



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA



MARIE SKŁODOWSKA-CURIE ACTIONS  
Research Fellowship Programme

### ***Marie Skłodowska-Curie Actions - Postdoctoral Fellowships***

## **SPATIAL TRANSCRIPTOMIC FOR CELLULAR THERAPEUTIC IN MELANOMA RESISTANCE**

The Laboratory of Angiogenesis and Cancer Metabolism in the Dept. of Biology at the University of Padua, led by Prof. Massimo M. Santoro, seeks a postdoctoral research associate to lead the spatial transcriptomic characterization of human melanoma patients. The research focuses on the study of novel mechanisms of **melanoma resistance and relapse** with a specific emphasis on immune checkpoint and lymph vascular regulation.

Using advanced transcriptomics and translomics approaches, as well as advanced molecular and metabolic techniques, the Santoro lab aims to identify and study novel molecular, metabolic and mechanobiological mechanisms that are crucial for the regulation of tumor vasculature, cancer growth, and ICI response. (Biffo et al., 2024, *Cell Metabolism*; Tosi et al., *Nature Communications*, 2024; Merteroglu and Santoro, 2023 *Trends Cancer*; Facchinello et al., 2022, *Nature Metabolism*; Oberkersch et al., 2022, *Developmental Cell*). Our laboratory has acquired strong experience in metabolism, genetic, molecular, and cellular biology, working with cells and animal models (mouse and zebrafish). We have ongoing collaborations with clinicians and university hospitals. Mouse animal facilities, transcriptomics/translomic platforms, STED, atomic force, multiphoton, light sheet microscopy equipment, and metabolic/proteomic core facilities are available for these studies. The project will include collaborations with international labs. Please visit these websites for further information about our team and our work: [www.massimosantorolab.com](http://www.massimosantorolab.com) and <https://pubmed.ncbi.nlm.nih.gov/?term=massimo+m.+santoro&sort=pubdate>.

### ***Skills, Experience & Qualification needed***

- Undergraduate degree in Biological Sciences and/or Bioinformatics.
- PhD degree in biomedical sciences, biology, medicine and/or Bioinformatics.
- Relevant theoretical knowledge in biological sciences, including good statistical practice.
- Relevant knowledge in RNA sequencing and transcriptomic profiling, with experience in the analysis and interpretation of such data, as well as the data management requirements of a large cohort.
- Solid foundation in biological laboratory skills and, possibly, experience with model organisms handling.
- Advanced IT skills for a range of applications, from Google Apps and Microsoft Office to specialist software, particularly for high-level programming languages such as Python or R.
- Ability to plan and perform complex tasks with keen attention to detail, seeking advice where necessary, and maintaining accurate, thorough records.

- Highly developed science communication skills, from a proven ability to publish robust research, to experience delivering presentations, and disseminating research to diverse audiences.
- Ability to direct lone working as well as being a dependable group member and support to technical staff and students.

The University of Padua is among the top Italian institutions of higher education with over 30 ERC grantees. Our university combine a strong tradition in cell biology with interdisciplinary approaches, and represents an idyllic environment for life science research. Padua is a historically important university city, located in the Northeast of Italy, near Venice, close to the Adriatic Sea and the Dolomites mountain range, ideal for those interested in exploring a healthy work-life balance.

Applicants interested in applying for a Marie Curie post-doctoral fellowship can find additional information at <https://www.unipd.it/en/msca-if>.

**Contact**

Please send your CV, letter of motivation, and the contact information of at least two supervisors to Prof. Massimo Santoro at [massimo.santoro@unipd.it](mailto:massimo.santoro@unipd.it).