Dr. Olav Lyngberg

Talk Title: A Decade of Progress in Digitalizing Pharmaceutical Manufacturing at JnJ: Lessons Learned and Future Directions

https://www.linkedin.com/in/olav-lyngberg-pharma-innovation/

Abstract:

In the last decade, the adoption of sophisticated modeling, machine learning, and artificial intelligence, combined with process analytical technologies like Raman and NIR, has become commonplace in Johnson & Johnson's manufacturing landscape. This transformation has driven groundbreaking achievements once considered pure science fiction—such as real-time release of oral solid dosage forms, central & automated process control, and remote fault detection that surpasses human capabilities, demonstrating tangible value and opening new horizons for innovation.

This presentation will reflect on our manufacturing & supply chain journey, sharing key lessons learned and focusing on next steps. As we relentlessly pursue new cures, these technological innovations form a vital part of a comprehensive system dedicated to ensuring the high-quality, reliable supply of complex medicines. With the advent of Cell and Gene Therapies, which introduce substantial patient-specific variability, existing ML and AI tools are being challenged—reminding us that our ongoing mission remains

centered on delivering safe, effective, and affordable medicines to patients worldwide, with confidence in outcomes and supply.