



Dublin Academic Medical Centre



CRC
Clinical
Research
Centre

Infrastructure & Resources



Dublin Academic Medical Centre

About DAMC

Dublin Academic Medical Centre is a patient-focused academic medical centre incorporating Mater Misericordiae University Hospital, St. Vincent's Healthcare Group, and University College Dublin

DAMC Mission

The mission of Dublin Academic Medical Centre is to improve the health of patients and the general population, and provide excellent training to healthcare professionals, by purposefully linking treatment, teaching and research capability.

DAMC Values and Ethos

The values and ethos of the founding institutions are integral to Dublin Academic Medical Centre. This will ensure that in fulfilling its functions, DAMC will be guided by the values of the innate dignity of the person, compassion, justice, quality, accountability, equity, advocacy and academic freedom.

DAMC will be based on mutual respect, empathy, partnership and co-operation. It will operate in a manner which is sensitive to the needs of the local communities of each of the hospitals, as well as meeting regional and national healthcare needs.

DAMC will facilitate and promote a caring and healing environment for patients in which the essential contribution of each member of staff is valued.

Director's Welcome

Welcome to the Clinical Research Centre (CRC). Here at the centre we undertake clinical research in a caring environment that aims to improve medical treatment of disease. The CRC has facilities at both St Vincent's University Hospital and the Mater Misericordiae University Hospital. Two of Ireland's largest teaching hospitals.

Our mission is to improve patient care by acting as a catalyst to bring all members of the biomedical research enterprise together to ensure novel health interventions are developed and diffused into Irish healthcare practice.

Core activity areas supported at the CRC include

- A) Clinical Trials (Phase I-Phase IV)
- B) Medical device studies
- C) Population studies
- D) Biocollections
- E) Translational research programmes
- F) Biomarker studies
- G) Qualitative Studies
- H) Pharmacokinetic Studies

Since opening in April 2006 the CRC has conducted over 11,000 research patient visits, across over 100 project areas. The key driver of our success remains combining excellence in research with commitment to patient care.

The research achievements of the CRC are built on state-of-the-art infrastructure and excellence in research support. This booklet provides information for investigators and research partners on the CRC resources available.

Do not hesitate to contact me if you require any further information

Peter
Dr Peter Doran
Director, DAMC CRC



About the CRC

The sequencing of the human genome has enabled researchers to pinpoint errors in genes - the smallest units of heredity - that cause or contribute to disease. The aim is to use this information to develop new ways to treat, cure, or even prevent the thousands of diseases that afflict all of us. But it is a long way from gene identification to effective treatments. The DAMC-Clinical Research Centre at the Mater Misericordiae and St. Vincent's University Hospitals was officially opened in April 2006 in an effort to further this work. Patients with different chronic diseases including end-stage kidney disease, pulmonary fibrosis and cancer, donate samples to the clinic on a regular basis, and these are assessed in the context of their own treatment and for the development of more accurate therapies for these diseases in general. The clinical research directed by Dr Peter Doran helps discover ways to improve medical care and to establish new treatments which in turn will improve the quality of life for patients who are living daily with chronic illness. The CRC contributes to ongoing research creating a scientific and caring culture for the benefit of present and future patients and medical research contributes to the development of new cures and better treatments. Through the donation of samples for molecular research, patients are making an immense contribution to the efforts underway to understand the mechanism of disease and effect improved patient outcome into the future. This clinical facility serves to complement UCD's Conway Institute for Biomolecular and Biomedical Research, ensuring UCD's biomedical research focus is a continuum from bedside to bench side

Since opening in April 2006 the UCD CRC has completed over 12,000 research patient visits in core areas of clinical trials, population studies and mechanisms of disease based research. As well as providing the infrastructure for development of improved healthcare practice, the CRC, through its clinical facilities is also enhancing access to health services and new medicines. Currently, an average of 100 patients are seen each week by CRC staff, with a total of 12 outpatients clinics being completed on a weekly basis. As well as underpinning research, a major benefit of this is the fast tracking of patients into the health system through the CRC. This is a substantial benefit to both the patient and the health service in general

