

Medicines Manufacturing Innovation Foundry Event

Thursday 18th January 2024 **Digital Pharma** Agenda



DETAILS

09:30

Arrival and registration with refreshments.

10:00

Opening remarks: Introduction and outline of the day from Dave Berry, Director of Digital Business Systems at CPI, Foreword from Gary Hanniffy, PwC

10:30

Session 1 begins: **The Digital Roadmap**

Keynote from Martin Wallace, GSK and MMIP and Hareklea Markides, how MMIP and Innovate UK support the delivery of a digital roadmap

- Split into groups for facilitated discussion

11:30

Break and opportunity to meet Session 1 innovators

12:00

Session 2 begins: **Digital Modelling**

- **Keynote from Niall Mitchell, Siemens**
- **Keynote from Gurinder Gill, Emerson**

Split into groups for facilitated discussion

13:00

Lunch and opportunity to meet Session 2 innovators

14:00

Session 3 begins: **Digital and Data**

- **Keynotes from Yiannis Ioannou, Amazon Web Services, how you share data and Rob Innes, WYOMING on edge computing**
- Split into two groups for facilitated discussion, looking at two distinct perspectives

15:00

Break and opportunity to meet Session 3 innovators

15:30

Review of the day with concluding thoughts from Dave Berry, CPI

16:00

Networking session

16:30

Event close

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Hareklea Markides, Innovate UK Delivering a digital road map for the UK

This presentation will outline the active involvement of the Innovate UK Transforming Medicines Manufacturing Community of Practice in creating and implementing a digital roadmap for the United Kingdom within the medicines manufacturing community.

[Find out more](#)

Martin Wallace, Medicines Manufacturing Industry Partnership and GSK MMDI a key enabler for the MMIP Digital Ambition (Medicine Made Smarter)

The purpose of this talk is to provide an outline of a proposal that is in development called the Medicine Manufacturing Data Institute, which is part of a broader MMIP (Medicine Manufacturing Industry Partnership) Digital ambition for the UK. The intention is to bring awareness, to stimulate a discussion and capture input on the expected benefits and user requirements from both industry and potential solution providers. This will serve as input into the discussion planned within the workshop.

Niall Mitchell, Siemens From Vision to Reality: Practical Examples of Digitalization in Pharma

In the past decade, the application of mechanistic models in pharmaceutical research and development has become an industry-standard approach to accelerate pharmaceutical development timelines, assess and mitigate risks, and support scale-up and tech transfer. More recently, the advent of industry 4.0 has spread to the pharmaceutical industry, leading to a rise of digitalization efforts to modernize pharmaceutical manufacturing operations. Along with the increasing availability of digital technologies, this trend has inspired applications of mechanistic models in pharmaceutical operations for real-time process optimization, operator training, soft sensing and advanced monitoring. In this talk, highlights of recent digital applications of mechanistic models across the pharmaceutical lifecycle will be presented. Case studies will include solvent swap process optimization, soft sensing of a fluid bed granulation process, and operator training for a continuous direct compression process.

[Find out more](#)

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Niall Mitchell, Siemens

From Vision to Reality: Practical Examples of Digitalization in Pharma

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[Find out more](#)

Yiannis Ioannou

How AWS can help establish the proper data foundation for the MMDI to accelerate innovation in drug development.

As a partner in the MELLODDY initiative, AWS previously helped establish privacy-preserving Federated Learning, encouraged collaboration between different institutions, enabled analysis that was previously considered impossible, and accelerated innovation in drug development. This is a brief introduction to our newest initiatives, services and best practices, through which AWS aspires to empower the MMDI partners to collaborate towards accelerating the design and manufacture of medicines supported by improved access to data.

Gurinder Gill, Emerson

Digital modelling

After the discovery of the molecule and its properties, process simulation and digital twins today play a very significant role in the safe and efficient transition to full scale manufacture, the operations, and the eventual demise of a facility. The models produced in many forms are penetrating more business functions. They are a capture of knowledge and competencies, and as such are becoming a key Intellectual Property of a business. However, the proliferation of models in many forms presents challenges with regards to cost management, control, and validation.