

**INNOVATION AND
ENTREPRENEURSHIP
AT THE UNIVERSITY
OF CAMBRIDGE**

2024

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FOREWORD

Cambridge has made a difference to the lives of millions of people around the world. A constant source of new ideas, technologies, innovations and insights, it has changed the way we live and learn.

The city has also had an important economic impact that belies its size. The University of Cambridge alone produces £30bn of economic impact annually. More than £23bn of this impact comes from commercialising University research, particularly through spinout companies.

This success has not happened by accident, but through a strategic, decades-long commitment to investing in and developing an ecosystem where companies have the potential to go from lab to market quicker than anywhere else.

Entrepreneurship is championed and encouraged at all levels of the University, with more than 95 different activities and groups devoted to some aspect of innovation, startups and growing businesses. They equip aspiring entrepreneurs with the right skills, networks, investment and space to grow and make a mark globally.

Together they form a unique, effective and driven ecosystem that allows anyone – from undergraduate to faculty – to turn a great idea or piece of research into a viable business. It explains why Cambridge is continually recognised as a global leader for innovation and entrepreneurship.

I have had the opportunity to see this first-hand from my role as Chief Executive of Cambridge Enterprise and in helping to establish Innovate Cambridge. I am excited to see how it will strengthen and mature further in my new role as Pro-Vice-Chancellor for Innovation.

Dr. Diarmuid O'Brien

DR DIARMUID O'BRIEN

PRO-VICE-CHANCELLOR FOR INNOVATION



THE CAMBRIDGE ECOSYSTEM

A SCIENTIFIC AND TECHNOLOGICAL SUPERCLUSTER

Cambridge does not fit any conventional mould. This small city, an hour from London, has generated, and continues to generate achievements out of all proportion to its size. Cambridge has evolved into a world class innovation ecosystem, a leader in globally significant research and intellectual property generation.

Often referred to as the 'Cambridge Phenomenon', 'Cambridge Cluster' or 'Silicon Fen', the Cambridge cluster brings together research excellence, deep and varied skills, flexible working space, investment and support services, all integrated through a connected ecosystem.

Central to Cambridge's success is a unique and driven community of exceptional science, people, companies and partners, together tackling global challenges and changing lives.

24  billion-dollar businesses based in Cambridge

40+  science and technology parks

£24bn  in annual turnover generated by knowledge intensive firms

5,500  knowledge intensive firms

73k+  people work for knowledge intensive firms

Largest  biomedical campus in Europe

CAMBRIDGE HAS CREATED MORE UNICORNS PER CAPITA THAN ANYWHERE ELSE IN THE WORLD.*

* Source: Dealroom, 2024.

CAMBRIDGE IS THE GLOBAL NUMBER ONE SCIENCE AND TECHNOLOGICAL (S&T) CLUSTER.*

According to the Index, the Cambridge cluster filed 6,582 patent applications and published 37,136 scientific articles per 1 million inhabitants over the past 5 years.

*Source: 2023 Global Innovation Index (GII)

“ Cambridge is a truly extraordinary place, where leading scientists work side by side with industry and academic partners, sparking ideas and creating life-changing medicines, technologies and services. I am thrilled to see it recognised again as one of the greatest innovation hubs on the planet. ”

PROFESSOR DEBORAH PRENTICE
VICE-CHANCELLOR



AN INNOVATION VISION FOR 2035

AN AMBITIOUS STRATEGY TO SUPERCHARGE CAMBRIDGE

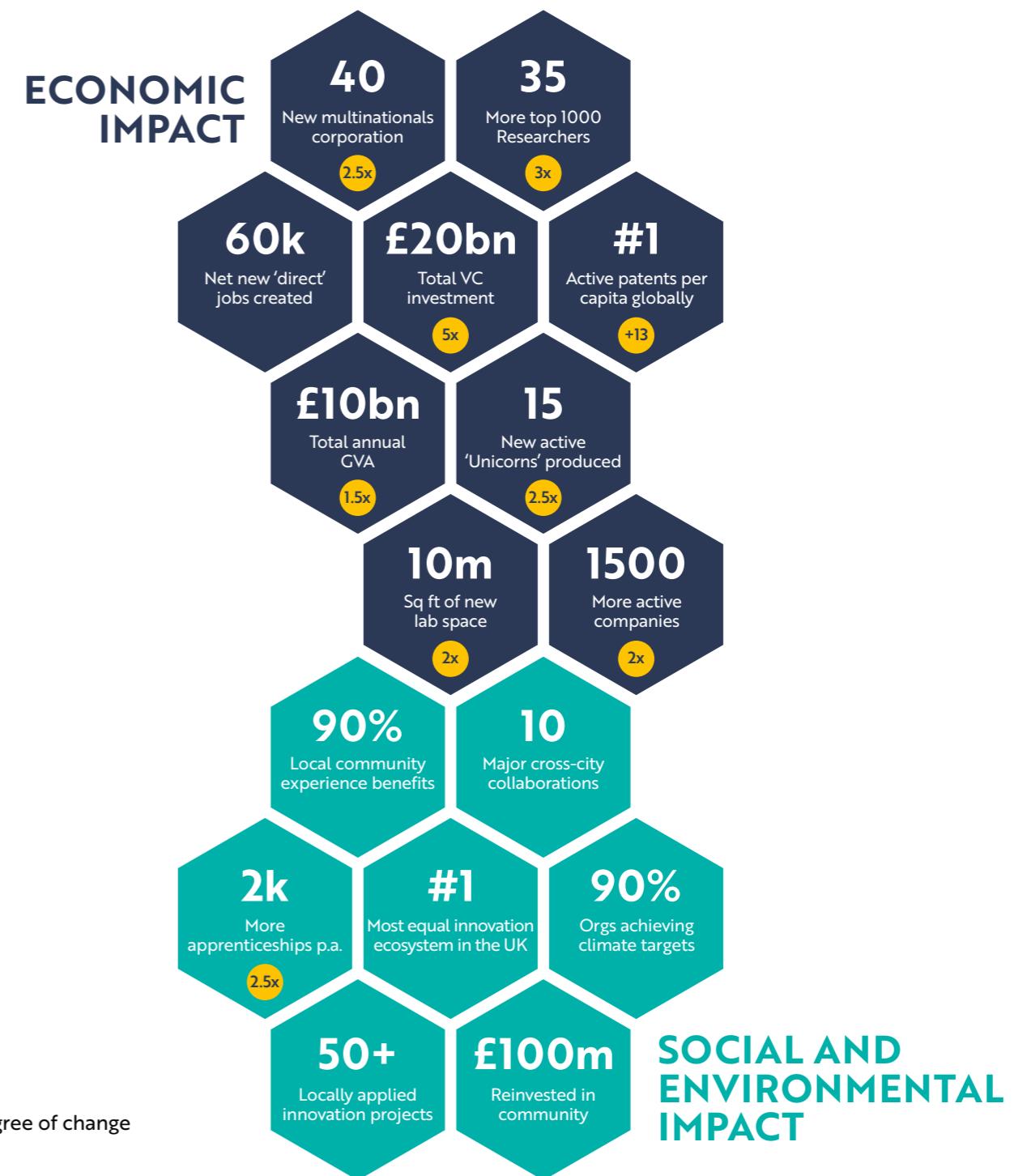
Innovate Cambridge was founded by Cambridge Enterprise, Cambridge Innovation Capital and the University of Cambridge to ensure pioneering discoveries are successfully translated for local and global impact. It recognises the city's unique role in helping drive Britain's growth and acts as the convener for the Cambridge ecosystem to come together and discuss what more can be achieved collectively.

