JOB DESCRIPTION

Job Title: Post Doctoral Associate

General Description (Purpose and Function):

This Post Doctoral Associate position will support Dr. Joana Almaça with her investigations that focus on the role of the microvasculature in type 1 diabetes.

Primary Duties and Responsibilities (For Non-exempt Employees Include Percent of Effort):

1. Identify the morphological changes of the human pancreatic islet microvasculature during the progression of type 1 diabetes using immunohistochemistry and electron microscopy.
2. Characterize human islet microvascular responses to endocrine cell activity, autonomic nervous input and endothelial cell activity by real-time confocal imaging of living human slices.
3. Prepare living human slices from pancreas biopsies and culture them for extended periods.
4. A broad range of activities will be expected, including *ex vivo* imaging of islet cell biology, Ca^{2+} imaging, and surgical procedures to prepare pancreatic slices. Image processing and quantification (e.g. using ImageJ) will be performed.

Skills and Education Requirements (Essential Requirements):

Strong scientific background in molecular physiology and demonstrated scientific problem solving ability and creativity. Experience in confocal microscopy, calcium imaging and image quantification is highly desired. Candidates should also have excellent communication skills and publication records, should have a track record of obtaining their own funding, and must be able to work in a highly collaborative manner. Please contact Joana Almaça (jalmaca@med.miami.edu) if you are interested in this job.