



2026

Impact Report

Bringing UCL's brilliant ideas to life.

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Foreword



As UCL marks its 200th year, this is a moment not merely for celebration, but for reflection; an opportunity to consider how a university founded on bold, independent principles continues to shape the world through the curiosity, courage and creativity of its people.

For two centuries, our community has pushed at the boundaries of the possible. From pioneering breakthroughs, such as the first operation under anaesthetic, to countless contributions across the full spectrum of academic disciplines, UCL has sustained a tradition of innovation rooted in a deep commitment to public good.

This year's Impact Report is a snapshot of that story, highlighting how UCL Ventures has turned great ideas into real-world impact for over 30 years.

By helping colleagues protect intellectual property, attract investment and build businesses that take discoveries to market, UCL Ventures has become a key driver of our innovation ecosystem.

Autolus stands as a powerful example. The company's CAR-T immunotherapy is now treating NHS patients with acute lymphoblastic leukaemia. Born in 2014 from

the partnership between UCL clinicians and UCL Ventures, Autolus shows what becomes possible when world-class research meets strategic investment and a determination to serve society. Ventures like this show how the right support can produce businesses that save lives, generate skilled jobs, and strengthen the UK's scientific landscape.

The breadth of innovation at UCL extends far beyond the life sciences. From engineering and chemistry to humanities and AI, and from robotics to mathematics, our academics advance knowledge that addresses the major challenges of our time.

As we celebrate this milestone anniversary, we pay tribute to the entrepreneurial spirit that animates our academic community: a passion for discovery, a dedication to improving lives, and an unwavering belief in the ability of research to change the world.

This shared ambition – a desire to create lasting, positive impact – will continue to inspire generations of students and scholars in the centuries ahead.

**Dr. Michael Spence AC,
UCL President & Provost**

What we do

Bringing brilliant ideas to life – and to market

We believe that truly exceptional research and ideas deserve a chance to change the world, with the expert support to make them happen.

That's why we're dedicated to working side by side with UCL's researchers, clinicians and innovators to realise the full commercial and social value of their research.

By connecting bold ideas with the right expertise, investment and networks, we protect, shape and launch innovative technologies and services – building ventures and licensing opportunities that are ready for investment, ready for growth, and ready to change the world.

Our multidisciplinary teams – from legal services and intellectual property protection to business strategy, marketing and project management – ensure brilliant ideas and research from the university gets the right focus in order to find the most effective route from discovery to market.

We connect great ideas with the funding needed to reach market, investing £910,000 in early-stage research through our Seed and Proof of Concept funds last year, and £15.5m through our tech funds over the last five years. Meanwhile, by building connections with venture capital providers, we help our ventures scale-up to bring their innovations to us all.

Getting these ideas to market benefits us all. Whether that's a transformative new therapy for blood cancers or a rare childhood disease, climate tech to reduce greenhouse gases, a community initiative to map and avoid air pollution, or even an AI algorithm to enable your sofa delivery.

As one of the UK's most established and self-sustaining commercialisation specialists, our successful spinouts and licences generate significant income, create jobs across the UK, attract further investment and help fuel the next generation of discovery at UCL.

Right now, our work couldn't be more important. We're helping ensure that university innovation delivers national growth, global competitiveness and solutions to the defining challenges of our time.

“For over 30 years, we've built a sustained engine of commercial success, turning exceptional research into real-world ventures and licensing deals across every discipline.

Building on 200 years of UCL's pioneering ideas and world-leading faculties, we're proud to help shape a culture of innovation in London and beyond.”

Dr. Anne Lane,
CEO, UCL Ventures.



UCL Ventures projects are innovating sectors from diagnosis to drug discovery.

A year in statistics

2,342

People employed by UCL Ventures spinouts across the UK.

£250,000

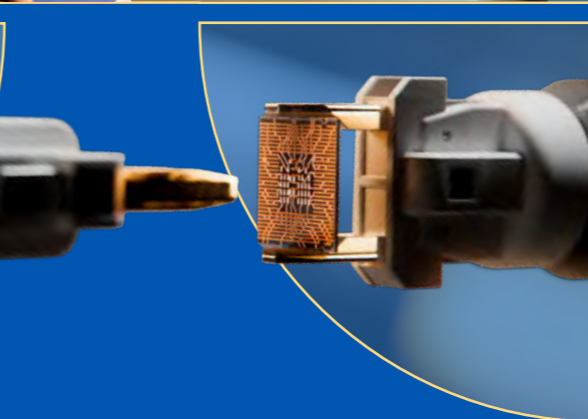
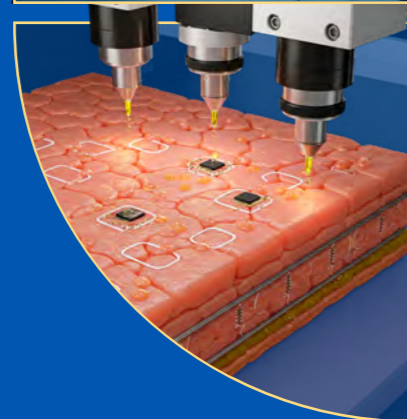
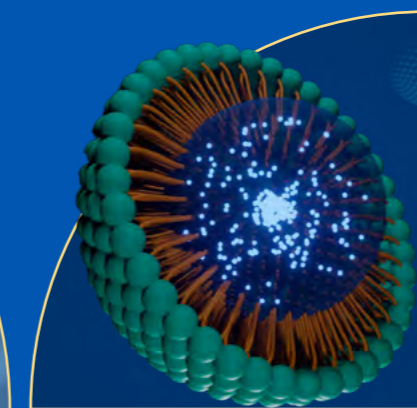
Seed funding awarded.

£3.06bn

External investment raised by UCL Ventures spinouts (2020/2021 – 2024/2025).

£147.3m

UCL Ventures spinout turnover.



£245m

Portfolio value.



12

Active Social Ventures.

£660,000

Proof of Concept project funding.

£69m

Equity portfolio value. Value of shares held in spinouts and companies.

95

Active spinouts.

£15.5m

Invested in early-stage UCL Ventures innovations by UCL Technology Funds (2020/2021 – 2024/25).

18

Therapeutics in pipeline.



*all statistics are from 2024/2025 unless stated.

Impact

We're driven by a simple belief: exceptional research deserves the chance to change the world, with the expert support to make it happen. From pioneering cancer therapies and treatments for rare diseases to AI innovations tackling carbon emissions, our focus is always the same: turning world-class research into real-world progress. Because when great ideas find their market, they change the way the world works, lives and thrives.



