



PhD position in cell biology / cancer cell immunology



Environment:

UNamur and UCLouvain are two universities respectively located in the human-sized cities of Namur and Louvain-la-Neuve in Belgium, within 45 min by train from the capital city Brussels, in the lively green heart of Europe. The pool of both institutions offers quality education to more than 37,000 students every year, and hosts more than 3,800 researchers in all fields of expertise. The cities of Namur and Louvain-la-Neuve are very well connected with public transportations. The environment offers an excellent quality of life, with many possibilities of socio-cultural and sport activities.

Details of the position:

We offer a fully funded 48-months (4 years) PhD fellowship jointly supervised by UNamur and UCLouvain (Belgium). The selected candidate will be asked to apply at least once to a Belgian national PhD funding source such as FRIA and/or FNRS (whatever the outcome, the 48-months funding is guaranteed). Net monthly allowance is around 2,000 Euros per month.

The selected candidate will be integrated in interdisciplinary teams and share his/her time between UNamur (Henri-François Renard, NARILIS) and UCLouvain (Pierre Morsomme, LIBST, and Pierre van der Bruggen, de Duve Institute). He/She will benefit from strong support and supervision throughout the different environments and expertise involved in the project. He/She will be integrated in an active collaborative network together with de Duve Institute (UCLouvain) and Institut Curie (Paris, France).

Project:

Since several years, we are working on the characterization of clathrin-independent endocytic mechanisms in mammalian cells¹⁻³. Located at the interface of cell biology and immunology, the project will tackle fundamental questions related to the regulation of adhesive/migratory and immunogenic properties of cancer cells by clathrin-independent endocytic mechanisms. Among other approaches, the candidate will use advanced tools of cell biology (cell migration) and cancer cell immunology, and start-of-the-art fluorescence microscopy approaches (fixed cell and live cell imaging: confocal, super resolution microscopy, TIRF, etc.).

- 1 Renard, H. F. *et al.* Endophilin-A3 and Galectin-8 control the clathrin-independent endocytosis of CD166. *Nat Commun* **11**, 1457, doi:10.1038/s41467-020-15303-y (2020).
- 2 Renard, H. F. *et al.* Endophilin-A2 functions in membrane scission in clathrin-independent endocytosis. *Nature* **517**, 493-496, doi:10.1038/nature14064 (2015).
- 3 Renard, H. F., Garcia-Castillo, M. D., Chambon, V., Lamaze, C. & Johannes, L. Shiga toxin stimulates clathrin-independent endocytosis of the VAMP2, VAMP3 and VAMP8 SNARE proteins. *J Cell Sci* **128**, 2891-2902, doi:10.1242/jcs.171116 (2015).

Features of candidates:

The selected candidate will hold a master thesis in cellular/molecular biology, biomedical sciences, immunology or a related field of life sciences. Experience with mammalian cell culture is an advantage. Interdisciplinary experiences, *e.g.* combining mammalian cell biology and immunology, are a plus. The candidate must be attracted by interdisciplinarity, willing to work at the interface between different fields and to interact with colleagues from different backgrounds. He/She should be attracted by the possibility of mobility between the different environments of the consortium (depending on experimental necessities).

Candidates who apply are expected to demonstrate excellent academic background and experimental skills.

Other requested features: great team spirit, excellent communication skills, autonomy, self-motivation, passionate, enthusiastic.

Languages: English language proficiency (knowledge of French is not requested).

Applications:

Please send application as a single pdf file to henri-francois.renard@unamur.be and pierre.morsomme@uclouvain.be.

The application file must contain a detailed CV, a motivation letter, the names and contact information of 3 referees.

Application deadline: August 15th, 2020, 00:00 (Europe/Brussels time).

Expected starting date: October 2020.