

Postdoctoral Position in Iron metabolism and Immunity

Institut Cochin, PARIS, France.

ANR-funded project. Start date in early 2027



Context

Iron fuels life, but also infection and cancer... Pathogens and tumor cells scavenge host iron to grow, while the immune system restricts its access as a defense strategy. How is this conflict resolved locally in diseased or injured tissues? This is the central question driving the IRONY team at Institut Cochin, and we are recruiting a postdoctoral fellow to help answer it.

Hepcidin was long viewed as an exclusively hepatic hormone controlling systemic iron homeostasis. Our team has demonstrated that it is also produced locally in peripheral organs and immune cells during infection, inflammation (Malerba et al., JCI, 2020; Bessman et al., Science, 2020; Abboud et al., Nat. Commun., 2024; Falabrègue et al., Blood, 2025) or cancer (work in progress). This tissue-restricted hepcidin production directly links iron metabolism to innate immunity. We are now translating these insights into therapeutic strategies designed to tip the iron balance in favor of immune defenses, with potential applications in infectious, inflammatory, and oncologic diseases. Working at the interface of iron biology and immunology, you will combine unique genetic mouse models, multi-scale analyses (from single-cell resolution to whole-organism physiology), and access to patient biopsies to define how hepcidin shapes immune responses in tissues and to identify new targets for immunometabolic therapies.

What we offer

- A fully funded position (ANR grant); 2-year contract, with the possibility of a 1-year extension. Flexible start date in early 2027
- Access to world-class core facilities: single-cell genomics, proteomics, cutting-edge imaging (including MACSIMA)
- Scientific autonomy and mentorship: you will lead an independent work package, present your findings at international meetings, and receive tailored support to strengthen your publication record and prepare for your next career step

Why Institut Cochin?

Joining Institut Cochin means becoming part of one of France's largest and most dynamic academic biomedical research centers, offering:

- A highly international, collaborative scientific environment
- Outstanding core facilities and technical support
- Extensive training and career development opportunities
- A location in the heart of Paris

We are looking for someone with:

- A PhD in immunology, immunometabolism, or a related field
- Experience with mouse models, flow cytometry, and/or immune biology, molecular biology
- Curiosity, creativity, rigor
- An organized, respectful, and collaborative mindset, with an interest in mentoring junior colleagues

Interested?

Please send a CV, a short statement of research interests and past achievements, and contact details for 2–3 referees to carole.peyssonnaud@inserm.fr.