o2h
co-discovery

Seeding New Ideas...

A proprietary operating system for fast tracking new ideas to a development candidate

We are an insight driven multi-modality integrated drug discovery platform. A unique workflow that combines novel in-house capabilities with leading strategic partnerships embedded on an AI backbone. Our **co-discovery** models are customised to match your funding milestones.



WELCOME...

Alchemy - From Idea to a Development Candidate..

"One of the most exciting things about drug discovery is that it never really stands still. We are now seeing a convergence of new technologies, modalities, and approaches change the way we think about discovering medicines, often in ways we could not have predicted. Yet the underlying challenge remains the same: how do we take a promising scientific idea and give it the best chance of becoming a meaningful candidate for a medicine?

Today, for example, we see chemistry and biology come together with AI, NAMs, conjugates and ADCs to create increasingly connected discovery programmes. I also see an important role for the alchemy between different disciplines, bringing together the right expertise, technologies and perspectives to create something greater than the individual parts. That is the proprietary workflow or operating system we have built at o2h co-discovery.

We work alongside biotech innovators, academic groups and pharma organisations at every stage of their discovery journey, shaping our approach around what each programme actually needs to align with the next funding milestone. For me, the most rewarding part is seeing these collaborations develop, from an early scientific idea through experiments, learning and iteration toward a programme with real potential.

As discovery continues to evolve, I believe the strongest programmes will come from bringing together the right people, expertise and ideas, and giving them the space to challenge, learn and build together. That is the kind of discovery culture we want to create at o2h.

Lastly, yes, we love working with inventors, but we are also part of an ecosystem of inventorship. We want to play our part in contributing to novel science and medicine, and to the ecosystems that support inventorship."

Prashant Shah,
CEO, o2h Discovery
Co-CEO, o2h Group

o2h discovery

Our Purpose

We @o2h have a mission to seed new ideas in life science and tech, directing our work with clear meaning. The purpose is to contribute to novel science to address unmet therapeutic need through funding, incubation, and collaborative execution.

We are engaged in pre-clinical research between idea generation and the identification of a lead/development candidate, using our core strengths in chemistry, biology and technology.

We recycle resource, energy, gratitude and love into the heritage ecosystems from where we have emerged and the global innovation ecosystems that we inhabit.

o2h group's vision is to be the best at

seeding new ideas in life science and technology by co-investing, co-creating and co-executing across boundaries

#o2hcollaborativeinnovation

discovery

A multimodality integrated drug discovery platform to support our collaborators developing the next generation of therapies.

ventures

An S/EIS fund focused on seeding early stage biotech therapeutics and related AI opportunities.

technology

Customised software development services including both web and mobile apps covering all phases from design, build to adoption.

incubator

Shaping one of the region's most exciting community of entrepreneurs in life science, technology and green innovation.

community

o2h group is a community aware company and has been working with various organisations on a number of programs.

therapeutics

Novel co-curation, risk share, spin in-out of unloved/novel pre-seed ideas and IP for later seed stage funding.

but why bother?

because at o2h we love working with fearless innovators from any background with a collective passion we design and shape new discoveries that impact the world in which we live.

external collaboration

we don't need to do everything ourselves and are comfortable with different levels of control in a collaboration necessary in order to innovate.

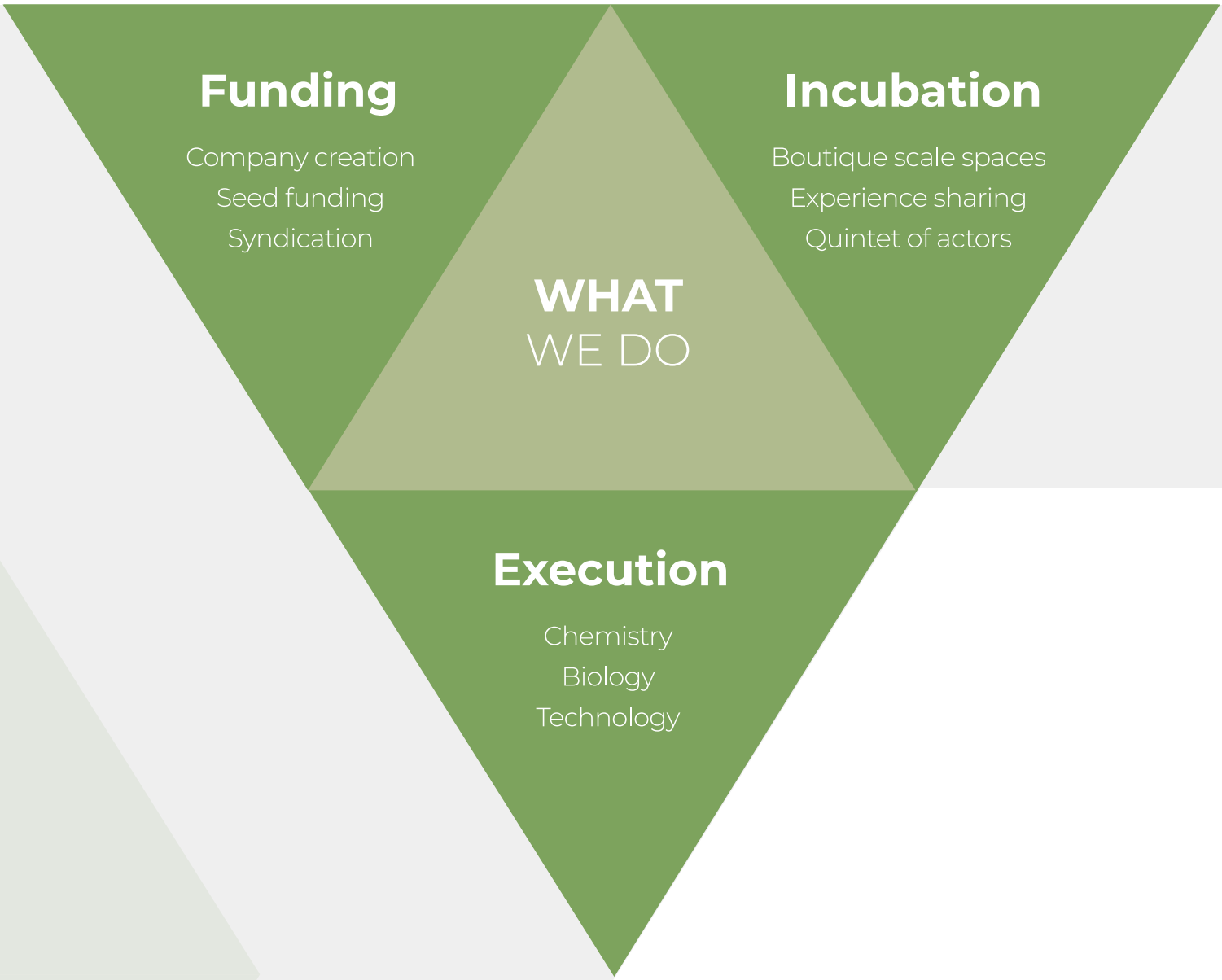
Light collaboration

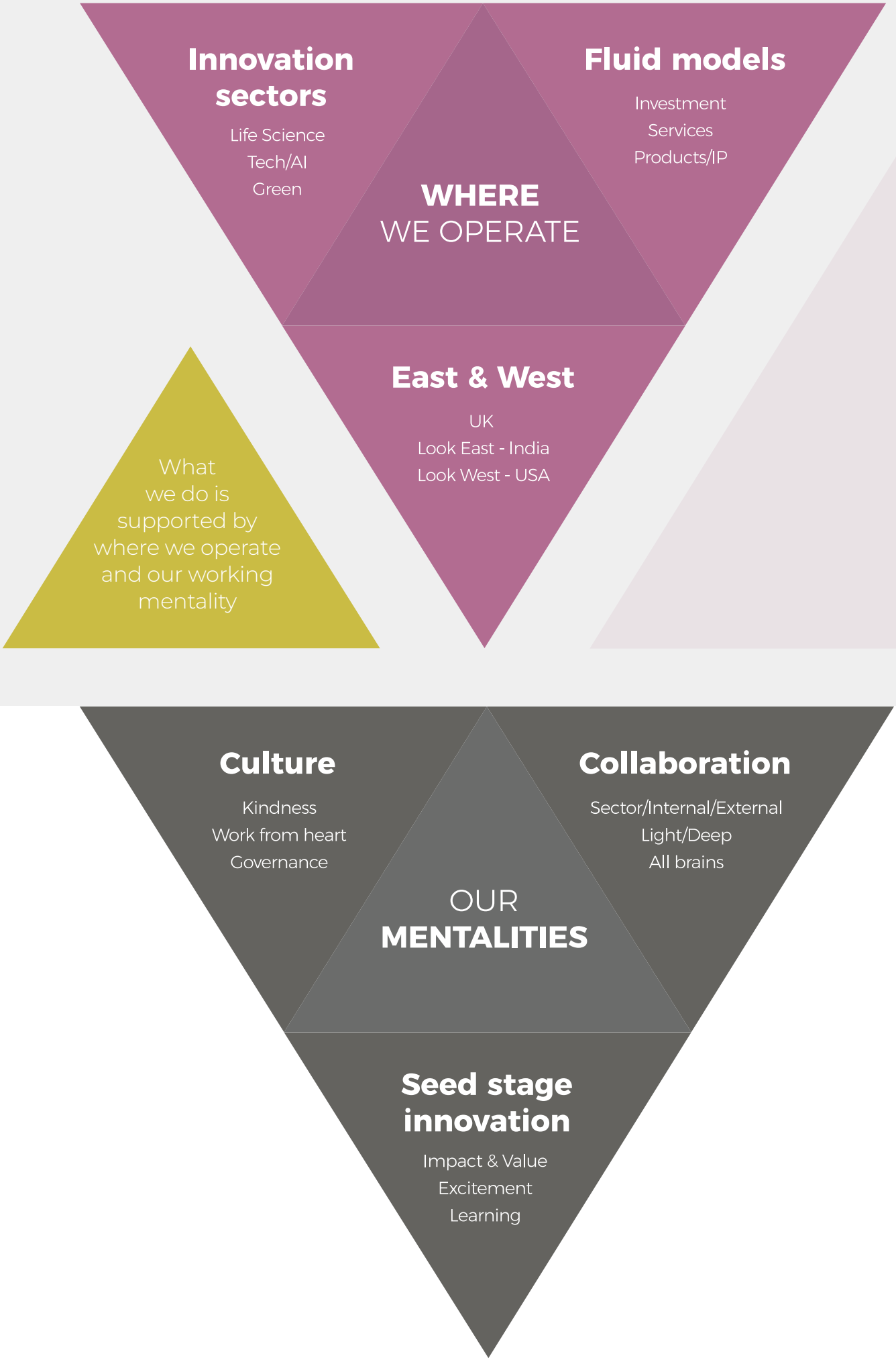


Deep collaboration

seeding new ideas

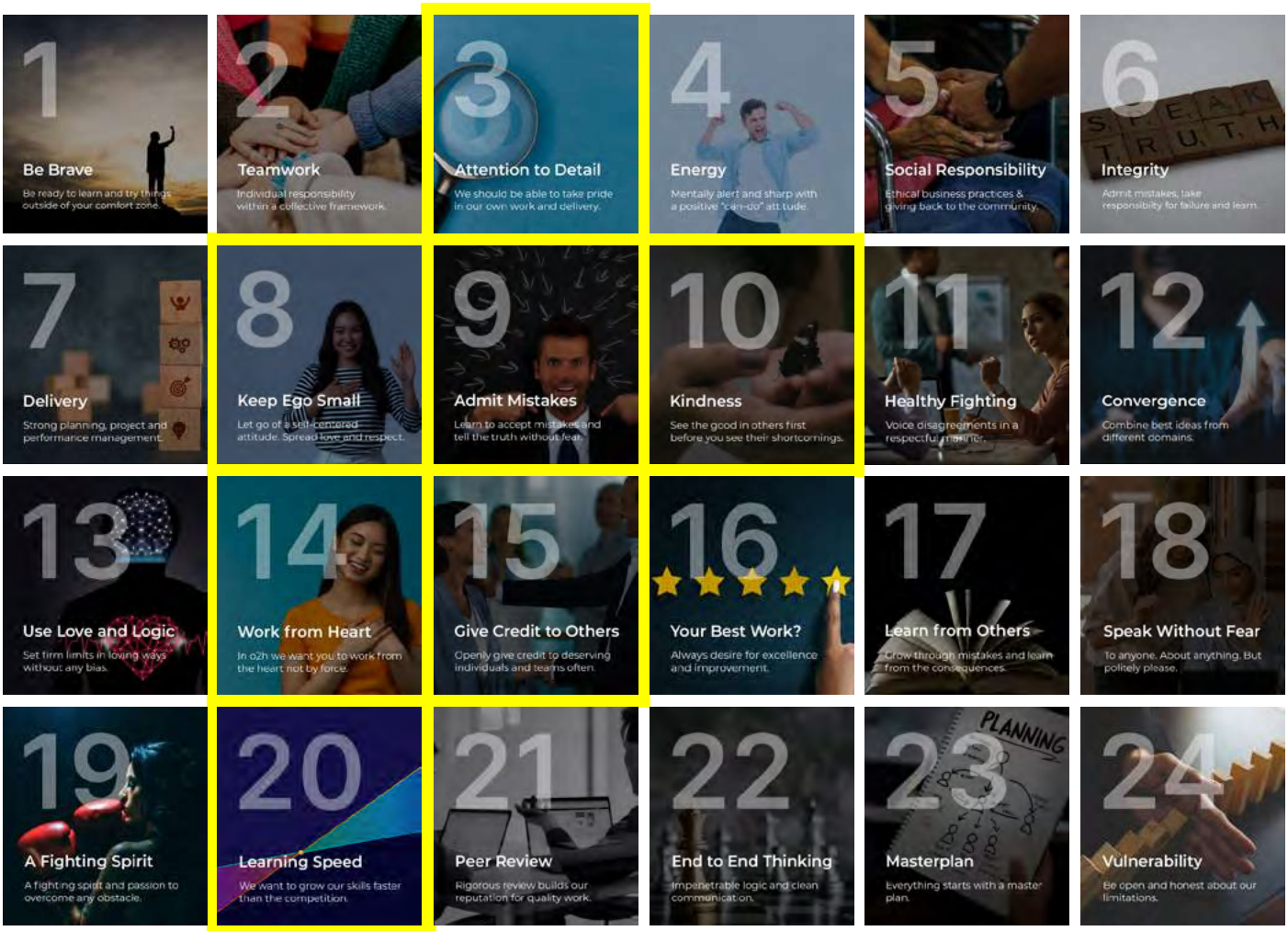
by triaging funding, execution and incubation




Innovation sectors
Life Science
Tech/AI
Green
Fluid models
Investment
Services
Products/IP
WHERE
WE OPERATE
East & West
UK
Look East - India
Look West - USA
What we do is supported by where we operate and our working mentality
Culture
Kindness
Work from heart
Governance
Collaboration
Sector/Internal/External
Light/Deep
All brains
OUR
MENTALITIES
Seed stage innovation
Impact & Value
Excitement
Learning

Our Culture is Our IP

It is embedded in simple human values that drive our habits, reflexes and attitudes to our work, each other and our community.



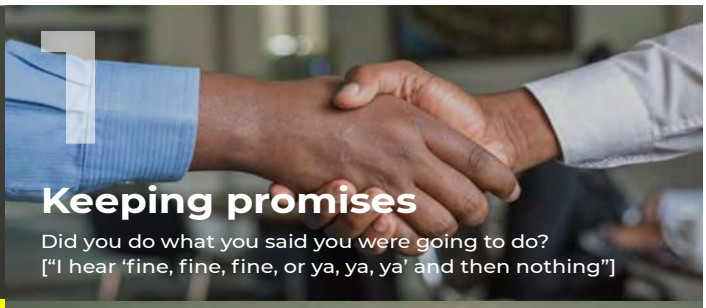
These 7 highlight a key piece of our human identity

> "Here the atmosphere is really electrifying"

Driving Customer Success

If you win, we win, and we have played our part in seeding new ideas in life-sciences, and finding patient cures...

Golden rules for collaborator communication



1 Keeping promises

Did you do what you said you were going to do? ["I hear 'fine, fine, fine, or ya, ya, ya' and then nothing"]



2 Save your collaboration manager time

What are you doing everyday to make the life of your collaboration manager easier everyday and allow them to process their work faster?



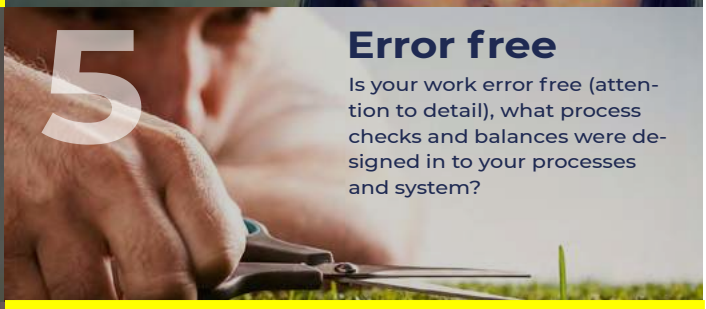
3 Insight

Are you giving insight/analysis for fast decision making or only giving them data/information/unexplained attachments?



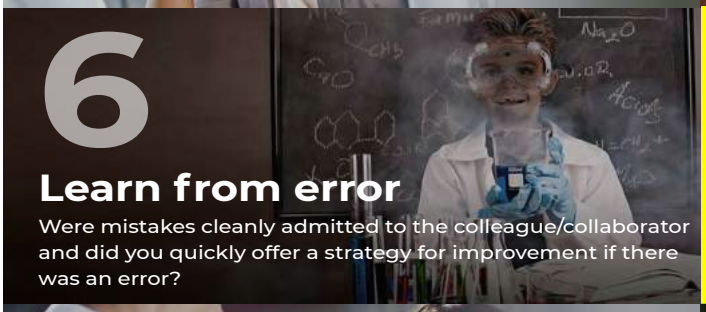
4 Advanced real time updates

Are you managing expectations via frequent real-time updates and informing of problems/ solutions? [colleagues/collaborators don't like surprises]



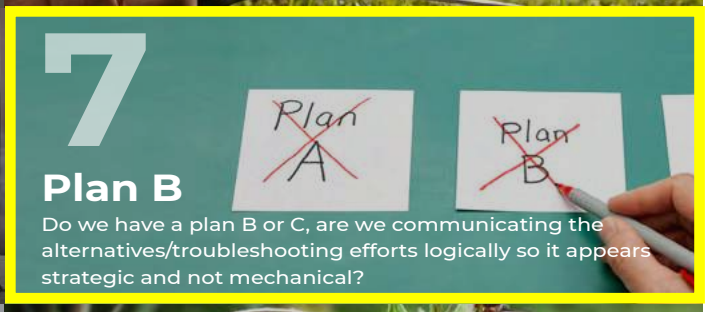
5 Error free

Is your work error free (attention to detail), what process checks and balances were designed in to your processes and system?



6 Learn from error

Were mistakes cleanly admitted to the colleague/collaborator and did you quickly offer a strategy for improvement if there was an error?



7 Plan B

Do we have a plan B or C, are we communicating the alternatives/troubleshooting efforts logically so it appears strategic and not mechanical?



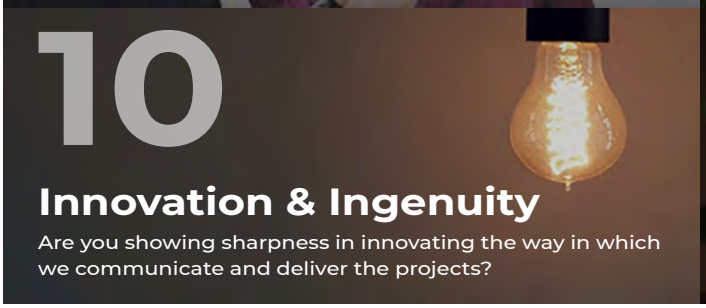
8 Direct insight from the ground

Is the collaborator exposed to live insights of trouble-shooting evidence from the ground team and via literature search based research?



9 Team strength in depth

Does the collaborator see the strength in depth of capabilities by being exposed to communications from scientists/techies working at the ground level?



10 Innovation & Ingenuity

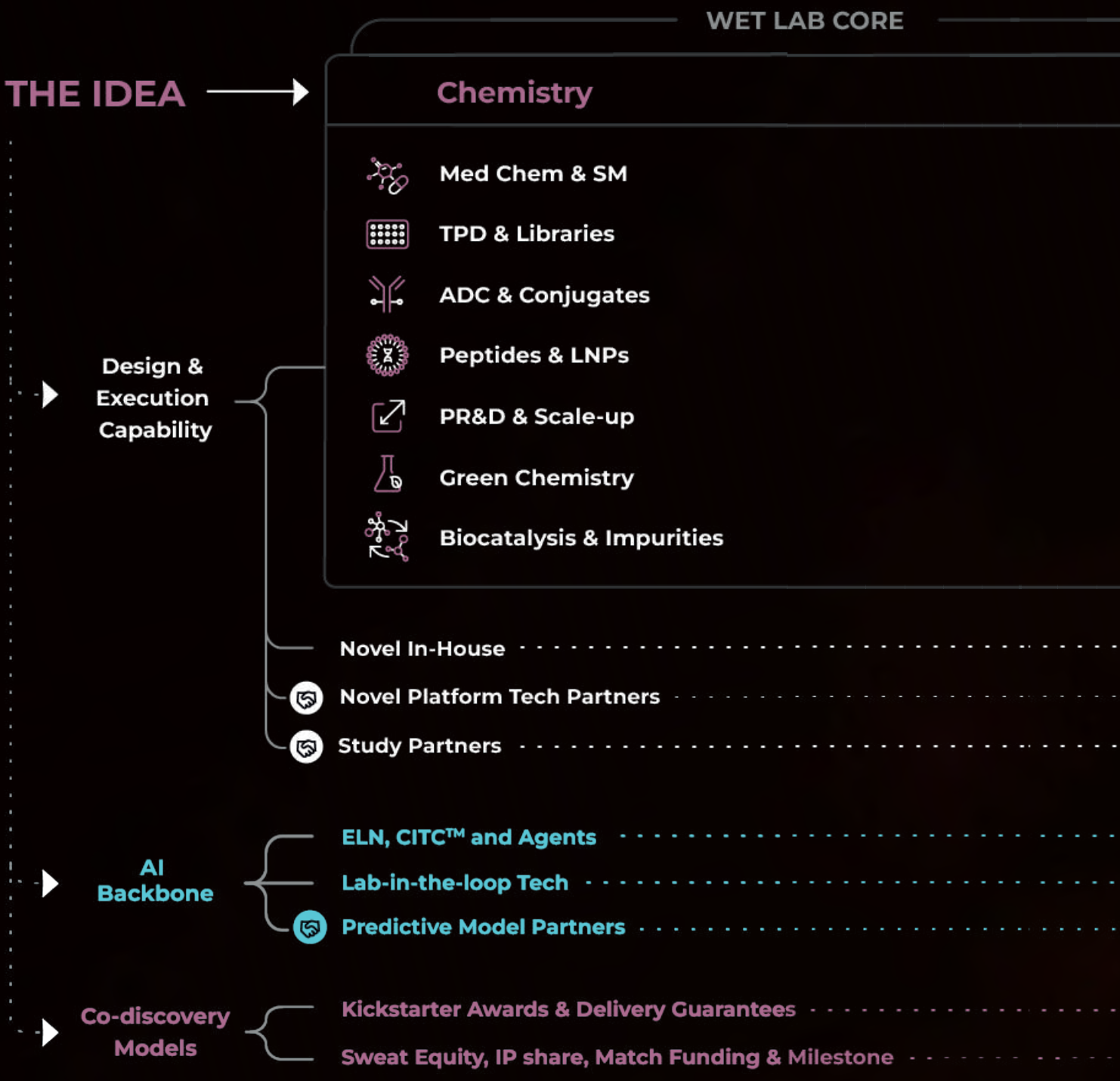
Are you showing sharpness in innovating the way in which we communicate and deliver the projects?



11 Expectations & Targets

Are you adapting to the latest changing expectations and targets of colleagues/collaborators and what is happening in their project/business?

An integrated multi-modality drug discovery platform...



The core is an integrated multi-modality drug discovery platform that combines novel capabilities with strategic partners embedded on an AI enabled backbone.



Alchemy - Fast tracking new ideas to a development candidate

THE IDEA

Chemistry

Design & Execution Capability

Wet Lab Core

- MedChem & Small Molecules
- TPD & Libraries
- ADC & Conjugates
- Peptides & LNPs
- Green Chemistry
- Biocatalysis & Impurities

Novel In-house

- Proprietary Fragment Library

Novel Platform Tech Partners

- Glues - (Ternary Tx, Stick Tx)
- ADCs - (Spirea)

Study Partners

- LNP Formulation - (Camgene)
- Computational - (Linchpin.bio, ODD)
- Fragment Libraries - (Astex)
- Compound Libraries - (Enamine)

AI Backbone

ELN, CITC, Agents

- Chemipedia - Reaction Data
- Mycelium - Agentic Lead Compound Analysis

Lab-in-the-loop Tech

Predictive Model Partners

- Molecule Discovery - (Deepmirror)
- Retrosynthesis - (SciFinder, Chemical.AI)

Co-Discovery Models

Awards & Guarantees

- Kickstarter, Delivery Guarantee, Match Funding

Risk Share (Inflexion^{Tx})

- Sweat Equity, IP share, Milestone

Culture

To take you on the journey from idea to development candidate, we have in-house capabilities comprising proprietary tools, strategic partnerships and technology platforms. We combine these with AI at each stage where appropriate, integrating human effort, hybrid tools and fully automated systems. Additionally we offer a range of business models that enhance capital efficiency, helping you to get to the lead candidate.

Biology

- Cascade Design
- Cellular Assays
- Screening & Automation
- Target Validation
- MOA & Engagement
- Bioanalysis & Phenotypic Screening

DMPK

- Phys-Chem Assays
- ADME Drug Profiling
- Safety & Toxicology
- Metabolism & DDI
- Bioanalysis
- Pre-formulation
- Discovery PK

PR&D/Scale-up

- Route Scouting
- Process Safety & Optimisation
- Impurity Control
- Non-GMP g to kg
- Tech Transfer & GMP Support

LEAD / DEV CANDIDATE

- RNA Biology
- Membrane Proteins SPR
- Mitochondrial
- Psychedelics
- ADCs & PDCs
- AUTOTACs & DUBTACs
- Novel E3s
- NAMs
- Cell Painting Assays
- Neuroinflammation

- DEL - (HitGen)
- Protein Production - (GenScript)
- 3D Organoids & Engineered Tissues - (Biodimensions)
- Omics - (Strand Life Sciences)
- Structural Biology (NCBS)
- NAMs (AZ)

- In-vivo - (Vipragen)
- hERG - (Metrion, ApconiX)
- AMES - (RCC Labs, Adgyl Lifesciences)
- Efficacy Models - (Pharmidex)

- Non-GMP (kg-scale) - (Ami Lifesciences)
- GMP - (Ami Lifesciences)

- Cellular Pathways, Genomics, and Repurposing - (AI-VIVO)
- AI Biology Integration (IIT Madras)

- In Silico Tox - (Consone AI)
- In Silico ADME - (Inductivebio)

Ternary³ Model Formation

To take you on the journey from idea to development candidate, we have a unique three-part ternary model combining novel capabilities (in-house/strategic third-party/ tech platforms), cutting-edge AI tools (mixed in with human experience), and business model to fit your stage of capital evolution.

Digitisation

- → ELN
- → CITC – Project Mgmt.
- → Inventory Search

'Mix in' Human Experience

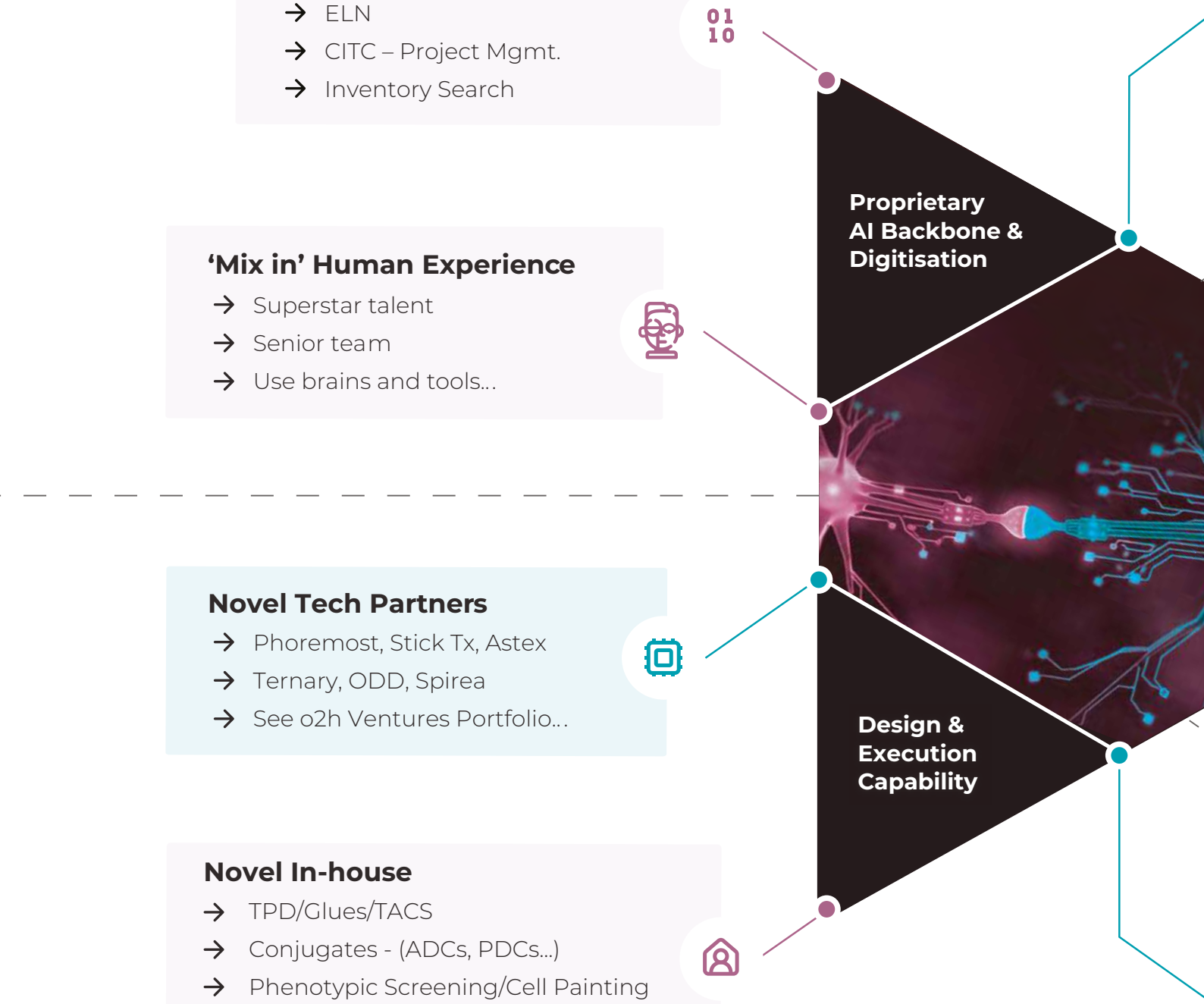
- → Superstar talent
- → Senior team
- → Use brains and tools...

Novel Tech Partners

- → Phoremost, Stick Tx, Astex
- → Ternary, ODD, Spirea
- → See o2h Ventures Portfolio...

Novel In-house

- → TPD/Glues/TACS
- → Conjugates - (ADCs, PDCs...)
- → Phenotypic Screening/Cell Painting Novel/Niche Assays - (Integrin, Cha - melogK, Neurite, Semarion, SPR, RNA, Mitochondrial, Psychedelics...)

