

DMMC Course PROTEOMICS: METHODS & APPLICATIONS

1530, Thursday 9 June 2005.

Shotgun Proteomics & Quantitative Proteomics

Dr Gerard Cagney, Conway Institute, UCD

Abstract

Although the identification of proteins using mass spectrometry has now become almost routine, two technical challenges remain. In this talk we will discuss *a) how to separate the proteome in space and time so it can be investigated* and *b) how to measure the up- and down-regulation of proteins*. These are very relevant to many clinical and basic research projects and some examples will be described briefly in the following talk.

Biography

Gerard Cagney studied science at University College Dublin and obtained a PhD from Queen's University Belfast in 1994. He worked in industry for three years with Elan Pharmaceuticals before joining the laboratory of Stanley Fields at the University of Washington to work on protein-protein interactions using arrays. On moving to the University of Toronto, his research at Andrew Emili's laboratory included proteomics and mass spectrometry. He became project manager at the Genome Canada Yeast Protein Interaction Project in the University of Toronto with Nevan Krogan, Jack Greenblatt and Andrew Emili. Gerard returned to Ireland in 2003 to work as Director of Proteomics at The Royal College of Surgeons in Ireland and then as an Investigator at University College Dublin.