







Post-doctoral position for 3 years in Saint-Antoine Research Center and Institut Pasteur (Paris, France) on ANR-funded project on interaction between NOD2 and *Faecalibacterium* in health and Crohn's disease

Scientific goal: Crohn's disease (CD), an inflammatory bowel disease, represents an increasing burden on western societies, but its pathogenesis remains unclear. CD is associated both with polymorphisms in certain innate immunity receptors that detect bacterial molecules, and with a decrease in Faecalibacterium, an anti-inflammatory intestinal bacterium. Oral administration of Faecalibacterium could represent a novel therapeutic strategy for CD patients. However, the bacterial molecules, the host receptors and signaling pathways involved are still poorly understood and require further investigations. This post-doctoral project is part of a collaborative project between Saint-Antoine Research Center and Institut Pasteur aiming to characterize the role of NOD2-signalling in the interaction between Faecalibacterium and the host in health and CD. The aim of the post-doctoral project will be to decipher in detail the molecular mechanisms of the interaction. All the tools and expertise necessary for the successful completion of the project are set up in the host laboratories (such as anaerobic culture, purification and analysis of bacterial cell wall constituents, reporter cell lines, isolation of antigen-presenting cells, WT and NOD2-/- human monocytic cell line, murine models of colitis, WT and NOD2^{-/-} mice (including germ-free), culture of human intestinal microbiota in vitro, Seahorse analyzer...). The Saint-Antoine Research Center has access to CD patient samples (blood, stool, biopsies).

Required skills: We are looking for a creative, motivated and rigorous candidate. The project will require a wide variety of techniques in different fields, including microbiology, biochemistry, cell culture and immunology. The candidate should have a recent PhD, be technically accomplished and have strong knowledge in microbiology, immunology and *in vivo* work. Some skills in biochemistry would be a plus. Knowledge of French language is not a requirement.

Research environment: The post-doctoral scientist will work in two complementary teams: (i) in Pr. Harry Sokol and Pr. Philippe Seksik's laboratory (https://www.crsa.fr/equipe-harry-sokol.html) in Saint-Antoine Research Center and (ii) in Ivo Boneca's laboratory in Institut Pasteur (https://research.pasteur.fr/fr/member/ivo-gomperts-boneca/). Both laboratories are located in the heart of Paris. The post-doctoral fellow will interact with the PIs (Dr. Nathalie Rolhion and Dr. Ivo Boneca) and also with other senior scientists, post docs, phD students, engineers and technicians. He/she will also interact with industrial partners, other labs in France and abroad and with several platforms.

Application process: The position is vacant from March 2026 on a full-time basis. Highly motivated candidates should send an application (including a cover letter, a *curriculum vitae* and the names of (at least) two referees) by email to nathalie.rolhion@inserm.fr and ivo.gomperts-boneca@pasteur.fr before December 31th 2025. Please indicate "Post-doc *Faecalibacterium*-NOD2" in the title of the email.