INSERM 1064-Center for Research in Transplantation and Immunology

Postdoctoral position in Immunology

Research Project: Cytokine are powerful tools to control and regulate immune responses. IL-34 is a homodimeric cytokine that binds to the CSF-1R, but also to PTPzeta and CD138. IL-34 has major but not unique actions on monocytes/macrophages. We and others have described tolerogenic and anti-inflammatory actions of IL-34.
We seek a highly motivated post-doc to work on a project aiming to analyze the actions of IL-34 on different immune cell subsets and to decipher the effect and potential of agonist and antagonist mutants of IL-34 on in vivo models of diseases. Several mutants have already been generated and action through CSF-1R, PTPzeta and CD138 will be assessed. This project is funded by the Labex ImmunologyGraftOncology network of laboratories (https://labexigo.univ-nantes.fr/).
Team: The project will be developed under the supervision of Carole Guillonneau and Ignacio Anegon in team 2 "Cell and Gene therapy in Immunology and Regenerative Medicine" of the INSERM/University of Nantes UMR1064-Center for Research in Transplantation and Immunology (CRTI) (http://www.itun.nantes.inserm.fr). The CRTI is located at the Nantes University Hospital and is member of the Labex IGO. This is a unique environment that fosters interactions between basic scientists and clinicians with the support of the most updated technological platforms. The project includes partners in areas of cancer, CNS inflammatory diseases and crystallography in three continents. Nantes is a vibrant city close to the Atlantic Ocean and at 2h train from Paris.

Candidate requirements: Candidates should have a PhD and a strong background in immunology and expertise in multidimensional flow cytometry, immune cell biology and in vivo animal experimentation.

Starting Date: January 2021 or upon agreement.
Salary for 2 years from Labex IGO, with a possible extension.
Applications in English including a cover letter, a detailed CV with publication list and references should be sent to Ignacio Anegon (ianegon@nantes.inserm.fr) and Carole Guillonneau (carole.guillonneau@univ-nantes.fr).

Recent publications of the team on IL-34 :

- Bezie S., Freuchet A., Serazin C., Salama A., Vimond N., Anegon I. and Guillonneau C. IL-34 actions on FOXP3+ Tregs and CD14+ monocytes control human graft rejection. Frontiers Immunol. 2020 Aug 11;11:1496.
- Bézie S, Meistermann D, Boucault L, Kilens S, Zoppi J, Autrusseau E, Donnart A, Nerrière-Daguin V, Bellier-Waast F, Charpentier E, Duteille F, David L, Anegon I and Guillonneau C. Ex Vivo Expanded Human Non-Cytotoxic CD8+CD45RClow/- Tregs Efficiently Delay Skin Graft Rejection and GVHD in Humanized Mice. Front Immunol. 2018 Jan 31;8:2014.
- Guillonneau C., Bézie S. and Anegon I. Immunoregulatory properties of the cytokine IL-34. Cell Mol Life Sci. 2017 Mar 3. doi: 10.1007/s00018-017-2482-4.
- Bézie S., Picarda E., Ossart J., Tesson L., Usal C., Renaudin K., Anegon I. and Guillonneau C. Interleukin-34, a new Treg-specific cytokine mediator of transplant tolerance. J. Clin Invest. 2015, Oct 1;125(10):3952-64.