“If we're conscientious, then AI can help us create a fairer and freer society, and a world of abundance where the whole of humanity can prosper and thrive.”

Dr. Daniel Hulme, Chief AI Officer, WPP Satalia.

Credit: Koelenmesse.

Satalia: solving big business' biggest challenges

Satalia is a pioneering AI company that specialises in blending expert consultation with specially-delivered AI systems to help large businesses solve highly complex problems – using smart algorithms to make things more efficient, like planning the best delivery routes for lorries or allocating staff to projects without waste.

Established in 2008 by Dr. Daniel Hulme, Professor Sir Anthony Finkelstein and Dr. Alastair Moore (all UCL Computer Science), Satalia was supported by UCL Ventures from the beginning through Proof of Concept funding to build prototypes, conduct market research and validate the technology to establish them in the marketplace.

Satalia's smart algorithms now deliver smart marketing, workforce and resource management and logistics co-ordination to huge businesses including Tesco, DFS, Coca-Cola, and Odeon.

Alex Salden, Managing Director, The Sofa Delivery Company, said:

“We deliver sofas sold by either DFS or Sofology: around 12,000 to 15,000 orders per week, 250 vehicles on the road every day, and 1,300 colleagues – it's a pretty big operation. Our biggest problem was around route optimisation and scheduling and the customer journey.

After working with Satalia, customer feedback was unbelievable. I reckon we saved more than £1m in the first year through routing and scheduling. That's before considering the impact on our carbon footprint and mileage!”

19%

Reduction in unexpected driver overtime.

8%

Increase in net promoter score (NPS).

3hr

Delivery slots made possible.

£1m+

Saved for DFS in one year alone through optimised routing and scheduling.



Satalia is helping make companies more efficient through AI.

From lab to patient: Autolus' CAR-T therapy

Autolus Therapeutics was founded in 2014 at UCL's Cancer Institute with the ambition to re engineer the immune system to fight disease. Today, that vision is becoming reality for patients, including those living with aggressive blood cancer and multiple sclerosis (MS).

A powerful reset

At just 28, Oscar Murphy was living with B-cell acute lymphoblastic leukaemia (B-cell ALL). He received chemotherapy and a donor stem cell transplant, but his cancer returned. "The leukaemia I've got is so fast acting," he said. "It needs an even quicker response to stop it. And we've now got an answer for that."

Oscar became the first patient in England to receive AUCATZYL (obe-cel) on the NHS, a next generation CAR T therapy developed by Autolus and delivered at Manchester Royal Infirmary.

Obe-cel was approved for NHS use in England in November 2025 for patients over the age of 26 with B-cell acute lymphoblastic leukaemia that has returned or not responded to other treatments. Around 800 new cases of B-cell ALL are diagnosed every year in the UK.

The treatment takes a patient's own T-cells, engineers them to recognise the signature of their cancer, and returns them to the body as a potent 'living medicine'. These reprogrammed cells can continue to grow and work long after infusion.

The same obe-cel technology is being explored as a potential one-shot treatment for MS. Building on its CAR-T platform, Autolus announced in October 2025 that it had dosed the first patient in its Phase 1 BOBCAT trial. Emily Henders, who has had relapsing MS for four years, was among 18 patients in the trial. "I'm feeling normal and I've got energy back," she reported.

Autolus was founded by Dr. Martin Pule and his collaborators at the UCL Cancer Institute and Great Ormond Street Institute of Child Health. The spinout venture began its journey with Proof of Concept funding. UCL Ventures support included facilitating the spinout process, managing intellectual property, and fostering partnerships. The company has raised over £950m of investment capital since incorporation, employing more than 450 people, and opening a state-of-the-art production facility, The Nucleus in Stevenage.

"One-time treatments for conditions with limited options demonstrate what the UK can achieve when world class clinicians, researchers and innovation support work in partnership."

Dr. Richard Fagan, Director of Biopharm, UCL Ventures.



Oscar Murphy, the first patient to be treated with AUCATZYL on the NHS (credit: BBC News).

Healthy Living: helping people with type 2 diabetes manage better

Healthy Living is an online structured education programme which uses cognitive behavioural therapy to empower people with type 2 diabetes to improve their health and wellbeing by supporting them to make positive lifestyle changes. Developed by the late Professor Elizabeth Murray (UCL Department of Primary Care and Population Health) alongside other specialists, the technology was licensed by UCL Ventures to NHS England so it could be made available nationally. The service now has over 95,000 registered users.

Over 5.8 million people in the UK are living with diabetes, around 90% of which have type 2 diabetes. It has a huge impact on people's lives and long-term health and costs around 6–10% of the entire NHS budget.



Healthy Living is a free-to-use NHS online service.

Promoting a healthier lifestyle

"So far, I have lost around 18lbs and I want to lose another 14lbs. This has been brought about by the changes I have made to my diet after learning more about type 2 diabetes through the Healthy Living programme. It has helped me understand in more detail about all facets of the condition, and helped me when I fall off the wagon. My sleep is better, and I feel much brighter and healthier in my whole being."

Ildwal, a keen golfer and travel enthusiast, joined Healthy Living after being diagnosed with type 2 diabetes.

Over **5.8 million** people in the UK live with type 2 diabetes.

Type 2 diabetes is estimated to cost **6–10%** of the NHS budget.

Healthy Living has over **95,000** registered users.



Endomag: transforming breast cancer care with magnetic sensing

The diagnosis and treatment of breast cancer is undergoing a revolution, thanks to a magnetic nanoparticle technology developed by Professor Quentin Pankhurst at UCL's Institute of Biomedical Engineering. Replacing radioactive tracers, the sensing technology can prevent unnecessary surgery, improve surgical outcomes, and increase patient access to the best standard of care. We spoke to Professor Pankhurst, who created his pioneering company Endomag with the support of UCL Ventures.

How has Endomag changed breast cancer treatment?

The real impact has been making magnetic methods clinically accepted and globally available, offering a safe alternative where radioactive tracers aren't accessible, such as in rural areas. Our injectable magnetic nanoparticle fluid, Magtrace, used alongside the Sentimag sensor, is safe and effective and has now been used in over 45 countries, with more than 700,000 procedures.

How has UCL Ventures supported you in Endomag's journey?

UCL Ventures was involved early on, supporting grant proposals and providing hands-on help to develop our pitch and through clinical studies and regulatory milestones. UCL Ventures' backing was crucial in the early days, especially in navigating funding rounds and Proof of Concept work.

