

Research & Innovation 2019

Innovations to Drive Future Drug Discovery

Homerton College, Cambridge
2 - 3 April 2019



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We are very pleased to welcome you to ELRIG's 7th Annual Research & Innovation conference in Cambridge. We are delighted to be hosting this meeting in this global centre of excellence in research and innovation.

This ELRIG event is intended to capture and present emerging opportunities in drug discovery research, often as they first arise in the academic arena. Our theme for this year's conference is "Innovations to drive future drug discovery" and under this umbrella we have put together themed tracks exploring new advances and technologies that will enable new and emerging biology to be effectively translated into successful therapeutics. We also have a specific track focussed on how new biology of relevance to drug discovery is being identified and discovered.

Complementing the excellent presentations in these tracks we are honoured to be joined by our two plenary keynote speakers, Steve Jackson (Gurdon Institute, University of Cambridge) and Harren Jhoti (co-founder and CEO of Astex Pharmaceuticals) who will share their experiences and perspectives on the future of drug discovery from the leading edge of academic and industrial research.

The planning and organisation of this meeting was due to the efforts of many individuals. In particular, we would like to thank our session chairs: Andrew Leach (European Bioinformatics Institute), Pamela Williams (Astex Pharmaceuticals), Euan Stronach (GSK), Nadine Clemo (Apollo Therapeutics), Mark Edbrooke (independent scientific consultant), Alessio Ciulli (University of Dundee), Lorna Ewart

DAY 1: TUESDAY 2ND APRIL

	THE AUDITORIUM NEW TECHNOLOGIES & INNOVATIONS IN DRUG DISCOVERY AND DEVELOPMENT	THE BOULIND SUITE WHERE ARE NEW DRUG TARGET HYPOTHESES COMING FROM?
8:00 - 9:00	REGISTRATION & COFFEE	
9:00 - 9:10	AUDITORIUM: Conference Directors' Welcome & introduction to Plenary Keynote Darren Cawkill (Apollo Therapeutics) & Jon Hutchinson (GlaxoSmithKline)	
9:10 - 9:55	AUDITORIUM: PLENARY KEYNOTE Blue skies research to commercial outputs and patient benefits Professor Steve Jackson (University of Cambridge)	
9:55 - 10:30	COFFEE	
10:30 - 12:00	Room MAB G12: Early Career Professional (ECP) Workshop - Careers in Drug Discovery: Networking with Purpose	
10:30 - 10:35	Session chairs introductions: Andrew Leach (European Bioinformatics Institute) & Pamela Williams (Astex Pharmaceuticals)	Session chairs introductions: Euan Stronach (GlaxoSmithKline) Nadine Clemo (Apollo Therapeutics)
10:35 - 11:15	The role of computer simulations in drug design Professor Jon Essex (University of Southampton)	Analysing human genetic influences on tens of thousands of human traits to find new drug targets Jeff Barrett (Genomics plc)
11:15 - 11:45	Leveraging Functional Genomics for Target Discovery Samantha Peel (AstraZeneca)	Clinic to Drug Discovery and back: Reverse Translation in Cancer Therapy Professor Bissan Al-Lazikani (Institute of Cancer Research)
11:45 - 11:50	Technology Spotlight: Craig Malcolm (Promega UK Ltd)	Technology Spotlight: Stina Lundgren (Pelago Bioscience)
11:50 - 11:55	Technology Spotlight: Lucy Farmer (LabLogic Systems Ltd)	Technology Spotlight
11:55 - 12:00	Technology Spotlight: Libby Naylor (Svar Life Science AB)	Technology Spotlight
12:00 - 13:30	LUNCH - EXHIBITION - POSTERS	
13:30 - 14:00	From target identification to clinical trials: a journey of proteomics in drug discovery Gitte Neubauer (Cellzome, a GSK company)	Prioritisation of oncology therapeutic targets using CRISPR-Cas9 screening Mathew Garnett (Wellcome Sanger Institute)
14:00 - 14:30	Poster Spotlight Presentations: Poster 6: Mark Abbott (Peak Proteins Ltd) Poster 22: Stefanie Reich (Domainex Ltd)	Poster Spotlight Presentations: Poster 7: Michelle Barnard (CRUK-MedImmune Alliance Laboratory) Poster 10: Nicholas Barnes (Celentyx)
14:30 - 15:00	Artificial Intelligence in Drug Design Ola Engkvist (AstraZeneca)	Artificial Intelligence for identifying novel therapeutic targets, biomarkers and drug repositioning opportunities Namshik Han (Milner Therapeutics Institute, University of Cambridge)
15:00 - 15:05	Technology Spotlight: Louise Affleck (Cisbio)	Technology Spotlight
15:05 - 15:10	Technology Spotlight: Sun Yung (Nexcelom)	Technology Spotlight
15:10 - 15:15	Technology Spotlight: Matthew MacKenzie (Miltenyi)	Technology Spotlight
15:15 - 15:45	COFFEE	
15:45 - 16:15	SiLC-MS (Single Live Cell Mass Spectrometry) analysis in the context of drug discovery Carla Newman (GlaxoSmithKline)	Drugging transcription: Progress and potential for treating human immune dysfunction Rabinder Prinjha (GlaxoSmithKline)
16:15 - 16:45	Expanding the scope of structure-based drug design with cryoEM Stacey Southall (Sosei Heptares)	Target Validation and Drug Discovery for KMO inhibitors Iain Uings (GlaxoSmithKline) & Damian Mole (University of Edinburgh)
16:45 - 17:15	Activity-Directed Synthesis: a platform for the discovery of bioactive small molecules George Karageorgis (University of Leeds)	New drug targets: the academic accidents! Clare Bryant (University of Cambridge)
17:15 - 19:00	DRINKS RECEPTION - NETWORKING - POSTERS - PUB QUIZ	

(AZ) and Alex Alderton (Sanger Institute) for their hard work and dedication in putting together an exciting and impressive scientific programme. We would also like to thank the ELRIG team for their support.

