





Post-doctoral position « Bacteriology of Host-Microbiome interactions »

<u>Integrative physiology of Host-Microbes Interactions Lab, PI F.Leulier</u> Institut de Génomique Fonctionnelle de Lyon, ENS de Lyon, France





The lab

We study how the intestinal microbiome influences host nutrition, growth and physiology. We use gnotobiology coupled to genetics, functional genomics, imaging and biochemical approaches in bacteria and the host. We use flies and mice as host models.

We are an international team based at the <u>Institute of Functional Genomics Lyon</u>, a mix research unit of the <u>Ecole Normale Supérieure</u> and <u>CNRS</u> in the <u>Gerland-Biodistrict</u> area of Lyon. We have access to a next door and brand-new large Mouse Gnotobiology facility in the context of the Equipex+ <u>InfectioTron</u> initiative. Lyon is a vibrant and welcoming international city where you will enjoy French gastronomy and culture and is the ideal base to discover France (Paris: 2h - Alps: 1.5hrs – Mediterranean Sea: 3hrs).

Recent publications on the topic

Microbe-mediated intestinal NOD2 stimulation improves linear growth of undernourished infant mice

A standardized gnotobiotic mouse model harboring a minimal 15-member mouse gut microbiota recapitulates SOPF/SPF phenotypes

Lactobacillus plantarum strain maintains growth of infant mice during chronic undernutrition

The position

We are looking to strengthen our research aiming at deciphering how microbiome components shape mouse physiology. To this end, you will use a controlled minimal microbiota community (15 bacterial strains) and gnotobiotic mice. You will investigate the fitness of these intestinal microbes in the mouse gut environment and study how they shape their host physiology during the juvenile growth phase (post-weaning).

The position is opened now until it is filled. An initial contract of one year (renewable up to 5 years) is proposed. Individual fellowship applications will be supported. Salary from 2200€ to 3300€ net per month according to experience.

The profile

Ph'D in Biology with past experience in bacteriology, gnotobiology and microbiome research. Advanced skills in bacteriology, genetics and molecular biology. Full operational autonomy is expected with excellent organization, communication and collaborative skills (English is the working language of the team). Evidence of strong interest in nutrition, microbiome and physiology is requested. Past experience working with anaerobes would be a plus.

The employer

The École Normale Supérieure de Lyon is an elite French public higher education institution that trains professors, researchers, senior civil servants as well as business and political leaders. It is a symbol of French Republican meritocracy and it is committed to disseminating knowledge to the widest audience and to promoting equal opportunity. The ENSL brings together several laboratories at the cutting edge of science and working on different fields of natural sciences and humanities.

Contact and application:

By e-mail only to François Leulier (françois.leulier@ens-lyon.fr): CV, cover letter and contact details of 3 references.