ORGANIZATIONAL

Fees & Registration

- 550 € for non-member
- 380 € for members of HUPO, GBM, EuPA, DGPF
- To register, please send a brief e-mail containing your name and address to Linda Pötter (Linda.Poetter@rub.de).
- The number of participants is limited to 10. The workshop will be done in two groups with respectively 5 person.
- Deadline for registration is 1st of June 2012.
- Participitants are expected to arrange their own hotel reservations. Suggestions can be made.

Methods:

- Each participant will receive glas slides for the spotting process and protein soltutions.
- The participants will learn in two groups a spotting workflow.
- In order to be able to examine the biological and technical variance the participants will introduced in different types of analysis software and also our own analysis pipeline.

THE LOCATION

Medizinisches Proteom-Center

Under the direction of Prof. Dr. Helmut E. Meyer, the Medical Proteom-Center is one of the world's leading institutes in proteome and protein analysis. The research interest covers all medical areas as well as basic research in life science. The methods include gel- and chromatography-based separation techniques with subsequent mass spectrometry, protein biochips and innovative bioinformatics/biostatistics.

AG Immune Proteomics

The research focus of the workgroup Immune Proteomics is is to understand the pathomechanisms of late onset neurodegenerative disorders such as Parkinson disease to establish molecular markers for the clinical monitoring of these disorders. There is growing evidence that progression of neurodegenerative disorders activates the immune system and reduces its self-tolerance as becomes obvious from the appearance of autoimmune antibodies. It is both of scientific and medical interest to study these autoimmune responses and to identify autoantigen/autoimmune antibody interactions that are indicative of a defined disease stage and therefore suited to develop diagnostic biomarkers for the clinical monitoring of new therapeutic approaches. The protein array technology is therefore a powerful tool.

Organizers

Prof. Dr. Helmut E. Meyer
Director
Medizinisches Proteom-Center, Bochum

Dr. Caroline May
Group leader Immune Proteomics workgroup
Medizinisches Proteom-Center, Bochum

PD Dr. Christian Stephan
Groupleader Bioinformatics/ Biostatistics workgroup
Medizinisches Proteom-Center, Bochum

RUHR-UNIVERSITÄT BOCHUM
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RUHR-UNIVERSITÄT BOCHUM
RESEARCH DEPARTMENT
Protein

mpc
MEDIZINISCHES PROTEOM CENTER

RUB

HANDS-ON WORKSHOP SPOTTING PROTEIN ARRAYS

28th – 29th JUNE 2012

Medizinisches Proteom-Center

HUPO EuPA PURE

GBM Deutsche Gesellschaft für Proteomforschung e.V. PROTEOME

Ministerium für Innovation, Wissenschaft und Forschung des Landes Nordrhein-Westfalen

Bundesministerium für Bildung und Forschung

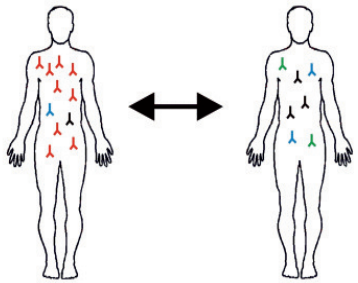
EUROPÄISCHE UNION
Europäischer Fonds für Regionale Entwicklung

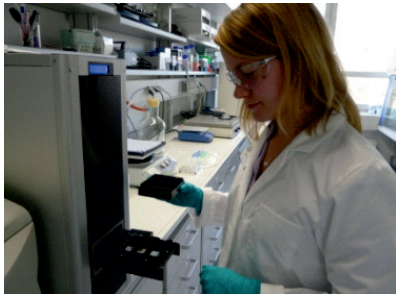
INTRODUCTION
Hands-on protein microarray workshop

The Hands-on protein microarray workshop will be held at the MPC in Bochum. Interesting lectures of experienced researchers will be accompanied by practical training of protein microarray procesisng with ProtoArray V.5. Moreover the technical and biological analysis will be explained.

Protein microarrays
High-troughput autoimmune profiling

For immune profiling and therefore the discovery of new antibodies, high-density protein arrays are the best alternative approach to ELISAs. A humoral immune response is known to be important in various diseases like autoimmune diseases, infectious diseases or cancer. Therefore antibodies in body fluids, e.g. blood, CSF or also saliva could be good biomarker candidates for the early detection of early onset of the diseases, improving the possibilities for a betimes therapy. Moreover, they can possibly pursue disease progression.





TOPICS

What is this workshop about?

Introduction into protein microarrays

Applications

Sample Preparation

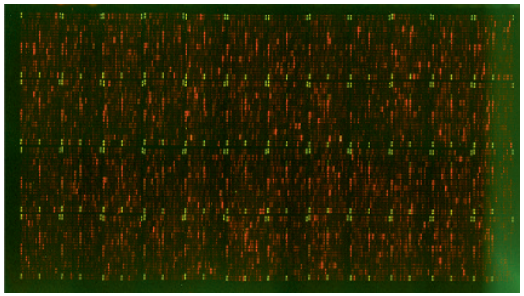
Proteomics

Statistics

Data analysis

Image acquisition

Experimental Design



TARGET GROUP
Who is addressed?

- ✓ all interested colleagues who want to delve into the protein microarray technique
- ✓ students, Ph.D. students, Postdocs

During the workshop the participants will get an introduction into protein microarray technique, including the analysis of protein microarrays. In the theoretical part a comprehensive overview of different proteinarray applications like e.g. analysis of different body fluids. In the practical part the participants will get an insight into the MPC ‘s protein microarray lab performing protein spotting of their own protein micro arrays.

Companies:

Strix Diagnostics

life technologies™

ME AUTOMATION

MicroDiscovery