

Dissecting the role of aneuploidy in cancer immune evasion

Teresa Davoli, PhD

Associate Professor, Institute for Systems Genetics

NYU Grossman School of Medicine

Date: July 4th 2025 Time: 14:00 Location: Aula 3 - Plesso Moruzzi

Abstract

Dr. Teresa Davoli will discuss her pioneering work on how aneuploidy influences tumor immune evasion and resistance to immunotherapy. Her research combines functional genetics and computational approaches to uncover how genomic instability shapes the tumor microenvironment. Notably, her lab has demonstrated that tumors with high aneuploidy or 9p loss are often "immune cold" and less responsive to immunotherapy. Dr. Davoli will also present her team's latest tool, KaryoCreate, which enables the engineering of specific chromosomal aneuploidies in human cells, opening new avenues for cancer research.

About the Speaker:

- PhD, The Rockefeller University (2013)
- Postdoctoral research with Dr. Stephen Elledge, focusing on cancer aneuploidy and immune evasion
- Group leader at NYU since 2018
- Recipient of numerous awards, including the Weintraub Graduate Student Award, Helen Hay Whitney Postdoctoral Scholarship, Breast Cancer Alliance Young Investigator Award, Melanoma Research Alliance Young Investigator Award, NIH MERIT Award, and the Pershing Square Sohn Prize



Selected Publications:

Davoli et al., Science 2017; William et al., PNAS 2021; Zhao et al., PNAS 2022; Bosco et al., Cell 2023.