Over 200 organisations signed up to an Innovation Charter for Cambridge and this unprecedented mandate led to consultations with 500+ people to develop an innovation strategy. With partners from both the private and public sector, including AstraZeneca, Microsoft and Arm, Darktrace, Cambridge City Council and Cambridge County Council, Innovation Cambridge has developed an ambitious and broad-ranging vision of innovation for the Greater Cambridge area.

The goal is to accelerate progress, and for the Greater Cambridge ecosystem to accomplish in the next 10 years the same success as in the past 25 years.

A COLLECTIVE AMBITION TO MAKE CAMBRIDGE:
“THE BEST PLACE IN THE WORLD TO MAKE GROUND-BREAKING DISCOVERIES AND TRANSLATE THEM INTO WORLD-CHANGING BUSINESSES.”

BY 2035, THE ECOSYSTEM CAN ACHIEVE:



THE UNIVERSITY'S IMPACT

WHERE BRILLIANT MINDS CONVERGE TO TACKLE THE WORLD'S MOST PRESSING CHALLENGES

At the core of the Cambridge ecosystem sits the 800-year-old University of Cambridge, renowned for its rich history of innovation and the birthplace of groundbreaking discoveries, from the jet engine to the structure of DNA.

The culture of entrepreneurship and innovation continues to thrive, with the University leading in critical areas from life-changing gene therapies to quantum computing and ethical AI.

The depth and breadth of teaching and research is the result of a culture of academic freedom and excellence that connects the discovery of new knowledge with the expertise to turn ideas into companies and organisations that change people's lives.

The University has actively sought to maximise its societal and economic impact by supporting spinout and startup companies created with the purpose of commercialising Cambridge research.

The vast majority of technology companies in the 'Cambridge Cluster' are connected to the University in some way: they are either based directly on University research, are founded or staffed by Cambridge graduates, or work collaboratively with University researchers to find solutions to business problems.

The University has not only been fundamental in creating and spinning-out some of the greatest Cambridge success stories but has helped harness a winning combination of venture capital, government-supported capital investment and infrastructure funding through a strategy of investing in innovation and commercialisation.

Cambridge Enterprise, the innovation arm of the University, has played a pivotal role by supporting and encouraging University of Cambridge innovators, experts, and entrepreneurs to use commercial avenues to develop their ideas and expertise.

500+

SPINOUTS AND STARTUP COMPANIES* CREATED OUT OF THE UNIVERSITY OF CAMBRIDGE, WITH A COMBINED MARKET CAPITALISATION OF OVER

£40bn

*Source: HE-BCI

CAMBRIDGE IS THE NUMBER ONE UNIVERSITY IN EUROPE FOR PRODUCING UNIVERSITY SPINOUTS.*

*Source: Dealroom



THE UNIVERSITY'S ECONOMIC IMPACT

The total economic impact* of the University is estimated at £29.8bn and includes £23.1bn – from the University's research and knowledge exchange activities (including commercial companies spun out from, or closely associated with, the University and other commercial activity carried out at the University).

The report estimated that the University supports more than 86,000 jobs across the UK, including 52,000 in the East of England, and contributes over £13bn in gross value added (GVA).

*Source: London Economics

FOR EVERY £1 THE UNIVERSITY SPENDS, IT CREATES £11.70 OF ECONOMIC IMPACT.

A LEADING HUB OF ENTREPRENEURIAL TALENT

In 2023, Dealroom a global provider of intelligence on startups and tech ecosystems, released data assessing which universities are the most successful at producing entrepreneurial talent, according to a commonly accepted measurement of success: venture capital funding.

It ranked Cambridge as the number one university in Europe for producing entrepreneurial talent and number one globally for founders who have gone on to raise more than \$10m in funding, per inhabitant.

Deeply embedded in the Cambridge culture is a spirit of 'pay it forward' and many of these successful entrepreneurs are very involved in using their expertise to develop and inspire the next generation of venture creators coming out of the University.

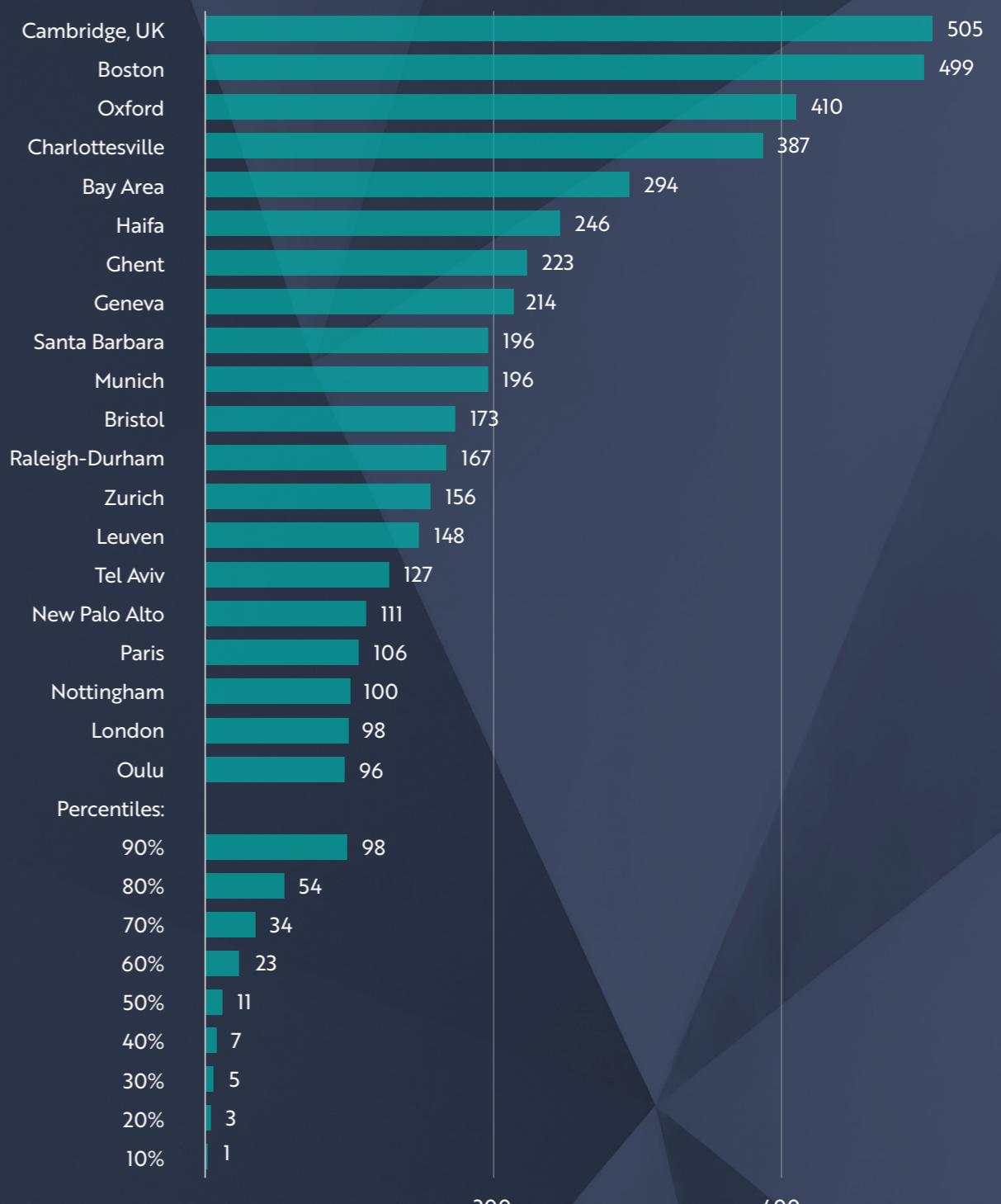
CAMBRIDGE IS RANKED
#1 FOR ALUMNI RAISING
>\$10m (per inhabitant)



“Cambridge has one of the most envied talent pools on the planet.”

