



Dr. Patrick Bennett

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Technological developments in the quantitative visualization of pelvic floor function using imaging and biomechanical devices

Proteomics scientists have developed and applied protein/peptide expertise in developing tools and workflows that can be useful in routine quantitative bioanalysis. Over the last five years, the field of Proteomics has begun using more quantitative techniques. Because of the significant increase in the development of biologics by the pharmaceutical industry, the application of these tools is becoming important. This talk will examine small versus large molecule method characteristics, and what is important in the quantitative analysis of peptides and biologics. Selecting the correct proteolytic peptide is key to the success of the protein Quantitation method. A workflow that can move from protein characterization on a high-resolution, accurate mass LC-MS, or SRM method building and quantitative analysis will be discussed, showing how HR/AM is a promising complementary technique to the SRM experiment in quantitating small molecules, peptides and proteins.

Biography

Patrick has over 25 years experience in pharmaceutical analysis. He started his career with SmithKline Bioscience in 1985 in toxicology/drug testing. From 1987 to 1993, he was a scientist with the Bristol-Myers Company/Bristol-Myers Squibb Department of Metabolism and Pharmacokinetics where he managed a group performing preclinical and clinical bioanalysis using HPLC, GC/MS and LC/MS as well as outsourcing to CRO's. In 1993, he was the first scientist hired at Advanced Bioanalytical Services (now Advion Biosciences) in Ithaca, NY. His role at Advion grew from performing and overseeing day to day laboratory operations to full operational responsibility as Laboratory Director. In 1997, Patrick became a partner with PharmaKnowledge, Inc. This company focused on providing bioanalytical consulting and training for pharmaceutical companies, CRO's and instrument companies that focused on informatics, regulatory compliance, bioanalysis, toxicokinetics and pharmacokinetics. In 1998, PharmaKnowledge, Inc. was acquired by NWT Inc and became part of Tandem Labs. Between 1998 and 2010, Patrick held the positions of Sr. Laboratory Director, General Manager and Vice President in a variety of roles at several of the Tandem Labs laboratories. During this time, he became a recognized innovator in both the CRO and bioanalytical space. His expertise led to the identification of phospholipids as the primary cause of matrix effects in bioanalysis by LC/MS. His focus on method development processes and innovation resulted in the bridging of good science, speed and customer focus. In 2010, Patrick joined Thermo Fisher Scientific as Strategic Marketing Director for Pharma within the Life Sciences Mass Spectrometry group.

Patrick earned a B.S. degree in Toxicology and a M.S. degree in Pharmacology from the College of Pharmacy and Allied Health at St. John's University and an M.B.A in International Marketing from the Martin J. Whitman School of Management at Syracuse University.

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