

The mission of the Catalan Institute of Nanoscience and Nanotechnology (ICN2) is to achieve the highest level of scientific and technological excellence in Nanoscience and Nanotechnology. Its research lines focus on the newly-discovered physical and chemical properties that arise from the behavior of matter at the nanoscale. ICN2 has been awarded with the Severo Ochoa Center of Excellence distinction for two consecutive periods (2014-2018 and 2018-2022). ICN2 comprises 18 Research Groups, 7 Technical Development and Support Units and Facilities, and 2 Research Platforms, covering different areas of nanoscience and nanotechnology.

Job Title: Postdoctoral Researcher In the Framework of EuroNanoMed III PROJECTS (ERA-Net Cofund Action on Nanomedicine under Horizon 2020)

Research area or group: Inorganic Nanoparticles Group

Description of Group/Project:

The main focus of the Inorganic Nanoparticles Group is the design and development of advanced functional inorganic nanoparticles with applicability in biomedicine, energy harvesting and catalysis. The project aims to develop a new concept of transfection vehicles as a safer way to transport mRNA to the cytosol via endocytosis. The final aim is to obtain functional expression of durable CAR19 construct by NP-mRNA complexes to result in viral-free, transient expression CAR19-T cells.

Main Tasks and responsibilities:

The researcher will be involved in all different aspects and stages of the project, from the development of the transfection vector to the study of their final performance. The position is framed within the CONCORD project, with a close collaboration between teams at the ICN2 and HCLINIC. CONCORD PCI2019-103436 project was supported by (MCIU/AEI), under the frame of EuroNanoMed III.

The functions of the job include:

- Development of the transfection vector and the study of its interactions with biological environments.
- mRNA synthesis and purification for structural studies.
- Evaluation of transfection efficiency of the NP-mRNA vector (cytometry and PCR).
- Functional in vitro study of the transfected cells.

Education, Experience, Knowledge and Competences required:

- Education: PhD in biology, biotechnology or a related discipline.
- Professional Experience: Experience in cell culture and transfection, cytometry and PCR (semi-quantitative and RT-PCR. Experience in the synthesis and purification of synthetic mRNA highly valued.
- Competences: Strong commitment, demonstrated ability to work with deadlines, excellent communication skills and ability to work with professionals with complementary backgrounds.

Summary of conditions:

- Full time work (37,5h/week)
- Contract Length: 1 year, 11 months.
- Salary will depend on qualifications and demonstrated experience.
- Support to the relocation issues.

- Life Insurance.

Estimated Incorporation date: as soon as possible

How to apply:

All applications must be made via the ICN2 website <https://jobs.icn2.cat/job-openings/214/postdoctoral-researcher> and include the following:

1. A cover letter.
2. A full CV including contact details.
3. 2 Reference letters or referee contacts.

Deadline for applications: 23th March

Equal opportunities:

ICN2 is an equal opportunity employer committed to diversity and inclusion of people with disabilities.