

# Project Updates ASAAP Pilot Study

On October 26, 2020, ASAAP recruited an adult patient diagnosed with uncomplicated malaria at the Centre de Recherches Médicales de Lambaréné (CERMEL) in Lambaréné in Gabon as its first study participant. This recruitment marked the initiation of the pilot study, which results would inform the final stages of preparations for implementing the multi-country trial.

ASAAP is a 4-year clinical trial research to evaluate the efficacy, safety, tolerability and pharmacokinetics of a new antimalarial drug combination (i.e. an Artemisinin based triple therapy by combining artemether+lumefantrine and atovaquone-proguanil), with particular focus on its successful application in one of the largest and most vulnerable demographics of Africa - children.





This pilot study will help detect any potential or unforeseen safety and tolerability issues with the trial drug combination in a limited number of adolescents/ adults, thereby offering the opportunity to mitigate any potential risk of biomedical research among children.

A successful pilot study will provide clearance for an age step-down decision for the main clinical trial in young African children aged 0-5 years.

The ASAAP Pilot study is registered at the ISCRTN (ISCRTN61526229) and the PACTR (PACTR202010540737215) trial registries.

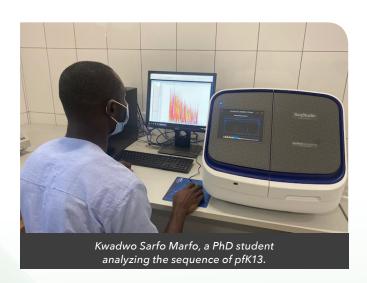
#### Capacity Building of ASAAP Staff

Work package 6 of the ASAAP project oversees the provision of a platform for infrastructure and fostering the development of human resource capacity to be fit for implementing cutting edge clinical research in the field of infectious disease and most importantly, towards the control and elimination of malaria in Africa.

#### lacksquare

#### **01.** Set up of new technological platform

Sequencing and Fragment Analyses Platform

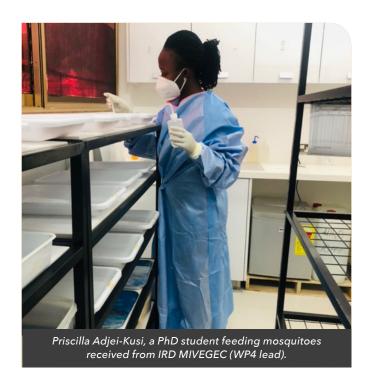


All partner sites for the ASAAP Project namely Benin, Gabon, Mali and Ghana have secured SeqStudio Genetic Analyzer for sequencing and fragment analyses. On October 23, 2019, the SeqStudio instrument for Ghana was installed by a Field Service Engineer from ThermoFisher Scientific and followed by basic system familiarization with KCCR Laboratory Scientists. The Laboratory Scientists at KCCR were also taken through theoretical and practical training sessions from December 9 and 10, 2019, by Field Application Scientist from ThermoFisher Scientific. The training covered operating the SeqStudio instrument, sample purification, sequencing and fragment analysis. Similar trainings were also carried out in the three other African sites.

Due to travel restrictions from the COVID-19 pandemic, virtual trainings have taken place on monthly basis to review procedures and progress under the lead of Dr. Jerome Clain from the University Paris Descartes.

## O2. Establishment of an Entomology Lab

In December 2020, the set-up of the entomology lab level 2 was completed at KCCR in Ghana. In a same way, the Centre de Recherches Entomologiques de Cotonou (CREC) with whom IRD Benin and IRCB collaborate on the ASAAP project upgraded their insectarium from a level 1 to a level 2 to enable a safe keeping of infected Anopheles. The four study sites are now well equipped to establish mosquito colonies and conduct experiments to answer Workpackage 4 objectives of the ASAAP project. Among other factors, the entomology laboratories will strengthen research and development of transmission blocking and vector control tools and also provide opportunities for collaborations, capacity building and knowledge sharing.