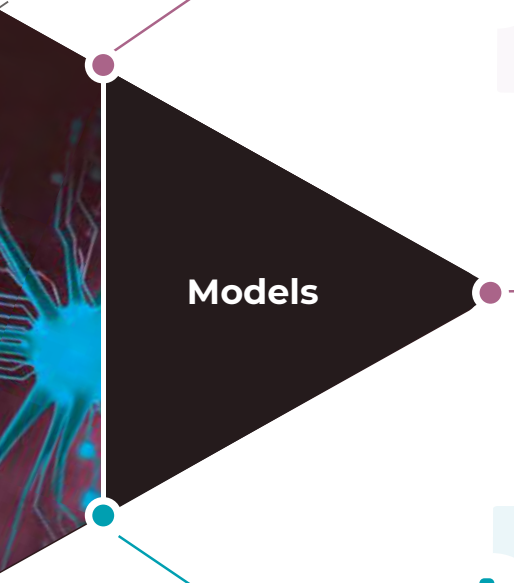


Novel AI Tech Partners

- SciFinder, Chemical.AI
- Deepmirror
- Inductivebio
- Ignota Labs

Risk

- Milestones/Buy-out
- IP share
- Sweat Equity



Awards

- Kickstarter
- Biology Match Funding

Services

- FTE, FFS
- Plug-in Biotech

Strategic Partners

- DEL - (HitGen)
- In-vivo - (Vipragen)
- Comp chem – (Linchpin.bio, ODD)
- hERG - (Metrion)
- Organoids - (Biodimensions)

Extensive Track Record of Collaborations in Biotech

o2h discovery has supported marquee biotech and pharma across the globe since 2004.

USA

Big Pharma / Biopharma

Genentech – A Member of the Roche Group
Theravance Biopharma
Pfizer

Biotech / Therapeutics

Revolution Medicines
arrakis therapeutics
Cedilla
ORIGAMI Therapeutics
ImmuNext
TREELINE BIOSCIENCES
Karyopharm Therapeutics
ONSERO
CURZA
salori
Amicus Therapeutics
Spark Therapeutics
MIRATI THERAPEUTICS
Idenix Pharmaceuticals
Epizyme
chromocell
bacchus therapeutics
capstan therapeutics
GliaCure
cogent
KYMERA
MORPHIC
nalu bio
SEAWOLF THERAPEUTICS
LIFORDI IMMUNOTHERAPEUTICS

TechBio / AI / Computational

Nimbus Discovery

glyphic//bio

Research / Academia

Penn State

Broad Institute

Flatley Discovery Lab

Stanford University

Investors / Enablers

Sigma-Aldrich

ATLAS Ventures

Curie.Bio

Sporos Bioventures

UK/Europe

Big Pharma / Biopharma

AstraZeneca

gsk

Novartis

Ferring Pharmaceuticals

Biotech / Therapeutics

Isomorphic Labs

Nxera

astex pharmaceuticals

Azadyne

Dunad therapeutics

Storm Therapeutics

Sentinel Oncology

artios DNA Damage Response

Phoremost

OMass Therapeutics

Amphista Therapeutics

Refoxy Pharma

Boster Therapeutics

Astra Therapeutics

Beactica Therapeutics

Tay Therapeutics

NEOPHORE

5 ALARMBIO

HOX THERAPEUTICS

OUTSEE Genomics led discovery

Greywolf

Exonate

SAMSARA THERAPEUTICS

senexis

PROCARTA BIOSYSTEMS

ardana

Sareum

nuformix

OPPILOTECH

BLACK BELT TX

Curileum

TechBio / AI / Computational

PHARMENABLE

OXFORD DRUG DESIGN

LifeArc

deepmatter

EVARISTE

KUANO

Research / Academia

CANCER RESEARCH UK

MANCHESTER 1824 The University of Manchester

ICR

UNIVERSITY OF OSLO

Oslo University Hospital

CRO / CDMO / Services

RxCelerate

metrion biosciences

ALMAC

Academic tech-transfer

invent2

Japan

Big Pharma / Biopharma

astellas

Eisai

Biotech / Therapeutics

sosei HEPTARES

SHIONOGI

Singapore

Big Pharma / Biopharma

RVAC MEDICINES

TechBio / AI / Computational

engine

Australia

Academic tech-transfer

QUT Queensland University of Technology

Taiwan

Biotech / Therapeutics

PharmaEngine
智擎生技製藥

What Our Customers Say...



My relationship with o2h Discovery is now more than a decade. I have had many opportunities to collaborate with the o2h team for my drug discovery efforts at Karyopharm, Protai and Sporos Bioventures. I have always been impressed by their efficiency to deliver novel chemical compounds that helps to achieve targeted project milestones. Real time and insightful communication is also their key differentiator.

Sharon Shacham
Co-founder & MD, E44 Ventures

Our relationship with o2h over many years supporting our medicinal chemistry projects in QEDDI has been highly productive. With o2h's help we have progressed our portfolio to an advanced stage ready for partnering. We are very pleased with the efficiency, productivity and communication with o2h chemists and look forward to further positive outcomes.



Brian Dymock
Head of QEDDI



At Cellestial, our goal is to maximise patient benefit that our treatments can offer. Small molecule therapeutics remain the most scalable form of treatment modality, meaning that more people around the world can benefit from them. We are proud to partner with o2h to expand our pipeline of astrocyte-protective small molecule drugs. The expertise provided both on the conceptual planning stage as well as the synthesis efficiency is world-class.

Dr Nat Hastings
CEO, Cellestial Health



We had a great experience working with o2h discovery on our Fragment libraries project. Their expertise in conducting fragment-based screening, targeting dual series threonine kinase on surface plasmon resonance, was impressive. The efficiency, productivity, and detailed communication from the o2h biologist team were outstanding. We look forward to further positive outcomes in our future collaborations.

Eran Seger
CEO and Co-founder, Protai Bio

Protai

Persephoni Biopartners is excited to announce the award of the o2h Kickstarter Program to InnoVira Therapeutics, a Persephoni portfolio company focused on developing small molecule medicines. The Kickstarter award will accelerate our early discovery and drive generation of candidates for our lead program. The high quality medicinal chemistry services provided by o2h Discovery are uniquely designed to help startups such as InnoVira reach value milestones more rapidly, which aligns closely with Persephoni's core mission of de-risking early stage companies to bring novel therapies to patients faster.

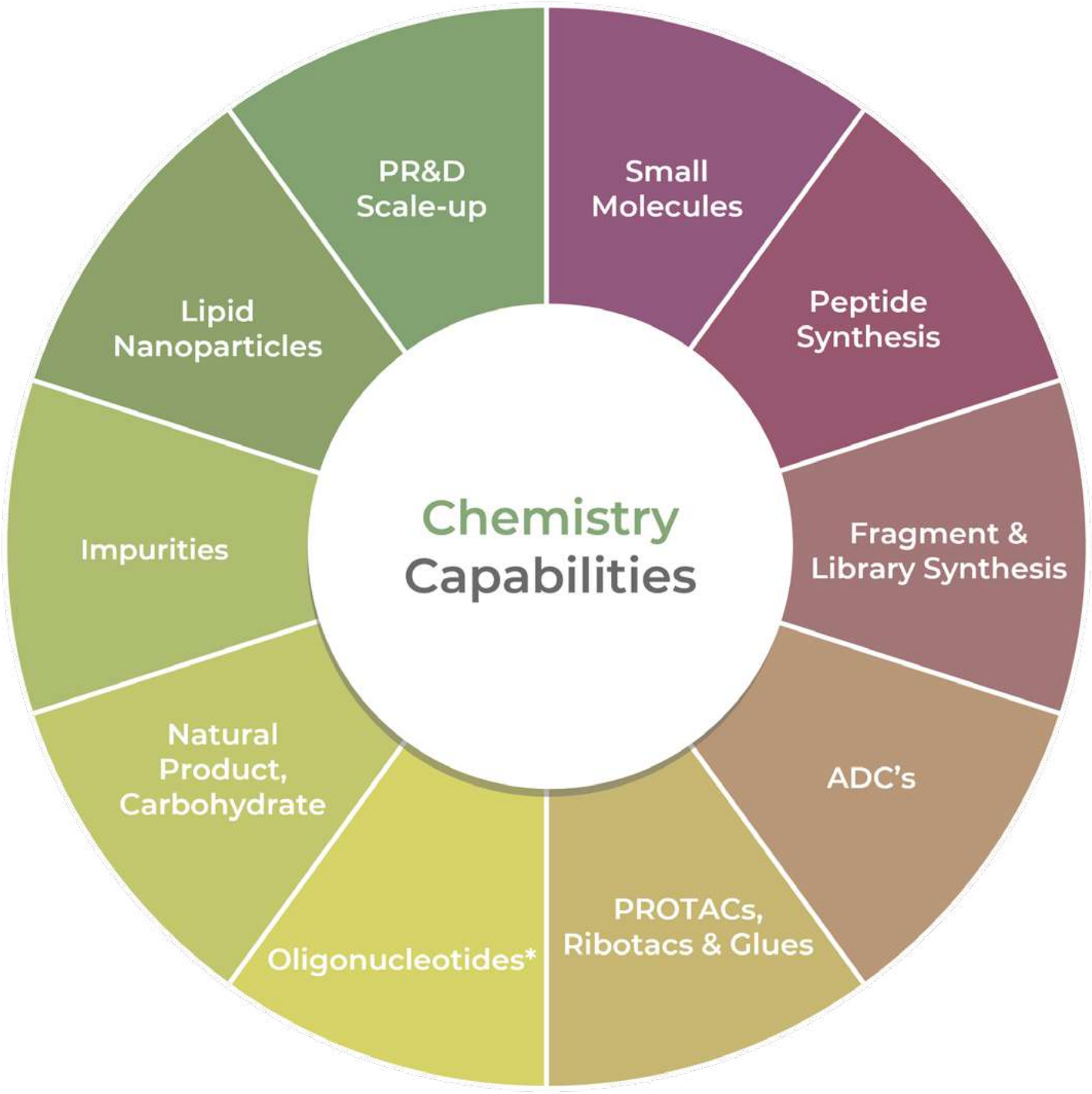


Hilary Schultz
CEO, Persephoni Biopartners

PERSEPHONI™
Discover | Transform | Accelerate

Chemistry Capabilities

We have deep chemistry expertise in medicinal chemistry, and various modalities to support a HIT ID to lead optimisation program complemented by strong HTE experience.



* Service in planning phase

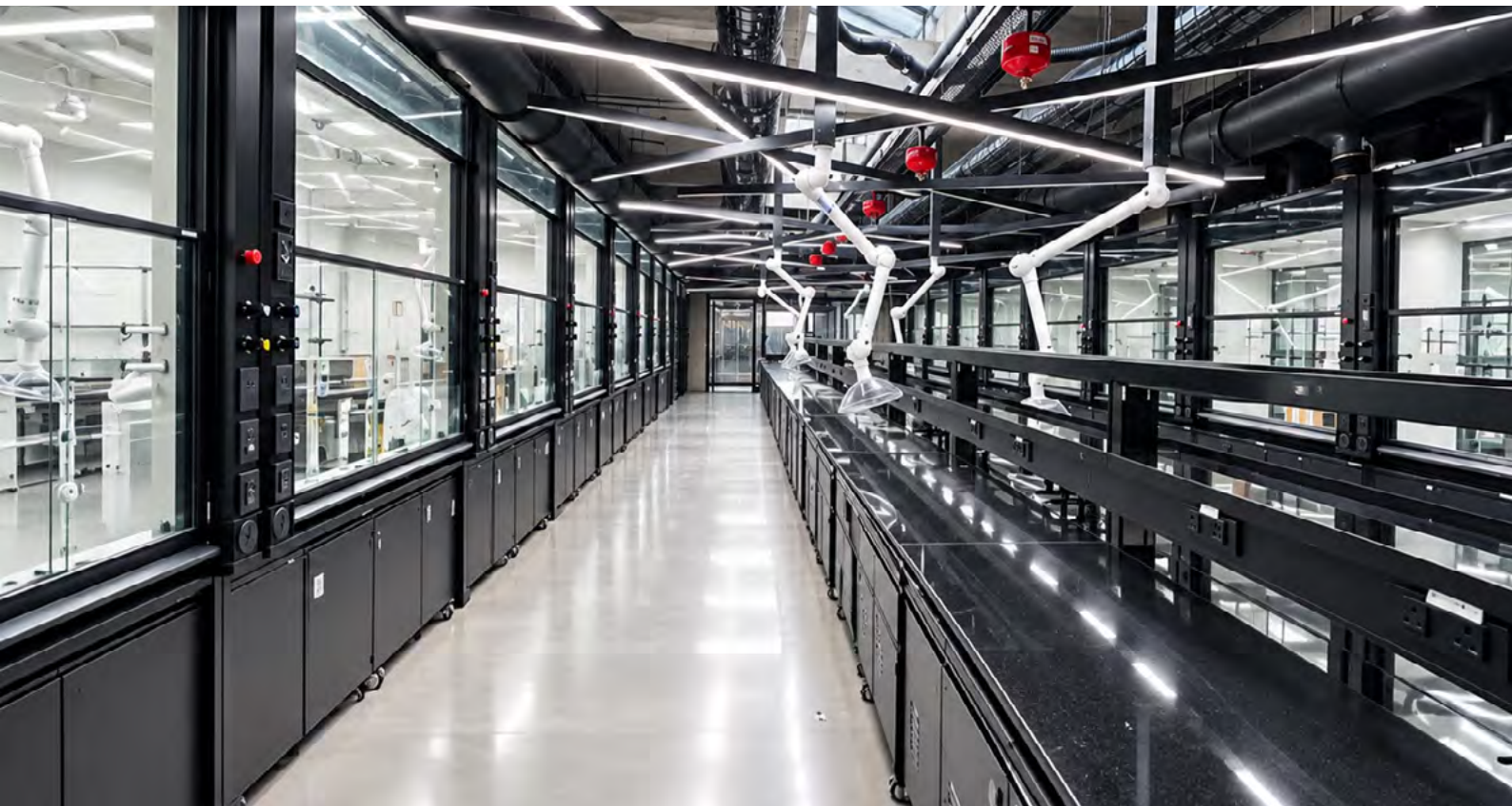
**Electrochemistry and Photochemistry reactions can support green chemistry approaches...

Chemistry Lab

Shirish Research Centre

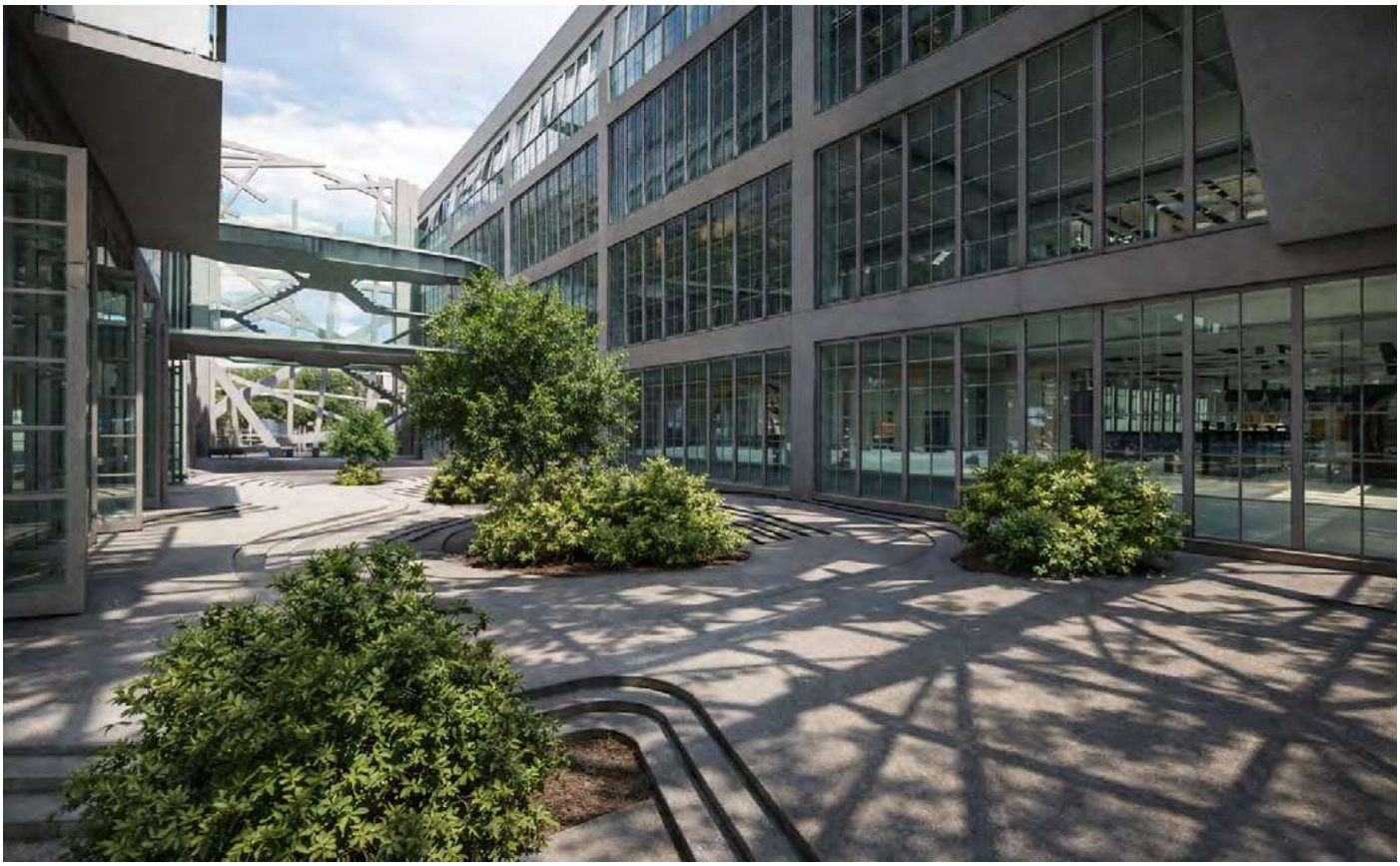
o2h discovery has launched a new state-of-the-art research centre with chemistry, biology, Scale-up, process and ADC capabilities to support integrated pre-clinical drug discovery programs.












sbirish research park

Coming Soon...

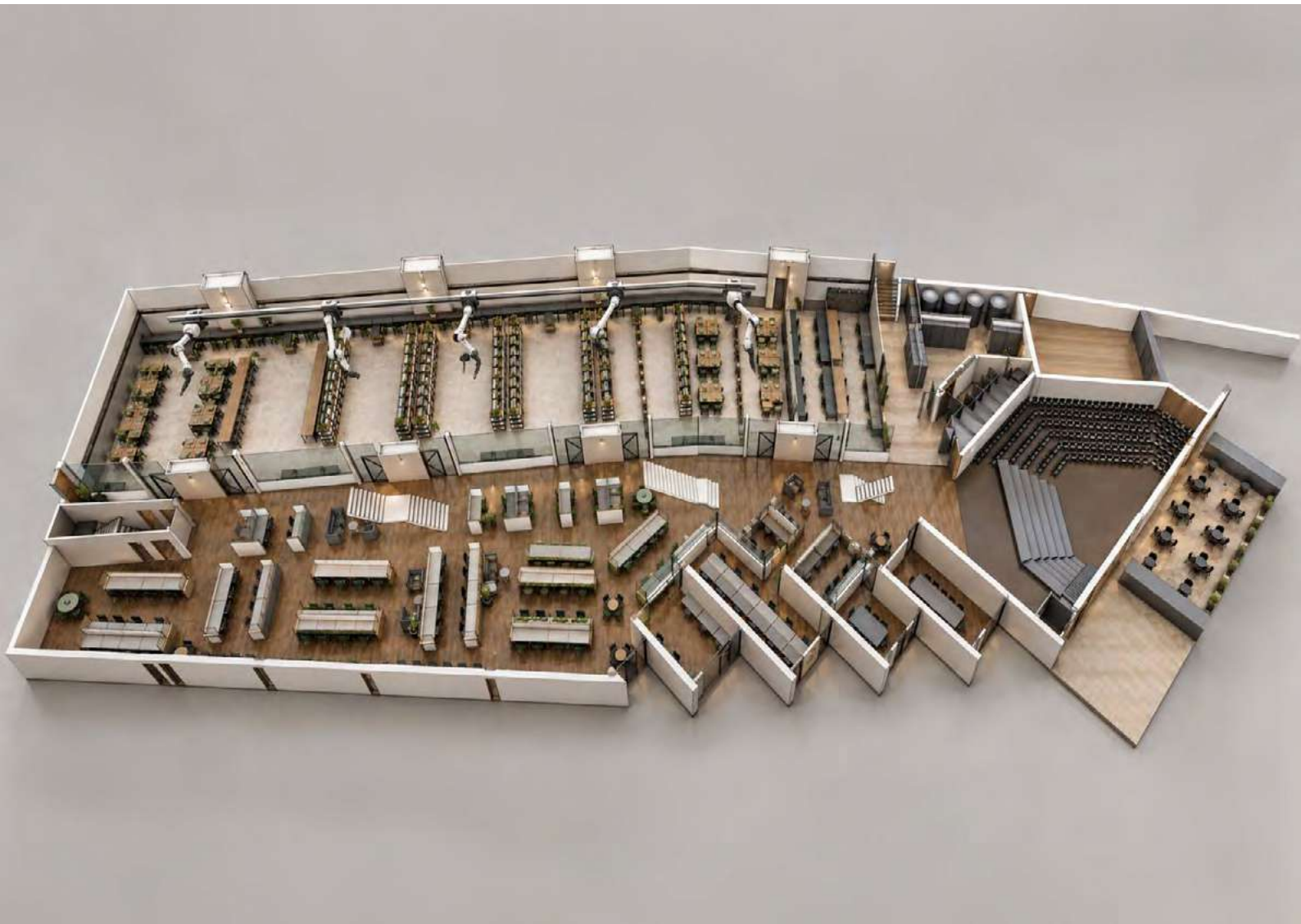
Hauxton Meadows

o2h discovery will launch the Hauxton Meadows housing early-stage science incubators which will feed into the large-scale spaces in the Cambridge eco-systems as they grow in scale. The building will contain 8 standard module laboratories that will have around 12 Biologists working in each of them.









Integrated Drug Discovery (IDD)

Deep scientific knowledge, expert management and a thorough understanding of the drug discovery challenges



Discover a comprehensive suite of capabilities to propel your drug discovery program from target validation to IND submission. We offer more than just multiple services.

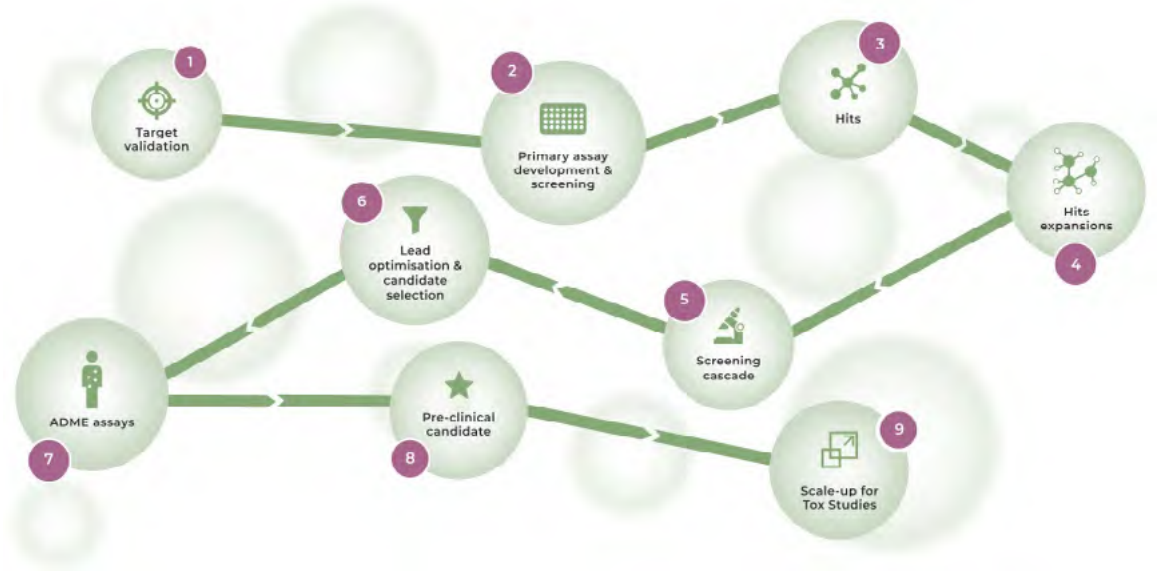
Our **integrated approach** combines deep scientific knowledge, expert management and a thorough understanding of the drug discovery challenges.

"Have always delivered and we particularly appreciate their philosophy of working towards the success of the partner organisation and not just the work plan."



Bob Boyle
CEO, Sentinel

Sentinel ONCOLOGY



Target Identification & Validation

Drug discovery starts with finding the right biological target and confirming that modulating it can deliver real therapeutic benefit. We have experience supporting drug discovery endeavours from inception through to pre-clinical model studies. We deploy integrated cellular, biochemical, and mechanism-based assays to confirm target relevance and disease linkage laying the groundwork for robust progression into hit discovery.

Hit Identification

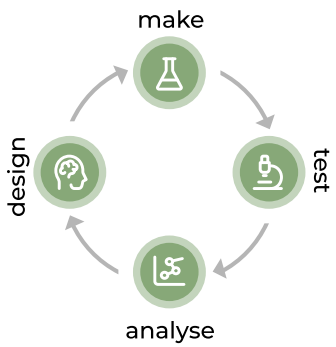
At o2h discovery, we tailor high-quality hit-finding strategies across diverse target classes, including challenging “me too” and “undruggable” targets. Leveraging biochemical, biophysical, and high-throughput cellular platforms, we deliver high-confidence hits with clear on-target engagement and actionable SAR to accelerate drug discovery.

Hit-to-Lead

At o2h discovery, we accelerate hit-to-lead development through rational design, SAR confirmation, synthesis, biological assays, and early ADMET studies. By integrating pharmacology, DMPK, and medicinal chemistry, we enable faster design-make-test-analyse cycles, empowering biotech partners to make informed Go/No-Go decisions and advance molecules addressing unmet medical needs.

Lead Optimisation

Lead Optimisation is a critical phase in the drug discovery and development process. During this stage promising lead compounds typically identified during the hit-to-lead phase undergo extensive refinement and optimisation. Our multidisciplinary approach enhances lead compounds via structure-guided design, ADMET fine-tuning, pharmacokinetic profiling, and safety assessment transforming leads into preclinical candidates.



Fragment Based Drug Discovery

Unlock the potential of undruggable targets with o2h discovery's Fragment-based drug discovery services



Fragment-based drug discovery has emerged as a revolutionary approach to identifying novel chemical starting points for a wide range of biological targets, including those once considered undruggable.

By utilising smaller, basic building blocks known as fragments, this cutting-edge method offers unique advantages in the search for potent drug candidates.

"We have worked with the o2h team on a range of synthetic projects and had consistently positive experience. The combination of competence, effective project management and detailed documentation made us go back again and again."



Professor Kirill Alexandrov

CSIRO, QUT Synthetic Biology Alliance

Medicinal Chemistry

We work at the critical interface of chemistry and biology, partnering with global biotech and pharma companies to accelerate the development of innovative therapies

Overview

Our medicinal chemistry expertise spans the full spectrum of small molecule design and synthesis, from traditional heterocyclic and carbocyclic chemistry (including carbohydrates and steroids) to complex modern modalities. These include PROTACs, molecular glues, peptides, and oligonucleotides, where our integrated approach helps advance even the most challenging drug discovery programs.

By combining deep scientific knowledge with flexible collaboration models, o2h Discovery enables partners to efficiently scale their research, reduce timelines, and bring breakthrough medicines closer to patients.

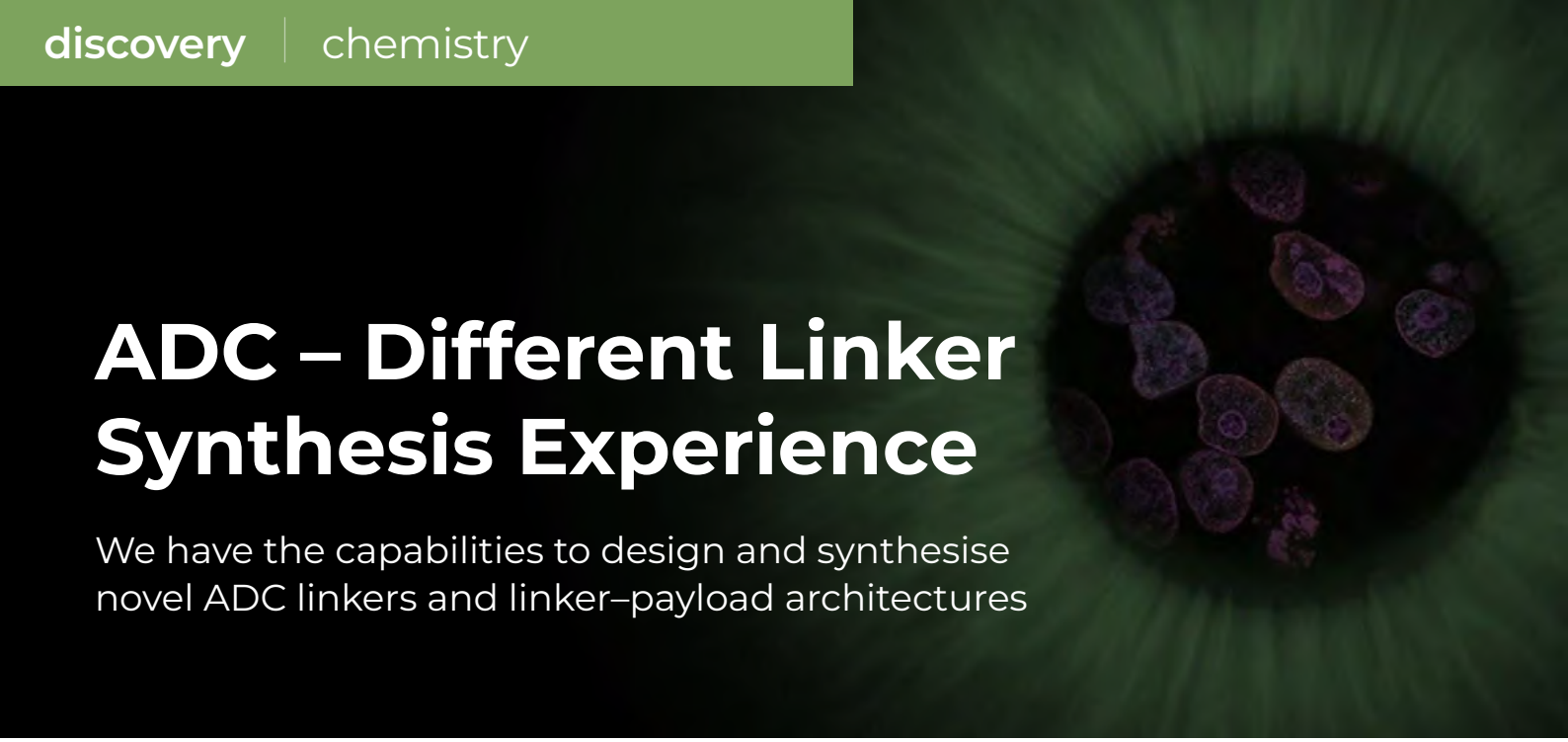
Why Partner with o2h Discovery for Medicinal Chemistry Service?

o2h Discovery offers end-to-end medicinal chemistry services, including hit identification, hit-to-lead optimisation, lead generation, and lead optimisation. Our services can be accessed as standalone projects or integrated within a complete drug discovery program.

We combine chemistry and biology expertise to design and synthesise high-quality compounds, establish structure-activity relationships, reduce liabilities, and advance molecules toward in vivo proof-of-concept. Our teams collaborate closely to ensure compounds meet target product profiles while supporting ADME, PK/PD, and pharmacological studies.



- Global expertise with operations in India, UK, and USA
- Integrated drug discovery model combining medicinal chemistry, biology, and DMPK
- Proven track record in hit-to-lead and lead optimisation program
- Flexible, agile, and collaborative engagement structures
- Strong emphasis on IP protection and scientific integrity



ADC – Different Linker Synthesis Experience

We have the capabilities to design and synthesise novel ADC linkers and linker–payload architectures

In recent years, we have continued to strengthen and expand our ADC discovery capabilities, supporting multiple client programs across linker design, payload chemistry, and conjugation technologies. Our growing expertise enables the development of complex ADC components from early-stage design through synthesis and characterization.

