

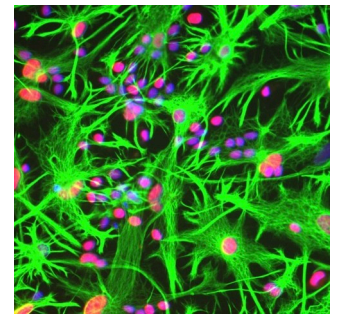
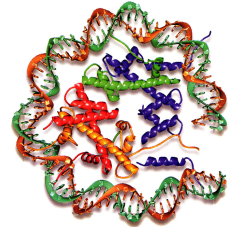
PhD Program in Molecular Biomedicine

November 28, 2018 - 9:00

Seminar room, I floor, Q Building – Via Giorgieri 5

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Fat Addicted: Metabolic Signatures of Minimal Residual Disease in Breast Cancer



Tumor recurrence is the leading cause of breast cancer related death. Recurrences are largely believed to arise from the subset of cells that survive therapeutic intervention and are collectively referred to as minimal residual disease. But how do you study a substrate such as minimal residual disease? There are multiple challenges that must be overcome, not least of all being the identification of these cells in the patient. Therefore, it is not surprising that our knowledge of both minimal residual disease, but also the development of recurrent disease from this substrate remains largely unexplored. In this seminar I will discuss how we applied a combination of pre-clinical mouse models of breast cancer and organoid cultures to capture and characterise a minimum residual disease correlate state. We will then explore how systems biology coupled with modelling revealed alterations in energy metabolism in this population that have a causal role in the development of tumour recurrence.

