

Proteomics Seminar

Wednesday, 17th February 2016 | 12:30 - 1:30 pm
DBS Conference Room 1 (S3 level 5)

Hosted by Dr. Lin Qingsong

Multiple Reaction Monitoring (MRM) - Mass Spectrometry-Based Targeted Quantification of Proteins



By **Dr. Kelli Jonakin**

Global Marketing Manager - Pharma/BioPharma/CRO at SCIEX

She joined SCIEX in 2011, where she has focused on MS workflows for biopharmaceutical analyses. She received her B.S. in Biochemistry from University of Puget Sound (WA, USA) a Ph.D. in Pharmacology from the University of Colorado Health Sciences Center (CO, USA), and completed a postdoctoral fellowship in Biochemistry at the University of Wisconsin-Madison (WI, USA).

Western blot/ELISA techniques are commonly employed as the traditional validation tools to confirm the identity and amount of a protein target. The success is dependent on the availability/quality of the target antibodies and very often resulted in increased cost and lengthy waiting time. Also many commercially available antibodies are not well characterized, and do not provide specific results. In recent years, there is an increasing interest in using Multiple Reaction Monitoring (MRM) methodologies in proteomics particularly in performing relative/absolute quantification of target peptide/protein and post translational modifications (PTMs). Compared to western blot and ELISA, MRM technique allows multiplexing and provide absolute specificity. This technique enables putative biomarkers to be verified/validated before going into the clinical phase, thus addressing the current bottlenecks of biomarker discovery pipeline. Here we would like to introduce the MRM technique for quantification of target proteins, highlighting practical approaches and examples.

Lunch will be provided after the seminar.

*For catering purpose, please register by **12th February 2016** at: <http://goo.gl/forms/AmdWnYK39E>*