Our ADC capabilities include:

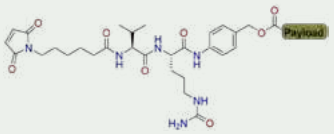
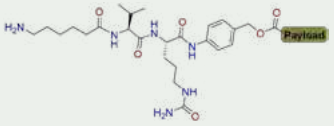
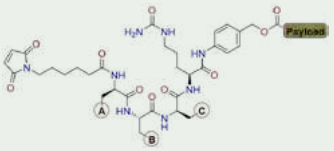
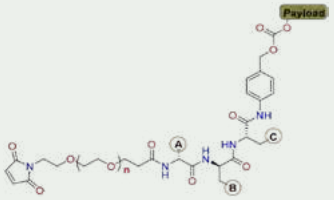
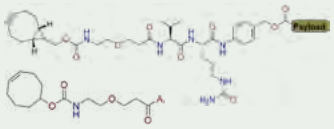
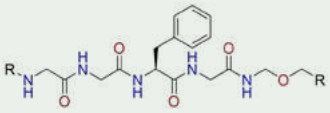
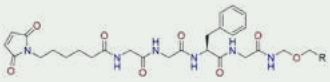
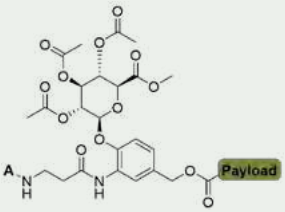
- Design and synthesis of cleavable and non-cleavable linkers (Val-Cit, Val-Ala, disulfide, glucuronide, PEG, click chemistry, and maleimide/NHS ester), utilizing SPPS technology for the rapid synthesis, customization, and delivery of peptide-based linker libraries.
- Development of linker-payload constructs and conjugation-ready building blocks.
- Experience with a diverse range of payloads, including Exatecan, SN38, MMAE, PBD dimers, Elimusertib, steroidal and non-steroidal payloads, and other potent anticancer heterocyclic small molecules.
- Design of peptide linker–payload conjugates to improve tumor-selective payload release and minimize off-target exposure.
- Development of Targeted Drug Conjugates (TDCs) incorporating SR48692-derived targeting ligands (receptor-targeting small molecules) and A1331852-derived payloads (potent apoptosis-inducing small-molecule payloads), integrated with optimized linker technologies for selective drug delivery.
- Route scouting, optimization, purification (Prep HPLC/flash chromatography), and comprehensive analytical characterization (LC-MS, HRMS, NMR, HPLC, and chiral SFC).

By combining expertise in medicinal chemistry, peptide synthesis, and analytical sciences, we provide integrated support for ADC discovery—from custom linker synthesis to complex linker-payload development—helping accelerate next-generation targeted therapeutics.

Examples of payloads we have worked with include:

1. Exatecan
2. SN38
3. MMAE
4. Duocarmycines
5. Triptolide

List of cleavable ADC Linkers – easy access of these linkers

Sr. No.	Linker name	Structure
1	MC-Val-Cit-PABC-Paylaod	
2	cadaverine-Val-Cit-PABC- Paylaod	
3	MC-A-B-C-Cit-PABC- Paylaod Non-natural AA linker	
4	Maleimide-PEGn-A-B-C-PABC- Paylaod PEGylated linker	
5 & 6	BCN-PEG-Val-Cit-PABC- Payload & TCO-PEG-Val-Cit-PABC- Payload Clickable linkers	
7	GGFG-linker Peptide linker	
8	Maleimide-caproyl-GGFG-linker Peptide linker	
9	Glucuronide linker B-Glucuronidelinker	



Peptide Synthesis - Capabilities and Experience

A dedicated to advancing scientific research and drug discovery through exceptional peptide synthesis services

Our Peptide Platform

With cutting-edge infrastructure, expert scientists, and a commitment to speed, we remove the traditional roadblocks in peptide sourcing, ensuring your research moves forward and faster than ever.

State-of-the-art facility for peptide synthesis, purification, analysis and characterisation

Expertise in traditional solution phase and advanced solid phase peptide synthesis (SPPS)

Capabilities to generate library of standard average length peptides (20-mer), as well as to deliver long chain (50-mer) and complex peptides

Peptide Modification

In addition to synthesis, our experienced team of chemists also excel in performing a wide range of peptide modifications, including but not limited to the following:

- Linear - long chain peptides
- Acetylated Peptides
- Macrocyclic Peptides
- Branched Peptides
- PEGylated Peptides
- Di-sulphide bond formation
- Succinylated Peptides
- Head to Tail Cyclisation
- Lactam ring formation
- Stapled Peptides

Additional Services

- Assay Development *(SPR, FP, ChamelogK)*
- Chromatography *(HPLC, TLC, GC, IC)*
- Chromatography with LC-MS/ESI
- Spectroscopy *(UV Vis, IR, NMR)*
- Titration *(Acid-Base & Karl Fisher)*
- pH Adjustment and Amino Acid Analysis
- Metallic Analysis *(AAS, ICP, ICP-MS)*
- Counter Ion Exchange *(TFA removal)*
- Solubility Testing







Nucleoside – Nucleotide Chemistry

We specialise in precision synthesis of nucleoside and nucleotide analogues, backed by advanced analytics

Nucleoside Analogues

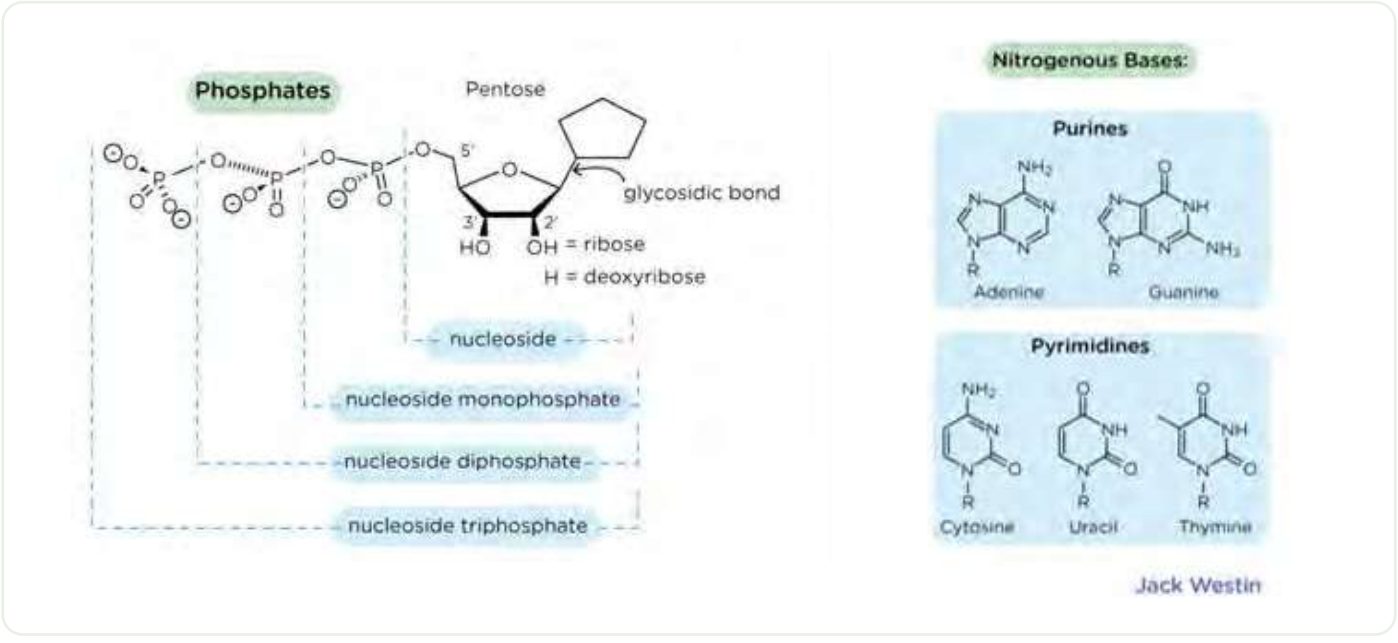
- Ribose and Base Modification: Enhancing stability and functionality.
  - Uracil/Cytidine
  - Adenosine
  - Guanosine
- C-linked Nucleosides: Improving pharmacokinetics and biological activity.

Nucleotide Analogues

- NMP, NDP, NTP, N4P, Thio-phosphate:
  Custom synthesis for biochemical and therapeutic applications.

Dedicated Purification and Analytical Instruments

- Ensuring high quality and purity of synthesized compounds.



High Throughput Experimentation (HTE) & Library Synthesis

Our scientific team specialises in HTE for diverse chemistries, covering reaction screening, synthesis, purification, and library delivery

Technology & Infra Support

- Catalyst Kits – Pre-packaged kits for rapid reaction screening and optimisation
- Parallel Reaction Stations – Radleys Carousels
- Parallel Reaction Blocks – 6, 10, 12
- Pressurized Vessels (for parallel hydrogenation, reduction, carbonylation type reactions)
- Robotic Microwave Systems
- Photo Reactor Systems
- Peptide Synthesizers
- Flash Purification Systems
- Prep HPLC Support
- SFC Support
- SCX Cartridges
- Ion Exchange Resins

Chemistry Range

- Suzuki Coupling
- Buchwald Coupling
- C-H Activation
- Pd-mediated Cross Coupling
- Acid-Amie Coupling
- Acrylamides

Library Diversity Reagents

- Boronates
- Acids
- Amines
- Esters
- Alcohols
- Aldehydes
- Aromatic & Heteroaromatic Halides
- Thio Compounds

Micro Chemistry New initiatives

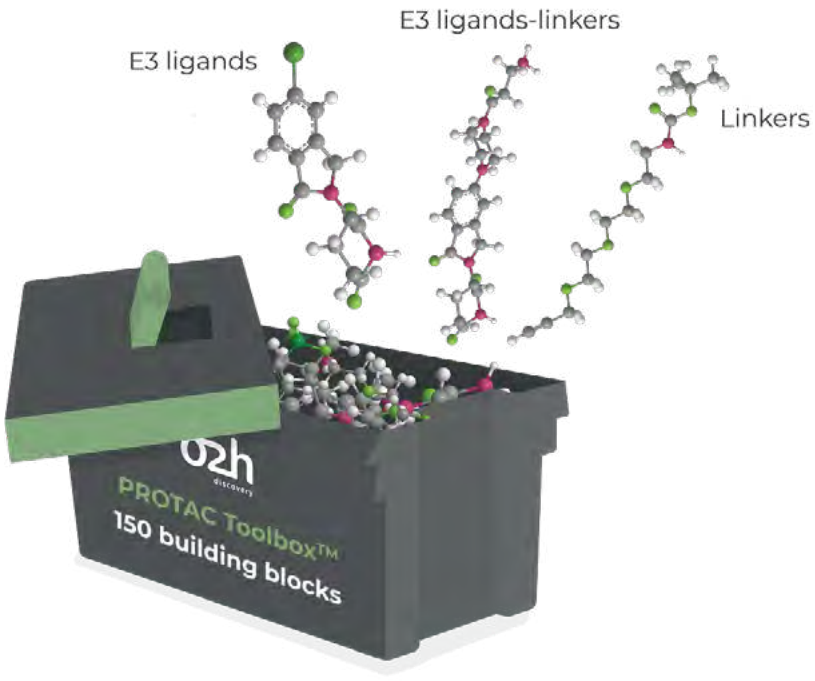
- Parallel rxn Screening
- Sub mg scale rxn (48 to 96)
- LCMS Monitoring
- Heatmap Data Generation
- Quick Decision Making

> 1500 compound library delivered with ~93% success rate, for a UK based big pharma

Targeted Protein Degradation

We have expertise in PROTAC services and synthesis for targeted protein degradation and integrated drug discovery

o2h discovery has a customisable "off-the-shelf" PROTAC Toolbox™ consisting of a diverse set of linkers, E3 ligands and functionalised E3 ligand-linker compounds to jumpstart design, synthesis and testing/screening novel protein degraders.



"We've worked with o2h for a long time now as partners, and I particularly pick out their PROTAC expertise in synthesis, purification, and also testing the stability of PROTACs once they've been made."

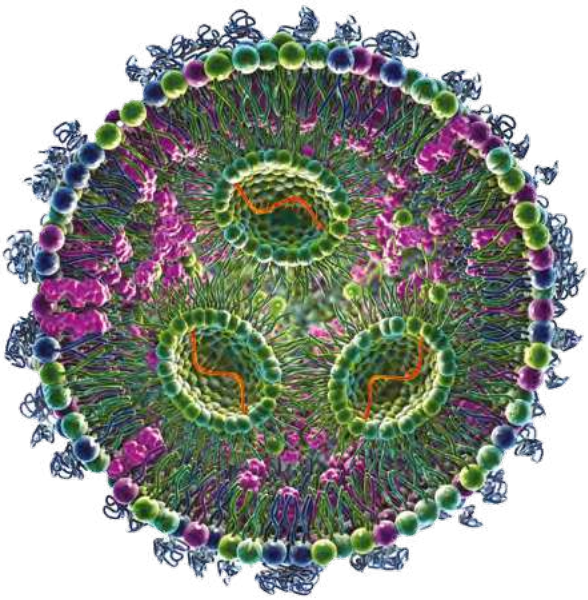


Julian Blagg

Executive VP, Drug Discovery, Neophore

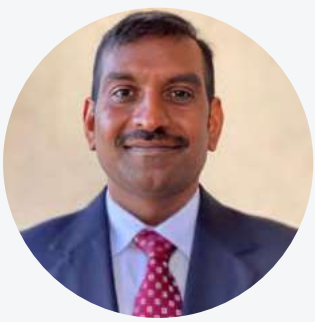
Lipid Nanoparticles (LNPs)

Specialising in the synthesis of diverse phospholipid molecules from mg to multi-gram scale



o2h has acquired extensive expertise and capabilities to conduct the synthesis, purification and analysis of diverse and intricate lipid containing molecules, from low milligrams to multi-gram scale.

Our analytical team utilises a range of analytical methods, such as CAD HPLC, to purify and assess these products, ensuring high levels of purity are achieved.



"We understand that lipid chemistry is complex and requires significant expertise in synthesis, purification, and analysis. Therefore, we looked for a competent and reliable CRO partner to support our requirements and found o2h discovery. We have now done several projects with o2h."

Bharat Majeti

Head of LNP technology, RVAC Medicines

RVAC MEDICINES

Advancing Next-Generation Covalent Inhibitors

Harnessing Scientific Expertise and Drug-Discovery Experience to Target Complex and Intractable Diseases

Covalent inhibitors offer distinct advantages over traditional reversible inhibitors, including enhanced potency, prolonged target engagement, time-dependent pharmacology and the ability to modulate challenging targets that lack well-defined binding pockets or are driven by transient or shallow binding interactions. When appropriately designed, covalent mechanisms can also enable improved selectivity through controlled reactivity and precise residue targeting.

At o2h discovery, we have capabilities to support the design and development of next-generation covalent inhibitors, spanning both targeted covalent and reversible covalent modalities, with the potential to address complex and previously intractable targets.

Our multidisciplinary teams offer integrated expertise in covalent drug discovery, including informed covalent warhead selection and medicinal chemistry strategies to finely tune intrinsic electrophilicity, steric accessibility, and leaving-group behaviour in order to define the minimum reactivity needed in the warhead and reduce the risk of off-target activity. We have established experimental biology capabilities such as jump-dilution assays to distinguish irreversible from reversible inhibition and to assess the durability of target engagement under enzyme-turnover conditions. In parallel, our ADME team provides the GSH reactivity assay to evaluate intrinsic electrophile reactivity and support early de-risking of off-target liabilities; additionally, the assay has been extended to include GST-mediated conjugation, providing a more physiologically relevant read-out for assessing metabolism-linked reactivity risks.

Through a strong understanding of protein–ligand interactions (including covalent binding geometry and residue microenvironment effects) and modern synthetic capabilities, we seek to deliver tailored solutions that may enhance target engagement and support sustained, mechanism-driven therapeutic effects.

Potential areas of support in covalent inhibitor discovery include:

- Identification and optimisation of covalent warheads across multiple electrophile classes
- Design and synthesis of selective covalent inhibitors with a focus on balancing potency, selectivity, and reactivity
- Support from concept through to preclinical development including hit-to-lead and lead-optimisation phases
- Development of residue-specific warheads, targeting cysteine as well as other residues such as lysine, tyrosine, and beyond (including serine and threonine where mechanistically appropriate)
- Mechanistic characterisation of covalent binding through kinetic, biochemical, and cellular assays
- Early developability assessment encompassing metabolic stability, permeability, and safety-relevant reactivity profiling

Should you wish to discuss how we might support your project, please contact us at discovery@o2h.com

Analytical Chemistry

Comprehensive Analytical Support Across the Entire Discovery and Development Cycle

Expertise

Basic Analysis: Comprehensive HPLC (Chiral & Achiral), LCMS, mass spectrometry, and NMR services for qualitative and quantitative analysis.

Structure Characterization: Expertise in NMR data interpretation, LCMS/MS analysis, and developing expertise in amino acid sequencing by MS/MS for peptide compounds.

Purification: Specialization in the purification of PROTACs, peptides, and lipids, including UV-inactive compounds up to gram scale.

Chiral Separation: mg to g scale chiral separations, a wide range of chiral stationary phases (CSPs), and high-efficiency SFC.

Advanced Studies: Property determination, including Chamelog K, Chromlog D, and impurity/product quantification.

Equipment

Spectroscopy: NMRs for 1H, 13C, 2D & QNMR analysis, UPLC-MS, direct mass with MS/MS capabilities, HR-MS/MS, ICP-MS & FTIR (outsourced).

Liquid Chromatography (LC) Systems: HPLC-PDA, 1 UPLC with PDA/CAD, HPLC- ELSD.

Purification: Specialization in the purification of PROTACs, peptides, and lipids, including UV-inactive.

Preparative/Purification Systems: Prep HPLC (with Auto purification), Analytical/Preparative SFCs (UPC2 & SFC Investigator for semi-purification (multiple columns and solvent selectors), Waters SFC 350 for Chiral separation).

Thermal Analysis: DSC 5+, TGA (outsourced).



PR&D and Scale-up Services

From lab-scale R&D to large-scale production (g to kg)

In our 20+ years of experience working on fast-paced drug discovery projects with companies across the globe, we have prepared thousands of new chemical entities. We put this experience together, along with our talented staff and high-end infrastructure, to offer high-quality and cost-effective services for your 'development' projects.

Key Highlights

- The Non-GMP PR&D lab designed to ensure safety and operational efficiency
- The kilo lab has a full range of 20L, 50L, and 100L jacketed glass reactors
- Temperature ranging from -35 °C to 200 °C
- State-of-the-art glass reactor assemblies incorporate advanced features
- Utilisation of flame-proof connections and static discharge mechanisms
- Equipped with Thermal Screening Unit and Differential Scanning Calorimetry
- Per batch manufacturing output from grams to lower kilograms

Our Offerings

- Flash purification machine to support large scale purification
- Route scouting for novel, cost-effective, and scalable ROS
- Process development and optimisation for pre-clinical supplies
- Scale-up of intermediates, building blocks, and final targets
- Analytical method development & large-scale purification support
- Synthesis, isolation, and characterisation of process impurities
- TSE/BSE certification and metal content analysis
- Milestone-based project tracking with thorough and real-time communication
- Supply of detailed tech pack with active assistance for technology transfer
- A dedicated analytical team to support real time QC and method development
- GMP Synthesis Support (via channel partners)

In-house Equipment Suite

A comprehensive range of equipment (Analytical, Reaction Technology and Purification) for 'speed' of project delivery:

Analytical	Items
SFC-Analytical	2
NMR(400 MHz-Bruker)	2
LCMS	9
HPLC-Reverse Phase	6
HPLC-ELSD Detectors	1
HPLC-Chiral/Normal Phase	1
GC	1
LCMS/MS	2
Polarimeter	1
Karl Fischer Titrator	1

Scale-Up Reaction Equipment	Items
20 L Rotavapor	2
Hydrogenator 1, 2, 5 and 10L	1
20 L Glass reactor non-Jacket (Temp range 25°C to 250°C)	1
50 L Rotavapor reactor non-Jacket (Temp range 25°C to 250°C)	1
50 L Rotavapor reactor with dean stark (Temp range -60°C to 250°C)	1
100 L Glass reactor (Temp range -40°C to 250°C)	1
Large Nutsche Filter	1

Purification	Items
SFC-Preparative (mg, gm, Kg-scale)	1
Prep HPLC	8
Scale-Up Flash Systems	2



From Our Labs to the Clinic & Market

The real-world impact of o2h Discovery's scientific contributions – translating partner programmes from early chemistry into the clinic and onto the market.

30+ Clients with Marketed Drugs

148+ Clients now in Clinical Trials

22+ High-Attribution Clinical Assets*

Spotlight – Deep o2h Engagements now in the clinic or market

Storm Therapeutics

7+ yrs | Oncology

METTL3 inhibitor programme → BI-9321 in Phase 1/2 AML

Chemistry FTE from lead generation through to scale-up

Sentinel Oncology

6+ yrs | Oncology

ATR kinase inhibitor → Phase 1/2 in oncology

Chemistry & biology from lead optimisation to candidate

Arrakis Therapeutics

8+ yrs | Oncology

RNA-targeted small molecules → multiple Phase 1 assets

57 FTEs - 4 o2h-synthesised compounds in Arrakis patents

NeoPhore

8+ yrs | Oncology

MMR pathway chemistry → NEO-201 Phase 1 oncology

Chemistry FTE, FFS, DMPK, PROTAC & scale-up

Heptares/Nxera

6+ yrs | CNS

Multiple GPCR programmes → HTL0016878 in Phase 2

Multi-programme GPCR chemistry partnership

Karyopharm

MARKETED

XPO1 inhibitor lead opt → Xpavia (selinexor), FDA 2019

Chemistry FFS contribution from ~2009-2010

Therapeutic Areas Served

Oncology 34 | Immunology 7 | CNS/Neurology 6 | Rare Disease 4

Ophthalmology 3 | Anti-infective 3 | Dermatology 3

How we at o2h Leveraging Generative AI

Optimising Research, Enhancing Collaboration, & Accelerating Drug Development with Generative AI.

AI and LLM Integration for R&D

Our tech team conducts research and development on AI tools and Large Language Models (LLMs), exploring their integration across all stages of the drug discovery process to enhance efficiency, innovation, and outcomes.

Accelerating MVP builds with GenAI

Using GenAI to speed up coding, test ideas faster, and turn concepts into working models quickly and efficiently.

Fast Tracking ADME Analysis

Partnered with an AI company to integrate ML and GenAI for faster ADME analysis predictions, helping collaborators save time and resources by focusing on shortlisted studies.

Upskilling team with GenAI

Training internal teams to leverage GenAIfor communication and research, streamlining processes to reduce overall R&D timelines.

Our Vision with GenAI in the Next 5 Years

To be at the forefront of AI-driven drug discovery, setting new standards in efficiency, innovation, and security within the CRO industry.

AI-Integrated Pipelines

- Develop workflows with AI for seamless data analysis and decision-making.
- Enhance CITC with AI capabilities for efficient chemical and project management

AI-Driven Collaboration

- Build strategic partnerships with AI technology providers and research institutions to drive innovation.



Security and IP Protection

- Implement robust data encryption and access controls for AI-generated insights.
- Collaborate with clients to safeguard proprietary data during AI model training and deployment.

Talent Development

- Train teams to master both AI tools and traditional scientific methodologies for a balanced approach.

IP Security – 6 Major Phases of Project Lifecycle

We understand the responsibility to protect the IP of our clients during a formative stage of the process



Project Setup Processes

- 2-way CDA
- Project Introduction form
- Project Code Name & Password

Laboratory & Office Processes

- Card Key Access
- Designated Lab & Write up areas
- Individual LNBs & Drawers

Collaborator Communication

- Project Place on Secured Platform
- Exchange of Password protected documents

Computer & Technology

- Designated Computer Systems
- Unique Login ID & Passwords
- Designated Project Place & Folders

Site Security

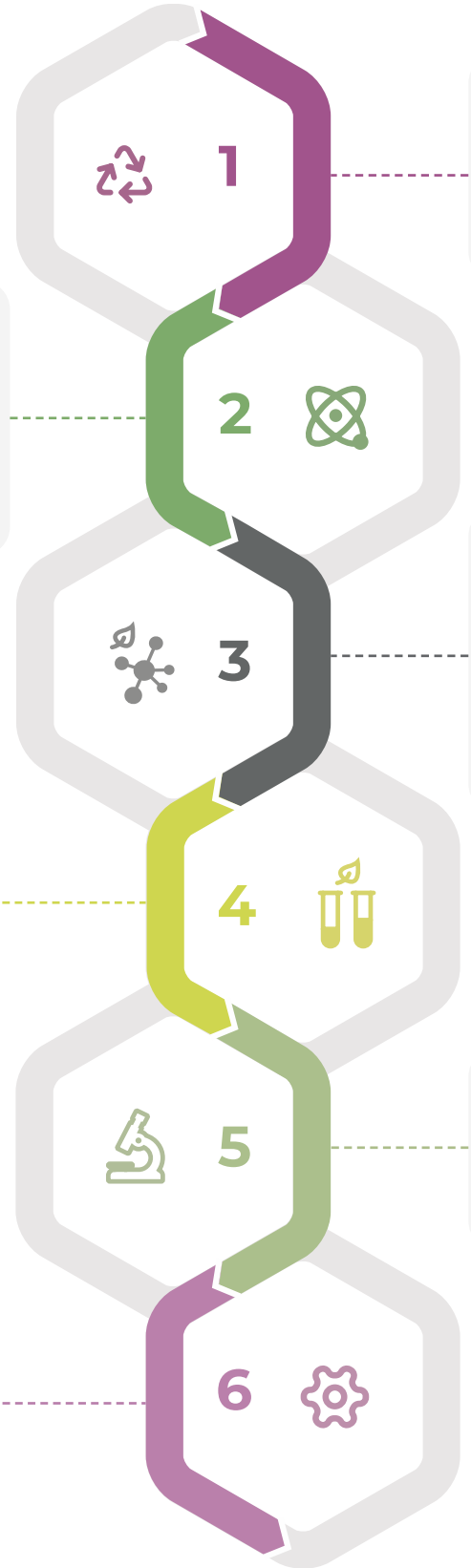
- Private & Secured On-site Server
- Firewall & Secured VPN
- Daily Back up
- Permission Controlled Access

Legal Compliance

- o2h IP Policy
- In-house QA Team
- QA/IP clearance on exit
- Employment letter with confidentiality clause
- Rigorous handover process

Green Chemistry

Implementing eco-friendly practices from synthesis to analysis on the bench



Prevent Waste at Source

Optimise/substitute routes for hazards/Waste

Optimized inventory control

Waste segregation protocols

Maximise Atom Efficiency

Shorten synthetic routes to reduce by-products

Close reaction monitoring for high yield & < waste

Apply validated high-yield processes to scale-up

Design Safer Chemical Synthesis

Catalysis over stoichiometric methods

In-house checks/peer review of route for safety

Effective literature review to reduce inventory

Use of Safer Solvents & Conditions

Greener solvent selection

Solvent recovery, recovery and minimization

Methods with shorter columns – save time/waste

Efficient Sample Analysis

Minimise sample sizes for analysis

Integrated analysis

Direct detection methods

Automation in Analysis

Automated systems to prevent errors

Avoid pre-treatment steps to reduce waste

Combine analytical processes to save resources

Clinical Bioanalysis & Translational Sciences

An experienced scientific team supporting clinical and preclinical development programs from candidate selection through clinical proof-of concept. Supporting global partners across small molecules, peptides, biologics and emerging modalities through scientific oversight, bioanalytical strategy, study management and data driven decision support.



Support

Clinical Bioanalytical Strategy

Support bioanalytical planning across 01 Phase I-IV studies, PK/PD endpoints, biomarkers, immunogenicity assessments and regulatory expectations.



Science

IND-Enabling Development Support

Scientific oversight of ADME, PK, toxicology, safety pharmacology and genotoxicity programs supporting 02 candidate progression and regulatory submissions.



Quality

Data Interpretation & Decision Support

Integrated review of PK, PK/PD, toxicology and bioanalytical datasets to support program decisions and portfolio progression.



Operations

CRO & Study Management

Identification, qualification and management of specialist CRO partners with end-to-end oversight of timelines, 03 quality and study execution.



Partnership

Cross-Functional Scientific Partnership

Embedded collaboration with medicinal 05 chemistry, DMPK, biology, regulatory and clinical teams to connect data with development strategy.



Assurance

Regulatory & Submission Readiness

Support for study reports, data packages, regulatory interactions and audit-ready documentation throughout development.

Novel Biology Capabilities

Advancing Next-Gen Novel Biology Capabilities @ o2h

1 PLATFORM

NAM & Advanced Models

New approach methodologies replacing traditional in vivo systems

- **3D Models** - physiologically relevant tissue architecture
- **Spheroids** - scalable 3D cell aggregates for screening
- **Organoids** - patient-derived disease modelling
- **Organ-on-a-Chip** - microfluidic human-relevant systems

2 DEGRADATION

Targeted Protein Degradation

Next-generation modalities for the undruggable proteome

- **Molecular Glues** - induced proximity therapeutics
- **PROTAC Toolbox** - modular bifunctional degraders
- **Novel E3 Ligases** - expanding the recruitable repertoire
- **AUTOTACs & DUBTACs** - autophagy & stabilisation routes

3 FRONTIER BIOLOGY

Emerging Modalities

Expanding therapeutic reach across RNA, organelles & conjugates

- **RNA Biology** - therapeutic targeting of the transcriptome
- **Mitochondrial Biology** - bioenergetics & disease
- **Microglia** - CNS innate immunity platforms
- **Multi-Omics** - integrated genomic, proteomic & metabolomic insight
- **ADCs & PDCs** - targeted antibody & peptide conjugates

Accelerating Non-Animal Models: A Strategic Venture

Regulation, science and cost are converging. o2h and AstraZeneca are establishing a dedicated NewCo to industrialise non-animal models at speed — a co-creation model, not a vendor relationship.

Why now?

Three forces are making NAMs the new standard

Regulatory Momentum

FDA Modernization Act 3.0 advanced through the US House in 2026, enforcing NAM adoption before human trials.

Scientific Maturity

Organ-chips, human iPSC assays and computational models now rival animal models in predictive power.

Ethical & Cost Pressure

Global pressure to reduce animal use is accelerating investment into human-relevant, scalable alternatives.

Why o2h?

The right partner for industrialisation

Proven track record

Two AZ academic summits on NAMs in India; years of collaboration across chemistry, bio-analytical, IDD and AI

Assay industrialisation capability

Demonstrated ability to scale key assays across Cambridge and Ahmedabad

Innovation ecosystem

Venture fund, science park and IDD capability with extensive biotech reach

Collaborative mindset

Co-creation built into the structure — not a transactional vendor relationship

Structure

NAM NewCo - proposed model

o2h 80% majority equity	AZ 20% minority equity

- £100k seed funding, pro-rata
- AZ approval for CEO and board appointments
- Access to venture capital, grants and licensing
- Lighter-touch governance — faster decisions
- Replicable model for other AZ innovation areas

Roadmap

Immediate next steps

Now
Stakeholder buy-in within AZ

Near-term
NAM hackathon & legal setup

Launch
High-visibility event (Cambridge / Parliament)

2030
Industry-wide NAM adoption target

Diverse Antibody Conjugate Formats

An Integrated Platform for Diverse Bioconjugates and Targeted Therapeutics.

A Antibody–Payload Conjugation

Classic ADC · Cytotoxic payload

Cytotoxic

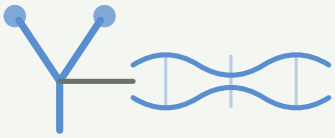


Integrated review of PK, PK/PD, toxicology and bioanalytical datasets to support program decisions and portfolio progression.

B Antibody–Oligonucleotide Conjugates

AOC · siRNA / ASO / miRNA

Oligo



Cell-targeted delivery of RNA therapeutics. Oligonucleotide synthesis and conjugation chemistry — a new modality for o2h.

C Antibody–Targeted Degrader Conjugates

PROTAC / Molecular glue payload

Degrader



Targeted protein degradation via PROTAC or molecular glue. Addresses undruggable targets with o2h's existing degrader expertise.

D Bispecific ADCs

Dual-targeting antibody · cytotoxic payload

Dual-target



Two distinct antigen-binding arms for dual tumour targeting — improved selectivity and internalisation efficiency.

