



## Table of Contents

This issue and full Instructions to Authors are available in electronic form at <http://www.mcponline.org>

### Research

- 825 **A Web-based Tool for *in Silico* Biomarker Discovery Based on Tissue-specific Protein Profiles in Normal and Cancer Tissues**  
[S] Erik Björling, Cecilia Lindskog, Per Oksvold, Jerker Linné, Caroline Kampf, Sophia Hober, Mathias Uhlén, and Fredrik Pontén
- 845 **Quantitative Proteomics Reveals Regulation of Dynamic Components within TATA-binding Protein (TBP) Transcription Complexes**  
[S] Florence Mousson, Annemieke Kolkman, W. W. M. Pim Pijnappel, H. Th. Marc Timmers, and Albert J. R. Heck
- 853 **Eight-channel iTRAQ Enables Comparison of the Activity of Six Leukemogenic Tyrosine Kinases**  
[S] Andrew Pierce, Richard D. Unwin, Caroline A. Evans, Stephen Griffiths, Louise Carney, Liqun Zhang, Ewa Jaworska, Chia-Fang Lee, David Blinco, Michal J. Okoniewski, Crispin J. Miller, Danny A. Bitton, Elaine Spooncer, and Anthony D. Whetton
- 864 **Targets of Tyrosine Nitration in Diabetic Rat Retina**  
[S] Xianquan Zhan, Yunpeng Du, John S. Crabb, Xiaorong Gu, Timothy S. Kern, and John W. Crabb
- 875 **Overproduction or Absence of the Periplasmic Protease DegP Severely Compromises Bacterial Growth in the Absence of the Dithiol:Disulfide Oxidoreductase DsbA**  
[S] Özlem Önder, Serdar Turkarslan, David Sun, and Fevzi Daldal
- 891 **Proteomics and Glycomics Analyses of N-Glycosylated Structures Involved in *Toxoplasma gondii*-Host Cell Interactions**  
[S] Sylvain Fauquenoy, Willy Morelle, Agnès Hovasse, Audrey Bednarczyk, Christian Slomianny, Christine Schaeffer, Alain Van Dorsselaer, and Stanislas Tomavo
- 911 **Trafficking and Postsecretory Events Responsible for the Formation of Secreted Human Salivary Peptides: A Proteomics Approach**  
Irene Messana, Tiziana Cabras, Elisabetta Pisano, Maria Teresa Sanna, Alessandra Olianias, Barbara Manconi, Mariagiuseppina Pellegrini, Gaetano Paludetti, Emanuele Scarano, Antonella Fiorita, Stefania Agostino, Alessia M. Contucci, Lea Calò, Pasqualina M. Picciotti, Armando Manni, Anders Bennick, Alberto Vitali, Chiara Fanali, Rosanna Inzitari, and Massimo Castagnola
- 927 **Relative Protein Quantification by Isobaric SILAC with Immonium Ion Splitting (ISIS)**  
[S] Mara Colzani, Frédéric Schütz, Alexandra Potts, Patrice Waridel, and Manfredo Quadroni
- 938 **Characterization of Anaerobic Catabolism of *p*-Coumarate in *Rhodopseudomonas palustris* by Integrating Transcriptomics and Quantitative Proteomics**  
[S] Chongle Pan, Yasuhiro Oda, Patricia K. Lankford, Bing Zhang, Nagiza F. Samatova, Dale A. Pelletier, Caroline S. Harwood, and Robert L. Hettich

On the cover, a dark field image of 5-day-old zebrafish (*Danio rerio*) embryos. Protein expression was analyzed by shotgun proteomics and on two-dimensional gels at this stage and at 3 days post-fertilizations. Roughly 15% of all detected proteins were derived from hypothetical or predicted gene models or were entirely unannotated. For details, see the article by Lucitt *et al.*, pages 981–994.

[S] Online version of this article contains supplemental material.

- 949 **Proteomics Characterization of the Cytotoxicity Mechanism of Ganoderic Acid D and Computer-automated Estimation of the Possible Drug Target Network**  
[S] *Qing-Xi Yue, Zhi-Wei Cao, Shu-Hong Guan, Xiao-Hui Liu, Lin Tao, Wan-Ying Wu, Yi-Xue Li, Peng-Yuan Yang, Xuan Liu, and De-An Guo*
- 962 **Comparison of Mascot and X!Tandem Performance for Low and High Accuracy Mass Spectrometry and the Development of an Adjusted Mascot Threshold**  
[S] *Markus Brosch, Sajani Swamy, Tim Hubbard, and Jyoti Choudhary*
- 971 **Hydrophilic Interaction Chromatography Reduces the Complexity of the Phosphoproteome and Improves Global Phosphopeptide Isolation and Detection**  
[S] *Dean E. McNulty and Roland S. Annan*
- 981 **Analysis of the Zebrafish Proteome during Embryonic Development**  
[S] *Margaret B. Lucitt, Thomas S. Price, Angel Pizarro, Weichen Wu, Anastasia K. Yocum, Christoph Seiler, Michael A. Pack, Ian A. Blair, Garret A. FitzGerald, and Tilo Grosser*
- 995 **Characterization of Domain Interfaces in Monomeric and Dimeric ATP Synthase**  
*Ilka Wittig, Jean Velours, Rosemary Stuart, and Hermann Schägger*

## Hupo Views

- 1005 **The HUPO Industrial Advisory Board**  
*Jan van Oostrum*

## Information

- 1006 **Calendar**