

## MULTIPLE POSTDOCTORAL POSITIONS IN ISLET BIOLOGY

## The laboratory of Dr. Patrick MacDonald (www.bcell.org)

Multiple postdoctoral positions are available within the MacDonald group (<u>www.bcell.org/positions-available.html</u>) for applicants who have recently obtained or will soon be completing a PhD in biomedical science or a related field. Successful applicants will have a record of outstanding research, whether published or otherwise, and both the desire and ability to lead projects within a collaborative environment.

**POSTDOC(S) IN ISLET BIOLOGY:** Up to two position(s) supported by a CIHR Foundation Grant, and broadly focused on the elucidation of novel pancreatic islet biology in human tissue and/or model systems. Areas of interest include but are not limited to: mechanisms of pancreatic islet cell (dys)function in human health and type 2 diabetes (T2D); collaborative approaches to connect single-cell function with single-cell RNA sequencing in T2D and HFD models; metabolic and receptor signaling impacts on the structural determinants of excitability and secretory granule fusion; and novel approaches to phenotyping of islet cells.

**POSTDOC IN ELECTROPHYSIOLOGY OR IMAGING:** For this position, supported by the National Institutes of Health as part of the Human Islet Research Network - Human Pancreas Analysis Consortium, we are seeking applicants with experience in electrophysiological or advanced imaging techniques. This may include patch-clamp of single cells, brain slice electrophysiology, or any relevant/related functional imaging approach. These approaches will be used to study the excitatory and exocytotic function of human islet cells, either in isolation or within *in situ* pancreas slice preparations, as part of our efforts to map human islet-cell heterogeneity *in situ* in collaboration with our international colleagues.

Abundant technical expertise and research resources will be available to the successful applicant(s). Our group is wellequipped for the study of excitable secretory cells, housing a large in-lab infrastructure for electrophysiology, cellular imaging, molecular biology, and biochemistry. Additional resources for proteomics, genomics, cell sorting, etc. are available through nearby institutional core facilities. Notably, our laboratory includes an in-house human research islet isolation and distribution program (<u>www.bcell.org/isletcore.html</u>) that allows tight integration between human tissue processing and experimental study. We supply human islets to over 80 groups in North American and Europe. Applicants will be encouraged to engage with this network to establish new collaborations, drive innovate projects forward, and develop their independent research.

These positions will be offered for an initial period of 2 years (with possibility of extension) at a salary level commensurate with experience and University guidelines.

**To Apply:** Forward your CV and contact information for three references to Patrick MacDonald via email at: <u>pmacdonald@ualberta.ca</u>. Informal inquiries are welcome.

Closing date: October 31, 2018, or until position is filled.

## We thank all applicants for their interest; however, only those individuals selected for an interview will be contacted.

The University of Alberta is committed to an equitable, diverse, and inclusive workforce. We welcome applications from all qualified persons. We encourage women; First Nations, Métis and Inuit; members of visible minority groups; persons with disabilities; persons of any sexual orientation or gender identity and expression; and all those who may contribute to the further diversification of ideas and the University to apply.