E Dual-Payload ADCs

MMAE/MMAF + SN-38 · site-specific

Dual MOA

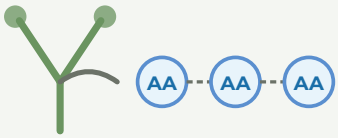


Two mechanistically distinct payloads on one antibody to overcome resistance. Site-specific cysteine chemistry (SH38/SW38 sites).

F Peptide–Drug Conjugates

Bioactive peptide payload delivery

Peptide Radioligand



Bioactive peptide payloads for receptor targeting, cell penetration or antimicrobial activity — leveraging o2h's in-house peptide platform.

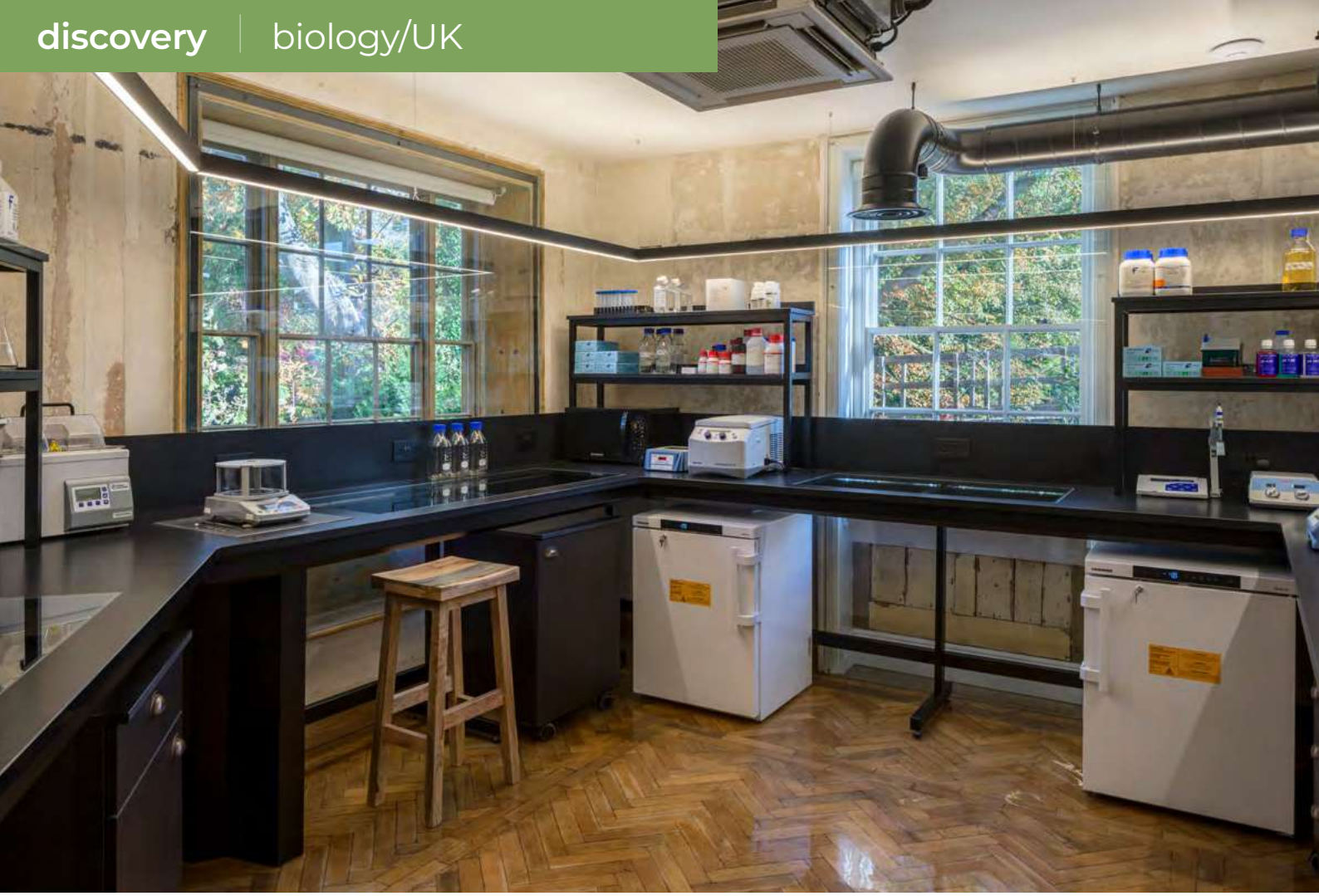
H Peptide-Scaffold Dual-Toxin Conjugates

α-Helix scaffold · Lys / Cys orthogonal sites

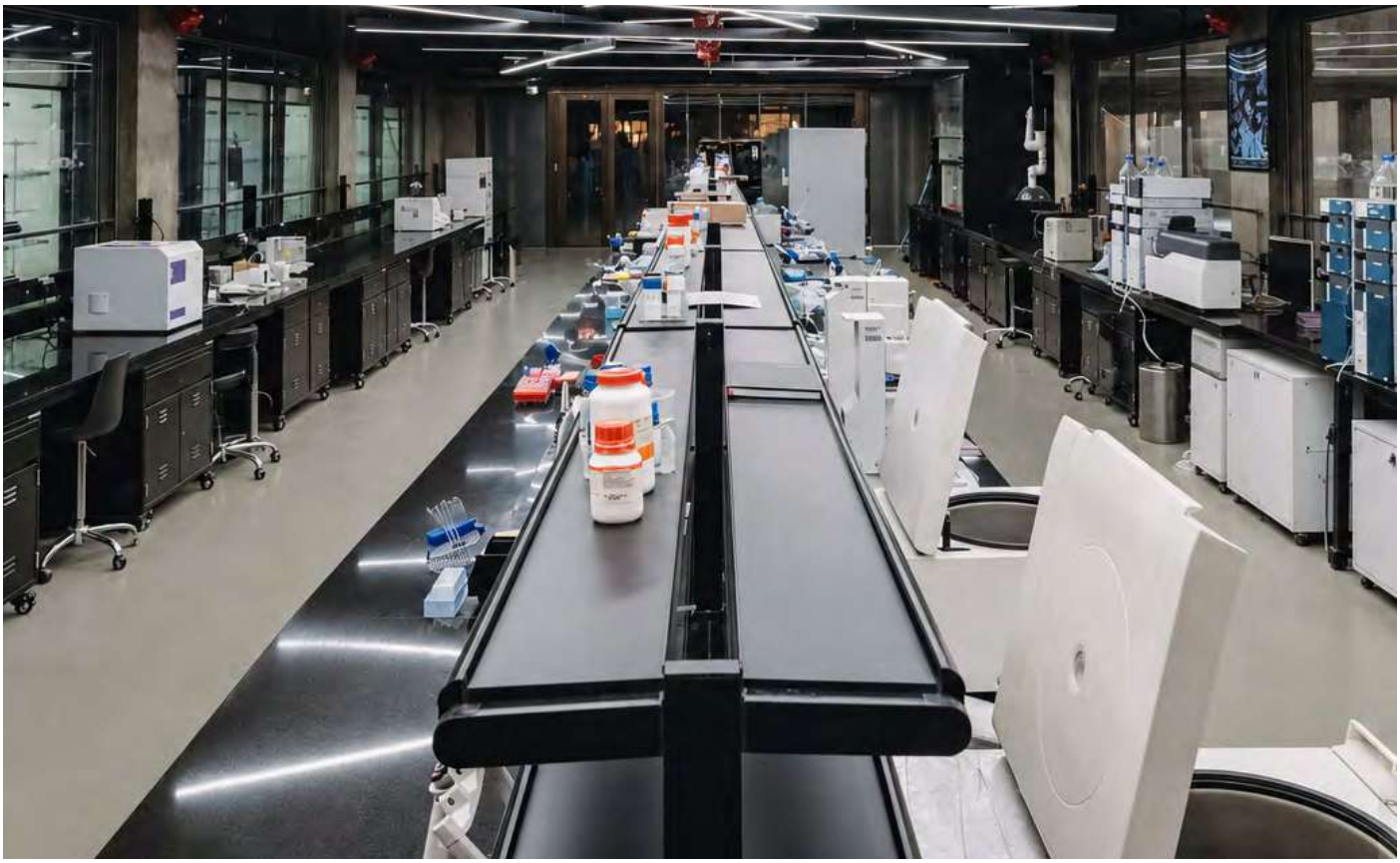
DAR 1-4



A peptidic α-helix presenting lysine and cysteine at defined exposed positions, functionalised differentially to carry two distinct toxins at highly reproducible DAR. The resulting peptide is attached to an Ab or Fab.




Monmouth





Biology Delivered

An integrated team of highly experienced biologists with a proven track record in advancing complex projects

Overview

At o2h discovery, we provide fully integrated biology services from our state-of-the-art facilities in Cambridge, UK, and Ahmedabad, India, to accelerate drug discovery programs. Our team of experienced Ph.D and Masters level scientists delivers high-quality results across a broad range of therapeutic areas. Leveraging advanced technology platforms, we support every stage from target validation to pre-clinical candidate selection.



Our biologists design and execute customisable assays to assess potency, efficacy, and mechanism of action (MOA) profiling. We foster a collaborative, cross-continental working model, ensuring seamless technology transfer between our UK and India teams. By combining academic insight with industrial rigor, we deliver faster, smarter research solutions.



State-of-the-Art Equipment

Our cutting-edge facilities are equipped with advanced tools to ensure precision and efficiency in biology research:

- Biacore T200 SPR
- Incucyte
- Thermo CX7 LED
- Robotics
- Jess
- CytoFLEX S
- FLIPR Penta
- Bio-Rad CFX96
- Hamilton Star
- CLARIOstar Plus & PHERAstar
- Opentrons OT2

Biology Capabilities

Compound/Fragment Screening

Biophysical/Biochemical and Cellular Assays

Target Validation, Mechanistic Studies



Future direction: DNA Encoded Libraries (DEL), Antibody Drug Conjugates (ADC), Membrane Proteins, Proteomics, other TACs and Molecular Glues

Discover novel assays and blogs on following topics:

- High-Content Imaging: A Transformative Approach to Drug Discovery
- Exploring SPR and Fluorescent Dye Displacement Assays for RNA Binding Small Molecule Therapeutics
- PROTAC: o2h discovery's Biology Expertise
- Exploring Psychedelics: A New Frontier in Mental Health Research
- Integrin Assays: Decoding Cellular Interactions
- Revolutionising Drug Discovery: Harnessing the Power of FRET and BRET Assays
- Unlock Advanced Flow Cytometry: Boost Research with the CytoFLEX S System

scan to read



Assay Screening

We provide integrated screening services to fuel novel drug discovery programs

Our Capabilities...

Assay development, optimisation, and validation

Screening using biochemical, biophysical, and cell-based formats

Hit confirmation, counter-screening, and selectivity profiling

Integration with ADME/DMPK studies and SAR expansion

Automated Discovery Powered by OT-2!

To strengthen our Screening offering, o2h discovery has integrated the Opentrons OT-2 liquid handling robot, a flexible and customisable automation platform designed for reproducible, high-throughput workflows.



Key Features

- Dual 8-channel multi-pipettes for accurate liquid handling down to 384-well plates
- Absolute reproducibility in pipetting, minimising variability across large datasets
- Customisable and programmable workflows adaptable to any throughput requirement
- Supports compound dispensing, serial dilutions, cell seeding, hit picking, and nucleic acid/protein extraction
- Kit- and reagent-agnostic software, avoiding lock-in to expensive consumables
- Reduced manual handling, saving time while eliminating human error

By incorporating OT-2, we enhance both throughput and data quality in Screening campaigns. This automation-driven approach ensures faster cycles of design–make–test–analyse (DMTA), enabling biotech innovators to progress from hits to leads with speed, accuracy, and confidence.

Drug Discovery Through Biophysical Insight

Using fluorescence polarization, SPR, and thermal shift assays, we study protein binding, stability, and mechanisms

At o2h discovery, we deliver biophysical characterisation of ligand-target interactions and can aid in hit finding approaches using fragment-based screening. We can prove mechanistic insights, kinetic and thermodynamic profiling for your novel compounds. With a published crystal structure of your target of interest and in complex with its cognate peptide/molecule, we can develop customisable assays for small molecule screening.

We can design Fluorescence Polarisation (or) Anisotropy with labelled peptide or compound probes using high performance plate readers like CLARIOstar and PHERAstar. With label-free technology platforms like Biacore T200, we can establish more advanced studies like Surface Plasmon Resonance (SPR) providing vital kinetic data on ligand-target interaction like association-Kon, dissociation-Koff rates and KD determination. We can use simple techniques such as Thermal Shift Assay (TSA) to determine thermal unfolding and aggregation of the target protein using SYPRO Orange dye that binds to hydrophobic regions of the denatured proteins; illuminating the presence of unstable proteins in the absence of compound binding or target engagement.

In addition to the range of aforementioned biophysical methods, o2h discovery has well-established alliance partners to augment our capabilities and in providing tailored needs for your research project.

To know more about our biology services offering, please reach out to us at discovery@o2h.com





Cascade Design

A systematic arrangement of assays and models that progressively evaluate a compound's efficacy, selectivity, and safety

Cascade Design: A Catalyst for More Efficient Drug Discovery

Progressing from hit to lead to preclinical development is fraught with challenges.
Many candidates fail due to:

- Poorly designed or non-reproducible assays
- False positives from irrelevant models
- Lack of early Go/ No-Go decision points
- Weak translation from in-vitro to in-vivo outcomes

o2h Discovery's Cascade Design Approach

1	**Integrated Discovery Cascade**	We design cascades that drive progress through well-defined Go/No-Go checkpoints, reducing late-stage failures.
2	**Progressive Assay Design**	Layering biochemical, biophysical, cellular, and in vivo assays to ensure biological relevance at every stage.
3	**STAR in Drug Development**	Incorporating Structure–Tissue Exposure/Selectivity–Activity Relationship (STAR) to align chemistry, PK/PD insights.
4	**Expert Decision Framework**	Our team applies the Dos, Don'ts, and Go/No-Go rules in assay design, helping collaborators avoid common pitfalls.

Why Partner with o2h Discovery?

At o2h discovery, we support our collaborators by combining biology, chemistry, and DMPK expertise to build cascades that de-risk discovery programmes, accelerate candidate selection, and support the next generation of therapies addressing unmet medical needs.

If you'd like to discuss your screening cascade challenges in more detail, we'd be happy to set up a call.
Write to us at: **discovery@o2h.com**

ChameLogK Assay

Unveiling chameleonicity for PROTAC molecules

o2h discovery; First in the World to Offer the ChameLogK Assay to our Clients...

o2h discovery is thrilled to be the first in the world to offer the ChameLogK assay to our clients. With the capability to quickly and inexpensively measure chameleonicity, this assay represents a significant step forward in assessing PROTAC molecules and optimising their properties. As we make this groundbreaking technology available, we invite our clients to explore the possibilities it presents in enhancing their drug discovery efforts. The ChameLogK assay, now a part of our service portfolio, positions our company at the forefront of innovation, providing clients with a valuable tool to navigate the complexities of molecule design in the ever-evolving landscape of drug development.

Integrin Assay

Decoding cellular interactions

Integrins are heterodimeric cell surface receptors and are key regulators affecting cell morphology, proliferation, survival and differentiation. Mutations in specific integrins or deregulated expressions are associated with a variety of diseases. Each integrin consists of α-subunit and a β-subunit, of which there are 18 and 8 variants, respectively, creating 24 known heterodimers. Integrins act as adhesion receptors with the unusual ability to signal in both directions across the plasma membrane. Integrins can therefore enable human cells to respond to changes in the extracellular environment (via outside-in signalling) and can influence the extracellular environment (via inside-out signalling). We have successfully established biochemical and cell-based assays to assess target engagement of small molecules for different integrin targets.



FLIPR® Penta Technology

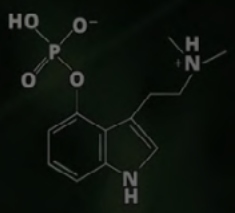
Collaborative FLIPR assay services for drug discovery programs

o2h discovery's commitment to excellence in scientific research is exemplified by our recent investment in the FLIPR Penta technology. We stand ready to collaborate seeking FLIPR-based assay services for different drug discovery programs. The introduction of the FLIPR Penta High-Throughput Cellular Screening System to our repertoire, enables rapid screening of compound libraries and to assess the effects of potential drug candidates in a fast, automated, and precise manner. It has extensive use in understanding GPCR and ion channel biology. With the simultaneous pipette and read function, plus high-end camera system, we can allow up to 100 measurements per second and provide detailed information about cardiomyocyte and/or neuronal oscillations.

We offer multiple fluorescence or luminescence-based assay readouts, and can support in measuring calcium flux, potassium and membrane potential.

Psychedelics Research

A new frontier in mental health research



Psilocybin

$C_{12}H_{17}N_2O_4P$

At o2h, we have developed and screened a series of 5-HT2A-small molecules with varying potencies towards Gq and β-arrestin-biased signaling thererby shedding light on the dynamics associated with the 5-HT2A receptor. These serve as invaluable tools in elucidating the specific intracellular responses providing comprehensive understanding for drug discovery and pharmacological research.

Our scientists can support in identifying compounds with differential signaling activities, downstream of the 5-HT receptor, stimulated via Gαq and beta-arrestin pathways.

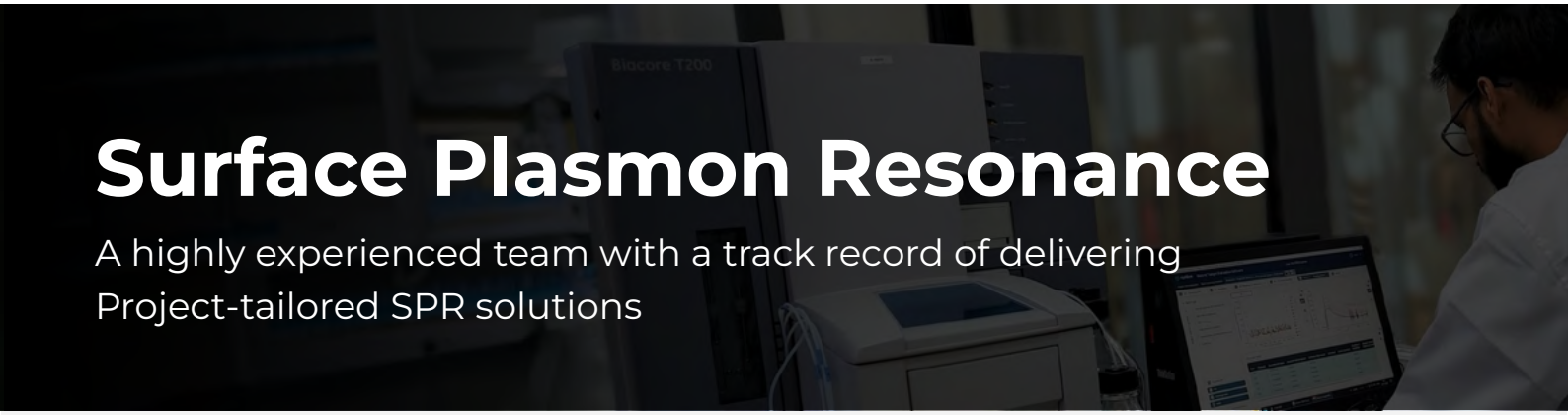
o2h can also support in exploratory studies using BRET-based protein-protein interactions and complementation assays (an area that is currently gaining interest).

High-Content Imaging

A transformative approach to drug discovery

At o2h discovery, our high-content imaging assays are designed to address a broad spectrum of biological questions, including protein trafficking, translocation, receptor internalisation, and target recruitment to specific organelles. These assays offer critical insights into molecular interactions and sub-cellular processes, enabling a deeper understanding of cellular dynamics.

Our expertise also spans cell cycle analysis, where we investigate mitotic progression, cytokinesis, and the effects of DNA Damage Response (DDR) mechanisms. By integrating assessments of proliferation, apoptosis, and autophagy, we provide a comprehensive view of cellular stress responses and overall cellular health. Additionally, we specialise in identifying phenotypic and morphological changes that signal invasiveness, drug resistance, and other disease-relevant behaviours, offering valuable insights for therapeutic development.



Surface Plasmon Resonance

A highly experienced team with a track record of delivering Project-tailored SPR solutions

o2h discovery offers a broad gamut of biochemical, biophysical, and cell-based bioassay screening services for supporting drug discovery programs of our various collaborators. To augment these services, we have incorporated SPR-based assays (surface plasmon resonance) in our portfolio using state-of-the-art Biacore T200 system. The Biacore T200 provides real-time, label-free, affinity and kinetic analysis for various types of biomolecular interactions with high sensitivity and accuracy. This system enables our team to deliver robust, high-quality data in a time-bound manner for the screening of small molecules, biologics and NBEs (novel biological entities) at any phase of drug development. We offer various project-tailored SPR solutions which include the following:

- Fragment-based drug discovery (FBDD)
- Small molecule drug discovery
- Biotherapeutic drug discovery

ChameLogK: A Rapid, High-Throughput Assay to Assess Bioavailability of Beyond Rule of Five Compounds

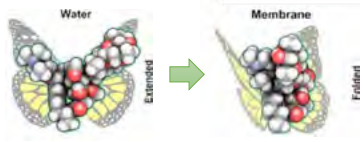
Catherine Stace*[1] Dharmesh Bhatt[2], Andy Morley[1], Claudio Dagostin[1], Mayank Gupta[2], Pranav Pandya[2], Hardic Dave[2], Dhruv Lad[2], Vinkal Zalavadia[2], Vishal Patel[2], Hemal Soni[2], Nilesh Dagia[2], Sunil Shah[1,2], Prashant Shah[1,2]
[1] o2h Discovery Pvt. Ltd., Changodar, Ahmedabad, India. [2] o2h Ltd., Mill SciTech Park, Hauxton, Cambridgeshire, UK. * Correspondence to catherine.stace@o2h.com

Abstract

ChameLogK is a cutting-edge method for measuring chameleonicity, a vital factor in assessing cell permeability propensity of small molecules, including 'Beyond Rule-of-Five' such as PROTACs, macrocycles and peptides. Chameleonicity is ability of molecules to conformationally adapt to their environment, driven by intramolecular hydrogen bonds; ChameLogK combines lipophilicity (BRlogD) and polarity (Δlog k_w^{IAM}) descriptors. Leveraging literature methods, o2h has developed a reliable, high-throughput platform to rapidly and inexpensively measure chameleonicity, accelerating optimization of Beyond Rule-of-Five therapeutic compounds

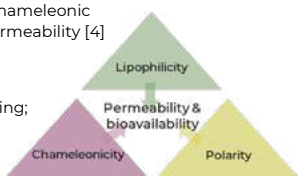
Chameleonicity: An indicator of bioavailability and cell permeability for Beyond Rule of Five molecules

- Chameleonicity is the capacity of a molecule to hide polarity in non-polar environments and expose it in water, help achieving sufficient permeability and solubility for drug molecules with high molecular weight [1]



Adapted from Danielus *et al*, Nature 2020 [2]

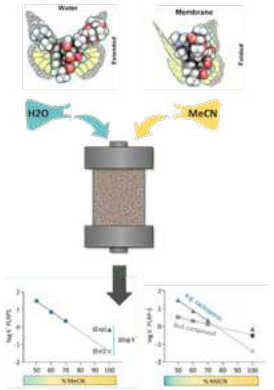
- For many years, it has been known that bRo5 molecules, such as macrocycles and small peptides, can exhibit chameleonic properties – conformational flexibility - driven by the formation of intramolecular hydrogen bonds [3]
- bRo5 compounds often suffer from a poor permeability and bioavailability profile. The design and optimization of compounds with chameleonic properties is central to optimizing solubility and permeability [4]
- BRlogD, Δlog k_w^{IAM} and ChameLogK are three complementary measures revealing lipophilicity, solubility, exposed polarity, and chameleonic masking; together forming a triad of drug-likeness, guiding smarter compound prioritization by explaining permeability and bioavailability [5]



- Other established phys chem measures relating to permeability, such as ePSA [6][1] are comparatively low throughput and costly, revealing a need for an easily-accessible alternative measure to support rapid design and optimization of bRo5 compounds
- The ChameLogK method was pioneered in by Giulia Caron's group in Turin [5] and has garnered significant interest in the academic setting, but had not been developed into a fully-transferable platform for routine screening in the commercial setting
- **o2h discovery is the first in the world to offer the ChameLogK assay to clients to support their drug discovery programs**

Measuring ChameLogK: How it works

ChameLogK is the difference (Δlog k') between the experimental retention at 100% MeCN on a PLRP-S column, and the extrapolated retention at 100% MeCN obtained from the linear region measured at 50/60/70% MeCN. Positive values indicate extra retention in the non-polar limit, consistent with polarity masking/folding (i.e. chameleonicity).



Method features:
- HPLC-based method, using PLRP-S column
- Record the retention time (RT) of compound in differing ratios of water:acetonitrile
- Linear regression to fit of Log k' PLRP-S and the % acetonitrile; Chameleonic properties are observed as a steeper downward slope with an up-tick
- Extrapolate to calculate at 100% acetonitrile and calculate Chamelogk using the formula:
  Chamelogk = Exp. log k' 100 - Ext. log k' 100

Graphics adapted from [2] and [5]

References

[1] David *et al* (2021) 'Prediction of Chameleonic Efficiency', ChemMedChem 16(7), pp2669-2685
[2] Danielas et al, (2020) 'Solution Conformations Explain the Chameleonic Behaviour of Macrocyclic Drugs', *Nature* 26(23), pp5231-5244
[3] Bockus and Lokey, (2017) 'Chapter 5: Bioactive and Membrane-Permeable Cyclic Peptide Natural Products', *Practical Medicinal Chemistry with Macrocycles: Design, Synthesis, and Case Studies*, John Wiley and Sons, Inc.
[4] Ramelot *et al*, (2023), 'Cell-permeable chameleonic peptides: Exploiting conformational dynamics in de novo cyclic peptide design, Current Opinion in Structural Biology 80, p102603
[5] Garcia Jimenez et al (2023), 'Chamelogk: A Chromatographic Chameleonicity Quantifier to Design Orally Bioavailable Beyond-Rule-of-5 Drugs', Journal of Medicinal Chemistry 66(15), p10681. **Seminal article by Giulia Caron's group**
[6] Goetz *et al* (2014), 'EPSA: A Novel Supercritical Fluid Chromatography Technique Enabling the Design of Permeable Cyclic Peptides', ACS Medicinal Chemistry Letters, 5(10).
[7] Apprato et al (2024), 'Exploring the chemical space of orally bioavailable PROTACs', Drug Discovery Today 29(4), p103917.

Assay Validation and Platform Development

o2h conducted a rigorous validation process, with a variety of different chemical species, underscoring the reliability of the assay as a robust and transferable platform, broadly applicable for multiple drug discovery programs.

- Validated with >20 different compounds, including macrocycles, non-macrocyclic compounds, and PROTACs
- >100 compounds examined to date confirm versatility and effectiveness in designing bioavailable compounds beyond Ro5 constraints

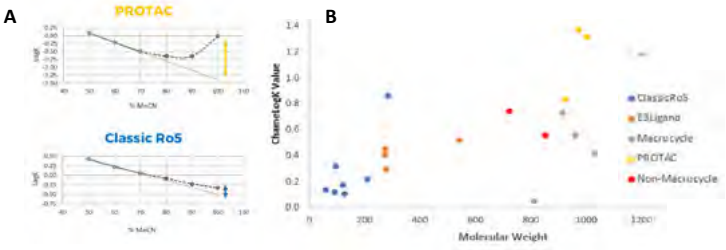


Figure 1: A. Output data showing correlation of Log K' with % acetonitrile for a PROTAC and a classic Ro5 compound; **B.** Summary of chameleonicity across a range of chemical species

Results
- PROTACs: Displayed distinct "Chameleonic" qualities.
- Non-macrocycles: Moderate chameleonicity, showing expected flexibility compared to classic Ro5 and PROTACs
- Macrocycles: Led by Cyclosporin, showed variable behaviour
- E3 Ligands: Consistent behaviour, possibly involving internal folding or interactions
- Ro5 molecules like caffeine, and diazepam defied expectation

o2h has streamlined processes for **maximal throughput and productivity**, creating a **cost-effective and easy-access** version of this ground-breaking technique

Supporting a range of modalities

- The **increasing need to explore the bRo5 space** to access novel chemistry, better mechanisms of action, and exciting new modalities, requires a way to quickly and inexpensively measure chameleonicity
- This assay represents a **significant step forward** in assessing molecules such as PROTACs and optimization of their properties [7] Enabling:

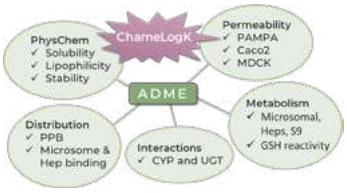
Hetero-bifunctionals | Glues

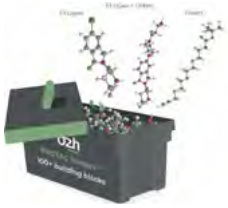
- ✓ Optimization to fit with target biology; e.g. crossing the **BBB** or efficiently accessing **intracellular targets**
- ✓ Characterization of molecules to guide **design** and create a **robust pre-clinical data package**
- ✓ Understand the **relationship between biophysical and cell-based** results

Peptides | Macrocycles

A key part of your drug discovery program

- o2h offers the ChameLogK assay as part of a comprehensive suite of ADMET and assay biology, enabling full characterisation of compounds
- o2h also offers a range of integrated services linking directly to this field:





- ✓ **PROTACs:** off-the-shelf-toolbox, featuring >100 building blocks, a range of E3 ligands and ready-to-use linkers
- ✓ **Custom Peptide Synthesis**: parallel and solid & solution phase; 'peptide guarantee'
- ✓ **Macrocycles** and natural product chemistry
- ✓ **Molecular glues**, with comprehensive assay suite for in-cell target engagement and degradation
- ✓ **Medicinal and synthetic** chemistry

Want to learn more about this assay and how o2h supports integrated drug discovery programs...?

Scan the QR code to explore our website:

Read our blog on ChameLogK:

Contact us: info@o2h.com

High-content analysis of DNA damage markers in multiplexed cell lines using the SemaCyte® microcarrier platform

Jackline Agwenge, Simon Stockwell
o2h Discovery, Hauxton House, Mill SciTech Park, Cambridge CB22 5HX

Abstract

High-content imaging (HCI) offers a considerable depth of analysis options when considering the requirements for developing a new cellular assay. The information-rich image data collected during an HCI assay allows access to measures of spatial, quantitative, temporal and morphological markers of target engagement, often requiring monolayers of adherent cells seeded to assay plates. The SemaCyte microcarrier system developed by Semarion enables powerful new strategies to manage cell monolayers in drug discovery workflows. In collaboration with Semarion, o2h Discovery have updated an established HCI approach to DNA damage to explore SemaCyte-enabled enhancements in cellular assays; miniaturisation of seeding, assay-ready adherent cells, multiplexed cell lines and subpopulation barcoding are investigated here.

Objectives

Perform a first-pass test using the SemaCyte system to obtain and analyse cellular HCI data, making use of cell multiplexing capabilities and same-day set up of assays from frozen cell SemaCyte stocks

Assay details

- **96-well plate, 2hr, 11-point etoposide** (EP) DRC
- Cells presented as **pooled SemaCytes** in each well
- Using **frozen SemaCytes** on same day as recovery
- Fixed endpoint - probes for **DNA damage markers**
- **3 multiplexed cell lines per well** – U2OS, A549, U87MG
- 4 SemaCyte **barcodes used for deconvolution** by HCI
- **Plate reference control:** U2OS cell line re-used for 4th barcode providing fixed 50µM set, spiked to every well

Key findings & next steps

Multiplexing - Early analyses with this data set yield sufficient information to characterise and differentiate variability in DNA damage dose responses between cell lines grown in parallel using SemaCytes

Thawed monolayers – recovery of frozen assay-ready monolayers worked well (>= 75% viable) and offers a new flexibility to scheduling and maintaining cells for deployment to assays

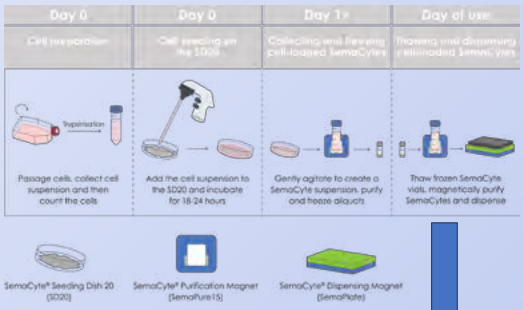
Data handling - The ability to deconvolute mixed populations using image processing to sort SemaCytes by barcodes proved accessible and opens further options for how to organize and control HCI assays

Next steps – A deeper dive into the current data set is planned, including exploration of RAD51 and implementation of dynamic image acquisition strategies such as the CellInsight EurekaScan

Acknowledgements
o2h Discovery would like to acknowledge the team at *Semarion* for their collaborative support and insight. Furthermore, *ThermoFisher Scientific* have provided indispensable support across instrument and data-handling steps in the workflow.

