

POSTDOCTORAL RESEARCH POSITION on immune surveillance monitoring in compromised skin using integrative multiparametric approaches

From January 2022 for 2 to 3 years

The structure: The research laboratory of Drs Veronique Braud and Fabienne Anjuère is established at the Institute of Molecular and Cellular Pharmacology (IPMC) (<https://www.ipmc.cnrs.fr/cgi-bin/ipmcx.cgi>) (University Côte d'Azur, France), a research institute which offers an excellent stimulating multidisciplinary research environment and state-of-the-art technologies.

The laboratory: Our group combines complementary approaches to investigate immune surveillance in epithelia. Recent work conducted by the team has characterized immune suppression associated with aggressive cutaneous squamous cell carcinoma (cSCC) and head and neck SCC (HNSCC). Through gene expression profiling, imaging mass cytometry and multiparametric phenotypic and functional analyses, we have phenotyped immune cells infiltrating cSCC/HNSCC, identified mechanisms that drive tumor growth and propose immune cell reprogramming ([Khou, 2020](#), [Luci, 2021](#), [Elaldi, 2021](#), [Goncalves-Maia, 2020](#), [Spelé, 2020](#)). We have also used mathematical modeling and numerical methods to predict parameters influencing tumor outcome ([Atsou, 2020](#), [Atsou, 2021](#)).

The project: At the interface of immunology/oncoimmunology and dermatology, the project will investigate immune mechanisms triggered in compromised skin, through the use of innovative technical approaches such as imaging mass cytometry and skin explant and 3D cell cultures. The aim is to identify novel immune surveillance mechanisms that can be deregulated during inflammation and cancer. The candidate will develop this project in interaction with all the members of the team, their clinical collaborators at the Cancer Center of Nice, Centre Antoine Lacassagne, and with PKDerm, a company developing smart innovative solutions for in-vitro efficacy and safety testing of products put in contact with the skin.

The candidate's profile: We are seeking a highly motivated researcher able to think critically. The applicant should hold a PhD in immunology/oncology/dermatology and a strong expertise in immunology and multiparametric flow cytometry analyses. Prior experience in imaging techniques, bioinformatics/Omics and primary 3D cell culture would be advantageous. Ability to communicate in spoken and written English is mandatory.

Opportunities: We are seeking candidates interested to apply for a permanent research position in our laboratory.

How to apply: Applicants should send a cover letter highlighting their past experience, motivation and their full CV, including the name of 2-3 referees to braud@ipmc.cnrs.fr