



THERAPEUTICS SYMPOSIUM 2022

**BRINGING
DISCOVERIES
TO LIFE**

**TUESDAY, 28TH JUNE
WEST ROAD CONCERT HALL, CAMBRIDGE & ONLINE**



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PROGRAMME 28 JUNE 2022

10:30 – 12:00 Meet the Consortium Session (*meetings by advance request only*)

12:00 – 1:00 Lunch

12:50 – 1:00 **Tony Kouzarides**, Milner Therapeutics Institute
Welcome and Introduction

1:00 – 1:30 **Kristian Helin**, The Institute of Cancer Research
“Novel targets for the treatment of acute myeloid leukaemia”

1:30 – 1:45 **Giulia Biffi**, CRUK Cambridge Institute, University of Cambridge
“No cancer cell is an island: why the microenvironment matters during pancreatic cancer progression and treatment”

1:45 – 2:15 **Lori Passmore**, MRC Laboratory of Molecular Biology
“Regulation of DNA interstrand crosslink repair”

2:15 – 2:30 **Matthias Zilbauer**, Department of Paediatrics, University of Cambridge
“Human gut organoids as translational research tools to study epigenetics in IBD”

2:30 – 3:00 Break

3:00 – 3:30 **Simon Boulton**, The Francis Crick Institute and Artios Pharma
“Targeting the DNA damage response”

3:30 – 3:45 **Andras Lakatos**, Department of Clinical Neurosciences, University of Cambridge
“Human ALS brain organoids: from cell type-specific pathogenesis to therapeutic strategies”

3:45 – 4:15 **Ravindra Gupta**, Cambridge Institute of Therapeutic Immunology and Infectious Disease (CITIID)
“SARS-CoV-2 variants”

4:15 – 4:45 **Richard Hargreaves**, Bristol Myers Squibb
“Putting the CNS back in BMS”

4:45 – 5:20 **Panel Discussion** chaired by Kristin-Anne Rutter, Cambridge University Health Partners. (see over)

5:20 – 6:45 Networking and Drinks Reception

PANEL DISCUSSION

**SHAPING THE FUTURE OF INTERDISCIPLINARY INTERACTIONS:
A Q&A WITH THE EXPERTS**

Chair:

Kristin-Anne Rutter

Executive Director, Cambridge University Health Partners

4:45 – 5:20

Michael Anstey

Partner, Cambridge Innovation Capital

Jamie Blundell

Group Leader, Institute for the Early Detection of Cancer, University of Cambridge

Victoria Higgins

Senior Director, UK Academic Alliance Management, GSK

Andy Neely

Pro-Vice-Chancellor for Enterprise and Business Relations, University of Cambridge

Jeroen Verheyen

Co-founder and CEO, Semarion

5:20 – 6:45

NETWORKING & DRINKS RECEPTION

TONY KOUZARIDES



*Milner Therapeutics Institute,
University of Cambridge*

BIOGRAPHY | Tony Kouzarides is Professor of Cancer Biology at the University of Cambridge and a Senior Group Leader at the Gurdon Institute. Tony is also the Director and co-founder of the Milner Therapeutics Institute at the University of Cambridge, which has a mission to deliver better therapies by connecting academia with industry.

Tony did his bachelors degree at Leeds University, and his PhD at the University of Cambridge. He then did postdoctoral work at the MRC Laboratory of Molecular Biology in Cambridge, and at New York University Medical Center. He returned to the UK to set up his own lab at the Gurdon Institute, where he has been since.

The Kouzarides lab has been studying epigenetic modifications for many years, starting with the identification of the first human enzymes to modify chromatin. The lab is now investigating the functions of mRNA modifications and their involvement in cancer. In close collaboration with STORM Therapeutics, the Kouzarides lab is targeting RNA modification pathways with small molecule inhibitors, to develop drugs against cancer.

Tony is founder/director of Cambridge Gravity, an organization for the promotion of science at the University of Cambridge. He is founder, patron and ex-director of a cancer charity in Spain called Conquer Cancer (Vencer el Cancer). He is on the Scientific Advisory Board of the Institute of Cancer Research (UK) and on the Executive Board of the Cancer Research UK Cambridge Centre.

Tony is a co-founder and ex-director of: Abcam plc, a publicly trading research reagents company in Cambridge; a co-founder and ex-director of Chroma Therapeutics, a drug discovery company based in Oxford; and a co-founder and current director of STORM Therapeutics, a drug discovery company based in Cambridge.

Tony has been elected member of the European Molecular Biology Organization, Fellow of the British Academy of Medical Sciences (FMedSci), Fellow of the Royal Society (FRS), Fellow of the American Academy of Arts and Sciences (AAAS) and is a Cancer Research UK Gibb Fellow.

He has been awarded the Wellcome Trust Award for Research in Biochemistry Related to Medicine (UK), the Tenovus Medal (UK), the Bodossaki Foundation prize in Biology (Greece), the Bijvoet Medal (Holland), the Biochemical Society Award Novartis Medal and Prize (UK), the Heinrich Wieland Prize (Germany) and the Excellence in Science Award (Cyprus).

In the 22-year period 1996-2017, Tony was the 10th most cited scientist (in any field) at the University of Cambridge, as shown in a published database of 100,000 top scientists (Ioannidis J *et al*, *Plos Biology*, 2019).

SESSION I

CHAIR

JEAN ABRAHAM

University of Cambridge

SESSION I

JEAN ABRAHAM



University of Cambridge

Jean Abraham is Professor of Precision Breast Cancer Medicine and an Honorary Consultant in Medical Oncology at the University of Cambridge. She directs the Precision Breast Cancer Institute and co-leads the Integrated Cancer Medicine theme and the Breast Programme in the Cancer Research UK Cambridge Centre. Jean is deputy theme lead for Cancer at the Cambridge NIHR Biomedical Research Campus. She is Chief Investigator of eight national/regional trials. She is a member of the National Clinical Studies Group for Breast Cancer and has advised NICE on breast cancer therapeutics and the House of Commons Select Committee on Genomics.

Her research aims to:

- i. develop innovative clinical trials in high risk and hereditary early stage breast cancers;
- ii. use multi-modal data integration to develop predictive and prognostic tools to provide individualised treatment strategies for breast cancer patients to improve clinical outcomes.

KRISTIAN HELIN



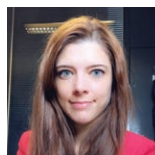
The Institute of Cancer Research (ICR)

TALK TITLE | Novel targets for the treatment of acute myeloid leukaemia

ABSTRACT | Acute myeloid leukemia (AML) is a cancer of the myeloid lineage of the hematopoietic system, characterized by the accumulation of immature white blood cells. Management of AML relies largely on intensive chemotherapy and allogeneic bone marrow transplantation, but many older patients cannot tolerate this treatment scheme. Despite intense research efforts and the introduction of new treatment options, the standard of care for treatment of AML patients has not changed for many years, and the 5-year survival rate is still only about 25%. At the meeting, I will present some of our efforts to identify potential new targets for the treatment of AML and our experiments addressing the mechanisms by which they contribute to AML.

BIOGRAPHY | Kristian Helin is the CEO of The Institute of Cancer Research (ICR) and a professor at the University of London. He has a PhD from University of Copenhagen and was a research fellow at Harvard Medical School. Professor Helin has been a research group leader and Director of research centres in Denmark, Italy, United States and now in the UK. The Helin laboratory has made several seminal discoveries in the field of cell cycle control, epigenetics and cancer. This work has led to the establishment of the biotech companies EpiTherapeutics and Dania Therapeutics. Professor Helin has received several prestigious awards for outstanding biomedical research and serves in several editorial boards, committees of advisory boards and grant committees.

GIULA BIFFI



Cancer Research UK Cambridge Institute, University of Cambridge

TALK TITLE | No cancer cell is an island: why the microenvironment matters during pancreatic cancer progression and treatment

ABSTRACT | Pancreatic ductal adenocarcinoma (PDAC) has a dismal prognosis and new therapies are needed. Cancer-associated fibroblasts (CAFs) are abundant in PDAC and are recognised promising therapeutic targets. The ongoing characterisation of PDAC CAF heterogeneity has revealed a high degree of complexity and has highlighted the need to dissect signalling pathways differentially activated in distinct CAF subtypes. By investigating the pathways downstream of TGF- β signalling activation, which drives the myofibroblastic CAF (myCAF) subtype, we found that EGFR/ERBB2 signalling is activated in myCAFs and ERBB inhibition differentially affects PDAC CAF subtypes. Our study highlights the need to better understand how cancer-targeting therapies affect the surrounding microenvironment in order to develop effective combination strategies for future clinical intervention.

BIOGRAPHY | After her PhD at the University of Cambridge, CRUK Cambridge Institute, Giulia trained at Cold Spring Harbor Laboratory as an EMBO and HFSP Post-doctoral Fellow. Since 2020, she has been a junior group leader at the CRUK Cambridge Institute. Giulia is also a UKRI Future Leaders Fellow and co-director of the Pancreatic Cancer Programme at the CRUK Cambridge Centre. Her laboratory focuses on understanding the tumour-promoting cross-talk between cancer cells and non-cancerous cells in pancreatic cancer to develop new treatments.

LORI PASSMORE



MRC Laboratory of Molecular Biology

TALK TITLE | Regulation of DNA interstrand crosslink repair

ABSTRACT | DNA interstrand crosslinks are tumour-inducing lesions that block DNA replication and transcription. When crosslinks are detected at stalled replication forks, ATR kinase phosphorylates FANCI, which stimulates monoubiquitination of the FANCD2-FANCI clamp by the Fanconi anemia (FA) core complex. Monoubiquitinated FANCD2-FANCI is locked onto DNA and recruits nucleases that mediate DNA repair. I will present cryoEM structures of phosphomimetic FANCD2-FANCI complexes. Unlike wild-type FANCD2-FANCI, the phosphomimetic complex closes around DNA, independent of the FA core complex. Overall, our results reveal that phosphorylation primes the FANCD2-FANCI clamp for ubiquitination, showing how multiple post-translational modifications are coordinated to control DNA-repair.

BIOGRAPHY | Lori A Passmore is a Group Leader at the MRC Laboratory of Molecular Biology in Cambridge. She uses an integrated approach combining structural, biochemical and functional studies, aiming to reconstitute multi-protein complexes and their activities, and to determine their high-resolution structures to understand their mechanisms. She works on protein complexes that add and remove poly(A) tails from mRNAs and complexes involved in repair of DNA crosslinks (the Fanconi anaemia pathway). She was elected a member of EMBO in 2018 and received the RNA Society's Inaugural Elisa Izaurrealde Award in 2020.

MATTHIAS ZILBAUER



Dept Paediatrics, University of Cambridge

TALK TITLE | Human gut organoids as translational research tools to study epigenetics in IBD

ABSTRACT | Epigenetic mechanisms determine cellular phenotype without changing the underlying DNA sequence. As such they play an essential role in driving cellular differentiation and determining cell identity as well as function. The responsiveness of epigenetic mechanisms to environmental factors combined with their stability has implicated them in the pathogenesis of many multi-factorial diseases including the Inflammatory Bowel Diseases (IBD) Crohn's Disease and Ulcerative Colitis. Specifically, stable epigenetic alterations occurring in relevant cell types during vulnerable stages of human development may contribute towards the chronic relapsing gut inflammation observed in patients diagnosed with IBD. Human intestinal epithelial organoids (IBD) represent a unique reductionist model to investigate the role of epigenetic mechanisms in human health and disease as these cultures have been shown to retain cell type and donor specific characteristics. Our group has identified distinct, stable disease associated DNA methylation changes in the intestinal epithelium of children diagnosed with IBD, which are retained in organoids. In this talk I will summarise some of the key theoretical concepts and main findings.

BIOGRAPHY | Matthias Zilbauer is an Associate Professor and Honorary Consultant at the University of Cambridge, UK. He leads a translational research programme aimed at investigating human intestinal epithelial cell biology during development, healthy homeostasis and disease, particularly Inflammatory Bowel

Diseases (IBD). Matthias completed his medical training at Mainz University (Germany) and trained in paediatrics as well as paediatric gastroenterology at a number of tertiary European Hospitals. Following completion of his PhD in mucosal immunology at the Institute of Child Health (University College London, UK) as well as clinical sub-specialty training in Paediatric Gastroenterology, he was recruited to the University of Cambridge as a clinician scientist in 2010.