YORAM WIJNGAARDE
FOUNDER, DEALROOM

PER INHABITANT NUMBER OF UNIVERSITY ALUMNI WHO RAISED >\$10m*



*Source: Dealroom

SPINOUTS TRANSFORMING OUR WORLD

T-THERAPEUTICS

TRANSFORMING THE CLINICAL LANDSCAPE FOR CANCER PATIENTS

T-Therapeutics was founded with a clear mission: to treat cancers that are currently untreatable. Although breakthroughs in immuno-oncology, which work by training the body's own T cells to target cancer cells, have been driving advancements in our battle with cancer, current approaches are limited, only working in some cancers and lacking specificity, which can cause significant side effects.

Built on the foundations of research from Professor Allan Bradley in the University's Department of Medicine, and previously at the Wellcome Sanger Institute, the company's OpTiMus® platform is a groundbreaking solution addressing these shortfalls. It creates a near-unlimited database of optimal T cell receptors (TCRs) which are used as building blocks for new therapies to unlock the immune system's potential for cancer-specific solutions.

Although the primary focus is on cancer treatment, T-Therapeutics has ambitions to expand its TCR-based medicine pipeline to target various autoimmune disorders too.

“ This funding round isn't just a win for T-Therapeutics; it underscores the University of Cambridge's role as a powerhouse in marrying academic brilliance with real-world impact. Our shared involvement with T-Therapeutics underlines both the University and Cambridge Enterprise's mission to create transformative change from University research, propelling forward innovations that can positively reshape lives. ”

DR DIARMUID O'BRIEN
PRO-VICE-CHANCELLOR FOR INNOVATION

RAISED

£48m

in Series A funding

CAMBRIDGE GAN DEVICES

DEVELOPING GREEN SOLUTIONS FOR EVERYDAY ELECTRONICS

Cambridge GaN Devices (CGD) was spun-out from the University of Cambridge by co-founders Dr Giorgia Longobardi and Professor Florin Udrea in 2016, with the goal of pushing the limits of semiconductor (GaN) properties to make greener electronics possible.

Built on a decade of research in the power device group at the Department of Engineering, the company has developed a range of GaN power devices, ICeGaN™, that are much higher performing than state-of-the-art silicon-based devices, enabling significant reductions in the size and weight of power converters, while producing energy efficiencies as high as 99 percent.

The company's range of ICeGaN™ transistors are customised for applications in critical markets, such as consumer and industrial Switch Mode Power Supply, lighting, data centres, and automotive HEV/EV.

CGD has already made remarkable progress, raising \$9.5m in Series A funding, followed by \$19m in Series B funding. It is using the funds to further accelerate growth, enlarge its product portfolio and expand its markets globally.

RAISED

\$19m

in Series B funding

“ To take just one application example, if all data centres were to adopt GaN, this would save 12.4TWh of electricity per year, or 9 million tons of CO2 - the equivalent of taking 1.9 million internal combustion engine vehicles off the road for a year. ”

DR. GIORGIA LONGOBARDI
CO-FOUNDER & CEO, CGD

SPINOUTS TRANSFORMING OUR WORLD

RIVERLANE

UNLEASHING THE POWER OF QUANTUM COMPUTERS

Trailblazer Dr Steve Brierley was a senior research fellow in computational mathematics at the University of Cambridge when he founded quantum computing, Riverlane, in 2016. The spinout was the culmination of years of research, driven by his conviction that quantum computing has the potential to accelerate human progress and solve global challenges from climate change to drug discovery.

Since then, he has successfully grown the company to nearly 100 people, raised over £38m in funding, and has recently been awarded an OBE for his services to Quantum Computing.

Riverlane has been instrumental in turning quantum hype into reality, by developing a breakthrough Quantum Error Correction stack that solves one of the biggest challenges for the sector of reducing the error rates in quantum computers to help them achieve useful scale.

The company is partnering with many of the world's leading quantum hardware companies, university labs and government agencies to build and implement the stack and the latest funding round will be used to accelerate its development and scale further.

RAISED OVER

£98m

in Series C funding

“ Solving quantum error correction – one of the defining scientific challenges of our times – will enable quantum computers to accurately simulate the true complexity of nature. We haven't even begun to imagine the many ways such technology will positively transform our world. ”

DR STEVE BRIERLEY
FOUNDER AND CEO, RIVERLANE

CENTESSA PHARMACEUTICALS

REDEFINING HOW MEDICINES ARE MADE

In 2021, Centessa Pharmaceuticals plc, a newly-created entity, acquired three University of Cambridge spinouts: ApcinteX, Morphogen-IX, and Z Factor. The new company was launched with \$250m in Series A financing, led by blue-chip investors.

In addition to the three Cambridge spinouts, Centessa acquired a further seven biotechs and went on to raise \$330m in one of the largest initial public offerings by a biotech in 2021.

The company has become a significant player in the biopharmaceutical field, respected for its robust pipeline of therapeutics addressing various conditions such as hemophilia, solid tumors and sleep-wake disorders. The unique business model also allows it to combine the flexibility of small-scale biotechs with the support of a large corporation.

It operates with the conviction that each one of their programmes has the potential to change the current treatment paradigm and establish a new standard of care.

RAISED

\$330m

in Nasdaq listing

“ We launched Centessa with a bold vision focused on reimagining the traditional pharmaceutical research and development model in order to discover, develop and ultimately deliver impactful medicines to patients. ”

SAURABH SAHA
CEO, CENTESSA PHARMACEUTICALS

WHAT MAKES THE UNIVERSITY SUCH A POWERHOUSE?

One of Cambridge's greatest strengths is its commitment to fostering an environment conducive to innovation. The University's extensive network of research centres, laboratories and incubators provides researchers, entrepreneurs and students with the resources and support needed to turn bold ideas into tangible solutions. From the Cavendish Laboratory, where the structure of DNA was famously unravelled, to the Cambridge Centre for AI in Medicine, Cambridge continually pushes the boundaries of knowledge and innovation.

The University's emphasis on entrepreneurship encourages students and researchers to explore the commercial potential of their ideas; it offers a range of programmes and initiatives aimed at nurturing entrepreneurial talent, from business accelerators and incubators, to entrepreneurship courses and societies. By equipping individuals with the skills,

knowledge and resources needed to turn ideas into reality, Cambridge cultivates a new generation of innovators who are poised to shape the future of the UK's economy and society.

The University is home to over 95 initiatives that support entrepreneurship and innovation delivered by colleges, academic departments and University subsidiaries. Together they form the University Enterprise Network (UEN), a community of peer learning and sharing of best practice.

The UEN created Innovation and Entrepreneurship Cambridge (IE Cambridge) to serve as the central hub for all the University's entrepreneurial activities. It acts as a resource to champion and convene entrepreneurship across the University.

THE UNIVERSITY ENTERPRISE NETWORK

The UEN brings together all the entrepreneurial support providers within the University, from college enterprise societies, business competitions, accelerators, business development or technology development programmes through to pre-seed and seed funding. In addition, the UEN also includes business support programmes, incubators and investors from the wider Cambridge ecosystem.



