



Postdoctoral researcher on medical physics / accelerators / medical engineering

The Nuclear Physics Group (<http://ucm.es/gfn>) at Universidad Complutense de Madrid is looking for a postdoctoral researcher within the FLASHonChip consortium to work on the development of an irradiation platform for biological samples with low-energy protons.

FLASHonChip, funded by the Spanish Ministry of Science, aims at using organ-on-a-chip devices to unveil the mechanisms of ultra-high dose-rate radiotherapy (FLASH). FLASH is potentially the most revolutionary discovery in radiation oncology in decades and could enhance the therapeutic window of both conventional radiotherapy and proton therapy.

Requirements

a) Essential

- PhD in Physics, Engineering or related fields.
- Competent in English.
- EU national or authorized to work in the EU.

b) Advantageous

- Proficient with MATLAB.
- Competent in Spanish.
- Knowledge of medical physics, radiotherapy or treatment planning.
- Knowledge of particle beams and/or experience with particle accelerators.
- Skilled with electronics and microcontrollers (Arduino, etc.).

Main tasks and responsibilities

- Development of an irradiation platform for samples including interfaces with beam control electronics.
- Refinement of a 2D treatment planning system for biological samples with real-time dose control capabilities.
- Assistance with dosimetry and sample preparation for radiobiology experiments.
- Preparation of manuscripts and presentation of results at scientific meetings.

Location

The work will take place at the Faculty of Physics at the Moncloa campus of UCM (Madrid, Spain). Experimental work might occasionally take place at other nearby laboratories.

Work conditions

Salary range in accordance with public tables for junior postdoctoral researchers (<3 years postdoctoral experience). The duration of the contract will be dependent on the duration of the project, ranging between 18-24 months.

Contact

Candidates please send CV and cover letter to **Prof. Daniel Sánchez Parcerisa** <dsparcerisa@ucm.es>.