SESSION 2

CHAIR
DAVID WILSON
AstraZeneca

SESSION 2

DAVID WILSON



AstraZeneca

David is Vice President and Global Head of Oncology Chemistry at AstraZeneca. He has over 25 years' experience of small molecule drug discovery gained at GSK, Johnson & Johnson, Dark Blue Therapeutics and AstraZeneca. During his career, David has worked across multiple therapeutic areas including neurosciences, infectious diseases, immunology and oncology, and has been closely involved with the discovery of numerous drug candidates that have progressed into clinical phase development. He has many research interests including epigenetic modulation, targeted protein degradation and the development of novel small molecule approaches to target 'undruggable' disease relevant proteins.

SIMON BOULTON



The Francis Crick Institute and Artios Pharma

TALK TITLE | Targeting the DNA damage response

ABSTRACT | DNA repair pathways safeguard against genome instability and tumorigenesis. However, once a cancer has formed, loss of DNA repair can accelerate mutation rates and drive tumour evolution. Cancers with compromised DNA repair are often susceptible to DNA damage and are dependent on complementary repair pathways that can be exploited therapeutically. For example, PARP inhibitors are effective at treating homologous recombination deficient (HRD) cancers, including those with mutations in the BRCA genes. However, novel treatment strategies are urgently needed to counter both innate and acquired resistance, which leads to disease relapse. Here, I will present our latest work focused on identifying novel therapeutic strategies that exploit DNA repair deficiencies in cancer.

BIOGRAPHY | Simon Boulton is a Principal Group Leader and Ambassador for Translation at the Francis Crick Institute. His work has helped define the mechanisms of DNA repair and how defects in these processes lead to genome instability and cancer. Simon is also co-founder and VP Science Strategy at Artios Pharma, a biotech company that is developing DNA repair inhibitors to selectively kill cancer cells. He is also Director, RadNet – City of London, a Cancer Research UK initiative to improve radiation treatments for cancer patients. Simon is a Fellow of the Royal Society, an EMBO Member, Fellow of the Academic of Medical Sciences and is the recipient of the Royal Society Francis Crick Medal, the EMBO Gold Medal and the Paul Marks Prize for Cancer Research.

ANDRAS LAKATOS



*Dept Clinical Neurosciences,
University of Cambridge*

TALK TITLE | Human ALS brain organoids: from cell type-specific pathogenesis to therapeutic strategies

ABSTRACT | We are just beginning to understand the pathomechanisms underlying fatal and untreatable neurodegenerative disorders, such as amyotrophic lateral sclerosis (ALS). Animal models and human two-dimensional stem cell-derived culture platforms provided immense insights into ALS-related molecular disturbances, highlighting potential therapeutic targets. However, these models do not recapitulate faithfully the human-specific aspects of cell diversity, complex cell interactions or pathobiology, which may have hampered therapeutic advances. To help overcome these issues, we developed an ALS patient-specific three-dimensional brain organoid slice culture system, a complementary human model that mimics cortical tissue architecture and captures early pathological hallmarks. In my talk, I will provide proof-of-principle examples for using our novel approach for early ALS biomarker discovery, target identification and pre-clinical drug testing.

BIOGRAPHY | András is a Clinician Scientist and Honorary Consultant Neurologist, and is leading a human organoid neurobiology laboratory in the Cambridge Centre for Brain Repair, Department of Clinical Neurosciences, University of Cambridge. Having obtained his first degree in medicine, he then received formal training in glial and stem cell biology in the CRUK Beatson Laboratories, Scotland and at the University of Cambridge, initially as PhD student and later as postdoctoral scientist. Subsequently, he completed basic specialty training in general medicine and higher specialist training in neurology at the Cambridge

University Hospitals, while setting up his own laboratory. His research team focuses on the development of cutting-edge human translational models for neurodegenerative disorders and CNS injuries, and combines these with single cell transcriptomic approaches and biological assays to advance pathomechanistic and therapeutic discoveries. He was awarded the MRC Clinician Scientist Fellowship in 2017 and the ARUK David Hague Young Investigator of the Year Award in 2022.

RAVINDRA GUPTA



*Cambridge Institute of Therapeutic Immunology and Infectious Disease (CITIID),
University of Cambridge*

TALK TITLE | SARS-CoV-2 variants

ABSTRACT | SARS-CoV-2 has continued to surprise the world in its ability to generate diversity and evade vaccine induced immune responses, specifically neutralising antibodies. Chronic infection with SARS-CoV-2 was recognised in 2020, with mutant viruses detected with multiple mutations in both spike and across the genome. In this talk I will outline how new variants have arisen and the key features of the variants of concern. The talk will highlight some of the mechanistic differences in their biology with reference to specific mutations, and what this means for transmission and vaccine efficacy. We will also explore implications of widespread use of therapeutics and drug resistance on the trajectory of the pandemic, drawing on insights from HIV, including mitigation of resistance by use of combination therapies with different mechanisms of action.

BIOGRAPHY | Ravi Gupta is Professor of Clinical Microbiology at CITIID. Gupta has worked in HIV drug resistance both at molecular and population levels, and his work led to change in WHO treatment guidelines for HIV. He led the team demonstrating HIV cure in the 'London Patient' – the world's only living HIV cure, and the second recorded in history. During the COVID-19 pandemic Gupta has deployed his expertise in RNA virus genetics and biology to report the first genotypic-phenotypic evidence for immune escape of SARS-CoV-2 within an individual, defining the process by which new variants likely arise, and also reporting some of the first data on Pfizer BioNTech vaccine-induced antibody responses against the B.1.1.7

variant that arose in the UK. More recently Gupta's work has defined the replication advantage of the Delta variant and the tropism shift and immune escape of Omicron. As a global leader in virology, Gupta has advised the UK government on COVID-19 through SAGE and NERVTAG. In 2020 Gupta appeared in the list of 100 most influential people by TIME.

RICHARD HARGREAVES



Bristol Myers Squibb

TALK TITLE | Putting the CNS back in BMS

ABSTRACT | This talk will describe how an externalized research model, that capitalized on the concentration of experienced neuroscientists, infrastructure and capabilities in academia and venture capital funded companies, was used to establish an innovative neuroscience drug discovery and development pipeline rapidly.

BIOGRAPHY | Richard Hargreaves holds a BSc and Ph.D. from Chelsea/Kings College, London University UK and is an Honorary Fellow of the British Pharmacological Society. He is currently Senior VP Head of Neuroscience Research and Early Development at Bristol Myers Squibb and previously held senior leadership positions in Neuroscience, imaging and biomarkers at Merck, Biogen and Celgene.

PANEL SESSION

PANEL CHAIR

KRISTIN-ANNE RUTTER

Cambridge University Health Partners

SESSION 3

KRISTIN-ANNE RUTTER



Cambridge University Health Partners

BIOGRAPHY | Dr Kristin-Anne Rutter joined Cambridge University Health Partners as the organisation's Executive Director with a remit to lead the vision for life sciences in Cambridge, harnessing the talent, expertise and potential of the city's cluster to deliver breakthrough scientific discoveries and rapidly prove and scale these to improve healthcare outcomes for all. She is working collaboratively across the ecosystem to understand what infrastructure, talent, funding and networks are required to maintain Cambridge as a global destination for talent and investment.

Previously as a Partner in McKinsey & Company's London Office, she worked across life sciences and healthcare systems and supported the UK government to identify opportunities to strengthen the UK Life Science industry and accelerate the deployment of innovation in the NHS.

Prior to joining McKinsey, Kristin-Anne worked as a doctor in Iceland, had experience with Eli Lilly in manufacturing quality assurance and was a product manager for Neuromonics, a start-up company in Australia bringing a treatment for Tinnitus to market. She is currently a Trustee and Board member of Marie Stopes International.

ANDY NEELY


Pro-Vice-Chancellor for Enterprise and Business Relations, University of Cambridge

BIOGRAPHY | Professor Andy Neely OBE is the Pro-Vice-Chancellor for Enterprise and Business Relations at the University of Cambridge and former Head of the Institute for Manufacturing (IfM). He was the Founding Director of the Centre for Digital Built Britain and the Cambridge Service Alliance. Professor Neely is widely recognised for his work on the servitisation of manufacturing, as well as his work on performance measurement and management. He received an OBE for services to Research and to University/Industry Collaboration in 2020.

VICTORIA HIGGINS


GSK

BIOGRAPHY | Victoria is currently Senior Director, GSK UK Academic Alliance Management. Working across the whole of global R&D and closely interfacing with GSK Government Affairs colleagues, Victoria leads strategic relationships with key UK Universities and Academic Health Science Centres including those centred in Cambridge and Oxford. Over her 25 year career at GSK she has held a variety of roles from the Virology bench via CMC Project Management and R&D Portfolio Management to her current role. She has been business lead for the Cambridge relationship since 2013 and focuses her efforts on building relationships that bring mutual benefit to both partners and value beyond the sum of the constituent parts; always motivated by the needs of the patient. Victoria also holds a position at KCL as visiting Entrepreneur in Residence focused on Strategic Industry Partnerships.

MICHAEL ANSTEY



Cambridge Innovation Capital

BIOGRAPHY | Dr Michael Anstey is a Partner specialising in life sciences investments.

Before joining CIC he was a Principal in the Healthcare Practice Area at The Boston Consulting Group's (BCG) Toronto office. Michael has experience in advising multinational businesses across North America, Europe, India, and Japan.

Michael was also co-founder of an early stage biotechnology company focused on developing small molecule drugs that target protein-protein interactions implicated in disease. Prior to BCG, Michael was an Investment Analyst at Oxford Capital Partners.

Michael earned his DPhil in Zoology in the field of neurobiology from the University of Oxford.

Michael manages CIC's investments in Bicycle Therapeutics (NASDAQ: BCYC), Congenica, Storm Therapeutics, Immutrin, PredictImmune, Sense Bio, Start Codon, and Epitopea. He is also on the board of Cambridge&, an organisation dedicated to attracting the highest quality individuals and organisations from around the globe into the Cambridge ecosystem.

JEROEN VERHEYEN



Semarion

BIOGRAPHY | Jeroen is Co-Founder and CEO at Semarion, an early-stage company focussed on revolutionizing cell screening. Semarion deploys microchip fabrication technologies to build smart microcarriers which bring adherent cells into suspension to accelerate workflows, miniaturize assays, and multiplex cell types. This unique approach can solve foundational bottlenecks in drug discovery to help create better medicines, faster. The company was spun out of the Cavendish Laboratories at Cambridge University by Jeroen and his Co-Founder, Tarun Vemulkar. Together, they developed and validated the core technology platform at the Department of Physics through a Translation Prize Fellowship. Prior to this, Jeroen did his Doctoral Research at the Department of Neurosciences, focussed on glial cell model development and the screening of RNA and stem cell therapeutics. He holds a MSc in both Biomedical Sciences and Nanotechnology Engineering. Jeroen also co-founded Majicom, a social enterprise developing water purification technologies. He worked as Biopharma Principal at Cambridge Innovation Consulting and as Project Manager at Smartbleach International.

JAMIE BLUNDELL

*Early Cancer Institute,
University of Cambridge*

BIOGRAPHY | Jamie is an Assistant Professor in the Early Cancer Institute at the University of Cambridge and a UKRI Future Leaders fellow. He obtained his PhD in theoretical physics at Cambridge before moving to Stanford for five years to undertake postdoctoral research with Daniel Fisher and Dmitri Petrov. His lab studies the somatic evolution that occurs in healthy tissues as we age and how this evolution is altered at the earliest stages of cancer. Jamie's lab develops ultra-sensitive sequencing technologies and applies these to large cohorts of longitudinal blood samples collected before cancer diagnosis. Analyzing these data using quantitative principles from evolutionary theory, his lab aims to develop personalized 'forecasts' of future cancer risk and identify those most in need of intervention. The lab also has an active interest in adaptive immune repertoire dynamics in cancer and other diseases.

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GLOBAL THERAPEUTIC ALLIANCE

The Milner Therapeutics Institute encompasses both a research institute and a global outreach programme for collaboration.

Our outreach programme is through the **Global Therapeutic Alliance**, which aims to build a global research community working together across academia and industry, with Cambridge providing a hub of expertise. The **Milner Therapeutics Consortium** is central to this aim (p18), and the Alliance has been expanded with the Affiliated Company (p24), Affiliated Venture Partner (p61), and Affiliated Institutions scheme (p60) to bring complementary expertise and resources to the community, and provide opportunity to extend collaborative links within and beyond Cambridge.

Research in the **Milner Therapeutics Institute** is funded by:



GLOBAL THERAPEUTIC ALLIANCE

MILNER THERAPEUTICS CONSORTIUM

The Milner Therapeutics Consortium is an academic-industry partnership, active since June 2015. This is underpinned by a Consortium agreement, designed to facilitate speedy exchange of reagents and fund collaborative research.



