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Malawi – Malaria Research

From asymptomatic parasitemia to cerebral malaria – investigating causes for a wide spectrum of malaria infection outcomes

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Background: Our group has performed clinical, epidemiologic and translational research on malaria infections in Blantyre, Malawi for the past 30 years. The collaboration is between Michigan State University (MSU), Queen Elizabeth Central Hospital and the University of Malawi College of Medicine, with collaborative efforts based at several other US and UK based institutes. The project will be based in Blantyre, Malawi, at the University of Malawi College of Medicine campus. Infrastructure in Blantyre includes a Pediatric Research ward for inpatient care, a Molecular and Genomics Core laboratory, a fully functional insectary, and several well-characterized rural sites within a 60km radius.

Project Description: Topics of investigation may range from clinical to epidemiologic to basic science aspects of malaria infection and its consequences. Our focus has historically been on severe disease with a long-standing observational study on children with cerebral malaria being the ‘backbone’ of our research efforts. However, recent efforts have moved away from the hospitalized patient and into the community where we are investigating the role of asymptomatic malaria infection and its role in maintaining a disease transmission reservoir. We are specifically interested in the host and/or parasite factors that lead to varied clinical outcomes after

Plasmodium infection. Techniques could range from immunologic to entomologic to molecular and genetic.

Required Qualifications: Students currently studying biology or public health are preferred.