Proteomics Hands-on Training Course: Basics of Protein Sample Processing & Analysis – Trinity Term 2017

DATES: Thursday, 4th May – Monday, 8th May 2017

VENUE: Target Discovery Institute, Old Road Campus (Building 6)

REGISTRATION: OPEN to 8 participants. Register by email <u>here</u>.

In this 3-day training workshop participants will be provided an introduction on how to use proteomics techniques to address their biological questions and learn how to process and analyse samples using mass spectrometry. The course consists of 2 theoretical and 3 practical modules and is aimed at those with little or no background in proteomic workflows.

Programme:

Thursday, 4th May	
10:00 – 12:00	Introduction to mass spectrometry-based proteomics : How it works, experimental design and options for quantitative analysis
13:00 – 17:00	Hands-on Sample Prep* : in-solution or in-gel tryptic digest of your own sample (day 1)
Friday, 5 th May	
10:00 – 12:00	Hands-on Sample Prep* : in-solution or in-gel tryptic digest of your own sample (day 2)
13:00 – 16:00	Fundamentals of Data Analysis: Using MASCOT for database searching, label-free quantitation and free alternatives for data analysis
Monday, 8th May	
10:00 – 12:00	Analyse Your Own Data: database searching and interpretation of your MS results
12:00 – 1:00	Basic Statistical Analysis using MeV: common ways of exploring proteomic datasets using free resources#

^{*} Participants are asked to bring their own sample for use in the practical modules. This can be either a protein or protein mixture in solutions, or an SDS-PAGE gel band. Alternatively, we will provide a total cell lysate for processing.

[#] Participants are asked to bring a laptop with them to use for the statistical analysis portion of the Day-3 training.