

Staff scientist/Research engineer: Instrumentation for targeted spatial transcriptomics

The **Spatial-Cell-ID** facility of Lyon is seeking a highly talented biophysicist/bioengineer. The successful candidate will set up a multi-user imaging platform dedicated to spatial transcriptomics on multiple types of biological samples.

Spatial-Cell-ID is a new national spatial transcriptomics facility funded by the French “EquipEx+” excellence initiative and led by the École Normale Supérieure of Lyon (ENSL). It aims to study cellular identity and its spatial heterogeneity within tissues, organs, or biological systems in normal and pathological contexts, through very recent developments in spatial transcriptomics. Spatial transcriptomics technologies were elected “Method of the Year 2020” by the *Nature Methods* journal and are currently revolutionizing our ability to study complex biological systems. Spatial-Cell-ID offers national equipment for spatial transcriptomics that integrates imaging, sequencing, and data analysis technologies which in synergy will provide access to the transcriptome of any single cell within its native spatio-temporal environment. It hosts a comprehensible selection of technologies, including single-cell transcriptomics (10x Genomics), untargeted spatial transcriptomics (e.g., Slide-seq), and targeted spatial transcriptomics (e.g., MERFISH), associating state-of-the-art technological platforms of the University of Lyon.

Role : The appointed candidate will **build the imaging platform for targeted spatial transcriptomics of Spatial-Cell-ID**. He/she will design, set up and interface the different parts of the experiment: microfluidic controls, super-resolution confocal imaging and acquisition system. Once the experimental setup is running, he/she will assist new users and train them when needed. The recruited engineer will be working at the ENS of Lyon and **closely collaborate with biologists, microscopists and biophysicists**, who will assist him/her in the different aspects of this highly interdisciplinary project.

Profile :

- Master’s or Engineering degree in biophysics/bioengineering/biology is required.
- Strong interest in instrumentation, if possible with experience in visual programming and coding for interfacing.
- Experience or the aptitude to quickly become proficient with the different steps involved in spatial transcriptomics experiments: design of probes, smFISH experiments, image acquisition and analysis.
- Excellent communication and collaboration skills. English is the working language.
- Experience in imaging of biological systems and/or microfluidics is a plus.

Desired starting date : January 2022

Contract duration : 3 years.

Salary : Remuneration based on experience (from 2000€/month for a junior to 3000€/month for a senior research engineer).

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 remains committed today 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 Biology, Mathematics, Physics and Humanities.

Instructions for applicants : Applications should include a CV, a cover letter, and contact details for 3 referees to be sent to: Jonathan Enriquez (jonathan.enriquez@ens-lyon.fr) & Sigolène Lecuyer (sigolene.lecuyer@ens-lyon.fr). **Please use the email subject “Spatial Cell ID”**. For further information please contact the same addresses. Applications will be considered upon submission.