

## Post-Doctoral position on PHEX biological functions in extracellular matrix mineralization - Paris Descartes University, France

A post-doctoral position funded for 18 months by the French National Agency of Research (ANR) is available for a talented and highly motivated post-doc fellow in Chaussain's lab. Our team focuses on the study of impaired mineralization process in the context of genetic diseases affecting mineral metabolism. We have acquired a solid expertise on X-linked Hypophosphatemia (XLH) since fifteen years and the lab is strongly connected with the national French reference center for rare disorders of the Ca and Pi metabolism. Since the identification of *PHEX* (*phosphate-regulating gene with homology to endopeptidases on the X chromosome*) gene mutations as a cause of XLH in 1995, the PHEX role remains unclear despite a key role in regulating the mineralization process and mineral metabolism. To understand PHEX biological functions, a major issue is to clarify PHEX interactions in the extracellular matrix of calcified tissues. The successful applicant will focus on the understanding of PHEX function through the identification of its binding partners using the engineered biotin ligase (BirA\*) to covalently attach biotin to PHEX binding partners in a proximity-dependent manner. XLH pathophysiological mechanisms will be then decipher using in cell and mice models.

This project will benefit from a highly dynamic and collaborative environment with the participation of Laurent Beck (INSERM U1229, Nantes) and Franck Oury (INSERM, Necker Hospital, Paris).

A solid background in molecular and cell biology and bone physiology are required. Candidates are expected to be autonomous, enthusiastic, and able to work in a collaborative team. Applicants must hold a PhD degree in biology and should send a letter of scientific achievements and of their interest in this project, a CV with list of publications, and contact information of 2 referees to [claire.bardet@parisdescartes.fr](mailto:claire.bardet@parisdescartes.fr)

Starting: January 2019