

*Workshop session – Sunday, May 5<sup>th</sup>, 9:00-10:30, ESACT meeting Copenhagen, Denmark*

## **ACTIP/ESACT joint session: The digital transformation of animal cell culture technology**

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### Scope

The ongoing digital transformation is influencing the way process scientists approach the development of manufacturing cell lines and industrial cell culture processes. Recent advances made in the field of process miniaturization, parallelization, automation and control are implemented into highly efficient process development workflows. This workshop provides insights by experts from the biopharmaceutical industry about their ways of leveraging digitalization and machine learning. Key challenges around experimental designs, data and knowledge management strategies, statistical process models and decision-making tools in the development of manufacturing cell lines and cell culture processes will be highlighted. The presenters will illustrate their concepts with example case studies and will discuss about future outlooks and opportunities in this context.

### Confirmed speakers

- Colin Clarke, NIBRT, Ireland. Digitalizing Biopharmaceutical Manufacturing: A platform for Integrating the Industrial Internet of Things and Big Data Analytics, (20 min. presentation + 5 min. discussion).
- Michael Sokolov, DataHow, Switzerland. Towards industry 4.0 – the role of smart model-based solutions for cell culture process digitalization and automation, (20 min. presentation + 5 min. discussion).
- Norbert Furtmann, Sanofi, Germany. Platformization of Multi Specific Protein Engineering: Data-driven workflow support for high-throughput screening, (20 min. presentation + 5 min. discussion).