

## Editorial

- 455 **Minireviews Revisited**  
*Ralph A. Bradshaw and A. L. Burlingame*

## Minireview

- 456 **Post-translational Modifications Regulate Class IIa Histone Deacetylase (HDAC) Function in Health and Disease**  
[S] *Rommel A. Mathias, Amanda J. Guise, and Ileana M. Cristea*

## Research

- 471 **Secretome Analysis of an Osteogenic Prostate Tumor Identifies Complex Signaling Networks Mediating Cross-talk of Cancer and Stromal Cells Within the Tumor Microenvironment**  
[S] *Yu-Chen Lee, Martina Srajer Gajdosik, Djuro Josic, James G. Clifton, Christopher Logothetis, Li-Yuan Yu-Lee, Gary E. Gallick, Sankar N. Maity, and Sue-Hwa Lin*
- 484 **Integrating Phosphoproteome and Transcriptome Reveals New Determinants of Macrophage Multinucleation**  
[S] ✎ *Maxime Rotival, Jeong-Hun Ko, Prashant K. Srivastava, Audrey Kerloc'h, Alex Montoya, Claudio Mauro, Peter Faull, Pedro R. Cutillas, Enrico Petretto, and Jacques Behmoaras*
- 499 **The Neddylation-Cullin 2-RBX1 E3 Ligase Axis Targets Tumor Suppressor RhoB for Degradation in Liver Cancer**  
[S] *Junfeng Xu, Lihui Li, Guangyang Yu, Wantao Ying, Qiang Gao, Wenjuan Zhang, Xianyu Li, Chen Ding, Yanan Jiang, Dongping Wei, Shengzhong Duan, Qunying Lei, Peng Li, Tieliu Shi, Xiaohong Qian, Jun Qin, and Lijun Jia*
- 510 **Antibody Profiling of Bipolar Disorder Using *Escherichia coli* Proteome Microarrays**  
*Po-Chung Chen, Guan-Da Syu, Kuo-Hsuan Chung, Yu-Hsuan Ho, Feng-Hsiang Chung, Pao-Huan Chen, Jyun-Mu Lin, Yi-Wen Chen, Shang-Ying Tsai, and Chien-Sheng Chen*
- 519 **RTS,S Vaccination Is Associated With Serologic Evidence of Decreased Exposure to *Plasmodium falciparum* Liver- and Blood-Stage Parasites**  
[S] *Joe J. Campo, John J. Aponte, Jeff Skinner, Rie Nakajima, Douglas M. Molina, Li Liang, Jahit Sacarlal, Pedro L. Alonso, Peter D. Crompton, Phillip L. Felgner, and Carlota Dobaño*
- 532 **New Host Factors Important for Respiratory Syncytial Virus (RSV) Replication Revealed by a Novel Microfluidics Screen for Interactors of Matrix (M) Protein**  
[S] *Sarit Kipper, Samar Hamad, Leon Caly, Dorit Avrahami, Eran Bacharach, David A. Jans, Doron Gerber, and Monika Bajorek*

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On the cover: RAD6 is a ubiquitin E2 protein with roles in a number of different biological processes. We identify a new E2-E3 complex consisting of RAD6-KCMF1-UBR4, which appears to target N-end rule substrates to the lysosome. *In vivo* and *in vitro* interaction mapping, combined with NMR analysis (*background*; KCMF1-RAD6 HSQC binding data), demonstrate that KCMF1 acts as a scaffold to recruit RAD6 to UBR4. We also report that two RAD6 point mutants (R7W and R11Q) found in X-linked intellectual disability (XLID) patients specifically lose the interaction with KCMF1-UBR4, but not other RAD6-associated E3 ligases (shown is the RAD6 structure PDB 2Y4W; residues R7 and R11 highlighted in dark blue). For details, see the article by Jenny H. Hong *et al.*, pages 674–685.

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- 544 **Cerebrospinal Fluid Peptides as Potential Parkinson Disease Biomarkers: A Staged Pipeline for Discovery and Validation**  
 [S] *Min Shi, James Movius, Romel Dator, Patrick Aro, Yanchun Zhao, Catherine Pan, Xiangmin Lin, Theo K. Bammler, Tessandra Stewart, Cyrus P. Zabetian, Elaine R. Peskind, Shu-Ching Hu, Joseph F. Quinn, Douglas R. Galasko, and Jing Zhang*
- 556 **Quantitative Phosphoproteomics of the Ataxia Telangiectasia-Mutated (ATM) and Ataxia Telangiectasia-Mutated and Rad3-related (ATR) Dependent DNA Damage Response in *Arabidopsis thaliana***  
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- 572 **The Proteome and Lipidome of *Synechocystis* sp. PCC 6803 Cells Grown under Light-Activated Heterotrophic Conditions**  
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