Abstract:

The Molecular Cell Biology Team seeks to identify strategies to effectively target key tumour-environment crosstalk pathways to limit metastatic relapse and enhance the efficacy of tumour targeting agents. Cancer-associated fibroblasts (CAFs) and activated pericytes participate in tumour development not only by their impact on cancer cells via paracrine signalling and the deposition of a neoplastic extracellular matrix, but also by their influence on other stromal populations - particularly in promoting a immunosuppressive, pro-tumour microenvironment. The presentation will address our current research in (a) assessing the efficacy of targeting CAF subpopulations to reduce breast cancer metastatic colonisation, (b) the mechanisms by which CAF-immune cell crosstalk influences tumour growth and response to therapy, and (c) the role of therapy-induced stromal damage in promoting metastatic relapse.