

AVAILABLE POSITIONS

<b>Principal Investigator</b>	<b>ANGELA BACHI</b>
<b>Institute of Affiliation</b>	IFOM

PROJECT INFO	
Title of the proposed project:	Identifying Functional Proteomic Signatures in Epithelioid Sarcoma
Short description of the project	This project aims to advance the understanding of the molecular mechanisms underlying the pathogenesis of epithelioid sarcoma (ES), a rare and aggressive soft tissue malignancy. Alongside the identification of novel biomarkers, particular emphasis will be placed on elucidating the mechanistic pathways that drive tumor proliferation and aggressiveness in ES. The project will employ advanced methodologies, including spatially resolved proteomic profiling, to compare tumor and adjacent non-tumor tissues, with a focus on membrane-associated proteins. This approach enables the identification of candidate proteins and signaling networks associated with disease-specific alterations. The PhD researcher will develop expertise in experimental design, data acquisition, and analytical interpretation throughout the project. Identified candidates will be validated in ES cell line models and further investigated through functional assays to dissect their roles in key oncogenic processes, including cellular proliferation, survival, and migration, thereby contributing to a deeper mechanistic understanding of ES biology.
Main research area for the project	Cancer Biology / Molecular Oncology
Second research area for the project	Proteomics and Metabolomics
3 key words for the project	Epithelioid sarcoma; Proteomics; Signalling pathways

LAB INFO	
Main topic/s of the lab	Understanding the cancer TME crosstalk
Recent bibliography	Matafora V, et al BACE2 tunes lipid uptake through lipid transporters shedding supporting cancer cell proliferation. J Exp Clin Cancer Res. 2026 Tamburri S, et al SP140 represses specific loci by recruiting Polycomb Repressive Complex 2 and NuRD Complex. Nucleic Acids Res. 2025 Farris F aet al. Unveiling the mechanistic link between extracellular amyloid fibrils, mechano-signaling and YAP activation in cancer. Cell Death Dis. 2024
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