



SCHOOL OF MEDICINE
VANDERBILT UNIVERSITY

Postdoctoral Position

Department Molecular Physiology and Biophysics, Vanderbilt University – Nashville, TN

Full Description

The Arrojo e Drigo lab focuses on the mechanisms regulating post-mitotic cell homeostasis and longevity. Many postmitotic cells can be as old as the organism, which makes them remarkably long-lived. We study long-lived cells in different organs and explore their developmental trajectory, structure-function and aging patterns. Our lab uses a combination of single cell sequencing and high-resolution light, electron and isotope microscopy platforms to overlay cell structure-function with molecular identity, age and metabolism.

The lab is based in the Molecular Physiology and Biophysics (MPB) Department at Vanderbilt University. MPB is a highly collaborative, supportive and interactive department with direct access to cutting edge single cell sequencing and microscopy resources. In addition, the lab has a new high-speed confocal microscope for high-resolution microscopy of cell structure-function. The lab collaborates with an integrated network of labs in the US, Canada and Europe.

Applications are invited for a postdoctoral position to study the physiology of long-lived cells in the pancreas. The proposed research includes addressing questions such as how nutrient availability and metabolic disease (i.e. Type 1 or Type 2 Diabetes) impacts cell longevity, cell function and glucose homeostasis mechanisms. Research involves experiments with genetically-modified mouse models and measuring cell structure-function using mouse and human pancreas slices and/or isolated islets using multi-platform microscopy and single cell sequencing pipelines (DNA and RNA).

Successful applicants should be enthusiastic and driven to carry out cutting edge research in a supportive and collaborative environment. Proven ability to perform basic research in physiology, biochemistry, molecular biology or cell biology is required.

Application Details

To apply, please send a cover letter, up to date CV, and names and contact information for three references to Rafael A.

Drigo. Position available immediately.

Contact: Rafael Arrojo e Drigo, PhD (r.drigo@vanderbilt.edu)

<https://www.vanderbilt.edu/postdoc/position-detail/?id=488>