineering, and Math (STEM) fields.



The International Pragmatics Association (IPrA) has elected **Professor Nana Aba Appiah Amfo**, Dean of the School of Languages, as the first African member to its

Consultation Board since its establishment more than 30-years ago. The IPrA is an international scientific association dedicated to the study of language use with members in over 70 countries worldwide. Professor Amfo's election underscores her distinguished contribution to the field of Pragmatics, the science of language use.



The African Academy of Sciences (AAS) has conferred on **Professor Andrew Anthony Adjei**, Professor of Immunology and Coordinator of the Vice-Chancellor's Strategic

Teams, the status of *Fellow* (2018), for his contribution to the advancement of science in Africa. In conferring awards, the academy recognizes the scholarship, publication record, pioneering and leadership role of nominees and contributions to science that have shaped policy.

RECENT FUNDING

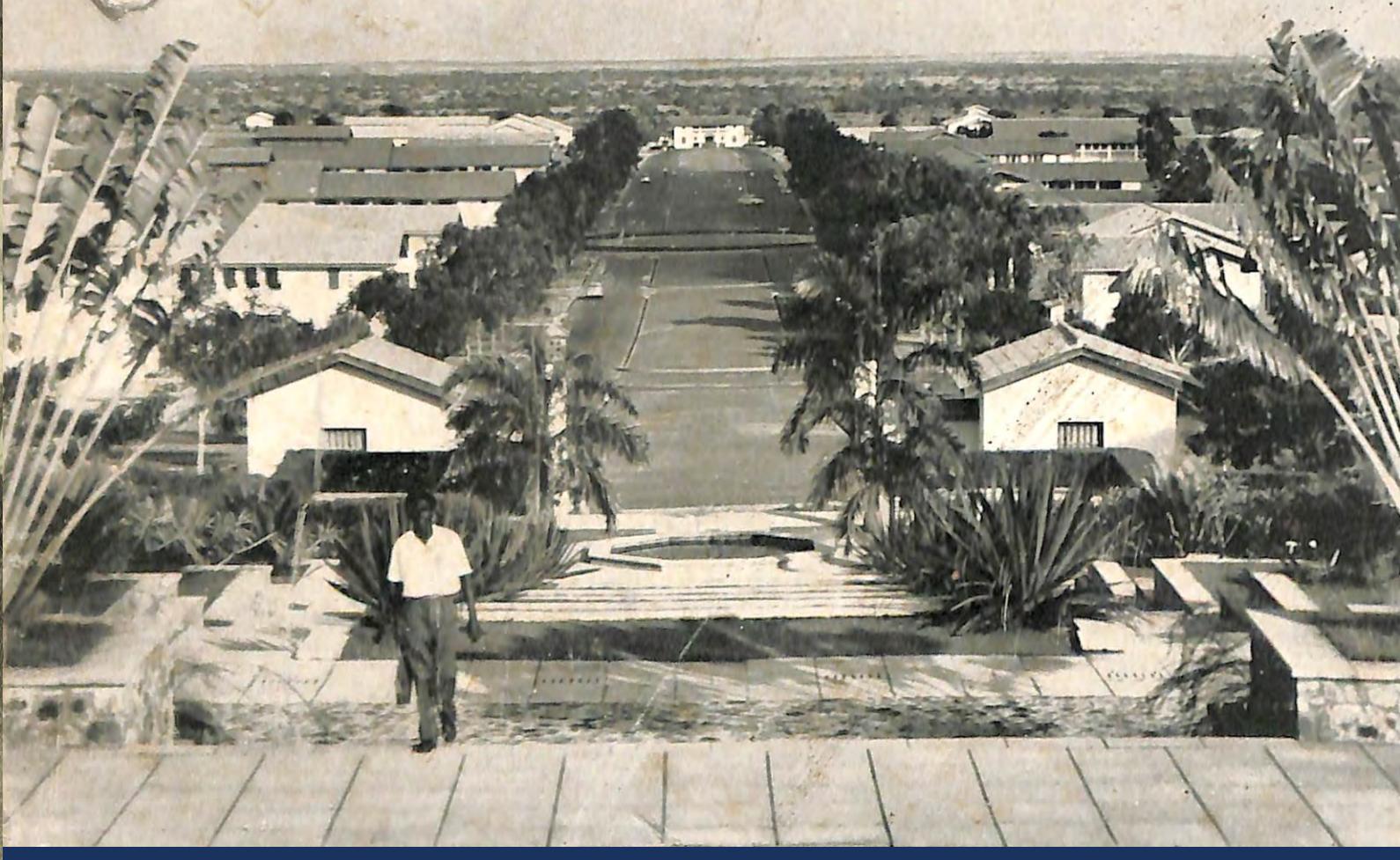
CONTRACTS & AGREEMENTS: 1ST AUGUST, 2018 TO 31ST JANUARY, 2019

FUNDER	PRINCIPAL INVESTIGATOR	ORIGINATING UNIT	PROJECT TITLE	BUDGET ALLOCATED TO UG
Academy of Medical Sciences	Prof. Chris Gordon	Institute for Environment and Sanitation Studies (IESS)	Nano and Micro Scale Plastics in Coastal Ghana: The Implication for Global Food Safety and Ecosystem Functioning	GBP 24,950.00
African Union Commission, through Centre for Space Science & Technology Education (CSSTE)	Dr. Sandow M. Yidana	Dept. of Earth Science	Multi-Scale Flood Monitoring and Assessment Services for West Africa (MIFMASS)	EUR 73,050.00
Alliance for Accelerating Excellence in Science in Africa (AES) African Academy of Sciences	Dr. Lucas Amenga Etego	West African Centre for Cell Biology of Infectious Pathogens (WACCBIP)	Genetic Interactions between Human Populations and Malaria Parasites in Different Environment Settings Across Africa (PAMGEN)	USD 415,800.00
Alliance for Accelerating Excellence in Science in Africa (AES) African Academy of Sciences	Prof. Gordon Awandare	West African Centre for Cell Biology of Infectious Pathogens (WACCBIP)	HI-GENE Africa Project	USD 68,971.00
Andrew W. Mellon Foundation	Prof. Samuel K. Offei Prof. Samuel Agyei Mensah	Academic & Student Affairs and Dept. of Geography & Resource Development	Building Capacity for Early Career Humanities Scholars in Africa	USD 975,000.00
