

POST-DOCTORAL POSITION IN EXOSOMES AND CANCER RESEARCH
AVAILABLE IN THE LABORATORY OF PNEUMOLOGY
UNIVERSITY OF LIEGE, GIGA INSTITUTE, BELGIUM

A post-doctoral position is available at the Laboratory of Pneumology, led by **Prof Dr Renaud Louis** and under the supervision of **Prof Dr Julien Guiot**, within the GIGA Institute of the University of Liege (Belgium).

The GIGA Institute (www.giga.uliege.be) is an interdisciplinary biomedical research center offering access to core facilities including animal facilities, imaging, sequencing and viral vector production platforms.

Located within the university hospital on the Sart-Tilman campus, the institute comprises more than 600 scientists specializing in the development of health solutions for the benefit of patients. GIGA scientists include physicians, pharmacists, veterinarians, psychologists, molecular and cellular biologists, chemists, physicists, mathematicians, and engineers working together for academic excellence and to foster breakthrough medical innovations.

As part of a collaborative funding and under the overall supervision of **Dr Ingrid Struman's** Molecular Angiogenesis lab, we are looking for a motivated candidate to manage the project in a translational fashion between the clinic and the wet lab.

Research topic

Based on our combined lab team expertise in extracellular vesicles (EVs), we aim to determine if EVs are suitable tools for lung diseases. The project jointly supervised by Dr Ingrid Struman and Dr Julien Guiot will aim to detect and block immune checkpoint proteins (ICPs) in the context of non-small cell lung cancer (NSCL). We recently developed a new methodology allowing the identification of up to 40 ICPs at the surface of EVs in a single liquid-biopsies. The high sensibility of the method permits the detection of several ICPs at the same time offering a new possibility to follow the evolution of immune checkpoint landscape in tumor.

Three axes will be developed:

- (i) Technological development in exosome identification and modification.
- (ii) Identification of the ICP profile in patients with lung cancer using exosome/EV surface markers.
- (iii) Engineering exosome/EV to modify lung disease behavior.

In this context, we propose a unique collaborative and translational approach to promote an innovative biotechnological development and to obtain a first therapeutic proof of concept in an unmet medical need.

Tasks

The position offers various tasks and activities in an exciting environment, including but not limiting to:

- Designing and conducting the research project based on the funding objectives.
- Managing the wet lab practices and supervising a lab technician dedicated to the project.
- Managing the whole workflow of sampling: from the patients inclusion, samples management, biobank requirements to the lab experiments.
- Promote the research project through publications drafting and dissemination activities.
- Maintaining daily efficient and productive communication with the academic and industrial partners of the project.

Profile

We are looking for a highly motivated researcher with a PhD degree in biomedical sciences, biochemistry or equivalent, and a high interest in lung diseases.

The ideal candidate should have a strong background in molecular biology, with interest in cancer immunology and published evidence of aptitude for high quality research.

Fluency in oral and written English, an independent, creative mind yet with a good team spirit and excellent organizational skills are essential requirements.

What we offer

- A high-profile research project, fully financed by competitive grants.
- A modern, international, and well-equipped research environment with state-of-the-art technological platforms.
- Multimodal activities linking the clinical and research worlds.
- An attractive salary in an affordable, lively, and welcoming environment.
- A full-time position for a 4-year period (one-year renewable contracts)
- The candidate should ideally start in March 2024.

How to apply

Applications including CV with contact details of two references, a list of publications and a statement of research interests should be sent to Benoit Ernst: benoit.ernst@uliege.be.

For any scientific related questions, please contact Prof Dr Julien Guiot: j.guiot@chuliege.be.

In line with our values, the University of Liège encourages an inclusive culture. We promote equality of opportunity, value diversity and nurture a working and learning environment in which the rights and dignity of all our staff and students are respected.

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