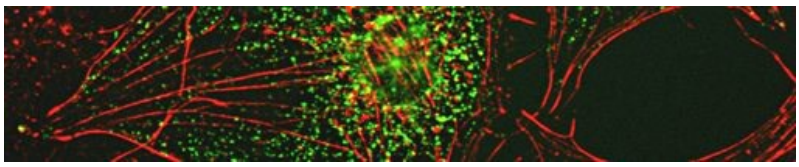
Cancer Cell Biology and Epigenetics



Cancer Cell Biology and Epigenetics includes a diverse range of research interests with a common theme - understanding the mechanisms underlying the unique properties of cancer cells. This includes not just the aberrant proliferation, motility and metabolic adaptions of cancer cells, but also their interactions with each other and with their environment.

An important aspect of this work involves defining the processes which regulate normal cell function e.g. the development of the normal haematopoietic system, or the intercellular interactions in normal epithelial tissues. Research can then progress to elucidating how perturbations of these functions lead to diseases including cancer. The ultimate aim is to exploit this information for the development of new treatments.

Open all sections

Cell Biology Research

- **Desmosomes in cell differentiation, wound healing and cancer** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/Desmosomes/index.aspx)
  (Group Leader: **Dr M Chidgey** (/staff/profiles/cancer/chidgey-martyn.aspx))
- Hypoxia and cancer metabolism
  (Group Leader: **Dr D Tennant** (/staff/profiles/cancer/tennant-daniel.aspx))
- **Iron in health and disease** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/iron-health-disease/index.aspx)
  (Group Leader: **Dr C Tselepis** (/staff/profiles/cancer/tselepis-chris.aspx))
- **Breast cancer cell biology** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/Breast-cancer-cell-biology/index.aspx) (Group Leader: **Dr F Berditchevski** (/staff/profiles/cancer/berditchevski-fedor.aspx))
- **Oxgenases and Cancer** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/oxygenases-cancer/index.aspx) (Group leader: **Dr Mathew Coleman** (/staff/profiles/cancer/coleman-matthew.aspx))

Epigenetics Research

- Arginine methylation in cancer
  (Group Leader: **Dr Clare Davies** (/staff/profiles/cancer/davies-clare.aspx))
- **Chromatin and gene expression** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/Chromatin-gene-expression/index.aspx)
  (Group Leader: **Prof B Turner** (/staff/profiles/cancer/turner-bryan.aspx))
- Epigenetics of colorectal cancer
  (Group Leader: Dr G Matthews)
- Epigenetics, viruses and cancer
  (Group Leader: **Prof C Woodman** (/staff/profiles/cancer/woodman-ciaran.aspx))
- **Molecular Haematopoiesis and Epigenetics** (/research/activity/mds/domains/Cancer/cancer-cell-biology-epigenetics/molecular-haem-epigenetics/index.aspx) (Group Leader: **Prof C Bonifer** (/staff/profiles/cancer/bonifer-constanze.aspx))

Clinical Research

- Centre for Clinical Haematology
  (Group Leader: **Prof C Craddock** (/staff/profiles/cancer/craddock-charles.aspx))