

The Charles Institute aims to become a leading international centre of excellence in dermatology research and training.

ABOUT THE CHARLES INSTITUTE

Launched in June 2008, The Charles Institute at UCD is the first academic institute devoted to dermatology in Ireland. The Institute's vision is to become a world leader in dermatology research and training, which will lead to improved patient care through the discovery of new treatments and therapies.

FUNDING

The new 2,000m² institute will be built on the UCD campus at Belfield at a cost of €18 million. €12 million of this funding comes from the Board of the City of Dublin Skin and Cancer Hospital from the sale of their Hume Street Hospital site, and University College Dublin is contributing the remaining €6 million.

KEY AREAS OF RESEARCH

The research at The Charles Institute will address common skin diseases such as psoriasis, eczema, skin cancer and rare genetic skin diseases. The research objectives of The Charles Institute are to:

- Understand the fundamental nature of skin disease
- Build translational research programmes that will transform dermatology
- Leverage existing areas of academic, research and clinical excellence at UCD
- Meet national and international training needs in dermatology
- Integrate research and training in dermatology.

The application of frontier biotechnologies will provide exciting opportunities to develop worthwhile new therapies for the ultimate benefit of the patient. These will include:

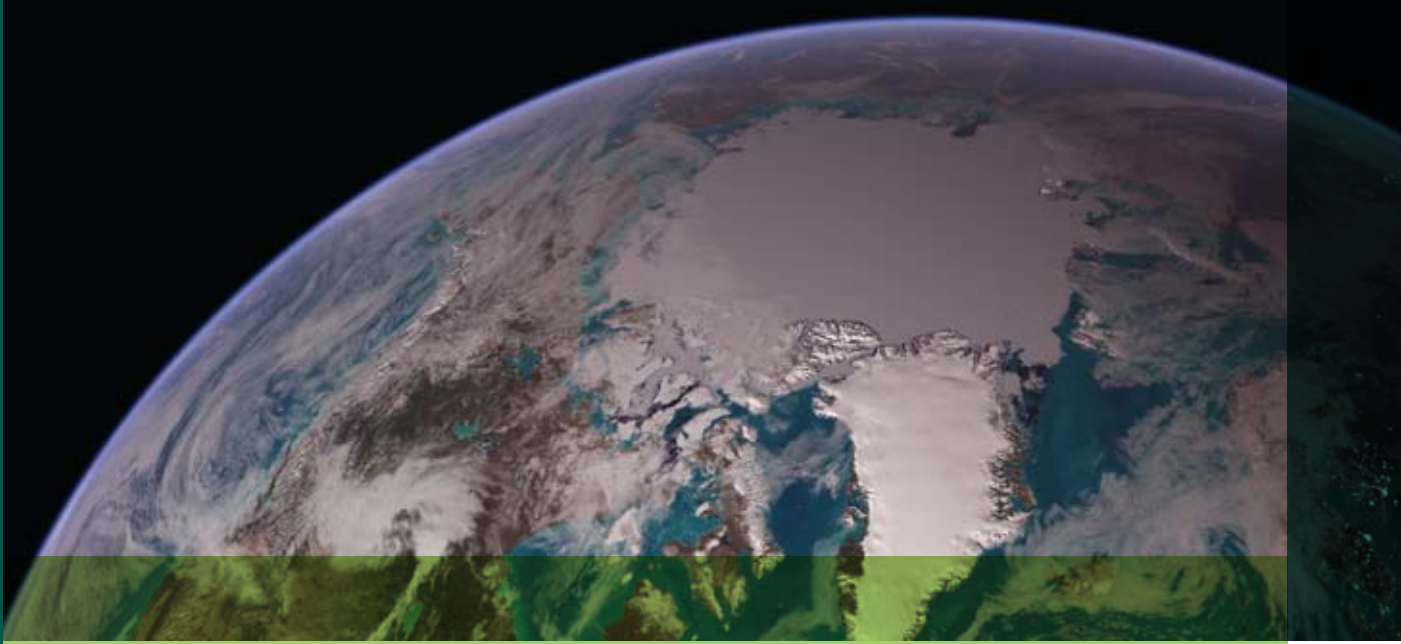
- Micro-therapeutics – generation of new drugs for clinical research
- Stem cell therapy – regenerative medicine, tissue repair and wound healing
- Tissue engineering – creation of artificial skin
- Nanobiology – the development of nanomaterials for drug and gene delivery.

OUTPUTS

The Charles Institute Seminar Series has been running since October 2009, with the aim of bringing together leading international experts to speak on the latest advances in dermatology.

COLLABORATION

The Charles Institute is a partnership between the UCD School of Medicine and Medical Science; affiliated teaching hospitals, St Vincent University Hospital and Mater Misericordiae University Hospital; and the Board of the City of Dublin Skin and Cancer Hospital Charity.



UCD Earth Sciences Institute (ESI) is a centre for energy and environment research of a scale capable of leading Ireland's response to climate change and the global energy crisis, thereby making Ireland an innovation hub for "green technologies".

ABOUT ESI

Research at the UCD Earth Sciences Institute is about:

- **Creating knowledge and insights that did not previously exist**
- **Finding new and sustainable ways of living on the earth**
- **Expanding the capacity in business, academia and government to innovate and to transform challenges into opportunities**
- **Bringing insights from science to inform policy and the public.**

FUNDING

ESI investigators have received over €120 million in research funding to date.

KEY AREAS OF RESEARCH

- **Earth Systems**
- **Energy Systems**
- **Bio-Systems**
- **Urban Systems**
- **Policy & Integration**

OUTPUTS

Academics involved in ESI-related research activity have published over 3,000 publications to date.

COLLABORATION

The UCD Earth Sciences Institute will collaborate with outstanding academic clusters and research institutions in Ireland and abroad, and with relevant business and commercial interests.

National partners include Trinity College Dublin, National University of Ireland Galway, University of Limerick, Queen's University Belfast, Teagasc, University of Ulster, Dublin Institute for Advanced Studies, Geological Survey Ireland (GSI), Met Eireann – Irish Meteorological Service, Sustainable Energy Ireland (SEI) and Comhar Sustainable Development Council.

International partners include Environmental Economics Unit, University of Goteborg, Forum of European National Highway Research Laboratories, Istituto Nazionale di Geofisica e Vulcanologia, The John Innes Centre, UK, Justus-Liebig University Giessen, Ludwig-Maximilians Universitat Munchen, Universidad de Granada and University of Strathclyde.