Postdoc offer: deciphering the role of B cells and antibodies in ovarian tumors to improve anti-cancer immunity

Position Summary

We are seeking a highly motivated and scientifically-driven postdoctoral fellow to join our team "Cancer Immune Surveillance and Therapeutic Targeting". Our Lab aims to identify new tumor immune surveillance and escape networks to improve cancer treatments. B cells and antibody-producing cells have recently emerged as critical tumor components influencing patient survival and response to therapies, but the underlying mechanisms remain unclear. The current project funded by ANR-RHU and INCa aims to i) decipher the mechanisms underlying plasma cell differentiation in B-cell-hot ovarian tumors, ii) identify antigens targeted by dominant expanded clonotypes and iii) determine the impact of chemo-immunotherapy on B cell diversity and functions in tumor and blood and its association with patient outcomes. The successful candidate will use unique patient samples, including tumors from patients with a paraneoplastic neurological syndrome, internal data sets of bulk and single cell RNA/BCR sequencing, multispectral tissue imaging, flow cytometry and antibody profiling arrays.

Contract: **2 years** with possible extension to 3 years.

Publications from the lab related to the field

- Le Saux et al. (2024). Nature Com. In press
- Voissière et al. (2024). Science Translational Medicine 16(731).
- Hubert et al. (2020). Science Immunology 5(46).
- Chefdeville et al. (2019) Acta Neuropathol. Com. 7(1):38.
- Small M et al. (2018) Acta Neuropathol. 135(4):569-579.

Scientific environment

The CRCL hosts 26 teams and offers a stimulating scientific environment with state-of-the-art facilities to conduct cutting edge research in the field of cancer. The host group is currently composed of 6 members and is part of a team of 30 persons all working in the onco-immunology field using cellular, OMICs and computational approaches. The team benefits from long-standing interactions with clinicians of CLB and HCL and is part of various networks/consortiums, including the RHU-BETPSY, which partly fund the position The candidate will work under the supervision of Bertrand Dubois and is expected to present his/her work regularly during group and lab meetings and to apply to postdoc fellowships.

Skills and qualifications

The candidate must hold a PhD in (onco-) immunology, or related field, and have experience in the use of one or several of the technologies envisaged for the project. He/she is expected to be a hard-working and highly-motivated individual with scientific curiosity and strong organizational and problem-solving skills. Experience in B cell biology, bioinformatics (or at least interest in developing such a competence), manuscript writing and grant application will be considered as a bonus.

Application

Interested candidates should submit a motivation letter, CV and contact details of 2 references to Bertrand Dubois (Bertrand.dubois@lyon.unicancer.fr). The position is to be filled as soon as possible.