

**4-year PhD position at Maastricht University (NL) and ULiege (BE) for the project “*Spatio-temporal investigation of environment-driven lung innate responses regulating type 2 allergic asthma*”**

In the context of a joint project between the GIGA Institute (Immunophysiology Lab), the FARAH center (Vaccinology Lab) of Liège University (Belgium) and the Pathology department of the Maastricht University (The Netherlands), we offer a 4-year PhD position to start before end 2020. The fellow will be working in both locations under the respective supervision of Prof. Thomas Marichal, Prof. Laurent Gillet & Dr. Bénédicte Machiels (ULiège) and Dr. Pieter Goossens & Prof. Erik Biessen (Maastricht). We are therefore looking for a highly-motivated, enthusiastic and talented young scientist who combines a strong immunological or biological background with an interest in microscopy or histology.

**We expect:**

---

Applicants are expected to be motivated team players that hold a Master's degree in life sciences (Biomedical Sciences, Biology, Medicine, Veterinary Medicine, Bio-Engineering or equivalent). A background in Immunology, Respiratory medicine or Bio-informatics and hands-on experience in microscopy or histology are considered an advantage. Interest in bioinformatics and data analysis is required, as it constitutes a substantial part of the project, downstream of image acquisition and in complement of wet-lab experiments. **Mobility** between both locations will be required. While knowledge of French and/or Dutch could be useful, good **English** communication skills are a must.

**We offer:**

---

Temporary employment is offered for 4 years in a challenging, multi-disciplinary environment at the forefront of the lung immunity field, working with experienced, highly-skilled colleagues. The doctoral schools in both universities offer PhD training plans with broad educational programs in relevant transferable skills and techniques, including FELASA C training, while hands-on training in the use of murine models, novel microscopic techniques and data analysis through advanced bio-informatic approaches will be offered by the host labs. A competitive salary will be calculated based on your qualifications and previous experience.

**The project:**

---

The influence of environmental factors, such as viruses, microbial products or pollutants on the development of lung inflammatory diseases like asthma is well documented. Nevertheless, the underlying mechanisms remain unclear. In particular, while lung innate immune cells can sense and be shaped by environmental triggers and microenvironmental signals, it is not clear how this occurs in a spatio-temporal manner to modulate the lung niche and disease pathogenesis. ULiege partners have evidence that type 2 innate lymphoid cells (ILC2s), neutrophils, monocytes and macrophages represent important early innate immune sensors in this context. In parallel, UM partners have developed an innovative, multi-colour microscopy technique that would allow a detailed investigation of the intercellular connections and interactions that may drive disease pathogenesis. This project will gather local experts from the fields of Immunology, Microbiology and Respiratory Medicine to investigate this complex question. The PhD student will mainly focus on the imaging-related aspects of several promising projects in

**4-year PhD position at Maastricht University (NL) and ULiege (BE) for the project “*Spatio-temporal investigation of environment-driven lung innate responses regulating type 2 allergic asthma*”**

mouse models, as well as the initiation of novel joint projects and the characterization of innate cell responses in tissues from patients suffering from lung inflammatory disorders.

### **How to apply?**

---

Applications should include a motivation letter, an elaborate curriculum vitae and 1-2 references, and be directed to Dr. Goossens ([pieter.goossens@maastrichtuniversity.nl](mailto:pieter.goossens@maastrichtuniversity.nl)) and Prof. Marichal ([t.marichal@uliege.be](mailto:t.marichal@uliege.be)).

Deadline: **October 1<sup>st</sup>, 2020.**

### **Links to the host Labs / Institutes**

---

[www.gigaimmunophysiology.uliege.be](http://www.gigaimmunophysiology.uliege.be)

[www.farah.uliege.be](http://www.farah.uliege.be)

[www.gigadoctoralschool.uliege.be](http://www.gigadoctoralschool.uliege.be)

[www.pathologie.mumc.nl/nl](http://www.pathologie.mumc.nl/nl)

[www.carimmaastricht.nl/education/phd-programme](http://www.carimmaastricht.nl/education/phd-programme)