



POST-DOC POSITION OFFER AT INSTITUT PASTEUR DE LILLE

Cross-talk between stress response and infection in dendritic cells

We seek to hire a highly motivated candidate to work on the role of the Unfolded Protein Response (UPR) in modulating type 1 conventional dendritic cell (cDC1) functions in the context of *Toxoplasma gondii* infection. We recently unravelled that induction of the IRE1 pathway of the UPR is essential to activate key cDC1 functions and establish an efficient T-cell mediated control of parasite dissemination during acute toxoplasmosis (Poncet A et al. EMBO R, 2021, PMID: 33586853). We now aim to identify the involved molecular mechanisms, focusing on the cross-talk between changes in lipid metabolism induced by the infection and UPR-mediated regulation of cDC1 maturation and MHC-I antigen presentation. To this aim transgenic mice, in vitro cDC1 models and transgenic *T. gondii* strains will be used. The study will combine immuno-phenotyping techniques, metabolic assays, cellular biology and transcriptomic approaches.

The CIIL is a dynamic research center located in the Pasteur Institute of Lille that comprises internationally recognized groups focusing on immunity to infections and microbiology (<https://ciil.fr/>). The project is also embedded in a research consortium consisting of experts in UPR and Immunity (S. Janssens, IRC-VIB, Ghent) and in DC biology and T cell responses in the context of infections by intracellular parasites (N. Blanchard, Infinity, Toulouse). The candidate will be an active part of this consortium and will interact and collaborate with the other partners.

Highly motivated scientists with a strong interest in host-pathogen interactions are encouraged to apply. The candidate should have a PhD in Life Sciences with a strong knowledge in immunology. Experience with animal experimentation and flow cytometry is mandatory. Experience in imaging techniques would also be appreciated. Good writing and oral communication skills will be needed. The candidate should have demonstrated initiative, problem-solving attitude, and ability to work well both independently and as a team member.

CV, list of publications, short description of previous research projects and experience, and contact information for two referees should be sent by email to: sabrina.marion@pasteur-lille.fr.