

Post-doctoral position in molecular imaging of fibrosis

Job Full Description:

A Post-doctoral position in molecular imaging of fibrosis is offered to work on a collaborative project between the group of Dr. Jesús Ruiz-Cabello at CIC biomaGUNE and two laboratories of Biodonostia led by Dr. María Caffarel and Dr. Jesús Bañales.

The two-year project involves the discovery of non-invasive methods for the early diagnosis of fibrosis, capable to discern between early or advanced stages or between active or stable scars. This identification would allow the application of an early therapies that could led to a better prognosis in affected patients. We will work in molecular imaging solutions, based mainly in PET, to offer the possibility to identify fibrotic tissues through specific nanoradioprobes capable to identify initial differential events. Our plan to develop new MRI and PET imaging alternatives based on chelate-free gadolinium or radiometal doped nanomaterials is a novel approach. The developments will be experimented in different experimental models of tumorigenesis associated to fibrosis.

We are seeking an ambitious and motivated post-doctoral candidate to implement the synthetic procedures and run all the in vitro and in vivo tests required for this project.

The research will be conducted in a collaborative project between world-class CIC biomaGUNE groups involved in the work of molecular imaging and fibrosis. The group of Dr. Jesús Ruiz-Cabello is a well-known laboratory working on the development of functional nanoparticles and is broadly known in the field of cardiovascular and pulmonary imaging in small animals. The group of Dr. Muñoz Caffarel is working in the characterization of molecular mechanisms mediating breast cancer progression and Dr. Bañales is focused in the study of molecular mechanisms involved in liver physiopathology and the search of new diagnostic and therapeutic strategies.

Required Qualifications and Experience:

- The applicant should have a PhD degree with experience in organic/inorganic chemistry, nanomaterials, magnetic nano systems, molecular imaging and radiochemistry.
- Supervisor license of radioactivity facilities, specialist in nuclear medicine.
- This project requires solid background knowledge in nanotechnology, physical characterization, functionalization, purification and radioactivity labeling of nanoparticles.
- Experience in molecular imaging (PET, SPECT, MRI) techniques and imaging analysis in small animals for experimentation.
- Fluency (written and oral communication) in English are required.

Project Funding: Maria de Maeztu Units of Excellence Program - Grant No. MDM-2017-0720

Type of Contract and duration: Full time contract with an initial duration of 12 months renewable up to 24 months.

Envisaged Job Starting Date: February 2021

Application Deadline: 30/11/2020

How To Apply: Please submit your application with a motivation letter stating why you are interested in this position, your CV, the contact details of two academics who can provide a reference using [this form](#) indicating as Job Offer Code 313_Postdoc.

Informal requests for additional information can be sent to Prof. Jesús Ruiz Cabello at jruizcabello@cicbiomagune.es

Equal opportunities Policy: CIC biomaGUNE is proud to be an equal opportunity employer and applicants will receive consideration for employment without regard to: age, color, disability, gender, national origin, race, religion, sexual orientation, gender identity, or any other classification protected by European, national, or local law.