Session	Microbial Protein & Microbial Oils Transition Players
Title	Closing the Protein Gap with Precision Fermentation
Company	21st.BIO
Speaker	Niels Banke
Keywords feedstock (max 2)	glucose, maltodextrin
Keywords technology (max 2)	precision fermentation
Keywords End-Product (max 2)	dairy proteins

Abstract:

Global demand for high-quality protein is accelerating, driven not only by population growth, but also by changing diets, the rise of GLP-1 use, and ageing populations seeking better nutrition. At the same time, traditional dairy production faces major constraints: fewer and ageing farmers, environmental impact, and limited natural resources. 21st.BIO addresses this challenge with industry-leading precision fermentation technology, enabling scalable and cost-efficient production of sustainable proteins. Our platform builds on 40+ years of strain and process development by scientists at Novo Nordisk and Novonesis. Since 2020, 21st.BIO has advanced these strains and processes and now licenses them to companies worldwide, helping them bring protein innovations to market at competitive cost. Our proprietary strains are exceptionally robust, achieving a world-first with the extracellular expression of spider silk proteins, one of the most complex proteins to produce. Their incredible productivity and versatility make them ideally suited for lower priced nutritional proteins such as beta-lactoglobulin and alpha-lactalbumin. To bridge the “valley of death” between innovation and commercialization, 21st.BIO combines advanced strains, optimized fermentation and DSP processes, regulatory know-how, and a pilot plant in our Danish HQ. We empower partners to scale faster, reduce production costs, and help close the protein gap: supporting a sustainable future for food and nutrition.