



DISCOVERY

Discovery Services and Facilities

Discovering and characterizing novel drugs depends on innovative and reliable science. Our multidisciplinary drug discovery expertise and scope of capabilities allow us to deliver data and insight clients can trust to progress their drug discovery programs.

	Cambridge, UK	Harlow, UK	Leiden, Netherlands	Portsmouth, UK	Morrisville, NC, USA	Freiburg, Germany	Kuopio, Finland	San Francisco, CA, USA	Groningen, Netherlands	Göttingen, Germany	Worcester & Shrewsbury, MA, USA	Montreal, Canada	Mattawan, MI, USA	Edinburgh, UK	Reno, NV, USA	Cleveland, OH, USA
Target Discovery and Validation																
RNAi-based screening			•													
shRNA libraries			•													
CRISPR/Cas9 gene editing			•	•												
Primary cell-based assays		•	•	•	•	•										•
High-content screening (HCS)			•													•
Hit Identification																
High-throughput screening (HTS)	•	•	•													•
Antibody screening								•								
Fragment screening	•	•														
Virtual screening	•	•														
Chemistry Services																
Medicinal chemistry	•	•														
Computer-aided drug design (CADD)	•	•														
Synthetic chemistry	•	•														
Analytical chemistry	•	•														
Process and scale-up chemistry	•	•														
Pharmaceutical sciences and formulation	•	•														
Compound screening libraries	•	•														

EVERY STEP OF THE WAY

	Cambridge, UK	Harlow, UK	Leiden, Netherlands	Portishead, UK	Morrisville, NC, USA	Freiburg, Germany	Kuopio, Finland	San Francisco, CA, USA	Groningen, Netherlands	Göttingen, Germany	Worcester & Shrewsbury, MA, USA	Montreal, Canada	Mattawan, MI, USA	Edinburgh, UK	Reno, NV, USA	Cleveland, OH, USA
Assay Development and Screening																
Phenotypic screening	•	•	•	•												
Biochemical screening assays	•	•														
High-throughput screening (HTS)	•	•	•													•
High-content screening (HCS)	•		•													
Ion channel hit discovery	•															•
Target engagement and deconvolution	•			•												
Mass spectrometry	•	•						•								
Structural Biology and Biophysics																
Thermal shift assays	•															
Surface plasmon resonance (SPR)	•															
Isothermal titration calorimetry	•															
Nuclear magnetic resonance (NMR)	•															
X-ray crystallography	•															
ADME																
High-throughput ADME (HT-ADME)	•										•					
<i>In vitro</i> ADME	•	•									•					
Pharmacokinetic screening								•			•		•			
Pharmacodynamics								•			•		•			
<i>In Vitro</i> Biology																
Primary cell-based assays (human and rodent)	•	•	•	•	•	•	•									
Patient-derived cell-based assays			•	•		•	•									
Stem cell assays	•		•													•
Antiviral and antimicrobial testing				•												•
Oncology assays	•	•	•	•	•	•		•								•
Neuroscience assays	•	•	•	•			•	•	•	•						•
Immunology assays	•	•	•	•	•											
Immuno-oncology assays	•	•	•	•	•	•										
Rare disease assays	•	•	•				•									•
Ion channel screening	•															•

	Cambridge, UK	Harlow, UK	Leiden, Netherlands	Portishead, UK	Morrisville, NC, USA	Freiburg, Germany	Kuopio, Finland	San Francisco, CA, USA	Groningen, Netherlands	Göttingen, Germany	Worcester & Shrewsbury, MA, USA	Montreal, Canada	Mattawan, MI, USA	Edinburgh, UK	Reno, NV, USA	Cleveland, OH, USA	
Mechanism of action studies	•	•	•	•	•	•											•
<i>In Vivo</i> Pharmacology																	
Cardiovascular/Metabolic disease pharmacology models				•							•	•				•	
Infectious disease pharmacology models				•									•	•			
Inflammation and immunology pharmacology models				•			•					•	•		•		
Musculoskeletal pharmacology models				•								•					
Neuroscience pharmacology models							•	•	•	•			•				
Ocular disease pharmacology models				•								•	•				
Oncology pharmacology models				•	•	•					•						
Rare disease pharmacology models				•			•										
Respiratory disease pharmacology models				•								•		•	•		
Vaccine Development																	
Immunogenicity studies				•													
Challenge and protection studies				•													
Immune profiling studies				•													
Novel adjuvant and antigen delivery vector testing				•													