Molecular Omics
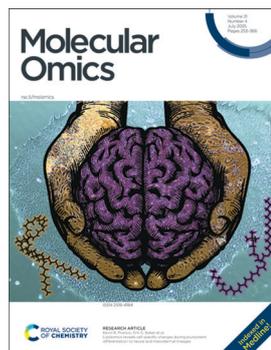
Research and reviews in omic sciences, including genomics, proteomics, transcriptomics, metabolomics, glycomics and lipidomics

rsc.li/molomics

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.
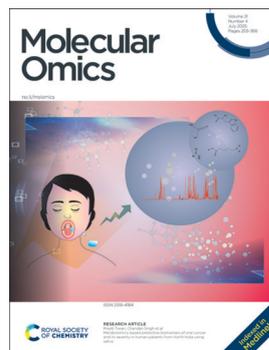
IN THIS ISSUE

Cover
See Kevin R. Francis, Erin S. Baker *et al.*, pp. 259–269.
Image contains elements licenced from Adobe Stock contributor Satoru Sketches under the Adobe Education License. Image reproduced by permission of Haley Jostes and Erin Baker from *Mol. Omics*, 2025, **21**, 259.
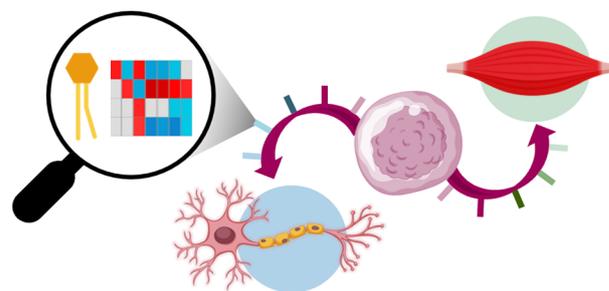
Inside cover
See Preeti Tiwari, Chandan Singh *et al.*, pp. 270–281.
Image reproduced by permission of Rahul Yadav, Vyomika Bansal, Anamika Singh, Neeraj Sinha, Preeti Tiwari and Chandan Singh from *Mol. Omics*, 2025, **21**, 270.
Cover image designed by Rahul Yadav. Conceptualisation by Dr Preeti Tiwari and Dr Chandan Singh.

RESEARCH ARTICLES

259

Lipidomics reveals cell specific changes during pluripotent differentiation to neural and mesodermal lineages
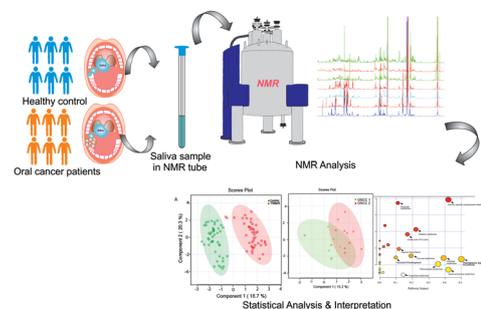
Melanie T. Odenkirk, Haley C. Jostes, Kevin R. Francis* and Erin S. Baker*

270

Metabolomics-based predictive biomarkers of oral cancer and its severity in human patients from North India using saliva

Rahul Yadav, Vyomika Bansal, Anamika Singh, Neeraj Sinha, Preeti Tiwari* and Chandan Singh*

Royal Society of Chemistry approved training courses

Explore your options.
Develop your skills.
Discover learning
that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members **get at least 10% off**

