



ELRIG Drug Discovery 2015
Innovation in Assay
Development & Screening

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Company Overview

- Founded in 2004 in BioCity, Nottingham, UK
- UK's largest independent provider of integrated drug discovery resource and expertise
- Provide advanced scientific knowledge, intellectual input and experience to accelerate drug discovery projects
- 133 staff – 75% of scientists have PhDs + considerable pharmaceutical industry R&D experience
- Six purpose built modern laboratories integrating multiple scientific disciplines



Sygnature's Integrated Drug Discovery Approach

- Complete integrated drug discovery projects:
 - Hit identification
 - Lead identification
 - Lead optimisation
 - Hit id to development candidate
- Open client access to experienced project teams comprised of a range of scientific disciplines
 - Medicinal Chemistry
 - *in vitro* Bioscience
 - Computational Chemistry & Informatics
 - DMPK & Physical Sciences
- Efficient design, make, test, analyse cycle
- Client communication and transparency is key



Assay Development at Sygnature Discovery



- Design complex *in vitro* and *in vivo* screening cascades
 - Advanced scientific knowledge and intellectual input
- Develop & run robust and reproducible industry standard biochemical, cell-based and biophysical assays
 - 'From scratch' assay development & transfer of clients assays
- Flexible development and tailoring of assay throughput to meet project requirements
 - Low to Medium-throughput screening (<10,000 compounds)
 - Strategic alliances with leading 'centres of excellence' in drug discovery to accommodate HTS (>10,000 compounds)
- Broad range of biological targets & different therapy areas
 - Small molecules and biologicals
 - Potency, mechanism-of-action, target selectivity and species cross-over
- Radio-chemical licence, human tissue licence and in-house blood donor panel

Sygnature's In-house Instrument Platforms

EnVision® Xcite
Multi-label Reader



AlphaScreen
SureFire
FP, FI, A, TRF, L

Biacore T200
SPR Reader



Fragment binding
Binding kinetics
Hit validation

SensiQ Pioneer FE
SPR Reader



Luminex MAGPIX
Multiplex Analyte Detection



Biomarker analysis

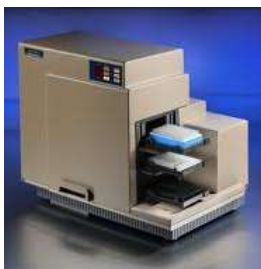
Biomek® NXP
Laboratory Automation Workstation



96 pipetting head
Cherry picking

FlexStation 3

Multi-Mode Microplate Reader
Integrated liquid handling



Fast kinetic read outs
Intracellular calcium
Membrane potential
FP, FI, A, TRF, L

NanoDrop 2000



RNA/DNA purity
Low volume

StepOne Plus

RT-PCR System



RNA quantitation
DSF

ChemiDoc MP

Gel Imaging System



DNA and protein gels
High sensitivity
Multiplex fluorescence imaging

BD Accuri™ C6

Flow cytometry



Two lasers (blue and red)
Light scatter and
fluorescence detectors

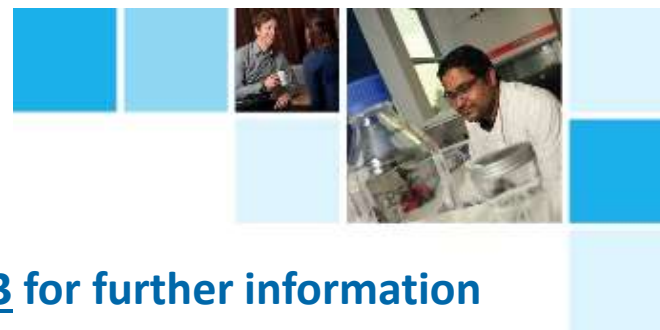
Strategic alliances with leading 'centres of excellence' in drug discovery to complement our own in-house expertise

>10 Years of Drug Discovery Success at Sygnature Discovery



- Excellent track record of successful delivery to our clients
 - 5 drug candidates currently in the clinic
 - 15 compounds in pre-clinical development
 - >50 patents
 - 170 client projects delivered
- Collaboration with clients secured prestigious Wellcome Trust drug discovery funding
- Part of €196M European Lead Factory consortium, the pan-European platform for drug discovery





Please come and visit our company stand B03 for further information

SYGNATURE
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