Session	**Emerging Innovative Technologies: Novel Fermentation and Downstream Processing Innovations**
Title	From Waste to Resource: Valorizing Precision Fermentation Biomass for the Circular Bioeconomy
Company	Revyve
Speaker	Jana Wittmer
Keywords feedstock (max 2)	Yeast, Bacteria
Keywords technology (max 2)	Mild Micronization
Keywords End-Product (max 2)	Protein, Fiber

Abstract:

Precision fermentation is rapidly expanding in Europe, enabling the sustainable production of high-value molecules. For every kilogram of purified product, however, some amount of microbial biomass remains as a side-stream. This spent fermentation biomass is rich in proteins, lipids, and functional biopolymers, yet today it is largely underutilized — often classified as waste. Here, we provide a theoretical overview of the quantities of spent biomass generated annually across Europe and explore current practices for its management. We will also highlight the main barriers that limit its valorisation into food- and feed-grade applications. Finally, we will outline how **Revyve**'s pioneering technology could potentially upgrade these side-streams into high-value, functional ingredients for food and nutrition. Unlocking this underexploited biomass could transform precision fermentation from a single-product process into a fully circular biorefinery model, advancing both Europe's bioeconomy and its sustainability goals.