

POST-DOCTORAL POSITION AT INSTITUT NECKER (PARIS)

Context and environment: A post-doc position is available in the lab of Elodie Segura in the Immunology department of Institut Necker Enfants Malades (INEM) in Paris. The group studies the biology of mononuclear phagocytes in health and pathology, by combining analysis of *in vitro* models using human cells and *in vivo* models in mice.

Tissue damage initiates a local response that can be schematically divided into three stages (inflammation, tissue proliferation and tissue remodeling), in all of which macrophages play key roles. This requires macrophages to switch from a pro-inflammatory to a resolutive program. Dysregulated timing of this transition, or failed resolution, leads to chronic inflammation, chronic wounds, fibrosis, and organ failure. However, despite the crucial importance of this process, what transcription factors orchestrate the coordinated expression of the macrophage repair program remains largely unknown. The aim of the project is to unravel key regulators of the inflammation-to-repair transition, using in parallel an unbiased approach based on single-cell omics data and a candidate-based approach with candidate molecules experimentally validated in unpublished work.

Institut Necker Enfants Malades (INEM) is a world-class biomedical research Institute located in the center of Paris and affiliated with Université Paris Cité, CNRS and INSERM. The institute has an international staff of around 300 people from more than 20 countries, divided into 21 research groups. INEM research aims at gaining a holistic understanding of human pathophysiology, by associating expertise in hormonal communication, signaling, metabolism, inflammation, immunity and haemato-oncology. Existing resources include access to on-site state-of-the-art core facilities, including animal facility, bioinformatics, flow cytometry, Next Generation Sequencing, histology, cell imaging and image analysis, proteomics, gene transfer and genome editing.

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. Previous experience of *in vivo* mouse work is required. Familiarity with the following techniques will be an advantage but is not mandatory: flow cytometry, gene regulation/chromatin biology 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 March 2025 until filled. Funded 2-year contract with a possible extension.

Please send CV, motivation letter and contact details of at least two persons able to provide references to elodie.segura@inserm.fr

<http://esegura-lab.org>

<https://www.institut-necker-enfants-malades.fr/>