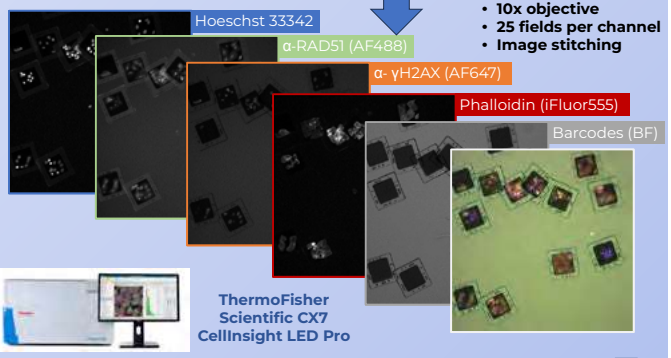
Workflow

1. Cell handling



- 3 cell lines:
  - U2OS
  - U87MG
  - A549
- Each assigned SemaCyte barcodes
- Revived following frozen storage
- Pooled for assay
- Drugged 2hr with EP DRC same day
- Fixed and stained for subsequent HCI

2. High-content imaging

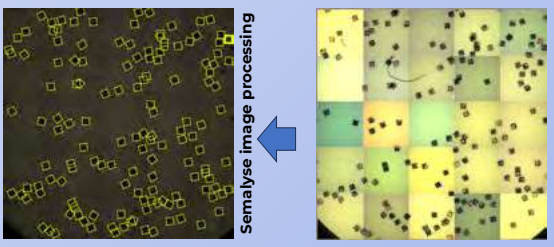


ThermoFisher Scientific CX7 CellInsight LED Pro

- 10x objective
- 25 fields per channel
- Image stitching

3. Image processing I – deconvolution

QC and extraction of SemaCytes according to cell line-specific barcodes



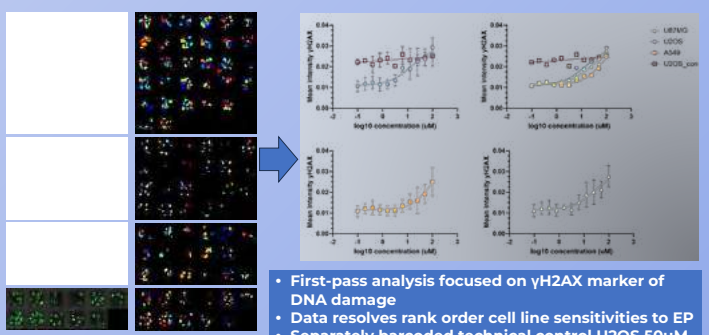
4. Image processing II – quantitation

Cell Profiler to detect and characterise cells within SemaCyte-defined image masks

Barcoded cell line groups per well

Cell by cell feature extraction

Cell line-specific etoposide dose response curves



- First-pass analysis focused on γH2AX marker of DNA damage
- Data resolves rank order cell line sensitivities to EP
- Separately barcoded technical control U2OS 50µM EP population correctly intersect main DRC

Poster No - ProUPS_080

Integrated drug discovery services from o2h: Advancing therapeutic innovation through collaborative research

Romit Bose[1], Prasad Sulkshane[1], Rajesh Yesodharan[1], Animesh Pandit[1], Anagha Dahake[1], Prachi Soni[1], Priya Gajjar[1], Adit Kotak[1], Simon Stockwell[2], Keith Woodley[2], Christian Mutti[2], Jackline Agwenge[2], Alice Willer[2], Sunil Shah[1,2], Prashant Shah[1,2], Gayathri Sadasivam[1,2*]

[1] *In vitro* Biology, o2h Discovery Pvt. Ltd., Changodar, Ahmedabad, India

[2] *In vitro* Biology, o2h Discovery Pvt. Ltd., Mill SciTech Park, Hauxton, Cambridgeshire, UK

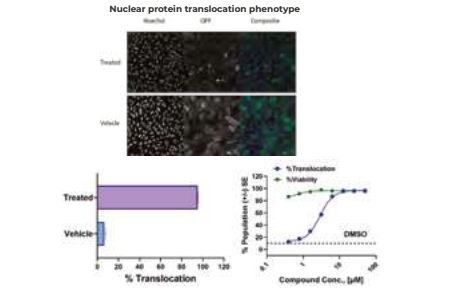
*Correspondence to gayathri.sadasivam@o2h.com

Overview

o2h Discovery has enhanced its biology expertise across therapeutic areas in Cambridge, UK, and Ahmedabad, India, utilizing advanced platforms to support all stages of preclinical drug discovery, from lead optimization to IND filing. Our Integrated Drug Discovery (IDD) approach combines biology, chemistry, and ADME capabilities to accelerate the design-make-test-analyze cycles. Our experienced biologists develop customizable assays to support potency-to-efficacy translation and mechanism-of-action characterization, with seamless collaboration between our UK and India teams. Specializing in small molecule drug discovery, we bring in-depth expertise in target biology, providing valuable insights that drive progress in complex biology projects across a broad range of therapeutic areas.

High-content imaging (HCI)

- o2h Discovery leverages high-content imaging (HCI) systems with confocal capabilities for high-resolution, quantitative, realtime analysis of lead molecule characterization across several biological processes.
- These include protein trafficking, receptor internalization, cell cycle progression, apoptosis, drug resistance, DNA damage response, and changes in cell health and morphology.
- By providing spatial, quantitative, and morphological data, HCI enables precise target engagement analysis.
- o2h has developed bespoke HCI speckle assay to analyze phenotypic changes in spliceosome factors induced by molecules targeting mRNA splicing factors.
- In collaboration with Semarion, o2h Discovery has enhanced the HCI approach for DNA damage analysis using the innovative SemaCyte® microcarrier system, optimizing cell monolayer management for more efficient drug discovery.





Assay Parameters

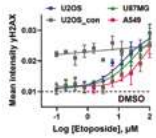
- 3 cell lines (U2OS, U87MG, A549)
- Each assigned SemaCyte barcodes
- Revived following frozen storage
- Pooled for assay
- Drugged 2hr with EP DRC same day
- Fixed and stained for subsequent HCIC

Experimental Workflow

1. Cell line handling
2. High-content imaging
3. Image processing I – deconvolution
4. Image processing II – quantitation



Cell line-specific etoposide dose response curves

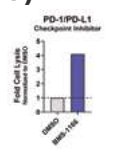


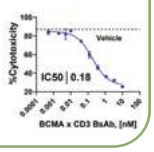
Scan the QR to read more about our HCI assay services

Immuno-oncology (IO)

o2h offers various IO research services for the phenotypic screening of novel immune therapeutics, which includes the following:

- PBMC isolation and immunophenotyping
- Receptor expression using FACS
- Co-culture of cancer cells with immune cells
- Cytotoxicity of immunotherapeutic (CFSE/7-AAD)





Scan the QR to read more about our IO Services

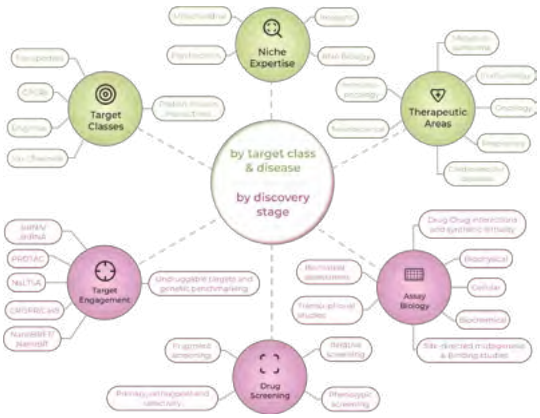
Integrated Drug Discovery (IDD)

o2h offers a comprehensive suite of R&D services to propel your drug discovery program from target validation to IND submission.

- **Comprehensive Toolbox:** In-house expertise in chemistry, biology, ADME with advanced capabilities in SPR, and HCI.
- **Therapeutic Foresight:** Specializing in cancer biology, immuno-oncology, metabolic disorders, and CNS diseases.

Scan the QR to read more about our IDD services





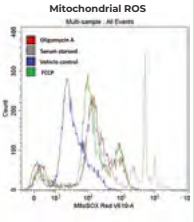
Mitochondrial Biology

o2h offers cutting-edge assays that detect and monitor hanges in mitochondrial structure and function, helping researchers unravel the intricacies of these organelles and their impact on cellular health. Dysfunctional mitochondria are implicated in diseases such as Parkinson's, Alzheimer's, diabetes, and even aging.

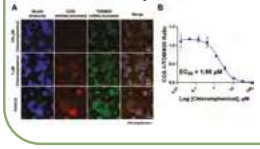
Assay Services

- Superoxide production using MitoSOX red dye – flow cytometry
- Mitochondrial Biogenesis or Degradation (Mitophagy) – HCI
- Mitochondrial Calcium uptake using RHOD-2 AM dye – FLIPR
- Jess-Based Western Blotting of proteins (SDHA, MFN2) involved in mitochondrial fission, fusion, and apoptosis

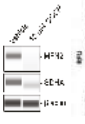
Mitochondrial ROS



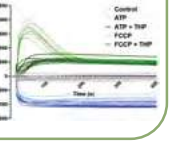
Mitochondrial Biogenesis HCI assay



JESS Western Blotting

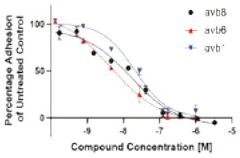


Mitochondrial Calcium flux



Integrin Biology

- Customizable platform to evaluate compound potency and specificity in cell adhesion assays targeting multiple integrins.
- Our assays investigate the inhibition or activation of integrin pairs—key drug targets for numerous diseases.
- Our custom cell lines enable precise evaluation of differential inhibition across integrin pairs, simplifying specificity testing.
- In-depth compound characterization through other bespoke cellular assays using flow cytometry and HCI, assessing activity in biological settings.



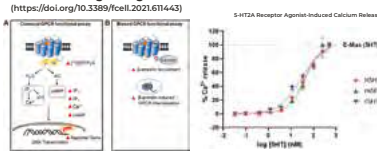
Scan the QR to read more about our integrin biology services

Psychedelics Discovery Services

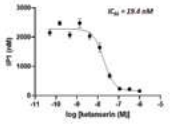
- At o2h, we have developed and screened a series of 5-HT2A small molecules with varying potencies towards Gq and β-arrestin-biased signalling, providing insights into 5-HT2A receptor dynamics.
- These molecules serve as key tools for understanding specific intracellular responses, advancing drug discovery research.

GPCR Signalling
(https://doi.org/10.3389/fcell.2021.611443)

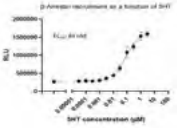
Calcium Release



IP1 accumulation



β-arrestin recruitment



Scan the QR to read more about our psychedelic discovery services

State-of-the-art Equipment

Our cutting-edge facilities are equipped with advanced instruments to ensure precision and efficiency in biology research.

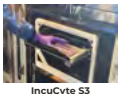

Biacore T200


CellInsight CX7 HCS


FLIPR Penta


CytoFLEX S


JESS


IncuCyte S3

o2h Biology Match Funding Award

From idea to milestone, start generating data on the bench

- Match Funding of up to 50%
- Highly Experienced Biologists
- Comprehensive Project Management
- Access to Cutting-edge Equipment Suite

Scan the QR to know more

Poster No - ProUPS_079

An array of Targeted Degradation approaches offered as a part of integrated drug discovery services by o2h Discovery

Prasad Sulkshane[1], Romit Bose[1], Keith Woodley[2], Alice Willer[2], Shubham Gourana[1], Anagha Dahake[1], Animesh Pandit[1], Jackline Agwenge[2], Christian Mutti[2], Simon Stockwell[2], Rajesh Yesodharan[1], Sunil Shah[1,2], Prashant Shah[1,2] and Gayathri Sadasivam[1,2*]

[1] *In vitro* Biology, o2h Discovery Pvt. Ltd., Changodar, Ahmedabad, India

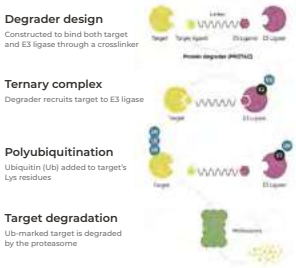
[2] *In vitro* Biology, o2h Discovery Pvt. Ltd., Mill SciTech Park, Hauxton, Cambridgeshire, UK

*Correspondence to gayathri.sadasivam@o2h.com

o2h Discovery

- o2h Discovery provides early-stage drug discovery services from its advanced facilities in Ahmedabad, India, and Cambridge, UK.
- The company has expanded its expertise in targeted protein degradation (TPD), offering a comprehensive suite of solutions for PROTAC design, synthesis, screening, and a customizable "off-the-shelf" PROTAC toolbox. Our experienced biology team provides assays for binary and ternary complex formation, protein degradation, and DC50 estimation, ensuring fully integrated capabilities.
- Leveraging expertise in small molecule discovery and bespoke assay development, o2h enables screening of small molecules that bind to unique RNA folds.
- Drawing on insights from Tong et al. (2023), o2h Discovery is applying these findings to design RNA-targeting molecules. By conjugating RNA-binding small molecules with RNase L-recruiting agents, or RIBOTACs, o2h aims to develop novel RNA degraders using a PROTAC-like approach, enhancing RNA-targeted drug discovery.
- Looking ahead, o2h is also exploring the use of DUBTACs for protein stabilization and other TAC-based mechanisms to clear protein aggregates, broadening its scope in targeted degradation strategies.

PROTAC (PROteolysis TArgeting Chimera)



Specific questions:

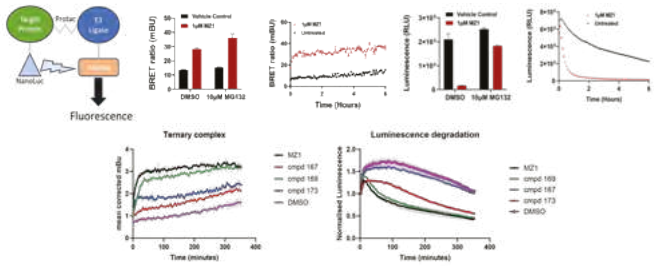
Q. Is my target degraded?
Q. What is the binary affinity for POI & E3 ligase?
Q. Do they form ternary complex?
Q. Is my target ubiquitinated?

Case Study:
Target protein: BD2 domain of BRD4
E3 Ubiquitin ligase: VHL
PROTAC molecule: MZ1

Demonstration of ternary complex formation & target protein degradation by Nanoluciferase assay:

HEK293 cells expressing NanoLuc-BRD4 (Donor) and Halo-Tag-VHL (acceptor) at 1:100 ratio.

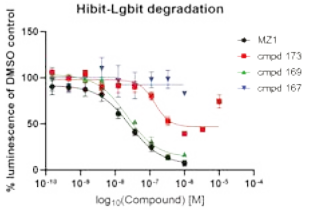
Ternary Complex Formation | **Target Protein Degradation**



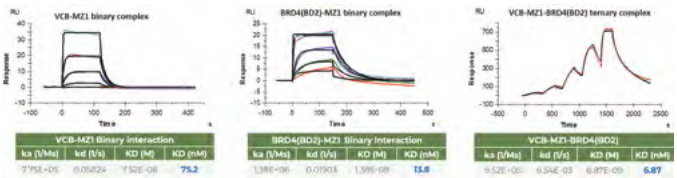
Demonstration of target protein (BRD4) degradation by split Nanoluciferase assay:

- In HEK293 cells stably expressing LgBit nanoluciferase fragment, we knocked in the corresponding HiBit fragment at the endogenous locus of BRD4.
- The LgBit fragment has a high affinity for the HiBit fragment, thereby reconstituting the active NanoBiT® (Nanoluciferase) enzyme.
- Expression of BRD4 therefore, creates an active nanoluciferase.
- Degradation of BRD4 thus causes a decrease in the Nanoluciferase signal.

Assessing BRD4 degradation by HiBit-LgBit assay



Demonstration of binary and ternary complex formation by SPR:



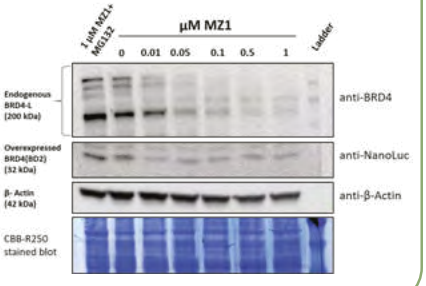
VCB-MZ1 Binary interaction			
ka (1/Ms)	kd (1/s)	KD (M)	KD (nM)
7.75E-05	0.05824	7.52E-08	75.2

BRD4(BD2)-MZ1 binary interaction			
ka (1/Ms)	kd (1/s)	KD (M)	KD (nM)
1.38E+06	0.01903	1.38E-09	13.8

VCB-MZ1-BRD4(BD2)			
ka (1/Ms)	kd (1/s)	KD (M)	KD (nM)
9.52E-05	6.54E-03	6.87E-09	6.87

Demonstration of target protein degradation by western blotting:

HeLa cells transfected with the Nanoluc-BRD4(BD2) plasmid and 24 hours later treated with indicated concentrations of MZ1 for 6 hours. The cell lysates were analyzed by western blotting for the indicated proteins.



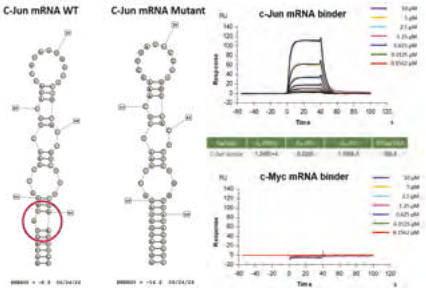
RiboTAC (RNA-TArgeting Chimera)

- Current RNA-targeting modalities have been limited to antisense oligonucleotides, which mediate Ribonuclease-dependent RNA cleavage.
- However, RNA is remarkably structured and intricately folded as hairpin loops through its intramolecular base pairing, forming a series of unique secondary structures.
- These RNA folds, similar to motifs or domains in proteins, may offer a unique opportunity for targeting by small molecules through specific binding.
- The biological outcome of such RNA binding small molecules can be further enhanced by appending a functional group to it, which can recruit a Ribonuclease, activate it and cleave the target RNA.
- We have developed SPR & Fluorescence Dye Displacement assays as robust and highly sensitive methods to study these specific RNA-small molecule interactions.

Case Study

- Studying the specific interactions between c-Jun mRNA and a small molecule [Ref. Tong et al. (2023)].
- A specific part of c-Jun mRNA bearing a unique loop/kink – Wild Type (WT), where a small molecule – c-Jun mRNA binder binds.
- Negative control: Mutant c-Jun mRNA, which lacks the unique kink (the binding site).
- Unrelated small molecule: c-Myc mRNA binder.

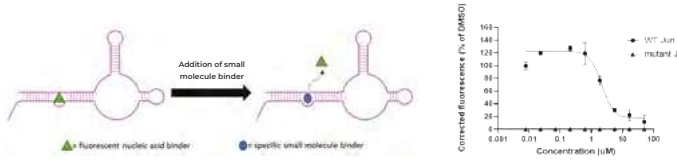
Demonstration of RNA-small molecule interactions by SPR:



In SPR assay, the small molecule c-Jun binder showed specific binding towards WT form of c-Jun mRNA as compared to its mutant form, such that upon mutant subtraction, the sensorgram appear positive.

The unrelated small molecule c-Myc mRNA binder did not exhibit binding to the c-Jun mRNA, with the net effect being marginally negative sensorgrams.

Demonstration of RNA-small molecule interactions by Fluorescent dye displacement assay

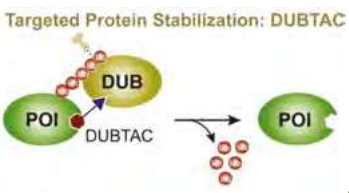


Fluorescence readout showing displacement of the ToPro RNA binder by the c-Jun binder. As the concentration of the c-Jun binder increases, fluorescence decreases. No displacement is observed with the mutant c-Jun mRNA.

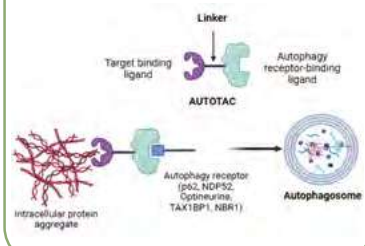
Next, we plan to demonstrate the ternary complex of RNA-RiboTAC-RNaseL by SPR and evaluate the RiboTAC efficacy in cellular studies.

Future Plans

DUBTAC (Deubiquitinase-TArgeting Chimera)

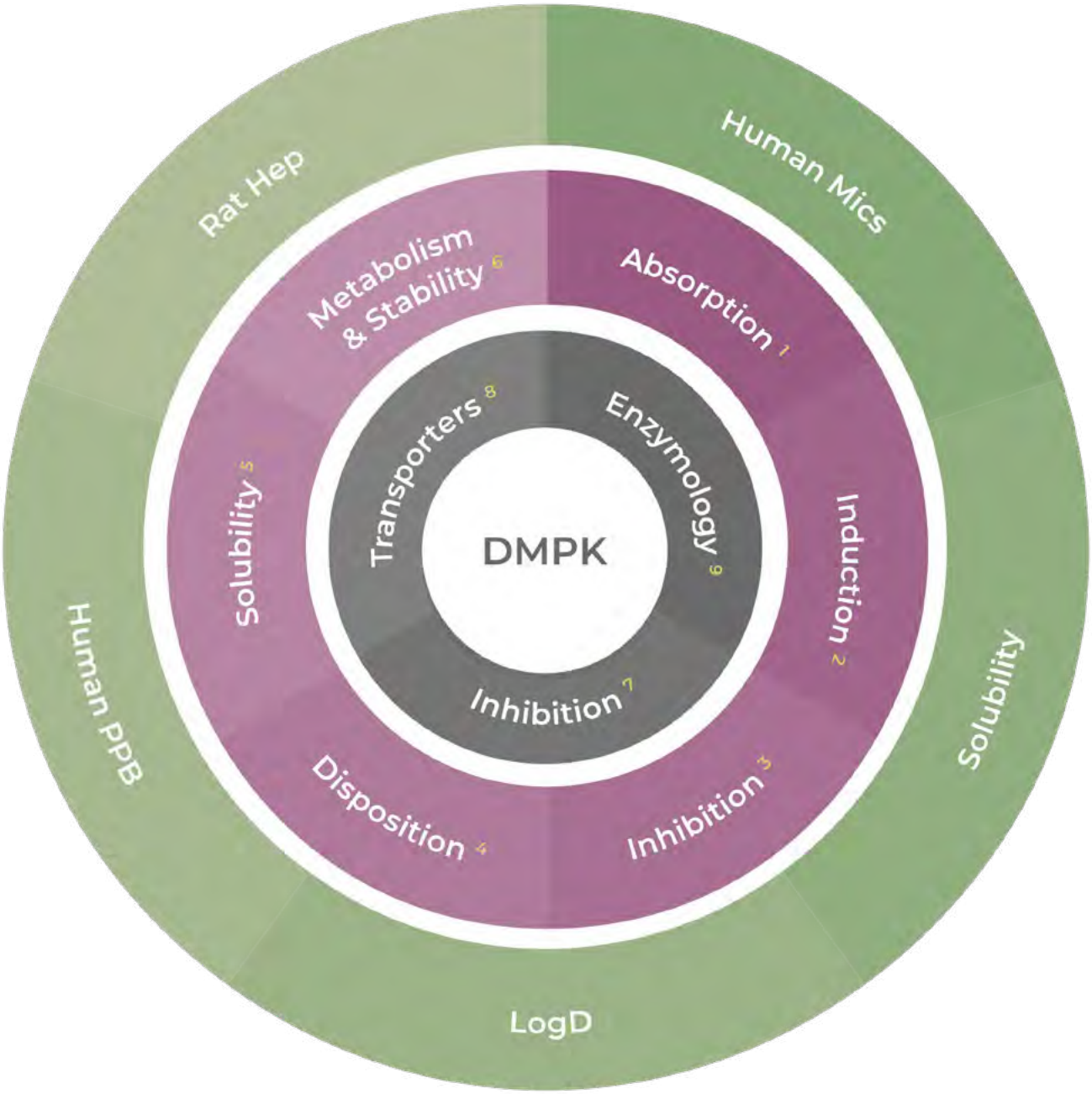


Autophagy-TArgeting Chimera



DMPK Capabilities

o2h discovery operates a multi-modality integrated platform from Cambridge, UK, and Ahmedabad, India, with a focus on insight driven discovery.



1. Cell-permeability, CACO2-efflux, MDCK-MDR1, MDCK-MDR1-BCRP
2. PXR, CYP induction, HepRG, HepR
3. CYP enzyme, TDI, PgP, OATP1B1, BCRP
4. Blood plasma partitioning, plasma protein binding, hepatic uptake, OATP1B1 substrate
5. pKa, Solid, FaSSIF, Lung solubility
6. Hepatocyte, microsome clearances, met-id , CYP identification, Fuinc, chemical stability, chemical reactivity
7. UGT, SULT, other enzymes
8. Substrates
9. UGT identification, enzyme identification

Wave 1 Wave 2-3 Wave 4



Advanced ADME Services for Accelerated Drug Discovery

At o2h Discovery, we offer tailored in vitro ADME services to support small molecules, peptides, lipids & nucleosides. From early discovery to candidate nomination, our flexible workflows deliver reproducible, decision-enabling data aligned with your medicinal chemistry and biology efforts accelerating your molecule's path to the clinic.

- 12+ Years of Experience
- > 1000 ADME Studies Each Year
- Large Scientific Team
- Integrated with Chemistry & Biology

Comprehensive ADME Assay Platforms

Our ADME screening service can provide customised solutions to solve complex druggability issues throughout the early discovery and development phases with speed, quality, and cost effectiveness.

Physicochemical Properties	Drug Metabolism	Permeability & Drug Transporters Services	Drug-Drug Interaction	Distribution
• Solubility (kinetic, thermodynamic, FaSSIF, FeSSIF, FaSSGF, simulated lung fluid) • Lipophilicity (LogP, LogD, Chrom LogD and pKa) • Stability (buffer, pH, plasma)	• Microsomal stability • Non-CYP mediated Metabolism • S9 stability • Hepatocyte stability • sEH stability • Metabolic identification • L-Glutathione stability • GSH conjugation • Cathepsin cleavage	• PAMPA • CACO2- permeability • MDCK-MDR1 permeability • MDCK-WT permeability • P-gP transporter in CACO2 and MDCK • BCRP substrate identification • BCRP inhibition • MDCK-BCRP permeability • OATP1B1 substrate identification • OATP1B1 transporter inhibition • Hepatic uptake	• CYP inhibition • CYP induction • CYP TDI • UGT inhibition • SULT inhibition	• Plasma protein binding • Tissue homogenate binding • Blood-plasma partitioning • Microsomal binding (Fuinc) • Hepatocyte binding (Fuinc)



Customised Assays

Tailored assays to meet niche research needs, including:

- ChameLogK (Bio-availability of 'beyond rule of 5' molecules)
- Cathepsin Cleavage
- Soluble Epoxide Hydrolase (sEH) Stability
- Aldehyde Oxidase (AO) Phenotyping
- Photostability under Stress Conditions
- GST-mediated GSH Reactivity

Instrumentation

- LC-MS/MS Platforms
- Multimode Plate Readers
- HPLCs & UPLC
- Liquid Handling Systems
- Cold Storage & Reagent Management

Why o2h discovery?

Our unique points-based system provides an easy-to-use and cost-effective way to access flexible ADME services: get the economies of scale & the flexibility you need, without all the paperwork.

- Experienced scientists with deep domain expertise
- Customisable workflows for small molecules, peptides, and beyond
- Agile team and rapid turnaround ideal for fast-moving biotechs
- Clear, reproducible, and flexible reporting
- Our ADME services align with chemistry and biology to deliver cohesive insights

Contact us

o2hdiscovery.co
discovery@o2h.com
o2h-discovery
o2h_discovery
o2hlife
o2hgroup

Scan to visit website

In-vivo Pharmacokinetics

We provide robust and reproducible in-vivo pharmacokinetics and pharmacology studies that drive discovery pipeline decisions

PK Services

- Discrete and cassette studies
- Single-dose and repeat-dose
- Gender and food effect
- Dose proportionality
- Tissue distribution (e.g. brain uptake)
- Excretion studies
- Bio-avaibility

Species/Animals Available

- Rat (Sprague Dawley, Wistar)
- Mice (Balb/C, Swiss Albino)
- Dog (Begale)
- Rabbit (New Zealand White)
- Guinea Pig (Dunkin Hartley)
- Mini-pig

Toxicology Services

- General: Acute tox, repeat-dose tox (7/14/28/90 days), Chronic tox (180 days)
- Genetic: Core Battery (AMES, Chromosomal Aberration, MNT), Comet Assay
- Developmental & Reproductive: OECD 421, 422, Male fertility, OECD 414, OECD 443

Disease-relevant Pharmacology Models (rodent-based)

Oncology

- PC3 (Prostate)
- SKOV3 (Ovarian)
- Mia PaCa-2 (Pancreatic)
- MOLT4 (ALL)
- A549 (Lung)
- HCT116 (Colon)
- MDA-MB468 (Breast)
- A375 (Melanoma)
- Metastasis model

Inflammation model

- Collagen-induced arthritis
- Adjuvant-induced arthritis
- DSS-induced colitis
- TNBS-induced colitis
- PMA-induced psoriasis / atopic dermatitis
- IMQ-induced psoriasis / atopic dermatitis

Motor Skill

- Neurodegenerative Disorder-Y Maze test
- Neuromuscular diseases- Four limb hanging tests

CNS

- Neurotoximia – LPS Induced
- Parkinson disease
- ALZHEIMER'S MODEL

Metabolic Disorders model

- Osteoporosis
- TYPE II Diabetic obese
- Aging study



Molecules to Medicines: Effective Pre-Formulation

Extensive characterization of drug substance, formulating the NCEs for pre-clinical studies

Formulation Expertise Driving the Transition from Discovery to Clinic

At o2h Discovery, we support biotech and life sciences innovators with comprehensive toxicology formulation services designed to accelerate preclinical development. Our expertise spans pre-formulation studies, preclinical formulations for PK evaluations, and the development of robust TOX formulations prepared for dosing.

We also specialise in solubility and bioavailability enhancement strategies to ensure optimal drug performance. By integrating scientific rigour with a collaborative approach, we help our partners streamline the transition from discovery to safe and effective clinical candidates.

Comprehensive Pre-Formulation Solutions for Drug Discovery

Discovery support

- Salt screening
- Drug solubilizer screening
- Determination of partition coefficients
- Formulation stability

Material characterization (solid-form)

- Polymorph and crystallinity studies
- Thermal characterization (DSC)
- Solid-state NMRs
- Particle size and size distribution

Early pre-clinical formulation

- Self-emulsifying drug delivery systems (SEDDS)
- Co-solvent technique
- Lipid-based formulation
- Molecular dispersion
- Nanosuspension
- Complexation

Our pre-formulation studies evaluate a broad spectrum of physical and chemical properties essential for designing the right formulation and delivery approach for your lead candidates. Backed by a team of expert scientists, we translate these insights into formulations that are effective, scalable, and compliant with regulatory standards.

