



# 25 MARCH

3.30 P.M.  
ROOM A207  
POVO 1

## AMINA ZOUBEIDI

THE UNIVERSITY OF BRITISH COLUMBIA

## Deciphering Lineage Plasticity in Prostate Cancer: Insights and Therapeutic Implication

Advances in the standard of care for prostate cancer have significantly improved treatment outcomes but have also driven the emergence of aggressive tumors characterized by lineage plasticity. This phenomenon, defined by the ability of cancer cells to switch identities, often arises early in response to therapy, as demonstrated by clinical studies showing the rapid adaptation of tumors under selective pressure. At the core of this plasticity lies a metastable transition state, an intermediate cellular phase that presents a critical window for therapeutic intervention. Dr. Zoubeidi will discuss how alterations in the epigenome and metabolome play a central role in driving this adaptability, with lineage plasticity largely governed by dynamic and reversible epigenetic dysregulation. She will present how changes in chromatin architecture create an environment that enables transcription factors to undergo “reprogramming,” ultimately facilitating tumor cell plasticity and therapy resistance. Given this inherent epigenetic and metabolomic plasticity, she will highlight how therapeutic strategies targeting these dynamic alterations offer a promising avenue for reversing resistance phenotypes.

CIBIO EXTERNAL SEMINAR



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