Neuroprotective Agents for Cerebral Malaria

PROJECT DESCRIPTION

"Cerebral malaria (CM) is a severe complication of Plasmodium falciparum infection which may result in death or developmental disability. The pathologic processes leading to convulsions, coma and death in CM are not yet fully elucidated; however, parasite sequestration, inflammation, haemostasis, and dysfunction of the neurovascular unit (NVU) are widely accepted mechanisms. The endothelium plays a central role in these processes as the site of parasitized erythrocyte (PE) sequestration and as the regulator of fluid extravasation into the central nervous system (CNS). Modulating endothelial barrier function at the NVU may provide new therapeutic approaches to improve outcomes in CM. Recently licensed pharmaceuticals, developed as therapies for cancer or neurologic disease, could be re-purposed for use as host-directed therapies in CM to target pathways involved in endothelial stability and activation.

Our lab is examining several endothelial pathways as possible pharmacologic targets for CM. Methods include cell culture of endothelial cells with physiologic readouts. Prior lab experience desirable."

FACULTY-DEPARTMENT

Medicine-Pediatrics

DESIRED FIELD OF (STUDENT) STUDY

Biological sciences, including lab experience

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

1

INTERNSHIP START DATE

May 1, 2018

INTERNSHIP END DATE

July 31, 2018

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
intern@ualberta.ca
ARE THE DATES FLEXIBLE?

Yes