What's next for Endomag and for magnetic nanoparticles in cancer treatment?

New data is indicating the benefit of using magnetic fluids for lymph node detection and magnetic seeds for lesion localisation in other cancers too, such as head and neck, prostate, gynaecological and melanoma. I'm also involved in other applications such as

magnetic hyperthermia for cancer therapy and in blood purification for treating malaria and optimising gene therapy. The potential for magnetic technology in healthcare is vast!

Endomag's technologies have already benefitted over 700,000 women around the world.



Professor Quentin Pankhurst,
Co-founder, Endomag.



Endomag's Sentimag technology.



Jeri's Endomag experience

In 2019, Jeri Francouer was diagnosed with a type of breast cancer called DCIS for the second time. Back in 2003, when Jeri first got tested, a radioactive tracer was used that caused her significant pain. This time, Endomag's Magtrace was used instead.

Jeri's cancer was not invasive, meaning no further surgery was needed. Jeri reported a pain-free experience with Endomag.

"There was minimal discomfort. It was basically pain-free. I believe that this is a gamechanger for surgical treatment in breast cancer."

Jeri Francouer, Endomag patient.

Community

For two centuries UCL has demonstrated that universities should serve not just as centres of learning, but as engines of social progress and community transformation. UCL Ventures has continued this legacy with a dedicated focus on social impact, establishing a dedicated Social Ventures team to support academics to form businesses whose profits are devoted to helping communities solve specific challenges.



“It was never about making big bucks for shareholders.”

Louise Francis, Co-founder, Mapping for Change

Residents participating in a mapping workshop.

Mapping for Change: research-led change for communities

Mapping for Change uses the power of maps, crowdsourced data and inclusivity to empower people and communities to influence policy and decisions in urban planning, health and more, so that their voices are heard. It especially benefits underserved and marginalised groups.

Founded by UCL academics Professor Muki Haklay, Louise Francis and Christopher Church, Mapping for Change’s Community Maps online participatory

mapping platform provides an effective tool for enacting change.

UCL Ventures supported Mapping for Change by providing Proof of Concept funding, intellectual property protection and an accelerator programme called Health Social Innovators. It has gone on to support community projects in more than 20 countries.

Mapping for Change benefits underserved and marginalised groups.



Redbridge: community action on air pollution

Mapping for Change worked with the London Borough of Redbridge to empower the community to monitor local air quality, raise residents’ awareness and measure behaviour change and health outcomes.

Mapping for Change’s ‘We Care for Our Air’ initiative provided equipment and training for residents to monitor nitrogen dioxide and fine particulate pollution near their homes, analysing and sharing the results each month. Mapping for Change engaged pupils in local primary schools and supported cycle training to encourage car-free travel.

114 community monitoring locations were established, air quality workshops delivered in schools and a publicly-accessible map created to enable residents and visitors to make informed choices about outdoor activities and travel routes to minimise their exposure to harmful pollution.



A volunteer assists Mapping for Change, installing air quality technology in Redbridge, London.

ReadClear: restoring reading for people with visual impairment

There around 4 million people globally living with dementia and brain-related visual impairment; 30% of stroke survivors live the rest of their lives with some kind of visual impairment. For many years these people have been struggling to follow lines of text, getting lost on the page and seeing words as a cluster.

ReadClear is an app which minimises visual distractions on screens, highlighting one section of text at a time to improve readability. Co-produced with people with specific neurological reading challenges, it was designed by Dr Aida Suárez-González from the UCL Dementia Research Centre.

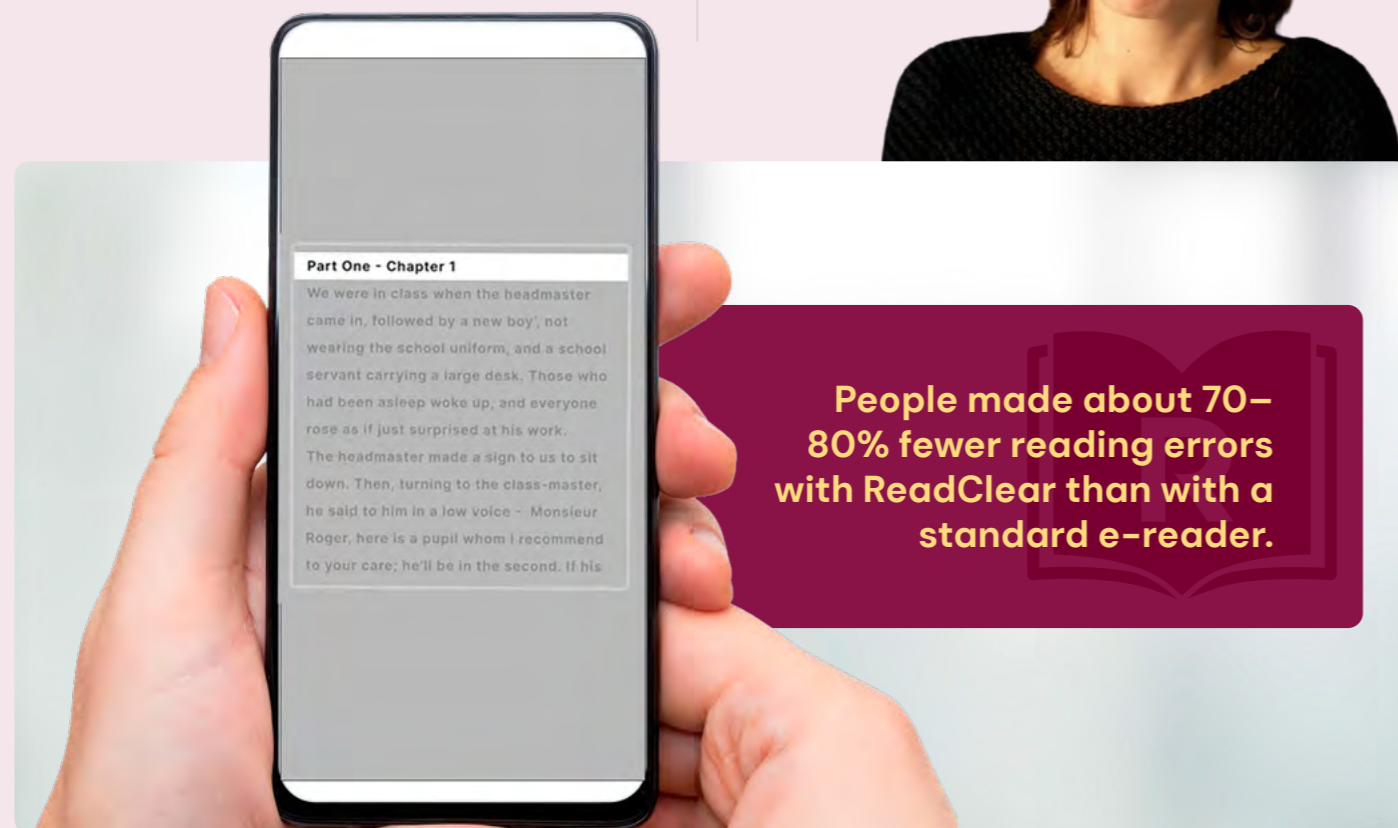
UCL Ventures supported ReadClear to successfully apply for a UKRI Accelerator Award and guided the social venture throughout its journey to bring the technology to market.