ASTELLAS PHARMA INC.



Astellas Pharma Inc., headquartered in Tokyo, is a global pharmaceutical company dedicated to improving the health of people around the world through the provision of innovative and reliable pharmaceuticals.

At Astellas, open innovation is a core part of our culture and strategy and is critical to our long-term success. Innovations in science are key drivers to the success of Astellas' pipeline and delivering on our promises to patients. To accomplish these goals, Astellas is constantly aware of, and rapidly accesses the right science at the right time to drive our pipeline both today and for the long-term future success of Astellas. This includes areas like Blindness & Regeneration, Mitochondrial Biology, Genetic Regulation and Immuno-Oncology. This requires building strong networks with key opinion leaders in science and medicine from academia and industry. Which in turn, identifies and creates the necessary win-win collaborations and partnerships needed to accelerate the discovery and development of new medicines. These partnerships deliver value through impact on our product pipeline in a way that allows us to translate these innovations into novel treatments to address areas of unmet medical need for patients.

For more information, please visit us on www.astellas.com

ASTEX PHARMACEUTICALS



Astex is a leader in innovative drug discovery and development, committed to the fight against cancer and diseases of the central nervous system. Astex is developing a proprietary pipeline of novel therapies and has multiple partnered products in development under collaborations with leading pharmaceutical companies. Astex is a wholly owned subsidiary of Otsuka Pharmaceutical Co. Ltd., based in Tokyo, Japan. Otsuka Pharmaceutical is a global healthcare company with the corporate philosophy: *“Otsuka — people creating new products for better health worldwide.”* Otsuka researches, develops, manufactures and markets innovative and original products, with a focus on pharmaceutical products for the treatment of diseases and nutraceutical products for the maintenance of everyday health.

For more information about Astex Pharmaceuticals, please visit www.astx.com

For more information about Otsuka Pharmaceutical, please visit www.otsuka.com/en/

ASTRAZENECA



We are a global, science-led biopharmaceutical company focused on the discovery, development, and commercialisation of prescription medicines in Oncology, Rare Diseases, and BioPharmaceuticals, including Cardiovascular, Renal & Metabolism, and Respiratory & Immunology.

Inspired by our values and what science can do, we are focused on accelerating the delivery of life-changing medicines that create enduring value for patients and society.

Our scientists work in collaboration with others in dedicated laboratories in universities and research institutions, aiming to generate high impact science to support possible future advances in life-changing medicines.

Our new facility, the Discovery Centre (DISC), is our largest research centre in the UK, where more than 2,000 people will work together across our therapy areas and drug discovery platforms. Located on the Cambridge Biomedical Campus (CBC) — Europe’s leading centre for biomedical research — the Discovery Centre will harness the power of our physical proximity to our neighbours across Cambridge, bringing together groups from the healthcare, academic, industry and research sectors to meet, collaborate and work together. Currently we’re involved in over 200 partnerships across the Cambridge life sciences ecosystem and more than 130 active collaborations with the University.

To learn more, please visit astrazeneca.com and follow us on Twitter @AstraZeneca.



At Bristol Myers Squibb, we are inspired by a single vision — transforming patients’ lives through science. We focus on the science that drives meaningful change for patients, for their carers and loved ones, and for the communities and societies we share. We are a global biopharmaceutical company with leading franchises in oncology, haematology, cardiology and a strong presence in immunology, fibrosis and specialty medicine. We are committed to continuing innovation and have a broad late-stage and robust early-stage pipelines, supported by our cutting edge technologies and discovery platforms. We are a global company, headquartered in the US, with industry-leading research and development, medicine development, delivery and commercial operations in the UK and Ireland.

In our facilities across the UK and Ireland, more than 900 members of Bristol Myers Squibb staff work to develop and deliver innovative medicines that transform people’s lives.

Our values of passion, innovation, urgency, accountability, inclusion and integrity are central to who we are, what we do and how we do it. They inspire us every day and unite us with our colleagues and partners here in the UK and Ireland and around the world.



Eisai is a leading global research and development-based pharmaceutical company headquartered in Japan. Everything we do is dedicated to giving our first thought to patients and their families through our *human health care (hhc)* philosophy. Our collective passion and dedication to patient care is the driving force behind our efforts to discover and develop innovative medicines in therapeutic areas with high unmet medical needs, including oncology and neurology.

Our External Innovation strategy aims to contribute to *human health care* by prioritising disease prevention, prediction, and treatment based on global investments and research collaboration. Our Neurology Global External Innovation team is led from the EMEA Knowledge Centre (EKC) in Hatfield, Eisai’s regional headquarters. The site also houses neurology research laboratories and oncology and neurology clinical research as well as a secondary manufacturing facility. Our flexible approach allows us to engage in a number of different academic partnership models, including research sponsorship for specific programmes, joint research programmes, scientific start-up programmes, and ‘Open Innovation’ models involving public/private consortia.

Our mission is clear; we strive to make a significant long-lasting contribution to society in an ethical, compliant and sustainable way by embodying our *hhc* philosophy, in everything we do.

ELI LILLY AND COMPANY



Lilly is a global healthcare leader that unites caring with discovery to create medicines that make life better for people around the world. We were founded more than a century ago by Colonel Eli Lilly, a man committed to creating high-quality medicines that met real needs, and today we remain true to that mission in all our work. Across the globe, Lilly employees work to discover and bring life-changing medicines to those who need them, improve the understanding and management of disease, and give back to communities through philanthropy and volunteerism.

Lilly External Innovation and Business Development teams are always on the lookout for the breakthrough ideas for novel therapeutics and partnerships that complement our internal pipeline. Working with Lilly means your team will have access to more than 6,000 scientists who are recognized worldwide for their deep expertise and advanced research capabilities. Our evaluation provides an independent, objective review of molecules, processes and technologies. To find out about our scientific areas of interest and how to collaborate with us please visit <https://www.lilly.co.uk/discovery/scientific-partnering>

FERRING PHARMACEUTICALS



Ferring Pharmaceuticals is a research-driven, specialty biopharmaceutical company committed to helping people around the world build families and live better lives. Ferring Pharmaceuticals has more than 6000 employees operating in 56 countries and have products available in 110 countries worldwide. In 2021 the sales reached EUR 2.2 Billion.

Ferring is a leader in reproductive medicine and maternal health, and in specialty areas within gastroenterology and urology/uro-oncology. We have a fully integrated R&D organization with more than 700 scientists and use around 20% of our annual revenue on R&D. Today, over one third of the company's research and development investments goes towards finding innovative and personalized healthcare solutions to help mothers and babies, from conception to birth. Our R&D mindset is focused on identifying and developing innovations no matter their source. As a global pharmaceutical company, we pursue strategic partnerships that can leverage technologies and capabilities. Our goal is to create long-term mutually beneficial partnerships that advance science and bring innovative medicines to patients around the globe.

Key indications:

- Reproductive medicine & maternal health: Infertility (female & male), Implantation Support, Preterm Birth, Preeclampsia
- Gastroenterology: Crohn's disease, Ulcerative Colitis, Celiac disease
- Uro-oncology: Bladder cancer, Urothelial cancer, Prostate Cancer
- Strong interest in the microbiome and immunology across all three therapeutic areas.



Innovation is at the heart of achieving our purpose — to unite science, talent and technology to get ahead of disease together. It's by discovering and developing new vaccines and medicines that we help patients and make a large-scale, positive impact on human health through prevention and treatment of disease.

To deliver transformational vaccines and medicines, our R&D approach is to focus on the science of the immune system, human genetics and advanced technologies, such as artificial intelligence and machine learning.

We prioritise research into vaccines and medicines across our four therapeutic areas of infectious diseases, HIV, oncology, and immunology including respiratory. We also remain open to opportunities outside these core areas where the science aligns with our strategic approach.

Through our own work, and partnerships with other businesses and academia, we currently have 21 vaccines and 43 medicines in development. Many have the potential to be first or best-in-class. In all we do, we encourage our teams to pursue bold research, backed by data and science and underpinned by clear accountability.



Johnson & Johnson Innovation seeks to positively impact human health through innovation.

Johnson & Johnson Innovation in EMEA focuses on accelerating early stage innovation across the region and forming collaborations between entrepreneurs and the Johnson & Johnson Family of Companies. Johnson & Johnson Innovation provides scientists, entrepreneurs and emerging companies with one-stop access to science and technology experts who can facilitate collaborations across the pharmaceutical, medical device and consumer health sectors.

In our Pharmaceuticals sector we are divided into six therapeutic areas that run disease and pathway focused portfolios, which are fuelled by world class functions. In our areas of focus*, we drive research from inception/idea through new indications for marketed products until loss of exclusivity.

Under the Johnson & Johnson Innovation umbrella of businesses, we connect with innovators — through our Innovation Centre in London, UK, our incubator JLABS @ BE in Belgium, our strategic venture capital arm Johnson & Johnson Innovation JJDC, Inc. and for later stage collaborations our Janssen Business Development teams — to create customized deals and novel collaborations that speed development of innovations to solve unmet needs in consumers and patients.

For more information about Johnson & Johnson Innovation, please visit: www.jninnovation.com or follow us on Twitter @jninnovation

* Cardiovascular; Metabolism & Retinal Disease; Immunology; Infectious Diseases and Vaccines; Neuroscience; Oncology; and Pulmonary Hypertension.

PFIZER



At Pfizer, we apply science and our global resources to bring therapies to people that extend and significantly improve their lives. We strive to set the standard for quality, safety and value in the discovery, development and manufacture of health care products, including innovative medicines and vaccines. Every day, Pfizer colleagues work across developed and emerging markets to advance wellness, prevention, treatments and cures that challenge the most feared diseases of our time, including those focused in our core therapeutic areas of Oncology, Internal Medicine, Inflammation & Immunology, Rare Disease and Vaccines. Consistent with our responsibility as one of the world's premier innovative biopharmaceutical companies, we collaborate with health care providers, governments and local communities to support and expand access to reliable, affordable health care around the world. And, we regularly engage in collaborations with innovators to push forward great science — and continually seek new partners that are actively researching bold scientific ideas, capabilities and technologies that have the potential to bring innovative treatments to patients in need (www.Pfizer.com/partners). For more than 170 years, we have worked to make a difference for all who rely on us.

To learn more, please visit us on www.Pfizer.com and follow us on Twitter at @Pfizer and @Pfizer News, LinkedIn, YouTube and like us on Facebook at [Facebook.com/Pfizer](https://www.facebook.com/Pfizer).

SHIONOGI



Do you believe that your research has potential to deliver an innovation that improves healthcare and provides socio-economic impact beyond academia?

If your answer is 'yes', Shionogi is here to work with you to realise the potential of your research.

Shionogi is a research-intensive global pharmaceutical company having its roots in Japan. The company's achievement in delivering many life-saving healthcare products stems from successful collaborations with partners in academic communities and biotech/pharma companies. As scientific research does not happen in isolation, Shionogi researchers pursue discovery through collaborations with scientists around the globe who share their passion in bringing innovations to the real world. Partnership with Shionogi involves working in a cross-cultural/international environment, setting a research objective with a view of therapeutics development, and building a shared commitment to deliver a win-win outcome.

Shionogi seeks research partners in its core therapeutic areas including infectious diseases and neuroscience (pain, psychiatric disorders, dementia); additionally, in areas of healthy aging, metabolic disorders and immuno-oncology. Shionogi also pursues research collaborations in new development areas including nucleotide and peptide therapeutics, microbiome therapeutics, AI-powered/data-driven drug discovery, and digital health technologies.

Working together, we can deliver a significant impact on improving health and quality of life.

For more information about Shionogi, please visit: <https://www.shionogi.com/global/en/>

AFFILIATED COMPANIES

The Affiliated Company scheme, established in October 2016, now includes 64 organizations which bring diverse expertise and resource to the Milner network.

PHARMA & BIOTECH



START-UPS & SMEs*



START-UPS IN FRAME SHIFT BIO-INCUBATOR



INDUSTRY ASSOCIATION



* Small and medium-sized enterprises

AFFILIATED COMPANIES

LIFE SCIENCE TOOLS & SERVICES

AI & DATA SCIENCE

DRUG DISCOVERY ASSAYS & CONSUMABLES



LIFE SCIENCES





As a global life sciences company, Abcam identifies, develops, and distributes high-quality biological reagents and tools that are crucial to research, drug discovery and diagnostics. Working across the industry, the Company supports life scientists to achieve their mission, faster. Abcam partners with life science organisations to co-create novel binders for use in drug discovery, *in vitro* diagnostics and therapeutics, driven by the Company's proprietary discovery platforms and world-leading antibody expertise. By constantly innovating its binders and assays, Abcam is helping advance the global understanding of biology and causes of disease, which enables new treatments and improved health. The Company's pioneering data-sharing approach gives scientists increased confidence in their results by providing validation, user comments and peer-reviewed citations for its 110,000 products. With twelve sites globally, many of Abcam's 1,100 strong team are co-located in the world's leading life science research hubs, complementing a global network of services and support.