Manage Your Integrated Drug Discovery Collaboration From Anywhere

o2h.com/chemistry-in-the-cloud/



features

- Project Management
- New Projects
- Communication & Data
- Starting Materials
- Performance, Admin & Tracking

ELN Step-by-Step

A structured, end-to-end experiment record – from brief to registered material

1. **Experiment Brief**
   Reaction No. with hover-preview
2. **Reaction Scheme**
   Standardised two-level classification
3. **Reaction Plan**
   Scale, quantity, parallel type
4. **Supporting Literature**
   Literature provenance tracking
5. **Chemical Calculations**
   Inventory/Previous lots + deduction
6. **Risk Assessment**
   ERA checklist – Low/Medium/High
7. **Experimental Text**
   4-section structured editor
8. **Multiple/Parallel Reactions**
   Conditional – activated by Step 3
9. **Material Registration**
   Closeout + three-tier hierarchy
10. **Quality Control** — In Progress
    Pre-lot QC with review workflow
11. **Operations** — In Progress
    Yield calculations & record closeout

● Live in Production ● Final Hardening in Progress

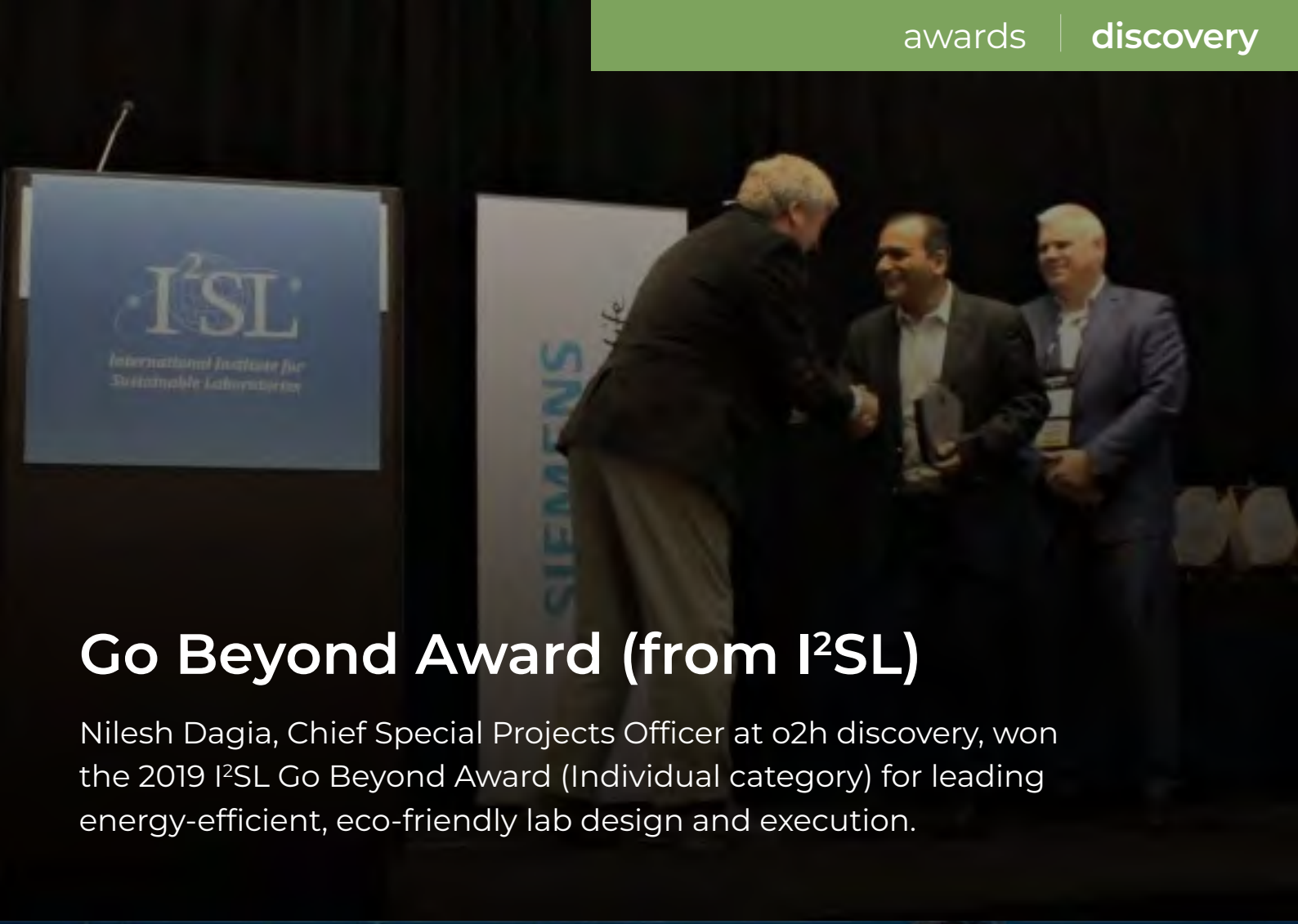


Best Use of Technology Award

Chemistry in the Cloud™ has won the category “Best Use of Technology Award” in the Pharma Industry Awards UK 2023.

PHARMA INDUSTRY AWARDS





Go Beyond Award (from I²SL)

Nilesh Dagia, Chief Special Projects Officer at o2h discovery, won the 2019 I²SL Go Beyond Award (Individual category) for leading energy-efficient, eco-friendly lab design and execution.



OBN Awards 2023

o2h discovery won the “Most Impactful CRO of the Year” Award at the industry leading OBN Awards ceremony...

Models

Our campaign models are designed to give biotechs the head start they need to advance their drug discovery programs.

From Kickstarters to Biology Match Funding and the Peptide Guarantee, our initiatives open structured pathways that accelerate growth and move pioneering science toward its next milestone.

o2h Biology Match Funding Award

From idea to milestone, start generating data on the bench



Overview

o2h discovery is serving up the o2h Biology Match Funding Award, an exclusive programme designed to give biotechs and big pharma an opportunity to smash through their discovery research projects!

With this award, we will match fund 50% of the FTE cost for projects up to $65K/£50K. It is designed to help you ace key milestones and rally your way to the next stage of funding or secure additional grants. It will also enable biotech research companies to tap into o2h's vast expertise and resources, ensuring the delivery of impactful scientific results. With this initiative, we aim to foster a collaborative environment that drives scientific breakthroughs and promotes growth within the biotech ecosystem.

Eligibility

This award is open to all sizes of biotech companies, big pharma, and academic institutions with novel drug discovery programs requiring biology research support. Early-stage startups must have secured initial funding or grants to qualify. **T&C**[1]

Evaluation

The applications will be evaluated by the match funding committee based on the programme's scientific potential, impact on human health, alignment with our in-house research capabilities, and other factors. This is a time-limited competition. **T&C**[2]

Programme highlights

Match Funding of up to 50%

o2h will provide match funding for 50% of the FTE cost of biology research carried out with o2h discovery, for selected projects valued up to $65K/£50K.

Highly Experienced Biologists

Get access to work with our highly experienced team with a strong track record of >25 years delivering solid results to progress challenging biology projects.

Comprehensive Project Management

Expertise in executing and managing diverse biology projects, including target engagement, pharmacological profiling, target biochemistry, cell-based assays and more.

Access to Cutting-edge Equipment Suite

o2h's biology equipment capabilities include the Jess, Biacore T200 SPR, FLIPR Penta, CytoFlex, and more.

Terms & Conditions:

(1) The work package will be fully executed at o2h's in-house research facilities and cannot be conducted in collaboration with any other CRO or organisation. Additionally, projects must fall within the scope of o2h's biology research capabilities.

(2) Awardees will be announced within 3-4 weeks from the date of application.

o2h Kickstarter Award

A competitive award to turbocharge your biotech startup with a chemistry boost!

8+
Editions across the globe

45+
Awards provided so far

$8.1M+
Invested in resources

Give your startup a boost of chemistry...

Building on the success of our earlier Kickstarter competition, we have now launched the latest edition of o2h Kickstarter in “North America”, exclusively tailored for early-stage biotech companies that have secured initial funding, have exciting drug targets, and have the ability to scale, but need expert services to supercharge their chemistry efforts to meet the next scientific and funding milestones.

In essence, the award aims to support the next wave of biotechnology companies by providing a cost-effective team of six experienced o2h Discovery chemists, including two senior and four junior chemists. Despite o2h’s broader capabilities in Med Chem, ADME, and Biology Screening (in the UK and India), the goal is to keep the process straightforward and accessible.

Scan to find out more

Meet the Kickstarter Winners

Since its launch, the o2h Kickstarter Award has supported innovative biotech companies and academic spinouts from around the world, helping them generate critical scientific data and reach their next milestone.

Winning the o2h Kickstarter Award is a tremendous validation of our team's dedication to solving the MYC problem in cancer. The expertise and collaborative support provided by the o2h team are actively accelerating our hit-to-lead chemistry efforts. This partnership is instrumental in helping us rapidly advance our first-in-class MYC:TRRAP inhibitors from the laboratory toward the clinic, bringing us one step closer to addressing a critical unmet need in oncology.



Dr. Ed Feris
CEO, ***cosMYC***



We are deeply grateful to the o2h Kickstarter program for their invaluable support in advancing our small molecule discovery efforts. This partnership has enabled us to expand our compound portfolio and accelerate the lead optimization phase of our lead program. Support from initiatives like o2h Kickstarter plays a crucial role in helping early-stage biotech companies translate scientific innovation into tangible therapeutic opportunities

Ana Montalban
CEO & Co-founder, ***Adularia***

The Kickstarter has been pivotal for our development progress. Medchem can be expensive and challenging for early-stage biotechs, but we are now enjoying the momentum this high-quality chemistry programme brings to our lead optimisation. We had heard good things about the Kickstarter before we applied and I am happy to pass on that positivity from our own experience.



Rory Triniman
CEO & Founder, ***Veirulence Ltd***

The o2h Kickstarter: Peptide

Exclusively for **Peptide-focused** biotech startups

The o2h Kickstarter: *Track Record*

8+	45+	$8.1M+
Editions across the globe	Awards provided so far	Invested in resources

About o2h Kickstarter: Peptide

From Small Molecules to Peptides

The o2h Kickstarter was originally launched to support early-stage biotech companies in accelerating small-molecule drug discovery. Building on strong demand from the biotech community, the programme now extends to peptide therapeutics, with a dedicated edition designed for startups working on peptide-based drug discovery.

This expansion reflects the increasing role of peptides in modern drug discovery and o2h's continued focus on supporting innovation across modalities. The programme is structured to enable progression from early hit identification through to IND-enabling stages, with integrated scientific support to move programmes forward.

Programme Benefits *(What you get)*

Peptide Synthesis, Delivered with Precision

High-purity linear and cyclic peptides, including stapled and constrained formats, enabling reliable library generation and SAR exploration.

End-to-End Chemistry, Built for Execution

End-to-end delivery for early-stage teams, enabling rapid progression to proof-of-concept without building in-house capability.

ADME Built Into the Programme

Includes 100 complimentary ADME points across both stages (25 in Stage 1, 75 in Stage 2) to assess permeability, stability, and solubility early.

Biology Support, on Demand

Extend your programme with expert biology support at 20% reduced cost, covering target engagement, validation, and assay development.

How it works?

The Peptide Kickstarter is structured in two stages, giving startups both an initial discovery push and a clear pathway to continued support.

Stage I - Discovery

A defined piece of work to generate early, decision-relevant data

In Stage I, Selected companies will receive:

- **100 peptides synthesis (linear & cyclic)** *(at a fraction of the usual price)*
- **25 ADME data points**
- **20% discount on Biology FTEs**
- **End-to-end project management**

Stage II - Continued Development

Dedicated support to advance your peptide pipeline

Following a successful Stage I, participating companies can continue into Stage II and get:

- **Dedicated FTE engagement** *(at a fraction of the usual price for upto 6 months)*
- **75 additional ADME data points**
- **20% discount on Biology FTEs**
- **Focus on optimisation and further profiling**

kickstarter@o2h.com

o2hdiscovery.co/o2h-kickstarter-peptide

o2h Plug-in Biotech

A new plug-and-play model for structuring a biotech

Overview

o2h discovery has launched o2h Plug-in Biotech, a new dedicated service designed to help early-stage biotech companies establish and scale subsidiary-like operations in the UK and India.

Changing the business model from Contract Research Organisation (CRO) to Contract Discovery Organisation (CDO), the plug-in biotech is a plug-and-play operational platform that will enable biotech founders and executives to retain strategic control while outsourcing execution and administrative functions to o2h's expert teams on both sides of the world.

Why choose us?

We have the core capabilities to help you set up your subsidiary-like biotech.

- Scalability
- Skills & Talent
- Speedy Execution

How do we help you?

We will provide all the required services to help you smoothly set up and run your biotech operations

Plug-in Biotech — Head-office

Chemistry/Biology, PR&D/Scale-up

Dedicated FTE's or labs with the latest equipment, and experienced scientists to support your research needs.

Tech & AI

IT support, security management, data management, digital development and AI-driven solutions to enhance your biotech operations.

Board, Licensing and BD Support

We can add board members, licensing and BD capabilities to support from the UK to support asset value creation opportunities.

Scientific Decision-Making & Licensing

Focus on advancing your therapeutics pipeline while accessing top scientific expertise for decision-making and licensing.

Project Management

Streamlining your drug discovery projects from inception to completion, ensuring timely delivery and optimal efficiency.

Legal Services

Legal assistance for regulatory compliance, intellectual property protection, contract management, and more.

Supply Chain Management

End-to-end supply chain solutions, ensuring timely procurement and delivery of necessary materials.

Board & C-Suite

Keep key leadership resources close to ensure aligned vision, faster decisions, and a stronger strategic advantage.

Accounts & Finance

Comprehensive financial services including bookkeeping, payroll, tax compliance, and financial reporting.

HR, EA & Office Admin Management

End-to-end support across recruitment, compliance, employee benefits, facilities, admin, executive and daily operations.

Marketing Support

Branding, digital marketing, content creation, and outreach strategies to amplify your presence.

Funding & Grants

Maximise investment opportunities without distractions from backend execution.

discovery@o2h.com

o2hdiscovery.co/plug-in-biotech

o2h Discovery Platinum Partner

An exclusive benefit that helps you deliver more value to your portfolio

About

Extending the o2h Kickstarter Award to More Biotech Innovators

Through the o2h Kickstarter Award, we've supported 45+ early-stage biotech companies across the UK, USA, Europe, Australia and Israel. Building on its success, we created the Platinum Partner Programme to help even more innovators access specialist drug discovery support during their earliest stages of growth.

The programme enables venture capital firms, venture builders, universities, incubators and technology transfer offices to extend the benefits of the o2h Kickstarter Award directly to eligible companies within their portfolio or ecosystem.

By combining investment and ecosystem support with o2h Discovery's integrated drug discovery expertise, Platinum Partners help founders generate critical scientific data, reduce development risk and accelerate progress towards key technical and fundraising milestones.

Benefits for Portfolio Companies

- A dedicated team of six synthetic chemists for up to six months to accelerate small molecule discovery programmes
- High-purity linear, cyclic and constrained peptide synthesis supports to rapidly expand peptide SAR programmes
- 100 complimentary ADME points and a 20% discount on biology services
- Integrated project management support delivered through o2h Discovery's multi-disciplinary discovery teams

Benefits for Platinum Partners

- **Add Value Beyond Capital**
- **Strengthen Portfolio Success**
- **Differentiate Your Ecosystem**
- **A Trusted Discovery Partner**

Our Platinum Partners

Stevenage Bioscience Catalyst
Milner Therapeutics Institute
o2h ventures
zinc
Persephoni™ Discover | Transform | Accelerate
Mercia Ventures
Pioneer
Linchpin.Bio Consulting Network

co-discovery with o2h discovery inflexion Tx

A Match Funding Offer to Support Critical Proof-of-Concept Studies

Unlock high value ideas, assets and near misses...



Overview

We are in an era of exciting new science. Pharma and biotech are often required to make extremely pressured decisions on the deployment of scarce funds and resources. The commercial biopharma paradigm requires companies to quickly move promising assets from preclinical to clinical along a focused strategic journey to help access critical stakeholder support for milestone payments and further funding.

Inflexion Tx mitigates against a delayed or missed opportunity by sharing some of the value in return for mobilising these ideas with a structured program towards the next key go-no-go position. o2h discovery has evolved deep design experience for focused and efficiently structured POC studies leading to an early signal that the science works. The expertise cuts across a range of modalities and integrates medicinal chemistry, biological assay cascade design, DMPK and analysis. The match-funding offer is available in bundles of USD 100K, 250K, or 500K, allowing shared financial and scientific risk.

Where it can help...

Through Inflexion Tx, projects can regain focus and direction, unlocking value and advancing scientific opportunities where others may have seen only risk. It can provide critical support in scenarios such as:

New Modality
Explore alternative modalities against an existing asset to explore new IP space

Novel Target Space
Using novel screening strategies combining in-silico for target identification

Near Miss
An additional study boost may be required to crack a scientific bottleneck

Novel Hit Matter
Design assay cascade/ panel along with some early chemical matter

Rescue After Setback
Stalled after pre-clinical study data or clinical trial setback

New Indicators
Assets not aligned with strategy but valuable in other indications

Novel Contrarian Ideas
Projects that go by hunch against prevailing industry trends

Funding Gap
Providing data to the program champion to unlock an asset

Creating Backup Program
Building up the pipeline behind the development candidate

Lead Optimisation
Advancing promising leads into more potent, development ready drug candidate molecules

Power Your Pipeline With India

Excellence for accelerated drug discovery

Key Stats

10.75% CAGR growth will push India's CRO sector to USD 2.5 billion

$82M+ infrastructure for drug discovery and development

$2M+ to develop common facilities such as testing labs and effluent treatment plants

Why is India the Perfect Destination for Your Next Drug Discovery Project?

India's CRO landscape is evolving rapidly, with clinical development services taking the lead, followed by discovery chemical services. To stay ahead of shifting regulatory landscapes, CROs are enhancing their scientific writing and regulatory capabilities. Notably, biomarker development and companion diagnostics are emerging as critical areas of focus, particularly in the context of precision medicine and targeted therapies.



The Strategic Edge of Partnering with India

Scientific Talent Pool

A vast pool of highly skilled scientists with expertise in cutting-edge technologies

Secure and Reliable

Strong IP protection, privacy measures, and robust compliance with global regulatory standards

Advanced Infrastructure

Modern research facilities equipped to handle complex discovery needs

Fast Supply Chain

Fast and reliable supply chain to accelerate project timelines and deliverables

Favourable Policies

Supportive biotech and outsourcing regulations that promote innovation and partnership

discovery@o2h.com o2h-discovery o2hlife o2hlife

Scan to visit website



o2h Peptide Guarantee

*Get peptides delivered in **2 weeks.***
If delayed, it's on us!

Overview

At o2h Discovery, we recognise that fast and reliable peptide synthesis is crucial for accelerating innovation, advancing drug discovery, and delivering life-changing therapies without delay. This is why a rapid and dependable peptide synthesis service becomes essential.

With the o2h Peptide Guarantee Programme, our goal is simple: deliver high-quality peptides in 2 weeks. If delayed, it's on us!

This initiative is designed to accelerate the drug discovery journey for small-molecule-focused biotech organisations, academic researchers, and pharma companies by providing peptides with speed, precision, and reliability. Our expertise in peptide synthesis supports the development of innovative therapies that address unmet medical needs, helping advance groundbreaking science that improves human health and the environment.

Highlights

Ultra-Fast Peptide Synthesis

High-quality peptides delivered in 2 weeks. If delayed, it's on us.

T&C Applied

Highly Experienced Peptide Chemists

Work with our expert scientists with vast experience in synthesising and optimising complex peptide molecules with efficiency.

End-to-End Peptide Solutions

From custom synthesis and complex modifications at mg to gram scale, to purification, analysis and characterisation; we handle it all with precision.

Cutting-Edge Equipment & Advanced Capabilities

o2h's peptide facility is equipped with Biotage Syro I, CEM Liberty Blue, and more for fast, high-quality peptide production.

Contact us

o2hdiscovery.co/peptide-guarantee
discovery@o2h.com
o2h-discovery
o2hlife
o2hlife
o2hgroup

Scan to visit website

o2h Kickstarter Winners' Wall

Over the years, we have become a trusted discovery partner to early-stage life science, biotech, and techbio companies, helping them translate innovative ideas into meaningful scientific progress and successful funding outcomes.

USA

OROGEN

Keystone

Breakloop

SCITHERA

SERINUS

PANNEX THERAPEUTICS

Neurovation LABS

GRADIENT

Jefferson Thomas Jefferson University

InnoVira

cosMYC

Permanence Bio

Atelier Tx Powering Vitality

ZPrime

Synprox

Galilei Biosciences

ST4TE therapeutics

Type6 THERAPEUTICS

TRBO TR Beta Oncology

UCSF University of California San Francisco

Iterion THERAPEUTICS

PAIM therapeutics

PSY THERAPEUTICS

UK & Europe

Cellestial Health

Awen Oncology

Azadyne

ALARMBIO

scripta therapeutics

KUANO

University of Glasgow

Ternary Tx

alevin THERAPEUTICS

ORIGAMI Therapeutics

Molecular Glue Labs

HOX THERAPEUTICS

HADO THERAPEUTICS

ADULARIA

KLYV Therapeutics

TRIMTECH THERAPEUTICS

VEIRULENCE

SEVENLESS

serenatis bio



Australia

PSY THERAPEUTICS

MONASH University

Israel

PROTEKT Therapeutics

Protai

A passion for investing

We have a track record of nurturing and investing in emerging life science and tech companies.

Biotech is one of the leading sectors in the UK economy. The o2h Ventures team are leaders in the biotech community and have been actively involved as investors, holding various board/ industry positions as well as being engaged in grassroots scientific activity for over 20 years.

The o2h Human Health Funds

About us

Founded in 2018, o2h Ventures is a UK-based venture capital firm focused on investing in the next generation of biotech companies that are working to improve human health. Headquartered in Cambridge, o2h Ventures has invested over $10 million into more than 35 early-stage life science companies, with a particular focus on novel therapeutics and emerging technologies like AI and machine learning.

Many of the companies backed by o2h are tackling diseases with high unmet medical need—such as cancer, depression, infectious diseases, and age-related conditions—and several are university spinouts from institutions including Cambridge, Oxford, UCL, Dundee, and Nottingham.

o2h Ventures takes a hands-on approach, often leading investment rounds and supporting its portfolio companies through Board positions. The firm is authorised by the FCA and continues to invest from its tax-efficient funds into seed & pre-seed biotech companies that are now progressing toward commercial maturity and long-term impact.

>35
Biotech investments (~10M) over 6 years

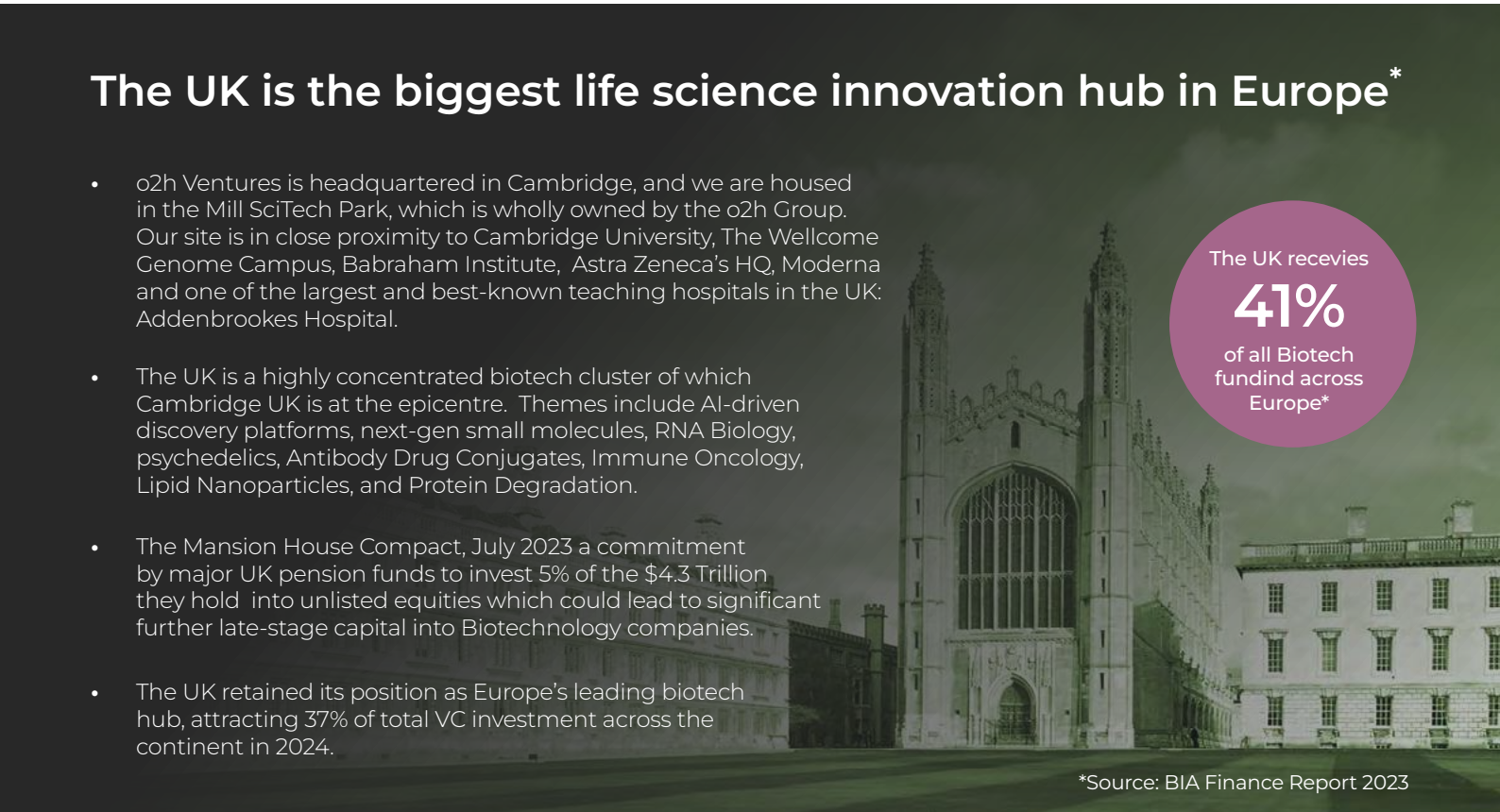
7
Clinical stage from Seed

>$400M
External finance leveraged

1
Seed to IPO 39x upon first listing TSX V:DMT

The UK is the biggest life science innovation hub in Europe*

- o2h Ventures is headquartered in Cambridge, and we are housed in the Mill SciTech Park, which is wholly owned by the o2h Group. Our site is in close proximity to Cambridge University, The Wellcome Genome Campus, Babraham Institute, Astra Zeneca's HQ, Moderna and one of the largest and best-known teaching hospitals in the UK: Addenbrookes Hospital.
- The UK is a highly concentrated biotech cluster of which Cambridge UK is at the epicentre. Themes include AI-driven discovery platforms, next-gen small molecules, RNA Biology, psychedelics, Antibody Drug Conjugates, Immune Oncology, Lipid Nanoparticles, and Protein Degradation.
- The Mansion House Compact, July 2023 a commitment by major UK pension funds to invest 5% of the $4.3 Trillion they hold into unlisted equities which could lead to significant further late-stage capital into Biotechnology companies.
- The UK retained its position as Europe's leading biotech hub, attracting 37% of total VC investment across the continent in 2024.



*Source: BIA Finance Report 2023

Developing IP for global markets with a lower people & infrastructure costs and lower valuations than the USA.

Cambridge

The UK's Billion-Pound Biotech Engine

Cambridge has long been synonymous with academic brilliance, scientific discovery, and entrepreneurial spirit. Today, it has emerged as **Europe's leading hub for life sciences**, anchored by world-class institutions such as the University of Cambridge and the Babraham Institute and in close proximity to major pharma and research centres.

Being embedded in Cambridge gives o2h Ventures unparalleled access to the most exciting spinouts and scientific founders. It also places us in the centre of a dense network of pharma, investors, and entrepreneurs—ensuring a constant flow of high-quality opportunities.

#1 in the UK
#2 Globally for innovation intensity

40+
Business and science parks

€162B+
Enterprise value of Cambridge startups & scale-ups

100+
Nobel laureates produced by Cambridge

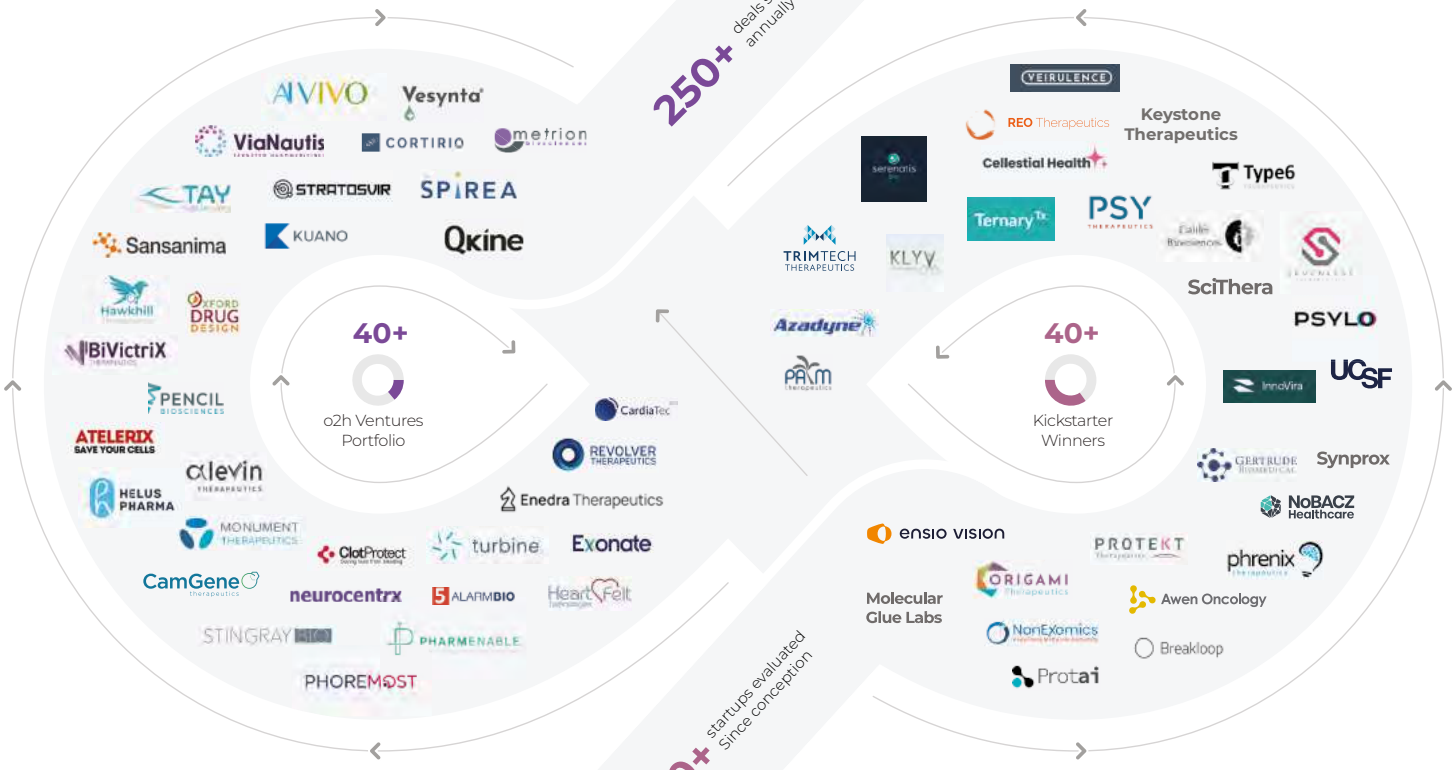
4
Universities with global rankings (including Cambridge and Anglia Ruskin)



For investors, Cambridge represents a proven pipeline from discovery to scale-up, offering access to the next generation of biotech and technology leaders.

Access:
The o2h advantage

Being part of Cambridge's biotech network gives us a unique window into tomorrow's science. Unlike traditional funds that only see deals once they are in the market, we are embedded within the biotech ecosystem itself. Through **o2h Ventures** and **o2h Discovery**, we see science earlier, support founders at inception, and build trusted relationships long before others.

