

## Review

- 1097 **Inference and Validation of Protein Identifications**  
*Manfred Claassen*

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- 1105 **Quantitative Proteomics Reveals Regulation of Karyopherin Subunit Alpha-2 (KPNA2) and Its Potential Novel Cargo Proteins in Nonsmall Cell Lung Cancer**  
[S] *Chun-I Wang, Kun-Yi Chien, Chih-Liang Wang, Hao-Ping Liu, Chia-Chen Cheng, Yu-Sun Chang, Jau-Song Yu, and Chia-Jung Yu*
- 1123 **Proteomic and Transcriptomic Profiling of *Staphylococcus aureus* Surface LPXTG-proteins: Correlation with agr Genotypes and Adherence Phenotypes**  
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- 1140 **Quantitative Phosphoproteomic Analysis of Soybean Root Hairs Inoculated with *Bradyrhizobium japonicum***  
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- 1156 **Complementary Proteome and Transcriptome Profiling in Phosphate-deficient Arabidopsis Roots Reveals Multiple Levels of Gene Regulation**  
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- 1167 **Integrative Proteomic Profiling of Protein Activity and Interactions Using Protein Arrays**  
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- 1177 **Profiling Lipid-protein Interactions Using Nonquenched Fluorescent Liposomal Nanovesicles and Proteome Microarrays**  
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- 1191 **A Novel Method for the Simultaneous Enrichment, Identification, and Quantification of Phosphopeptides and Sialylated Glycopeptides Applied to a Temporal Profile of Mouse Brain Development**  
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- 1203 **Diversity in the Protein N-Glycosylation Pathways Within the *Campylobacter* Genus**  
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On the cover: Proteomics of the digestive fluid from the Venus flytrap plant sheds light on the digestion mechanism in carnivorous plant. The Venus flytrap was one of Charles Darwin's favorite plants and the picture in the right corner is an illustration from his book "Insectivorous Plants" from 1875 (Reproduced with permission from John van Wyhe ed. 2002 - *The Complete Work of Charles Darwin Online*, <http://darwin-online.org.uk/>). For details, see article by Waltraud X. Schultze, et al., pages 1306–1319.

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- 1220 **Aurora B-dependent Regulation of Class IIa Histone Deacetylases by Mitotic Nuclear Localization Signal Phosphorylation**  
[S] *Amanda J. Guise, Todd M. Greco, Irene Y. Zhang, Fang Yu, and Ileana M. Cristea*
- 1230 **Interactome-wide Analysis Identifies End-binding Protein 1 as a Crucial Component for the Speck-like Particle Formation of Activated Absence in Melanoma 2 (AIM2) Inflammasomes**  
[S] *Li-Jie Wang, Chia-Wei Hsu, Chiu-Chin Chen, Ying Liang, Lih-Chyang Chen, David M. Ojcius, Ngan-Ming Tsang, Chuen Hsueh, Chih-Ching Wu, and Yu-Sun Chang*
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- 1320 **Secretomic Analysis Identifies Alpha-1 Antitrypsin (A1AT) as a Required Protein in Cancer Cell Migration, Invasion, and Pericellular Fibronectin Assembly for Facilitating Lung Colonization of Lung Adenocarcinoma Cells**  
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- 1378 **Adenoviral E4 Gene Stimulates Secretion of Pigmental Epithelium Derived Factor (PEDF) that Maintains Long-term Survival of Human Glomerulus-derived Endothelial Cells**  
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- 1430 **Native Tandem and Ion Mobility Mass Spectrometry Highlight Structural and Modular Similarities in Clustered-Regularly-Interspaced Shot-Palindromic-Repeats (CRISPR)-associated Protein Complexes From *Escherichia coli* and *Pseudomonas aeruginosa***  
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- 1475 **Parallel Reaction Monitoring for High Resolution and High Mass Accuracy Quantitative, Targeted Proteomics**  
*Amelia C. Peterson, Jason D. Russell, Derek J. Bailey, Michael S. Westphall, and Joshua J. Coon*
- 1489 **A Method for Large-scale Identification of Protein Arginine Methylation**  
*Thomas Uhlmann, Vincent L. Geoghegan, Benjamin Thomas, Gabriela Ridlova, David C. Trudgian, and Oreste Acuto*
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*Peter Henriksen, Sebastian A. Wagner, Brian T. Weinert, Satyan Sharma, Giedrė Bačinskaja, Michael Rehman, André H. Juffer, Tobias C. Walther, Michael Lisby, and Chunaram Choudhary*