

POSTDOCTORAL FELLOW, DIABETES RESEARCH INSTITUTE, UNIVERSITY OF MIAMI

A postdoctoral associate position is available at the Diabetes Research Institute of the University of Miami. The main lines of research in the Beta Cell Regeneration Lab revolve around the development of **regenerative strategies for type 1 diabetes**, including stem cell differentiation into insulin-producing β -cells and islet regeneration. In particular, our current research is focused on the induction of **human pancreatic ductal BMP-responsive progenitor cells**, which we have identified and characterized by lineage tracing (Klein *et al.*, *Diabetes*, 2015; Qadir *et al.*, *Cell Reports*, 2018); **single-cell RNAseq** and transplantation of sorted populations (Qadir *et al.*, *PNAS*, 2020); and organotypic culture (**human pancreatic slices**) techniques (Qadir *et al.*, *Nature Comms*, 2020). Our seminal contribution to the development of the latter has enabled for the first time the real-time monitoring of β -cell regeneration in an *in vitro* setting that resembles the native organ. Our research pipeline is expected to help us realize the full potential of single-cell transcriptomics to unveil dynamic biological processes, model human pancreatic disease, and, ultimately, enable the development of regenerative therapies for diabetes.

Job Duties

- Work on an NIH-funded project involving longitudinal single-cell analytical techniques in state-of-the-art human pancreatic slice (HPS)-based system.
- Develop and execute original research and possess a high motivation to drive and conduct research.

Minimum Qualifications

- MD or Ph.D. in Basic Science, Health Science, or a related field.

Preferred Qualifications

- Demonstrate a solid publication record and evidence of excellent skills/experience in one or more of the following areas: bioinformatics, single-cell RNAseq analysis, pancreatic tissue culture.

Contact:

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