

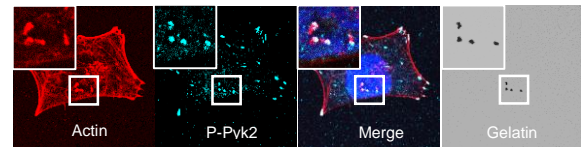


Offer Description

A 18 months Research Engineer position is available in the Laboratory of Bioimaging and Pathologies at the CNRS/Université de Strasbourg to develop new imaging technics to investigate invadopodia architecture at the nanoscale level.

Project

To invade distant organs, metastatic cancer cells acquire the ability to cross the vascular wall to enter the bloodstream and lymphatic system. To perforate basement membranes, cancer cells put in place supramolecular complexes called invadopodia. Invadopodia are major signaling hubs where adhesive, cytoskeletal, proteolytic and membrane trafficking pathways converge. How can invadopodia get self-assembled locally, rapidly, and correctly is a major question.



This fellowship is offered in the context of a project funded by the INSERM/ aviesan aimed at the development of new probes for high resolution imaging of invadopodia constituents using both fluorescence microscopies and scanning transmission electron microscopy.

Job description

The engineer's tasks will be devoted to the biological evaluation of new probes for invadopodia imaging.

The engineer will be responsible for the following tasks:

- Carrying out cell cultures, biochemistry and molecular biology studies: Western blot, transfection, plasmid amplification etc.
- Carrying out immunofluorescence experiments with antibodies/nanobodies and analysis by both confocal and 3D-STORM microscopies.
- Set up, apply or adapt techniques and protocols

The successful applicants will be welcomed into the interdisciplinary team "Migration, Invasion & Targeting" led by Philippe Rondé to work on different aspects of invadopodia maturation. See for our recent publications on this topic:

- Legrand M., et al. (2023) *Cell Death Dis.* **14** (3) :190 <https://doi-org.insb.bib.cnrs.fr/10.1038/s41419-023-05704-4>
- K. Jerabkova-Roda, et al. (2023) *bioRxiv* <https://doi.org/10.1101/2023.07.07.548108>
- Carl & Rondé (2023) *Bioinform. Adv.* **26** 3(1):vbad156 <https://doi.org/10.1093/bioadv/vbad156>

Candidate Requirements

The candidate should be highly-motivated, with a PhD in Cell Biology, Biophysic or Biochemistry. Competences in molecular biology and microscopy are welcome. The candidate must be creative, and demonstrate capacity to work in an interdisciplinary environment.

Starting position

The fellowship will start as soon as the post is filled. Applicants should send their CV, a cover letter and at least one reference to Philippe Rondé (philippe.ronde@unistra.fr)