“The University combines best practice in entrepreneurship with first class scientific and technical expertise. It also ensures that new talent is identified and supported at all stages of the entrepreneurial journey.”

ANN DAVIDSON
HEAD OF PRACTICE, ENTREPRENEURSHIP CENTRE, JUDGE BUSINESS SCHOOL



“There's a community in Cambridge where people are supporting each other all the time. I've been able to learn a lot from brilliant people with the right expertise, who are also extremely generous and willing to share their experience.”

MARC RODRIGUEZ GARCIA
CTO AND CO-FOUNDER, XAMPLA

THE UNIVERSITY ENTERPRISE NETWORK

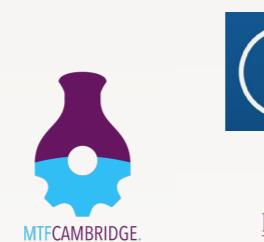
Collectively the UEN provides support at every stage of the entrepreneurial journey from thinking to acting. Aspiring entrepreneurs can travel through the network, accessing the right programme or activity at each step, eventually reaching the point where they have secured funding and are fully launched.

This graphic demonstrates just a few of the initiatives on offer for illustrative purposes.



Cambridge University
Technology & Enterprise Club

JOHNIAN
ENTREPRENEURS' CLUB



CRoSS Ideas
Incubator

CAMSTART



Venture
Creation
Weekends



FOUNDERS.
At the University of Cambridge



CANOPY



ENTREPRENEURIAL THINKING

Networking,
Events & Societies

Enterprise & Innovation
Programmes

Competitions

ENTREPRENEURIAL ACTING

Venture Builders

Venture Support

Investment

UNIVERSITY SUPPORT FOR ENTREPRENEURS

The following are just a few examples of the many entrepreneurial support providers from across the University.

BIO-SPARK FELLOWSHIPS

Bio-spark is an entrepreneurial programme and support system for early-career academics considering a career in business and enterprise.

The programme is a gateway into industry and startup formation. It is a fellowship programme that provides internships at Pharma, Biotech or Venture partners, mentorship for those with ideas for setting

up companies, and networking opportunities for all Bio-spark fellows. Bio-spark is a "learn by experience" programme that runs outside of PhD and postdoc responsibilities.

The annual programme runs over eight months (from October until June).

CAMBRIDGE UNIVERSITY TECHNOLOGY & ENTERPRISE CLUB (CUTEC)

Cambridge University Technology and Enterprise Club (CUTEC) was founded in 2003 to support scientific entrepreneurship in Cambridge. It is a leading student-run organisation that seeks to nurture and enhance the entrepreneurial spirit among academics and students.

The club hosts the annual Technology Ventures Conference connecting entrepreneurs, academics, investors, and business professionals in Cambridge. The conference is one of the world's largest student-run entrepreneurial events, attracting high profile venture capitalists, entrepreneurs, and angel investors from around the world.



Cambridge University
Technology & Enterprise Club

CUTEC aims to:

- Connect: to promote networking between students, experienced entrepreneurs, startups, investment partners, advisors and alumni
- Inspire: to spread ideas about technology and business to promote entrepreneurship and creation of value
- Enrich: to foster an entrepreneurial culture in technology and strengthen networking, teamwork, and business knowledge.



“ You can be both scientist and businesswoman in the right environment, and Cambridge has that. ”

NADIA RADZMAN
RESEARCH ASSOCIATE, SAINSBURY LABORATORY

ACCELERATING BRILLIANCE

FOUNDERS.

At the University of Cambridge

Founders at the University of Cambridge is a strategic initiative that equips founders for growth through capital investment, multi-stage programmes, intensive mentoring and a global community of experts, delivered by Cambridge Enterprise.

At the heart of its mission to 'Accelerate Brilliance' is access to an exceptional network of founders, investors and senior executives. Together they have, so far, collectively founded over 100 companies and backed over 800 ventures currently worth over £15bn.

THE PROGRAMMES

FOUNDERS /SYNC

At the University of Cambridge

Uniting ambitious people from key disciplines to create groundbreaking AI and software startups.

Pre-company talent accelerator.

Backing individuals to build teams.

- Phased 10-week co-founder matchmaking programme.
- Fee-free, with monthly stipend for Founders and possibility of investment.
- Ideation sprints, masterclasses, mentorship.
- Further six months of scheduled touchpoints.

FOUNDERS /START

At the University of Cambridge

Transforming science and tech-led startups into commercially viable ventures.

Pre-seed company accelerator.

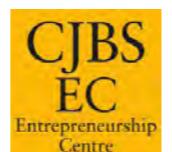
Preparing early-stage companies for investment.

- 14-week intensive programme focused on developing market, team and investment.
- Pitch opportunity at London-based Investor Day, with over 200 investors.
- £40k funding guaranteed, with a further £160k syndicated funding for those meeting specified milestones.



ENTREPRENEURSHIP CENTRE (CJBS)

EnterpriseTECH and EnterpriseTECH STAR are both 10-week-long programmes to create a comprehensive pathway for researchers across all disciplines to immerse themselves in entrepreneurship and hone skills that foster personal and professional growth as entrepreneurs. Both programmes are interconnected educationally and practically, with EnterpriseTECH laying the groundwork before progressing to EnterpriseTECH STAR. To qualify for the latter, completion of EnterpriseTECH is a prerequisite.



Their aim is to co-create a new generation of science-minded researchers who value entrepreneurial thinking, creativity, confidence-building and hands-on experience, who are curious and motivated to join or establish their own unique ventures or move into the business world and be agents of transformation and change.

I-TEAMS

i-Teams brings together multi-disciplinary teams of PhDs, Postdocs and Masters students to conduct primary market research for groundbreaking University inventions. Teams interview relevant industry and sector experts, providing evidence-based recommendations to the inventors, and learning hands-on commercialisation skills.

i-Teams runs one or two courses every term. All courses are open to participants from any University department.

Innovation i-Teams – investigate the best commercialisation route for a new invention, open to all postgraduates, Michaelmas and Easter term



- Development i-Teams (with the Centre for Global Equality) – identify how to take new technologies into the developing world, open to all undergraduates and postgraduates, Michaelmas and Easter term
- Medical i-Teams – recommend the best commercialisation route for new medical technologies, including treatments, diagnostics and research tools, open to all postgraduates, Lent term

"Participating in i-Teams has been one of the best things I did while being in Cambridge."

i-Teams has worked on over 250 technologies, trained over 1500 students and resulted in more than 110 spinout companies which have attracted over \$300m of investment.

KING'S COLLEGE ENTREPRENEURSHIP LAB

The King's E-Lab offers a year-long extracurricular programme for students (from undergrads to postdocs) to learn how to assess opportunities, conduct market analysis and prepare business plans, as well as learning the basics of venture finance, pitching and managing dynamic teams.

The goal is to help students develop an entrepreneurial mindset, which can then be applied to their own business project, social enterprise or research project.

Alongside the programme is a speaker series where students can hear from high-calibre founders, investors, scientists, inventors, CEOs and managers of established companies, as well as startups and many more.

Every term the King's students are joined by an Entrepreneur in Residence, a renowned professional who will provide them with mentoring, guidance, practical advice and connections to help them succeed in their entrepreneurship journey.