Andrew W. Mellon Foundation	Prof. Samuel K. Offei Prof. Samuel Agyei Mensah	Academic & Student Affairs and Dept. of Geography & Resource Development	Establishment of a Centre for Teaching and Learning in the Humanities at the University of Ghana	USD 45,000.00
Cambridge-Africa ALBORADA Research Fund	Dr. Jennifer A. Coffie	Legon Centre for International Affairs and Diplomacy (LECIAD)	Refugee Diaspora and Peace Building in the Gambia	GBP 5,555.00
Economic and Social Research Council	Prof. Joseph Teye	Centre for Migration Studies	Migration for Inclusive African Growth	GBP 72,973.40
European and Developing Countries Clinical Trials Partnership (EDCTP)	Dr. George B. Kyei	Dept. of Virology	Identification of Novel HIV Reactivation Agents: Towards Building Translational HIV Cure Research Infrastructure in Ghana (H-CRIS)	EUR 499,125.00
European Union -Long term EU-Africa Research & Innovation Partnership (EU-LEAP) through Federal Office for Agriculture and Food (BLE)	Prof. Joseph Yaro Dr. Austin D. Ablo	Dept. of Geography & Resource Development	Small Fish and Food Security: On the Way to Innovative Integration of Fish into African Food Systems to Improve Diet	EUR 82,357.00
Fleming Fund	Dr. Japheth A. Opintan	Dept. of Medical Microbiology	FF4 Ghana Country Grant 1 Anti-microbial Resistance (AMR) in Ghana	GBP 1,842,668.69
International Society for Neurochemistry (ISN)	Dr. Thomas A. Tagoe	Dept. of Physiology	Identifying Deficits in Synaptic Properties which can serve as Biomarkers following Exposure to Parasitic Excretory Proteins.	USD 4,500.00
International Development Research Centre (IDRC)	Dr. Esi Colecraft	Dept. of Nutrition and Food Science	Scaling up Women's Agripreneurship through Public-Private Linkages to Improve Rural Women's Income, Nutrition, and the Effectiveness of Institutions in Rural Ghana	CAD 367,900.00
Institute of Tropical Medicine (ITM) Antwerp	Prof. Kwasi Torpey	Dept. of Population, Family and Reproduction Health	Hepatitis C treatment for HIV Patients in Resource-poor Countries: Is a Public Health Approach Possible?	EUR 94,664.44
International Food Policy Research Institute (IFPRI)	Dr. Richmond Aryeetey	Dept. of Population, Family and Reproduction Health	Transform Nutrition – West Africa: Ghana Stories of Change	USD 60,064.50



