

**Context and environment:** A post-doc position is available with Elodie Segura in the Immunology department of Institut Curie. The group studies the biology of human antigen-presenting cells in health and pathology, by combining analysis of human cells directly isolated from tissues, *in vitro* models using human cells, and *in vivo* models in mice.

During inflammation, monocytes are rapidly recruited and differentiate *in situ* into monocyte-derived macrophages (mo-Mac) and monocyte-derived dendritic cells (mo-DC). In chronic inflammatory diseases, mo-DC fuel the inflammation and are major contributors to tissue damage, while in cancer mo-Mac play a key role in suppressing anti-tumoral immune responses. How monocytes differentiate into mo-DC or mo-Mac is still poorly characterized. A better understanding of the molecular ontogeny of monocyte-derived cells would provide novel targets for the therapeutic manipulation of monocyte differentiation. We have recently shown that the Aryl Hydrocarbon Receptor is a molecular switch for directing monocyte differentiation towards mo-DC versus mo-Mac (Goudot et al, 2017). The successful candidate will employ molecular biology, cellular immunology and mouse models to unravel the transcriptional networks involved in the regulation of mo-Mac versus mo-DC differentiation by the Aryl Hydrocarbon Receptor.

Institut Curie is one of the largest European institutions for cancer research with a strong interdisciplinary tradition and state-of-the-art core facilities. It is located in the center of Paris (France), in a rich cultural and scientific environment. The Immunology department, headed by Sebastian Amigorena, includes 10 independent research groups in fundamental and translational immunology, working in a very collaborative and international environment.

**Candidate profile:** We are looking for a qualified, intellectually curious and highly motivated candidate holding a Ph.D. in biology, preferably in immunology, molecular biology or genomics. Familiarity with the following techniques will be an advantage but is not mandatory: flow cytometry, gene regulation/chromatin biology, lentiviral infections and bio-informatics. Strong organizational and communication skills and independence are essential. Written and spoken English is mandatory. Salary will be dependent on diploma and experience.

**Application :** Opened from September 2017 until filled.

Please send CV, motivation letter and contact details of at least two persons able to provide references to [elodie.segura@curie.fr](mailto:elodie.segura@curie.fr)

<http://esegura-lab.org>  
<http://u932.curie.fr/>

Goudot C, Coillard A, Villani AC, Gueguen P, Cros A, Sarkizova S, Tang-Huau TL, Bohec M, Baulande S, Hacohen N, Amigorena S, Segura E (2017). Aryl hydrocarbon receptor controls monocyte differentiation into dendritic cells versus macrophages., *Immunity*. 47: 1-15.