



## Post Doctoral position on the biology of human dendritic cells

Paris, July 14<sup>th</sup> 2020

A 3-year, INCA-funded post-doctoral position is available in the Guermonprez Lab at the Centre for Inflammation Research, University de Paris Medical School, Bichat Hospital, Paris. The Guermonprez lab investigates the role of dendritic cell subsets in regulating T cell responses.

Human dendritic cells (DCs) are the sentinel cells of the immune system. Upon the activation of innate signaling pathways, DCs can engage in immunogenic maturation and initiate anti-tumor immune responses. Human “classical” DCs encompasses type 1 and type 2 DCs. Recently, the Guermonprez lab has characterized the development and function of a new subtype of type 2 DCs which exhibit a strong ability to drive the activation of CD8<sup>+</sup>CD103<sup>+</sup> tissue resident memory T cells (Bourdely *et al.*, *Immunity* 2020). The Guermonprez lab is also involved in the development of innovative approaches in mechanistic modelling of human hematopoiesis and dendritic cell development in humanized mice models (Anselmi *et al.*, *Nature Comm.*, 2020). This INCA-funded project intends to characterize in more details the inflammatory cues regulating DC development, trafficking and their relevance of the activation of tumor-specific lymphocytes in the context of breast cancer.

The successful candidate is expected to possess a scientific background in one (or several) of the following fields: dendritic cells biology, hematopoiesis, transcriptional regulation, T lymphocyte biology, cancer immunology, humanized mice models.

A solid technological expertise in high-dimensional approaches (scRNAseq, high dimensional flow cytometry, mass cytometry, high dimensional imaging, *e.g.*) will be appreciated.

Enthusiasm for human immunology, commitment and project leadership will be essential.

### References:

Transcriptional and Functional Analysis of CD1c<sup>+</sup> Human Dendritic Cells Identifies a CD163<sup>+</sup> Subset Priming CD8<sup>+</sup>CD103<sup>+</sup> T Cells. Bourdely P\*, Anselmi G\*, Vaivode K\*, Ramos RN, Missolo-Koussou Y, Hidalgo S, Tosselo J, Nuñez N, Richer W, Vincent-Salomon A, Saxena A, Wood K, Lladser A, Piaggio E, Helft J, Guermonprez P. *Immunity*. 2020 Jun 30;51(6):1074-7613(20)30232-6.

Engineered niches support the development of human dendritic cells in humanized mice. Anselmi G, Vaivode K, Dutertre CA, Bourdely P, Missolo-Koussou Y, Newell E, Hickman O, Wood K, Saxena A, Helft J, Ginhoux F, Guermonprez P. *Nat Commun*. 2020 Apr 28;11(1):2054.

### Contact & application:

Informal inquiries and applications should be sent to [pierre.guermonprez@cnrs.fr](mailto:pierre.guermonprez@cnrs.fr)

To apply, please provide 1 CV, 1 publication list and email contacts for 2 references.

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