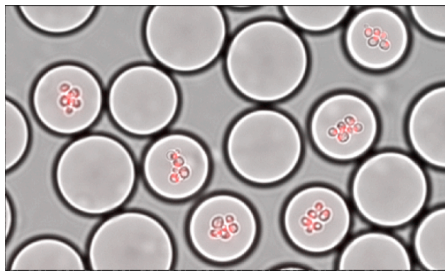


Ph.D. OPPORTUNITY

3-YEARS FELLOWSHIP AVAILABLE IN LYON (and PARIS), FRANCE

A collaborative project is supported by CNRS through its "80 Prime" interdisciplinary program and includes 3 years salary for a Ph.D. student. You will work in the team of Dr. Gaël Yvert at Laboratory of Biology and Modeling of the Cell located at ENS de Lyon, France. You will be affiliated to the BMIC graduate school of University of Lyon. Your employer will be CNRS. The project involves the Laboratory Colloids and Divided Matter located at ESPCI in downtown Paris. You will need to spend frequent stays in Paris, under the supervision of Dr. Jean Baudry.



Begin date: October 1st 2020

Required diploma:

A research master degree from a University or Grande Ecole, in a field relevant to the project (biology and/or engineering).

Salary: ~2,130 euros/month ('brut')

The project is based on technological developments from two laboratories which, when combined, have the potential to address fundamental questions in evolutionary genetics. We have developed an optogenetic switch that can induce targeted mutations with blue light. This tool offers the possibility to trigger specific genetic changes at a precise time. Our collaborators have a long-time expertise in digital microfluidics, where live cells are encapsulated in microdroplets and can then be monitored for growth and physiology over time. Your project will combine these two technologies to quantify the effect of genetic changes in hundreds of thousands of individual yeast cells.

Concepts: Genetics and evolutionary biology; Optogenetics; Yeast biology.

Techniques: Experimental setup for digital microfluidics and optogenetics; Molecular Biology and Microbiology; Data analysis (image analysis, statistics, programming in R)

Skills: Motivation, perseverance, rigor, creativity and curiosity.
Respectful and professional interaction with colleagues.
Knowledge in (evolutionary) genetics, interest in chemistry and physics.
Expertise in molecular genetics, experimental biology and programming is a plus.

Links: Laboratory: <http://www.ens-lyon.fr/LBMC/gisv/>
Collaborator: <https://www.lcmd.espci.fr/index.php?lg=uk>

How to apply: Please send an email containing "[PhD 80 Prime]" in its subject, with your motivation letter, CV and reference names (contacts such as previous supervisors who can tell us about you) to Gael.Yvert@ens-lyon.fr.