



## Postdoctoral researcher for vaccine development against *Acinetobacter baumannii* (up to 3 years)

### Posted Date

15 Nov. 2023

### Locations

Gosselies and Namur (Belgium)

### Center

- ULB Center for Research in Immunology (U-CRI, ULB, Gosselies)
- Research Unit in Biology of Microorganisms (URBM, UNamur, Namur)

### Lab

Eric Muraille Lab (<https://www.urbm.be/research-groups/eric-muraille>)

### Type

Post-doctoral

## The position description

- We are looking for a PhD or postdoctoral researcher to participate in the project **BAXERNA**: ***“Immuno-peptidomics-based Development of Next-Generation Bacterial mRNA Vaccines”*** funded by *Horizon Europe Framework Programme*.
- The main goal of BAXERNA proposal is to establish a new vaccine development pipeline based on significantly improved immuno-peptidomics screening and innovative mRNA vaccine formulation. We will use our powerful new pipeline to develop novel mRNA vaccines against three bacterial pathogens that can persist within phagocytic cells: *Mycobacterium tuberculosis*, *Mycobacterium ulcerans*, and *Acinetobacter baumannii*. This project is embedded into a large consortium composed of European universities and biotechnology companies: VIB-UGent Center for Medical Biotechnology (Belgium), Universiteit Gent (Belgium), Karolinska Institute (Sweden), Institut Pasteur (France), Radboud University (Netherlands), Rheavita (Belgium), Université libre de Bruxelles (ULB, Belgium), Univercells (Belgium), Vrije Universiteit Brussel (Belgium), Vaccine Formulation Institute (Switzerland).
- The role of the researcher at ULB will be to evaluate the effectiveness of candidate RNA vaccines against pulmonary infection by the bacterium *Acinetobacter baumannii* in mice and characterizing the humoral and cellular immune response induced by these vaccines.

## The lab and its working environment

The team of Prof. Dr. Eric Muraille (<https://www.urbm.be/research-groups/eric-muraille>) analyzes the host/pathogen relationship in the mouse model via a multidisciplinary approach involving the study of the host's immune response and the biology of the pathogen. In order to make this approach possible, his team is part of both **U-CRI** (ULB Center for Research in Immunology, ULB, Gosselies, <https://u-cri.ulb.be>) and **URBM** (Research Unit in Biology of Microorganisms, UNamur, Namur, <https://www.urbm.be>). This dual affiliation allows you to benefit from broad scientific expertise in immunology and microbiology and the technological platforms of ULB and UNamur.

The master and Ph.D. thesis students in this team are under joint ULB/UNamur supervision and are residents at URBM. The URBM includes a total of 6 research teams and offers a dynamic and international environment (<https://www.urbm.be>).

Recent publications : ***PLoS Pathog.*** 2022. doi: 10.1371/journal.ppat.1010621, ***PLoS Pathog.*** 2021. doi: 10.1371/journal.ppat.1009887, ***Front Immunol.*** 2019. doi: 10.3389/fimmu.2019.01589

## The candidate's profile

- You hold a Ph.D. in Biological or Biomedical Sciences or a related field.
- You have a good background in immunology, microbiology (preferably bacteriology) and molecular biology.
- Experience with flow cytometry, qPCR analysis and mouse models is a plus.
- Evidence of strong interest in host-pathogen interaction is highly expected
- You are eager to work in biosafety level 2 and 3 laboratories.
- You must have excellent autonomy, communication and collaboration skills, a proactive attitude in project management, and must interact in French and English with students and our collaborators.

## We offer

- A full-time contract for 1 year, extendable to 3 years.
- Becoming part of an enthusiastic team working on a humanitarian project.
- An international working environment.
- Access to state-of-the-art equipment for life science research of technological platform of U-CRI and URBM.

## Contact and application

More information, also regarding the salary scales, can be inquired with Prof. Dr. Eric Muraille ([eric.muraille@ulb.be](mailto:eric.muraille@ulb.be)).

Interested to apply? Please send your CV, motivation letter and contact details of 2 references to [eric.muraille@ulb.be](mailto:eric.muraille@ulb.be).

Starting date: February-March 2024.