

Postdoctoral position in the Meylan Lab – Signaling mechanisms of lung tumor development and response to immunogenic therapies

Lab's interests

The research program of the Meylan's group is on the immuno-metabolic control of lung malignancies, with a focus on intercellular communication systems, innate immunity and tumor-associated neutrophils. Using a combination of *in vitro* cell cultures, genetically-engineered mouse models, bioinformatics as well as patient-derived tumor tissue sections, we hope our research will contribute better, knowledge-based treatments of patients in a near future.

In 2021 our group relocated from EPFL (Switzerland) to ULB (Belgium). Currently composed of 7-8 staff, it is strategically located on two complementary research sites, (1) the Institut Bordet (Erasme campus, Brussels) that offers immediate proximity to clinical oncologists and access to precious tumor samples, and (2) the Laboratory of Immunobiology (Gosselies campus) that comprises multiple immunology groups and state-of-the-art facilities, together providing excellent conditions for research on cancer immunobiology. The postdoc, although expected to be located mostly on the Gosselies site, will benefit from both locations for research and interactions.

Project

Our goal is to comprehend mechanistically the signaling and metabolic pathways, in tumor cells and in T cells, which functionally link immunogenic cell death to immunotherapy response in two clinically-relevant mouse cancer models (lung adenocarcinoma and hepatocarcinoma), using CRISPR and ProCODE approaches for gene manipulation and protein-based bar-coding.

Building from our recent studies of lung adenocarcinoma ([CellRep 2017](#), [NatCom 2020](#), [CanRes 2021](#)), we will use new *in vivo* genomics screens to investigate the role of signaling pathway components of innate immunity and cell death on (1) tumor progression and (2) the response to immunogenic chemotherapy. This project will be done in the framework of a newly established collaboration with two neighboring laboratories, headed by Fabienne Andris and Stanislas Goriely. Thus, this project will benefit from a strong inter-group collaboration and from daily interactions, which will catalyze research.

Qualifications

The applicant should have a strong knowledge and background in the field of cancer biology and/or immunology. Experience with mouse work would be a strong advantage. The applicant should have at least one first-author publication of primary research in an international, peer reviewed scientific journal.

Application

We will offer a full postdoc grant (3-4 years position available). Candidates should not have lived and/or worked in Belgium for more than 24 months during the past 3 years. Interested applicants should send a cover letter briefly describing their research experience and interests, and a personal CV that includes the name and contact information of three references, to Etienne Meylan (etienne.meylan@ulb.be).

For more information about us: [MEYLAN-LAB](#)

Starting date: during 2023