MAXWELL CENTRE - IMPULSE PROGRAMME



The impulse Programme, based at the Maxwell Centre, is an established 12-week programme specifically for technology innovators, offering opportunities for both entrepreneurship and intrapreneurship. Run as a mentoring programme, impulse leverages decades of deep science, tech research, and expertise from top-tier entrepreneurs within the city's expansive tech ecosystem to foster a new generation of entrepreneurs and intrapreneurs.

Impulse takes place once a year, from the end of April to the middle of July, and comprises three modules with follow-up support through masterclasses and alumni mentoring. It is delivered through industry mentoring, one-to-one advice, investor pitch sessions, market research, workshops, and networking.

Spreading the programme over a period of time allows participants to digest the content and refine their ideas through customer research and the mentorship process. During the first and last weeks of the programme, participants are encouraged to attend in person, although these sessions are also run in a hybrid format. The impulse Programme is open to anyone. The fee for

University of Cambridge members is currently £1,500, but there are a number of sponsored "Fellowship" places available via impulse partners from the Cambridge ecosystem for both Cambridge and external participants. The application window typically opens in September/October.

MILNER THERAPEUTICS INSTITUTE - FRAME SHIFT BIO-INCUBATOR

Frame Shift provides unique space for startups and SMEs to work side-by-side with other startups, pharma and academic scientists in an ecosystem physically and culturally designed to spark collaboration and entrepreneurship. It has a particular focus on R&D intensive companies working in areas related to the MTI's expertise (e.g. functional genomics, early target discovery, therapeutics).

Frame Shift offers:

- Wet lab space and write-up desks at the heart of the Cambridge Biomedical Campus
- Potential for interactions with clinicians, researchers and drug discovery scientists at the University and hospitals on the biomedical campus
- Advice and research input from the MTI research teams



- Know-how and expertise of representatives of the 12 Milner affiliated pharma companies that are part of the Milner Consortium
- Membership of an exclusive network of 70+ affiliated global pharma and biotech companies, and access to MTI events including the annual Milner Therapeutics Symposium

Companies usually join Frame Shift as a team of one to three people and stay for 18-24 months. During this time, many secure successful funding, enabling their teams to expand and move out to other premises by the time their teams have exceeded eight people in the MTI.

PEMBROKE COLLEGE - THE PARMEE PRIZE

The Parmee Prize welcomes applications from all stages of the entrepreneurship journey. Training and mentoring from Richard helps applicants develop their business idea and shortlisted candidates are given pitching training before pitching their business to a panel of judges. The winning applicant gets £2000 to develop their business and receives mentoring support from Richard.



Pembroke College
Cambridge

Past winners come from a diverse range of fields, and include:

- a wearable braille reader
- an AI-powered bill of quantities generator that can 'read' architectural plans
- an AI tool that autogenerates discharge summaries

We welcome applications from individuals and teams, but the lead applicant must be a Pembroke College undergraduate or postgraduate student.

“ The programme guided us through every stage of the entrepreneurial journey. ”

PAWAN SHRESTHA
CEO, LARK OPTICS



I/E CAMBRIDGE

INNOVATION & ENTREPRENEURSHIP

IE Cambridge is the University's dedicated innovation and entrepreneurship hub. It acts as the front door for aspiring entrepreneurs - from undergrads through to faculty - to effectively navigate the wealth of support on offer.

Launched in May 2023, IE Cambridge promotes all the University's innovation and entrepreneurship initiatives, and connects University entrepreneurs with the wider ecosystem. It signposts people to the right activity for whatever stage they're at on their entrepreneurial journey, and provides them with useful, relevant resources.



“Through IE Cambridge we are helping future entrepreneurs connect to the full ecosystem and the expertise and knowledge that has been the bedrock of its success.”

CAROLINE HYDE
HEAD OF ECOSYSTEM INITIATIVES &
PARTNERSHIPS, CAMBRIDGE ENTERPRISE

VISION

TO CHAMPION AN ENTREPRENEURIAL CULTURE WHERE ENTERPRISING MINDS FROM WITHIN THE UNIVERSITY ARE EFFECTIVELY SUPPORTED TO MAKE THEIR IDEAS A REALITY.

PURPOSE

TO BE THE CONVENER OF INNOVATION AND ENTREPRENEURIAL ACTIVITY AT THE UNIVERSITY OF CAMBRIDGE.

IE CAMBRIDGE IN ACTION

EVENTS

IE EXPO

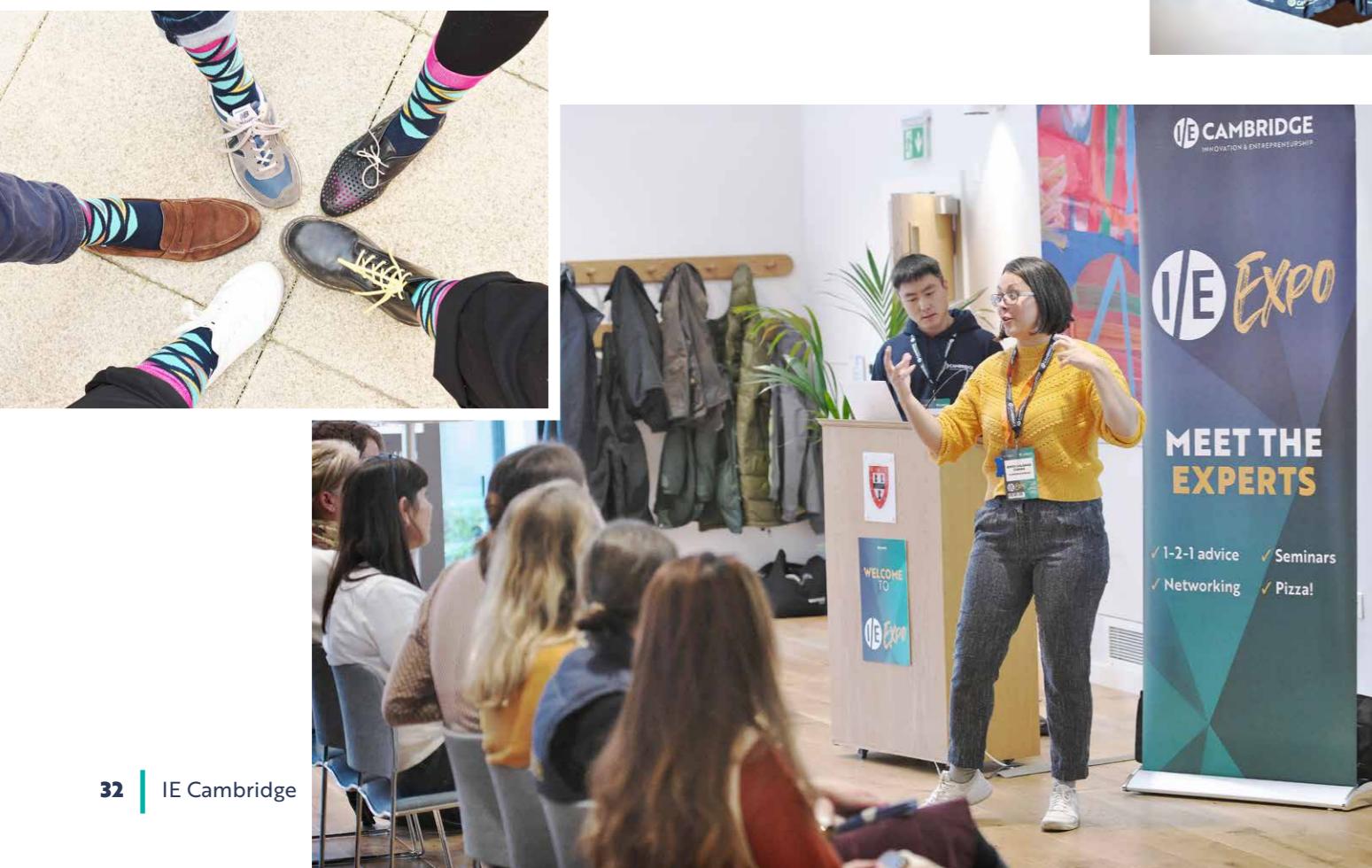
A yearly event to showcase all the entrepreneurial support available

POSTDOC ENTREPRENEURSHIP EVENT

A one day event with the PostDoc Academy and Postdocs of Cambridge Society

FRESHER'S FAIR ENTREPRENEURSHIP TENT

A whole area dedicated to helping new students connect to the support available



RESOURCES

ENTREPRENEURSHIP SUPPORT GUIDE

A comprehensive guide, available both in print and online, listing all the innovation and entrepreneurial activities on offer across the University network.

