

Translational Laboratory for Testing Trophic Factors in Neonatal Short Bowel Syndrome

PROJECT DESCRIPTION

For the last 7 years our laboratory has been studying peptide factors that are trophic to the intestine in neonatal piglets, a clinically relevant translational model for human neonates with short bowel syndrome and intestinal failure. In particular, we have and continue to study glucagon like peptide-2 (GLP-2). We are looking for peptides that will increase mucosal adaptation and increase linear growth of the intestine. We have a unique animal model in neonatal piglets that have had resection of the entire ileum and so lack the ability to increase endogenous GLP-2 and show limited adaptation and intestinal growth. Our current laboratory projects continue to study GLP-2, but also seek to study new peptide factors and factors that alter the intestinal microbiome in order to facilitate intestinal adaptation. This project is ideal for interns with an interest in experimental animal models or surgery, also for those who are interested in the fields of gastroenterology, microbiology, nutrition and pediatrics. Experience will be hands on in the laboratory, caring for piglets while on trial having intravenous or parenteral nutrition, participating in the initial surgical interventions and at the final surgeries collecting relevant data.

FACULTY-DEPARTMENT

Medicine-Pediatrics

DESIRED FIELD OF (STUDENT) STUDY

Bachelor or higher; this laboratory suited to Veterinary medicine or medical research trainees

INTERNSHIP LOCATION

University of Alberta Main Campus - Edmonton

NUMBER OF INTERNSHIP POSITIONS

1

INTERNSHIP START DATE

September 1, 2018

Contact: Brendan Cavanagh, Internship Coordinator (Inbound)
University of Alberta International
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INTERNSHIP END DATE

November 30, 2018

ARE THE DATES FLEXIBLE?

Yes, I am flexible regarding the internship dates. Selected students can contact me to request a date change.