



Pre-doctoral research fellowship in Biochemistry at the University of Padova

The BioComputingUP Group, Department of Biomedical Sciences, University of Padova is currently searching for 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 candidates 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 and function employing techniques at the intersection between biology, medicine, chemistry, physics and 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 we are also part of [ELIXIR-ITA](#). We are proponents of COST Action [ML4NGP](#) and coordinators of a Horizon Europe Marie Skłodowska-Curie Staff Exchange project [IDPfun2](#), as well as partners in several other EU funded projects.

Key Responsibilities:

- Investigating the propensity of pVHL for phase separation and aggregation and exploring the role of protein interactors in pVHL aggregates.
- Assessing the impact of pVHL mutants in phase separation dynamics. Investigating the role of proteins sequestered in nucleolar inclusions in cellular and cancer progression and their connections with pVHL.
- Using 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.
- Collaborating closely with interdisciplinary teams at BioComputingUP.

Qualifications:

- Master’s 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:

- Engaging in a dynamic and international working environment.
- Participating in international collaborations and gaining exposure to global scientific communities.
- Receiving specific training in collaborators' laboratories, enhancing your research skills and professional network.

How to apply

Applicants are invited to submit a recent 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 info of one (or more) professional reference in your CV. This position is available immediately, and applications will be accepted until the position is filled.

Contact Information: Prof. Emanuela Leonardi at biocomp@bio.unipd.it.