Two Facilities One CRC

In 2008 the CRC successfully integrated the facilities and personnel at the Mater Misericordiae University Hospital and St Vincent's University Hospital Campus into a single functional CRC. Despite the geographical differences our staff and investigators have embraced this vision of a single operational CRC across the hospital sites

The goal of the site integration was to create a single organisational and management structure for the clinical research enterprise. To implement this change, Dr Peter Doran was appointed Scientific Director of the CRC, with responsibility for the scientific and organisational management of the CRC across the hospital sites.

Operating policies and procedures were standardised and information sharing encouraged. In addition regular all staff meetings were held leading to the emergence of a strong CRC identity among all staff. We will continue our work to advance the single brand that is now the CRC

In a practical sense, movement of staff between sites has been encouraged and resources and infrastructure are now routinely shared. For example, the CRC biobank facilities are now shared between the sites. The end result of these efforts has been the establishment of a vibrant CRC which is best positioned to meet the needs of both patients and investigators at two of Ireland's premier academic hospitals.

A streamlined CRC governance structure has been established with a single CRC advisory committee reviewing applications for access to CRC facilities.





CRC Clinical Infrastructure

The primary function of the UCD CRC is to support physicians and scientists in the completion of research in state-of-the-art facilities. Researchers conduct studies within dedicated facilities staffed by expert personnel. Access to CRC facilities is available to all investigators in the UCD School of Medicine and Medical Science and its partner hospitals following review and approval of project proposals.

Core clinical infrastructure for patient contact at the CRC is available at both the MMUH and SVUH campuses. The clinical infrastructure is located in purpose built facilities whose design have been influenced by the goal of making the patient's visit to the CRC as comfortable as possible.

The infrastructure is composed of:

Eight outpatient type interview rooms for patient interview, examination and sampling

Four procedure rooms for more complex patient phenotyping, including minor procedures

Recovery room facilities for patients post procedure

The clinical suite is equipped with all necessary resources for patient monitoring and treatment.

To further expand the suite of resources available to CRC investigators we have recently commissioned a DXA scanner for body composition analysis, exclusively for research use.

In addition a dedicated Pharmacokinetics has been development within the CRC. This will provide an appropriate environment for longer patient visits to the CRC

We are committed to continuing to provide a state-of-the-art investigative environment for CRC users.

CRC Laboratory Infrastructure

To create a truly “bench-to-bedside” research environment, the CRC has established and maintains core laboratory infrastructure at both campuses. The laboratory facilities are complemented by a significant Biobank Infrastructure, which has been established and is managed according to international best practice.

Cell & Molecular Biology Laboratory;

The CRC maintains a fully equipped laboratory suite at both the SVUH and MMUH campuses for molecular research. This facility, is composed of

Cell and tissue culture suite for primary cultures, equipped with sterile cell culture hoods, incubators etc

General molecular biology laboratory with all basic equipment as well as dedicated facilities for molecular analysis.

These infrastructures provide all the

CRC Biobank

The establishment of well phenotyped repositories of biological material for translational research is a major element of CRC activities. State-of-the-art, secure biobanking facilities are available at both MMUH and SVUH campuses. The CRC biobank now has capacity to store approximately 250,000 samples in a secure environment

Recognising the importance of biological materials, significant developments have been made to ensure the reliability, robustness and security of the biobanks,

A comprehensive system-monitoring and system-failure response plan has been put in place to ensure the security of these key resources.



CRC IT Infrastructure

Information technology is a major enabling factor in driving high quality clinical and translational research. At the UCD CRC significant efforts have been invested in the development of tailored IT systems to underpin research. These systems have been developed with usability, security, confidentiality and flexibility in mind.