#### **03. Enrolment of Student**

#### Higher degree level (PhD and Masters)

ASAAP has enrolled students for higher degree under the project. Five students have been enrolled to the PhD programmes in all partner countries as follows: Dossou Akpéyédjé Yannelle (Benin), Priscilla Adjei-Kusi (Ghana), Cheik Papa Oumar Sangare (Mali), Kwadwo Sarfo Marfo (Ghana) and two Masters students from two partner countries - Esther Naadu Placca (Ghana) and Ballo Fatoumata I (Mali).



**Dossou** Akpéyédjé Yannelle (Benin)



**Priscilla**Adjei-Kusi
(Ghana)



Cheik Papa
Oumar
Sangare
(Mali)



Kwadwo Sarfo Marfo (Ghana)



Esther Naadu Placca (Ghana)



**Ballo**Fatoumata I
(Mali)

#### lacksquare

#### 04. Student Highlight: Esther Naadu Placca



Esther Placca, a young vibrant researcher partook in training organized by Pharmacometrics Africa in collaboration with the Rwanda Biomedical Centre at Rubavu, Rwanda from October 14 - 17, 2019 to help prepare her research project towards her Masters

degree. The training focussed on the basic concepts of pharmacokinetics in pharmaceutical and clinical applications. Esther gained understanding of the processes involved in pharmacokinetics, namely; administration, distribution, metabolism and elimination of drugs; and a rational design of dosage regimens. She was selected again to participate in an advanced 10-week online course, also organized by Pharmacometrics Africa in collaboration with the Infectious Diseases Institute of Uganda to broaden her knowledge in pharmacometrics. Esther said: "The training provided a great opportunity for me to gain knowledge and deeper understanding of general Pharmacology concepts as well as a platform to network with professionals in this field". Through the ASAAP Capacity Building exchange program, Esther will be able to visit with collaborative partners at the Paris Descartes University in France which is responsible for Pharmacokinetics study arm under the ASAAP clinical trial and contribute to the research.

#### ASAAP Editorial

### Impact of COVID-19 on Malaria control in Africa

Disease outbreaks often disrupt existing programs, including malaria control efforts. The recent experience was in 2014-2016 where we saw an increase in mortality, with additional 7000 malaria-associated deaths in children under five in Guinea, Liberia and Sierra Leone during the Ebola outbreak.

#### Malaria interventions and Burden during the COVID-19 period in Ghana

In Ghana, the surge of COVID-19 cases led to a reduced attendance to hospital facilities for non-COVID cases. Malaria admissions to hospitals dropped by 41% from 2019 to 2020, which may not necessarily be attributable to real cases reduction but potentially borne of out of heightened fear of contracting COVID-19 if one attended the health facilities tasked with treating and

managing the pandemic. The period of 2015-2018 recorded relatively higher annual in-patient deaths from malaria but at a reduced frequency and case fatality rate (CFR) i.e. 593 deaths (CFR=0.48) to 121 (CFR=0.12). However, 2019-2020 saw a marginal increase in rate of case fatality rates (0.08 in all ages and 0.10 in under 5years children in 2019 to 0.12 in both categories in 2020) according to National Malaria Control Program. Though some malaria control interventions such as distribution of insecticide-treated nets in schools were initially suspended, many have currently resumed with modifications aimed at consolidating the gains made over the years.

### Global Strategies for Malaria Control in COVID-19 Pandemic

Incidence of malaria morbidity and mortality pose a substantial risk to human lives and thus must be reduced by the implementation of key interventions. Global malaria partners continue to mobilize to mitigate the risks arising from COVID-19. Malaria burdened countries are entreated to adopt and follow the WHO's "Tailoring malaria interventions in the COVID-19 response" technical report on how their fragile health systems can continue to provide malaria prevention and eradication services while controlling COVID-19 pandemic. Under The auspices of the RBM Partnership to end Malaria, the Alliance for Malaria Prevention Coalitions has also outdoored its quidance on safe distribution of insecticide-treated nets in countries battling COVID-19.

The outbreak of COVID-19 has increased governments' investment in infrastructure and resources for combatting infectious diseases, a feat which would come handy in the future fight against other diseases, after COVID-19 is successfully controlled.







The ASAAP project is part of the EDCTP2 programme supported by the European Union

e.puorideme@kccr.de asaap@kccr.de www.asaap-malaria.org