Table of Contents

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

Editorial

1779  
**Clinical Proteomics**  
*Julio E. Celis and José M. A. Moreira, Guest Editors*

Biomarkers of Diseases & Conditions

Cancer

Review

1780  
**Proteomic Contributions to Personalized Cancer Care**  

Research

1795  
**15-Prostaglandin Dehydrogenase Expression Alone or in Combination with ACSM1 Defines a Subgroup of the Apocrine Molecular Subtype of Breast Carcinoma**  
*Julio E. Celis, Pavel Gromov, Teresa Cabezon, Jose M. A. Moreira, Esbern Friis, Karin Jirstrom, Antonio Llombart-Bosch, Vera Timmermans-Wielenga, Fritz Rank, and Irina Gromova*

1810  
**Proteomics Identification of Cyclophilin A as a Potential Prognostic Factor and Therapeutic Target in Endometrial Carcinoma**  
*Zhengyu Li, Xia Zhao, Shujun Bai, Zhi Wang, Lijuan Chen, Yuquan Wei, and Canhua Huang*

Cardiovascular Disease

Review

1824  
**The Role of Proteomics in Clinical Cardiovascular Biomarker Discovery**  
*Alistair V. G. Edwards, Melanie Y. White, and Stuart J. Cordwell*

Research

1838  
**Unraveling Molecular Complexity of Phosphorylated Human Cardiac Troponin I by Top Down Electron Capture Dissociation/Electron Transfer Dissociation Mass Spectrometry**  
*Vlad Zabrouskov, Ying Ge, Jae Schwartz, and Jeffery W. Walker*

On the cover, incoming patients provide detailed medical histories and consent for research protocols during the process of diagnosis and disease staging. Specimen banking under appropriate conditions is required for translational research, including proteome analysis. Discoveries can be implemented in clinical care to direct the use of different therapies and customize treatment regimens to each patient. For details, see the article by Koomen et al., pages 1780–1794.

[S] Online version of this article contains supplemental material.  
[×] Author’s Choice
Urogenital and Non-urogenital Diseases
Review
1850  Urogenital and Non-urogenital Diseases
Stéphane Decramer, Anne Gonzalez de Peredo, Benjamin Breuil, Harald Mischak, Bernard Monsarrat, Jean-Loup Bascands, and Joost P. Schanstra

Infection in Premature Neonates
Research
1863  Identification of Diagnostic Biomarkers for Infection in Premature Neonates

Infertility
Review
1876  Sperm Chromatin: Fertile Grounds for Proteomic Discovery of Clinical Tools
Tammy F. Wu and Diana S. Chu

Pathway Proteomics & Post-translational Modifications
Review
1887  Chemical and Pathway Proteomics: Powerful Tools for Oncology Drug Discovery and Personalized Health Care
Ulrich Kruse, Marcus Bantscheff, Gerard Drewes, and Carsten Hopf

Research
1902  Laser Capture Microdissection and Protein Microarray Analysis of Human Non-small Cell Lung Cancer: Differential Epidermal Growth Factor Receptor (EGFR) Phosphorylation Events Associated with Mutated EGFR Compared with Wild Type
Amy J. VanMeter, Adrianna S. Rodriguez, Elise D. Bowman, Jin Jen, Curtis C. Harris, Jianghong Deng, Valerie S. Calvert, Alessandra Silvestri, Claudia Fredolini, Vikas Chandhoke, Emanuel F. Petricoin III, Lance A. Liotta, and Virginia Espina

Review
1925  Metadegradomics: Toward in Vivo Quantitative Degradomics of Proteolytic Post-translational Modifications of the Cancer Proteome
Alain Doucet, Georgina S. Butler, David Rodríguez, Anna Prudova, and Christopher M. Overall

Methodologies
Research
1952  Accurate Inclusion Mass Screening: A Bridge from Unbiased Discovery to Targeted Assay Development for Biomarker Verification
Jacob D. Jaffe, Hasmik Keshishian, Betty Chang, Theresa A. Addona, Michael A. Gillette, and Steven A. Carr

1963  Enhanced Detection of Low Abundance Human Plasma Proteins Using a Tandem IgY12-SuperMix Immunoaffinity Separation Strategy
Wei-Jun Qian, David T. Kaleta, Brianne O. Petritis, Hongliang Jiang, Tao Liu, Xu Zhang, Heather M. Mottaz, Susan M. Varnum, David G. Camp II, Lei Huang, Xiangming Fang, Wei-Wei Zhang, and Richard D. Smith
1974 Use of an Immunoaffinity-Mass Spectrometry-based Approach for the Quantification of Protein Biomarkers from Serum Samples of Lung Cancer Patients
Gordon R. Nicoll, Mark Han, Jun Kim, Charles E. Birse, Erin Brand, Anh Nguyen, Mehdi Mesri, William FitzHugh, Patrick Kaminker, Paul A. Moore, Steven M. Ruben, and Tao He

1983 A Multiplexed Quantitative Strategy for Membrane Proteomics: Opportunities for Mining Therapeutic Targets for Autosomal Dominant Polycystic Kidney Disease
Chia-Li Han, Chih-Wei Chien, Wen-Cheng Chen, Yet-Ran Chen, Chien-Peng Wu, Hung Li, and Yu-Ju Chen

1998 A Portrait of Tissue Phosphoprotein Stability in the Clinical Tissue Procurement Process
Virginia Espina, Kirsten H. Edmiston, Michael Heiby, Mariaelena Pierobon, Manuela Sciro, Barbara Merritt, Stacey Banks, Jianghong Deng, Amy J. VanMeter, David H. Geho, Lucia Pastore, Joel Sennesh, Emanuel F. Petricoin III, and Lance A. Liotta

Resources
Review
2019 A Genecentric Human Protein Atlas for Expression Profiles Based on Antibodies
Lisa Berglund, Erik Björling, Per Oksvold, Linn Fagerberg, Anna Asplund, Cristina Al-Khalili Szigyarto, Anja Persson, Jenny Ottosson, Henrik Wernérus, Peter Nilsson, Emma Lundberg, Åsa Sivertsson, Sanjay Navani, Kenneth Wester, Caroline Kampf, Sophia Hober, Fredrik Pontén, and Mathias Uhlén

Research
2028 Antibodypedia, a Portal for Sharing Antibody and Antigen Validation Data
Erik Björling and Mathias Uhlén

Review
2038 Human Proteinpedia as a Resource for Clinical Proteomics
Suresh Mathivanan and Akhilesh Pandey

Research
2048 Targeting the Human Cancer Pathway Protein Interaction Network by Structural Genomics
Yuanpeng Janet Huang, Dehua Hang, Long Jason Lu, Liang Tong, Mark B. Gerstein, and Gaetano T. Montelione

Review
2061 Banking of Biological Fluids for Studies of Disease-associated Protein Biomarkers
Anne-Sofie Schrohl, Sidse Würtz, Elise Kohn, Rosamonde E. Banks, Hans Jørgen Nielsen, Fred C. G. J. Sweep, and Nils Brünner

HUPO Views
2067 Minimum Reporting Guidelines for Proteomics Released by the Proteomics Standards Initiative
Andrew R. Jones and Sandra Orchard

Information
2069 Calendar