

The Division of Molecular Medicine is comprised of research groups from the College of Life Sciences and the College of Medicine, Dentistry & Nursing. Main research areas include genetic skin disease and the development of new drugs for skin diseases such as eczema, developing new anti-cancer drugs, development of new therapeutic antibodies, delivery of drugs and nucleic acids into human skin. <http://www.lifesci.dundee.ac.uk/mm>

The mission of the Medical Research Council Protein Phosphorylation Unit is to advance understanding of the role of protein phosphorylation and cell regulation in human disease, to facilitate the development of drugs to treat diseases caused by abnormalities in this process, to generate the reagents and improve the technologies on which more rapid progress in this area depends. <http://www.lifesci.dundee.ac.uk/mrcppu>

The Division of Molecular Physiology focuses on research into the signalling pathways that control nutrient uptake, metabolism and cell growth and proliferation, in response to the availability of nutrients and cellular energy status. Our approach is to gain insights at a fundamental level, but our research has particular applications in the physiology of exercise, and the medical problems of obesity, diabetes and cancer.

<http://www.lifesci.dundee.ac.uk/mp>

The Division of Plant Sciences performs basic research designed to explore and explain the mechanisms by which plant genes function and plants grow and develop in response to their environment. We aim to combine our high quality scientific activity with relevant translation into crop improvement, biofuel development, and the assessment of biodiversity.

<http://www.lifesci.dundee.ac.uk/ps>

The Centre for Anatomy and Human Identification combines expertise in the fields of anatomical and forensic sciences to further teaching and research. The Centre is involved in high profile national and international forensic casework and has a strong research and publication profile. <http://www.lifesci.dundee.ac.uk/CAHId>

The SCottish Institute for ceLL Signalling (SCILLS) is a new research centre dedicated to the study of how biological processes are controlled and how they become deregulated in disease. The Protein Ubiquitylation Unit is the Institute's first research Division. Its major aims are to advance understanding of the role of protein ubiquitylation and related modifications in cell regulation and human disease and to facilitate the development of drugs to treat diseases caused by abnormalities in this process. <http://www.scills.ac.uk>

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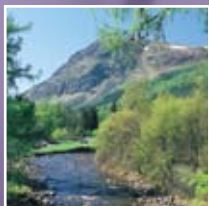
Research at the College of Life Sciences University of Dundee

Excellence and international recognition
are at the heart of everything we do



- The College of Life Sciences at the University of Dundee is one of the best places in Europe to work in life sciences research according to numerous polls in The Scientist's magazine.
- This is a truly international research environment with over 850 staff and PhD students from over 57 countries across the globe.
- Expertise in the College encompasses biomedical, biological and chemical sciences ranging from molecular structure and drug design to genetic and cellular control mechanisms and the anatomy and physiology of whole organisms.
- The College is home to the Wellcome Trust Centre for Gene Regulation and Expression, the MRC Protein Phosphorylation Unit and the Scottish Institute for Cell Signalling.
- The College was awarded the Queens Award for excellence for pioneering work in drug discovery.
- The College is unique among UK Universities in having a fully functional Drug Discovery Unit.
- The College has state-of-the-art facilities for advanced proteomics, microscopy and cell-sorting.
- Our research is having a major impact on the economy of Tayside by stimulating the regional biotechnology industry which currently accounts for 16% of local jobs.

The University of Dundee sits in the heart of the historic city of Dundee on the banks of the River Tay in north-east Scotland. Known as 'The City of Discovery' and named after Scott of the Antarctic's ship 'Discovery', which was built in Dundee and now sits as the centrepiece of a multimedia heritage centre on the city's waterfront, Dundee's history of invention and innovation make Dundee a fitting place for an aspirational University. From mountains and lochs in the west to miles of coastline in the east, the city is surrounded by magnificent Scottish scenery providing ample opportunities to play championship golf, walk, cycle, fish or simply experience the changing seasons in wide-open spaces. Dundee is home to a changeable, temperate climate influenced by its coastal location. The University of Dundee is a truly international environment and extends a warm and friendly welcome to research students and staff from all corners of the globe.



The Division of Biological Chemistry and Drug Discovery seeks to provide chemical and informatics solutions to biological problems through excellence in basic and applied multidisciplinary research. Discovery, characterization and validation of drug targets in neglected diseases are a major focus of the Division's research projects. Knowledge gained from these fundamental studies forms the foundation for translation into novel drug-like leads through the Drug Discovery Unit. <http://www.lifesci.dundee.ac.uk/bcdd>

The Division of Cell Biology and Immunology explores essential aspects of cell biology and signal transduction in mammalian cells with a major focus on cells of both the innate and adaptive immune systems. The Division uses biochemistry and advanced cell imaging techniques to explore the spatial/temporal aspects of signal transduction and cytoskeletal rearrangements in immune cells. <http://www.lifesci.dundee.ac.uk/cbi>

The Division of Cell and Developmental Biology investigates how the differentiation of cells and tissues into functional organs and organisms is determined and maintained. Research projects address the integration of sub-cellular processes into higher order multi-cellular organisation, from cell signalling processes that determine developmental morphogenesis to the mechanisms by which structural proteins maintain and facilitate complex tissue function and anatomy. <http://www.lifesci.dundee.ac.uk/cdb>

The CRUK Nucleic Acid Structure Research Group works on the structural, dynamic and chemical properties of nucleic acids, and their recognition by and interactions with proteins. Nucleic acids perform many roles in the cell. They act as the store of genetic information (DNA), the genetic messenger and template for the synthesis of proteins (mRNA), the processing of mature spliced RNA (snRNA) and precisely processed RNA (snoRNA), as an enzyme and even in the control of gene expression. <http://www.lifesci.dundee.ac.uk/nasg>

The Division of Signal Transduction Therapy (DSTT) is a unique collaboration between scientists in the MRC Protein Phosphorylation Unit and the College of Life Sciences at the University of Dundee and five of the world's leading pharmaceutical companies, namely AstraZeneca, Boehringer Ingelheim, GlaxoSmithKline, Merck Serono and Pfizer. The DSTT is dedicated to accelerating the development of specific inhibitors of kinases and phosphatases for the treatment of disease and was awarded a Queen's Anniversary Award in recognition of its achievements. <http://www.lifesci.dundee.ac.uk/dstt>

The Wellcome Trust Centre for Gene Regulation and Expression is a world-leading research centre studying gene expression and chromosome biology. The Centre's mission is to pioneer the development and integration of advanced research technologies to study how genes and chromosomes are regulated and it's vision is to provide a quantitative understanding of protein function and cell biology that will advance the diagnosis, treatment and prevention of human disease. <http://gre.lifesci.dundee.ac.uk/>

The Division of Molecular Microbiology aims to understand fundamental processes in prokaryotic and eukaryotic microorganisms, and to apply this knowledge in areas ranging from environmental decontamination to the discovery of novel antibiotics and other bioactive products. Work on model organisms is complemented by studies on important pathogens to understand the molecular basis of the processes involved in virulence and to help to identify strategies for pathogen control. <http://www.lifesci.dundee.ac.uk/mmb>