FUNDER	PRINCIPAL INVESTIGATOR	ORIGINATING UNIT	PROJECT TITLE	BUDGET ALLOCATED TO UG
Medicines for Malaria Venture	Dr. Richard K. Amewu	Dept. of Chemistry	South African Malaria Drug Discovery (SAMDD) Programme	USD 15,000.00
Medicines for Malaria Venture	Dr. Richard K. Amewu	Dept. of Chemistry	South African Malaria Drug Discovery (SAMDD) Programme	USD 50,000.00
Moneygram	Prof. Robert E. Hinson	Dept. of Marketing and Entrepreneurship	Marketing Working Teams (MAWOTs)	USD 10,000.00
National Institutes of Health (NIH)/FIC	Dr. Amos Laar	Dept. of Population, Family and Reproduction Health	New York University/University of Ghana Research Integrity Training Program	USD 65,616.00
Office Cheriflen des Phosphates (OCP) Ghana Limited	Dr. Dilys MacCarthy	Soil and Irrigation Research Centre (SIREC)	Protocol Test for the Efficacy of Two Fertilizer Products on Rice and Maize	GHS 50,921.00
Oxford Policy Management Limited (OPM)	Prof. Joshua Y. Abor	Dept. of Finance	Ghana Oil and Gas for Inclusive Growth (GOGIG)	GBP 36,045.98
Robert Bosch Stiftung	Prof. George Owusu	Centre for Urban Management Studies	Pan-African Research College on Sustainable Cities	EUR 132,000.00
Skills Development Fund II (DANIDA)	Prof. Robert E. Hinson	Dept. of Marketing and Entrepreneurship	Skills Development Fund, Phase II (SDF II) of the Danish Support to Private Sector Development, Phase III (SPSD III) Ghana 2016-2020	USD 200,000.00
Silicon Valley Community Foundation (Open Philanthropy Project Fund) through University of Oxford / Imperial College of Science, Technology and Medicine	Dr. Fred Aboagye-Antwi	Dept. of Animal Biology and Conservation Science	Target Malaria SVCF Project	USD 577,606.20
Silicon Valley Community Foundation (Open Philanthropy Project Fund) through University of Keele	Dr. Fred Aboagye-Antwi	Dept. of Animal Biology and Conservation Science	Target Malaria SVCF Project	USD 1,212,000.90
United Nations International Children's Emergency Fund (UNICEF) Ghana	Dr. Charles G. Ackah	Institute of Statistical, Social and Economic Research (ISSER)	Knowledge, Attitudes and Practices Study	GHS 237,826.02
United Nations International Children's Emergency Fund (UNICEF) Ghana	Dr. Charles G. Ackah	Centre for Social Policy Studies (CSPS)	Making the District Assemblies Common Fund Work to Address Inequalities among Districts	GHS 73,750.00
United Nations International Children's Emergency Fund (UNICEF) Ghana	Dr. Clement Adamba	Dept. of Educational Studies and Leadership	Technical Institutional Consultancy to Support Qualitative Research on - "Time to Teach: Causes and Motivations of Teacher Absenteeism in Ghana"	GHS 509,256.80
USAID through Chemonics International Inc.	Dr. Samuel K. Dery Dr. Roger A. Atinga	Dept. of Biostatistics	Assessment of Motivation and Performance Outcomes of Public Sector Health Supply Chain Workers in Northern Region, Ghana	GHS 408,713.00
U.S Agency for International Development / University College London (USAID/UCL)	Prof. Christabel Enweronu-Laryea	Dept. of Child Health	Smart Sclera Screening of Jaundiced Newborns in Ghana	USD 112,875.00
Volkswagen Foundation	Dr. Annabella Osei-Tutu	Dept. of Psychology	'Is it well with my Soul?' Effects of Contemporary African Religious Practices on Well-Being	EUR 205,000.00
Wellcome Trust through Kings College, London	Prof. Ama de-Graft Aikins	Regional Institute for Population Studies (RIPS)	Collaborative Awards in Humanities and Social Science	GBP 35,738.00
Wellcome Trust	Prof. Gordon Awandare	West African Centre for Cell Biology of Infectious Pathogens (WACCBIP)	PeSHIGen Toolkit: Public Engagement for Strengthening Hearing Impairment Genetics Research	USD 189,130.00
World Health Organization (WHO)	Prof. Richard Adanu	Dept. of Population, Family and Reproduction Health	The Umbiflow International Study	USD 75,295.00

VIEW OF LEGON CAMPUS FROM COMMONWEALTH HALL TO THE MAIN ENTRANCE



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Inspiring UG was motivated by their submissions.

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