

A roadmap to building a new site with new technology.

Martin Hunter, Director for Manufacturing Science & Tech., AstraZeneca Global Biologics Operation, Sweden



Mr. Hunter is Responsible for ensuring reliable, flexible filling, inspection, device assembly and packaging of late stage clinical and commercial products using lean, efficient, compliant standardized processes. Department functions include; Validation, Process Engineering, Analytical Support, New Product Introductions and Tech Transfer.

How can a new manufacturing site for biologics be effectively delivered with new technology whilst ensuring commercial and compliance to regulatory requirements are built in from the start? The presentation will provide an overview and update on the programme to establish a new manufacturing capability within AstraZeneca and the lessons learned.

Free flowing sensors in bio production – what can we use this new technology for?

Niels Jensen, CEO of Freesense



Mr. Jensen has a background as master from the business school and have worked as a business consultant with large international companies such as Flextronics, ITW and L'Oréal. Further he has been part of the senior management of technology companies such as Philips and GN where applying new technology to customers have been an integral part of his work.

Process data from fermentation tanks bringing new insights to the production process with data never available before. Actual data about circulation time in large scale bioreactors. The perspectives of the technology in terms of mapping stagnant regions in large scale bioreactors and the technology in terms of better understanding scale up process and optimizing existing production processes. Wireless sensor (particle) technology intended for real-time monitoring from the inside of fermentation processes.

Your projects are your future business

Kasper Iven Skjold, CRO, Forecast.



Mr. Iven Skjold has sales background from Berlingske Newspaper, IBM and SAS Institute. He is experienced doing inside as well as solution sales. His everyday job is to lead all commercial and customer aspects at Forecast.it. This is done by having a great team of both project, sales, marketing, and customer success professionals. Everyone of them focused on getting clients successful with Forecast!

Industry 4.0 will require a major digitization effort, which implies initiating several programs and projects. But 2/3 of all large IT projects tend to either run over budget or deadline (or both) - for you this is a huge risk to your business. Learn how AI (Artificial Intelligence) and cloud computing will help you make your Industry 4.0 projects more predictable and easier to succeed with.

How to adjust a SMART future for people. Designing good smart systems for humans.

Karin Eklund, Team Manager of User Experience, Semcon



Mrs. Eklund is manager for the User Experience team at Semcon. The team consists of three groups; Research and Innovation, Interaction Design and Human Factors. Previous worked as User Experience Manager at Ascom Wireless Solutions. In the position she worked with strategy and vision, innovation management, concept development, and best practices and processes for Usability Engineering process required by MDD (Medical Device Directive). She has a Master in Cognitive Science from Linköping University

Combining tech, usability and design in new ways – from creative concepts to production systems and digital information solutions. Always with an end-user focus. Understanding the needs of the end-user (patient) is key to success for all pharma companies and there is much inspiration to gain from the projects. The presentation includes case studies from their many projects. As an example is the work with the development of self-driving cars (<https://semcon.com/smilingcar/>).

Lab-on-the-Chip in Chemical and Biochemical Engineering

Ulrich Krühne, Assoc. Prof., DTU



Prof. Krühne is among the leading experts in microfluidic systems used in bioprocessing and cell based screening. His experience is gained from his work in a small startup company, a national research institute and projects at the Technical University of Denmark.

The presented case studies include cell-cell interaction studies in microfluidic sensor systems, an automated *in vitro* fertilization device and a system for screening whole cell catalysts. A special focus point of the presentation will be the design of the systems and the use of computational fluid dynamic (CFD) methods in order to accelerate the development process of microfluidic applications.

Continuous manufacturing from a technical and business perspective

Eric Jayjock, PhD, Director of Continuous Manufacturing, Patheon, USA.



Mr. Jayjock performed his graduate studies at Rutgers University where he was a part of the NSF Center for Structured Organic Particulate (C-SOPS) systems. As a culmination of this work he designed and coordinated the construction of the C-SOPS continuous direct Compression line. Upon the completion of this work Eric join the Janssen team and worked on bringing the continuous manufacturing approach to the industry. At Patheon, he is developing highly flexible, highly capable continuous manufacturing framework to serve the diverse needs of the Pharmaceutical Industry.

Patheon is well known for the work as CMO of pharmaceuticals. They embarked some year's ago on a journey to be the first contract and development manufacturing organization (CMDO) to undertake continuous manufacturing. Their approach to continuous manufacturing is modular with respect to unit operations spanning, dry/wet granulation, tableting and capsule filling.

Technologies of the Future and People - innovation, disruption and how we all react

Jesper Bo Jensen, CEO of Fremforsk / Center for Future Studies



Mr. Jensen founded Fremforsk in 2001. He is working with: The future of retail in Europe, Regional and city development, The situational consumer, Housing and families - future demand, The property market - trends and prices, Public sector in the future and the new youth as workers, shoppers and family formers. He graduated as Ph.D. in political science from Aarhus University in 1989.

This presentation will focus on possibilities, options and choice of technologies in the coming years. It will address the question of how Industry 4.0 and tech disruption will affect the health system and the pharmaceutical industry. Technology driven change, robots A:I: doctors and new treatments will alter the way our health systems work and form new opportunities for the pharmaceutical industry. Mr. Jensen will give us a captivating and humorous presentation you will not soon forget. The future has never looked so bright!