

Postdoctoral Position – Cancer Immunology & Immunometabolism

36-month position
INCa PLBIO funded
Clermont-Ferrand, France
Salary: according to experience
Starting date: expected January 2027

Project

Microenvironment Metabolism-Adapted Vaccination for Enhanced Reactivation of Immunosurveillance in Advanced Prostate Cancer. The NuReP team (Nuclear Receptors & Pathophysiology) at iGReD – Université Clermont Auvergne/CNRS/Inserm is seeking a highly motivated postdoctoral researcher to join the INCa-funded MAVERIC project.

Research Project

Advanced prostate cancer remains largely resistant to immunotherapy, partly due to an immunosuppressive tumor microenvironment. MAVERIC aims to determine how metabolic reprogramming of dendritic cells can restore antitumor immunosurveillance. The project focuses on Liver X Receptors (LXRs), cholesterol-sensing nuclear receptors linking metabolism and immunity. Using an innovative orthotopic metastatic prostate cancer model, we will develop an *in situ* vaccination strategy combining tumor antigens, TLR ligands and novel LXR α -selective ligands. Treatment-induced remodeling of the tumor microenvironment will be investigated using spectral cytometry, scRNA-seq and spatial transcriptomics, with the goal of providing preclinical proof-of-concept for a new immunometabolic therapeutic strategy.

Your Role

The successful candidate will play a central role in the project and will:

- Develop and characterize genetically engineered and orthotopic prostate cancer models (CRISPR, lineage tracing, surgery).
- Investigate dendritic-cell and antitumor immune responses following LXR modulation and vaccination.
- Perform spectral cytometry, cell sorting, scRNA-seq and spatial transcriptomics, including downstream data analysis.
- Conduct cellular and molecular experiments using tumor and immune-cell models.
- Collaborate with chemists developing novel LXR ligands and with the multidisciplinary MAVERIC consortium.
- Contribute to publications, international conferences and dissemination of project findings.

Candidate Profile

We are looking for a PhD scientist in immunology, cancer biology or a related field, with:

- A strong background in cancer immunology / tumor microenvironment; expertise in dendritic cells is a strong asset.
- Experience in cell culture and flow cytometry, ideally spectral cytometry.
- Experience with animal models and appropriate certification (French Level 1 or equivalent).
- Experience with scRNA-seq and/or spatial transcriptomics, including computational analysis.
- Scientific independence, curiosity and a strong collaborative mindset.
- Good written and spoken English.

Research Environment & Career Development

iGReD provides an interdisciplinary environment combining fundamental, translational and clinical research, with access to advanced platforms in genomics, cytometry, imaging and animal experimentation. The position offers strong training at the interface of cancer immunology, immunometabolism, preclinical oncology and single-cell/spatial omics, together with opportunities for scientific ownership, publications, international networking and development toward an independent academic, translational or biotechnology career.

Located in central France, Clermont-Ferrand is a vibrant university city at the doorstep of the Chaîne des Puys and the Auvergne Volcanoes Regional Natural Park, offering outstanding opportunities for hiking, cycling and outdoor activities.

How to Apply

Please send a CV, a brief cover letter outlining your research experience and interests, and contact details for 2–3 references to:

Silvère Baron, PhD, HDR – NuReP, iGReD

silvere.baron@uca.fr

Team informations, please scan me :) >>>>

