

Université Claude Bernard Lyon 1- Hosting offer for a MSCA Post-doctoral fellowship candidate in **regulation of bacterial cell differentiation**

Host Organisation	Université Claude Bernard Lyon 1
Department	Molecular Microbiology and Structural Biochemistry (MMSB)
Laboratory	Signaling and asymmetry of the bacterial cell
Website (lab / research team)	https://mmsb.cnrs.fr/equipe/signaletique-et-asymetrie-de-la-cellule-bacterienne/
Supervisor Contact name	Mathilde Guzzo
Supervisor Contact email	mathilde.guzzo@cnrs.fr

Host Organisation

The Université Claude Bernard Lyon 1 welcomes Marie Skłodowska Curie Postdoctoral Fellowships applications !

With 62 laboratories and more than 7000 publications per year, and leading French university in terms of the number of patents filed in collaboration with industry, Lyon 1 contributes to scientific and innovation progress in numerous fields: health, mathematics, IT, physics, chemistry, earth and space sciences, life sciences, etc. Creator of emerging knowledge and new technologies, the University is consolidating its research excellence on a global and international level by developing inter- and multidisciplinary approaches targeting the major challenges facing today society.

Host research lab/team

The **Molecular Microbiology and Structural Biochemistry (MMSB) Lab** in Lyon, France, is a renowned research facility dedicated to studying the molecular mechanisms underlying microbiology and structural biochemistry. Led by a team of experts, MMSB focuses on elucidating the intricate processes of microbial function at the molecular level.

The “Signaling and Asymmetry of the Bacterial cell” (SAB) research team has extensive knowledge and expertise in bacterial cell-cycle regulations and asymmetric cell division, studying the bacterial model organism *Caulobacter crescentus*. Combining genetic approaches and fluorescence microscopy imaging with biochemical and structural approaches, the host lab focuses on molecular mechanisms driving cell-cycle progression and how environmental signals are integrated to modulate cell proliferation in bacteria at the molecular level.

Hosting Offer

The **SAB lab** offers to host a MSCA Postdoctoral Fellowship candidate (typically a post-doc of less than 8 years research experience since PhD defence), submitting an application to the next MSCA-2026-PF call for proposals (deadline 09th of September 2026), interested to work on the following research topic:

- Investigating the molecular mechanisms driving growth transitions using *Caulobacter crescentus* as a model organism
- Connecting environmental sensing to the regulation of growth: screen-based approaches and molecular exploration of bacterial adaptation.

The fellowship could last for 12 to 36 months, depending on the type of Postdoctoral Fellowship.

Supervision

The successful Marie-Curie Post-doctoral fellow will be supervised by Dr. Mathilde Guzzo. Her research interests include spatial and temporal regulations controlling and coordinating central cellular processes in bacteria. She is an expert in signal transduction and cell polarity in bacteria. Her research combines genetic and biochemical approaches as well as fluorescence microscopy to dissect signaling pathways and characterize the underlying molecular mechanisms.

Application process

Interested candidates are invited to contact us exclusively by email at mathilde.guzzo@cnrs.fr

Make sure that you include the reference to this offer in the title of your email. Please attach a CV, a motivation letter, your MSc marks, **as well as a 1 page research proposal.**

Professional grant application support:

Candidates will receive the support of the supervisors, as well as online training from a professional grant application company, and advice from successful applicants, to prepare and submit their application with the SAB team as a host laboratory, to the next MSCA-PF call for proposals.