

## Minireview

- 3105 **Analysis of Major Histocompatibility Complex (MHC) Immunopeptidomes Using Mass Spectrometry**  
*Etienne Caron, Daniel J. Kowalewski, Ching Chiek Koh, Theo Sturm, Heiko Schuster, and Ruedi Aebersold*

## Research

- 3118 **Positive Mode LC-MS/MS Analysis of Chondroitin Sulfate Modified Glycopeptides Derived from Light and Heavy Chains of The Human Inter- $\alpha$ -Trypsin Inhibitor Complex**  
[S] *Alejandro Gomez Toledo, Jonas Nilsson, Fredrik Noborn, Carina Sihlbom, and Göran Larson*
- 3132 **A Degenerate Cohort of Yeast Membrane Trafficking DUBs Mediates Cell Polarity and Survival**  
[S] *Janel R. Beckley, Jun-Song Chen, Yanling Yang, Junmin Peng, and Kathleen L. Gould,*
- 3142 **Top-down and Middle-down Protein Analysis Reveals that Intact and Clipped Human Histones Differ in Post-translational Modification Patterns**  
[S] *Andrey Tvardovskiy, Krzysztof Wrzesinski, Simone Sidoli, Stephen J. Fey, Adelina Rogowska-Wrzesinska, and Ole N. Jensen*
- 3154 **Integrated Metabolomics, Transcriptomics and Proteomics Identifies Metabolic Pathways Affected by *Anaplasma phagocytophilum* Infection in Tick Cells**  
[S] *Margarita Villar, Nieves Ayllón, Pilar Alberdi, Andrés Moreno, María Moreno, Raquel Tobes, Lourdes Mateos-Hernández, Sabine Weisheit, Lesley Bell-Sakyi, and José de la Fuente*
- 3173 **Novel Molecular Insights into Classical and Alternative Activation States of Microglia as Revealed by Stable Isotope Labeling by Amino Acids in Cell Culture (SILAC)-based Proteomics**  
[S] ✎ *Harris Bell-Temin, Ashley E. Culver-Cochran, Dale Chaput, Christina M. Carlson, Melanie Kuehl, Brant R. Burkhardt, Paula C. Bickford, Bin Liu, and Stanley M. Stevens Jr.*
- 3185 **Aberrant Expression of *Dynein light chain 1 (DYNLT1)* is Associated with Human Male Factor Infertility**  
[S] *Sivankutty Indu, Sreeja C. Sekhar, Jeeva Sengottaiyan, Anil Kumar, Sathy M. Pillai, Malini Laloraya, and Pradeep G. Kumar*
- 3196 **Dithiothreitol (DTT) Acts as a Specific, UV-inducible Cross-linker in Elucidation of Protein-RNA Interactions**  
[S] *Uzma Zaman, Florian M. Richter, Romina Hofele, Katharina Kramer, Timo Sachsenberg, Oliver Kohlbacher, Christof Lenz, and Henning Urlaub*
- 3211 **Evidence of Highly Conserved  $\beta$ -Crystallin Disulfidome that Can be Mimicked by *In Vitro* Oxidation in Age-related Human Cataract and Glutathione Depleted Mouse Lens**  
[S] *Xingjun Fan Sheng Zhou, Benlian Wang, Grant Hom, Minfei Guo, Binbin Li, Jing Yang, Dennis Vaysburg, and Vincent M Monnier*

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On the cover: *Anaplasma phagocytophilum* in infected *Ixodes scapularis* ISE6 tick cells. The ISE6 tick cells constitute a model for hemocytes involved in pathogen infection and immune response. The ISE6 cells were inoculated with *A. phagocytophilum* (human NY18 isolate, arrows). For details, see the article by Margarita Villar, *et al.*, pages 3154–3172.

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- 3224 **An Integrated Multiomics Approach to Identify Candidate Antigens for Serodiagnosis of Human Onchocerciasis**  
 [S] ✎  
*Samantha N. McNulty, Bruce A. Rosa, Peter U. Fischer, Jeanne M. Rumsey, Petra Erdmann-Gilmore, Kurt C. Curtis, Sabine Specht, R. Reid Townsend, Gary J. Weil, and Makedonka Mitreva*
- 3234 **Matrix Metalloproteinase 10 Degradomics in Keratinocytes and Epidermal Tissue Identifies Bioactive Substrates With Pleiotropic Functions**  
 [S]  
*Pascal Schlage, Tobias Kockmann, Fabio Sabino, Jayachandran N. Kizhakkedathu, and Ulrich auf dem Keller*
- 3247 **Rosuvastatin Alters the Proteome of High Density Lipoproteins: Generation of alpha-1-antitrypsin Enriched Particles with Anti-inflammatory Properties**  
 [S]  
*Scott M. Gordon, Benjamin McKenzie, Georgina Kemehe, Maureen Sampson, Shira Perl, Neal S. Young, Michael B. Fessler, and Alan T. Remaley*
- 3258 **The Extracellular Vesicles of the Helminth Pathogen, *Fasciola hepatica*: Biogenesis Pathways and Cargo Molecules Involved in Parasite Pathogenesis**  
 [S] ✎  
*Krystyna Cwiklinski, Eduardo de la Torre-Escudero, Maria Trelis, Dolores Bernal, Philippe J. Dufresne, Gerard P. Brennan, Sandra O'Neill, Jose Tort, Steve Paterson, Antonio Marcilla, John P. Dalton, and Mark W. Robinson*
- 3274 **Relevance Rank Platform (RRP) for Functional Filtering of High Content Protein-Protein Interaction Data**  
 [S]  
*Yuba Raj Pokharel, Jani Saarela, Agnieszka Szwajda, Christian Rupp, Anne Rokka, Shibendra Kumar Lal Karna, Kaisa Teittinen, Garry Corthals, Olli Kallioniemi, Krister Wennerberg, Tero Aittokallio, and Jukka Westermarck*
- 3284 **Temporal Phosphoproteome Dynamics Induced by an ATP Synthase Inhibitor Citreoviridin**  
 [S]  
*Chia-Wei Hu, Chia-Lang Hsu, Yu-Chao Wang, Yasushi Ishihama, Wei-Chi Ku, Hsuan-Cheng Huang, and Hsueh-Fen Juan*

## Technological Innovation and Resources

- 3299 **The 2012/2013 ABRF Proteomic Research Group Study: Assessing Longitudinal Intralaboratory Variability in Routine Peptide Liquid Chromatography Tandem Mass Spectrometry Analyses**  
 [S]  
*Keiryn L. Bennett, Xia Wang, Cory E. Bystrom, Matthew C. Chambers, Tracy M. Andacht, Larry J. Dangott, Félix Elortza, John Leszyk, Henrik Molina, Robert L. Moritz, Brett S. Phinney, J. Will Thompson, Maureen K. Bunger, and David L. Tabb*

## Additions and Corrections

- 3310 **Quantitative profiling of protein tyrosine kinases in human cancer cell lines by multiplexed parallel reaction monitoring assays**  
*Hye-Jung Kim, De Lin, Ming Li, and Daniel C. Liebler*

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