Research Information system

A unique resource in the biomedical research field nationally, the UCD CRC Research Information system is available to all hospital-based investigators and provides a standardised platform for the collection, annotation and analysis of data in research studies. Specifically, this system permits the:

- Identification of patients of interest



CRC Data Centre

- Hardware
 - Web Server
 - Security Server
 - Application Server
 - Database Server
 - 2 TB storage
 - Back up unit
- Accessibility
 - Web based secure environment
 - <https://remote.dahccrc.ie>
- Applications
 - Sample registration
 - Sample labelling
 - Sample Tracking
 - Deployment of analysis tools (e.g EpiInfo)
 - Bespoke databases



Supporting Partners

The major role of the CRC is to enable research by the provision of state-of-the-art infrastructure and expertise for translational research. The CRC assists investigators and industry partners in all areas of their research programme development from study design to data analysis. These support services, delivered by expert staff ensure that all research conforms to the highest standards.

Specific core services available include

- Study design
- Study Sponsorship
- Core laboratory services
- Obtaining regulatory approval
- Design of databases for studies
- Nursing support
- Collection of biological samples
- Conducting clinical trials (Phase I-IV)
- Sample storage
- Sample management
- Sample processing
- Sample analysis
- Data collection
- Data Management
- Data analysis

The range of support services available to investigators means that the CRC is actively supporting both existing established research programmes and also actively facilitating the development of emerging areas of research.

Through the provision of these core services the CRC has fostered a vibrant research culture, which is generating new knowledge pertaining to the pathogenesis, diagnosis and treatment of disease.



CRC Staff

A major driver of the continued success of the CRC is our cadre of highly skilled staff, committed to our vision of driving improvements in healthcare delivery through clinical inquiry. The CRC research team has further expanded in 2008 with additional staff recruited. In particular our research nursing team has been expanded to serve the increased demand of the investigative community.

CRC Leadership

Dr Peter Doran
Scientific Director,
UCD CRC,

Prof. Pat Murray
Prof. of clinical Pharmacology,
MMUH

Prof. Michael Keane
Prof. of Medicine and Therapeutics
SVUH

Prof. Bill Powderly
Chief Academic Officer,
DAHC

Prof. Doug Veale
Director of Translational Research
DAMC

CRC Management

Ms. Jackie Breiden
Research Nurse Manager,
MMUH Campus

Ms. Mary McGrath
Research Nurse Manager
SVUH Campus

Dr David Murray,
Senior Scientist
UCD CRC

Nursing Staff

Ms. Marie Burke
Research Nurse, MMUH

Ms. Eileen O'Connor
Research Nurse, MMUH

Ms. Jacintha Fitzpatrick
Research Nurse, SVUH

Ms. Denise Carmody
Research Nurse, SVUH

Ms. Grainne Hickey
Research Nurse, SVUH

Ms. Ann Marie Mulligan
Research Nurse, MMUH

Ms. Carmel Weldridge
Research Nurse, MMUH

Ms. Emer Close
Research Nurse, MMUH

Ms Suzanne O'Neill
Research Nurse, MMUH

Technical Staff

Ms. Paola Bagaglia
Ms. Avril Buckley

Administrative Staff

Ms. Helen Champion
Ms. Louise McCague



Dublin Academic Medical Centre



Dublin Academic Medical Centre

Clinical Research Centre
Mater Misericordiae University Hospital
Catherine McAuley Education and
Research Centre
Nelson St.
Dublin 1

Clinical Research Centre
St. Vincents's University Hospital
Elm Park
Dublin 4

General Enquiries: +353-1-7166397
Website: www.ucd.ie/crc

General Enquiries: +353-1-7165811
Website: www.ucd.ie/crc

Contacts

Dr Peter Doran,
Scientific Director
Tel: +353-1-7166387
Email: director.crc@ucd.ie

Ms. Jackie Breiden, RGN, MSc.
MMUH Site Lead
Tel: +353-1-7166327
Email: medresearch@mater.ie

Ms. Mary McGrath
SVUH Site Lead
Tel: +353-1-7165811
Email: m.mcgrath@ucd.ie