

EVOLuTION Summer School and Transferable Skills Training
Wednesday 6th-Friday 8th September, 2017

Summer School: “The ‘quest’ for innovative targets and drugs”

Day 1: 6th Sep – LifeArc, Stevenage, Bioscience Catalyst, Gunnels Wood Rd, Stevenage SG1 2FX

07.30 Minibus from London to Stevenage –pick up location: East gate of QMUL, corner of Westfield Way and Mile End Rd.

Introduction to drug discovery: Small Molecules and Antibodies.

Room Location: LifeArc - Keytruda

Chair: Debbie Taylor

09.30 Small molecule drug discovery

Andy Merritt, LifeArc

10.15 Antibody Therapeutics

David Matthews, LifeArc

11.00 Tea / Coffee - Foyer

Target identification & validation

11.15 How to identify good targets for drug discovery

Kerstin Papenfuss, LifeArc

11.45 What is a validated target

David Jones, LifeArc

12.15 Lab tours

13.00 Lunch – Foyer

New lead discovery – screening approaches.

Chair: Andy Merritt

14.00 Biochemical screening

Keith Ansell, LifeArc

14.30 Biophysical approaches

Pete Coombs, LifeArc

15.00 Phage screening

Arek Oleksy, LifeArc

15.30 Tea / Coffee - Foyer

Hit-to-lead and lead optimisation

15.45 Value of computational chemistry

Chido Mpamhanga, LifeArc

16.15 Medicinal chemistry strategies

Tim Chapman, LifeArc

16.45 Antibody Humanisation and Affinity Maturation

Preeti Bakrania, LifeArc

17.30 – Minibus departs to take attendees back to London

Day 2: 7th Sep - QMUL, Charterhouse Square, Lister and Young Seminar Room, 2nd floor, John Vane Science Centre, EC1M 6BQ

Lead discovery

Targeted approaches: Receptors, Enzymes, Channels, Epigenetic, Allosteric

Chair: Andy Merritt

09.30 Overview of targets

Andy Merritt, LifeArc

10.00 GPCR overview and case study about PAMs

Jeff Jerman, LifeArc

Chair: Mauro Perretti

10.30 Plenary Lecture

John Wallace, University of Calgary

Developing a Novel Anti-Inflammatory Drug: Trials and Tribulations

11.15 Tea / Coffee

Phenotypic approaches:

Chair: Andy Merritt

11.45 Phenotypic Screening – TDP43

Emily Bureau, LifeArc

12.15 Wnt signalling assays

Mark Stubbs, ICR

12.45 Lunch and ESR journal club

Genetic Approaches to Targets

Chair: Debbie Taylor

14.00 100,000 genomes project

Mark Caulfield; GeL

14.30 Epigenetic targets for the treatment of human disease

David Tough, GSK

15.00 Computational Biology and bioinformatics

Mike Barnes, QMUL

15.30 Tea / Coffee

In vitro and *In vivo* challenges of drug discovery:

16.00 Introduction to PK and metabolism

Elizabeth Allen KCL and Quintiles

In vitro PK and ADME assays

In vivo PK, PD and ADME models

19.00 – 22.00 Summer School Dinner for attendees

Location: The Peasant, 240 St John street London EC1V 4PH

Transferable Skills Training Day “*Knowledge exploitation: IP and Commercial exploitation*”

Day 3: 8th Sep - QMUL, Charterhouse Square, Lister and Young Seminar Room 2nd floor, John Vane Science Centre, EC1M 6BQ

Chair: Mauro Perretti

09.30 Introduction to Intellectual Property Law Paula Alessandro, QM Innovations

10.00 Development and commercialisation through licensing of the Cytosponge - A Case Study Georgia Gliki, LifeArc

10.30 Tea / Coffee

Kilburn and Strode – Sarah Lau and Michael Newton

11.00 IP protection - NDAs, trademarks, invention capture/ drafting patent applications

11.30 IP management – The patent process / international stage / filing strategies/ freedom to operate / costs involved in maintaining the patent

12.00 IP exploitation

12.30 Lunch

13.30-15.30 WP6 exploitation module with ESRs, Kilburn and Strode and LifeArc – brainstorming / interactive session.

End of Summer School

Getting to Charterhouse Square

The nearest tube station for Charterhouse square is Barbican – After exiting Barbican station at street level turn left, then take the first left into Carthusian Street and the first right into Charterhouse Square. If you keep going you will come to a little gatehouse at the top of Rutland Place, which leads to the campus, and the John Vane Science Centre is at the corner of the campus diagonally opposite the gatehouse.

Signs will direct you to the Lister and Young Seminar room which is located on the second floor of the John Vane Science Centre.



Barbican station

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