Université Claude Bernard Lyon 1- Hosting offer for a MSCA Post-doctoral fellowship candidate

in **Mediators of plant bacteria interaction**

Host Organisation	**Université Claude Bernard Lyon 1**
Department	**UFR Biosciences**
Laboratory	**Microbial Ecology**
Website (lab / research team)	**https://www.ecologiemicrobiennelyon.fr/**
Supervisor Contact name	**LAVIRE Céline**
Supervisor Contact email	**celine.lavire@univ-lyon1.fr**

Host Organisation

The Université Claude Bernard Lyon 1 welcomes Marie Sklodowska 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 **Microbial Ecology Laboratory** (https://www.ecologiemicrobiennelyon.fr/eng) is at the intersection of microbiology, ecology, and the environment. The laboratory's research focuses on microorganisms: interactions between microorganisms and other organisms, relationships between microorganisms and their environment, and adaptation of microorganisms to environmental conditions and global change. The LEM comprises 70 permanent staff (researchers, lecture, engineers and technicians) and around 50 non-permanent staff (post-docs, PhD students, and undergraduated students). By coupling mechanistic and ecology this lab has developed tools in molecular biology, environmental genomics, chemistry of natural substances and microbial activity analyses.

The **ECO-PHEVE** (ECOlogy of PHage and Extracellular VEsicles - ex Diversity and Adaptation of phytopathogenic bacteria) research team studies extracellular vesicles and bacteriophage and their ecological roles. The interaction between microorganisms and plants is a highly intricated process, occurring via a sophisticated communication network and bacteria employs a multitude of mechanisms to colonize and survive in the plant environments. Among them extracellular vesicles (EVs) could play a significant role in this communication. We aim to understand how the EVs produced by bacteria or by the plant participate in the interactions between the two partners.

Hosting Offer

ECO-PHEVE research team 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 9th September 2026), interested to work on either of the following research topic:

- How can EV from phytobacteria (phytopathogenic or phytobeneficial bacteria) modulate the plant physiology and its microbiota. Exhaustive analysis of the content of EVs (proteins, lipids, metabolites), with a study of the global response of the host by using various approaches, including the study of the metabolome.
- How can EV from plant modulate its microbiota. Exhaustive analysis of the content of root EVs (proteins, lipids, metabolites). Particular emphasis will be placed on the study of root vesicles and their role in structuring microbial communities.

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 either Céline Lavire (orcid.org/0000-0002-0698-4683or Ludovic Vial (orcid.org/0000-0001-6021-0251). They have developed a recognized expertise in plant bacteria interactions, but also in phytochemical and metabolomics analyses. During recent years, C. Lavire and L. Vial have contributed to significant publications on *Agrobacterium* ecology and managed several national/local projects (EC2CO-CNRS funding, ANR).

Application process

Interested candidates are invited to contact us exclusively by email at celine.lavire@univ-lyon1.fr and ludovic.vial@univ-lyon1.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 advices from successful applicants, to prepare and submit their application with the DABP team from Microbial Ecology laboratory as a host laboratory, to the next MSCA-PF call for proposals.