HOW TO GUIDES

A series of guides that provide aspiring entrepreneurs with the right knowledge and advice on essential topics such as 'Understanding Intellectual Property' and 'Accessing Finance'.



COMMUNITY

IE.CAM.AC.UK WEBSITE

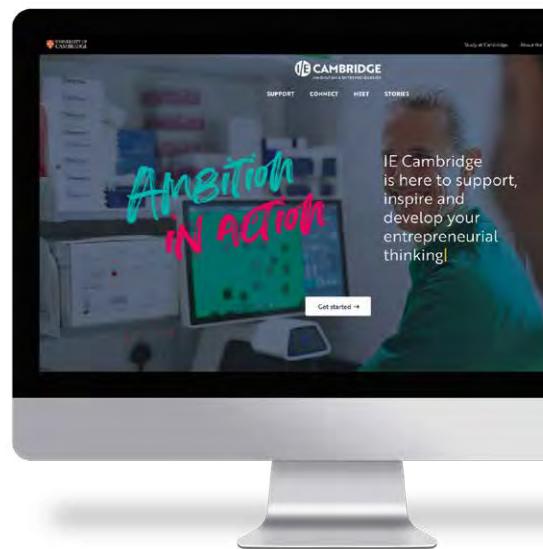
Online resources and inspiring stories of Cambridge entrepreneurs.

IE CAMBRIDGE CONNECT

A community building app helping to connect entrepreneurs and support providers.

#IECAMBRIDGE LINKEDIN

Using #iecambridge to bring together posts and activity from across the ecosystem.



IE CAMBRIDGE IN ACTION

IE Cambridge aims to support, inspire, and develop entrepreneurs at whatever stage they may be at, whether they have an acorn of an idea, research that has potential for real-world application, or are already up and running as a company.

To signpost them to the most relevant programme, society or funding, IE Cambridge has broken the journey into different stages.

STAGE A

Curious?

I want to learn more, gain skills and meet people who have experience as entrepreneurs and innovators.

STAGE B

Got an idea?

I think I have something that could develop into a venture but am not sure what I need to do next.

STAGE C

Building your venture?

I have formed a team and we are ready to work together to progress our venture with the right support.

STAGE D

Growing your venture?

We are ready to engage with experts who can guide and support our venture.



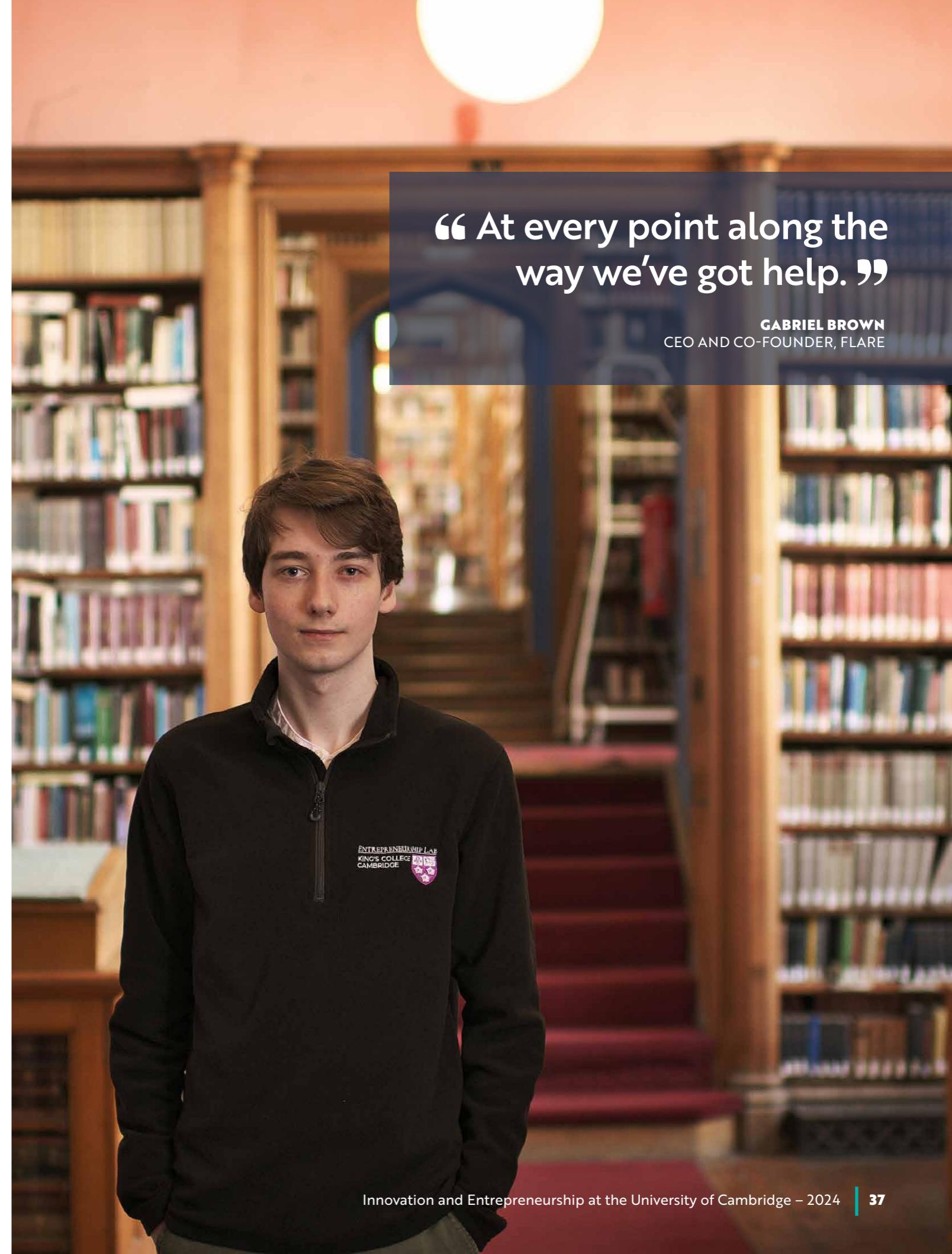
The following stories highlight some of the different programmes that University of Cambridge students and faculty have participated in to receive the support they needed at different stages of their entrepreneurial journeys.

KING'S E-LAB CULTIVATES ENTREPRENEURIAL MINDS

Gabriel Brown was a theology undergraduate and choral scholar at King's College when he came up with an idea to create a social network for activists. He teamed up with two fellow students and together they embarked on a mission to bring their idea to market. The challenge was they had no business expertise or knowledge of how to go about it.

