



## 9<sup>th</sup> Open Symposium

“Reaching Utopia - The Kaleidoscope of Bioanalysis”

### Biography and Abstract

<b>Session Day 1-01 Towards Utopia</b>	
<b>Title:</b>	LC-MS Bioanalysis: From minutes to seconds
<b>Speaker:</b>	Scott Summerfield - GlaxoSmithKline
<b>Biography</b>	Scott is a senior director and Head of small and large molecule Bioanalysis at GSK. Having completed a PhD and post-doctoral fellowship in proteomics, Scott started in the Pharma industry in 1997. In subsequent years Scott has assumed a number of line and matrix leadership roles covering bioanalysis and portfolio support within drug discovery and development.
<b>Abstract</b>	Sub-minute bioanalytical LC-MS separations are now readily achievable with the current scanning speeds of mass spectrometers (QqQ and TOF) and optimised column/LC systems geometries that realises chromatographic peak widths of less than a second and with minimal peak dispersion. Here we present results from a collaborative effort between Pharma, Academia and instrument manufacturers in order to help develop this approach towards routine use in the mainstream of quantitative bioanalysis. Results from conventional LC-MS methodologies will be compared to rapid separations of multiple component biological sample extracts, where chromatographic run times of over several minutes in duration can be reduced to 30 – 45 seconds with no loss of chromatographic fidelity over the original separation. Opportunities from drug discovery to clinical support will be presented alongside drug monitoring and the potential for multi-dimensional approaches. The current state-of-the-art for coupling LC, column and MS will be presented along with a vision of how this technology could evolve into a new paradigm in automated sample bioanalysis at unparalleled speed.