Ph.D. student position

METABOLIC MECHANISMS IN CARDIOVASCULAR DISEASES

Our laboratory at Dept. of Biology, University of Padua and Venetian Institute Molecular Medicine (***https://massimosantorolab.com***) is seeking a PhD student to study **endothelial signaling and metabolic pathways in Endo-MT-driven pathological angiogenesis.**

Using human and mouse genetic approaches as well as advanced molecular and metabolic techniques we want to elucidate how mechanical signaling and metabolism regulate EndoMT in pathological conditions such as atherosclerosis. The project will focus on the role of specific metabolites and signaling pathways recently identified by our laboratory (Donadon and Santoro, *Development,* 2021; Camillo et al., 2021, *J. Cell Biol*.; Facchinello, Astone et al., 2022, *Nature Metabolism;* Oberkersch et al., 2022, *Developmental Cell,* Astone, Oberkersch *et al., 2023, Cardiovascular Research*). We have acquired strong experience in biochemistry, genetic, molecular and cellular biology of endothelial and mural cells in different vertebrate animal models and human primary cells. Mouse animal facility, transcriptomic and translatomic expertise, STED confocal microscopy, multiphoton-light sheet microscopy equipment, and metabolic/proteomic core facilities are available in the laboratory and department for these studies.

Ph.D. candidates should hold a degree in biomedical sciences, bioengineering, medicine, or any related discipline. Motivated students of all nationalities with a strong commitment to basic and/or clinical research are invited to apply. Any experience in molecular biology, cellular and developmental biology, biochemistry, cell culture, metabolism, etc. is an advantage. The candidate should have well-developed social skills and be able to work in a team. Interest in the field of angiogenesis, cell signaling, and metabolism will be an additional asset. Applicants should have good communication skills in spoken and written English.

We offer a dynamic working environment, stimulating scientific surroundings in a young, enthusiastic, motivated team (with English as the main language), and the opportunity to work on high-impact projects. We offer a competitive salary (European Marie Curie Fellow range) and social security contribution. Please send your CV, a letter of motivation, and the contact information of at least two references to Prof. Massimo Santoro at **massimo.santoro@unipd.it.** The positions will start 2024 (flexible).

As a top European institution of higher education, the University of Padua holds over 30 ERC grantees and offers a strong foundation in cell biology studies with interdisciplinary approaches. This idyllic environment for life science research is located in the northeast of Italy, which is perfect for those seeking a healthy work-life balance thanks to its proximity to the Adriatic Sea and the Dolomite Mountain range.