

Post-Doctoral position- Immunobiology of Stromal Cells (Team Marc Bajénoff)

The « Immunobiology of Stromal Cells » group at the Centre d'Immunologie de Marseille Luminy (CIML-France) wishes to recruit an ambitious, highly qualified postdoctoral fellow to work on bladder macrophages and their niches. This position is available for 24 months (+ 12 months), with a flexible starting date in may 2020. The successful candidate will work in the context of an ANR project lead by Dr. Marc BAJENOFF.

Summary :

All tissues contain macrophages (M ϕ) that sustain tissue homeostasis within the body, not only as immune cells, but also through trophic, regulatory and repair functions. Within the bladder, an abundant population of M ϕ participates in the control of urinary tract infections. Yet, this population of M ϕ is largely overlooked. The concept of the M ϕ niche postulates that M ϕ homeostasis is locally regulated by “niches” that provide both an anchoring and nurturing scaffold to M ϕ . Last year, we and others have demonstrated that **stromal cells act as M ϕ niches** in lymphoid organs by providing a nurturing scaffold to subcapsular sinus M ϕ . We have now gathered solid, unpublished evidence that this phenomenon is not an exception but rather, the rule across tissues, including the bladder. Identifying the niche of M ϕ might appear as a fundamental question. However, we discovered that niche-specific ablation of M ϕ survival genes induces a local, permanent and specific deletion of neighbouring M ϕ , thus representing an original and alternative approach to study the functions of M ϕ for which mouse models are presently lacking.

The aim of this project are to (a) identify the niche of bladder M ϕ as well as the underlying mechanisms and (b) the homeostatic functions of bladder M ϕ through manipulation of their niche.

We are looking for a candidate with a strong background and expertise in immunology, imaging and flow cytometry. Highly motivated candidates with interests in the field of stromal immunology, innate immunology, developmental biology and imaging are welcome to apply.

The successful candidate will join an international, collaborative team with extensive scientific exchange and benefit from excellent scientific environment within the CIML, state of art research facilities, and expertise in flow cytometry, imaging and computational biology.

Requirements

- Ph.D. in immunology or developmental biology.
- Expertise in multicolor flow cytometry, confocal imaging, mouse models. Previous work with tissue resident cell populations is expected but not required.
- Excellent communication skills.
- Knowledge of RNA-seq analysis tools is preferred, but not required.

Applicants should submit curriculum vitae, brief description of research accomplishments and career goals, list of publications, and the names of two referees into a single document to bajenoff@ciml.univ-mrs.fr