Postdoctoral researcher position

Our team and line of research

Yasmine Cantaut-Belarif is a CNRS Research Associate at the Paris Brain Institute. She joined the team of Claire Wyart to investigate the role of cerebrospinal fluid during development. She showed that a conserved polymer bathing in the cavities of the brain and spinal cord, named the Reissner fiber, controls the geometry of the posterior axis in developing zebrafish embryos. Since 2020, her work aims to unravel the mechanisms by which this acellular thread influences the morphogenesis and the alignment of the body at embryonic and post-embryonic stages.

The position

We are seeking to appoint a postdoctoral researcher to join a **3-year** research programme in developmental neuroscience **funded by the Agence Nationale de la Recherche (ANR)**.

The aim of the programme is to understand how the Reissner fiber bathing in the cerebrospinal fluid shapes the **geometry of the body and the alignment of the spine during post-embryonic stages**. More specifically, we seek to *(i)*identify the mechanisms by which this fiber is maintained over time in the brain and spinal cord cavities, *(ii)*to dissect the fundamental molecular and cellular pathways controlling the maintenance of this structure influencing body and spine shape. To address these questions, the candidate will combine the power of genetics and *in vivo* state-of-the-art imaging in zebrafish and develop approaches including gain-and-loss of function as well as structural and functional analysis of transgenic lines.

Contract & Starting date

One-year renewable contract (three years total)
Starting: January 2022 (flexible)

The environment and team spirit

The Paris Brain Institute provides a stimulating environment hosting an international and interdisciplinary community of outstanding scientists as well as cutting-edge resources and facilities. Our lab culture is to promote communication- and cooperation-based mentoring to achieve **creative and rigorous research** and to **foster the scientific maturity and independence of our trainees**!

Candidate profile

We are seeking for a motivated candidate

- working with a **proactive and cooperative** style in a team
- willing to approach tasks with **structured** working methods and reproducibility in mind

- able to **communicate** in an interdisciplinary and international working environment

Required selection criteria

- PhD or MD/PhD with a background in cell/developmental biology and neuroscience. **Graduate students about to defend their PhD are encouraged to apply!**
- Significant technical expertise in imaging, cell and molecular biology. Programming (Matlab, Python) will be a plus
- Previous experience in zebrafish is welcome but not required
- Excellent organizational skills, self-motivation and creativity

How to apply

Interested applicants must send

- a cover letter stating the research interests and motivation to join us: we want to know more about **your vision of science** and **your work spirit**!
- a CV including technical skills
- a list of publications highlighting the most relevant and impactful paper
- 2 reference letters

Contact

Dr. Yasmine Cantaut-Belarif, CNRS Research Associate
Paris Brain Institute
yasmine.belarif@icm-institute.org

Learn more about the institute and the lab

The Paris Brain Institute https://institutducerveau-icm.org/fr/team/equipe-wyart/
The Spinal Sensory Signalling lab http://wyartlab.org/