Contact: www.abcam.com



Absci is the drug and target discovery company harnessing deep learning AI and synthetic biology to expand the therapeutic potential of proteins. We built our Integrated Drug Creation™ Platform to identify novel drug targets, discover optimal biotherapeutic candidates, and generate the cell lines to manufacture them in a single efficient process. Biotech and pharma innovators partner with us to create the next generation of protein-based drugs, including Bionic™ Proteins containing nonstandard amino acids, and other novel drug designs that may be impossible to make with other technologies. Our goal is to enable the development of better medicines by Translating Ideas into Drugs™.

Contact: www.absci.com | info@absci.com

AI VIVO



AI VIVO is a Cambridge-based company providing an intelligent systems pharmacology platform to accelerate drug discovery and development. We uniquely combine systems biology, machine learning and AI to build a disruptive technology that enables unexpected discoveries and orders-of-magnitude gains in scalability, speed and cost. Our team of systems biologists, system pharmacologists and machine learning experts believe that biology, health and disease are all about balances and imbalances. We developed a proprietary discovery pipeline to represent 1) balances in a healthy normal condition, and 2) imbalances induced by diseases, treatments and the microbiome.

We then use our optimised AI-driven prediction engine to link these balances and imbalances with mechanisms, indications and chemical space. We use this data to alleviate pathological imbalances and restore stability with unprecedented accuracy by 1) identifying novel unexpected modulation strategies (e.g. mechanisms, pathways, targets), and 2) predicting corresponding modulators (e.g. compounds, peptides, metabolites). This disruptive platform speeds up and de-risks the discovery process by concurrently identifying multiple candidates and pre-selecting the best opportunities through experimental validation. We then offer successful validations as IP-protected data packages to be acquired or in-licensed.

AI VIVO is currently engaged in predicting, validating and developing novel mechanisms and pathways for selected disease areas; drug combination candidates for drug repositioning and life cycle management; microbiome-based solutions and product development. We partner with pharma, biotech, CROs and academics.

Contact: info@aivivo.co | www.aivo.co

ALTEMIS LAB



Founded by an experienced team with considerable industry knowledge. AltemisLab utilises this expertise to deliver the highest quality products and exceptional service. Helping customers to map workflows and identify the tools that will realise practical, financial and time saving benefits.

The founders of AltemisLab have been working with 2D barcoded tubes since 2000, when this technology was first used by pharmaceutical companies for compound storage.

Using our knowledge and experience we have set out to perfect 2D tube design and we are proud to introduce our AlteTube range of sample storage tubes.

AltemisLab 2D barcoded tubes, barcode readers, de-capping, capping, and handling equipment symbolise a new era of efficiency. With AltemisLab you can rest assured that compliance, quality control and manufacturing excellence are unrivalled.

Contact: www.altemislab.com | info@altemislab.com

AMGEN



Amgen is committed to unlocking the potential of biology for patients suffering from serious illnesses by discovering, developing, manufacturing and delivering innovative human therapeutics. This approach begins by using tools like advanced human genetics to unravel the complexities of disease and understand the fundamentals of human biology.

Amgen focuses on areas of high unmet medical need and leverages its expertise to strive for solutions that improve health outcomes and dramatically improve people's lives. A biotechnology pioneer since 1980, Amgen has grown to be one of the world's leading independent biotechnology companies, has reached millions of patients around the world and is developing a pipeline of medicines with breakaway potential.

Contact: www.amgen.com

ARCTORIS



Arctoris is a tech-enabled biopharma platform company founded and headquartered in Oxford, UK with its US operations based in Boston and its Asia-Pacific operations based in Singapore. Arctoris combines robotics and advanced computational approaches with a world-class team of drug hunters for small molecule and biologics discovery. Ulysses, the unique technology platform developed by Arctoris, enables the company and its partners to conduct their R&D — from target to hit, lead, and candidate — significantly faster, and with considerably improved data quality and depth. Bringing together the expertise of seasoned biotech and pharma veterans with its proprietary technologies, Arctoris leads to higher success rates and an accelerated progression of programs towards the clinic. Arctoris pursues an internal pipeline of assets in oncology and neurology and also collaborates with select biotech and pharma partners in the US, Europe, and Asia-Pacific.

Contact: www.arctoris.com | partnering@arctoris.com

AXOL BIOSCIENCE



Axol Bioscience is the leading provider of product and service solutions within the induced pluripotent stem cell (iPSC)-based neuroscience, immune cell, and cardiac modeling for drug discovery and screening markets.

With the rapid uptake of iPSC-based products and technologies for use in drug development R&D and screening, there is a growing call from users for better reproducibility and consistency in these increasingly critical tools.

Axol is committed to being an industry leader in applying robust quality systems to the development and manufacture of iPSC products. We recently took a critical first step of obtaining ISO 9001:2015 certification at our manufacturing site in Edinburgh, Scotland.

Contact: www.axolbio.com | operations@axolbio.com

BENEVOLENT AI

BenevolentAI

Benevolent AI, founded in 2013, creates and applies AI technologies to transform the way medicines are discovered and developed. The company seeks to improve patient's lives by applying technology designed to generate better data decision making and in doing so lower drug development costs, decrease failure rates and increase the speed at which medicines are generated. The company has developed the Benevolent Platform™ — a discovery platform used by BenevolentAI scientists to find new ways to treat disease and personalise drugs to patients.

Contact: www.benevolent.ai



BioAscent is a leading provider of science-led integrated drug discovery services based at the former MSD R&D site in Newhouse, Scotland.

BioAscent's drug discovery services include *de novo* assay development, target analysis and bespoke screening strategies, compound screening, medicinal and synthetic chemistry, computational chemistry and compound management, all with access to in-house diversity and fragment libraries. Our team of expert drug discovery scientists has experience of successfully working from assay development through to preclinical and clinical candidates across all biological target classes and major therapeutic indications. Our compound management service offers customers secure compound aggregation and storage, up-to-date visibility of all samples and orders with a full audit trail, and rapid delivery in screen-ready format. We manage customer libraries ranging in size from a few hundred to a few hundred thousand compounds in both liquid and solid formats.

Since 2013, the BioAscent team has been responsible for:

- Over 150 biochemical and biophysical assays for drug discovery projects
- Over 30 hit-to-lead campaigns
- Over 50 hit validation/characterisation projects
- Over 100,000 screening plates delivered to our global customers/partners

Contact: www.bioascent.com | info@bioascent.com



Biomax Informatics provides services and software solutions for efficient decision making and knowledge management at the intersection of life sciences, healthcare and information technologies. Biomax facilitates digital transformation within biotech, pharma, agriculture, food and chemistry.

Biomax offers a range of standard products, based on the core knowledge management technology BioXM™, which are synergistically interrelated.

- AILANI™, the Artificial Intelligence LANguage Interface, provides unique semantic integration and search capabilities that catalyze digital change and accelerate the innovation cycle.
- NICARA™ is a knowledge hub for brain image assessments and helps everyone working with brain data to explore the world of Morphometry and Connectomics.

In addition, Biomax offers specific solutions for Industrial Biotech and Systems Medicine.

With more than 20 years of experience and around 50 employees — including numerous life scientists, data scientists and software developers with a scientific background — Biomax is a competent partner.

Participation in multinational research projects keeps the Biomax team up-to-date with the latest research and technology and ensures that Biomax delivers state-of-the-art solutions to all customers.

Biomax was founded in 1997 and is headquartered in Planegg near Munich, Germany. The company is certified in accordance with ISO 9001 and ISO 27001.

Contact: www.biomax.com | info@biomax.com

BIORELATE



Biorelate was founded in 2014 from cutting-edge scientific research into how biomedical curation can utilise existing dark knowledge to accelerate future drug discovery. Staying true to our roots, we have always believed that a better understanding of today's science can bring forward the next generation of life-saving therapeutics being developed by world leading researchers.

As the incredible progress of scientific researchers continues to compound the huge volume of growing and evolving biomedical data, Biorelate's mission has never been so important. Through our platform, Galactic AI™, we use artificial intelligence led curation to provide and enable the insights that matter to scientists and organisations developing the innovations of the future.

Contact: www.biorelate.com | info@biorelate.com

BIT BIO



The widespread use of human induced pluripotent stem cell (hiPSC) derived mature cell types has been restricted by complex and suboptimal differentiation protocols. The Bit Bio novel cellular reprogramming approach supported by a uniquely engineered genetic switch, opti-ox, is able to largely overcome these restrictions. This proprietary technology enables homogeneous and efficient differentiation of entire hiPSC cultures through tightly controlled expression of selected transcription factors. opti-ox reprogramming enables the consistent manufacture of homogenous and mature hiPSCs derived functional cells within days, offering access to the highest quality cellular models with simple protocols.

'Bit Bio' represents the two fields — coding and biology — that determine the identity of every human cell. Ultimately, bits are the building blocks of code, just as cells are the building blocks of life. This is reflective of what Bit Bio does: precise reprogramming of human stem cells. Bit Bio's mission and focus are to enable a new generation of therapies through democratising access to consistent and functional human cells. This will improve research and drug discovery, lower the cost and extend the application of cell therapies.

Contact: www.bit.bio

CANTABIO PHARMACEUTICALS



Cantabio Pharmaceuticals Inc. is a preclinical stage biotechnology company focusing on the research and development of disease modifying therapeutics candidates for Alzheimer's disease (AD), Parkinson's disease (PD) and Type 2 Diabetes (T2D). Through its proprietary drug discovery programs Cantabio is targeting the reduction of protein aggregation, oxidative and glyoxal stress, which are believed to be some of the main causes of AD and PD. Cantabio's research strategy integrates a detailed therapeutic focus, target family biophysics, and drug discovery technology and expertise into an innovative drug discovery platform to develop small molecule pharmacological chaperones for clinical trials. These small molecule pharmacological chaperones act to stabilize the native functional form of selected protein targets against misfolding when they lose their function and/or become toxic.

In addition, the company is developing therapeutic proteins that can pass through the blood-brain barrier to supplement existing levels of proteins which display loss of function during disease conditions.

Cantabio is specifically developing the following therapeutic programs: (1) CB101: small molecule pharmacological chaperones targeting the DJ-1 protein for PD; (2) CB201: engineered cell-penetrant DJ-1 protein for T2D; (3) CB301: small molecule pharmacological chaperones targeting the Tau protein for AD. The company has operations in Silicon Valley (USA), Cambridge (UK) and Budapest (Hungary), where multidisciplinary in-house R&D is carried out in our laboratory facilities.

Contact: www.cantabio.com | info@cantabio.com

CELL GUIDANCE SYSTEMS



Cell Guidance Systems' primary focus is PODS®, a protein delivery technology which generates zero-order delivery kinetics over periods up to two months.

Protein instability is a recurring problem in the development of effective protein drugs, diagnostic assay controls, and delivery of effective vaccines. Cell Guidance Systems' PODS platform technology utilizes a patented technology to produce polyhedrin crystals containing constrained target proteins. This production process results in proteins with significantly enhanced stability in storage and zero-order release kinetics. Working in collaboration with world-class research institutes and other companies, Cell Guidance Systems is developing PODS proteins for use as therapeutics and cell survival agents for regenerative medicine.

Contact: Michael Jones | michaeljones@cellgs.com
| www.cellgs.com

CELL SIGNALING TECHNOLOGY



CST is a private, family-owned company, founded by scientists and dedicated to providing high quality research tools to the biomedical research community. Our employees operate worldwide from our U.S. headquarters in Massachusetts, and our offices in the Netherlands, China, and Japan. As scientists ourselves, we believe an antibody is only as good as the research it enables. For this reason, we are actively engaged in the development of technologies to facilitate signaling analysis and mechanistic cell biology research. And the same scientists who produce and validate our primary antibodies are available to provide technical support for customers. In this way, we are able to supply customers with both the reagents and the information they need to achieve consistent, reliable results at the research bench.

