

# Münster Conference on Biomolecule Analysis

## Thermo Scientific Workshop

### Proteomics sample preparation for Nano-UHPLC-MS

November 23, 2016

We would like to invite you to participate in our two workshops, where we aim to cover tips & tricks for sample preparation such as Western Blot, the use of  $\mu$ Drop Plates and Multiscan GO for quantification of small volumes of protein and nucleic acids as well as news in nano LC separation techniques.

#### Tips & Tricks in Sample Preparation for the Analysis of Biomolecules

##### a. Western Blot "How to make it work"

The Western workflow requires multiple steps, from gels to optimized antibody concentration. During this workshop, we will take you through the various steps required for a well performed western blot process and the required detection methods. Tips and tricks will be discussed, not only to make the process more efficient to use, but also to help better understand the various steps within the overall process. The goal of the workshop is to show the advantages of western blot as a sample preparation technique, and how to get the most out of this particular workflow.

##### b. Quantification of small volume nucleic acids and proteins using the $\mu$ DropPlate and Multiscan GO

During the second part of the sample preparation workshop, we will discuss the use of the so-called  $\mu$ DropPlate, and its capabilities.



#### Tips & Tricks in the use of long Nano LC columns for proteomics LC-MS workflows

Since its inception, (bottom-up) proteomics has aimed to identify and quantify the complete proteome from a cell, tissue or whole organism. Over the last 20 years many improvements have been made, specifically in the development of dedicated nano LC separation systems, as well as mass spectrometry instrumentation, such as Orbitrap technology, and software. The last 10 years have seen an increasing use of UHPLC technology in nano LC, offering the opportunity to use longer columns than the typical 75  $\mu$ m ID  $\times$  150 mm length used up to then. Today we see standard columns of 250 mm and 500 mm length, with many people looking at or already starting to use 750 mm long columns.

During this seminar we want to outline the benefits of using longer nano LC columns in a proteomics environment, and discuss how the product can help simplify separation workflows and help improve overall protein ID.

To register for the workshop, please follow the link below to the registration page for: Münster Conference on Biomolecule Analysis Thermo Scientific Workshop

<https://campus.uni-muenster.de/cu-proteomics/konferenz-2016/anmeldung/>