

Course Program Overview

Session 1. Introduction to the Course

Session 2. Principles of Mass Spectrometry and types of instruments and mass analyzers

Session 3. Visit to the Unit

Session 4. Introduction to main workflows in mass spectrometry

Session 5. Student project presentation

Session 6. Spectra interpretation

Session 7. Automatic database search

Session 8. Sample digestion

Session 9. Sample preparation forum: Digestion protocols

Session 10. SRM Practicals: Introduction to the case study sample

Session 11. SRM Practicals: Review of the Orbitrap acquisition method parameters

Session 12. Quantitative Proteomics

Session 13. Introduction to SRM

Session 14. Exercises with MaxQuant

Session 15. SRM Practicals: Method Development

Session 16. SRM Practicals: Review of the Q-trap acquisition method parameters

Session 17. Statistics in proteomics

Session 18. Post-translational modifications

Session 19. Exercises with Perseus

Session 20. Fractionation procedures

Session 21. Sample preparation forum: Enrichment protocols

Session 22. SRM Practicals: Protein quantitation

Session 23. Down stream analysis: External databases and resources

Session 24. Current trends in proteomics

Session 25. Network Analysis

Session 26. Summary of the biomarker pipeline

Session 27. Student presentations of selected papers

Organized by:



Supported by:



Core Facilities at the CRG
are supported by:



Members of the Board of Trustees:



Teachers

Eva BORRÀS, CRG/UPF Proteomics Unit, Barcelona, Spain

Martí BERNARDO, EMBL-EBI, Cambridge, UK

Salvatore CAPPADONA, CRG/UPF Proteomics Unit, Barcelona, Spain

Cristina CHIVA, CRG/UPF Proteomics Unit, Barcelona, Spain

Guadalupe ESPADAS, CRG/UPF Proteomics Unit, Barcelona, Spain

Alexander LEITNER, ETH Zurich, Switzerland

M. Ivonne PEÑA, CRG/UPF Proteomics Unit, Barcelona, Spain

Eduard SABIDÓ, CRG/UPF Proteomics Unit, Barcelona, Spain

Organized by:



Supported by:



Core Facilities at the CRG
are supported by:



Members of the Board of Trustees:



Advanced proteomics course for molecular biologists and clinicians

7-11 July 2014



Course Schedule

	Monday	Tuesday	Wednesday	Thursday	Friday
9		Session 6. Spectra interpretation	Session 12. Quantitative Proteomics	Session 17. Statistics in proteomics	Session 23. Down stream analysis: External Databases and Resources
10	Session 1. Introduction to the course		Session 13. Introduction to SRM	Session 18. Post-Translational Modifications	Session 24. Current trends in proteomics
11	Coffee break	Coffee break	Coffee break	Coffee Break	Coffee Break
12	Session 2. Principles of Mass Spectrometry and types of instruments and mass analyzers	Session 7. Automatic Database Search	Session 14. Exercices with MaxQuant	Session 19. Exercices with Perseus	Session 25. Network Analysis
	Session 3. Visit to the Unit	Open Seminar (Alex Leitner)		Open Seminar (Marti Bernardo)	
13	LUNCH	LUNCH	LUNCH	LUNCH	LUNCH
14		Session 8. Sample digestion	Session 15. SRM Practicals : Method development	Session 20. Fractionation procedures	Session 26. Summary of the biomarker pipeline
15	Session 4. Introduction to main workflows in mass spectrometry	Session 9. Sample preparation forum: Digestion protocols		Session 21. Sample preparation forum: Enrichment protocols	Session 27. Student presentations of selected papers
16	Afternoon break	Afternoon break	Afternoon break	Afternoon break	
17	Session 5. Student project presentation	Session 10. SRM Practicals : Introduction to the case study sample Session 11. SRM Practicals: Review of the Orbitrap adquisition method parameters	Session 16. SRM Practicals: Review of the Q-trap acquisition method parameters	Session 22. SRM Practicals: Protein quantitation	Farewell
18					
19					
20			Course Dinner - "MORITZ" Restaurant Ronda Sant Antoni 39 (L2 Sant Antoni or L1 Universitat)		