

Session	Start-ups/SMEs looking for Finance: pre-seed/angel/seed funding
Title	Finally: Fast and actionable metagenomics for complex
	bioproduction systems
Company	Symbiotic Biosystems
Speaker	Dave Morris
Keywords feedstock	
(max. 2)	
Keywords technology	Actionable Metagenomics
(max 2)	
Keywords	
End-Product (max 2)	

Abstract:

Symbiotic Biosystems is building a genetic ecosystem monitoring technology targeted at industrial microbial production systems. The technology is focused on bringing a user-friendly interface for operations to map the dynamics of a multi-organism bioproduction system to performance and production metrics and operational parameters. Using state-of-the-art long read sequencing technologies, custom gene identification and analysis pipelines, and targeted machine learning algorithms, communal dynamics and actionable information is available within 24 hrs. This allows engineers and scientists to respond to population dynamics when unfavorable strains or contaminants arise at low detection levels, or take actions to preserve high-performing microbial communities for future use. This near real-time metagenomic information will be packaged into an interface that maps key gene abundances, mutations, virus-host interactions, community diversity, and other critical information tailored specifically for each customer's application. Symbiotic Biosystems provides a highly effective and previously unavailable tool used to drive productivity and increase revenue, and our technology can be leveraged by a wide diversity of industrial applications; including fermentation, biogas production, biomanufacturing, agriculture and many more.