

Université Claude Bernard Lyon 1- Hosting offer for a MSCA Post-doctoral fellowship candidate in Bioinformatics applied to oncology

Host Organisation	Université Claude Bernard Lyon 1
Department	Life Science
Laboratory	Cancer Research Center of Lyon (CRCL)
Website (lab / research team)	https://www.crcl.fr/en/ribosome-translation-and-cancer/
Supervisor Contact name	Virginie MARCEL
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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 Laboratoire **Cancer Research Center of Lyon (CRCL)** is a leading research lab in Europe in the transfer of knowledge from basic cancer research to clinical applications in oncology, and in the development of teaching and training in oncology. The CRCL comprises 26 teams, totalling more than 600 members, including 150 researchers and lecturers.

The **Ribosome, Translation and Cancer** team, headed by Jean-Jacques DIAZ, aims to understand the role of the ribosome in cancer through dysregulation of translation, notably by chemical modifications of ribosomal RNAs. Indeed, it has recently emerged that the ribosome may have a distinct composition with specific translation activities. It comprises 6 research groups, totaling 18 permanent staffs, including researchers, clinicians and lecturers, as well as over 25 non-permanent researchers and students. JJ Diaz also coordinates the **TRANSLACORE European network** dedicated to understanding the importance of dysregulation of protein synthesis in cancer (<https://translacore.eu>).

Hosting Offer

The Ribosome, Translation and Cancer 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:

rRNA epitranscriptomics: clinical relevance, biological consequences and origin of alterations

Data (i.e., RiboMethseq), methodologies and bioinformatic tools are already present in the lab to quickly initiate a project.

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

Supervision

The Marie Curie postdoctoral fellow will join the emerging team of Virginie MARCEL, Research Director at Inserm. Her work has revealed that rRNA 2'O-methylation fine-tunes ribosome activity to selectively enhance the translation of oncogenic mRNAs (Marcel et al., *Cancer Cell* 2013; Erales et al., *PNAS* 2017). By developing custom in-house bioinformatics tools (<https://github.com/RibosomeCRCL>), she demonstrated that rRNA 2'O-methylation patterns are deregulated at specific sites in human breast cancers and gliomas, defining signatures associated with tumor subtypes and grades (Marcel et al., *NAR Cancer* 2020; Paraqindes et al., *Neuro-Oncol* 2023).

Her team is now leading efforts to elucidate how altered rRNA 2'O-methylation shapes cancer biology across diverse clinical and pathological contexts — including adult and pediatric tumors, EMT, and treatment resistance — supported by strong national and international collaborations. With more than 1,500 tumor samples profiled by RiboMethSeq, the team has generated a unique Pan-Cancer dataset that opens the door to high-impact discoveries through innovative machine-learning approaches, which the successful postdoctoral researcher will have the opportunity to develop.

Application process

Interested candidates are invited to contact us exclusively by email at virginie.marcel@lyon.unicancer.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 CRCL as a host laboratory, to the next MSCA-PF call for proposals.