Session	Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding
Title	Grain to gain: Decentralized Lactic Acid & Ethanol from spent grains
Company	Serkelbio
Speaker	Dr. Brian Freeland & Mr. Paul Hennessy
Keywords feedstock (max. 2)	Spent grains
Keywords technology (max 2)	Fermentation
Keywords End-Product (max 2)	Lactic Acid

Abstract:

SERKEL.BIO is pioneering a decentralized approach to biomanufacturing by deploying modular, containerized biorefineries that transform brewing and distilling co-products into food-grade lactic acid & ethanol. Each BioPod cluster processes 5,000 tonnes of brewers' spent grain annually, with scale-out methodology allowing for higher capacities. The BioPods produce Lactic Acid or Ethanol as their primary product, along with a range of co-products including animal feed, highlighting our "Gain-without-pain" approach to waste-product valorisation. The process integrates enzymatic hydrolysis, high-efficiency fermentation, and optimized downstream recovery, with innovations in co-product regeneration to reduce costs and environmental impact. This model addresses two critical challenges in the bioeconomy: valorization of underutilized agri-food residues and the need for scalable, low-CAPEX production systems. Unlike centralized biorefineries, BioPods can be rapidly deployed, require minimal permitting, and valorize feedstocks locally, reducing transport emissions and creating regional value chains. The technology aligns with EU Green Deal and circular economy objectives, offering a replicable solution for sustainable ingredient production. SERKEL.BIO is now seeking strategic partners and investment to deploy its first commercial clusters across Europe, demonstrating a scalable pathway to circular, distributed lactic acid production.