

International Lecture Series Disease Biology and Molecular Medicine

ALL WELCOME!



Prof. Shabaz Mohammed

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6 November 2017 19:00 h

Historischer Saal Stadtmuseum Halle

Christian-Wolff-Haus Große Märkerstr. 10 (ca. 100 m from market square)

"Proteomics of Intestinal Adult Stem Cells and Organoids"

Shabaz Mohammed studied chemistry at UMIST (now University of Manchester) and obtained his degree in 1999. For his DPhil, he worked with Simon Gaskell (Manchester) on biological mass spectrometry, albeit the more fundamental side of the topic and defended in 2003. He then worked in Odense, Denmark, with Ole Jensen, on technology development for use in studying post-translation modifications. There, he helped to develop a method that allowed quantitative analysis of phosphorylation, a widely adopted technique. In 2005, he moved to Utrecht University, Netherlands, to continue his research in the field of proteomic technologies with Albert Heck. In 2008, he became an Assistant Professor and started his own group. In 2013, he once again moved and is now an Associate Professor of Proteomics in the Departments of Chemistry and Biochemistry in Oxford. He is also the director of the joint Advanced Proteomics Facility of the Departments of Chemistry and Biochemistry, and the Dunn School of Pathology in Oxford

The accurate measurement of protein expression and modification is essential to understanding the underlying biomolecular determinants of cellular signaling. Therefore, Shabaz is currently developing chromatographic techniques for application in a proteomics environment, for the enrichment of post translational modifications, for characterization and exploitation of electron transfer dissociation for peptide sequencing, for the creation of facile chemical labeling based quantification and for the elucidation of (PTM based) signaling pathways through quantification.

Selected publications

Roversi et al. 2017, **Proc Natl Acad Sci USA** 114, 8544; Burger et al. 2017, **J Cell Biol** 216, 2373; Cristobal et al. 2017, **Cell Rep** 18, 263; Wright et al. 2016, **Science** 354, 597; Cundell et al. 2016, **J Cell Biol** 214, 539; Liko et al. 2016, **Proc Natl Acad Sci USA** 113, 8230; Raj et al. 2016, **Angew Chem Int Ed** 55, 8918.





