

Postdoctoral scholarship: Translational asthma research on lipid mediator regulation of small airway inflammation

Karolinska Institutet, Institute of Environmental Medicine

The Institute of Environmental Medicine (IMM) is an interdisciplinary research department at Karolinska Institutet. IMM conducting research within the areas of environmental and occupational medicine, toxicology, physiology, pharmacology, epidemiology, and biostatistics with the aim to clarify how environmental and lifestyle factors affect our health. IMM also serves as a scientific advisor to public authorities within the area of environmental medicine and IMM scientists participate in national and international expert groups.

Position and environment

With the support of a dedicated grant from the Swedish Heart and Lung foundation, there is an opening for a post doctoral fellow at the unit for Experimental Asthma and Allergy Research at IMM. The unit has an internationally recognized, long-standing experience with functional and biochemical studies of prostaglandins, leukotrienes, lipoxins and other bioactive lipid mediators in the context of asthmatic airway inflammation.

Project

The goal is to define mechanisms of relevance to asthma that ultimately may become novel targets for future treatments. This post doctoral fellow will be responsible for a project where specific interactions between lipid mediators and key cytokines in type 2 as well as non-type 2 inflammation will be investigated (for model, see e.g. Manson et al *J Allergy Clin Immunol.* 2020; 145:808-81) using isolated tissues from the small airways of humans and guinea pigs. This is a physiological and pharmacological research project, but includes supporting techniques such as histology, transcriptomics, proteomics, and the measurement of mediator release using different methods.

Qualifications

We are searching for a highly motivated candidate with a commitment to experimental research in asthma and other lung diseases. Experience of physiological or pharmacological research is a strong merit, in particular familiarity with functional experiments using tissue organ baths or myographs. Practical knowledge of handling experimental animals is necessary, and basic Felasa certification would be another asset. Excellent communication skills and an ability to interact socially and scientifically with other post docs and students in the laboratory, as well as collaborators in various networks is essential. Good computer skills are necessary, as well as fluency in English which is the main language used in this work environment. Previous post doc experience and a strong publication record are also important qualities.

To qualify, the applicant must hold a doctor's degree or a foreign qualification deemed equivalent to a doctorate. Applicants who have completed their degree no more than three years before the last date for applications will be given priority. Candidates who have completed their degree earlier than this will receive equal priority if special grounds exist.

Those who have allergies to animals or illnesses that may be aggravated by daily exposure to laboratory animals and chemicals are not advised to seek this position.

Swedish regulations concerning Scholarships

The purpose of scholarships for postdoctoral fellows is to promote internationalisation and contribute to further research qualification after a doctoral degree or equivalent. A scholarship for carrying out postdoctoral research can be granted for a maximum of two years within a four year period following the receipt of a doctoral degree or equivalent. To be eligible for a postdoctoral scholarship, the person must have obtained a doctorate or a foreign degree deemed to be equivalent to a doctorate. The scholarship is tax free and it is set for twelve months at a time, paid out on a six month basis.

Application process

An employment application must contain the following documents in English:

- *A complete curriculum vitae, including date of thesis defense, title of thesis, previous academic positions, academic title, current position, academic distinctions, and committee work*
- *A complete list of publications*
- *A summary of current work and research interests (maximum one page)*

Please contact Assistant Professor Jesper Säfholm (jesper.safholm@ki.se) for more information and instructions about how to submit the application through the Varbi recruitment system.