



<b>Session 3</b>	<b>Artificial Intelligence in service of biomanufacturing</b>
Pitch Title	Fast and risk-free scale-up & tech transfer
Company	SimVantage GmbH
Speaker	Christian Witz
Keywords feedstock	All
Keywords technology	Simulation software, reactor optimization, scale-up, process transfer, mixing studies
Keywords End-Product	All
<b>Abstract:</b>	
<p>SimVantage GmbH specializes in developing advanced simulation software for biotech process optimization, focusing on scaling bioprocesses from lab to production (including applications like novel foods and lab meat), optimizing the reactor operation, mixing studies and process transfer.</p> <p>The company's cloud-based simulation software integrates GPU-optimized algorithms based on the Lattice-Boltzmann Method (LBM) to enable precise simulations of fluid and bubble dynamics in bioreactors. It addresses a critical challenge in biomanufacturing, where traditional scale-up processes are time-consuming and costly. Furthermore, the mixing time can be simulated to reduce the necessary experiments in mixing studies, process transfers and scale-up.</p> <p>This technology offers the potential to streamline scale-up, reduce operational costs, and accelerate time-to-market for biotech products.</p>	