Session	Start-ups/SMEs looking for Finance: Pre-seed/Angel/Seed
Title	Bacteriophages as new biocontrol agents against bacterial threats
Company	Phagelynx
Speaker	Eva Moerman
TRL	TRL 1-3
Keywords feedstock (max 2)	bacteria, genomics
Keywords technology (max 2)	fermentation, machine learning
Keywords End-Product (max 2)	bacteriophages, AI-platform

Abstract:

As antimicrobial resistance spreads, the industries that depend on antibiotics and biocides need alternatives. In the biotechnology industry, a single bacterial contaminant can destroy an entire production batch. Phagelynx, a spin-off from Biolynx, turns to nature's own solution: bacteriophages, viruses that selectively infect and eliminate target bacteria without disrupting the surrounding microbial ecosystem.

To design the appropriate phage cocktail against a specific bacterial contaminant, we use PhageMatch, an in-house AI platform that uses genomic profiling to predict the most effective phages from our library against a given strain. Phagematch accelerates development by replacing labour-intensive trial-and-error screening with a data-driven prediction. We isolate, characterise and produce these phages in house, with fermentation capacity up to 100 litres, and apply them today in biotechnology processes.