ELRIG is a leading European not-for-profit organization that exists to provide outstanding scientific content to the life science community and a platform where academic and industry thought leaders come together to network and promote new innovations in drug discovery.

ELRIG is particularly proud to provide free delegate attendance at the conference, which would not be possible without the generous support of the sponsors and exhibitors. We hope that you all enjoy the meeting and use it as an

opportunity to network with friends, make new contacts and discuss new and interesting scientific advances and their ability to impact early drug discovery.

Research & Innovation 2019 Conference Directors



Darren Cawkill
(Apollo Therapeutics)



Jon Hutchinson
(GlaxoSmithKline)

DAY 2: WEDNESDAY 3RD APRIL

	THE AUDITORIUM	THE BOULIND SUITE
	NEXT GENERATION IN VITRO MODELS FOR DRUG EFFICACY & SAFETY	THERAPEUTIC APPROACHES OF THE FUTURE
8:00 - 9:00	REGISTRATION & COFFEE	
9:00 - 9:05	AUDITORIUM: Conference Directors' Welcome & introduction to Plenary Keynote Darren Cawkill (Apollo Therapeutics) & Jon Hutchinson (GlaxoSmithKline)	
9:05 - 9:50	AUDITORIUM: PLENARY KEYNOTE Twenty Years of thinking small Dr Harren Jhoti (Astex Pharmaceuticals)	
9:50 - 10:30	COFFEE	
10:30 - 10:35	Session chairs introductions: Lorna Ewart (AstraZeneca) & Alex Alderton (Sanger Institute)	Session chairs introductions: Mark Edbrooke (Independent Scientific Consultant) & Alessio Ciulli (University of Dundee)
10:35 - 11:15	Advances and challenges in implementing advanced cellular models to support drug discovery Jo Francis (GlaxoSmithKline)	Degrading SMARCA2 and BCL6: Sometimes you need PROTACs sometimes you don't Darryl McConnell (Boehringer Ingelheim)
11:15 - 11:45	Novel Human-based Hepatic Safety Models: focus on liver spheroids Dominic Williams (AstraZeneca)	Precision Nanomedicines Giuseppe Battaglia (UCL)
11:45 - 12:15	Poster Spotlight Presentations: Poster 12: Farbod Famili (Ncardia) Poster 17: Nirmal Perera (LGC - ATCC)	Poster Spotlight Presentations: Poster 4: Mark Treherne (Cellsece) Poster 8: Georgina Suzanne Ferrier Anderson (University of Cambridge)
12:15 - 12:20	Technology Spotlight: Andrew Carnegie (Merck)	Technology Spotlight
12:20 - 12:25	Technology Spotlight: Sharon Barnard (INTEGRA Bioscience Ltd)	Technology Spotlight
12:25 - 12:30	Technology Spotlight: Kathrin Adlkofer (CellBox Solutions)	Technology Spotlight
12:30 - 13:45	LUNCH - EXHIBITION - POSTERS	
13:45 - 14:15	Programming cell identity: enabling the next generation of human cell models from pluripotent stem cells Thomas Moreau (Elpis)	Huntingtin lowering strategies for disease modification in Huntington's disease Professor Sarah Tabrizi (UCL)
14:15 - 14:45	Advances in brain organoid technologies and their applications to human biology Madeline Lancaster (MRC Laboratory of Molecular Biology)	Bioelectronics - is the next novel therapy class an electronic implant? Jason Witherington (Galvani)
14:45 - 15:15	Editing the genome of human iPSCs using CRISPR/Cas9 - disease modelling and beyond Andrew Bassett (Sanger)	Bicycles® - An entirely new class of therapeutics Paul Beswick (Bicycle Therapeutics)
15:15 - 15:45	COFFEE	
15:45 - 16:15	Human Multi-Organ-Chip based disease modelling: progress and challenges Uwe Marx (TissUse, Berlin)	Receptor Mediated Delivery of Antisense Oligonucleotides to Pancreatic β -cells Linda Sundström (AstraZeneca)
16:15 - 16:45	How do we drive the evolution and implementation of novel in vitro techniques in partnership with in vivo, ex vivo and in silico siblings? Mark Holbrook (Certara)	
16:45 - 17:00	CLOSING REMARKS & CONFERENCE CLOSE	

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ELRIG EVENTS 2019

Advances in Cell-Based Screening 2019
with Chemical Biology Satellite Meeting
AstraZeneca, Gothenburg
22 - 24 May 2019

Discovery Technologies 2019
Emerging Technologies in Safety Assessment
Alderley Park, Cheshire
26 September 2019

Drug Discovery 2019
Looking Back to the Future
ACC, Liverpool
5 - 6 November 2019

ELRIG 2019 Networking Events
Locations across the UK
Throughout 2019

Book your place for these events NOW! For more information please contact the ELRIG team:
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