

## Postdoctoral fellow in vascular cognitive impairment and dementia

The Duplaa lab in the UMR Inserm U1034/University of Bordeaux is seeking a highly motivated postdoc candidate to work on the project "Prevention of Vascular Cognitive Impairment through Early Detection of Cardiovascular Diseases"

- Two-year fixed-term contract with possible renewal for a 3rd year.
- funded by the ERA-CVD Joint Transnational Call 2020

### Science

In Europe, more than 10.5 million people are suffering from cognitive impairment and dementia with an associated overall health care costs of about €790 billion. The vast majority of cognitive impairment and dementia in the population is due to a mix of vascular brain injury and neurodegenerative disease, and the vascular component is now recognized as a major driver in the pathophysiology of the disease. Its most frequent substrate by far in the general population is cerebral small vessel disease (cSVD), most often covert, i.e., detectable on brain images without association with a clinical stroke (lacunes, white matter lesions, microbleeds...).

The project aims to investigate underlying mechanisms of cerebral small vessel disease to identify novel therapeutic targets. Focus will be done on the role of the Wnt/Frizzled signaling in the blood brain barrier function.

Duplaa laboratory has a long-lasting expertise in the Wnt/frizzled signaling in vascular biology. The team identified novel components of the non-canonical Wnt pathway and dissected their role in cardiovascular diseases. Using robust proteomic research and novel VCI model, the group could now tackle Wnt signaling in cSVD and VCI.

Bats, ML *et al.* *FASEB* (2020). Sewduth, RN *et al.* *Science Signaling* (2017). Peghaire, C *et al.* *Arterioscler Thromb Vasc Biol* (2016). Guillaubert-Gourgues, A *et al.* *Mol Biol Cell* (2016). Sewduth, RN *et al.* *Nat Commun* (2014). Descamps, B. *et al.* *Circ Res* (2012). Barandon, L. *et al.* *Arterioscler Thromb Vasc Biol* (2011).

### Your Role:

- Contribute to the project's research on studying Wnt signaling role in cerebral small vessel disease in vascular cognitive impairment and dementia
- Prepare papers for publication in leading international peer-reviewed journals
- Disseminate findings at conferences and meetings

### Your Profile:

- A first post-doctoral experience of at least 18 months
- A strong track record of accomplishment in one of the following fields: vascular biology, neurovascular biology, imaging and physiology. Molecular and/or cellular neurobiology.
- Experimental animal skills
- Highly motivated and enthusiastic scientists. French speaking is not a requirement.
- Strong ability to work both independently and as part of a team

### What we offer:

- A position in a highly visible research project at the frontiers of knowledge in the field of genetic, dementia and cardiovascular physiology.
- Opportunities for a network in European ERA-CVD project and participation in international conferences
- Firm opportunities for local career development
- A multidisciplinary, international, well-equipped work environment
- Attractive remuneration
- Host institute: <http://www.u1034.bordeaux.inserm.fr/>

### Job Information

- **Closing date:** July 15<sup>th</sup> 2021
- **Employment start date:** ideally october 1<sup>st</sup> 2021, but due to the pandemic, we will accommodate the selected candidates.
- **Institution:** UMR Inserm U1034
- **Department:** Duplaa 's Laboratory
- **Town:** Inserm U1034 is located in the highly dynamic and international city of Bordeaux, France. Bordeaux is considered as one of the most attractive metropolises in Europe, with a strong signature in biological and neurovascular science, architecture & gastronomy (which we hope to enjoy soon again!)

### Contact Information

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- Please send your application in a single 3/4 page-long pdf, including your CV, publications, summary of your previous research experiences, and e-mail addresses of referees/letters of reference