



Molecular  
Medicine  
Ireland



# Clinician Scientist Fellowship Programme

Structured Training Period: 30 June - 5 July 2008



**Molecular Medicine Ireland Clinician Scientist Fellowship Programme Structured Training****Schedule for Period 30 June – 5 July 2008****Monday 30 June**

Venue: Cheyne Lecture Theatre, Royal College of Surgeons in Ireland

- 1800-1815    **Introduction**
- 1815-1900    *Clinician Scientist Keynote Lecture*  
**25 Years of Clinical Research – structure and serendipity**  
Prof. William Powderly, Dean of Medicine, Head of UCD School of Medicine and Medical Science
- 1900-2000    **Wine reception**

**Tuesday 1 July****Introduction to Research and Laboratory Methods for Clinician Scientists – Day 1**Venue: Fintan Gunne Lecture Theatre, Catherine McCauley Centre, Nelson St, Dublin 7  
Course Organisers: Dr David Murray & Dr Peter Doran (UCD)

- 0830-0900    **Registration Tea/Coffee**
- 0900-0915    **Introduction, Overview and Welcome**  
Dr Ruth Barrington, Molecular Medicine Ireland
- 0915-0940    **Introduction to Scientific Research**  
Dr Peter Doran, UCD Clinical Research Centre
- 0940-1010    **Ethical & Legal Issues**  
Dr Jackie Breiden, UCD Clinical Research Centre
- 1010-1030    Coffee / Tea
- 1030-1115    **Key elements of research proposal (experimental design)**  
Dr Mary Codd, UCD School of Medicine & Medical Science
- 1115-1200    **Statistics**  
Dr Mary Codd, UCD School of Medicine & Medical Science
- 1200-1320    Lunch
- 1320-1400    **Laboratory safety**  
Ms Paola Bagaglia, UCD Clinical Research Centre
- 1400-1445    **Cell biology & cell culture**  
Dr Eoin Cotter, UCD Clinical Research Centre
- 1445-1515    Coffee/Tea

1515-1615 **DNA & RNA: biology and techniques**  
Dr David Murray, UCD Clinical Research Centre

1615-1700 **An overview of bioinformatics**  
Dr Denise Sadlier, UCD & Mater Hospital

**Wednesday 2 July**

**Introduction to Research and Laboratory Methods for Clinician Scientists – Day 2**

Venue: Fintan Gunne Lecture Theatre, Catherine McCauley Centre, Nelson St, Dublin 7

Course Organisers: Dr David Murray & Dr Peter Doran (UCD)

0830-0900 **The Medics Perspective**  
Dr Nick Chew, UCD & Mater Hospital

0900-0930 **The supervisors perspective**  
Dr Peter Doran, UCD Clinical Research Centre

0930-1000 **After the research degree, what next?**  
Dr Paddy Mallon, UCD & Mater Hospital

1000-1030 Coffee/Tea

1030-1130 **Protein analysis**  
Dr Toby Holmes, UCD Clinical Research Centre

**Technology Focused Talks & Case Studies**

1130-1215 **Recent Advances and Biomedical Applications of Protein Array Technologies**  
Prof Dolores Cahill, UCD Conway institute

1215-1300 **Flow Cytometry**  
Dr Alfonso Blanco Fernández, UCD Conway Institute

1300-1345 Lunch

1345-1430 **High Content Bioassay Screening**  
Dr Anthony Davies, TCD Institute of Molecular Medicine

1430-1530 **Problem solving tutorial**  
Dr David Murray, UCD Clinical Research Centre

1530-1630 **Tour of the Mater Hospital Clinical Research Centre and Laboratories**

1630-1715 *Clinician Scientist Keynote Lecture*  
**The Clinician Investigator in 21<sup>st</sup> Century Ireland**  
Prof. Noel Caplice, Professor of Cardiovascular Sciences (UCC)

**Thursday 3 July**

**Writing & Communication Skills Workshop** – Prof Alan Kelly ((Dean of Graduate Studies and Senior Lecturer in Food Technology, UCC)

Venue: Fintan Gunne Lecture Theatre, Catherine McCauley Centre, Nelson St, Dublin 7

- 0930-1030    **Introduction to the literature**  
Why do scientists publish? The nature of scientific journals, impact factors, inter-field differences.
- 1030-1045    Coffee/Tea
- 1045-1215    **The scientific paper**  
The objectives and sections of a scientific paper, designing good figures and tables, writing abstracts, etc.
- 1215-1300    **Publication and beyond**  
Submission of papers to journals, the refereeing process (and all of its outcomes, with examples), how papers make an impact, bibliometry (h-indices, etc.), emerging issues such as open access journals.
- 1300-1400    Lunch
- 1400-1445    **Publication and beyond (continued)**
- 1445-1545    **Publication ethics**  
Falsification, fabrication and plagiarism and other areas of misconduct, with examples
- 1545-1600    Coffee/Tea
- 1600-1800    **Presentation skills**  
Designing and making effective scientific presentations, preparing to give talks, including Powerpoint design, designing effective poster presentations.

**Friday 4 July**

Venue: Fintan Gunne Lecture Theatre, Catherine McCauley Centre, Nelson St, Dublin 7

- 0930-1300    **Translating your research into the clinical setting**  
(Tea/coffee at 1100) - Ms Siobhan Gaynor (Senior Associate, Molecular Medicine Ireland / ICRIN)
- This workshop will cover:
- An introduction to clinical research**  
Terminology, conventions, Types of clinical trials, key documents, protocol, aspects of design, randomisation, consort guidelines, patient registries
- Drug Development Pathway**  
milestones, clinical studies, toxicology, pharmacokinetics/metabolism, dosage form, active ingredient, marketing, pharmacoconomics, regulatory affairs
- Clinical Trial Process**
- Principles of Clinical Research**  
Declaration of Helsinki, Ethical guidelines, requirements, Social Value, Scientific Validity, Fair subject selection, informed consent, respect for human subjects

**Good Clinical Practice (GCP)**

Declaration of Helsinki, History of rules, Structure of GCP, ICD GCP principles, EU directive

**Responsibilities of the Ethics Committee**

Irish EC's & Clinical Trials of IMPs

**Responsibilities of the Sponsor, Monitor, Investigator**

1300-1400

Lunch

1400-1700

(Tea/coffee at 1530)

**Integrity in Scientific Research Workshop (Part 1)**

Prof David Brayden (Associate Professor and Director of Research, UCD School of Agriculture, Food Science & Veterinary Medicine)  
Prof Alan Baird (Professor & Head of Subject of Veterinary Physiology and Biochemistry, UCD School of Agriculture, Food Science & Veterinary Medicine)

Background - Core values in medical research include integrity at several levels. This workshop will introduce the concept that most laboratory ethical behaviour is communicated through lab culture, often personified by personality traits and core values of the lead investigator.

Workshop details - These two sessions comprise facilitated discussion of issues raised in five videos on specific topics in ethics in research. Attendees will be shown videos in turn and groups will be asked what questions the dramas raise for them, followed by presentations on potential ethical solutions. These videos have been sourced as official learning material with permission from the American Association for Advancement of Sciences (AAAS).

**Saturday 5 July**

Venue: Fintan Gunne Lecture Theatre, Catherine McCauley Centre, Nelson St, Dublin 7

0930-1230

(Tea/coffee at 1100)

**Integrity in Scientific Research Workshop (Part 2)**

- Prof David Brayden & Prof Alan Baird

1230-1330

Barbeque