Contact: Melvin Jose | melvin.jose@cellsignal.com
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CYCLICA



From molecule to medicine, Cyclica embraces the complexity of disease. With deep roots in the industry, a first-in-class platform, and an innovative decentralized partnership model, Cyclica is creating medicines with greater precision for unmet patient needs. Our work spans dozens of collaborations with large pharma and biotech as well as several joint ventures. We are a passionate team of biotech and pharma professionals, biologists, chemists, and computer scientists who live and labor at the intersection of our collective expertise.

To learn more about Cyclica and how we partner, please visit us online.

Contact: www.cyclicarx.com



Cytiva is a global provider of technologies and services that advance and accelerate the development and manufacture of therapeutics. We have a rich heritage tracing back hundreds of years, and a fresh beginning since 2020. Our customers undertake life-saving activities ranging from fundamental biological research to developing innovative vaccines, biologic drugs, and novel cell and gene therapies. Our job is to supply the tools and services they need to work better, faster and safer, leading to better patient outcomes. Cytiva is a global life sciences leader dedicated to advancing and accelerating therapeutics. Cytiva is a trusted partner to customers that undertake life-saving activities ranging from biological research to developing innovative vaccines, biologic drugs, and novel cell and gene therapies. Cytiva brings speed, efficiency and capacity to research and manufacturing workflows, enabling the development, manufacture and delivery of transformative medicines to patients.

Contact: www.cytivalifesciences.com



DaeWoong Group is a global healthcare group established in 1945, which has been providing high quality pharmaceuticals for more than 70 years.

DaeWoong Pharmaceutical is one of most innovative and globalized pharmaceutical companies in South Korea. Our group revenue exceeds almost 1B US dollars.

DaeWoong has global presence with 8 branches including China, Indonesia, Japan, Vietnam and USA and 5 R&D centers worldwide.

We have had an outstanding sales record over the past years and we have very strong capabilities in several therapeutic areas especially in CV, Endo, and GI and also would like to have more presence in oncology as well. We are looking for the opportunities to strengthen our commercial abilities with more products. We have a variety of in-house pipelines for biologics, chemicals and platform technologies. You can see the overview of our R&D pipelines on our website.

DaeWoong obtained US FDA approval for Nabota injection, which is a botulinum toxin and we developed Acid Pump Antagonist and PRS; for these, we are seeking external partnership opportunities for further effective development. In addition to our in-house development, we are constantly seeking external collaboration opportunities to expand our pipelines which will be our next generation growth engine.

Contact: <https://www.daeWoong.co.kr/>
| joonchem@daeWoong.co.kr

DIAGENODE



Diagenode provides complete solutions for epigenetics research in immuno-oncology, neuroscience, and more. Our comprehensive approach to gain insights into RNA, DNA, and chromatin analysis from solid tumor to liquid biopsy samples with experimentally-validated, easy-to-use solutions and services give researchers the success to move from research to translational and clinical applications.

Diagenode's product portfolio includes innovative shearing solutions for a number of applications such as DNA shearing from 150bp to 100kb, chromatin shearing, RNA and protein extraction, and cell lysis. In addition, we offer reagent kits and high quality antibodies to streamline DNA methylation, ChIP, ChIPmentation, ChIP-seq, and ATAC-seq workflows. The company's latest innovation includes single cell ATAC-seq services powered by Bio-Rad's dd-Seq technology promising highest possible capture efficiency and greater number of unique fragments.

In addition, our Epigenomics Profiling Services provide epigenome-wide drug discovery, transgenerational studies, epigenetic biomarker identification including cancer biomarkers, and functional epigenomics.

Contact: info@diagenode.com | www.diagenode.com

DOMAINEX



Domainex is an award-winning integrated drug discovery research service partner, providing the full range of pre-clinical drug discovery services. We work collaboratively in partnership with clients from a variety of sectors including academic, pharmaceutical, biotechnology and patient foundation organisations around the world.

Our team comprises of approximately 70 scientists, who are committed to providing high quality services, and have expertise in:

- Protein production and characterisation
- X-ray crystallography
- Assay development and screening (biochemical, biophysical and cell assays)
- High-throughput screening
- Computational chemistry including virtual screening
- Medicinal, synthetic and analytical chemistry
- Fragment- and structure-based drug discovery

Contact: www.domainex.co.uk
| enquiries@domainex.co.uk

DRISHTI DISCOVERIES

DRISHTI Discoveries

Drishti Discoveries is a preclinical stage gene therapy company. Drishti is using a clinically validated gene modulation technology to express proprietary engineered miRNA molecules within the cell, converting the cells into RNAi producing factories.

Our strategy is to apply the validated technology to silence validated targets to develop *in vivo* gene therapy for diseases with high unmet need.

Drishti's current focus areas include:

1. Genetic modifiers of rare diseases, and
2. Genetic diseases caused by dominant mutations

Drishti's lead programme is targeting a genetic modifier of TDP-43 toxicity in ALS. We have identified and *in vivo* validated a lead candidate for this programme. We are currently developing non-clinical efficacy evidence.

Moving forward, Drishti is developing a pipeline of programmes relevant to diseases of the nervous system.

Contact: www.drishtidiscoversies.com

EAGLE GENOMICS



Eagle Genomics is a software business that is pioneering the application of network science to biology across the Food and Nutrition, Beauty and Personal Care, AgBio and Healthcare sectors. Its AI-augmented knowledge discovery platform, e[datascientist]™, empowers scientists to exploit multi-dimensional data in minutes rather than months, helping companies conduct science-led innovation for next-generation products. It supports the entire innovation workflow — from hypothesis through insight to product claims — helping bring novel, safer and sustainable products to market.

A Cambridge, UK-headquartered business with a global presence, it has sites in London's Knowledge Quarter, Hyderabad, India, New York's Genome Center as well as Paris' Station F, Potsdam Science Park, Germany and Kyiv, Ukraine.

Contact: www.eaglegenomics.com
| contact@eaglegenomics.com

GENEDATA



For the last 25 years, Genedata has been transforming life science data into intelligence with a portfolio of award-winning software solutions and scientific consulting. Our Biopharma Platform of advanced software are built on open, enterprise-level client-server architecture, which can be deployed to a variety of infrastructures, including on-premises or cloud-based installations. We provide digital solutions to cover your data analysis needs, from mass spectrometry biotherapeutic characterization (Expressionist), AI powered High Content Screening analysis (Imagecent) to the capture & analysis of High Throughput Screens (Screener) and managing your NGS workflows from cell line development to biosafety (Selector). We also support the digitalization of your company-wide R&D processes with our flexible workflow solutions, to transform your biotherapeutic discovery (Biologics), breakdown data silos by integrating multi-omics, biomarker, and clinical data (Profiler) and design next-generation manufacturing processes for cell line development, upstream and downstream processing, formulation, and analytics (Bioprocess). We also offer a range of services and support, from installation and customization to global roll-out support, training, data analysis, application consulting and IT consulting services, all tailored to clients' specific needs. Our highly skilled professionals bring extensive domain knowledge and experience to your organization. Today, we work with the world's leading pharmaceutical, agrochemical, and biotechnology companies, as well as some of the most innovative life science research institutions.

Contact: www.genedata.com

| www.genedata.com/company/contact-us

GENESTACK



Genestack brings together bioinformatics and software development expertise to provide solutions for data and metadata management, as well as analysis pipelines and a range of interactive visual analytics tools.

Our portfolio of products and services includes a combination of off-the-shelf modules, customisation, and new apps prototyping. We draw on decades of industry and academic experience to provide customers with tailored data management solutions and scientific consultancy.

We work with clients in the pharmaceutical, consumer goods, biotechnology and healthcare industries to help them get the most out of their data and maximise the return on investment into data production. We aim to make the lives of people who do bioinformatics simpler. Our goal is to help our users leverage high-throughput multi-omics data and fast-track drug discovery, precision medicine and bioinformatics research in the post-genomic era.

Currently we are releasing Omics Data Manager (ODM), a data management system for multi-omics, biological and healthcare data. ODM is a software product that enables its users to create a FAIR data catalogue, by solving common pain points in data management such as data silos, lack of metadata standards, and unclear data relationships. ODM is the result of a fruitful collaboration with a top pharmaceutical company.

Contact: info@genestack.com | www.genestack.com

GENOME BIOLOGICS



Genome Biologics was founded in 2017 on the strength of a state-of-the-art integrated RNAi and NCE drug discovery and development platform. The central disruptive quality of Genome Biologics is its ability to translate AI/Big data-driven disease signature identification and mapping to the pre-clinical drug validation realm, through generation of *in vitro* and *in vivo* precision disease models to more accurately identify and validate efficacious therapeutic RNAi and NCEs for cardiovascular and cardiometabolic disease. In taking this unparalleled approach, Genome Biologics has developed a rich therapy pipeline in Cardiovascular Disease — Genome Biologics drug assets improve diseased heart function by employing a number of strategies including metabolic modulation and the activation of cardiac regeneration.

Contact: www.geneomebiologics.com
| info@genomebiologics.com

HAPLN SCIENCE



HaplnScience, Inc. is a Korean biotech company founded in late 2018 with a mission to develop a breakthrough anti-aging therapy against tissue degenerative diseases. It is utilizing a recombinant human HAPLN1, which it has identified as a critical protein having a role in maintaining ECM homeostasis. The company has initially set up its target indications for OA, COPD and Dry Eye Disease, all of which are age-related tissue degenerative diseases with high unmet medical needs. We are further interested in researching and understanding ECM remodelling and related ECM components in more depth for the treatment of the tissue degenerative diseases.

Contact: www.haplnscience.com
| hbchoi@haplnscience.com

HEALX



Healx is a mission-driven biotech, pioneering the next wave of drug discovery by re-engineering the entire process from the ground up. At the core of our approach is Healnet, the next generation AI platform we built to attack the drug discovery problem in a massively parallel, hypothesis-free way.

We deploy Healnet across three core areas: drug redevelopment, combination therapy development, and molecular enhancement. In each of these areas, Healnet uses cutting-edge AI to rapidly discover novel disease biology and modes of action — without being limited to a single target — and identify non-obvious connections between that biology and existing compounds. Our team then applies their drug discovery and development expertise to accelerate these novel treatment opportunities towards the clinic.

Contact: clara.tang@healx.io | www.healx.io

IMMUNDNZ



Immundnz is a UK-based specialist immunology company providing customised and experimental immunology services using *in vitro* and *ex vivo* human cell models for preclinical drug research and development. Key areas that we focus on are immuno-oncology, inflammation, auto-immune disease and the assessment of immune risk, immune safety and immunotoxicity in order to understand the effect of novel compounds on the immune system.

Contact: Masih Alam | masih.alam@immundnz.com
| www.immundnz.com

intellegens

Intellegens software applies advanced machine learning to accelerate innovation for chemicals, materials, manufacturing, and beyond. In the race to design and develop new and improved therapeutics, it is essential to maximise value from the existing data available to an R&D organisation. That data may come from experiment, simulation, trials, or patient populations. It is typically sparse (i.e. not every possible attribute is populated) and noisy — features that cause conventional machine learning methods to fail. The Alchemite™ deep learning software is a unique technology, originating at the University of Cambridge, that enables users to build machine learning models from sparse, noisy data. These models can then be used to direct experimental programs along the most productive pathways and to gain breakthrough insights into which factors drive key properties for drugs and biopharmaceuticals. Successes have included identifying potential drug candidate compounds, significantly reducing the amount of experimentation required to achieve development objectives, and providing valuable insights into large-scale commercial pharmaceutical datasets.

Contact: www.intellegens.com | info@intellegens.com

jw Pharmaceutical

Taking the first step in 1945, JW Pharmaceutical has found the market for domestic therapeutic drugs based on its philosophy of respecting life and pioneering spirit. JW Pharmaceutical established a comprehensive research center in 1983 based on accumulated technology and outstanding capability. Based on a long history and know-how in treatment and medicine, JW Pharmaceutical are constantly researching and developing innovative new medicine. We are targeting the diseases with high demand for medical unmet needs, concentrating on the development of innovative new medicines using JW's unique technology, and conducting research activities in line with global trends through open innovation. Research directions are Innovation R&D, Nutrition therapy and Diagnostics. 22 pipelines are developing, in disease areas including cancer, immunological disease, cardiovascular system, metabolic disease, regenerative medicine, rare and eye disease. We are committed to making our society bright and healthy by producing and supplying innovative technologies, products and services which will support healthy lives, and will pursue the satisfaction and happiness of customers, shareholders and the employees through our trustworthy activities.

