

Research

- 512 **Comparative Analysis of Mitochondrial N-Termini from Mouse, Human, and Yeast**
[S] Sarah E. Calvo, Olivier Julien, Karl R. Clauser, Hongying Shen, Kimberli J. Kamer, James A. Wells, and Vamsi K. Mootha
- 524 **Unlocking Cancer Glycomes from Histopathological Formalin-fixed and Paraffin-embedded (FFPE) Tissue Microdissections**
[S] Hannes Hinneburg, Petra Korać, Falko Schirmeister, Slavko Gasparov, Peter H. Seeberger, Vlatka Zoldoš, and Daniel Kolarich
- 537 **Sex-Specific Biology of the Human Malaria Parasite Revealed from the Proteomes of Mature Male and Female Gametocytes**
[S] Jun Miao, Zhao Chen, Zenglei Wang, Sony Shrestha, Xiaolian Li, Runze Li, and Liwang Cui
- 552 **Melt With This Kiss: Paralyzing and Liquefying Venom of The Assassin Bug *Pristhesancus plagipennis* (Hemiptera: Reduviidae)**
[S] Andrew A. Walker, Bruno Madio, Jiayi Jin, Eivind A. B. Undheim, Bryan G. Fry, and Glenn F. King
- 567 **Comparative Monomethylarginine Proteomics Suggests that Protein Arginine Methyltransferase 1 (PRMT1) is a Significant Contributor to Arginine Monomethylation in *Toxoplasma gondii***
[S] Rama R. Yakubu, Natalie C. Silmon de Monerri, Edward Nieves, Kami Kim, and Louis M. Weiss
- 581 **An Anatomically Resolved Mouse Brain Proteome Reveals Parkinson Disease-relevant Pathways**
[S] Sung Yun Jung, Jong Min Choi, Maxime W. C. Rousseaux, Anna Malovannaya, Jean J. Kim, Joachim Kutzera, Yi Wang, Yin Huang, Weimin Zhu, Suman Maity, Huda Yahya Zoghbi, and Jun Qin
- 594 **Clustered, Regularly Interspaced Short Palindromic Repeats (CRISPR)/Cas9-coupled Affinity Purification/Mass Spectrometry Analysis Revealed a Novel Role of Neurofibromin in mTOR Signaling**
[S] Xu Li, Min Gao, Jong Min Choi, Beom-Jun Kim, Mao-Tian Zhou, Zhen Chen, Antrix N. Jain, Sung Yun Jung, Jingsong Yuan, Wenqi Wang, Yi Wang, and Junjie Chen
- 608 **Effects of ErbB2 Overexpression on the Proteome and ErbB Ligand-specific Phosphosignaling in Mammary Luminal Epithelial Cells**
[S] ✂ Jenny Worthington, Georgia Spain, and John F. Timms
- 622 **Comparative Proteomics of Purified Pathogen Vacuoles Correlates Intracellular Replication of *Legionella pneumophila* with the Small GTPase Ras-related protein 1 (Rap1)**
[S] Johanna Schmölders, Christian Manske, Andreas Otto, Christine Hoffmann, Bernhard Steiner, Amanda Welin, Dörte Becher, and Hubert Hilbi
- 642 **The Human Leukocyte Antigen (HLA)-B27 Peptidome *in Vivo*, in Spondyloarthritis-susceptible HLA-B27 Transgenic Rats and the Effect of Erap1 Deletion**
[S] Eilon Barnea, Dganit Melamed Kadosh, Yael Haimovich, Nimman Satumtira, Martha L. Dorris, Mylinh T. Nguyen, Robert E. Hammer, Tri M. Tran, Robert A. Colbert, Joel D. Taurog, and Arie Admon

On the cover: Laser Capture Microdissection allows isolation of distinct morphological tissue features for highly sensitive and selective N- and O-glycomics analyses, opening new possibilities to study disease associated glycan features from down to ≈1000 cells. For details, see the article by Hannes Hinneburg, *et al.*, pages 524–536.

