

BIOTECHNOLOGY AND BIOSCIENCES SEMINARS



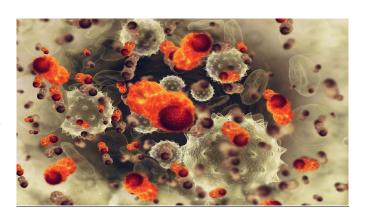
Dipartimento di Biotecnologie e Bioscienze – UNIMIB

Thursday, February 22, 2024, 4:30 p.m., U3-BIOS building, room U3-01 / Webex

Molecular and spatial control of macrophages in cancer

Renato Ostuni

San Raffaele Telethon Institute for Gene Therapy (SR-Tiget) San Raffaele Scientific Institute



Abstract: The Ostuni lab combines advanced single-cell and spatial genomics on human samples with mechanistic studies in the mouse to elucidate how microenvironmental factors shape the behavior of innate immune cells. Over the years, we contributed to the understanding of the molecular control and functional implications of macrophage and neutrophil diversity in homeostasis and cancer. Our vision is that by taking an interdisciplinary approach to understand biology we will develop the next generation of cell and gene therapies for immune-mediated human diseases. We recently discovered a central pathogenetic mechanism driving inflammation and immune evasion in pancreatic cancer (PDAC), fueled by the local interplay between a subset of IL-1b+ macrophages and tumor cells endowed with molecular features of aggressive disease. We further developed state-of-the-art technologies for spatial gene expression analyses in human PDAC samples to elucidate the spatial dynamics and niche control of immune-stromal-tumor cell interactions in human cancer.

Host: Francesca Granucci

Gli attestati di partecipazione al seminario sono validi anche per l'acquisizione dei CFU, per informazioni visitare la pagina del seminario btbs.unimib.it - Twitter: @BtBsUNIMIB - YouTube channel: BtBsUNIMIB - infobtbs@unimib.it