“Investing in technology like ReadClear, and making it freely available, would pay back tremendous amounts, giving these people something back of their lives so they can live as well as they possibly can, for as long as they possibly can.”

Roberta Mckee Jackson, The Rare Dementia Support Team

“ReadClear can improve reading in people with brain-related visual difficulties resulting from neurological conditions, such as stroke or dementia. I would like this app to be everywhere... in every phone, tablet and browser... to be accessible for anyone who may need it.”

Dr. Aida Suárez-González, Founder, ReadClear.



The ReadClear app interface.

Diversity Data Hub: helping build truly diverse workforces

Large organisations often lack reliable tools for building genuinely diverse and inclusive workplaces. Established by Dr. Claire Tyler and Professor Lindsey Macmillan (UCL Institute of Education), Diversity Data Hub is a data-led collaboration between UCL and large UK employers. It provides deep insights into why certain groups are less likely to obtain job offers for entry-level roles such as graduate roles, apprenticeship and work experience. It also focuses on professional progression within companies.

The project provides a comprehensive report to employers detailing how to improve their hiring process to create a more diverse and inclusive environment.

START: practical support for those caring for relatives with dementia

Most people with dementia live at home with support from a family member, but those family carers often experience symptoms of anxiety and depression and decreased quality of life.

Developed by Professor Gill Livingston, Dr Penny Rapaport and Dr Sarah Amador (all from UCL Brain Sciences), START (STrAtegies for RelaTives) provides a package of support including online relaxation exercises and downloadable manuals offering coping strategies for family carers.

It has been proven to be clinically and cost effective in reducing anxiety and depressive symptoms and increasing quality of life.



UCL Ventures at the heart of the innovation community

UCL Ventures plays a central role in the UK's innovation community – from training academics to be the next generation of business leaders, to collaborating with other universities to find the net-zero materials of the future.

I-O programme: inspiring the spinout founders of the future

The I-O (Ideas to Opportunities) programme supports academics from their first steps in exploring the value of Intellectual Property – providing training, resources and networking to support their journeys towards a successful spinout or licence.

The programme has two main elements.

I-O Inspire is a free seminar series delivered at eight weekly sessions presented by UCL Ventures commercialisation experts with guest speakers from industry and venture investment. The Seminars cover

different aspects of the journey to market, from idea assessment to commercialisation, with group activities to reinforce skills such as understanding market needs and pitching to investors.

I-O Converse offers insightful conversations with UCL academics who've been through the commercialisation process. Sharing their journey through engaging fireside chats, the sessions are a chance to gain informal guidance in a relaxed, collaborative setting and meet like-minded peers.

"It's been a really great experience. As someone who comes from a solely academic background, it was really useful, introducing me to the basic concepts of moving from the academic world into a spinout, or licensing our product. It also helped me get more comfortable with the linguistics of the business world."

Dr Anka Lucic, Department of Biochemical Engineering, UCL

The LifeArc Fellowship

UCL Ventures is a partner in the LifeArc Fellowship, a year-long training programme that develops the next generation of technology transfer professionals seeking to bring healthcare technologies to market.

UCL Ventures, Imperial College Innovations, and Queen Mary Innovations each provide structured learning, mentorship, and hands-on experience in commercialising university healthcare research and innovations.

The initiative is funded and managed by LifeArc, a not-for-profit life science organisation tackling rare diseases and supporting promising initiatives in global health.

The Fellowship provides structured learning, mentorship, and hands-on experience.

MATcelerate ZERO

MATcelerate ZERO is an industry-led accelerator designed to fast-track university-developed innovations and research in new material that can help support the transition to Net Zero. Its mission is to bridge critical gaps in funding and market insight and accelerate the process of translating materials research into real-world applications.

MATcelerate ZERO has a three-pronged strategy: create industry-university partnerships, develop minimum viable products to de-risk investment, and reduce the lab-to-market timescale from 20+ years to seven years.

A network of leading UK research universities, including UCL, Cambridge, Oxford, Imperial, Manchester and Bristol, collaborate through their Technology Transfer Offices, focusing on technology areas such as energy generation and storage, low-carbon construction, and carbon capture and storage.



I-O Inspire Spring Programme, 2025.



2025's LifeArc Fellows join UCL Ventures' Senior Business Manager Harriet Story (second from right).

Future

Our work turning world-class research into real-world solutions is helping create a brighter future. From assisting in Net Zero efforts to tackling health challenges like cancer and inherited diseases, we champion bold ideas and empower innovators to create impact that lasts. Here's to the next generation of breakthroughs.



Stanhope AI's CEO Professor Rosalyn Moran.

Phasecraft: unlocking tomorrow's quantum computing power today

Phasecraft's mission is to make quantum computing a reality in years, not decades, by designing quantum algorithms that can work on today's hardware.

Phasecraft's software platform, Mondrian, uses quantum principles to solve highly-complex, real-world computational challenges up to 1,000x faster, opening up whole new advances in materials science, renewable energy networks, and novel drug design and discovery.

Founded by Professor Toby Cubitt (UCL Quantum Science and Technology Institute), Professor Ashley Montanaro (University of Bristol), and Professor John Morton (UCL London Centre for Nanotechnology), Phasecraft collaborates with quantum hardware leaders like Google Quantum AI, IBM and industrial partners.

Phasecraft received pre-seed funding led by UCLTF and has since raised over \$50m.

"Our platform Mondrian has taken a major step toward commercial quantum utility, showing how enhanced quantum algorithms can unlock near-term breakthroughs."

Professor Ashley Montanaro,
Co-Founder, Phasecraft.