Contact: Kyoung-Wan Cho | kwcho@jw-pharma.co.kr
| www.jw-pharma.co.kr

KPBMA



KPBMA has over 230 member companies in the pharmaceutical industry. To achieve the goal of 'Improving national healthcare through the sound development of the pharmaceutical industry' and with a mission of 'Developing innovative new drugs', KPBMA is committed to play a variety of roles such as bridging government and private sectors to foster industry, developing the bio-pharma ecosystem for open innovation, training industry professionals, accelerating advancement into global markets etc. Internationally, KPBMA runs Industry-Academia R&D Collaboration projects with MIT university and is affiliated with the Milner Therapeutics Institutes in Cambridge. With several companies in a Consortium, KPBMA keenly supports them to launch joint R&D projects. Besides, KPBMA also assists companies to enter challenging global markets by partnering with international organizations & companies and organizing reciprocal visits, co-hosting international forums etc. By joining forces with governmental institutions, KPBMA established KAICD (Korea AI center for Drug Discovery and Development) in 2019. With a mission of accelerating the adoption of AI-based drug discovery by creating a national scale pre-competitive resource, KAICD provides technical support for companies, surveys research for AI-based drug discovery and trains AI-based drug discovery professionals. KPBMA welcomes overseas players who seek R&D/ Business collaboration opportunities with Korean pharmaceutical companies at any time.

Contact:

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LIFEBIT



Lifebit is democratising access and understanding of genomic data to leap-forward cures and disease prevention. Lifebit solves the challenge of analysing vast amounts of distributed and previously inaccessible genomics data. We do this with an end-to-end platform that enables federated analysis and powerful automation, no matter where data resides, no matter what compute infrastructure is employed.

Lifebit CloudOS is the first fully federated clinico-genomic data platform that integrates and accommodates all best practices and compliance models. Data privacy and security are always assured and collaboration across teams is seamless. Importantly, with its federated architecture, organisations and researchers are not required to move sensitive data from one place to another, enabling secure, collaborative access.

Whether drug discovery, diagnostics or predicting drug response, Lifebit's technology creates new collective understandings from complex distributed data. With our partners and customers, we are shaping an integrated, collaborative landscape of knowledge to enrich life and enable tangible breakthroughs.

Contact: www.lifebit.ai | hello@lifebit.ai

MEDANNEX



Medannex is an award-winning Scottish biopharmaceutical company committed to unlocking the therapeutic potential of targeting annexin-A1. Our goal is to create a first-in-class therapy to improve the lives of people impacted by cancers and autoimmune diseases.

Following a Series B fundraise, and supported by both Scottish Enterprise and Innovate UK, Medannex is collaborating with world-leading clinical experts to explore the huge therapeutic and commercial potential of our patent-protected immunomodulatory technology.

We are currently preparing to initiate a First-in-Human clinical oncology study with our lead antibody, MDX-124, later this year. Our non-clinical therapeutic development programme for autoimmune diseases continues in parallel.

Medannex won both 'Investment of the Year' and 'Outstanding Skills Development' at Scotland's Life Sciences Annual Awards 2021.

Contact: info@medannex.org | www.medannex.org

METISOX



Metisox is an innovative technology company providing artificial intelligence and machine learning solutions for patient stratification in personalized medicine, biomarker identification, and genomics analysis.

Contact: www.metisox.com | info@metisox.com

MICROBIOTICA



The microbiome is transforming our knowledge of biology and promising novel therapies for a wide range of diseases based on live bacteria. Microbiotica is a pioneer translating new rigour in microbiome science to enable it to fulfil its promise as a new therapeutic modality. Recognition of this has been demonstrated by collaborations with Cancer Research UK, University of Cambridge, University of Adelaide and Genentech, by multiple awards, and by a recent £50m fundraise supported by an international syndicate of investors. This enables the company to transition into the clinic and expand its discovery pipeline.

The company's unique platform was initially built on investment over 10 years at the Sanger Institute that addressed fundamental barriers in microbiome genomics, mass gut bacterial isolation, patient microbiome profiling, and identification of therapeutic bacteria. These capabilities have been industrialised and set the company apart, enabling a precision medicine approach to the microbiome by identification of clinical bacterial signatures that serve as stratification biomarkers and live bacterial therapies.

Microbiotica's therapeutic focus is Immuno-oncology and IBD where two exciting assets, MB097 and MB310, are progressing into clinical trials. The company has an ongoing strategic commitment to the microbiome in immuno-oncology driven by its MITRE clinical collaboration in multiple cancers with Cambridge University Hospitals and CRUK. Programs in additional therapeutic areas are being progressed in the Discovery phase.

Contact: info@microbiotica.com | www.microbiotica.com

NEMESIS BIOSCIENCE



Nemesis Bioscience is a biopharmaceutical company developing DNA therapeutics, CRISPR-based DNA editing technology, administered before/with antibiotics to inactivate anti-microbial resistance (AMR) in bacterial pathogens. These therapeutics make existing antibiotics work again, prevent the spread of resistance genes, and will protect the efficacy of new antibiotics.

To deliver the therapeutics, Transmids[®], our novel vectors, are encapsidated in a bacteriophage coat. Transmids can also spread directly between bacteria by conjugation.

We have shown: (i) multiplexing allows 8 families of beta-lactamase (bla) resistance genes to be inactivated by one DNA therapeutic — so resurrecting sensitivity to a broad range of beta-lactams; (ii) efficacy of Transmid delivery by phage coat infection and of consequent AMR inactivation in mouse models in therapeutic studies of bacterial infection; and (iii) also prophylactically inactivating AMR following plasmid conjugation from an introduced commensal strain to AMR bacteria in the gut flora.

We are undertaking a two-year research collaboration with Shionogi & Co. Ltd. to further develop Nemesis Transmid Technology for the treatment and/or prevention of hard-to-treat respiratory infections caused by *Pseudomonas aeruginosa*. The collaboration will leverage the innovative science and technology platforms of both parties and will aim to move products into clinical development.

Contact: Frank Massam | massam@nemesisbio.com
| www.nemesisbio.com

O2H



The o2h group has a vision of seeding new ideas in life sciences, AI/tech and green innovation. The divisions include funding, incubation and execution covering chemistry, biology and tech. The group is headquartered in Cambridge, UK at the stunning 2.76 acre Hauxton Mill SciTech Park where it is shaping a new vibrant innovation-led community.

The o2h group is co-located in Cambridge, UK and in Ahmedabad, India and has 6 verticals covering Venture, Discovery, Therapeutics, Technology, Co-work and Community.

o2h co-work labs is a lovingly renovated old mill house and is a unique environment for those serendipitous conversations. The 'experience sharing' will just flow where members can expect a constant stream of lively 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...

o2h ventures has a track record of nurturing and investing in emerging life science companies. o2h human health S/ EIS funds are focused on seeding early stage biotech therapeutics and related AI opportunities.

o2h discovery has wet lab cell biology and genomics capabilities in Cambridge and is open to executing projects and regional collaborations. Further we understand that innovation is increasingly enabled by effective technology and o2h tech has experience of building MVP's and software builds for these innovation-led companies.

Contact: o2h.com | info@o2h.com

OBRIZUM



OBRIZUM® Group Ltd. is a B2B corporate learning and knowledge management company. We are headquartered in Cambridge (UK) with satellite offices in London and South Korea. The company is structured in three divisions: OBRIZUM®, our award-winning artificial intelligence-driven eLearning and analytics software product; OBRIZUM® Media, our multimedia content production agency; and OBRIZUM® X, our blended corporate training and conferencing offering.

Contact: info@obrimum.com | www.obrimum.com

OPPILOTECH



Oppilotech modelling methodology is different from traditional approaches (Flux Based Analysis) in that we go into a much higher level of detail incorporating parameters such as catalytic rates, metabolite levels and half-lives. The high level of detail allows us to reveal new biology and identify first-in-class non-intuitive drug targets. We initially focused our modelling efforts on *E.coli* identifying four first-in-class antibacterial drug targets and generated active chemical matter against three of them. The company intends to develop these programmes towards the clinic. We are now expanding into pathways in human cells, allowing us to address a wider range of diseases. Oppilotech is actively seeking partnerships with pharma/ biotechs/academic groups to model specific biological pathways to identify viable drug targets and new biology.

Contact: www.oppilotech.com

PELAGO BIOSCIENCE



Pelago Bioscience was founded in 2013 to develop and provide services based upon its patented CETSA® (Cellular Thermal Shift Assay) method. Since then, we have established a global reputation and run projects for almost 150 companies throughout Europe, America and Asia. After several years of rapid growth, we moved in 2021 to larger facilities at the Karolinska Research Campus and now offer an expanded range of services enabling us to provide an integrated research capability. In addition to CETSA® we also provide proteomics, assay development & screening services. Contact our project support team to learn how Pelago can enhance your research.

Contact: www.pelagobio.com | contact@pelagobio.com

PHOREMOST



PhoreMost is a Cambridge UK-based biotech company, focused on its core goal of “Drugging the Undruggable™”. Founded in 2014, PhoreMost has developed its proprietary next-generation phenotypic screening platform SITESEEKER® which can discern the best new targets for future therapeutics and, crucially, how to drug them. This has the potential to significantly increase the diversity and affordability of novel therapeutics for cancer and other diseases of unmet need.

PhoreMost’s internal pipeline focusses on targeted protein degradation (TPD), oncology and immuno-oncology. In the TPD space, PhoreMost has been able to progress binders to multiple novel E3 ligases and has developed its screening approach to allow the identification and exploitation of the most suitable E3 ligase for a particular therapeutic target. PhoreMost’s most advanced asset is an allosteric PLK inhibitor, currently in late pre-clinical development in partnership with Sentinel Oncology.

In addition to internal programmes, PhoreMost collaborates with a range of pharma and biotech partners to enable access to its SITESEEKER platform. Through these collaborations — with companies including Boehringer Ingelheim, Otsuka, and Oxford Biomedica — PhoreMost works closely with its partners to screen pathways of interest and deliver validated targets with functional, binding peptides, suitable for entry into the drug discovery pipeline.

Contact: www.phoremmost.com

QKINE



Qkine manufactures high-purity, animal-free growth factors, cytokines and other complex proteins for stem cell, organoid culture and regenerative medicine. Based in Cambridge, UK, Qkine combines proprietary production processes with protein engineering technology to tackle fundamental biological and scale-up challenges. Our goal is to provide the highest purity, bioactive proteins to best support our customers and maximize the impact of their science. Qkine is proud to support emerging industries, such as cellular agriculture, working closely with customers and collaborators to better understand how we can help them overcome the challenges in their fields.

We are leaders in protein innovation with approximately 30% of our catalogue being formed of unique products. We have developed a portfolio of stable, tag-free growth factors for use in the most popular iPSC and ESC pluripotency maintenance media recipes, and we provide pioneering growth factor forms for use in organoid cultures. Unique products available from Qkine include: tag-free thermostable FGF2-G3 which is stable in culture media for >7days; the first animal-free TGF-β1 for chemically defined stem cell media; and animal-free HGF (NK1) which is an optimised form and leads to improved differentiation of iPSCs to hepatocyte-like cells.

Qkine is an ISO9001: 2015 certified company, providing unmatched quality and reliability. We undertake stringent purity and bioactivity testing for all proteins and offer total transparency with this data.

Contact: www.qkine.com | info@qkine.com

SAI LIFE SCIENCES



Sai Life Sciences is one of India's fastest growing Contract Research, Development & Manufacturing Organizations. A pure-play, full-service CRO-CDMO, it works with global innovator pharma and biotech companies to accelerate the discovery, development and commercialisation of small molecules.

Over two decades, Sai Life Sciences has served a diverse set of NCE development programmes, consistently delivering value based on its quality and responsiveness. It has a 100% successful track record of regulatory inspections across its R&D and manufacturing facilities. Today, it works with 17 of the top 25 large pharma companies, in addition to multiple small and mid-sized pharma & biotech companies and has over 2200 employees across its facilities in India, UK and USA.

In 2019, Sai committed to investing over US\$150M between 2019 and 2023 to significantly expand and upgrade its R&D and manufacturing facilities, deepen scientific & technological capabilities, strengthen automation and data systems, and above all raise the bar for safety, quality and customer focus.

The company's infrastructure expansion includes:

- Discovery biology lab in Boston, USA
- Centre of excellence in process R&D in Manchester, UK
- Integrated Discovery Services in Hyderabad that include medicinal chemistry, *in vitro* and *in vivo* biology services, DMPK, toxicology and a vivarium
- 172 KL API & Intermediate manufacturing capacity
- High potent capability in R&D and manufacturing
- Dedicated clean room block

Contact: Victoria Steadman | victoria.s@sailife.com
| www.sailife.com

SELVITA



Selvita is a preclinical Contract Research Organization providing multidisciplinary support in resolving the unique challenges of research within area of drug discovery and drug development studies.