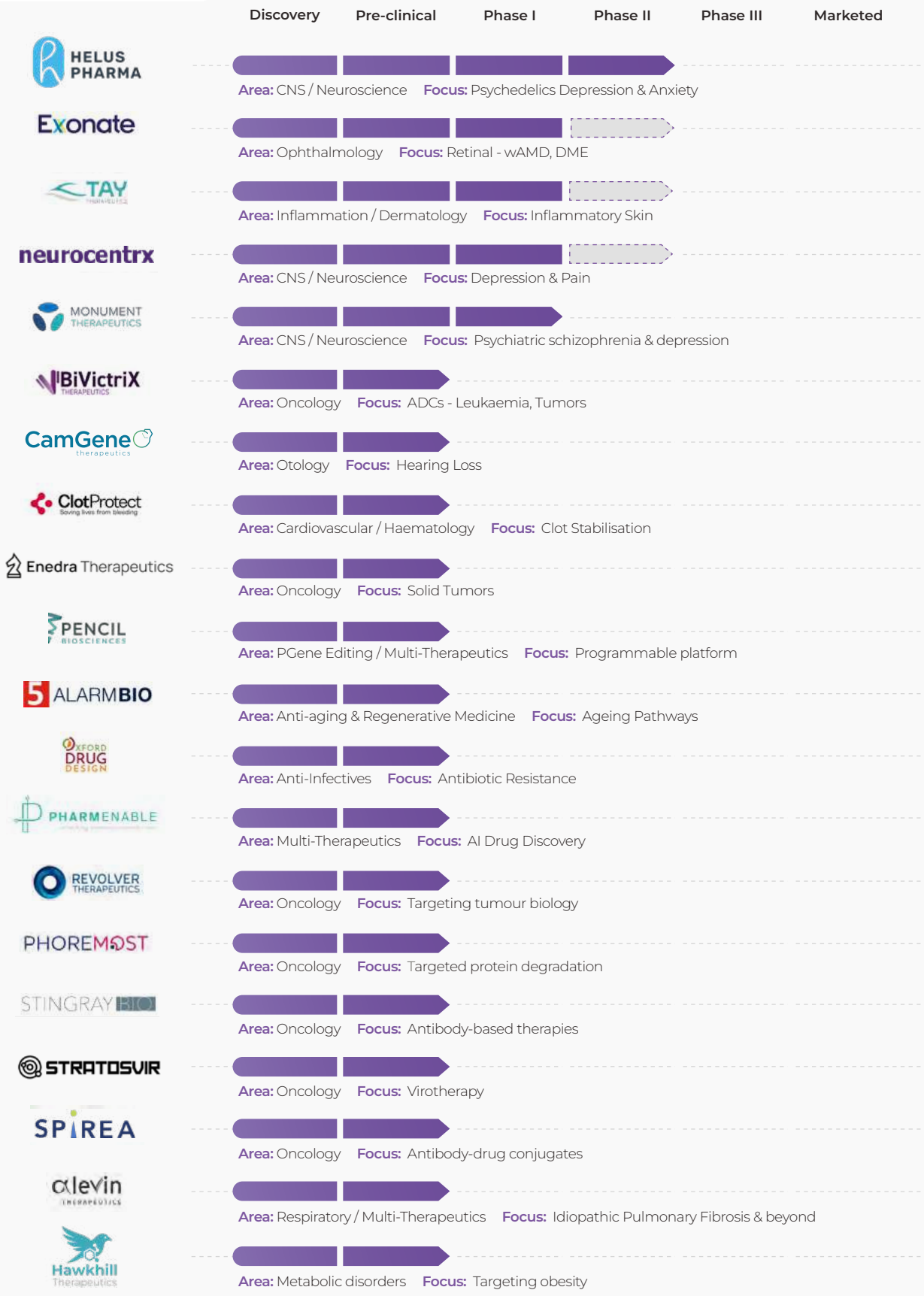


o2h Discovery Kickstarter is a proprietary competition award that supports the most exciting early biotech ideas. Winners receive expert chemistry/biology services, mentorship, and scientific support — giving us privileged visibility into innovation years ahead of the market. **o2h Ventures** builds on this by scouting opportunities across the UK and beyond, applying advanced scientific due diligence and backing the strongest ideas with capital, guidance, and access to the Cambridge ecosystem.

- ✦ Access to early-stage innovation at good valuations
- ✦ An integrated biotech engine
- ✦ Co-investment opportunity rights

Portfolio Evolution Across Key Milestones

Therapeutics



Platform Biotech

Proof of concept | Platform Validation | Pipeline Expansion | Strategic Partnership | Clinical Advancement | Commercial Readiness | Market Leadership

ViaNautis
Area: Multi-Therapeutics **Focus:** Drug Delivery (Nanoparticles)

Tech Bio

Proof of concept | Algorithm / Platform Validation | Pipeline Expansion | Strategic Partnership | Clinical Advancement | Commercial Readiness | Market Leadership

turbine.
Area: Oncology **Focus:** AI Oncology Simulation

KUANO
Area: Multi-Therapeutics **Focus:** Quantum AI (Enzymes)

CardiaTec
Area: Cardiovascular **Focus:** AI Cardiovascular Discovery

Vesynta
Area: Multi-Therapeutics **Focus:** AI Precision Dosing

AIVIVO
Area: Anti-Infectives **Focus:** AI Preclinical (Anti-Infectives)

Medtech

Concept & Prototype | Preclinical / Bench Validation | Clinical Validation | Regulatory Approval | Commercial Launch | Market Expansion & Standard of Care

HeartFelt Technologies
Area: Cardiovascular **Focus:** Remote Heart Failure Monitoring

CORTIRIO
Area: CNS / Neuroscience **Focus:** Portable Brain Injury Diagnostics

Pharma Enablers

Proof of concept | Technology Validation | Early Collaborations | Pharma Partnerships | Commercial Adoption | Industry Standard

metrion biosciences
Area: CNS / Multi-Therapeutics **Focus:** Ion Channel Discovery

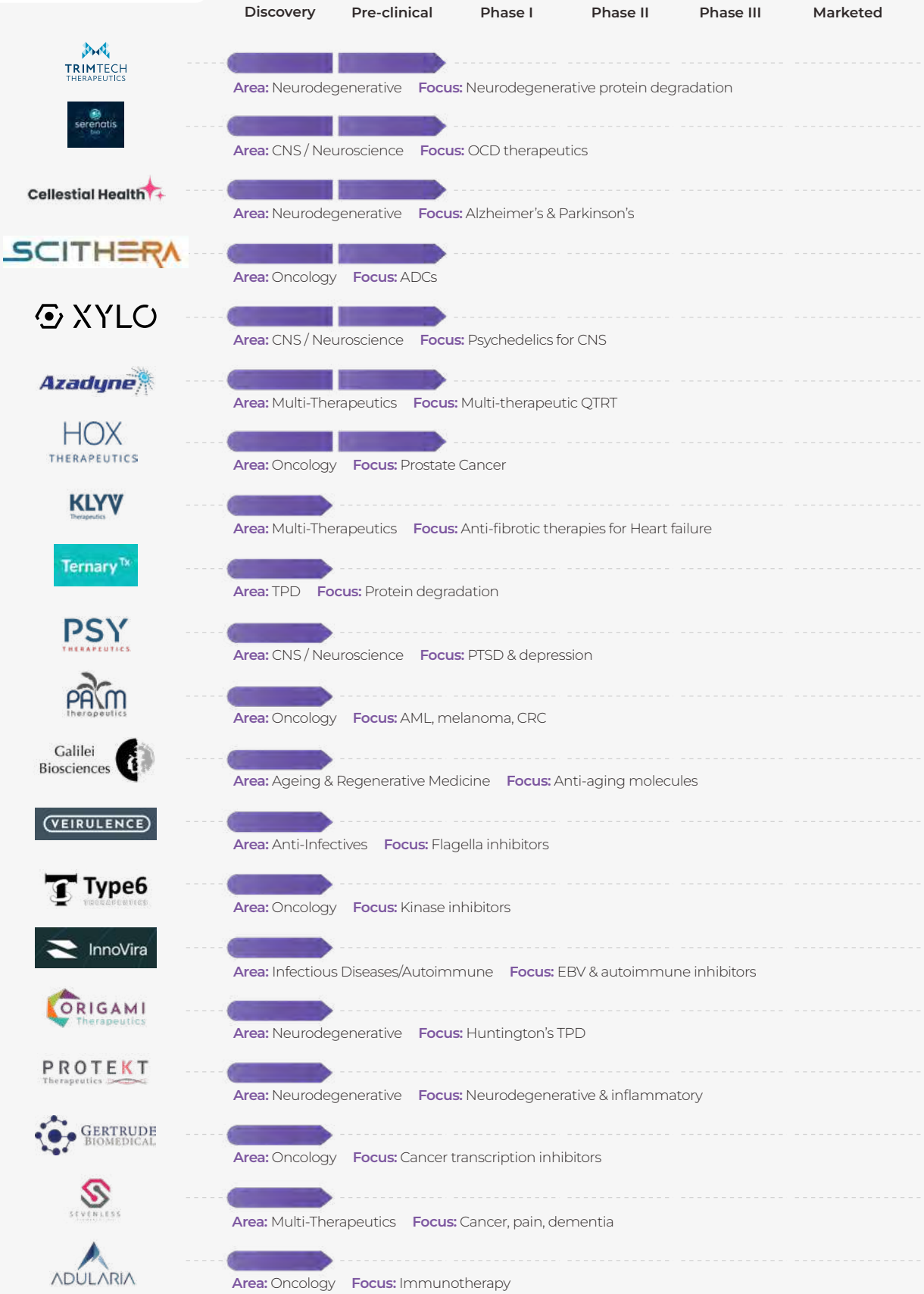
Qkine
Area: Multi-Therapeutics **Focus:** Growth Factors (Stem & Regen)

ATELERIX SAVE YOUR CELLS
Area: Multi-Therapeutics **Focus:** Cell/Tissue Preservation

Sansanima
Area: Multi-Therapeutics **Focus:** 3D Cell Culture & Testing

o2h Kickstarter Evolution Across Key Milestones

Therapeutics



	Discovery	Pre-clinical	Phase I	Phase II	Phase III	Marketed
cosMYC						
ST4TE therapeutics						
PANNEX THERAPEUTICS						
ZPrime						
Molecular Glue Labs						

Area: Oncology **Focus:** Prostate Cancer

Area: Metabolic disorders **Focus:** Obesity

Area: Multi-Therapeutics **Focus:** Oncology & Neurology

Area: Oncology **Focus:** Precision oncology

Area: Oncology **Focus:** Molecular glues (PPIs)

Platform Biotech

	Proof of concept	Platform Validation	Pipeline Expansion	Strategic Partnership	Clinical Advancement	Commercial Readiness	Market Leadership
Keystone							
Synprox							

Area: Targeted drug delivery **Focus:** Tissue-targeted drugs

Area: Drug discovery **Focus:** Oncology drug discovery

Tech Bio

	Proof of concept	Algorithm / Platform Validation	Pipeline Expansion	Strategic Partnership	Clinical Advancement	Commercial Readiness	Market Leadership
Protai							

Area: Oncology & Immunology **Focus:** Protein-level disease mapping

Pharma Enablers

	Proof of concept	Technology Validation	Early Collaborations	Pharma Partnerships	Commercial Adoption	Industry Standard
Awen Oncology						
phrenix therapeutics						
Breakloop						

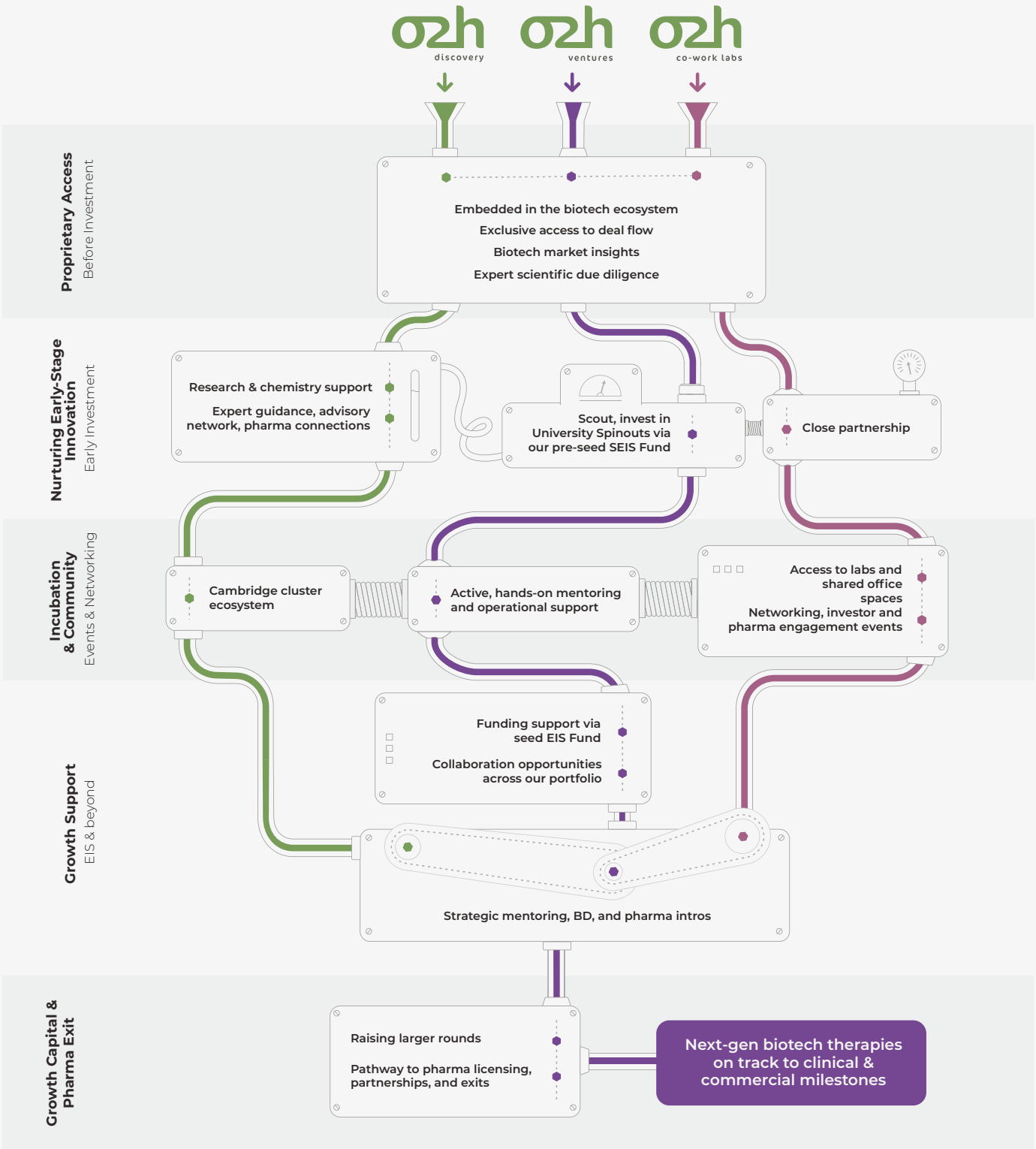
Area: Oncology **Focus:** Oncology drug discovery

Area: Psychiatric & Neurological Disorders **Focus:** Cognitive Impairment, Schizophrenia

Area: Drug Discovery **Focus:** Neuroimmune drug discovery

The Integrated o2h Biotech Engine

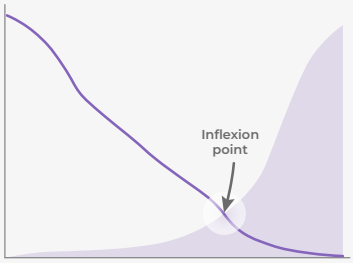
From proprietary deal access to Big Pharma exit, o2h Ventures uniquely integrates discovery, incubation, community, and capital—de-risking early-stage science and creating outsized opportunities in biotech.



Clear de-risked pathway designed to capture maximum value creation

Biotech Finance Across the Lifecycle

o2h Ventures supports biotech companies through every stage, from inception to scale. Our SEIS fund provides early, tax-efficient capital to university spin-outs and founders, alongside mentorship and access to our Cambridge network. The Knowledge-Intensive EIS Fund offers follow-on capital to drive clinical and commercial growth. As our portfolio matures, the Seven Sisters Human Health Growth Fund backs de-risked, later-stage biotech companies ready to scale.



The o2h Seven Sisters Human Health Growth Fund



The UK consistently attracts over 40% of all biotech investment across Europe. Yet, despite world-class science, a persistent valuation gap with the US remains, driven not by weaker innovation, but by a shortage of growth capital at the crucial scaling stages.

- Seven later-stage human health companies from the o2h portfolio, with the clearest path to exit
- Clear 5–7 year exit horizon, mainly through trade sales
- Companies which have been significantly technically de-risked, with revenue or late-stage trials
- Access to UK biotech at attractive valuations
- Positioned for growth, scale, and meaningful exits

Our Seven Sisters Human Health Growth Fund will provide an opportunity to invest in some of the UK's most exciting biotech companies at attractive entry points. Many of these businesses have already navigated significant technical risk, are either generating meaningful revenue or advancing towards late-stage clinical trials and, crucially, are at the stage where a single round of funding could accelerate them towards a clear exit pathway.

Portfolio Overview - Clinical

Company	Therepeutic Area / Focus	Description	Modality	Funds Raised
Small Pharma	**Area:** CNS / Neuroscience **Focus:** Psychedelics (Depression, Anxiety)	Developing psychedelic-based therapeutics, including the deuterated psilocin analog CYB003, to transform treatment for major depressive disorder - **Phase II**	Small Molecule	IPO - Exited to Cybin Inc. NYSE listed $425M
Exonate	**Area:** Ophthalmology **Focus:** Retinal (wAMD, DME)	University of Nottingham spinout developing small-molecule modulators of mRNA splicing to treat wet AMD and diabetic macular oedema, in collaboration with Janssen (J&J) - **Phase II Inception**	Small Molecule	Series A £9.28M
TAY THERAPEUTICS	**Area:** Inflammation / Dermatology **Focus:** Inflammatory Skin	University of Dundee spinout developing small-molecule therapeutics targeting stop codon mutations in cancer and genetic diseases through strategic partnerships - **Phase II Inception**	Small Molecule	Seed £3.35M
neurocentrx	**Area:** CNS / Neuroscience **Focus:** Depression & Pain	Developing oral, abuse-deterrent ketamine formulations (Keticap) for treating depression, bipolar disorder, and other mood-related conditions - **Phase II Inception**	Small Molecule	Series A £8.39M
MONUMENT THERAPEUTICS	**Area:** CNS / Neuroscience **Focus:** Psychiatric (Schizophrenia, Depression)	Advancing precision psychiatry and neurology through digital biomarkers and novel CNS compounds to deliver targeted treatments for defined patient subtypes - **Phase I**	Small Molecule	Series A £6.87M

Portfolio Overview - Pre-Clinical

Company	Therepeutic Area / Focus	Description	Modality	Funds Raised
BiVictriX THERAPEUTICS	**Area:** Oncology **Focus:** ADCs (Leukaemia, Tumors)	Developing highly selective cancer therapies using proprietary "twin antigen fingerprint" technology to enable precise Bi-Cygni treatments that target the cancer, not the patient.	Small Molecule	Series A £2.91M
CamGene therapeutics	**Area:** Otology **Focus:** Hearing Loss	Developing lipid nanoparticle-based mRNA therapies to regenerate inner ear cells and transform the treatment of hearing loss.	Small Molecule & Biological	Seed £2.45M
ClotProtect Saving lives from bleeding	**Area:** Cardiovascular / Haematology **Focus:** Clot Stabilisation	University of Leeds spinout developing a next-generation small molecule to outperform tranexamic acid and transform bleeding management across clinical settings.	Small Molecule	Seed £845K
Enedra Therapeutics	**Area:** Oncology **Focus:** Solid Tumors	Developing the CASPAROV platform to uncover novel drug targets and biomarkers by analysing tumour diversity driven by chromosomal instability in complex cancers.	Small Molecule	Series A £1.70M
PENCIL BIOSCIENCES	**Area:** Gene Editing / Multi-Therapeutics **Focus:** Programmable Gene Editing Platform	Developing a novel gene modulation technology with broad applications, offering new therapeutic possibilities for patients with rare diseases.	Biological & Cell	Series A £7.25M
ALARMBIO	**Area:** Ageing & Regenerative Medicine **Focus:** Ageing Pathways	Developing small-molecule therapeutics targeting novel mechanisms to prevent or delay age-related diseases and promote healthy longevity.	Small Molecule	Seed £870K
OXFORD DRUG DESIGN	**Area:** Anti-Infectives **Focus:** Antibiotic Resistance	University of Oxford spinout leveraging AI-driven drug discovery to develop novel therapeutics for oncology and high-threat pathogens, supported by validated in vivo data.	Digital & Small Molecule	Series A £13.97M

Portfolio Overview - Pre-Clinical

Company	Therepeutic Area / Focus	Description	Modality	Funds Raised
PHARMENABLE	**Area:** Multi-Therapeutics **Focus:** AI Drug Discovery	Cambridge University spinout using its AI-enabled chemSEEK platform to discover novel small molecules with antibody-like specificity against challenging targets.	Digital & Small Molecule	Pre-series A £9.66M
REVOLVER THERAPEUTICS	**Area:** Oncology **Focus:** Tumor Targeting	University of Bath spinout developing constrained peptide drugs to target “undruggable” transcription factors, with an initial focus on cancer targets like paediatric high-grade gliomas.	Small Molecule	Seed £431K
PHOREMOST	**Area:** Oncology **Focus:** Targeted Protein Degradation	Using its proprietary SITESEEKER phenotypic screening platform to identify previously “undruggable” targets and develop novel therapies across multiple diseases.	Small Molecule	Series B Extension £61.75M
STINGRAY BIO	**Area:** Oncology **Focus:** Antibody Tx	University of Sussex spinout developing small-molecule cancer therapies targeting the LMTK3 kinase pathway, with an initial focus on breast cancer.	Small Molecule	Seed £609K
STRATOSVIR	**Area:** Oncology **Focus:** Virotherapy	Creating IV-deliverable viral immunotherapies to reprogram the immune system against solid tumors and metastases.	Biological & Cell	Seed £796K
SPIREA	**Area:** Oncology **Focus:** ADCs	Cambridge University spinout developing next-generation ADCs using its multivalent ELIVATE technology to unlock new payloads and enhance cancer treatment.	Small Molecule	Pre-series A £3.54M
alevin THERAPEUTICS	**Area:** Respiratory / Multi-Therapeutics **Focus:** Idiopathic Pulmonary Fibrosis (IPF) and beyond	University of Nottingham spinout developing small-molecule RGD integrin inhibitors for IPF, liver and kidney diseases, and cancer.	Small Molecule	Seed £1M

Portfolio Overview - Pre-Clinical

Company	Therepeutic Area / Focus	Description	Modality	Funds Raised
ViaNautis	**Area:** Multi-Therapeutics **Focus:** Drug Delivery (Nanoparticles)	UCL spinout pioneering nanomedicine with its polyNaut® platform to deliver genetic therapies to hard-to-reach sites such as the brain, CNS, and lungs.	Platform Tech	Series A £22.90M
turbine.	**Area:** Oncology **Focus:** AI Oncology Simulation	Using AI to create predictive "Simulated Cell" models that accelerate and optimise drug discovery, with a focus on cancer treatment.	Digital Health	Series A £7.73M
KUANO	**Area:** Multi-Therapeutics **Focus:** Quantum AI (Enzymes)	Using AI and quantum-driven screening to discover potent transition state protein inhibitors across multiple therapeutic areas.	Digital Health	Seed £4.98M
CardiaTec BIC	**Area:** Cardiovascular **Focus:** AI Cardiovascular Discovery	Cambridge University spinout using computational and omics-driven approaches to decode cardiovascular disease biology and discover novel therapeutics.	Digital Health	Seed £6.82M
Vesynta	**Area:** Multi-Therapeutics **Focus:** AI Precision Dosing	Developing software-driven precision dosing technology that integrates drug monitoring and pharmacology to optimise treatment across cancer and infectious diseases.	Digital Health	Seed £1.79M
AIVIVO	**Area:** Anti-Infectives **Focus:** AI Preclinical (Anti-Infectives)	Using AI and multi-omics data to build "OrganoMaps" that reveal disease mechanisms and accelerate drug discovery across therapeutic areas.	Digital Health	Seed £505K

Portfolio Overview - Tech Bio

Company	Therepeutic Area / Focus	Description	Modality	Funds Raised
xploro	**Area:** Digital Health / Multi-Therapeutics **Focus:** Oncology Support (Pediatrics)	Digital health platform using AR and interactive games to help children understand medical procedures, reducing anxiety through engaging, avatar-led experiences.	Digital Health	Seed £425K
HeartFelt Technologies	**Area:** Cardiovascular **Focus:** Remote Heart Failure Monitoring	Developing AI-powered, contactless monitoring technology that tracks foot volume changes to detect heart failure early and reduce hospital readmissions.	Digital / Medical Device	Series A £4.93M
CORTIRIO	**Area:** CNS / Neuroscience **Focus:** Portable Brain Injury Diagnostics	Developing portable, wearable brain imaging devices using functional Near-Infrared Spectroscopy (fNIRS) for rapid, point-of-care diagnosis and monitoring of traumatic brain injuries.	Digital / Medical Device	Seed £3.60M
metrion biosciences	**Area:** CNS / Multi-Therapeutics **Focus:** Ion Channel Discovery	Preclinical CRO specialising in ion channel screening, cardiac safety, and neuroscience assays to support pharma and biotech research.	Small Molecule	Series B £8.30M
Qkine	**Area:** Multi-Therapeutics **Focus:** Growth Factors (Stem & Regen)	Cambridge University spinout producing premium, functionally pure recombinant proteins using proprietary E. coli purification technology to improve research reproducibility.	Biological & Cell	Series A £9.21M
ATELERIX SAVE YOUR CELLS	**Area:** Multi-Therapeutics **Focus:** Cell/ Tissue Preservation	Using alginate hydrogel technology to extend biological sample shelf life, backed by strong IP and leadership.	Biological & Cell	Seed £4.13M
Sansanima	**Area:** Multi-Therapeutics **Focus:** 3D Cell Culture & Testing	Developing in vitro cell-based assays to replace animal testing in the production of clostridial neurotoxin-based therapeutics.	In vitro / Cell-based Assay Technology	Pre-seed $300K

o2h ChaiTime Portfolio Pitch Days

The o2h chaitime portfolio pitch day introduces a new format to our chaitime series, transitioning to an in-person event with a simultaneous webinar. It is designed to foster collaboration, create investment opportunities, and facilitate the exchange of innovative healthcare ideas within a global investor network.

This event serves a dual purpose:
Connecting o2h Ventures' portfolio companies with biotech investors worldwide and providing a platform for these portfolio companies to showcase their potential, interact with experienced investors, and build a potential pipeline for their funding round.

6
Editions

25+
Portfolio Company Pitches

1M+
in Investments Confirmed till Date

200+
In-Person Investors Engaged

150+
Global Participants via Zoom



o2h technology

We partner with accelerators, incubators and seed stage companies to support their digital transformation journey through all phases of software development services including planning, design, development and implementation



life science

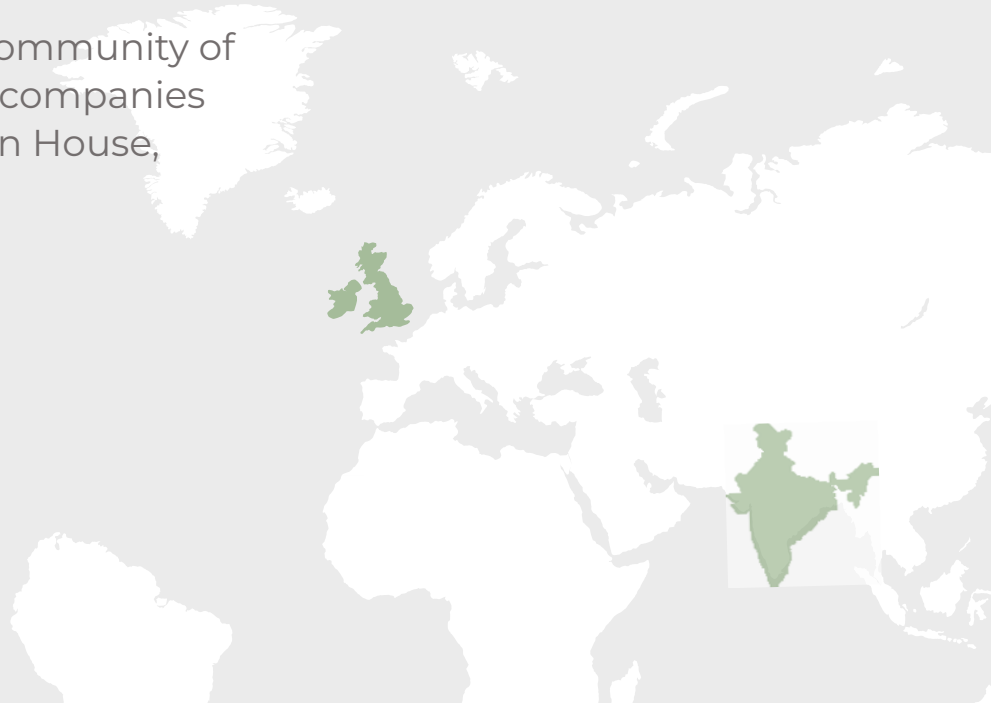
The o2h team are leaders in the biotech community and have been actively involved as investors, service providers, and holding various board positions. We have been engaged in grassroots scientific activity for over 20 years.



technology

We have the capabilities to build customised product and special project builds covering all stages of the product development lifecycle covering design, development and adoption.

We are co-located with a community of innovators and seed stage companies in o2h incubator at Hauxton House, Cambridge, UK.

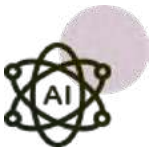


Our Services

We have developed and launched 50+ projects across web and mobile applications

Product Development

We consult, support and implement the entire product life cycle, from the initial launch of an MVP to ongoing support of the live product. Our expertise lies in product development within the life sciences, technology, and green innovation sectors.



Gen AI

We design and implement cutting-edge generative AI solutions tailored to your business needs, from custom model creation to seamless integration. Our expertise spans text, image, and audio generation, unlocking innovation and efficiency.



Cloud Technologies

By utilising cloud-based applications, organisations can eliminate the complexities of building and maintaining application architectures. We specialise in AWS, Google Cloud, and Azure.



QA Automation

Modern digital applications need to scale rapidly and efficiently. Our team of experienced QA engineers excels at designing highly effective automated tests, including functional, regression, performance, and load testing, to ensure optimal performance and scalability.



Mobile Application

Mobile can serve as a standalone entry point or complement a web application. We ensure your app is elegantly designed across your chosen platform(s). Our expertise spans iOS, Android, Hybrid, Flutter, and React Native technologies.

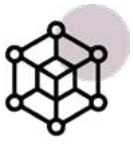
Website Development

In today's fast-paced world, we deliver best-in-class, scalable web applications. Leveraging the latest web technologies such as WordPress, HTML5, CSS3, JavaScript, and TypeScript, we tailor solutions to perfectly align with your needs.



AR & VR Development

We help businesses craft immersive experiences for their customers through comprehensive AR/VR development services. Our offerings include ideation, design, development, testing, deployment, and ongoing maintenance and support.



Blockchain Development

We help businesses leverage the power of decentralised technology. Our team of experts specialise in creating custom blockchain solutions tailored to business needs, including smart contracts, decentralised applications (dApps), and more.



Cyber Security

We offer a range of cyber security services that are designed to help you safeguard your data and IT infrastructure from a wide array of risks, including malware, hacking, phishing, and more.

o2h technology

Tech Kickstarter Competition

Give your startup a tech boost...

We have launched the o2h tech kickstarter competition to provide a boost of tech software/web development to seed stage companies who have secured some initial funding and are looking forward to build MVPs, Web or Mobile apps to kickstart their digital journeys or supercharge their existing MVPs by expanding their functionality with additional resources.

At o2h technology, we love working with innovative early stage companies and help them build tech products that have an impact on human and planet health. We enable our clients' digital transformation journeys through all phases of software development services, including design, development, and implementation.

Scan to find out more

polaris

Identifying and Executing Quick-Win Generative & Agentic AI Use Cases in Life Sciences

About Polaris

o2h has been working at the intersection of technology and life sciences for over two decades, supporting both large pharmaceutical companies and emerging biotechs across discovery, technology, and AI/digital transformation projects.

AI is driving significant change across the life sciences sector. The pace of change is quicker and the gap between what AI is capable of and what organisations are actually implementing needs constant attention.