Stanhope AI: neurology-inspired AI for human-like decisions

Stanhope AI is developing a new form of AI to equip autonomous systems with low-energy, super-smart, human-like thinking. Founded by Professor Rosalyn Moran (Kings College London), Professor Karl Friston (UCL Institute of Neurology) and Dr. Biswa Sengupta, Stanhope AI blends neuroscience and artificial intelligence, using groundbreaking research in computational neuroscience by Professor Friston.

Stanhope's algorithms can be installed on devices such as drones or robotic vehicles, operating in situations where data communications or GPS connectivity is unavailable. Unlike traditional AI, they self-update in real time using onboard sensors, enabling autonomous decision-making in unpredictable environments, such as industrial fires, deep sea expeditions, or chemical spills.

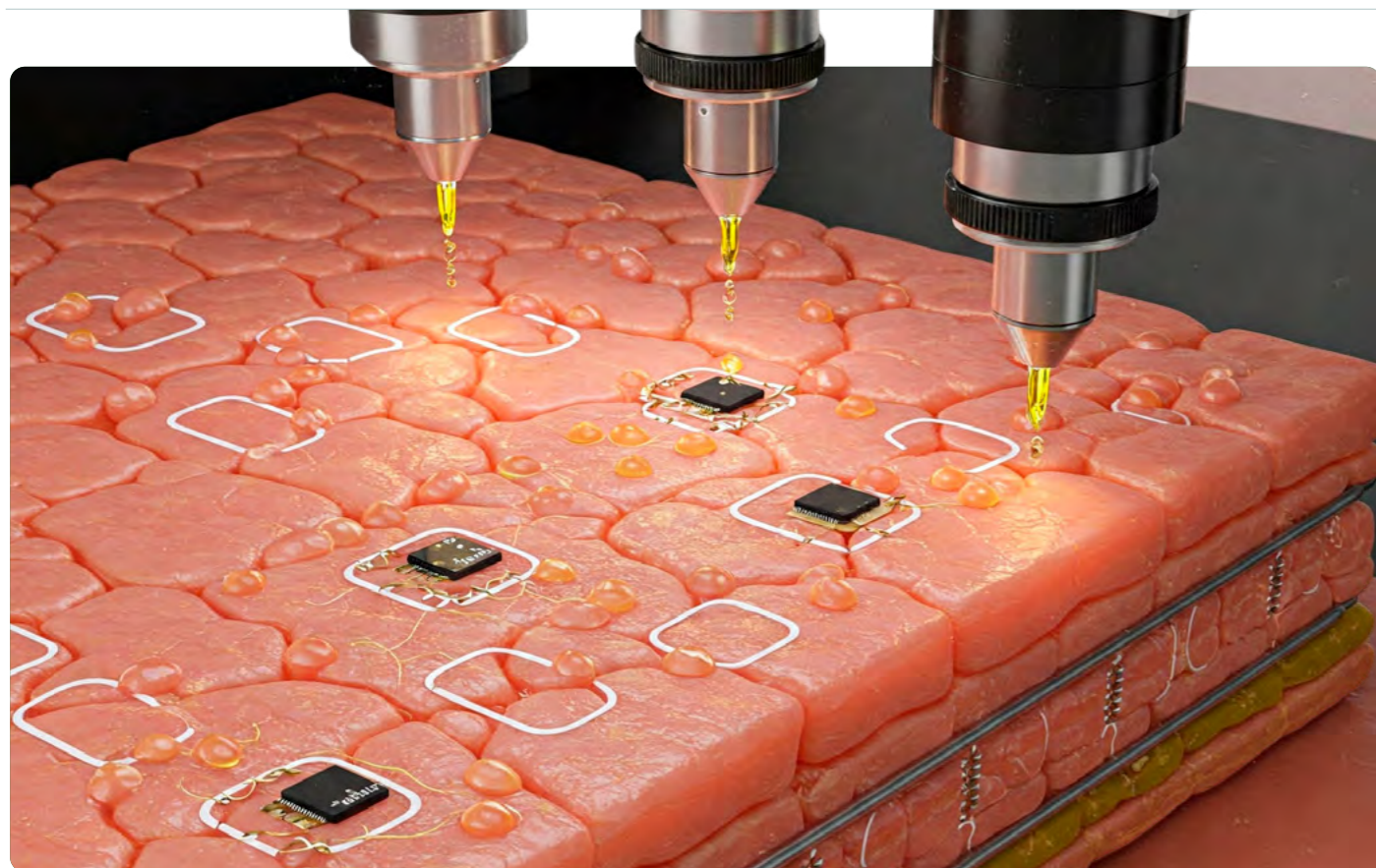
Professor Moran said: "Our mission is to bridge neuroscience and AI for human-like decisions."

The technology has future potential in manufacturing, robotics and embodied AI: integration into physical systems, allowing them to interact with the real world through perception, reasoning, and action.

Backed by UCLTF, Stanhope AI raised £2.3m seed funding in 2024.



Stanhope AI demonstrates its drone technology.



Ourobionics' has developed a biofabrication machine called CHIMERA, which has the potential to create a wide variety of 3D biologically identical tissues.

Ourobionics: 'human-like' tissues for a future free from animal testing

Imagine a future where animal testing is a thing of the past, replaced by interactive human-like tissues with built-in sensors. Ourobionics works in the field of 4D bioprinting: micro-spraying of cell cultures to build sophisticated human-like tissues such as skin, complete with biosensors, bioelectronics and working structures including pores and hairs.

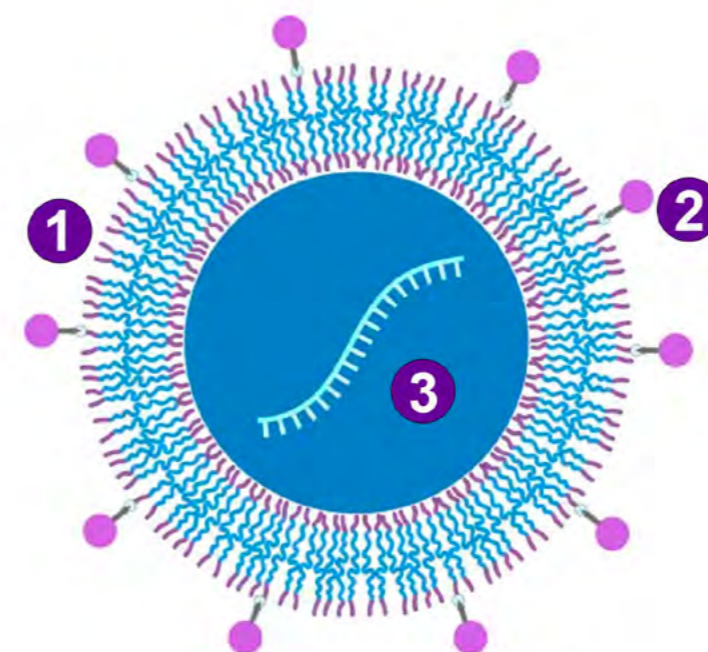
These advanced tissues hold the realistic prospect of an alternative to animal testing in assessing the safety and efficacy of pharmaceuticals and chemical agents.

