

Workshops at Drug Discovery 2018



Sartorius Stedim Biotech: Live-cell analysis techniques: developing translational assays for drug discovery

Tuesday 9th October: Platinum Suite 6
10:50 - 12:15

Translational assays provide critical bridges between in vitro models and the clinic, enabling a greater understanding of disease and potential therapy. To meet these requirements has resulted in an increased employment of more complex and advanced cell models, including co-culture systems, primary/iPSC-derived cells and patient specific tissue organoids. This raises the bar for assay development and functional profiling methods that are able to extract the deeper content provided by these models, whilst maintaining throughput and ease of use.

In this workshop, we will discuss the latest developments in live-cell analysis. Through BioTech and CRO end-user case study presentations, new applications in therapeutic discovery projects will be reviewed. These include immune cell killing assays in 2D & 3D, phagocytosis, antibody internalization measurements and tumour-spheroid analyses. Interactive discussions will be encouraged to explore how live-cell analysis is best aligned with discovery project requirements and how they can be further developed to address unmet need.

The workshop is targeted toward researchers with general interest in translational cell models, cell-based assays, cancer biology and immunology, including current and prospective users.

Agenda

- | | |
|---------------|-----------------------------------------------------------------------------------------------------|
| 10:50 – 10:55 | Welcome & introductions
Tim Dale (Sartorius) |
| 10:55 – 11:20 | Kinetic measurements of immune cell cytotoxicity
Dan Foxler (GammaDelta Therapeutics) |
| 11:20 – 11:45 | Live cell imaging assays for Immunology drug screening
Jessy Cartier (Aquila BioMedical) |
| 11:45 – 12:10 | New IncuCyte applications: Multi-spheroids and Cell-by-Cell analysis
Tim Dale (Sartorius) |
| 12:10 – 12:15 | Concluding remarks |



Peak Analysis and Automation Ltd: Harmony, Overlord and the S-LAB automated plate handler - a powerful combination.

Tuesday 9th October: Platinum Suite 5
11:30 - 12:30

Harmony™ is an easy to use, configurable user interface that allows the control of a small or large system. S-LAB™ is a small footprint, reliable plate handler that supplies microplates from a stack, rack, hotel or incubator. Overlord™ allows control of over 300 instruments with the ability to delid, regrip and process barcodes. PAA have combined these technologies to provide the perfect solution to low cost automation of most instruments. Come to the Overlord User Group meeting at ELRIG Drug Discovery 2018 to discover how S-LAB can automate your lab quickly and cost effectively.



Titian Software & Tecan: Are We Nearly There Yet? Past Present and Future of Sample Management

Tuesday 9th October: Platinum Suite 7
13:15 - 14:15

Tecan and Titian will be presenting their long standing partnership in software integration combining sample management and laboratory automation. This builds on the historical work to allow Mosaic users to be guided through setting up a run on a Tecan liquid handler. The topics will range from the humble beginnings of the Genesis integration with Mosaic – to the new Fluent® and FluentControl™ updates which enable the combined software to deliver high capacity and outstanding speed. The platform provides excellent precision, throughput and walk-away time with live inventory updates. Also to be discussed will future directions to further enable both companies to make it easy to get more done, more confidently and hence support scientists in delivering life-changing research.

Speakers

Kevin Moore (Head of Markets & Applications, Tecan)

Toby Winchester (Automation Product Manager, Business Application Consultant Team Leader, Titian)

Jason Meredith (Head of Software Product Management, Tecan)



SiLa Workshop: Closing the loop in the Lab using Artificial Intelligence

Tuesday 9th October: Platinum Suite 5
14:00 – 17:30

Artificial Intelligence (AI) tools are starting to become established in pharmaceutical research and life sciences more generally - with some 69% of companies in the sector using AI and related techniques. Typical uses include mining images and other large data sets for new insights. The possibility is now emerging to use AI to help plan the next experiment – ‘to close the loop’ – for faster and better results. This workshop brings together experts in the lab, and AI to look at closing the loop with AI for two applications: Screening and Chemical synthesis. We will aim to address the following questions: What is possible now? What have the experiences been? What are the pitfalls? And finally, (and perhaps most important!) how can I benefit?

Join us for an interactive workshop session, led by industry experts, where we will present use cases and overviews from a range of Scientists. There will be plenty of time for questions and debate as well as presentations on innovative developments in the field.

