

Basic course: Chromatography for Proteomics

Organisers: EuPA Education Committee, Proteored-ISCIIII and the Spanish Proteomics Society

Course dates: **November 12-16, 2012**

One-week full time at the National Centre for Biotechnology-CSIC and Faculty of Pharmacy-UCM, Madrid, Spain.

Course objectives

In accordance with the HUPO/EuPA guidelines, we aim to

- Provide a theoretical basis for understanding chromatographic separations
- Illustrate how the techniques are being applied in modern proteomics studies
- Help students to design their own experiments
- Provide practical instruction in laboratory techniques
- Provide extensive tutorial/discussion sessions

Course description

There are two main separation methods used in modern proteomics, electrophoresis and chromatography. The course is part of a series designed to give researchers a thorough basis to understand the new trends in protein expression analysis and to enable scientists entering the field to evaluate how useful these new techniques are to their own research and how to apply them effectively.

Course outline

Theoretical lectures

- Basic liquid chromatography terms and theory
- Methods for separating protein and peptide mixtures
- Designing multi-dimensional separations
- Mass Spectrometry and database searching

Practical classes

- Sample preparation and extraction
- Evaluating and optimising separations
- Making nanocolumns, plumbing and HPLC troubleshooting

Deadline for registrations: 1st November 2012

Minimum number of students: 5 (if not the course will be cancelled).
Maximum: 16

Fee: 350 € (not including food, accommodation and travel) payable upon confirmation of participation.

Contact: ProteoRed Coordination Unit (coordinacion@proteored.org)