Postdoctoral Researcher position in onco-immunology (2 years, September 2025) at Mondor Institute for Biomedical Research, UPEC

EXPLORING IMMUNE MECHANISMS AND NOVEL THERAPIES IN PANCREATIC DUCTAL ADENOCARCINOMA (PDAC)

Inserm U955 team Immunoregulation and Biotherapy, director: José Cohen
PI of the project: Ilaria Cascone

RESEARCH PROJECT

We are seeking a highly motivated and skilled postdoctoral researcher to join our INSERM-funded project investigating the immune mechanisms involved in the remodeling of the immune tumor microenvironment of pancreatic ductal adenocarcinoma (PDAC). This research will focus on understanding how the immune tumor microenvironment remodels in response to PDAC, identifying mechanisms that block anti-tumor immune responses and resist immune checkpoint therapies, and developing innovative therapeutic approaches.

Our team has previously established advanced immunocompetent orthotopic PDAC mouse models that replicate key characteristics of human PDAC. These models have been instrumental in evaluating the impact of therapeutic targets on tumor growth and the tumor microenvironment (Gilles et al., Cancer Res 2016; Ponzo et al., Cancers 2022). Notably, we have demonstrated the therapeutic potential of anti-TNFR2 therapy, which reduces tumor growth and reactivates immune cell infiltrates (Debesset et al., JITC 2024).

In this position, the postdoctoral researcher will:
- Utilize PDAC mouse models to explore therapeutic strategies.
- Perform single-cell RNA sequencing and multiplex flow cytometry to analyze tumor-infiltrating immune cells.
- Conduct functional analyses of T cells.

The project is supported by state-of-the-art technological platforms and animal facilities at the IMRB (https://imrb.inserm.fr/) and external platforms such as CyPS at Hôpital Pitié-Salpêtrière.

CANDIDATE REQUIREMENTS

Education: MD/PhD or PhD in Oncology, Immunology.

Field of interest:
- A strong interest in both basic and translational research.
- Experience in cancer research, particularly in tumor microenvironment studies.
- Additional expertise in big data processing and bioinformatics will be prioritized.

Skills.
- Expertise in multiparametric flow cytometry and cell culture.
- Expertise or familiarity with experimental tumor models, including mouse manipulation, animal surgery, and ethical considerations related to mouse experimentation.
- Previous experience in bioinformatics and data analysis is an advantage.
- Proven ability to write scientific publications and grant applications in English.

Applications

Interested candidates should send the following documents to Dr. Ilaria Cascone at **ilaria.cascone@u-pec.fr**:
- Curriculum Vitae (CV).
- List of publications.
- Summary of previous research.
- Names and contact information for two references.

ABOUT THE TEAM

Our research focuses on two main objectives:
1. Identifying mechanisms and therapies to inhibit immune responses in transplantation, thereby promoting immune tolerance and preventing organ rejection or graft-versus-host disease (GVHD).
2. Improving the efficacy of anti-cancer immunotherapy by modulating the tumor microenvironment (TME).

The team conducts preclinical research using mouse models and actively translates findings into clinical trials in both transplantation and oncology. We collaborate closely with clinical departments and lead the Center for Clinical Investigation in Biotherapy.