The technology is founded on Professor Suwan Jayasinghe's work in electro-spraying of cell cultures. UCL Ventures supported the

transfer of Professor Jayasinghe's research to Ourobionics to develop it into a patented state-of-the-art technology, from which this ground-breaking company has developed.

"The key benefit of 4D printing skin lies in the ability to achieve unprecedented precision in cellular organisation and patterning."

Professor Suwan Jayasinghe, Department of Mechanical Engineering, UCL.



1. Polymer nanovesicle.
2. Targeting ligands.
3. Payloads.

ViaNautis' proprietary polyNaut platform is engineered to address the major shortcomings seen in other drug delivery technologies.

Revolutionising drug delivery

UCL spinouts and licences are transforming diagnosis, detection and delivery to help solve some of the world's most challenging health conditions.

ViaNautis is developing 'polyNaut' nanovesicles made from advanced polymers to deliver genetic medicines to the brain and other hard-to-reach areas. Founded by Professor Giuseppe Battaglia, the spinout aims to transform treatment for a wide range of diseases. With UCL Ventures' support in securing intellectual property protection and launching the spinout in 2018, Vianautis raised £20m in Series A funding in 2023 and entered into a strategic collaboration agreement with Lilly in 2024.

Drug delivery is also being revolutionised by UCL Ventures spinout **Intract Pharma**. Intract's 'Phloral' technology ensures

medicines reach precise locations in the gut to improve treatment of conditions such as inflammatory bowel disease. The result of more than 20 years of research, the technology has the potential to transform treatment of many chronic inflammatory diseases. By enabling monoclonal antibodies to reach their site of action in the gut intact so they can be given orally, Intract is targeting patient-friendly, cost effective delivery that reduces reliance on hospital resources.

"We focused on getting a strong patent portfolio and robust preclinical Proof of Concept data."

Dr. Vipul Yadav, Chief Executive Officer, Intract Pharma.



Panda Surgical's handheld robots for neurosurgery.

Tackling the world's most devastating neurological conditions

EpilepsyGTx is tackling one of neurology's toughest challenges: drug-resistant epilepsy. The spinout venture's goal is to make patients with focal refractory epilepsy seizure-free. Its lead therapy, EPY201, uses viral vectors, a modified virus designed to deliver genetic material into cells, to silence overactive brain cells.

UCL Ventures supported Epilepsy GTx's formation, intellectual property protection, and helped secure £10m seed funding in 2024 for preclinical studies and Phase 1/2a trials.

EpilepsyGTx was co-founded by Dr. Stephanie Schorge, Professor Dimitri Kullmann, Professor Gabriele Lignani and Professor Matthew Walker (UCL Department of Clinical and Experimental Epilepsy).

UCL researchers are also developing advanced therapies to treat conditions such as motor neurone disease, a progressive devastating neurodegenerative disease which affects over 1 in 400 people worldwide.

Trace Neuroscience is focusing on UNC13A, a protein which facilitates communication between nerve and muscle cells. The decline in people's ability to produce this vital protein characterises almost all cases of motor neurone disease, leading to wasting, paralysis, and eventual death within 3-5 years.

Trace Neuroscience, co-founded by Professor Pietro Fratta (UCL Queen Square Institute of Neurology) and Professor Aaron Gitler (Stanford), is developing therapies which act at the gene level to restore UNC13A production, re-establish healthy communication between nerves and muscle cells, and improve muscle function.

In 2024, Trace raised \$101m in Series A funding, one of the largest in the sector, supporting clinical trials for its most exciting therapies in neurodegenerative disease.

The next wave of surgical solutions

UCL Ventures spinouts are harnessing AI, precision engineering, and non-invasive technologies, to make procedures safer, more effective, and accessible.

Panda Surgical is developing handheld robotic devices for neurosurgery, which use AI-powered software to improve decision-making, allowing surgeons to reach previously inaccessible areas and perform delicate manoeuvres safely and precisely.

Avoiding invasive surgery altogether is the mission of **Neuroharmonics** led by Professor Bradley Treeby (UCL Department of Medical Physics and Biomedical Engineering).

Neuroharmonics is developing a non-invasive ultrasound technology for highly-targeted stimulation of different regions of the brain. The approach uses precisely-focused sound waves to safely modulate specific brain circuits and is showing remarkable promise in treating neurological and psychiatric conditions, including dementia, essential tremor, and depression.

Combining cutting-edge engineering with deep neuroscientific understanding, Neuroharmonics is building what could become the gold standard for non-invasive neuromodulation, potentially transforming the lives of millions affected by brain disorders, while advancing new frontiers in brain-computer interaction.

"Panda Surgical is a great example of the impactful research and commercial potential at UCL."

Weng Sie Wong, Senior Business Manager, Physical Sciences & Engineering, UCL Ventures.

Origins

UCL: 200 years of discovery, innovation and societal change

Since its founding in 1826, UCL has been defined by a spirit of openness and innovation, and a commitment to making a difference in the world.

UCL Ventures interviewed Professor Dame Hazel Genn, Pro-Provost Bicentennial, to explore how UCL will celebrate 200 years of pioneering breakthroughs that continue to change lives and inspire the future.

2026 marks 200 years since UCL's establishment as the first university in London. The ambition of the bicentennial year is to celebrate and reinforce UCL's founding values, highlight the excellence and impact of UCL's ground-breaking work, and present an ambitious and inspiring portrait of its future.



Professor Dame Hazel Genn, Pro-Provost Bicentennial.

You've been leading on the programme for UCL's bicentenary. What has stood out for you looking back at UCL's past?

What stands out most is UCL's remarkable record of being "first" in so many fields. From its founding, UCL set itself apart by opening education to people of any faith or background at a time when the only other universities in England – Oxford and Cambridge – limited admission to men who subscribed to the Anglican Church.

UCL pioneered disciplines with early Chairs appointed to teach medicine, science, languages and law. We were one of the first to teach subjects as diverse as English, German, Italian, botany, chemistry and engineering.

