

**Job title: Postdoctoral position on pancreatic beta cell maturation**

**Project: Targeting microexons and neural-related splicing programs to enhance *in vitro* beta cell maturation**

We are seeking a highly motivated postdoctoral researcher to join an exciting international project investigating how alternative splicing, especially of neural microexons, influences the maturation of pancreatic islets.

Despite major advances in stem cell-derived islet differentiation, achieving fully functionally mature beta cells *in vitro* remains a critical challenge. This project aims to uncover novel regulatory mechanisms that drive beta cell maturation, with the potential to improve diabetes therapies.

As the lead scientist, you will apply single-cell long-read sequencing, CRISPR interference (CRISPRi), and small molecule modulation to dissect the molecular pathways underlying islet development.

**\* Your Role:**

You will conduct and coordinate experimental work across two vibrant research environments: the Irimia Lab at UPF-CRG in Barcelona and the Sander Lab at the MDC in Berlin.

**\* Key responsibilities include:**

- Differentiation of pancreatic islets from stem cells *in vitro*.
- CRISPRi-based gene perturbation in islets.
- Small molecule screening experiments.
- *In vivo* transplantation of islets and functional assays.
- Execution and, potentially, analysis of single-cell long-read sequencing.

**\* What We Offer:**

- Collaborative, interdisciplinary mentorship from two leading labs.
- Access to state-of-the-art facilities and innovative technologies.
- International exposure and in-person training across two world-class institutions.
- The opportunity to lead experimental directions in a high-impact research area.

**\* How to apply:**

Send an email to Manuel Irimia (mirimia@gmail.com) with your CV and motivation letter.

