

UNIVERSITÀ
DEGLI STUDI
DI PADOVA

Pre-doctoral research fellowship in Biochemistry (experimental profile)

The [BiocomputingUP Group](#), Department of Biomedical Sciences, University of Padova, is currently seeking a highly motivated and hardworking candidate who wants to contribute to cutting-edge biomedical research to investigate the role of phase separation in regulating pVHL physiological functions and its dysregulation in cancer progression.

The candidate will work in the project “Deciphering phase separation and aggregation mechanisms driving von Hippel-Lindau tumor suppressor function” funded by **AIRC (Italian Association for Cancer Research)** and coordinated by **Prof. Silvio Tosatto**.

The successful candidate will be part of the dynamic and ambitious research group, the **BioComputing UP** Laboratory, headed by **Prof. Silvio Tosatto**, composed of three dozen people working on several aspects of prediction of protein structure & function employing techniques at the intersection between biology, medicine, chemistry, physics & computer science. Our aim is to integrate the development of novel methods and their application to biologically relevant problems. We are currently funded by AIRC and are also part of [ELIXIR-IT](#), the Italian Infrastructure for Bioinformatics. We are proponents of COST Action [ML4NGP](#) and coordinators of the Horizon Europe MSCA Staff Exchange project [IDPfun2](#), as well as partners in several other EU funded projects.

Key Responsibilities:

- Investigate the propensity of pVHL for phase separation and aggregation and identifying possible protein partners that promote this process. To assess the pH-dependent nucleolar detention of pVHL in diverse cancer cells specific for VHL-disease. To formulate a pharmacological strategy targeting aberrant pVHL PS to halt cancer.
- Using basic methodologies of molecular biology, such as DNA cloning, bacterial transformation, transfection, western blot, cell culture, cell viability, proliferation assay, colocalization assay, protein expression in prokaryotic and eukaryotic cells.
- Using tools, such as circular dichroism, electron microscope, fluorescent microscope.
- Preparing samples for Mass spectrometry.
- Collaborating closely with interdisciplinary teams at BioComputingUP.

Qualifications:

- Master degree in Molecular Biology, Chemistry, Pharmaceutical Biotechnologies or related fields.
- Basic experience with molecular biology, cell biology and biochemistry.
- Good communication and teamwork skills

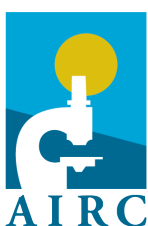
Opportunities:

- Engage in a dynamic and international working environment.
- Participate in international collaborations and gain exposure to global scientific communities.
- Receive specific training in collaborators' laboratories, enhancing your research skills and professional network.

How to apply

Applicants are invited to submit their CV and a concise research/personal statement describing background/qualifications, future goals and reasons for the interest in this position. In addition, please include names and contact information of one (or more) professional reference. This position is available immediately, and applications will be accepted until the position is filled.

Contact Information: Prof. Giovanni Minervini or Dr. Emanuela Leonardi at biocomp@bio.unipd.it.



“Deciphering phase separation and aggregation mechanisms driving von Hippel-Lindau tumor suppressor function” is funded by AIRC, the Italian Association for Cancer Research.