

# Molecular Omics

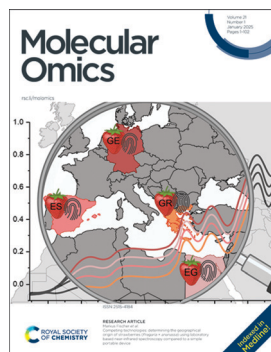
Research and reviews in omic sciences, including genomics, proteomics, transcriptomics, metabolomics, glycomics and lipidomics

[rsc.li/molomics](https://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

ISSN 2515-4184 CODEN MOOMAW 21(1) 1-102 (2025)



### Cover

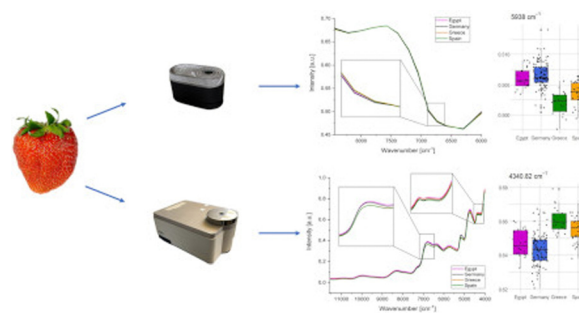
See Markus Fischer *et al.*, pp. 7-18.  
Image reproduced by permission of Johannes Brockelt, Felix Schmauder and Markus Fischer from *Mol. Omics*, 2025, 21, 7.  
Created in BioRender. Creydt, M. (2024) <https://BioRender.com/r94t302>.

## RESEARCH ARTICLES

7

### Competing technologies: determining the geographical origin of strawberries (*Fragaria* × *ananassa*) using laboratory based near-infrared spectroscopy compared to a simple portable device

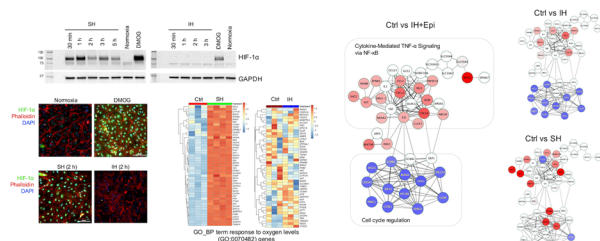
Johannes Brockelt, Felix Schmauder, Kim Brettschneider, Marina Creydt, Stephan Seifert and Markus Fischer\*



19

### Sustained hypoxia but not intermittent hypoxia induces HIF-1 $\alpha$ transcriptional response in human aortic endothelial cells

Rengul Cetin-Atalay\*, Angelo Y. Meliton, Yufeng Tian, Kaitlyn A. Sun, Parker S. Woods, Kun Woo D. Shin, Takugo Cho, Alex Gileles-Hillel, Robert B Hamanaka and Gökhan M. Mutlu\*



# RSC Advances

At the heart of open access for  
the global chemistry community

## Editor-in-chief

Russell J Cox

Leibniz Universität Hannover, Germany

## We stand for:



**Breadth** We publish work in all areas of chemistry and reach a global readership



**Affordability** Low APCs, discounts and waivers make publishing open access achievable and sustainable



**Quality** Research to advance the chemical sciences undergoes rigorous peer review for a trusted, society-run journal



**Community** Led by active researchers, we publish quality work from scientists at every career stage, and all countries

Submit your work now

[rsc.li/rsc-advances](https://rsc.li/rsc-advances)

@RSC\_Adv

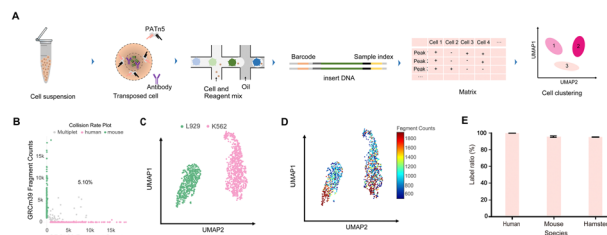


## RESEARCH ARTICLES

32

**MobiChIP: a compatible library construction method of single-cell ChIP-seq based droplets**

Xianhong Yu,\* Guantao Zheng, Liting Xu, Weiyi Guo, Guodong Chen, Yiling Zhu, Tingting Li, Mingming Rao, Linyan Wang, Rong Cong and Hao Pei\*

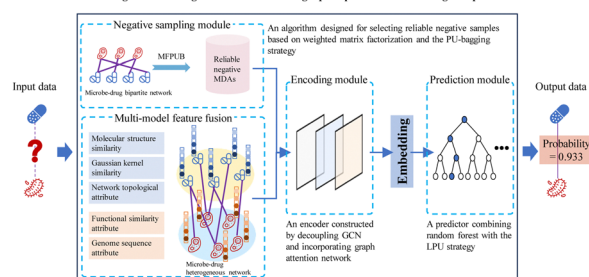


38

**GRL-PUL: predicting microbe–drug association based on graph representation learning and positive unlabeled learning**

Jinqing Liang, Yuping Sun\* and Jie Ling

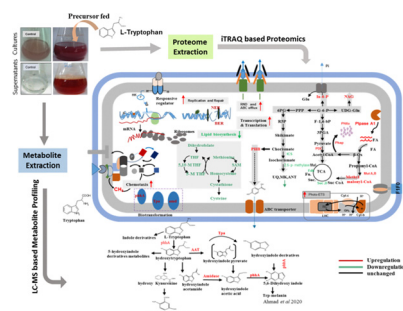
GRL-PUL: Predicting microbe–drug association based on graph representation learning and positive unlabeled learning



51

**Proteomic and metabolic profiling reveals molecular phenotype associated with chemotrophic growth of *Rubrivivax benzoatilyticus* JA2 on L-tryptophan**

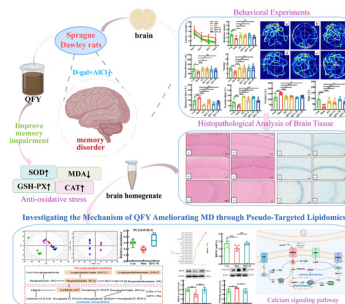
Shabbir Ahmad, Mujahid Mohammed, Lakshmi Prasuna Mekala, Sasikala Chintalapati and Ramana Chintalapati\*

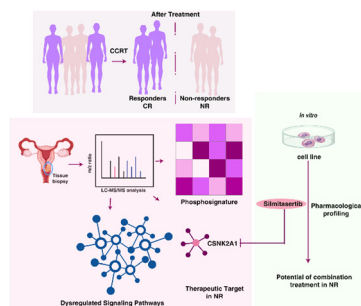


69

**Investigating the mechanism of Qifu Yin in ameliorating memory disorders through pseudo-targeted lipidomics**

Fuxia Zhao, Jing Wang, Minjun Wu, Jiaqi Fan, Shiqi Liu, Fanying Deng, Shihui Wang, Yangang Cheng and Yan Wang\*





## Phosphoproteomics guides low dose drug combination of cisplatin and silmitasertib against concurrent chemoradiation resistant cervical cancer

Irene A. George, Janani Sambath, R. E. Dhawale, Manisha Singh, Vinita Trivedi, R. Venkataramanan, Richa Chauhan\* and Prashant Kumar\*