What has also been vital is UCL's focus on teamwork and collective achievement, rather than just individual accolades. Behind every one of our Nobel Prize winners stands a huge amount of collaborative work. Our new branding reflects this: UCL is a place that facilitates research and helps people do their best work, together. Those foundational values of innovation, openness, and breaking down conventional thinking is what truly distinguishes UCL.

How can the university's past inform its research and impact in the future?

I always say that our history of innovation, discoveries and conspicuous impact are the best evidence of what we are capable of achieving in the future.

Our multidisciplinary and interdisciplinary environment has always been central to that success. It is part of who we are. UCL's strength lies in bringing together people from across all disciplines—arts, humanities, social sciences, engineering, medicine, science and beyond. When we combine these perspectives, we create the conditions in which transformative ideas can emerge.

This way of working is not new; it is embedded in our history. And it is precisely what will enable us to address the challenges ahead with creativity, rigour and impact.

You have a huge programme of UCL200 events, many of which are open to the public. Which are most excited about?

We are launching the year with UCL Illuminated. UCL's iconic Wilkins Building and newly remodelled Quad will be transformed into a dazzling *Son et Lumière* – an immersive experience brought to life with cutting-edge 3D projection mapping, light, music, storytelling and animation. There's the UCL200 Exhibition 'Two Centuries Here' running through the Wilkins Building, Japanese Garden and Student Centre, new publications being released and several artists in residence that will create a lasting legacy for UCL. Not to mention a student-led programme of activities and events, including the UCL200 Summer Festival and UCL The Musical!

What excites me most is the range of activity: from high-profile lectures and roundtables to light-hearted events and demonstrations designed to engage everyone. A key ambition is to use UCL200 to welcome new audiences into UCL and I hope our diverse and engaging programme will open our doors more widely than ever before.

What impact do you hope UCL200 will have?

I hope UCL200 will help people see beyond the headlines and understand the real, positive impact universities like UCL have on society. The institution is full of people dedicated to research, teaching, and making a difference in the world.

One thing I'd love people to appreciate more is the economic and social benefit of UK education, not just to London or the UK, but globally. Our research improves health, economies, and lives far beyond our borders. It's not just about money; it's about the benefit to society, helping people live better, more productive lives.

Celebrating 200 years of discovery at UCL



UCL's founding

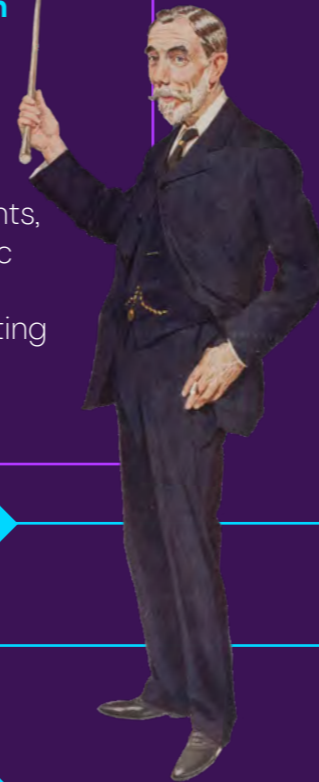
UCL was founded as an institution at the forefront of scientific and social progress.

First public operation under anaesthetic in Europe

Professor Robert Liston performed the first public operation using modern anaesthesia in Europe, paving the way for modern anaesthesiology.

Discovery of noble gases – argon, helium, neon, krypton, xenon and radon

Professor Sir William Ramsay and colleagues identified a new group of elements, expanding the periodic table, leading to vast applications from lighting to space exploration.



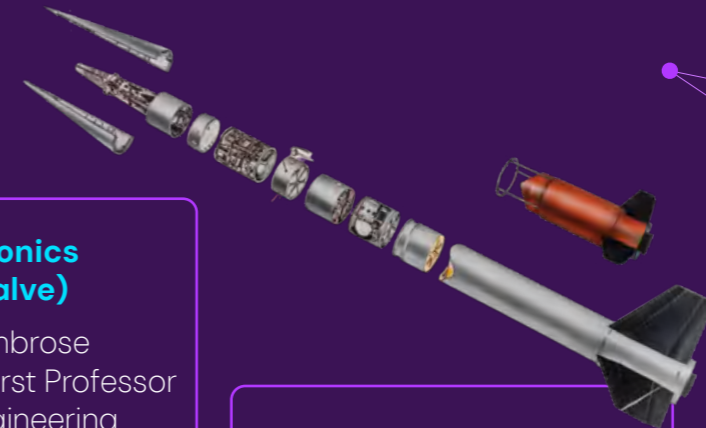
Birth of electronics (thermionic valve)

Professor Sir Ambrose Fleming, UCL's first Professor of Electrical Engineering, invented a device controlling the movement of electrons in a vacuum. The valve signalled the birth of electronics.



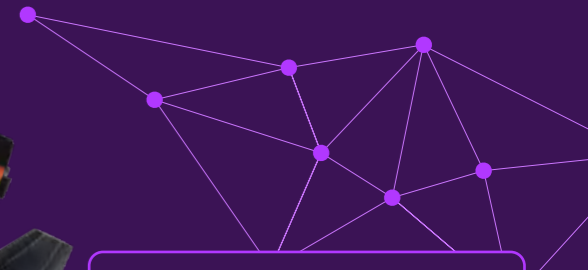
First successful British scientific rocket

Sir Harrie Massey led a team of UK government and UCL academics to launch the first successful British scientific rocket.



Establishment of the first transatlantic computer network

Professor Peter Kirstein helped connect UCL with research centres in the US, laying the groundwork for global digital communication.



1826

1846

1894-1898

1904

1956

1974

1980s

1984

2002

2020

2026

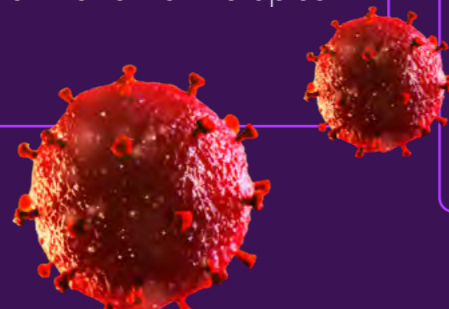
Early work on gene therapy vectors

UCL's Molecular Medicine Unit developed viral vectors (a modified virus) for gene delivery, the basis for modern gene therapies.