Selvita was established in 2007 and currently employs over 900 professionals, of which over 40% hold a PhD degree. The Company research sites are located in Krakow (HQ) and Poznan, Poland, as well as Zagreb, Croatia. Selvita's international offices are located in Cambridge, MA, and San Francisco Bay Area, in the U.S., as well as in Cambridge, UK.

Selvita Group has broad expertise and track record in oncology, inflammation, fibrosis, anti-infectives, respiratory diseases and CNS.

The company offers drug discovery support at every stage of the early discovery phase up to the preclinical development. Selvita specializes in a variety of drug discovery processes from *in silico* drug design and synthesis of a target-focused library, SAR and ADME-driven lead optimization and toxicity prediction, followed by complex preclinical *in vitro* and *in vivo* pharmacology, structural biology, all tailored to the customer's needs.

Contact: www.selvita.com

SEMARION



Semarion, a University of Cambridge spin-out, is revolutionizing adherent cell assays for drug discovery through novel materials physics. Its proprietary SemaCyte® microcarrier platform brings adherent cells into suspension enabling freezing adherent assay-ready cells, miniaturizing primary cell assays, and multiplexing cell line panels to drastically increase workflow efficiencies and enable novel cell screening paradigms.

Contact: www.semarion.com | info@semarion.com

SENGENICS



Sengenics is a precision medicine company working to improve patient outcomes through physiologically relevant, data-guided decision making. Our solutions enable the discovery and validation of autoantibody biomarker signatures for patient stratification, therapeutic response prediction and development of companion diagnostics.

Our novel seromics technologies drive the creation of protein microarray services and products for autoantibody biomarker profiling. Our focus is helping advance the discovery, validation, and use of biomarkers in the fields of autoimmune disease, immuno-oncology, neurological and infectious disease.

Sengenics was founded in 2008, built on technology developed at Cambridge University. Our KREX protein folding technology ensures that the proteins on our arrays are correctly folded, full length and functional. This is critical for autoantibody discovery because over 90% of antibodies recognize the shape of an epitope, not the amino acid sequence.

We work with many of the world's top pharmaceutical companies as well as biopharma, academic institutions, contract research organizations and disease foundations. More than 160 companies and institutions have used our platform to advance their research and biomarker development.

Contact: www.sengenics.com | enquires@sengenics.com

SOMASERVE



SomaServe is a delivery technologies company operating the PolyNaut platform: a technology for intracellular, targeted delivery of mRNA, siRNA and other nucleic acid-based therapeutics (NATs) and protein therapeutics to the brain and other hard to target tissues and cell types.

Contact: info@somaserve.com | www.somaserve.com

SPLICEOR



Spliceor Ltd is an early stage University of Cambridge spin-out, co-founded by Dr Carin Ingemarsdotter and Professor Andrew Lever, developing novel gene therapies for certain types of aggressive cancers for which current treatments are ineffective.

Spliceor's technology is based on perturbing the RNA splicing system within a cancer cell to favour the uncommon trans-splicing mode where, in contrast to cis-splicing, where two exons from the same RNA transcript are joined, two exons on different pre-mRNA molecules are joined together through an RNA trans-splicing reaction to produce a chimeric RNA transcript. Spliceor targets cancer-specific RNAs to generate a lethal gene product within the cancer cell.

The Spliceor team has identified a specific class of target cancer RNAs that are expressed selectively in many cancers and provide ideal targets for this approach. Using these, Spliceor aims to generate a platform approach to cancers, beginning with liver and pancreatic cancer, to generate curative and well tolerated gene therapies for cancer patients.

Contact: carin.ingemarsdotter@spliceor.com
andrew.lever@spliceor.com

STANDIGM

Standigm[®]

Standigm is a Seoul-based workflow AI drug discovery company co-founded by three drug discovery science and technology experts in 2015. The three joined forces to bridge their areas of expertise across AI, chemical engineering, and systems biology to eliminate some of the false starts in drug discovery by employing unique AI algorithms.

Standigm has an ASK platform that can discover new targets by completing the search for new drug candidates with AI technology and by strengthening technological differentiation from other AI-based drug development companies. The company also has Standigm BEST, an AI platform for novel compounds, which can generate the 150-dimensional latent space constructed by various chemical features, including AI-based conditional modification and hit identification models.

Standigm has expanded its operations across the world, recently opening offices in the U.S. and UK. This expansion has enabled Standigm to carry out multiple projects simultaneously, using its workflow AI technology to meet the needs of various novel scenarios of early drug discovery. The ultimate goal of its workflow AI is to complete a closed-loop AI system in which any data produced in projects are fed back for continuous improvement while reducing the resources to secure patentable lead compounds inhibiting a novel target.

Contact: www.standigm.com | business@standigm.com

STORM THERAPEUTICS



Storm Therapeutics is a spin-out of the Gurdon Institute at the University of Cambridge, created to commercialise the work of founders Professors Tony Kouzarides and Eric Miska in RNA epigenetics.

Several large families of RNA-modifying enzymes have been identified that impact key biological processes by changing the activity of RNA through catalysing epigenetic RNA modifications. Storm is working at the forefront of this new field, collaborating closely with our scientific founders and their research groups at the Gurdon Institute to elucidate the functional role of diverse RNA modifications. Advances in the understanding of RNA modification and its role in the development of cancer offer the prospect of identifying novel therapeutic targets. Using cutting-edge techniques such as CRISPR screens, chemical biology, RNA-Seq and RNA mass spectrometry, we have established a unique target discovery platform for the identification of small molecule modulators of RNA modification pathways.

Since inception in May 2015, Storm has raised £16m in seed and Series A funding. The company uses the proceeds to establish a pipeline of drug discovery programmes to develop novel, first-in-class drugs for the treatment of specific cancers with high unmet medical need.

Contact: info@stormtherapeutics.com
| www.stormtherapeutics.com

TAGOMICS



Tagomics are developing an innovative next-generation epigenetic profiling platform and are applying their technology to advance non-invasive healthcare. The company's proprietary technology represents a dramatic step-change over existing clinical workflows for epigenetic analysis, owing to its low-cost, simplicity, high sensitivity, and throughput.

Contact: tagomics.com

TWIST BIOSCIENCE



Twist Bioscience is a leading and rapidly growing synthetic biology and genomics company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology. The core of the platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by 'writing' DNA on a silicon chip. Twist is leveraging its unique technology to manufacture a broad range of synthetic DNA-based products, including synthetic genes, tools for next-generation sequencing (NGS) preparation, and antibody libraries for drug discovery and development. Twist is also pursuing longer-term opportunities in digital data storage in DNA and biologics drug discovery. Twist makes products for use across many industries including healthcare, industrial chemicals, agriculture and academic research.

Contact: www.twistbioscience.com
| customersupport@twistbioscience.com

VERNALIS RESEARCH



Vernalis Research, a HitGen Company, is recognised as a world leader in fragment- and structure-based drug discovery. Based in Cambridge, UK, Vernalis has been developing and applying these methods to challenging projects since 1997. Vernalis has a strong emphasis on combining innovative structural biology, biophysics, and medicinal chemistry to solve problems and tackle targets across therapeutic areas, ranging from oncology to inflammation and CNS disorders. This requires a deep understanding of the techniques involved and a cautious interpretation of the data; an approach grounded on over two decades of developing and applying fragment-based lead discovery to a wide range of therapeutic targets. By combining structural, thermodynamic, and kinetic information from fragment and other hits, we design novel, potent, drug-like molecules. Our successes include generation of lead compounds which inhibit protein-protein interactions and enzymes, leading to pre-clinical candidates for Mcl-1, Bcl-2, Hsp90, FAAH, Chk1 and IRAK4. Vernalis balances an internal portfolio of drug discovery projects with fully integrated research collaborations with academic partners, and biotechnology and pharmaceutical companies.

Contact: www.vernalis.com | collaborate@vernalis.com

VERINNOGEN



Verinnogen's novel technology has been built to act as the interface between the physical and digital worlds, able to do what imaging can't: digitise touch on a large scale. Our contact profiling technology and computational process allows faithful recreation of 3D surfaces without the possibility of optical interference, all contained within a quick and simple process. Our first product, a hand-held pre-clinical tumour measuring device for *in vivo* oncology studies, will reduce the variability associated with subcutaneous tumour volume estimation, improving the quality of pre-clinical data and expediting the translation of novel cancer innovations. With an estimated 60+ million tumour volume measurements being made worldwide, and inter-operator variability of standard methods reported to be over 100%, a quick, easy-to-use but reliable and accurate method is urgently needed. This vital application will form the bedrock of Verinnogen's 3D contact profiling technology, supporting the development of additional features, products, and applications to transform the way we interact with, and measure, 3D surfaces across a multitude of sectors, including human health, agriculture, manufacturing, and security. Working closely with partners and collaborators using a quality-led design approach, Verinnogen looks to enable its customers with a unique set of tools to generate the key data and metrics they need to change the world.

Contact: www.verinnogen.com

VIVAN THERAPEUTICS



Vivan Therapeutics, a UK based company, offers personalised cancer therapeutics utilising technology developed at and in partnership with Mt Sinai Medical Center. We identify personalised cancer treatments for patients based on their tumour genetics. For each patient, we build a genetically matched fruit fly model of the tumour, which is used for large-scale drug screening to find novel and effective drug combinations. This platform can treat even difficult cancers with combinations of approved drugs. Nearly all combinations incorporate non-cancer drugs, making them less toxic and more affordable. Using our proprietary screening data, we are building a powerful AI-driven digital health tool, TuMatch, which can predict effective treatment options rapidly. We have launched TuMatch for colorectal cancer and are working to expand to other GI and lung cancers.

Our *in vivo*, high throughput drug screening platform is also used to power biopharma discovery and development. Our drug discovery platform provides *in vivo* models to screen 1,000s of compounds and combinations of FDA approved drugs to discover novel and efficacious combinations of potential therapies that truly match the complexity of the patient mutational landscape (for oncology). We use a unique fly “avatar”, where we can replicate this mutational complexity with up to 20 mutations introduced in each avatar to assess compound efficacy, toxicity, support clinical trials and patient stratification or enable drug repurposing. Vivan has created models that express different oncogenic G12 KRAS human variants, including G12C and G12D. These models can be used for KRAS variant-specific anti-cancer drug discovery and to validate the response to KRAS variant-specific inhibitors under investigation/development.

Contact: laura@vivantx.com | www.vivantx.com

YUHAN CORPORATION



Yuhan Corporation is a South Korea-based top-selling pharmaceutical company founded in 1926. In the spirit of Yuhan’s global open innovation, throughout the last 4 years we made 5 licensing out deals of our in-house programs with Gilead, Janssen, and Boehringer Ingelheim and other global pharmaceutical companies (total deal size of \$3.54 billion USD). We have our own research center, manufacturing plants, department of clinical research, regulatory affairs, sales, and marketing in Korea and have three global subsidiary offices in USA and Australia, currently looking to establish one within the EU. We always welcome collaboration opportunities in new drug assets that match our strategic focus areas and companies that share our drive towards excellence in medicine.

Contact: Kaelin Cho, Head of Global BD
brisa@yuhan.co.kr | <http://eng.yuhan.co.kr/Main/>

ZYGOSITY



Zygosity operates at the interface of machine learning, synthetic biology and gene engineering to develop solutions to significant unmet medical needs. By applying precision engineering for cell and gene therapies, we deliver CRISPR-edited solutions with the highest standards of purity, safety and efficacy.

Current gene editing is error-prone and results in genetic impurity. Imprecise edits mean impure medicines in which only a fraction of the cells have the desired genetic correction. This severely limits the potential for both *in vivo* and *ex vivo* therapeutic applications.

Our solution uses a machine-learning tool, ML Concert™, to provide specific cleavage and repair outcomes and circumvent genetic impurity. We have robustly benchmarked this capability across different cell types and species. In short, we use data to dictate the cleavage and repair processes.