Visit **rsc.li/cpd-training**

SAVE 10%

Registered charity number: 207890

RESEARCH ARTICLES
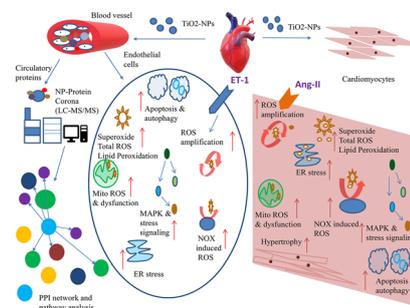
282

Human circulatory proteome interaction, oxidative stress-associated signalling and cardiovascular implications during titanium dioxide nanoparticle (TiO$_2$-NP) exposure
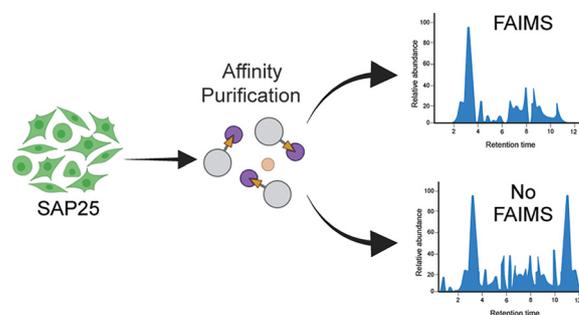
Gobichettipalayam Balasubramaniam Maadurshni, Balamurali Mahalakshmi, Manikandan Nagarajan and Jeganathan Manivannan*

303

Analysis of FAIMS for the study of affinity-purified protein complexes using the orbitrap ascend tribrid mass spectrometer
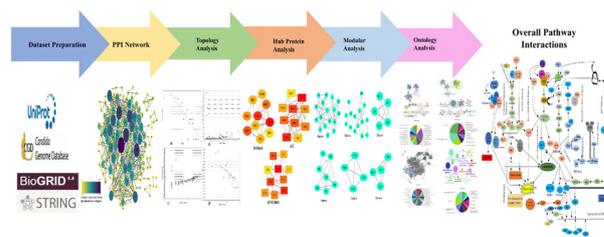
Pratik Goswami, Joseph Cesare, Michaella J. Rekowski, Zachary Clark, Janet Thornton and Michael P. Washburn*

315

PPI network identifies interacting pathogenic signaling pathways in *Candida albicans*

Deepanjan Chattopadhyay, Sanjib Das, Paromita Saha Mondal, Tanushree Mondal, Subhasree Samanta, Amalesh Mondal, Achintya Mohan Goswami* and Tanima Saha*
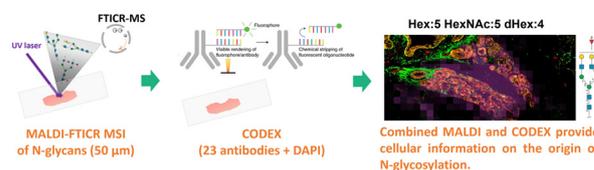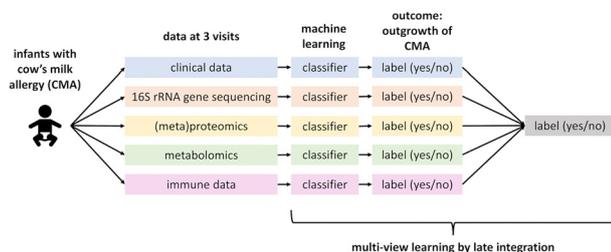
334

Integrating *N*-glycan and CODEX imaging reveal cell-specific protein glycosylation in healthy human lung

Dušan Veličković,* Jeffrey Purkerson, Harsh Bhotika, Heidie Huyck, Geremy Clair, Gloria S. Pryhuber and Christopher Anderton
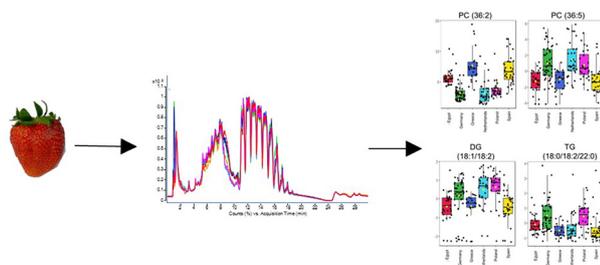
RESEARCH ARTICLES

343

A multi-omics machine learning classifier for outgrowth of cow's milk allergy in children

Diana M. Hendrickx, Mariyana V. Savova, Pingping Zhu, Ran An, Sjef Boeren, Kelly Klomp, Sumanth K. Mutte, PRESTO study team, Harm Wopereis, Renate G. van der Molen, Amy C. Harms and Clara Belzer*

353

Lipid profiling: proving the geographical origin of strawberries (*Fragaria × ananassa*) using a non-targeted LC-IM-MS approach

Johannes Brockelt, Felix Schmauder, Marina Creydt and Markus Fischer*

This journal is © The Royal Society of Chemistry 2025