Hands-On Proteomics Workshop

(2D Gel Electrophoresis in combination with Mass Spectrometry)

Efficiency and Reliability through Innovative Technology

NH DyeAGNOSTICS

Strategies for Effective Sample Preparation – Exciting Proteins are Low Abundant Proteins

NH DyeAGNOSTICS shows strategies for efficient sample preparation and demonstrates a High Performance Technology for multiplexed 2D gel analysis (experimental design, labeling, performance, imaging).

SERVA Electrophoresis

Dr. Reiner Westermeier: High Performance Electrophoresis (HPE) - A New Dimension of 2D Gel Electrophoresis

Learn to handle a complex workflow using the 2D High Performance Electrophoresis System. The combined use of the HPE Tower and HPE 2D gels allows a separation quality not experienced before. Subsequently to IEF in SERVA IPG BlueStrips samples are separated on 2D horizontal gels using the HPE Tower system.

DECODON

Image Analysis with Delta2D – expression profiles from 2D gel images

DECODON shows you how to use Delta2D, how to analyze images in an innovative way and how to use statistical approaches to get robust data including visualization for presentation and easy understanding.

BRUKER

Strategies for Protein Identification - from in-gel digestion to protein identification

Learn how to prepare good samples for MALDI-TOF/TOF-MS. Tips and tricks for sample preparation to achieve highly valuable protein identification by an highly automated workflow. Learn how to "read" MS and MS/MS data to check your database output with respect to reliability and accuracy.

Did you experience problems you want to discuss?
Do you want to have your own samples analyzed?
Please inform us when you register.

Registration: Dr. Martina Marchetti-Deschmann (martina.marchetti-deschmann@tuwien.ac.at)
Please register – course is limited to 10 participants (except lectures on Wednesday afternoon)
Details: http://www.cta.tuwien.ac.at/iac/biopa/events/hands_on_proteomics_workshop_2014/

When: 22.04. – 25.04.2014
Where: Vienna University of Technology, Getreidemarkt 9, 1060 Vienna

Costs:

	Industry	Students, PhD, PostDoc…
early bird (till 31.03.2014)	500,00€	350,00€
after 01.04.2014	600,00€	450,00€

AuPA members have a discount of 50 or 100€.

Program

Tuesday, 22. April 2014

8:30	to	8:45	L	Registration and Welcome
8:45	to	9:00	L	Introduction of participants (e.g. name, work place, type of research, goal)
9:00	to	9:15	L	Theory: Sample Preparation + Labeling (Refraction-2D™, Saturn-2D™)
9:15	to	9:30	L	2D gel electrophoresis - state of the art
9:30	to	9:45	L	Image Analysis of 2D electrophoresis gel - state of the art
9:45	to	10:00	L	Introduction to Modern Protein Mass Spectrometry
10:00	to	10:15		Coffee break
10:15	to	11:15	P	Praxis: Sample Preparation (Refraction-2D™, Saturn-2D™)
11:15	to	12:45	P	IPG rehydration and sample preparation
12:45	to	13:45		Lunch
13:45	to	16:15	P	Sample Preparation + Labeling, Scan of a Demo gel
16:15	to	16:30		Coffee break
16:30	to	17:00	L	Aspects of Sample Preparation
17:00	to	17:30	L	HPE Tower, HPE 2 D Gels
17:30	to	18:30	P	Start of 1st dimension: Cup-Loading, start IEF (6h)

Wednesday, 23. April 2014

8:00	to	9:00	P	Handling of the HPE Tower, Start of 2nd dimension (runs 6h)
9:00	to	10:00	P	Image analysis of 2D Gel images with Delta2D
10:00	to	10:15		Coffee break
10:15	to	12:15	P	Gel analysis under supervision with demo gels (1)
12:15	to	13:15		Lunch

- PUBLIC -

13:15	to	13:45	L	Strategies of efficient sample preparation and labeling
13:45	to	14:15	L	**Guest speaker Dr. Klaus Kratochwill (Med. Uni. Vienna)**
14:15	to	14:30		break
14:30	to	15:00	L	**Guest speaker Prof. Dr. Marek Sebala (Masaryk University)**
15:00	to	15:30	L	Innovative analysis of 2D gel images
15:30	to	15:45		break
15:45	to	16:15	L	**Guest speaker Dr. Corina Mayrhofer (Vet. Med. Vienna)**
16:15	to	16:45	L	Latest developments in 2D electrophoresis for Proteome Analysis **Guest Speaker Univ. Prof. Dr. Günter Allmaier (TU Vienna)**
16:45	to	17:15	L	Modern Mass Spectrometry for Proteomics

Thursday, 24. April 2014

8:00	to	10:00	P	Gel analysis under supervision with demo gels (2)
10:00	to	10:15		coffee break
10:15	to	11:15	L	Mass spectrometry sample preparation
11:15	to	12:45	L	Mass spectrometry and analysis of mass spectra
12:45	to	13:45		lunch
13:45	to	14:30	L	Trouble shooting
14:30	to	16:00	P	Scanning of own gels
16:00	to	16:15		coffee break
16:15	to	17:15	P	MS results import in Delta2D, database research (Uniprot), presentation of results

Friday, 25. April 2014

8:00	to	10:00	P	Gel analysis under supervision with own gels
10:00	to	10:15		break
10:15	to	11:45	P	Spot picking

L: lecture, P: Hands-On

Slight changes of time plan may occur during the course.