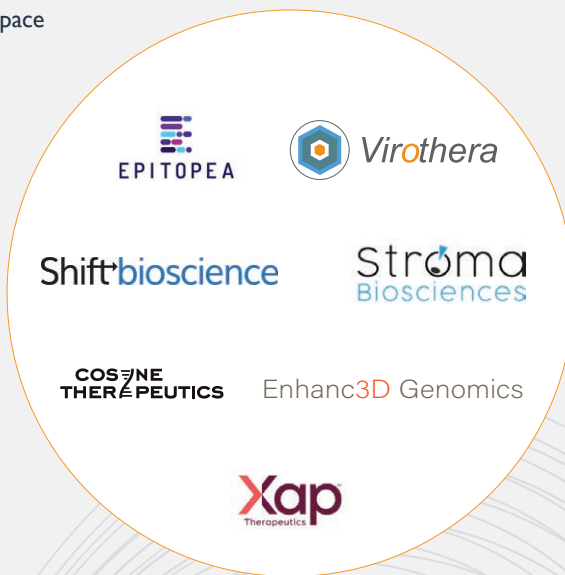
Achieving editing purity will unlock the next generation of CRISPR medicines by providing safety, efficacy and reproducibility. We will realize the potential of our groundbreaking approach by developing a pipeline of *in vivo* genetic medicines, where precise editing is the holy grail of CRISPR gene therapy and will unlock currently inaccessible patient cohorts, and *ex vivo* cell therapies where we will open opportunities for CAR-T, iPSC, NK and macrophage approaches

Contact: zygosity.com

FRAME SHIFT BIO-INCUBATOR

The Milner Therapeutics Institute provides space for start-ups and SMEs through the Frame Shift Bio-incubator.

Frame Shift provides a unique environment for companies to work side-by-side with startups, pharma and academic scientists in an ecosystem physically and culturally designed to spark collaboration and entrepreneurship.



FRAME SHIFT BIO-INCUBATOR

COSYNE THERAPEUTICS

COSYNE THERAPEUTICS

CoSyne Therapeutics is a computational drug target discovery company based in London and Cambridge. The company's mission is to develop next generation therapeutics to help patients with devastating diseases. Their first goal is to cure brain cancer..

Contact: cosyne-therapeutics.com

ENHANC3D GENOMICS

Enhanc3D Genomics

Enhanc3D Genomics ("Enhanc3D") is a private functional genomics company based in Cambridge, UK. Enhanc3D was founded in 2020 out of Professor Peter Fraser's research laboratory at the Babraham Institute and is backed by Bioqube Ventures, Start Codon and private investors.

The Company is developing a platform to unlock the full potential of the three-dimensional organisation of the human genome. Using AI technology, Enhanc3D's proprietary platform directly measures DNA interactions controlling gene regulation. This focuses on the uncharted non-coding regions that make up 98% of the human genome with the aim to identify disease-associated genetic interactions including those that are causal for disease susceptibility and progression. This unique and innovative approach has the potential to transform traditional target discovery methods and make precision medicine an everyday reality for patients. Enhanc3D is led by a team which combines deep technology and therapeutics expertise, with strong operational and commercial experience and is supported by a strong scientific advisory board and founders.

Contact: enhanc3dgenomics.com

EPITOPEA



Epitopea is a new transatlantic cancer-immunotherapeutics company with operations in Cambridge and Montreal. Our company builds on the recent discovery of an abundant new class of tumour specific antigen. We will discover additional antigens and prioritise the most promising for exploitation via multiple modalities to achieve our goal: guiding the adaptive immune system to control cancer.

Contact: www.epitopea.com

SHIFT BIOSCIENCE



We have now directly experienced the devastating collision of the fast pandemic of COVID-19 with the slow pandemics of chronic disease, the latter driving healthcare costs to 1/3 GDP by 2040. Control of biological age with Yamanaka factors promises an effective solution to chronic disease, but risks teratoma formation. Shift Bioscience is focused on rapid discovery of safer biology for age control through an active machine learning approach, promising a new drug class that effectively confronts the increasing challenge of chronic disease.

Contact: www.shiftbioscience.com

| hello@shiftbioscience.com

STROMA BIOSCIENCES



The targeting of stromal cells as anti-cancer therapy is a largely unexplored field. Historically research has mainly been focused on cancer cells, underappreciating that cancer is a disease of tissues rather than of individual cells.

The Stroma Biosciences platform identifies targets and novel treatments targeting stromal cells, thereby cutting this important lifeline for cancer cells. Their emerging pipeline includes several stromal targets to treat lymphoid and myeloid malignancies, with a potential to also advance solid cancer treatments.

Stroma Biosciences has shown for the first time that targeting the stroma with small molecule inhibitors is feasible and substantially improves current therapies in preclinical tumour models. They have deciphered critical molecular mechanisms underlying stromal support of tumour cells and demonstrated that interference with stroma–tumour communication substantially improves therapies, potentially eradicating cancer cells *in vivo*.

Their experience in the tumour microenvironment field for more than a decade puts them at the forefront of stroma research to develop novel therapies.

Contact: Andrew Moore | amoore@stroma.bio
| stroma.bio

XAP THERAPEUTICS



Xap Therapeutics (formerly Rockend), co-founded by Dr James Patterson, is developing a next generation cell-based therapeutic. Their platform is based upon genetically engineered iPSCs, and makes use of multiple new advances across the synthetic biology and genome editing space.

Xap aim to develop a non-immunogenic, intelligent and safe drug that could be used for the treatment of cancers, autoimmune diseases and various other unmet medical needs.

Contact: xaptherapeutics.com



Virothera (formerly Virokine Therapeutics Ltd) has proprietary platform technologies to solve the problem of controlling immune cell targeting *in vivo*. We are a start-up preclinical stage biotech with novel gene immunotherapies addressing difficult to treat persistent disease. For our first target, HSV2, a global STD pandemic, we use our novel immune presentation platform combining genes to stabilise the virus entry complex in membranes (VLM, virus like membranes); in models this immunisation shows complete protection from acute disease. Adding our novel immunomodulator gene (VIT, virokinine immune therapeutic) controls cellular immune response for durable protection from recurrences, while the converse (CIR, cytokine immunoregulator) has potential to eliminate a dysregulated response, for example in Covid. Funded by NIH/ NIAID for IND-enabling preclinical model *in vivo* studies in the USA, the prophylactic nucleic acid HSV2 vaccine shows high efficacy and the therapeutic is under evaluation for the clinic. In discovery stage, we tune our gene technologies for other infectious disease and cancer.

Our team places founder Professor with experienced Directors in Corporate Finance and BD, expert scientific advisory Board from Oxford, Stanford, Harvard and Pharma, plus highly qualified lab staff. Last year, we showed preclinical proof of concept, filed three company owned patents and this year were honoured to move to the Frame Shift incubator at the Milner Therapeutics Institute in Cambridge.

Contact: info@virothera.co.uk

| www.milner.cam.ac.uk/frame-shift/

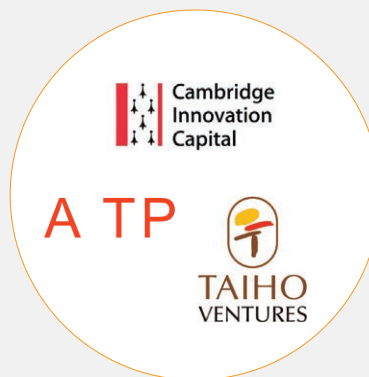
AFFILIATED RESEARCH INSTITUTIONS

The Affiliated Research Institutions programme, established in October 2017, now includes 14 academic institutions across four continents. These partners share our vision of developing new models for research collaboration across industry and academia to transform pioneering science into therapies.



AFFILIATED VENTURE PARTNERS

The Affiliated Venture Partners programme, operational since October 2017, provides mentoring and potential funding for the start-ups within the Start Codon Accelerator and the Frame Shift Bio-incubator.



AFFILIATED SOCIETIES & CHARITIES

We work with and support various societies and charities throughout Cambridge and beyond.



NO	POSTER TITLE	PRESENTER	INSTITUTION
1	The GSK Immunology Network: targeting the immune system through open innovation	Emma Koppe	GSK
2	A streamlined workflow for analytical characterization of antibodies	Sun Hye Kim	Genedata
3	3D bioelectronic models of the human gut and microbiome	Chrysanthi-Maria Moysidou	University of Cambridge
4	Towards discovery of novel targets and medicines by antibody phenotypic screening on glioblastoma stem cells	Abdalla Mohamed	Cancer Research Horizons
5	DDX3Y is aberrantly expressed in male lymphoma cells and is an attractive therapeutic target	Chun Gong	Wellcome MRC Cambridge Stem Cell Institute, University of Cambridge
6	Harnessing multiome single-cell approach to improve the fidelity of human intestinal epithelial organoid-derived cell types	Francesca Perrone	University of Cambridge
7	Follistatin resistant Activin A	Alice Victoria Taylor	Qkine
8	Identification of novel therapies for KRAS mutant cancers using fruit fly avatar models and <i>in vivo</i> high-throughput drug screening	Nahuel Villegas	Vivan Therapeutics
9	The health data research hub for inflammatory bowel disease — gut reaction	Laetitia Pele	NIHR IBD BioResource
10	Automated tissue dissociation for downstream Omics applications using VIA Extractor™ tissue disaggregator from Cytiva	Devina Divekar	Cytiva
11	MAVEN: GUI compound mechanism of action analysis and visualisation using transcriptomics and compound structure data	Layla Hosseini-Gerami	University of Cambridge
12	PhoreMost — Drugging the Undruggable® for the benefit of humankind	Joy Shih	Phoremost
13	CETSA®EXPLORE: target engagement profiles to study SAR, off-targets, and toxicity at proteome wide level	Sean Tyacke	Pelago Bioscience
14	Molecular mechanisms of actin regulation in health and disease	Jenny Gallop	Gurdon Institute and Dept Biochemistry, University of Cambridge
15	Bioelectronic screening platform for monitoring tumour-derived extracellular vesicle-induced epithelial-to-mesenchymal transition in real-time	Walther Traberg	University of Cambridge
16	Identifying a novel regulatory role of ACS2 on PI3K-Akt signalling	Bethany Cragoe	Babraham Institute

NO	POSTER TITLE	PRESENTER	INSTITUTION
17	A highly predictive autoantibody-based biomarker panel for prognosis in early-stage NSCLC with potential therapeutic implications	Sabrina Aziz	Sengenics
18	Parp mutations protect from mitochondrial toxicity in Alzheimer's disease	Yizhou Yu	University of Cambridge
19	Integrating <i>in silico</i> design and <i>in vitro</i> screening for epitope-specific nanobody discovery	Xing Xu	University of Cambridge
20	Simulating chronic myeloid leukaemia (CML) under treatment using network biology	Cheng Wai Lei	University of Cambridge
21	Towards unravelling the causes of succinate accumulation during ischaemia reperfusion injury using computational models	Cheng Wai Lei	University of Cambridge
22	Targeting specific non-coding RNA family members with artificial endonuclease XNAzymes	Maria Jose Donde	University of Cambridge
23	Combinatorial drug repurposing in renal cell carcinoma	Gehad Youssef	Milner Therapeutics Institute, University of Cambridge
24	DILIC: An AI based classifier to search for drug-induced liver injury literature	Sanjay Rathee	Milner Therapeutics Institute, University of Cambridge
25	scRNA-Seq based drug repurposing for targeting alveolar regeneration in idiopathic pulmonary fibrosis	Anika Liu	University of Cambridge and Milner Therapeutics Institute
26	Development of functional assays to investigate intestinal epithelial barrier in patient-derived gut organoids	April Rose Foster	Milner Therapeutics Institute and University of Cambridge
27	Identification of novel lung cancer targets in patients pre-disposed to COVID-19	Michelle Barnard	Cancer Research Horizons – AstraZeneca Antibody Alliance Laboratory and Milner Therapeutics Institute
28	The Joint AstraZeneca – Cancer Research Horizons Functional Genomics Centre	David Walter	Cancer Research Horizons
29	Identifying driver-specific vulnerabilities in paediatric high grade glioma subtypes	Antonella de Cola	University of Cambridge
30	Partner alteration-specific tumor-vascular interactions in models of diffuse midline glioma	Amelia Foss	University of Cambridge

NO	POSTER TITLE	PRESENTER	INSTITUTION
	ONLINE ONLY POSTERS		
1	Discovery of novel epidermal growth factor receptor (EGFR) inhibitors using computational approaches	Donghui Huo	<i>University of Cambridge</i>
2	De-risking CVD drug discovery and development	Huong Fischer	<i>Genome Biologics</i>
3	Comparative pan-proteome analysis of nontuberculous mycobacteria species for the identification of broad-spectrum targets	Aishwarya Swain	<i>Pondicherry University</i>
4	Computational prioritization of therapeutics targets in leishmania species: Towards anti-leishmanial drug discovery	Jyoti Prava	<i>Pondicherry University</i>
5	Identifying and validating new drug target candidates for SOX2-driven squamous cell lung cancer	Daniel Kottman	<i>University of Cambridge</i>

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