

Senior Postdoctoral Researcher

Development of Conductive Hybrid Scaffolds based on Carbon Nanomaterials for Tissue Engineering

Job Full Description: Applications are invited for a senior postdoctoral position in the Carbon Nanobiotechnology lab at CIC biomaGUNE to develop conductive scaffolds based on Carbon Nanomaterials (CNMs) for the regeneration of neural and cardiac tissues. On one side, CNMs have emerged as an effective tool for manipulating neuronal activity at multiple levels of tissue complexities and have been proposed as growth substrates promoting neuronal development, scaffolds for nerve tissue engineering, electrode coating or neuronal interfaces for long-term implants. Tissue engineering is focused on the development of the ideal implants to regenerate or replace the damaged tissue within a dysfunctional zone. Large number of publications have reported how cells grow and interact in planar dimensions, although the human body represents a very complex three-dimensional cellular net, far from the bidimensional *in vitro* plate assays. Thus, tridimensional scaffolds, such as hydrogels or sponges, stand out for their increase in structural complexity, surface area, effective volume, and degree of porosity, thus providing gradients of nutrients and oxygen.

Required Education Level:

- PhD in Chemistry, specialization in Carbon Nanotechnology
- Post-doctoral experience of 3-4 years is preferred

Required Skills/Qualifications:

- Good theoretical background and previous practical experience in organic and polymer chemistry.
- Background in biomaterials/material science is required.
- Experience in *in vitro* cultures of electroactive cells.
- Ability and certification to work with small animals.
- Mentoring experience. Previous or current supervision of PhD or MS students will be highly valuable.
- Proficiency in English, spoken and written.

Project Funding: AXA Research Fund

Type of Contract and duration: full time contract with an initial duration of 1 year renewable based in performance and the development of the research project to which it has been assigned.

Envisaged Job Starting Date: May 1st 2021

Application Deadline: March 12th 2021

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 3032.

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.