

## ***Post-doc position– Biomarkers in allergic asthma***

### ***Supervisor:***

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### **Biomarkers in allergic asthma**

Asthma is an inflammatory airway disease characterized by varying degrees of hyperreactivity and thickening around bronchi and bronchioles as a result of inflammation. For a long time, asthma has been thought to be a disease in the central airways, whereas today it has been pointed out that asthmatics who have an influence on the peripheral parts of the lung have more severe disease. Allergic asthma is a common type of asthma, and some patients with allergic asthma, in addition to a direct allergic reaction, also have a troublesome and unpredictable late-reaction after about 6-8 h. Biomarkers involved in asthma are related to the Th2 response, including periostin, interleukin-13 and mast cell-mediated cysteinyl leukotrienes (Cys-LT).

The aim of this post-doc project is to characterize inflammatory biomarkers in patients in order to understand the process and mechanisms of an allergic reaction, and to find out if it is possible to predict which ones that will have a late allergic reaction.

Biomarkers in serum/plasma, urine, bronchial lavage (BL) and bronchoalveolar lavage (BAL) will be investigated in patients with allergic asthma, and the role of eosinophilic inflammation and exhaled NO will be evaluated.

### **Methods:**

The project includes analyses of biomarkers in patient material, using ELISA, immunostainings and molecular biology methods, such as quantitative real-time PCR. Results will be analysed and published.

### **Qualifications:**

Candidates with a PhD in biomedicine, biology, or similar, are eligible for this post-doc project. An advantage is experience in ELISA techniques, fluorescence microscopy and molecular biology techniques, as well as knowledge in bioinformatics.

In addition, it is required that the applicant has other properties and capabilities that are necessary to carry out the project. Of importance is the ability for independent work and engagement. The nature of the work requires flexibility in terms of structure and working time, as well as laboratory accuracy. Good co-operation ability and pleasant personality is a requirement.

### **Position:**

This is a post-doc position for 2 years with a scholar ship from Lund University. The candidate can start as soon as possible.

### **Application:**

The application, CV, publication list, diploma/course extract and references, must be sent in to [Ellen.Tufvesson@med.lu.se](mailto:Ellen.Tufvesson@med.lu.se) at the latest 2019-02-28. All documents must be certified.