They decided to join the King's Entrepreneurship Lab and took part in the residential training programme, as well as the corresponding events and workshops organised throughout the academic year. Amongst the new skills they learnt were how to create a business plan, develop their strategy, make a pitch deck and forge the right connections. After a winning pitch the team received the King's E-Lab residential prize and have received ongoing mentoring and support.

A King's E-Lab Entrepreneur in Residence has become a shareholder in their startup and the venture continues to develop at pace. Although the co-founders are now graduates of the University they still feel supported and championed by the E-Lab and wider Cambridge ecosystem.



“ At every point along the way we've got help. ”

GABRIEL BROWN
CEO AND CO-FOUNDER, FLARE

COMBINING ACADEMIA AND ENTREPRENEURSHIP

Neuroscientist Coco Newton was focused on her PhD, exploring new cognitive diagnostic tests for Alzheimer's disease, when a friend recommended EnterpriseTech, a 10-week programme run by the Cambridge Entrepreneurship Centre at the Judge Business School. Interested in furthering the impact of her research through commercialisation, Coco firstly joined Cambridge Gravity's Bio-Spark programme and then EnterpriseTECH, launching her journey from academia into the world of business.

Through additional entrepreneurial support programmes such as EnterpriseTECH STAR and Accelerate Cambridge, Coco continued to build on her business skills, giving her the knowledge and confidence to co-found her own company, Fathom Cognition.

Since then, she has built a team, secured funding, and continues to develop life-changing tools for use in the NHS for the earlier detection of Alzheimer's. As a Research Associate at the King's Entrepreneurship-Lab, she is also integrating her research with social outreach and engagement in dementia health systems. Her drive comes from wanting to considerably improve outcomes for those at risk and her positive experience has made her a champion of academic-led innovation.

“ Cambridge provides the perfect runway to go from being an academic student with absolutely zero business experience to someone that’s capable of starting their own company. ”

COCO NEWTON
COO, FATHOM COGNITION



ECOSYSTEM ADVANCED THE PATH TO INNOVATION

Jeroen came to Cambridge from Belgium, intending to stay for just three years to complete a PhD that would explore combining neuroscience with fields such as nanotechnology. More than a decade later, he is still very much a part of the Cambridge ecosystem – as the Co-Founder and CEO of Semarion, a University of Cambridge spinout with a mission to accelerate the pace of drug discovery.

His journey began at CUTEC, the Cambridge University Technology and Enterprise Club, where Jeroen encountered inspiring entrepreneurs, among them his future co-founder, Tarun Vermulkar. The insights and knowledge he gained at the Club shifted his mindset from a purely academic attitude to one focused on product development.

To gain further business knowledge, Jeroen and Tarun took part in the impulse accelerator programme at the Maxwell Centre, which helped them crystallise their early business plan, develop their market research, create a pitch deck and meet a variety of mentors. It gave the duo the skills to approach potential customers and understand what investors were looking for.

They continued to grow within the University ecosystem taking full advantage of the commercial guidance from Cambridge Enterprise, the accelerator programmes at the Judge Business School, the experience of the Chris Abell Postdoc Business Plan Competition and working with the Milner Institute to continue their commercial development.

Cambridge Enterprise was also instrumental to their early stage investments, acting as co-investor for their seed round and providing the credibility to attract other investment.

Semarion have started 2024 in a strong position, growing their team, developing amazing applications and soft launching their first product.



**“Once you’re in the ecosystem
you see all the opportunities
that are around.”**

JEROEN VERHEYEN
CO-FOUNDER AND CEO, SEMARION

CONFIDENCE CAME THROUGH THE BUSINESS PLAN COMPETITION

Marc joined the University as a postdoc, attracted by the opportunity to conduct research alongside serial entrepreneur Professor Thomas Knowles in the Yusuf Hamied Department of Chemistry. He was particularly interested in how Professor Knowles was applying the learnings from his academic research to solving real world problems.

The journey to commercialisation happened quickly for Marc. Their research creating alternatives to single-use plastic was showing strong business potential, so he entered the Chris Abell Postdoc Business Plan Competition and then the impulse programme at the Maxwell Centre to learn all he could about costs, scaling-up, IP patents, product development and pitching to investors. He also found it invaluable to hear from other founders who had been through the spinout process and were now running successful companies. By 2018, he had co-founded Xampla.

Having support from Cambridge Enterprise was a critical factor in Xampla's creation and growth. They helped the co-founders create an initial leadership team, provided guidance throughout its formation, and aided in securing three patents to underpin Xampla's technology. Support from the Ventures team provided crucial funding for initial technology development and opened the door to co-investors like Amadeus Capital Partners, Horizons Ventures and Parkwalk Advisors.

Xampla's mission to eliminate the world's most polluting plastics is well underway. The company is growing rapidly and has recently raised £5.6m in its latest round of funding, bringing its total of investment raised to £14m. It has become the UK's first university spinout to achieve B Corp status demonstrating the transformative potential of academic research when aligned with entrepreneurial spirit.



“It allowed us to pitch our idea to a series of investors just to get some initial feedback.”

MARC RODRIGUEZ GARCIA
CTO AND CO-FOUNDER, XAMPLA

THE UNIVERSITY OF CAMBRIDGE AS AN INVESTOR

One of the biggest challenges for startups and spinouts is securing pre-seed and seed funding – a critical stage for entrepreneurs to validate their ideas, develop their technologies, and scale their ventures.

Central to the growth of the Cambridge ecosystem has been the University's crucial role as an investor in these early stage ventures, stepping in to bridge that gap between academic innovation and commercial success. Its investments play a pivotal role in supporting new companies at what is often seen as the most high-risk chapter of the investment spectrum.

Cambridge Enterprise Ventures (formerly seed funds), established in 1995, manages the University of Cambridge's investment funds, and not only invests in early-stage companies but also helps founders to form a commercial strategy and supports them in their product

development and growth. Making typically around 20 investments per year, Ventures uses its extensive network of mentors and non-executives to attract the necessary management and follow-on finance needed as companies develop.

It has been instrumental in establishing the University as a global leader in launching transformative, high-growth companies. The evergreen nature of the funds allows a long-term view, and all income realised from investments is returned to the fund to support the development of future companies.

“We offer dedicated support from the earliest stages of company creation and over 20 years of experience in nurturing and investing in new businesses. Through this we are not only trying to create economic and social impact, but to grow the fund and leave a legacy for the next generation of University entrepreneurs.”

CHRISTINE MARTIN
HEAD OF VENTURES,
CAMBRIDGE ENTERPRISE



VENTURES IN NUMBERS

Cambridge Enterprise Ventures syndicates with VC, corporate and angel investors to bring together sufficient capital to provide broad support for life science, deep tech, sustainability and social venture businesses. Investments decisions are made on the basis of societal benefit as well as monetary return.

The funds can invest up to £2m in any one company over its lifetime. Investment decisions made over £100k are taken by the Cambridge Enterprise Investment Committee, made up from a pool of 17 members. They have each been selected for their deep knowledge of research commercialisation and extensive experience of launching and investing in startups and spinouts.

Through Ventures' policy of reinvesting income, they have managed to continually grow the initial funding pot from £8.1m to over £42m of investment, leveraging a further £3bn of follow-on funding.

As of July 2023, the University investment funds together held cash and assets of over £75m, and last FY invested £5.3m in new and portfolio University spinouts.

