

Fully funded postdoctoral fellow position to study the mechanisms underlying microbiome-brain interactions

We invite applications for a postdoctoral position to join a collaborative project between the laboratories of Carlos Ribeiro at the Champalimaud Centre for the Unknown in Lisbon Portugal and François Leulier at the Ecole Normale Supérieure, Lyon, France. Recent research has highlighted the importance of the gut microbiome in controlling physiology and behavior. How gut microbes influence brain function to alter behavior is currently one of the big mysteries in biology. We have recently shown that two specific gut bacteria species alter feeding decisions in the powerful genetic model organism *Drosophila melanogaster*¹. The combination of bacterial genetics with the powerful experimental methods available in *Drosophila* has allowed for the identification of mechanisms by which gut bacteria influence host phenotypes².

You will participate in an interdisciplinary collaborative project between the Ribeiro and the Leulier labs aiming at establishing and using bacterial genetic tools to identify the mechanism by which microorganisms act on the brain to influence specific appetites of the host. The position involves using state of the art bacterial genetic and genomic tools in combination with automated, quantitative behavioral assays and other cutting-edge circuit neuroscience approaches to identify the mechanisms by which *Lactobacilli* and *Acetobacteraceae* influence brain function.

We are looking for a highly motivated candidate with experience in either using genetic manipulations in bacteria to attain mechanistic insights into complex biological processes such as metabolism, or *Drosophila* researchers with a strong background in molecular techniques willing to learn cutting-edge microbial genetic manipulation approaches. Additional skills in *Drosophila* neuroscience, metabolism research, and microbe-host interactions are considered a plus. We strongly value team spirit and a positive and empowering work environment. You can find more information on the Ribeiro and Leulier laboratories at: <http://www.ribeirolab.org> and <http://igfl.ens-lyon.fr/equipes/f.-leulier-functional-genomics-of-host-intestinal-bacteria-interactions>.

Candidates are encouraged to send applications (cover letter, CV, and contact information of 3 references) to **Carlos.Ribeiro@neuro.fchampalimaud.org**. Recommended application deadline is April 30th, 2018. Reviewing of applications will start immediately until the position is filled. Openings are available immediately and the position is funded until the end of 2020. The position is based in Lisbon with regular visits to the laboratory in Lyon.

About Champalimaud Research: We aim to understand complex biological problems such as brain and behavior, physiology, and cancer. The research teams include members from across the world. Located on the waterfront in central Lisbon, Portugal, the Champalimaud Centre for the Unknown is equipped with cutting-edge research facilities. We offer a stimulating, internationally diverse and highly collaborative work environment and competitive salary & benefits. Lisbon's sunny Atlantic-Mediterranean climate, vibrant culture and high quality of life make this a great place to live and work. English is the official language of the institute.

1. Leitão-Gonçalves, R. *et al.* Commensal bacteria and essential amino acids control food choice behavior and reproduction. *PLoS Biol.* **15**, e2000862 (2017).

2. Matos, R. C. *et al.* D-Alanylation of teichoic acids contributes to *Lactobacillus plantarum*-mediated *Drosophila* growth during chronic undernutrition. *Nature Microbiology* **2**, 1635–1647 (2017).

