

UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

## Pre-doctoral research fellowship in Biochemistry (computational 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 a dynamic and ambitious research group, lead by **Prof. Silvio Tosatto** and composed of three dozen people working on several aspects of protein structure & function prediction, employing techniques at the intersection between biology, medicine, chemistry, physics & computer science. 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 many other EU funded projects.

### Key Responsibilities:

- To investigate the propensity of pVHL for phase separation and aggregation and exploring the role of protein interactors in pVHL aggregates. To assess the impact of pVHL mutants in phase separation dynamics. To investigate the role of proteins sequestered in nucleolar inclusions in cellular and cancer progression and their connections with pVHL.
- Utilize bioinformatics tools for protein *in silico* analysis such as MobiDB-lite, PhaSePred, PASTA 2.0. Searching biological databases, such as VHLDB, PhaseDB, MobiDB. Transcriptomics analysis. Functional enrichment analysis.
- Collaborate 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

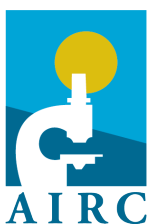
### Opportunities:

- 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](mailto: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.*