At o2h Technology, we have launched Polaris, a new AI implementation offering designed specifically to help life sciences organisations move quickly into practical execution.

Polaris is focused on helping organisations identify and execute early quick-win AI use cases using the latest generative and agentic tools. The focus will be improve workflow efficiency, unlock new opportunities, and help teams build direct hands-on experience with AI tools, data, processes, and applications. The early wins would then provide a beachhead for deeper and more wide ranging projects during a second phase of work.

Two Easy-to-Access Starter Packages

LIMITED TIME OFFER ENDING JULY 31ST

IGNITE

£6,000

6 Weeks Engagement

A practical starter package for identifying opportunities or pain points for a modest exploration of 1-2 use cases.

ACCELERATE

£16,000

16 Weeks Engagement

An extended engagement focused on implementation, orchestration, and building early GenAI and/or Agentic AI workflows with 2-3 use cases with a modest scope or 1-2 use cases at a deeper level.

SCALE & TRANSFORM

Custom

Customised Engagement

Designed for organisations looking to scale AI capabilities, operational integration, orchestration, and long-term transformation initiatives.

Through Polaris, we will work with you to help build

- The orchestration layer
- The data layer for AI enablement
- Early GenAI and Agentic AI use cases
- Practical AI workflows designed to improve operational efficiency and unlock measurable value
- Direct organisational experience with AI tools, data, processes, and applications

We can also explore

- Agentic AI use cases
- AI-enabled digital workforces
- Practical AI applications within regulated life sciences environments

Polaris is designed to help organisations identify opportunity or performance gaps, and engage in AI experimentations during a phase one, and step towards a structured, scalable, and more measurable implementation in a second phase.

**Additional terms, conditions, timelines, deliverables, and commercial considerations may apply depending on organisational requirements, technical complexity, and programme scope.*

technology@o2h.com | o2h-tech | o2htechnology | o2htechnology | o2htech

CellRepo

Revolutionising Genetic Engineering with Version Control Solutions

Industry: Biotechnology

Project Timeline: 2024 to Present

Location: United Kingdom

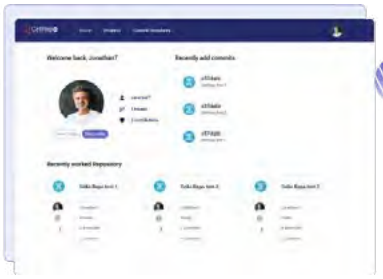
Collaboration Model: Fixed Price

Services: Business Analysis, Design, Development, Quality Assurance, DevOps, Senior Technical Consultation

Project Description

CellRepo is an innovative platform tailored for genetic engineering, providing a centralised structure for version control for the experiments.

By introducing concepts from software development into bioengineering, CellRepo enables researchers to log, track, and collaborate on genetic modifications with precision, security, and ease.



Problem Statement

Traditional processes for tracking genetic modifications are manual, fragmented, and prone to errors, lacking a unified system that ensures consistency and collaboration.

CellRepo aims to bridge this gap by digitising and simplifying data management in genetic engineering, ensuring precision, security, and compliance with regulations.

Key Challenges

- Version Control for Genetic Engineering
- Data Integrity & Security
- Collaborative Workflow
- Git-Like Project Structure

Proposed Solution

1. **Centralised Data:** Unified platform with advanced search and categorisation.
2. **Genostamp™:** Tracks all genetic strain changes for accuracy.
3. **Secure Setup:** Heroku hosting with encrypted AWS S3 storage.

Insights

Increased collaboration & research efficiency

Decreased administrative overhead

Improved regulatory compliance

SIMPLY ART



Transforming Museum Experiences with AI

Industry: Arts, Culture (EdTech)

Project Timeline: 2024 to Present

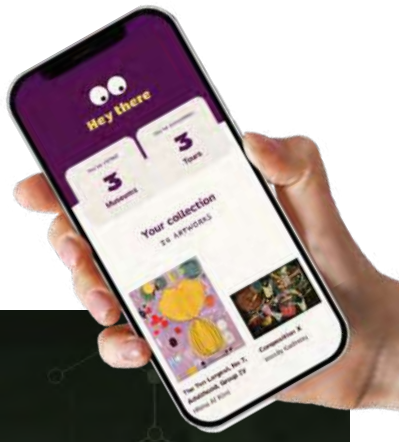
Location: United Kingdom

Collaboration Model: Fixed Price

Services: Business Analysis, Design, Development (Web, Mobile, Gen AI), QA, DevOps, Sr. Tech Consultation

Project Description

SimplyArt AI is a mobile and web platform that transforms museum engagement by enabling digital exhibits and immersive onsite or virtual exploration. With AI-powered Q&A, natural voice narration, and adaptive tours tailored to visitors, it makes cultural content more interactive, inclusive, and accessible, earning recognition as our 3rd Kickstarter winner.



Problem Statement

Younger, digital-first audiences quickly disengage from traditional museum tools like plaques and static guides, making museums risk losing relevance. Accessibility challenges further limit engagement for visitors with learning differences. SimplyArt AI was created to solve these gaps with more interactive and inclusive experiences.

Key Challenges

- Accurate and Context-Aware AI Responses
- Harmonising Innovation with User-Centred Design
- Embedding Accessibility Seamlessly

Proposed Solution

1. **AI-Driven Personalisation:** Interactive Q&A, AI narration, and adaptive tours tailored to each visitor.
2. **Accessibility-First & Scalable:** Built-in inclusive features with seamless, multi-museum content management.

Insights

Boosting Visitor Engagement with AI

Embedding Accessibility by Design

Future-Ready Museum Operations

Extensive Track Record of Collaborations in Tech

Over the years we have provided tech expertise to many companies in life science, AI/tech and green innovation.

Tech

stampfree.ai · SAMSUNG · iWantGreatCare · enlightenbio · SHIPNET
updraft · ALARMBIO · pollenlabs · LAING O'ROURKE · deepmirror
PeopleStory · SHOOBS · RnwI · Bondu · RMS
Tamarind · SIMPLY ART · Discovr Analytics · Intro · rav.ai
SMV ENGINEERS

Life Science

PHARMENABLE THERAPEUTICS · STRATOSVIR · deepmatter · STEMNOVATE · WARUKSHA
CamGene · Joint Analytics · Ignota Labs · OXFORD DRUG DESIGN

Green Innovation

trovr · CLUBZERO · redigo/carbon · M/LIME · ORO · PLASTICS EUROPE

Health Tech

Pangaea · Biiah · 360me · miPatient

Manufacturing

GD Waldner

HR Tech

WRITERECRUIT · ClipStory · TalentBlog

Market Place

seesail

Bio Tech

AROMARC · NEUROLENTECH

E-commerce

QUEENSLAND MINT · DESIGNNBUY



mill scitech park
a lively culture of creators

a lively community of creators

Shaping one of the region's most exciting community of entrepreneurs in life science, and technology



o2h incubator

the mill scitech park

o2h incubator operates the mill scitech park in Hauxton, Cambridge, a place for entrepreneurs, scientists, techies & dreamers. Supported by high specification labs to create a genuinely unique environment for creativity and innovation to thrive.

We are quite obsessive about playing our part in the creation of a global collaborative community around innovation because we believe it's the cross fertilisation of ideas across boundaries that spurs exciting new ideas, and well, we just can't help doing what we love.



2.76
acres of stunning English countryside

3
buildings blended from different eras

2,398
sq.m of boutique office and lab space

a studio style workspace for

life scientists & techies

An incubation model like no other

We have a passion for collaboration and look forward to shaping a closely integrated community of founders, students, academics, experienced entrepreneurs, senior managers, mentors, angels and VCs.

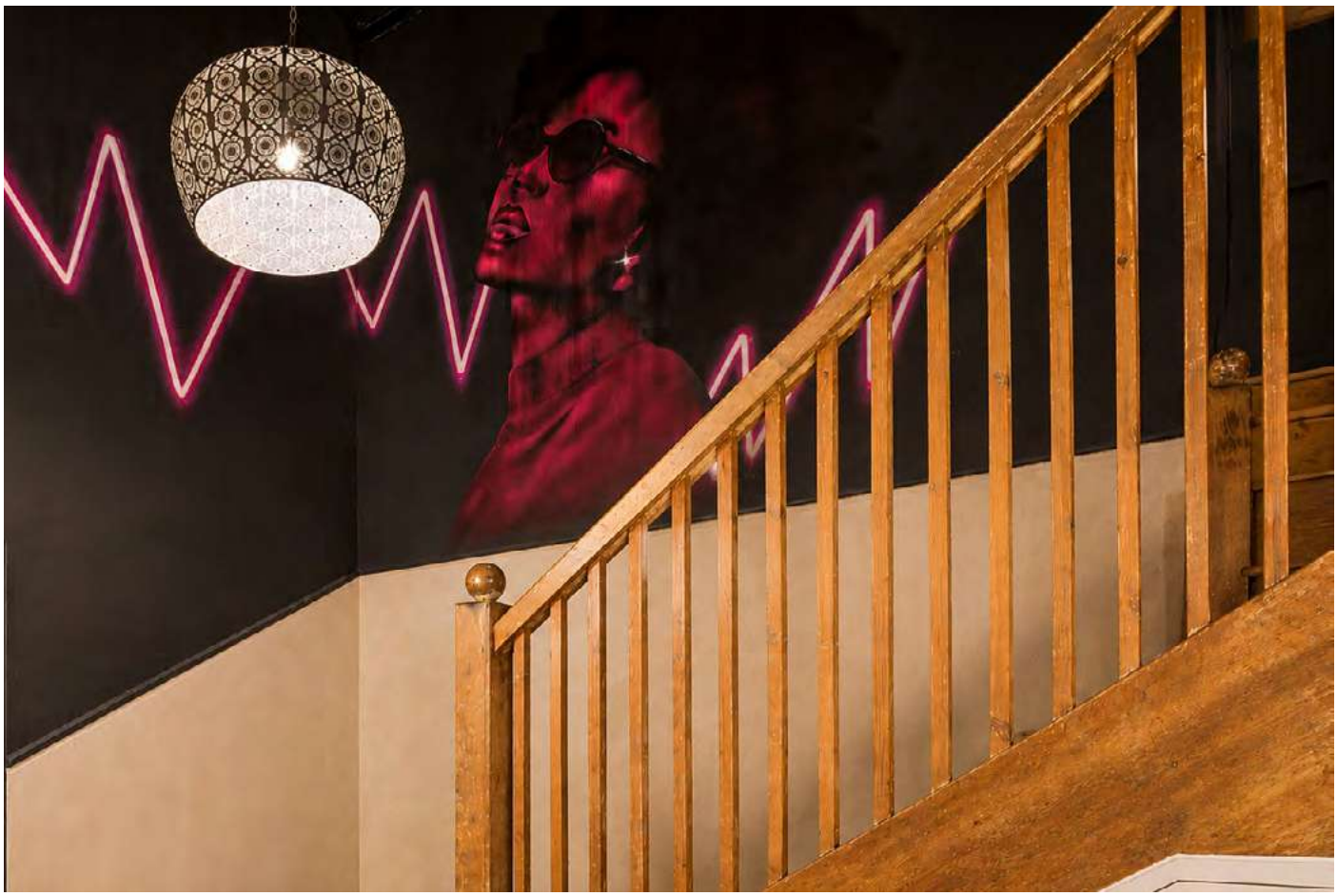
The vision of o2h group is to seed new ideas in life science, technology and green innovation by co-investing, co-creating and co-executing across boundaries.

The experience sharing from your peers (we prefer not to call it mentoring) will just flow, it's in our DNA. You can also expect a constant stream of interesting people to come through our doors, it's quite an intimate setting, so we will make an intro, make you both a coffee and you can do the rest...




HAUXTON HOUSE






crack
willow



o2h community

Building a Community

o2h is a community-aware company working with organisations on a wide range of programs. We connect scientists, entrepreneurs, and society through initiatives from planting 100,000 trees to hosting Women's Open Day, Influencer Bootcamps, Biotech Bikers and Cambridge Wide Open Week.

By opening our doors to investors, innovators, students, and residents, we help shape the future of science with the community.

The Cambridge TechBio Caucus

An experimental caucus to learn how we can nurture the world leading techbio space in Cambridge...

We were delighted to launch the first inaugural interactive conversation of the Cambridge TechBio Caucus (CTBC) with some of its leading players in the space. The Cambridge ecosystem is a leader in tech and life sciences and is home to some of the most exciting TechBio companies in the world.

The participants share their views on a broad range of topics including but not limited to the recent market volatility, the need to communicate how the biology works and detailing various viable business models that investors from both the tech and life science community can buy into.
If you would like to join our Cambridge TechBio Caucus micro community which we organise in conjunction with Bits in Bio please do get in touch.



we are absolutely delighted to launch

the influencer bootcamps

Hauxton House, Mill Scitech Park, Cambridge

o2h incubator organises two influencer bootcamps events per year, one covering life sciences and one covering tech. Looking far beyond the 'start-up' skills the idea is to bring together a group of people who we call the 'Dirty Dozen', who are proven in getting their hands dirty helping the British tech economy flourish. We try to nurture a vibe that is an intimate space for exchange of thoughts and not a typically rigid classroom/panel/conference format where you are only expected to only listen. We hope that the dirty dozen tackle subjects in depth, disagree and stir up a little controversy!

We cover a range of subjects from economic landscape, strategy, creativity, technology trends, customers/investors, deals/exits, the role of Cambridge but more importantly we allow for personal stories, workshops, debate and masterclasses. The invites include influencers covering from the quintet of (1) Small co technical experts and CXOs, (2) Big co' Managers/Executives, (3) Academia/Profs, (4) Policy Makers and (5) Incubators & Seed/VCs.

aim
squad

A drop-in open conversation with Coffee, Masala Chai & Sandwiches

The AIM (Accelerator, Incubator, Mentoring) squad is a no agenda highly casual meeting held every quarter at the o2h incubator on subjects we care to talk about over masala chai, sandwiches and coffee. This is not an event where the invite is based on seniority, neither is it invite only, so we share with any colleagues who we think are like minded even if they are new to our line of work, we want to be inclusive and open to all experience levels.

The overall objective is over time to develop a more co-ordinated punch for what we do. The vibe is that our small intimate group of attendees sit around our farmhouse style table indoors or in the garden overlooking the meadows/brook and just let it flow...



Cambridgesquared™

o2h discovery

Building a global community of medicinal chemists and biologists

o2h group believes in collaboration in drug discovery

The o2h group has been building a global community of medicinal chemists and biologists between Cambridge, UK and Cambridge, Boston, Massachusetts. The o2h group has organised well attended bar nights to date and plan to supplement this with a technology platform to encourage collaboration, representation, sharing of career opportunities, and importantly provide a first port of call or a safe space to discuss any future entrepreneurial ventures they or others are considering. We are planning to extend Cambridgesquared to other hubs such as San-Francisco, San-Diego, Singapore, Bangalore, etc.



o2h
ventures . discovery . tech

AN OPEN DAY FOR

WOMEN IN SCIENCE, TECH & ENTERPRISE

Inspiring Women



cambridge stock exchange project

JPJENKINS powered by Infinitx

Accessing Public Market Liquidity Inside High-Density Ecosystems

The Cambridge Stock Exchange Project is creating a platform for private companies who are scaling up to access liquidity from the market inside in the UK.

The Opportunity

The UK produces world-class science and technology companies — but often loses them before they reach their full potential. Breaks in the funding continuum, limited liquidity options, and short funding cycles leave companies vulnerable to premature acquisition or relocation to the USA, disconnecting them from their home ecosystems and creating significant lost economic opportunity for the UK.

The Cambridge Stock Exchange Project (CSEP) brings capital market liquidity into high-density innovation-led ecosystems.

CSEP bridges the gap between local private funding ecosystems and capital markets by providing liquidity pathways for UK science and technology ventures that are not yet ready for a full market listing or would benefit from remaining independent.

Through its strategic partnership with JP Jenkins, CSEP helps growth-stage companies access an FCA-regulated venue offering secondary market liquidity.

Who is it for?

Growth Stage Companies
High-potential UK science and technology companies seeking access to regulated market liquidity, strategic resources, and investor networks while preserving innovation, leadership, and economic contribution within the UK.

Investors
JP Jenkins provides a transparent, regulated mechanism for investors and shareholders to buy and sell shares through a network of 50+ UK-regulated brokers.

The CSEP Funding Continuum

The CSEP Funding Continuum is a long-term roadmap connecting UK science and technology companies with capital providers, exchanges, and institutional partners — from grant funding through to public markets.

CSEP is beginning where the gap is greatest: connecting growth-stage UK companies with regulated market liquidity through its strategic partnership with JP Jenkins.

Stages:
Grant Providers → Pre-Seed → Seed → Series A → Series B → Series C → CSEP → - - → Global Exchanges → Managed Funds & ETFs

For more information please visit cambridgestockexchangeproject.com

Cambridge Stock Exchange Project Limited is not authorised or regulated by the Financial Conduct Authority and does not provide investment advice, arrange deals in investments, or solicit investors. Secondary market liquidity and primary capital raising services are provided exclusively by JP Jenkins Limited, authorised and regulated by the Financial Conduct Authority (FRN 1037394). The information provided is for informational purposes only and does not constitute a financial promotion or offer to buy or sell securities. Investments can go down as well as up. Cambridge Stock Exchange Project Limited is incorporated in England & Wales (No. 15764768).

Contact us at **info@cambridgestockexchangeproject.com**

CWOW
CAMBRIDGE WIDE OPEN WEEK
(Combined Ways of Working)

powered by o2h community

A WEEK OF LIFE SCIENCES @ THE HOME OF LIFE SCIENCES



CWOW
CAMBRIDGE WIDE OPEN WEEK
(Combined Ways of Working)



SUPPORTING INCLUSIVE COLLABORATION

In March 2023, the government published its new strategy to make the UK a science and technology superpower by 2030. The plan draws on industry, finance, academia and civil society to realise its ambition. Cambridge has long championed collaboration, establishing itself as one of the leading science and technology clusters in the world. A reputation built on world-leading innovation, fast-growing science and tech companies, academia, and innovation centres - underpinned by investment, people and skills. To support and further progress this world-leading position requires inclusive collaboration across the Cambridge community.

Designed to provide the whole community with a chance to visit and experience the cluster first-hand, the o2h group first launched Cambridge Wide Open Day. Following its remarkable reception, the event evolved into a full-week celebration: Cambridge Wide Open Week.

INSPIRING OUR COMMUNITY

Cambridge is alive with ideas, funding, IP, exciting companies, and new facilities. Cambridge Wide Open Day encourages inclusive collaboration, vital for the region's continued growth. You can engage with the broader community, facilitating introductions to investors, finding bigger premises, or inspiring the next generation workforce. The event opens doors for local residents, as well as visitors from across the UK and the world, to see what happens behind the closed doors of pioneering life sciences, technology, and green innovation companies.

ABOUT CAMBRIDGE WIDE OPEN WEEK *(AKA Combined Ways of Working)*

2025 marked the successful debut of Cambridge Wide Open Week (CWOW), a week-long festival of innovation, science, and collaboration held from 9th–13th June. The event showcased Cambridge's pioneering companies, research labs, and innovation spaces, providing investors, founders, students, policymakers, and the wider community with a unique behind-the-scenes experience of one of the world's most dynamic life sciences ecosystems.

CWOW 2025 featured the flagship Cambridge Wide Open Day on 11th June, the two-day Ventures Tour highlighting emerging biotech and techbio companies, Biotech Bikers rides, networking receptions, and a variety of conferences, talks, masterclasses, and workshops.

Building on this success, Cambridge Wide Open Week 2026 returns from 11th–19th June 2026, with fresh ideas, larger stages, and new opportunities for you to connect, collaborate, and celebrate Cambridge's world-leading life sciences ecosystem.

CWOW 2026 SCHEDULE - WHAT'S ON!

THURSDAY 11TH JUNE

VENTURES TOUR – OXFORD

9:00 AM – 10:15 AM

OXFORD LAUNCH BREAKFAST *(INVITE ONLY)*

Welcome speech, registration and breakfast

Oxford Science Enterprises, 46 Woodstock Road, Oxford OX2

10:15 AM – 11:15 AM

PITCH 1: OXFORD SCIENCE ENTERPRISES

Investor showcase + networking

Oxford Science Enterprises, 46 Woodstock Road, Oxford OX2 6HT

11:35 AM – 12:40 PM

PITCH 2: OXFORD VENTURE ANGELS + LONGWALL VENTURES

Investor showcase + networking

Saïd Business School, Park End Street, Oxford OX1 1HP

1:00 PM – 2:15 PM

LUNCH & NETWORKING

Inventa, Botley Road, Oxford OX2 OHA

2:15 PM – 3:05 PM

PITCH 3: OXFORD UNIVERSITY INNOVATION

Investor showcase + networking

Inventa, Botley Road, Oxford OX2 OHA

3:05 PM – 4:25 PM

PITCH 4: OXFORD TECHNOLOGY MANAGEMENT

Investor showcase + networking

Inventa, Botley Road, Oxford OX2 OHA

COMMUNITY

5:30 PM – 8:00 PM

DRINKS RECEPTION HOSTED BY BIOUK *(INVITE ONLY)*

Drinks and networking reception

Grassroots, 46 Woodstock Road, Oxford OX2 6HT

FRIDAY 12TH JUNE

VENTURES TOUR – LONDON

9:00 AM – 10:00 AM

LONDON LAUNCH BREAKFAST *(INVITE ONLY)*

Welcome speech, registration and breakfast

The Francis Crick Institute, 1 Midland Road, London NW1 1AT

10:00 AM – 11:15 AM

PITCH 1: KQ LABS

Investor showcase + networking

The Francis Crick Institute, 1 Midland Road, London NW1 1AT

11:40 AM – 12:45 PM

PITCH 2: MERCIA VENTURES

Investor showcase + networking

London Stock Exchange, 10 Paternoster Square, EC4M 7LS

12:45 PM – 1:45 PM

LUNCH & NETWORKING

London Stock Exchange, 10 Paternoster Square, EC4M 7LS

1:45 PM – 2:25 PM

PITCH 3: FORESIGHT GROUP

Investor showcase + networking

London Stock Exchange, 10 Paternoster Square, EC4M 7LS

2:50 PM – 4:00 PM

PITCH 4: LIFEARC VENTURES

Investor showcase + networking

Victoria House, Bloomsbury Square, London WC1B 4DA

4:05 PM – 5:00 PM

PITCH 5: PIONEER GROUP

Investor showcase + networking

Victoria House, Bloomsbury Square, London WC1B 4DA

COMMUNITY

5:00 PM – 7:00 PM

DRINKS RECEPTION HOSTED BY PIONEER GROUP *(INVITE ONLY)*

Drinks and networking reception

Victoria House, Bloomsbury Square, London WC1B 4DA

MONDAY 15TH JUNE

VENTURES TOUR – CAMBRIDGE (DAY 1)

8:45 AM – 9:45 AM

CAMBRIDGE LAUNCH BREAKFAST *(INVITE ONLY)*

Welcome speech, registration and breakfast

The Glasshouse, Innovate Cambridge, Botanic House, 100 Hills Road, Cambridge CB2 1PH

9:45 AM – 10:50 AM

PITCH 1: AMADEUS CAPITAL PARTNERS

Investor showcase + networking

The Glasshouse, Innovate Cambridge, Botanic House, 100 Hills Road, Cambridge CB2 1PH

10:55 AM – 12:05 PM

PITCH 2: STEVENAGE BIOSCIENCE CATALYST

Investor showcase + networking

Deloitte, One, Station Square, Cambridge CB1 2GA

12:05 PM – 1:00 PM

LUNCH & NETWORKING

Deloitte, One, Station Square, Cambridge CB1 2GA

1:20 PM – 2:35 PM

PITCH 3: ACCELERATE CAMBRIDGE

Investor showcase + networking

Cambridge Judge Business School, Trumpington St, Cambridge CB2 1AG

3:05 PM – 4:20 PM

PITCH 4: O2H VENTURES + MELTWIND + CANCER RESEARCH HORIZONS

Investor showcase + networking

Hauxton House, Mill SciTech Park, Mill Lane Hauxton, Cambridge CB22 5HX

4:45 PM – 6:30 PM

PITCH 5: BIO-SPARK

Investor showcase + networking

Newnham College, University of Cambridge, Sidgwick Ave, Cambridge CB3 9DF

COMMUNITY

6:30 PM – 8:00 PM

DRINKS RECEPTION HOSTED BY BIO-SPARK *(INVITE ONLY)*

Drinks and networking reception

The LAB, 90 Regent St, Cambridge CB2 1DP

TUESDAY 16TH JUNE

VENTURES TOUR – CAMBRIDGE (DAY 2)

8:45 AM – 9:45 AM

INWARD INVESTORS BREAKFAST *(INVITE ONLY)*

Welcome speech, registration and breakfast

The Glasshouse, Innovate Cambridge, Botanic House, 100 Hills Road, Cambridge CB2 1PH

9:45 AM – 10:55 AM

PITCH 1: CAMBRIDGE INNOVATION CAPITAL + START CODON

Investor showcase + networking

The Glasshouse, Innovate Cambridge, Botanic House, 100 Hills Road, Cambridge CB2 1PH

11:00 AM – 12:10 PM

PITCH 2: CAMBRIDGE ANGELS

Investor showcase + networking

Deloitte, One, Station Square, Cambridge CB1 2GA

12:10 PM – 1:10 PM

LUNCH & NETWORKING

Deloitte, One, Station Square, Cambridge CB1 2GA

1:10 PM – 2:10 PM

PITCH 3: INNOVATE UK BUSINESS GROWTH

Investor showcase + networking

Deloitte, One, Station Square, Cambridge CB1 2GA

2:15 PM – 3:30 PM

PITCH 4: CAMBRIDGE ENTERPRISE + PARKWALK

Investor showcase + networking

The Glasshouse, Innovate Cambridge, Botanic House, 100 Hills Road, Cambridge CB2 1PH

4:00 PM – 5:25 PM

PITCH 5: ACCELERATE@BABRAHAM

Investor showcase + networking

Hilton Cambridge City Centre, 20 Downing St, Cambridge CB2 3DT

COMMUNITY

5:30 PM – 7:30 PM

DRINKS RECEPTION HOSTED BY AFFINIA *(INVITE ONLY)*

Drinks and networking reception

Hilton Cambridge City Centre, 20 Downing St, Cambridge CB2 3DT

powered by o2h community

title sponsor MILLS & REEVE Achieve more. Together.

WEDNESDAY 17TH JUNE

OPEN DAY

9:00 AM – 10:00 AM

CWOD COMMUNITY BREAKFAST *(INVITE ONLY)*

Community breakfast to launch Cambridge Wide Open Day Season 4

Clayton Hotel Cambridge, 27–29 Station Rd, Cambridge CB1 2FB

11:00 AM – 3:00 PM

CAMBRIDGE WIDE OPEN DAY

Tours, Company Showcase, Masterclasses & Cocktail Party. See Cambridge life sciences in one shot

Cambridge

9:00 AM – 10:30 AM

CFFN: BREAKFAST ROUNDTABLE

The Build Begins: Navigating Early Hurdles Building in Life Science

The Press, Station Rd, Foxton, Cambridge CB22 6SA

12:30 PM – 3:00 PM

STEVENAGE BIOSCIENCE CATALYST: TOUR AND PANEL

SBC will host a tour of the campus, followed by a panel talk and lunch

Stevenage Bioscience Catalyst, Gunnels Wood Rd, Stevenage SG1 2FX

9:00 AM – 3:30 PM

CREATIVE DISRUPTION FORUM *(PAID)*

The latest dealmaking and investment strategies that work

Mills & Reeve, Botanic House, 100 Hills Road, Cambridge CB2 1PH

SOCIAL

4:00 PM ONWARDS

GARDEN PARTY

A buzzing summer garden party with music, food, drinks & ice-creams!

Hauxton House, Mill SciTech Park, Mill Lane Hauxton, Cambridge CB22 5HX

THURSDAY 18TH JUNE

TECHBIO, BIOTECH & PHARMA

8:00 AM – 12:00 PM

BIA TECHBIO X *(PAID)*

Join the BIA's thriving TechBio community for engaging discussions, valuable insights and dynamic networking

The Discovery Centre – AstraZeneca, Biomedical Campus, 1 Francis Crick Ave, Trumpington, Cambridge CB2 0AA

12:30 PM – 7:30 PM

ASTRAZENECA EXCHANGE

An event dedicated to supporting networking and celebrating collaboration within the UK Life Sciences ecosystem

The Discovery Centre – AstraZeneca, Biomedical Campus, 1 Francis Crick Ave, Trumpington, Cambridge CB2 0AA

10:00 AM – 4:30 PM

CREATIVE DISRUPTION FORUM *(PAID)*

Modern Drug Discovery – The latest strategies

The National Institute of Agricultural Botany, 93 Lawrence Weaver Road, Cambridge CB3 0LE

6:00 PM – 8:30 PM

CONEXEN LIFE SCIENCES COMMUNITY EVENT *(PAID)*

Community and networking for professionals and founders in biopharma, life sciences, and health tech in Cambridge

Merlin Place, Milton Road, Cambridge, CB4 0DP

6:00 PM – 8:00 PM

MORE RESEARCH, LESS CANCER – CANCER RESEARCH UK EVENT

Exclusive event to explore how global innovation is accelerating progress in cancer research and treatment

Cancer Research UK Cambridge Institute University of Cambridge, Li Ka Shing Centre, Robinson Way, Cambridge, CB2 0RE

FRIDAY 19TH JUNE

COMMUNITY DAY

10:00 AM – 2:00 PM

FORM THE FUTURE – INSPIRING FUTURE STEM WORKFORCE

Form the Future will be working with Cambridge Research Park who will be opening their doors to inspire students from Cambridge primary schools. From high-spec labs to fully-equipped business suites, the students will meet the employers onsite, engage with STEM activities and learn what goes on behind the normally closed doors of a research park.

Cambridge Research Park, Cambridge CB25 9TL

FRINGE EVENTS

WED 10TH JUNE — 10:00 AM – 5:30 PM

CREATIVE DISRUPTION FORUM – OXFORD *(PAID)*

The Future of Neuro Therapeutics and CNS Health Innovations

The Magdalen Centre, 1 Robert Robinson Avenue Littlemore OX4 4GA

THU 11TH JUNE — 10:30 AM – 3:30 PM

3C – CAMBRIDGE | CMC | CDMO *(INVITE ONLY)*

Maximizing Value from an Early Stage

The Glasshouse, Innovate Cambridge, 100 Hills Road, Cambridge CB2 1AR

SAT 13TH JUNE — 9:00 AM – 6:00 PM

BIOTECH BIKERS

Bringing together biopharma, biotech, bioscience, and healthcare professionals who share a passion for cycling.

Hauxton House, Mill SciTech Park, Mill Lane Hauxton, Cambridge CB22 5HX



CWOD
CAMBRIDGE WIDE OPEN DAY

powered by o2h community

EXPLORE THE CITY'S LIFE SCIENCES ECOSYSTEM IN ONE DAY!







Driving Net Zero: ESG-Driven Tree Planting Surpasses 100K Milestone...

o2h group encourages contribution, partnerships and connections with local NGO's and the community

We understand that we have a contribution to make to the community in which we do our work, not at some unspecified point in the future, but now, and as part of our life journey, however small that contribution is. o2h group encourages collaboration, partnerships, and connections with local NGOs as well as communities. The first stage is always to establish a personal connection based not on solving anyone's problems, but on giving one's love, time, and energy.

The second stage is to explore ways in which we can add value to their lives by deploying our skills. We have been active with a number of local organisations, including – Manav Sadhna, VSSM, India Recycles, Shelter for Children with HIV, old age homes such as Jivandhara, organisations supporting women's rights in disadvantaged areas of the city, The Blind People's Association and many more.





Inspiring Scientific Curiosity: Lab workshops for young locals







we believe to build a company we first build our culture






cervélo
HUNT
CAMBRIDGE

o2h co-discovery

Insight-Driven Science

State-of-the-art research centres in Cambridge, UK and Ahmedabad, India

UK
Mill scitech park
Mill lane
Hauxton
Cambridge
CB22 5HX

USA
CIC Cambridge
1 Broadway
Cambridge
MA 02142

India
Sharmista Research Centre
35, Panchratna Ind. Estate
Changodar, Sarkhej Bavla Road
Ahmedabad
Gujarat 382213

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For more information or to get a quote contact us at: **discovery@o2h.com**

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1st September 2026