**Professor Ofori-Acquah to Sequence the Whole Genome DNA of Children with Sickle Cell Disease in Ghana in a new Project funded by the US National Institutes of Health**


Professor Fiifi Ofori-Acquah, Director of the West African Genetic Medicine Centre (WAGMC) and Dean of the School of Biomedical and Allied Health Sciences (SBAHS) has been awarded a $3 million grant by the National Institutes of Health (NIH), USA to sequence the whole genome DNA of children with sickle cell disease (SCD) in Ghana.

The sequencing will be performed on the DNA of 500 children enrolled with broad consent in the Sickle Cell Disease Genomics of Africa (SickleGenAfrica) Network, an existing $5.4 million NIH project, which his team has been working on from 2018. The Network has enrolled over 1,500 Ghanaian children with SCD among a cohort of over 7,000 patients, including adults, in Ghana, Nigeria and Tanzania. In addition to the DNA sequencing, the new grant entitled Therapeutics Targets of Acute Chest Syndrome will fund other studies including genotyping of two polymorphic DNA repeat sequences in the promoter of the heme oxygenase-1 gene in a total of 1,500 patients in Ghana. The work will be performed in collaboration with SickleGenAfrica investigators including Dr. Yvonne Dei-Adomakoh, Director of the Ghana Institute of Clinical Genetics, and Head of Haematology Department at Korle Bu, Prof. Olayemi Edeghonghon and Dr. Amma Benneh both of the Haematology Department at Korle Bu, Dr. Cathy Segbefia, Child Health Department, Korle Bu, Dr. Vivian Paintsil, Komfo Anokye Teaching hospital, Kumasi and Dr. Ryan Minster, University of Pittsburgh, who will perform the bioinformatics analyses.

Professor Ofori-Acquah who holds a PhD in Molecular Genetics from the University of London is a globally renowned researcher in SCD and the Lead Investigator of the SickleGenAfrica Network. He explained that the new NIH grant will fund sequencing of 500 of a target 1,000 genomes of Ghanaian children with severe genetic disorders as part of new initiative called the Ghanaian Genome (GhGenome) Project to be launched later this year by WAGMC with Osagyefuo Amotia Ofori Panin, Okyenhene as the Patron. The goal of GhGenome is to build genetics health capacity in Ghana to ultimately provide access to all aspects of genetic medicine in the country. WAGMC launched a first-of-a-kind MSc Genetic Counselling programme in Sub-Saharan Africa in the current academic year enrolling a pioneering class of seven students as a part of the GhGneome Project. Other planned activities of GhGenome include a nationwide Public Lecture Series on the Ghanaian Genome to be given by Prof. Ofori-Acquah and free genetic health screening for sickle cell conditions, breast and prostate cancer and childhood developmental delays in collaboration with traditional leaders across the country.

Congratulations to Prof. Ofori-Acquah for securing a new multimillion dollar grant, which his team will leverage, through the sequencing of 1,000 Ghanaian genomes, to add our unique genomic heritage to the human genome atlas.