

FPI Predoctoral Contract at CNIC (Dr. Juan Miguel Redondo's Team) Gene regulation in Cardiovascular Remodeling and Inflammation Lab

We are seeking a **highly motivated candidate** who wants to start a scientific career **to do the PhD in our group**. We offer incorporation to our team via Predoctoral contract (2019 FPI call) linked to the **Plan Nacional Grant** "Nitric Oxide and Adams Members and Substrates in Marfan syndrome and Familial Thoracic Aortic Aneurysm and Dissection", awarded to Dr. Juan Miguel Redondo.

Mandatory requirements: Master's degree in Biomedical Sciences and an academic **record with average grade** of 7 (out of 10)

Our team is dissecting signaling pathways involved in vascular wall remodeling, a major feature of vascular diseases such as atherosclerosis, aneurysm and restenosis. We have set up animal models of these pathologies, discovered the role played by NO in syndromic aortic diseases and generated mice deficient for AngII-target molecules, some of which are totally resistant to these diseases. We aim to elucidate the molecular and cellular mechanisms underlying this protection. We are also studying the mechanisms that mediate familial forms of thoracic aortic aneurysm and dissection, including Marfan syndrome, and characterizing genes that regulate vascular wall remodeling.

Recent publications of the team:

- Gómez-del Arco, et al. *The Chromatin Remodeling Complex Chd4/Nu RD Controls Striated Muscle Identity and Metabolic Homeostasis*. **Cell Metabolism** (2016) 23:881-92
- Oller J*, Mendez-Barbero E*, et al. *Nitric oxide mediates aortic disease in mice deficient in the metalloprotease Adams1 and in a mouse model of Marfan syndrome*. **Nature Medicine** (2017) 23:200-12
- de Carcer G, et al. *Plk1 regulates contraction of postmitotic smooth muscle cells and is required for vascular homeostasis*. **Nature Medicine** (2017) 23:964-74
- Villahoz S, et al. *Conditional deletion of Rcan1 predisposes to hypertension-mediated intramural hematoma and subsequent aneurysm and aortic rupture*. **Nature Communications** (2018) 9:4795

For a complete list of publications please visit <https://www.cnic.es/en/investigacion/publicaciones/JMRedondo>

If you are interested, send your **CV**, the **academic record**, a **letter of interest** and **contact details of previous references** to cgimenez@cnic.es **no later than September 3rd 2019**

This information does not contain a public job offer. Job offers for specific vacancies are posted on the job portal <https://www.cnic.es/es/trabajarcnic-0>. Interested candidates should send their applications via the appropriate specific job offer, otherwise they won't be evaluated. The specific job offer is therefore, the only channel of participation in selection processes



Juan Miguel Redondo, PhD
Head of the Gene regulation in Cardiovascular Remodeling and Inflammation laboratory
Fundación Centro Nacional de Investigaciones Cardiovasculares Carlos III (CNIC)

