Dr Gunnel Halldén

Research Interests
My research is focused on developing novel treatment strategies for treatment-resistant prostate and pancreatic cancers. We use a combination of oncolytic adenoviruses (virotherapy) and cytotoxic factors. I focus on:

• Genetically modifying adenoviruses for selective replication in cancer cells and to eliminate toxicity to normal cells.
• Engineering the cancer-selective mutants to enhance chemotherapy-induced apoptosis and inhibit cell survival and rescue pathways including autophagy signaling.
• Generating potent and selective mutants by exploiting the deregulated cellular pathways in cancer cells.
• Investigating current cytotoxic drugs and small molecule inhibitors for synergistic interactions with our oncolytic mutants with the aim of reversing drug resistance.
• Dissecting the molecular signaling pathways that cause the enhanced cell killing to discover novel therapeutic targets.

Major Funders
• Pancreatic Cancer Research Fund
• Prostate Cancer Research Foundation
• Flavell Bequest in Prostate Cancer Gene Therapy

Contact Details
Email: g.hallden@qmul.ac.uk
Recent Publications


- Improved potency and selectivity of an oncolytic E1ACR2 and E1B19K deleted adenoviral mutant in prostate and pancreatic cancers. Öberg D, Yanover E, Adam V, Sweeney K, Costas C, Lemoine NR, Halldén G. *Clin Cancer Res* 2010; 16(2): 541-53.