

Molecular Medicine Ireland Clinician Scientist Fellowship Programme

Learning objectives of first week of structured training

This July 2008 period of structured training encompasses at an introductory level four broad areas of skill development and learning for researchers.

Introduction to Research and Laboratory Methods

- Understand the processes of scientific research (including generating hypotheses, experimental design, and quantitative aspects).
- Be primed on the environment of PhD research (including laboratory safety, ethics, student-supervisor roles, career development).
- Understand various research techniques and technologies.

Writing and Communication Skills

- Understand the scientific publication process (including rankings, impact factors, citation rates, open access journals).
- Be familiar with the organisation of a scientific paper and the principles of good scientific writing (including abstract writing and the design of good figures and tables).
- Understand the process of submitting a manuscript for publication (from referees to proofs and beyond).
- Be aware of publication ethics (including areas of misconduct such as falsification, fabrication and plagiarism).
- Understand how to craft effective scientific presentations (including slide and poster design).

Translating your Research into the Clinical Setting

- Understand the terminology and conventions of clinical research.
- Be familiar with the drug development pathway, including the clinical trial process.
- Understand the various rules and regulations and issues of patient consent and safety.

Integrity in Scientific Research

- Understand ethical issues and obligations relating to access to confidential information obtained in a professional capacity.
- Be familiar with the obligations involved in collaboration with industrial collaborators and sponsors.
- Understand the need for high levels of integrity and transparency in interpreting research results.
- Understand the criteria that are used for determining authorship of research publications.