

IMPROVE CONSORTIUM

Call for PhD application

Overview

IMPROVE (**IM**proving **PR**egnancy **O**utcomes with intermittent **preVE**ntive treatment in Africa) is a Consortium of 11 partners in Africa, Europe and the US funded by the European Developing Countries Clinical Trials Partnership (EDCTP) and Medical Research Council (MRC). The consortium will undertake a clinical trial to compare the efficacy, safety and tolerance of intermittent preventive treatment in pregnancy (IPTp) with dihydroartemisinin-piperazine (IPTp-DPP), alone or combined with azithromycin, versus IPTp with standard sulfadoxine- pyrimethamine (IPTp-SP) as control to reduce the adverse effects of malaria and curable STIs/RTIs in 4,680 women in 10 sites in high SP resistance areas in Kenya, Malawi and Tanzania. Additional nested studies on cardiac-safety; molecular markers of antimalarial resistance; antimicrobial activity of SP and AZ; and acceptability, feasibility and cost-effectiveness will also be conducted. Capacity building activities include PhD support for candidates associated with consortium partners in Kenya, Malawi and Tanzania, respectively.

Consortium Partners

Africa:

- University of Malawi, College of Medicine (CoM), Malawi
- Kenya Medical Research Institute (KEMRI), Kenya,
- National Institute for Medical Research (NIMR), Tanzania
- Kilimanjaro Christian Medical Centre (KCMC), Tanzania

Europe:

- Liverpool School of Tropical Medicine (LSTM), United Kingdom
- London School of Hygiene and Tropical Medicine (LSHTM), United Kingdom
- University of Copenhagen (UoC), Denmark
- University College of London (UCL), United Kingdom
- University of Bergen (UiB), Norway
- University of Tampere (UoT), Finland

USA: Centers for Disease Control and Prevention (CDC), Atlanta, USA

The IMPROVE Consortium seeks applicants for the following topics under 4 work packages

(This specific call is for WP3 – highlighted below for Tanzania)

- WP2: IPTp with dihydroartemisinin-piperaquine and azithromycin for malaria, sexually transmitted and reproductive tract infections in pregnancy in high sulphadoxine-pyrimethamine resistance areas in Kenya, Malawi, and Tanzania.
- **WP3: Assessment of sub-microscopic infections and molecular markers of malaria parasite resistance. Registration will be at UoC and KCMC being the hosting institution in Tanzania**
- WP4 : Assessment of antimicrobial activity and potential effect on drug resistance.
- WP5: Feasibility and Economic studies.

Financing terms and PhD programme

The following will be included:

- Stipend/salary support for the duration of the award in accordance with rules and regulations of the hosting and registering institution
- Cost of a training attachment at a European partner institution
- Centralized training on research methods, Good Clinical and Laboratory Practice and dissemination skills
- A Personal Development Programme and Mentoring

Specific project description and specific skills and requirements for applicant regarding WP3

Aim: To assess impact of sub-microscopic infections and molecular markers of antimalarial drug resistance on efficiency of IPTp with either standard SP or DPP.

The study will examine blood samples from all pregnant women enrolled into the clinical study for sub-microscopic *P. falciparum* infections by mainly quantitative PCR but other PCR based methods may be explored as well. Furthermore, the study will examine the *P. falciparum* infections for molecular markers of drug resistance (e.g. single nucleotide polymorphisms (SNPs) in *Pf dhfr/Pf dhps* and *Pf mdr1/K13* associated with resistance to SP and DP, respectively) mainly by the use of a next generation sequencing platform (Illumina) but as well PCR-ELISA based methodologies.

Of advantage for the applicant when applying:

- Hands-on experience and skills in molecular biology e.g. DNA purification, PCR, sequencing etc. including development and establishment of molecular methods and trouble shooting

- Experience in handling DNA sequencing data or similar bioinformatic skills
- Proven experience in scientific writing, e.g. through first authorship publications

Eligibility criteria and procedures

1. Master degree or the equivalent, relevant to the area of study (e.g. biology, molecular biology or biochemistry), and fulfilment of individual requirements of the institution to which the candidate will be registered
2. Previous publications related to the research themes of the IMPROVE project will be an added advantage
3. A personal statement demonstrating commitment to a career in research and academia
4. Willingness to commit 100% (full) time and effort to their PhD
5. Knowledge and skills relevant to the PhD topic applied for (see specific project description for details)
6. Candidate not holding or applied for other fellowships, and not holding a PhD
7. Personal motivation of the candidates as demonstrated by their personal statements and responses during interview
8. In addition applicants should be willing to remain and work at KCMC after completion of their PhD.

Application procedure:

Application must be sent electronically to: amifa2001@gmail.com no later than Monday 6th February 2017, 18hrs GMT.

Documentation to be included in the application

- CV (use the CV template format below, maximum 2 pages) and a publication list
- Names and contact information for two referees
- A synopsis focussing on the subject of the PhD call, describing shortly what is already known and key challenges and including some key references (Max. 1000 words excluding references)
- A personal statement on commitment to a career in research and academia (Max. 500 words)

NB: To access the electronic CV template visit the KCRI and KCMUCo websites

Selection procedure:

Shortlisting

Applications will be reviewed according to the prevailing procedures in the registering and hosting institutions. Shortlisted applications will be screened by IMPROVE's PhD Review Panel in accordance with the registering institution's admission criteria. An interview panel will consist of at least 4 members including the head of Department (or representative) of the department where the student will be enrolled, student's prospective supervisor/s, a representative of the IMPROVE consortium, and the PIs of the African hosting institutions. Employment and administration will be according to the hosting institution procedures.

CURRICULUM VITAE Template			
NAME		TITLE / PRESENT POSITION	
DATE OF BIRTH			
EDUCATION/OTHER RELEVANT TRAINING			
INSTITUTION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY

Employment record (positions)

Involvement in research projects and management skills

Scientific qualifications of relevance for the application

Other relevant experiences

Scientific achievements