



# 10 YEARS OF BAYBIOMS - SYMPOSIUM

**22.10.2025      8:30 am – 6:30 pm**

Gregor-Mendel-Str. 4, 85354 Freising, iGZW Conference Room

**8:30 – 8:45**

**Welcome & Opening**

**Corinna Dawid & Bernhard Küster** (*BayBioMS, TU Munich*)

**8:45 – 9:30**

**Opening Lecture - Mass Spectrometry Technology**

**Hamish Stewart** (*Thermo Fisher Scientific*)

The advance of analysers, new milestones and the path beyond

**9:30 – 10:00**

**Coffee Break**

**10:00 – 12:00**

**Bioinformatics – First BayBioMS pillar**

**Chair: Amirhossein Sakhteman** (*BayBioMS, TU Munich*)

10:00 – 10:45

**Keynote: Olga Vitek** (*Northeastern University, Boston*)

Statistical methods increase the accuracy and the interpretability of quantitative proteomic investigations

10:45 – 11:10

**Mathias Wilhelm** (*TU Munich*)

From data to machine learning models to knowledge

11:10 – 11:35

**Markus List** (*TU Munich*)

Data leakage is a widespread issue in biomedical machine learning: How to spot it, avoid it, and fix it.

11:35 – 12:00

**Melanie Schirmer** (*TU Munich*)

Integrating metagenomics, metabolomics and culturomics data to investigate the role of the microbiome in human health

**12:00 – 13:00**

**Lunch Break**



**13:00 – 15:00**      **Metabolomics – Second BayBioMS pillar**

**Chair: Karin Kleigrewe** (*BayBioMS, TU Munich*)

13:00 – 13:45      **Keynote: Ron Heeren** (*University of Maastricht*)

Layered images in mass spectrometry: translational ‘omics’ from cells to the clinic

13:45 – 14:10      **Dirk Haller** (*TU Munich*)

Lipid metabolism in colon cancer: the microbiome connection

14:10 – 14:35      **Michael Rychlik** (*TU Munich*)

Targeted Metabolomics helps to assess the safety of plant-based food alternatives

14:35 – 15:00      **Michael Gigl** (*TU Munich*)

Tracing the transfer of dietary chemosensates from the maternal diet to human milk and urine using untargeted and targeted metabolomics

**15:00 – 15:30**      **Coffee Break**

**15:30 – 17:30**      **Proteomics – Third BayBioMS pillar**

**Chair: Christina Ludwig** (*BayBioMS, TU Munich*)

15.30 – 16:15      **Keynote: Albert Heck** (*Utrecht University*)

Cycling through the proteomics field, from the bottom-up to the top-down

16:15 – 16:40      **Andreas Pichlmair** (*TU Munich*)

Chasing viral epidemics and pandemics by virus-host interaction profiling

16:40 – 17:05      **Johanna Tüshaus** (*TU Munich*)

Mapping the human brain proteome

17:05 – 17:30      **Axel Imhof** (*LMU Munich*)

Chromatin Proteomics

**17:30**              **Get-together**