

Randox Laboratories / Biosystems International Vendor Seminar

Monday, March 8, 12:15 – 1:30 pm

Molly Brown (Lower Level 1), Marriott City Center Hotel

RSVP by sending email to info@biosys-intl.com.

**Plasma Proteome Profiling Using Microarrays with a Monoclonal Antibody Library
(QuantiPlasma™) Directed Against Natural Human Plasma Proteins**

Presenters

William M. Hempel, Ph.D., *Director of Scientific Communications, Biosystems International*

John V. Lamont, MSc., *Chief Scientist, Randox Laboratories*

Proteomic profiling of human plasma by shotgun mass spectrometry is a popular approach for the discovery of novel biomarkers. This approach suffers, however, from limitations in reproducibility and sensitivity due to the wide dynamic range of protein concentration in plasma, often necessitating extensive upfront processing to remove abundant proteins. Furthermore, mass spectrometry based approaches require a costly and extensive infrastructure. Finally, validation of results are often further hampered by the lack of available immuno-affinity reagents.

A viable and economical alternative is the use of monoclonal antibody microarrays directed against natural human plasma proteins. We will present an innovative product QuantiPlasma®, which for the first time offers a turnkey microarray-based solution for protein profiling of human plasma on the Evidence Investigator platform of Randox Laboratories.

QuantiPlasma® libraries are integrated into microarray kits that extend the protein array technology products of Randox Laboratories. The monoclonal antibodies are directed against natural plasma proteins. The use and application of the new proteomic profiling tools will be discussed.