

## Proteomics Webinar | 18.02.2025

### **Session 1 | Advancing Proteomics: New Methods with the Astral Mass Spectrometer, Best Practices, and Challenges in Experimental Design and Data Analysis**

Time:

18.02.2025, 9:30 AM (GMT+1)

Link to Session 1:

<https://us06web.zoom.us/j/87941012285>

Speakers:

Bianka Świdarska – Lead Proteomics Mass Spectrometry Specialist, IBB PAS

Dr Agata Malinowska – Senior Specialist in Proteomic Data Analysis, IBB PAS

Introduction of advanced mass spectrometry technologies enables gathering deeper insight into complex biological systems. The Astral mass spectrometer represents a new era in high-throughput proteomics, offering improved sensitivity, speed and quantitative accuracy. This session will cover the capabilities of Astral instrument, its impact on protein identification and quantification possibilities, and its role in accelerating discovery in biomedical research.

In addition to technological advancements, optimised experimental design and preparative practices, as well as robust data analysis strategies, are crucial for obtaining meaningful results in proteomics studies. The session will explore best practices in experimental planning, sample preparation, data acquisition, statistical validation and interpretation of proteomics data.

### **Session 2 | Revolutionize Your Biomarker Discovery – Unravelling the Proteome by Untargeted Mass Spectrometry Proteomics at Scale**

Time:

18.02.2025, 11:30 AM (GMT+1)

Link to Session 2:

<https://seerbio.zoom.us/j/94880841661?pwd=G61dxJLVOR4RH0242ffqvvDa4tFLH.1&from=addon>

Speaker:

Dr Maik M. Pruess – Senior Field Application Scientist, Seer

Large-scale, unbiased proteomics studies are constrained by the complexity of biological matrices such as plasma. The Proteograph™ technology is a highly parallel protein quantification platform integrating nanoparticle (NP) protein coronas with liquid chromatography-mass spectrometry, providing efficient and scalable proteomic profiling.

Its performance has been demonstrated in various biological and clinical studies, including oncology, neurology, ageing research, and metabolic diseases. The platform's adaptability extends to a range of biological samples, including cerebrospinal fluid (CSF), cell culture media (for secretome analysis), and tissue homogenates. Furthermore, its species-agnostic approach enables applications in model organisms such as mice, rats, cats, pigs, and non-human primates.

By combining deep proteome coverage with high-throughput capabilities, Proteograph™ technology enables robust, quantitative proteomic studies, expanding the potential for biomarker discovery and translational research.