"EuPA Chromatography for Proteomics course".
"Teaching the Teachers"
29th September-3rd October, Madrid

Funded by Catedra de Genómica y Proteómica Merck Sharp & Dohme-UCM and ProteoRed

About the course:

The course is part of a series designed to give researchers a thorough basis to understand the new trends in protein expression analysis. The aim of the course is to enable young students to evaluate how useful these new techniques are to their own field of research and how to apply them effectively. The course will consist of both theoretical and practical lessons. The students will follow the isolation and separation of the protein components of a bacteriophage as a practical illustration of how a variety of techniques can be applied to a problem. The course run is being run at the Centro Nacional de Biotecnologia (CSIC), UAM Campus Cantoblanco and at the Universidad Complutense in Madrid, by Prof. Klaus Unger (University of Mainz) together with Juan-Pablo Albar, Concha Gil and Peter James.

Course Objectives:

In accordance with the HUPO/EuPA guidelines, we will strive to:
- Provide a theoretical basis for understanding chromatographic separations
- To illustrate how the techniques are being applied in modern proteomics studies
- To help students to design their own experiments

- To provide practical instruction in laboratory techniques
- To provide extensive tutorial/discussion sessions

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

Applications to participate on the course should be sent to: Pilar Ximénez de Embún
pilarx@quim.ucm.es or Maria Luisa Hernáez mlhernae@farm.ucm.es
Funding can often be obtained from the Proteomics Society in your country of study.