2-years postdoctoral research fellow position available in the "Molecular and Cellular Plasticity in Cardiovascular Diseases" group at the UMRS 1166 – ICAN in Paris, France, under the direction of Dr Sophie Nadaud. https://recherche-cardiovasculaire-metabolique.fr/

We seek to hire a highly motivated postdoctoral fellow to **investigate the role of regulatory pathways and of progenitor cells in vascular remodeling during hypertension** in the team led by Dr Sophie Nadaud at the UMRS 1166-ICAN. The UMRS 1166 – ICAN (Research unit on cardiovascular and metabolic diseases) is a dynamic research center located in Paris center that comprises internationally recognized groups focusing on cardiovascular and metabolic diseases. **We offer** a team oriented environment in a multidisciplinary research lab with numerous up-to-date technical facilities on the site (e.g. single cell RNAseq analysis…). Sorbonne University is ranked within the top 100 research centers in the world (Times Higher Education ranking & QS World Ranking).

The post-doctorate will work with research assistants, students and scientists to study vascular progenitors' fate using various lineage tracing mouse models and various systemic hypertension models. Vascular progenitor cells activity will also be studied *in vitro*. Experimental techniques will include: animal models generation, echo-doppler analysis of vascular function, immunohistology and immunofluorescence studies, progenitor cells FACS isolation and culture.

Highly motivated scientists with a strong interest in vascular pathophysiology are encouraged to apply. The candidate should have a PhD in Life Sciences with a **strong knowledge in vascular biology and should be experienced in animal manipulation (formation in animal experimentation) and tissue analysis (immunohistology, RT-PCR, Western-blots)**. Solid experience with **fluorescence imaging techniques** (microscope and analysis software) is mandatory. Experience in hypertensive animal models or FACS cell isolation and culture would also be appreciated but are not obligatory. Strong writing and oral communication skills will be needed and good English language skills are necessary. The candidate should have demonstrated innovation, initiative, problem-solving attitude, and ability to work well both independently and as a member of a team. Applicants should have the willingness to teach students and technicians. Working languages will be English and French.

The position, opened for two years (with a possibility of 6 months to one-year renewal), offers creative and stimulating working conditions in dynamic and international research environment. Salary will be in accordance with the University scale, depending on experience. The start date of the position is approx. Dec 2021-January 2022. Application will be considered until the position is filled.

CV, list of publications, 1/2-page personal statement with short description of previous research projects and experience, interests and contact information for (at least) two referees should be sent by email to: sophie.nadaud@inserm.fr

Publications related to the project:

- Dierick F, et al. Resident PW1+ Progenitor Cells Participate in Vascular Remodeling During Pulmonary Arterial Hypertension. Circ Res. (2016) 118 (5):822-33. DOI: 10.1161/CIRCRESAHA.115.307035
- Bordenave J, et al. Lineage Tracing Reveals the Dynamic Contribution of Pericytes to the Blood Vessel Remodeling in Pulmonary Hypertension. Arterioscler Thromb Vasc Biol. 2020;40(3):766-782. DOI: 10.1161/ATVBAHA.119.313715
- Guivarc'h E et al. Nuclear Activation Function 2 Estrogen Receptor α Attenuates Arterial and Renal Alterations Due to Aging and Hypertension in Female Mice. J Am Heart Assoc. 2020 Mar 3;9(5):e013895. DOI: 10.1161/JAHA.119.013895