Agenda

Medicinal Chemistry/new small Molecules

- 14:00 – 14:10 Introduction and scene setting
Patrick Courtney (Director, SiLA)
- 14:10 – 14:30 Activity-directed synthesis: a platform for bioactive molecular discovery
Adam Nelson (Rosalind Franklin Institute/Leeds University)
- 14:30 – 14:50 Accelerating drug discovery through automation
Garry Pairaudeau (AstraZeneca)
- 14:50 – 15:10 ROAR: The Centre for Rapid Online Analysis of Reactions
Mimi Hii (Imperial College/ROAR)

15:10 – 15:30 Discussion

15:30 - 16:00 **COFFEE**

Screening

- 16:00 – 16:20 Adalab closed loop and underpinning ontologies
Larisa Soldatova (Goldsmiths College/ADALab)
- 16:20 – 16:40 Smarter screening, how to leverage AI to ‘close the loop’
Kevin Teburi (Genedata)

- 16:40 – 17:00 Lundbeck’s transition to integrated drug discovery informatics platform
Plamen Petrov (Lundbeck Pharma)
- 17:00 – 17:30 Enabling ML and AI through a Standards-based Data Pipeline
Burkhard Schaefer, (BSSN Software / SiLA Board of Directors)
- 17:30 End of workshop



BioHub Workshop: Building Biotech Success: A Practical Case Study with CROs at Alderley Park

Tuesday 9th October: Platinum Suite 7
10:50 – 12:00

Speakers

- Dave Cook** (Blueberry Therapeutics)
Ruth Roberts (Apconix)
Steve McConchie (Aptus Clinical)
Ned Wakeman (Alderley Park Accelerator (BioHub))

CamBioscience Training Zone:

Cerebral Organoids

Tuesday 9th October: 08:20 - 12:30

- 08:20-8:45 CamBioScience hands-on training courses overview
- 08:45-10:15 Meet the CamBioScience team to discuss hands-on and digital training courses to enhance your technical skills and advance your career.
- 10:15-10:50 How to create and take personalised training courses online thanks to Artificial Intelligence
- 10:50-12:30 Digital lecture “Cerebral Organoids” on our AI-Learning platform OBRIZUM® by world leading expert in the field **Dr Madeline Lancaster** (University of Cambridge)
“Check your knowledge” interactive session!

CRISPR Design & Strategy

Tuesday 9th October: 12:30 - 14:00

- 12:30-14:00 CamBioScience hands-on training courses overview
How to create and take personalised training courses online thanks to Artificial Intelligence
- 14:00-15:30 Digital lecture on “CRISPR Design & Strategy” on our AI-Learning platform OBRIZUM with **Dr Oliver Baker** (King’s College London) and **Dr Ben Davies** (University of Oxford)
“Check your knowledge” interactive session!
- 15:30-16:00 How to create and take personalised training courses online thanks to Artificial Intelligence

Cerebral Organoids

Tuesday 9th October: 16:00 - 18:45

- 16:00-17:00 Digital lecture “Cerebral Organoids” on our AI-Learning platform OBRIZUM® by world leading expert in the field **Dr Madeline Lancaster** (University of Cambridge)
“Check your knowledge” interactive session!

- 17:00-18:45 Meet the CamBioScience team to discuss hands-on and digital training courses to enhance your technical skills and advance your career.

CRISPR Design & Strategy

Wednesday 10th October: 08:00 - 12:30

- 08:00-9:00 CamBioScience hands-on training courses overview:
How to create and take personalised training courses online thanks to Artificial Intelligence
- 9:00-10:10 Meet the CamBioScience team to discuss hands-on and digital training courses to enhance your technical skills and advance your career.
- 10:10-10:40 How to create and take personalised training courses online thanks to Artificial Intelligence
- 10:40-12:30 Digital lecture on “CRISPR Design & Strategy” on our AI-Learning platform OBRIZUM with **Dr Oliver Baker** (King’s College London) and **Dr Ben Davies** (University of Oxford)
“Check your knowledge” interactive session!

Competition Time

CamBioScience will be running a series of competitions during their training courses with some fantastic prizes. Make sure you come along to the CamBioScience Training Zone located in the Exhibition Hall to find out more!