

Université Claude Bernard Lyon 1- Hosting offer for a MSCA Post-doctoral fellowship candidate in 2025

Host Organisation	Université Claude Bernard Lyon 1
Department	Lyon Neuroscience Research Center
Laboratory	Brain, Behavior, and Learning Lab
Website (lab / research team)	www.bbl-lab.com
Supervisor Contact name	Jérôme PRADO
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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 Lyon Neuroscience Research Center (CRNL) provides an outstanding research environment, bringing together approximately 500 members with multidisciplinary expertise. The CRNL is structured into 22 research teams and 9 platforms, located within the Lyon East Hospital Pole. The CRNL benefits from access to key technological platforms, including facilities for research-dedicated MRI and MEG recordings.

The Brain, Behavior, and Learning Lab (<https://bbl-lab.fr>) at the CRNL aims to understand the cognitive mechanisms underlying math and reasoning skills in adults and children across development. Research at the BBL employs a range of methodologies, including behavioral tasks, parent-child observations, school-based

interventions, and neuroimaging techniques (MRI and fMRI). A major objective is to evaluate how lab-based research may inform education, and how education research can inform cognitive theories.

Hosting Offer

The **Brain, Behavior, and Learning 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-2025 - PF call for proposals (deadline 10th September 2025), interested to work on the following research topic:

Our lab investigates the neural underpinnings of mathematical cognition across development, with particular emphasis on understanding how mathematical skills are acquired, processed, and potentially impaired. Recent work has focused on the neural bases of mathematics learning disabilities, and we are currently expanding into the intergenerational transmission of mathematical abilities within families. We welcome candidates with diverse backgrounds: those with expertise in mathematical cognition seeking to develop neuroimaging skills, researchers with neuroimaging experience interested in applying their knowledge to mathematical cognition, or individuals with strong foundations in cognitive psychology and/or neuroscience. The successful candidate will have the opportunity to develop their own research questions within this framework, potentially exploring the neural circuits involved in numerical processing, the developmental trajectories of mathematical abilities, intervention approaches for learning difficulties, or the interplay between environmental and neurobiological factors in mathematical skill acquisition. This position offers excellent training opportunities in advanced fMRI methods while contributing to our understanding of a cognitive domain fundamental to human development and education.

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 Jérôme Prado, a Principal Investigator at the CNRS (French national Center for Scientific Research) who heads the Brain Behavior and Learning lab. Dr. Prado's research program seeks to understand the cognitive mechanisms underlying math and reasoning skills in adults and

children across development. Dr. Prado's work is at the forefront of research on the neural development of math and reasoning skills and has been published in many influential journals in cognitive and developmental psychology and neuroscience (e.g., PLOS Biology, Cognition, Psychological Science, Child Development, Cerebral Cortex, Neuroimage, Developmental Science).

Application process

Interested candidates are invited to contact us exclusively by email at jerome.prado@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 advices from successful applicants, to prepare and submit their application with the CRNL as a host laboratory, to the next MSCA-PF call for proposals.