Cheryl Lichti, PhD

Outstanding Paper of the Year

Cheryl Lichti, PhD, Assistant Professor of Pathology & Immunology in the Division of Immunobiology, is honored for her outstanding paper of the year: Identification of spliced peptides in pancreatic islets uncovers errors leading to false assignments published in *Proteomics*.

Dr. Lichti is a mass spectrometrist who has been studying the structure of autoimmune peptides in diabetes. She was concerned with a number of reports that appeared in the literature reporting on the presence of spliced peptides as the major contributors to autoimmunity and to the MHC class I immunopeptidome in cancer.

In her paper, she made a full analysis of the spliced peptides reported in the literature and concluded that most were wrong. Her observation was of extreme importance because of the claim of the relevance of spliced peptides. In her report, she gives a full explanation of the errors made in the analysis of mass spectrometry data that led to these erroneous conclusions. She also details that a few selected peptides were truly fused peptides, but which had no major impact in diabetic autoimmunity. Needless to say, Dr. Lichti’s observation was controversial, but in the end, most mass spectrometrists completely agreed with her and have accepted her conclusions.

Her observations indicate the importance of careful, detailed analysis of mass spectrometry data. This is a significant contribution that has corrected perceptions that drove unwarranted conclusions while confirming the presence of some true fused peptides.