We are currently inviting applications from enthusiastic and independent post-doctoral candidates with a PhD in Immunology to participate in our ANR Grant-funded MEMO-SIGN project.

Project and research consortium.
The B and T_{FH} memory compartments are heterogeneous and comprise different subsets endowed with distinct functions that are still not fully understood. We postulate that fitness and quality of the humoral immunity conferred by vaccination rely on the composition of the memory T_{FH} and B cell compartments and on the efficiency of the dialogue between these two populations. This research program centers on exploration of : i) the impact of vaccine formulation on anatomy of the memory B and T_{FH} compartments, ii) the crosstalk between memory B and memory T_{FH} during recall responses

The project is coordinated by T. Defrance and relies on *in vivo* experimentation in the mouse. It gathers four teams:
- Nicolas Fazilleau (CPTP, INSERM U1043, Toulouse) who is a pioneer in the field of memory T_{FH}
- François Vandenesh (CIRI, Lyon) who has gained international recognition in the field of Staphylococcal pathogenesis
- Bernard Verrier (LBTIT, UMR CNRS 5305, Lyon) who has a strong expertise in nanoparticulate vaccine design and vaccine formulation
- Thierry Defrance (CIRI, Lyon) who has a long-standing expertise in the field of B cell physiology and B cell memory.

Description of the laboratory
This position is opened in the Center for Infectiology Research (CIRI/INSERM U1111, Lyon) in Thierry Defrance's team. The Center for Infectiology Research is a highly dynamic environment fostering interactions between immunologists, bacteriologists and virologists. It provides all the necessary platforms and facilities for the project, in particular a top notch flow cytometry platform and animal house facility.

Job description and candidate profile
We wish to hire a post-doc for a project start between September 2016 and January 2017. The experimental approaches developed by the applicant will include animal work, flow cytometry and cellular immunology techniques. The applicants are expected to have a strong background in cellular immunology and B cell biology and a strong experience of mouse models and flow cytometry. A proven ability to identify key research objectives and meet agreed deadlines, in addition to self-motivation are essential. Excellent written and communication skills in English is a requirement.

Relevant publications from the consortium:
Taillardet M et al. The thymus-independent immunity conferred by a pneumococcal polysaccharide is mediated by long-lived plasma cells. **Blood**. 2009. 114(20):4432-40.

Taillardet M et al. Toll-like receptor agonists allow generation of long-lasting antipneumococcal humoral immunity in response to a plain polysaccharidic vaccine. **J. Infect. Dis.** 2010. 202(3):470-9.

Sicard A et al. B Cells Loaded with Synthetic Particulate Antigens: A Versatile Platform To Generate Antigen-Specific Helper T Cells for Cell Therapy. **Nano Lett.** 2016. 16(1):297-308.

Bachy E et al. CD1d-restricted peripheral T cell lymphoma in mice and humans. **J. Exp. Med.** 2016. 213(5):841-57.

Fazilleau N et al. Lymphoid reservoirs of Ag-specific memory T helper cells. **Nat Immunol.** 2007. 8:753-61.

Fazilleau N et al. Follicular helper T cells: lineage and location. **Immunity.** 2009. 30(3): 324-35.

Aloulou M et al. Follicular regulatory T cells can be specific for the immunizing antigen and derive from naïve T cells. **Nat. Commun.** 2016. 7: 10579-89.

Crémieux AC et al. α-Hemolysin, not Panton-Valentine leukocidin, impacts rabbit mortality from severe sepsis with methicillin-resistant Staphylococcus aureus osteomyelitis. **J Infect Dis.** 2014. 209(11):1773-80.

Romilly C et al. A non-coding RNA promotes bacterial persistence and decreases virulence by regulatinga regulator in Staphylococcus aureus. **PLoS Pathog.** 2014.

Stegger M et al. Origin and evolution of European community-acquired methicillin-resistant Staphylococcus aureus. **MBio**. 2014. 5(5):e01044-14.

Pavot V et al.. Encapsulation of Nod1 and Nod2 receptor ligands into poly(lactic acid) NPs potentiates their immune properties. **J Control Release.** 2013. 167(1):60-7.

Pavot V et al. Cutting edge: New chimeric NOD2/TLR2 adjuvant drastically increases vaccine immunogenicity. **J. Immunol.** 2014. 193(12):5781-5.

Climent N et al. Loading dendritic cells with PLA-p24 NPs or MVA expressing HIV genes induces HIV-1-specific T cell responses. **Vaccine.** 2014. 32(47):6266-76.

For more information and to apply for this position, please contact Thierry DEFRANCE (thierry.defrance@inserm.fr) Please include a cover letter addressing your interest in the position along with your CV, summary of your research experience and contact information of two professional references.