- 663 **Time-resolved Phosphoproteome Analysis of Paradoxical RAF Activation Reveals Novel Targets of ERK**
[S] *Peter Kubiniok, Hugo Lavoie, Marc Therrien, and Pierre Thibault*
- 680 **Mapping Atheroprotective Functions and Related Proteins/Lipoproteins in Size Fractionated Human Plasma**
[S] *Debi K. Swertfeger, Hailong Li, Sandra Rebholz, Xiaoting Zhu, Amy S. Shah, W. Sean Davidson, and L. Jason Lu*

Technological Innovation and Resources

- 694 **Loss-less Nano-fractionator for High Sensitivity, High Coverage Proteomics**
[S] ✎ *Nils A. Kulak, Philipp E. Geyer, and Matthias Mann*

AUTHOR INDEX

- Admon, Arie, 642
- Barnea, Eilon, 642
Becher, Dörte, 622
- Calvo, Sarah E., 512
Chen, Junjie, 594
Chen, Zhao, 537
Chen, Zhen, 594
Choi, Jong Min, 581, 594
Clauser, Karl R., 512
Colbert, Robert A., 642
Cui, Liwang, 537
- Dorris, Martha L., 642
- Fry, Bryan G., 552
- Gao, Min, 594
Gasparov, Slavko, 524
Geyer, Philipp E., 694
- Haimovich, Yael, 642
Hammer, Robert E., 642
Hilbi, Hubert, 622
Hinneburg, Hannes, 524
Hoffmann, Christine, 622
Huang, Yin, 581
- Jain, Antrix N., 594
Jason Lu, L., 680
Jin, Jiayi, 552
Julien, Olivier, 512
Jung, Sung Yun, 581, 594
- Kamer, Kimberli J., 512
Kim, Beom-Jun, 594
Kim, Kami, 567
Kim, Jean J., 581
King, Glenn F., 552
Kolarich, Daniel, 524
Korać, Petra, 524
Kubiniok, Peter, 663
Kulak, Nils A., 694
Kutzera, Joachim, 581
- Lavoie, Hugo, 663
Li, Hailong, 680
Li, Runze, 537
Li, Xiaolian, 537
Li, Xu, 594
- Madio, Bruno, 552
Malovannaya, Anna, 581
- Maity, Suman, 581
Mann, Matthias, 694
Manske, Christian, 622
Melamed Kadosh, Dganit, 642
Miao, Jun, 537
Mootha, Vamsi K., 512
- Nguyen, Mylinh T., 642
Nieves, Edward, 567
- Otto, Andreas, 622
- Qin, Jun, 581
- Rebholz, Sandra, 680
Rousseaux, Maxime W. C., 581
- Satumtira, Nimman, 642
Schirmeister, Falko, 524
Schmölders, Johanna, 622
Sean Davidson, W., 680
Seeberger, Peter H., 524
Shah, Amy S., 680
Shen, Hongying, 512
Shrestha, Sony, 537
Silmon de Monerri, Natalie C., 567
Steiner, Bernhard, 622
Spain, Georgia, 608
Swertfeger, Debi K., 680
- Taurog, Joel D., 642
Therrien, Marc, 663
Thibault, Pierre, 663
Timms, John F., 608
Tran, Tri M., 642
- Undheim, Eivind A. B., 552
- Walker, Andrew A., 552
Wang, Wenqi, 594
Wang, Yi, 581, 594
Wang, Zenglei, 537
Weiss, Louis M., 567
Welin, Amanda, 622
Wells, James A., 512
Worthington, Jenny, 608
- Yahya Zoghbi, Huda, 581
Yakubu, Rama R., 567
Yuan, Jingsong, 594
- Zhou, Mao-Tian, 594
Zhu, Weimin, 581
Zhu, Xiaoting, 680
Zoldoš, Vlatka, 524