



Merck Sponsored Symposium

Sunday 23 June 2024

13:30 – 15:00

Room - Tinto

Case Study on N-1 Perfusion Development by Fresenius Kabi and Related Innovations in Perfusion Technology for Cell Retention and Cell Line Development by Merck

When N-stage perfusion is not a viable option from cost perspective, N-stage intensification is a great opportunity for time and cost reduction. This often requires the use of N-1 perfusion to build up sufficient biomass for the intensified fed-batch phase. We will present the work performed to develop this N-1 stage at Fresenius Kabi to enable future N-intensified process development.

Successful implementation of perfusion relies on robust and scalable cell retention technology. The Cellicon® Perfusion Solution meets this need by providing flat-sheet filters designed for cells, in a single-use assembly for seamless process control. We will share data demonstrating this technology in perfusion applications to quantify process improvements.

During CLD for perfusion bioprocesses, it is essential to select clones that demonstrate high qP, moderate growth rates, and high titer. Traditional CLD methods may identify clones that perform well in fed-batch but miss the best perfusion clones. We will highlight advantages of using perfusion-specific CLD processes to create more productive clones and provide an integrated CLD solution for intensified processing using CHOZN® GS-/-, best-in-class media, and the Mobius® Breez Microbioreactor.

Live Q&A session to follow the presentations.

Moderator: Jennifer Campbell, Upstream Technical Specialist, Process Solutions, Merck

Speaker #1: Camille Payre, Upstream Process Development Senior Scientist, Fresenius Kabi SwissBioSim GmbH

Speaker #2: Geraldine Contrufo, Senior Biomanufacturing Engineer, Upstream MSAT EMEA, Merck

Speaker #3: David S. Razafsky, Ph.D., R&D Manager, Biopharmaceutical Expressions System Team, Merck