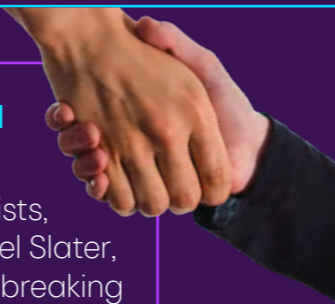
How HIV infects cells

Professor Robin Weiss and colleagues discover that the CD4 molecule on lymphocytes is the binding receptor for HIV, informing the development of diagnostic tests and antiretroviral therapies.



Transatlantic virtual handshake with MIT

UCL computer scientists, including Professor Mel Slater, helped lead a groundbreaking transatlantic 'virtual handshake', an experiment in haptic communication over thousands of miles, with counterparts at the Massachusetts Institute of Technology (MIT), contributing to the development of modern video conferencing.



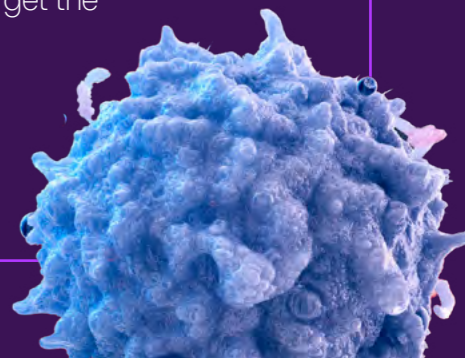
UCL-Ventura CPAP device for COVID-19

Researchers including Professors Rebecca Shipley and Tim Baker led a team from UCL, UCLH, and Mercedes-AMG HPP to rapidly develop the UCL-Ventura CPAP (Continuous Positive Airway Pressure) device.



Revolutionary leukaemia treatment reaches NHS patients

The first patient in England received a pioneering form of 'CAR-T' immunotherapy on the NHS to treat aggressive recurrent leukaemia. Based on pioneering UCL research, the 'obe-cel' therapy reprogrammes immune cells to target the disease and was developed by UCL spinout Autolus Therapeutics.



Financials 2024/25



2024/25 sees UCL Ventures flourish as it expands into new areas

2024/25 demonstrated UCL Ventures' financial resilience and strategic focus as we achieved an overall profit of £3.1m. With a turnover of £28m, our performance was bolstered by milestone payments from the first commercial sales of key cell and gene therapy assets. Royalty income reached £5m, while licence fees, milestones, and recoveries totalled £18.3m.

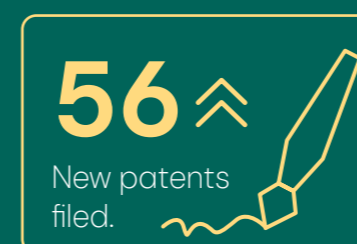
UCL Ventures also generated significant income from sale of a number of successful spinout businesses, in which we had equity.

Importantly, we maintained full financial

sustainability without receiving any central funding or management incomes from UCL. In fact, we were able to return income to the university following successful spinout sales in recent years, with a £5.9m Gift Aid donation to UCL from our reserves, reflecting our commitment to reinvesting in the university's future.

In the last year we have done even more in our mission to work side by side with UCL's researchers, clinicians and innovators to realise the full commercial and social value of their research: there have been 127 inventions disclosed, 56 new patents filed, and 53 licence deals completed.

We have invested £910,000 in Proof of Concept and seed investment early-stage funding for founders to progress their exciting research and ideas to make them investor ready.





UCL East.

Final thoughts

As UCL marks its bicentenary as a crucible of radical ideas, world-changing inventions, and research, it feels fitting to reflect on how UCL Ventures plays an integral role in the university's innovation ecosystem.

Having scaled early-stage businesses myself, I know that it's incredibly challenging to bring great ideas to life and to market successfully. It takes imagination, specialist expertise, tenacity and time. It also takes passion and dedication. And those qualities are exactly what I have found in UCL Ventures, having been Chair for just over a year. Getting technologies, inventions and innovations out of the university and into the world might seem like a business. But the benefits can improve all our lives and be world-changing.

As I hope this report has clearly shown, when great ideas find their market, they change the way we work, live and thrive. And that's what drives us in everything we do – the simple but powerful belief that exceptional research deserves the chance to change the world, with the expert support to make it happen.

The Autolus story shows clearly that this doesn't often happen overnight. It can take a decade or more to bring advanced therapeutics from a university lab to a patient. On the other hand, in the fast-moving world of deep tech, AI applications have to find their market quickly.

That's where an entrepreneurial spirit and commitment to collaboration really come in – many of our successes wouldn't be possible without collaborating with our UCL East network of partner hospitals and fellow universities across London and around the world.

Whether the journey takes ten years or 18 months, the impacts will be felt for

generations to come. And in a rapidly changing and challenging world, that gives us all cause for optimism.

Here's to the next 200 years of building ventures and licensing opportunities that are ready for investment, ready for growth, and ready to change the world.

**Lucy Armstrong,
Chair of the UCL Ventures Board.**



Quotes

“My thanks go to the brilliant engineers, clinicians and team at UCL Ventures who came together and made the life-saving CPAP device happen at a pace that would be considered unimaginable under normal circumstances.”

Professor Rebecca Shipley, Director of UCL Institute of Healthcare Engineering.



“Technologies nurtured by UCL Ventures are demonstrating immeasurable real-world impact, changing lives and driving economic growth. UCL Ventures, an innovator in research commercialisation, is turning groundbreaking ideas into real-world solutions, and CogStack is proud to be part of this journey.”

Dr. Tom Searle, CEO of CogStack.



“Working together is better than going it alone. UCL Ventures recognised that time was of the essence. Their team really cared about our story, and what it meant for us to spin out, and I will never forget that.”

Dr. Maria Leiloglou, CEO and Co-founder of EnAcuity.



“The financing we have achieved reflects the strong confidence our investors have in our technology, team, and mission. With their support, and the assistance of UCL Ventures, we are positioned to bring transformative tools to neurosurgeons and expand access to advanced surgical care for patients worldwide.”

Manios Dimitrakakis, CEO and Co-founder of Panda Surgical, and Honorary Research Fellow at UCL's Department of Medical Physics & Biomedical Engineering.



“UCL Ventures provided essential help with intellectual property protection, licensing, and spinout formation. They offered mentoring in business development, seed funding, and vital introductions to industry partners. Without this infrastructure, Yaqrit could not have reached its current stage.”

Professor Rajiv Jalan, UCL Institute for Liver and Digestive Health, Founder and Chief Medical Officer, Yaqrit.



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