



“Postdoctoral position: Pancreatic islet splicing and its role in insulin secretion and diabetes”

Centre for Genomic Regulation (CRG)

The Institute

The Centre for Genomic Regulation (CRG) is an international biomedical research institute of excellence, based in Barcelona, Spain, with more than 400 scientists from 44 countries. The CRG is composed by an interdisciplinary, motivated and creative scientific team which is supported both by a flexible and efficient administration and by high-end and innovative technologies.

In April 2021, the Centre for Genomic Regulation (CRG) received the renewal of the '[HR Excellence in Research](#)' Award from the European Commission. This is a recognition of the Institute's commitment to developing an HR Strategy for Researchers, designed to bring the practices and procedures in line with the principles of the [European Charter for Researchers](#) and the [Code of Conduct for the Recruitment of Researchers](#) (Charter and Code).

[Please, check out our Recruitment Policy](#)

The role

Pancreatic islets play a key role in maintaining glucose homeostasis by secreting insulin. Dysfunction and loss of insulin-producing beta cells leads to diabetes, a disease increasing worldwide that represents a major health challenge. While extensive research has started to uncover the transcriptional networks that control differentiation and function of beta cells, and showed that diabetes genetic risk variants often alter gene expression regulation, little is known about the roles of post-transcriptional mechanisms such as alternative splicing in islet biology and diabetes.

We are looking for a talented and highly motivated postdoc to join a new research line of the lab funded by ERC, La Caixa and EFSD that aims at understanding the role of a recently discovered alternative splicing program in islet function, glucose metabolism and diabetes. The successful candidate will utilize knockout mouse models and in vivo metabolic assays, combined with ex vivo islet culture and molecular and physiology approaches. The goal is to understand the impact of islet-specific microexons in endocrine pancreas development and regulated insulin secretion, and the overall effect on glucose metabolism.

About the lab

The Irimia lab is an international and multi-disciplinary team focused on elucidating the role of alternative splicing in vertebrate development and evolution. Much of our work focuses on microexons in the nervous system and in endocrine pancreas, a splicing program that we have originally discovered and to which we have made key contributions.

In our lab, we combine computational approaches (comparative bulk and single-cell transcriptomics and functional genomics) with experiments using in vitro and in vivo systems (mouse, zebrafish, and fruitfly). In addition, this project will be developed in close collaboration with two senior groups at CRG: the Ferrer lab (Regulatory genomics and diabetes) and the Valcárcel lab (Regulation of alternative pre-RNA splicing during development and disease), which will bring complementary expertise and provide further opportunities for scientific discussions and personal developmental.





Whom would we like to hire?

Professional experience

Must Have

- You have experience in mouse in vivo studies related to neuroendocrinology
- You have experience in primary cell cultures, ideally of ex-vivo assays with pancreatic islets

Desirable but not required/ Nice to have

- You have experience in rodent metabolic studies
- You have experience on mouse developmental biology
- You have experience with immortalized beta cell lines
- You have experience in immunostaining and confocal microscopy
- You have a background in energy metabolism/secretory processes/islet biology

Education and training

- You hold a PhD in disciplines such as Biology, Physiology or Biochemistry

Languages

- You are proficient in English

Competences

- You have highly developed organization skills
- You have scientific independence
- You enjoy working in a team

The Offer – Working Conditions

- **Contract duration:** 1 year renewable up to 5 years.
- **Estimated annual gross salary:** Salary is commensurate with qualifications and consistent with our pay scales.
- **Target start date:** As soon as possible.

We provide a highly stimulating environment with state-of-the-art infrastructures, and unique professional career development opportunities. To check out our training and development portfolio, please visit our website in the [training section](#).

We offer and **promote a diverse and inclusive environment** and welcomes applicants regardless of age, disability, gender, nationality, ethnicity, religion, sexual orientation or gender identity.

The **CRG is committed to reconcile a work and family life** of its employees and are offering extended vacation period and the possibility to benefit from flexible working hours.





Application Procedure

All applications must include:

1. A motivation letter addressed to Dr. Manuel Irimia.
2. A complete CV including contact details.
3. Contact details of two referees.

All applications must be addressed to Dr. Manuel Irimia and be submitted online on the CRG Career site - <http://www.crg.eu/en/content/careers/job-opportunities>

Selection Process

- **Pre-selection:** The pre-selection process will be based on qualifications and expertise reflected on the candidates CVs. It will be merit-based.
- **Interview:** Preselected candidates will be interviewed by the Hiring Manager of the position and a selection panel if required.
- **Offer Letter:** Once the successful candidate is identified the Human Resources department will send a Job Offer, specifying the start day, salary, working conditions, among other important details.

Suggestions: The CRG believes in **ongoing improvement** and promotes a **culture of feedback**. This is one of the reasons we have in place, at your disposal as a candidate, a mechanism to gather your suggestions/complaints concerning your candidate experience in our recruitment processes. Your feedback really matters to us in our aim at creating a **positive candidate journey**. You can make a difference and help us improve by letting us know your suggestions through the [following form](#).



HR EXCELLENCE IN RESEARCH

