**PhD student position,**

**Role of endogenous hydrogen sulfide in the control of vascular aging**

# Starting date: May 2020

[The laboratory of Vascular Surgery](http://cvalab.mystrikingly.com/) (CHUV, Lausanne, <http://cvalab.mystrikingly.com/>) offers a 4-year PhD fellowship (SNF funded).

**Research domain**: Our group conducts research in the areas of aging, dietary restriction and hydrogen sulfide, with the goal of elucidating mechanism and develop novel pharmacological and dietary intervention to improve the quality of life of our patients.

**Keywords:** Aging, dietary restriction, surgery, ischemia, reperfusion, clinical trial.

Aging is the biggest risk factor for most human diseases. Importantly, vascular dysfunction in the elderly is one of the strongest predictors of imminent death. Thus, a better understanding of vascular aging, and novel strategies to delay vascular aging, could tremendously influence the lifespan and the quality of life of elderlies.

Our goal is to understand the role of metabolic dysfunction in endothelial cells as a driver of aging. We hope to develop novel strategies, based on dietary intervention and hydrogen sulfide to delay or revert aging phenotypes, especially in the context of ischemia/reperfusion injury associated with surgery.

This project uses multiple mouse models of ischemia/reperfusion injury and young vs old mice to test dietary intervention and H2S-based therapies to reverse or delay aging. In addition, the student will have the opportunity to explore the metabolic effect of dietary restriction during surgery in human (prospective, randomized clinical trial).

We are looking for a **hard-working, highly motivated PhD-student with academic ambitions.** Applicants must hold a Master’s degree in Biology or Medicine acceptable for matriculation as a PhD or MD-PhD student at a Swiss University.

Previous experience with animal surgery and mouse work is required. As a PhD student, you will set up and perform experiments, collect/prepare data, figures, and summaries of studies conducted and ensure their publication. You will work in close collaboration with Vascular Surgeons, at the interface between medicine and research.

**Candidates should send a CV and letter to: alban.longchamp@gmail.com**