

Post-Doctoral Position in Vascular Biology in Bordeaux

A postdoctoral position is available in the endothelial cell biology group at INSERM U1026 BioTis.

## Development of a strategy to prevent degeneration and repair the arterial wall

**Employer**: INSERM (French Institute of Health and Medical Research) through a grant from the "Agence Nationale de la Recherche" (ANR) for the project FixFib.

Location: University of Bordeaux, Bordeaux, France.

**Period and duration:** The position is for a period of 24 months (with the possibility of extension). It is available immediately and applications will be accepted until the position is filled.

Job Description: Our research programme focuses on endothelial cell biology and more specifically on the interactions of endothelial cells with the basement membrane. We are interested in analyzing both the endothelial cell phenotypic and behavioral changes occurring upon pathological changes in basement membrane composition, and basement membrane alterations upon endothelial cell activation. We have recently discovered that the extracellular matrix protein fibrillin-1 plays a central role in endothelial cell biology (Alonso et al., Proc Natl Acad Sci USA. 2023, doi: 10.1073/pnas.2221742120, Alonso et al., Biomolecules 2022; doi: 10.3390/biom12101330). The project aims to develop innovative therapeutic applications for arterial wall repair of weakened vessels for regenerative and reparative medicine. In addition, it will contribute to a better understanding of the role of fibrillin-1 in ophthalmological abnormalities.

The laboratory is specialized in cell biological techniques and bio-imaging tools, biochemistry and signal transduction (please visit our website at <a href="https://genot-lab.org">https://genot-lab.org</a>) using in vitro and mouse models. The team is seeking to improve its knowledge in the field of single-cell transcriptomics for a comprehensive understanding of the cellular and molecular regulatory mechanisms involved in blood vessel formation and repair.

Our institute, the BBS - 'Bordeaux Biologie Santé' - is one of the leading biomedical research centers in Bordeaux, with excellent basic facilities on the site (TBMcore, <u>https://www.tbmcore.cnrs.fr/?lang=en</u>) and a site of excellence for bio-imaging (<u>https://www.bic.u-bordeaux.fr/</u>). The University of Bordeaux is an international campus with almost 54,000 students (<u>https://www.u-bordeaux.fr/en</u>). Bordeaux is an international tourist destination with an exceptional architectural and cultural heritage. The city is set in magnificent surroundings, close to the Pyrenees and the Atlantic Ocean. Two hours by train from the center of Paris.

**Requirements**: We are seeking a highly motivated candidate for joining our dynamic and international team with:

- a PhD and 0-3 years of relevant postdoctoral experience.

- a strong track-record of publications with at least one as first author in peer-reviewed journals

- experience with single-cell transcriptomics

Candidates must hold a PhD in cell biology or biochemistry or a related discipline. Priority will be given to candidates with experience in single-cell transcriptomic. Other skills include proficiency in data processing, good time organization, effective communication skills and the ability to work both unsupervised and as part of a team. The candidate must be fluent in English.

The salary will be in accordance with the INSERM salary scale, depending on past experience. Social security and health benefits will be included.

**Contact**: Applications, as a single PDF document containing a cover letter, a concise summary of previous research, a Curriculum Vitae, a publication list and contact details for at least 2 references should be sent to:

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