

## Supervisors and their research areas

### Professor Jon Austyn

- Cancer therapeutics (including biologicals) and vaccines
- Immunology
- Adaptive immunity and autoimmune disease
- Innate immunity and inflammation
- Immunology: transplantation and tolerance
- Vaccines
- Microbiology, infection and tropical medicine: Host-pathogen interactions
- Systems vaccinology
- Infection immunology and translational medicine
- Translational medicine and medical technology
- Translational medicine and medical technology: nanomedicine
- Translational medicine and medical technology: vaccines
- Surgical Sciences

### Professor Tipu Aziz

- Ageing, geratology and degenerative diseases
- Neuroscience
- Clinical neuroscience
- Functional brain imaging
- Neurodegenerative diseases
- Systems, cognitive and behavioural neuroscience
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

### Mr Martin Burton

- Bioinformatics, Statistics and Computational Biology
- Statistical genetics
- Genes, Genetics, Epigenetics and Genomics
- Immunology
- Innate immunity and inflammation
- Surgical science and practice
- Translational medicine and medical technology
- Translational medicine and medical technology: nanomedicine
- Surgical sciences

### Dr Andrew Bushell

- Immunology
- Immunology: transplantation and tolerance
- Surgical sciences

### Professor James Byrne

- Cardiovascular sciences
- Imaging
- Development biology and stem cells
- Imaging development
- Neuroscience
- Clinical neuroscience
- Functional brain imaging
- Surgical science and practice
- Translational medicine and medical technology
- Translational medicine and medical technology: imaging
- Surgical sciences

## Professor David Cranston

- Cancer
- Cellular mechanisms (including tumour microenvironment, angiogenesis and metastasis)
- Clinical trials
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

## Dr Claire Edwards

- Cancer
- Cancer diagnostics (biomarkers and imaging)
- Cancer therapeutics (including biologicals) and vaccines
- Cellular mechanisms (including tumour microenvironment, angiogenesis and metastasis)
- Molecular mechanisms
- Endocrine action in cancer
- Haematology
- Cell biology and microscopy
- Cellular and molecular biology in musculoskeletal systems
- Genetics and epigenetics
- Musculoskeletal oncology
- Musculoskeletal sciences (direct-entry)
- Surgical sciences

## Dr James Fitzgerald

- Peripheral nerve interfacing
- Brain computer interfacing
- Deep brain stimulation

## Professor Peter Friend

- Transplantation of kidney, pancreas, liver, intestine
- Organ preservation and normothermic organ perfusion
- Novel approaches to immunosuppression
- Clinical trials in transplantation
- Liver surgery

## Mr Alex Green

- Neuroscience
- Clinical neuroscience
- Systems, cognitive and behavioural neuroscience
- Respiratory sciences
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

## Professor Alison Halliday

- Cardiovascular sciences
- Vascular disease
- Epidemiology and clinical trials
- Surgical science and practice
- Translational medicine and medical technology
- Translational medicine and medical technology: imaging
- Surgical sciences

## Professor Freddie Hamdy

- Cancer
- Cancer diagnostics (biomarkers and imaging)
- Cancer therapeutics (including biologicals) and vaccines
- Cellular mechanisms (including tumour microenvironment, angiogenesis and metastasis)
- Clinical trials
- Epidemiology and population genetics

- Surgical science and practice
- Translational medicine and medical technology
- Surgical Sciences

### Mr Ashok Handa

- Cardiovascular sciences
- Vascular disease
- Imaging
- Design of patient pathways and clinical support systems
- Health economics, policy, promotion, and services
- Medical ethics and law
- Patient safety
- Primary care and general practice
- Evidence-based practice, epidemiology and health care delivery
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

### Ms Linda Hands

- Cardiovascular sciences
- Vascular disease
- Epidemiology and clinical trials
- Design of patient pathways and clinical support systems
- Primary care and general practice
- Evidence-based practice, epidemiology and health care delivery
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences
- Telemedicine

### Professor Paul Johnson

- Developmental biology and stem cells
- Embryonic stem cells
- Diabetes, endocrinology and metabolism
- Diabetes and the metabolic syndrome
- Immunology
- Adaptive immunity and autoimmune disease
- Innate immunity and inflammation
- Immunology: transplantation and tolerance
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

### Professor Hans Lilja

- Cancer
- Cancer diagnostics (biomarkers and imaging)
- Reproductive, genitourinary and sexual medicine
- Surgical science and practice

### Mr Peter McCulloch

- Patient safety, human factors and teamwork in surgery
- Systems and quality improvement in clinical pathways
- Evidence based medicine
- Research and evaluation methodology for surgery and interventional therapies
- Upper GI cancer surgery
- Emergency general surgery
- Surgery in resource-poor environments

## **Professor Rutger Ploeg**

- Diabetes, endocrinology and metabolism
- Immunology
- Innate immunity and inflammation
- Immunology: transplantation and tolerance
- Surgical science and practice
- Translational Medicine and Medical Technology
- Surgical sciences

## **Professor David Taggart**

- Cardiovascular sciences
- Biomedical engineering
- Surgical science and practice
- Translational medicine and medical technology
- Surgical sciences

## **Professor Kathryn Wood**

- Diabetes, endocrinology and metabolism
- Immunology
- Innate immunity and inflammation
- Immunology: transplantation and tolerance
- Surgical science and practice
- Translational medicine and medical technology
- Translational medicine and medical technology: stem cells and cell therapy
- Infection immunology and translational medicine
- Surgical sciences