

## Postdoc position in structural analysis of blood vessel leakage regulatory proteins and compounds

A two-year postdoc position is available in the group of Lena Claesson-Welsh, Uppsala University.

For information: <a href="mailto:lena.welsh@igp.uu.se">lena.welsh@igp.uu.se</a> and <a href="mailto:www.igp.uu.se/research/vascular-biology/lena-claesson-welsh/">www.igp.uu.se/research/vascular-biology/lena-claesson-welsh/</a>

For application, see https://www.uu.se/en/about-uu/join-us/details/?positionId=435870

## **Work description**

The applicant will be responsible for a project concerning the structural determination of proteins in complex with chemical substances of the category "small molecular weight compounds". Purified, recombinant protein preparations are analyzed in combination with substances, by cryo-electron microscopy. The project includes planning of protein production (which is carried out in collaboration with a protein purification facility), and analysis of the preparations with liquid chromatography. Furthermore, planning for substance synthesis performed commercially, and further optimization of conditions that enable structure determination primarily via cryo-EM. The cryo-EM work will be carried out with the support of the cryo-EM National SciLifeLab Facility (see https://www.scilifelab.se/units/cryo-em/). Other methods for structural determination may be relevant. The overall goal of the project is to identify and characterize substances that can inhibit excessive blood vessel leakage.

The applicant is overall responsible for detailed planning and implementation of the project as well as problem solving. The project ends with data compilation, and oral and written presentations.

## Qualifications

- Doctoral degree and education at an international level on a topic that is relevant to the project.
- The applicant must have extensive experience in structural determination, primarily through cryo-EM.
- The applicant must have extensive experience and skills in relevant (bio) chemical analysis methods.
- The applicant must have the capacity to be able to organize the planning and execution of the project, to selfmotivate and solve problems.
- It is an advantage if the applicant has published scientific articles in leading international journals as the first author.
- The applicant must have documented experience and proficiency in oral and written presentation in English.