CUMULATIVE TO JULY 2023

 **£3bn**
in follow-on funding raised by fund portfolio companies since 1995

 **£42m**
invested over fund lifetime

 **3.36x**
multiple across realised investments



IMPACT
Notable spinouts:
Gyrospace, BlueGnome,
VocalIQ, Solexa and
Centessa



£75m+
Of cash and assets held by the University investment Funds

CAMBRIDGE ENTERPRISE VENTURES INVESTMENT STAGES

PATHFINDER

- ✓ Up to **£20k** loan
- ✓ Commercial strategy & customer engagement
- ✓ Software prototyping & field testing

PRE-SEED

- ✓ **£50k-£150k** convertible loan or equity
- ✓ Opportunity validation
- ✓ Often matched by external investors

SEED

- ✓ **£250k-£1m** per investment round
- ✓ Product development
- ✓ External matching funds required

SERIES A+

- ✓ **£250k-£1m** per investment round
- ✓ As part of a growth syndicate

ENGAGING WITH OTHER INVESTORS

It is the strong relationships that Cambridge Enterprise Ventures has nurtured with many co-investors that has made it, and the companies it invests in, so successful. The University brings credibility and a strong track record to the table and works with a group of complementary

partners to ensure that spinouts and startups are given the best possible chance of growing their companies. Involving external investors brings in further expertise and networks, as well as invaluable funding.

THE UNIVERSITY OF CAMBRIDGE ENTERPRISE FUND (UCEF)

Launched in 2012 as a co-invest fund between Parkwalk Advisors and Cambridge Enterprise to unlock new funding from Cambridge alumni and the wider investment ecosystem. It primarily invests into early-stage scientific and technology companies coming out of the University and is able to double the capital provided to them. Managed by Parkwalk Advisors, it is the leading early-stage university Enterprise Investment Scheme (EIS) and the first of its kind.

The programme has raised in excess of £26m and has invested in 60 spin out companies. The funds have been highly successful – with fund III yielding three-fold returns for investors to date. **UCEF portfolio companies have collectively raised over £550m of syndicated capital and are valued at more than £1bn.**

CAMBRIDGE ENTERPRISE VENTURE PARTNERS (CEVP)

Established in 2011 to bring various co-investors under one roof. The membership-only programme is open to venture capitalists and angel investors with an interest in learning about early investment opportunities originating from the University of Cambridge.

Through CEVP, members have the opportunity to attend Investor Showcase events and hear pitches from up-and-coming Cambridge companies followed by time to network with the presenting companies and fellow members. The Ventures team also works closely with them to provide updates throughout the year on investments, available opportunities and portfolio news.

CAMBRIDGE ENTERPRISE VENTURES CO-INVESTS WITH OVER 100 INVESTORS FROM THE UK, EUROPE AND THE US.

“Cambridge Enterprise Ventures has an impressive amount of experience in bringing together the right people, skillsets and funding to ensure new companies are supported and successful at each stage of their growth.”

PAM GARSIDE
CHAIR, CAMBRIDGE ANGELS

“They are amazing partners: great at working with multiple stakeholders in constructive, transparent and helpful ways, really strong on best practice governance and genuinely always trying to do the right thing.”

MORAY WRIGHT
CEO, PARKWALK ADVISORS

CAMBRIDGE INNOVATION CAPITAL

Cambridge Innovation Capital (CIC) was set up in 2014 by the University of Cambridge and Cambridge Enterprise to increase the successful commercialisation of life sciences and deep tech innovation. It is a preferred investor for the University, securing over £0.5bn in funding and providing crucial support to over 40 companies whose innovations are set to transform the lives of many.

Through its unique partnership with the University and an expansive network spanning entrepreneurs, research institutes, and accelerators, CIC has access to the next wave of globally impactful startups. It invests strategically in the development of disruptive ventures across a spectrum of fields, including cancer therapy, genomic diagnosis, surgical robotics, artificial intelligence, and quantum computing. While the pursuit of commercial value remains integral, investment decisions are guided by the desire to empower innovative companies set to change the world.

“ Cambridge has consistently led the way in science-based innovation. Our long standing and close collaboration with the University of Cambridge affords us unmatched access to the most promising opportunities within one of the world’s foremost innovation hubs. ”

ANDREW WILLIAMSON,
MANAGING PARTNER, CIC

10

Year track record

>£0.5bn

Assets under management

40

Portfolio companies, including 4 unicorns

>£2.5bn

3rd party capital raised by portfolios

7

Exits: 2 IPOs, 5 M&A

100+

Founders supported

c. 2500

high skills jobs across the portfolio



CAMBRIDGE ENTERPRISE VENTURES CASE STUDIES

COLORIFIX

A REVOLUTIONARY SOLUTION TO REDUCE THE FASHION INDUSTRY'S IMPACT

Inspired by their study of water contamination in Nepal, Colorifix's co-founders Jim Ajioka, from the Department of Pathology, and Orr Yarkoni, formerly a postdoc and now the company's CEO, have created a eco-friendly fabric-dyeing process that uses the DNA codes for colours found in nature and instructs microbes to recreate them.

It's a breakthrough that will significantly reduce the enormously destructive effects of the fashion industry's dyeing processes on water. The Colorifix process they have since developed shows up to a 80% reduction in chemical pollution.

The company and its customers aim to make Colorifix's dyeing solution the standard for eco-friendly dyeing of the world's clothes in the future. Supported by Ventures in early investment rounds, the company raised an £18m Series B in 2022 round to support this vision, led by H&M Group's corporate venturing arm. Since then, Colorifix have expanded operations internationally and trebled its team size to realise this impact.

“ Colorifix is bringing the fashion industry back to its roots and harnessing the power of the natural world to colour our clothing in a more sustainable way. We believe our solution can be transformative for the fashion industry and for ensuring the protection of our water, air and land for future generations. ”

ORR YARKONI
CEO AND CO-FOUNDER, COLORIFIX

RAISED OVER

£18m

in Series B funding

NYOBOLT

DELIVERING THE FUTURE OF BATTERY TECHNOLOGY

Nyobolt was spun out of the Yusuf Hamied Department of Chemistry in 2019, by co-founders Professor Dame Clare Grey and Dr Sai Shivareddy, with the aim of developing high-performance battery and charging technologies to create a world where lengthy charge times no longer exist.

The company has unlocked the potential of battery performance with a unique technology that is manufacturable and scalable, giving batteries both ultra-fast charging time and longer life, opening up the possibility of the electrification of new products and services that are currently impossible to develop. The goal is to provide a sustainable solution supporting the transition to net zero in multiple sectors.

Supported by Cambridge Enterprise in early investment rounds, the company has gone on to raise a further £50m in Series B funding. The investment is set to drive Nyobolt's opportunity to scale and expand manufacturing facilities, as well as grow its teams across the globe.

RAISED

£50m

in Series B funding

“ Nyobolt technology will not only enable net zero both in the electrification of transport, but also the storing of clean and renewable energy on and off the grid. ”

PROFESSOR CLARE GREY

CHIEF SCIENTIST AND CO-FOUNDER OF NYOBOLT

CAMBRIDGE ENTERPRISE VENTURES CASE STUDIES

STICKERBOOK BY OBLIQUITY GROUP

MAKING SUSTAINABILITY EDUCATION EASY, EFFECTIVE AND FUN

Developed by Simon Kelly and John Isherwood at the Cambridge Institute for Sustainability Leadership and Cambridge Social Ventures Incubator, Stickerbook turns an organisation's mission into bite-sized videos and Q&A sessions, letting users collect stickers for their sustainable actions.

It is the world's first micro-learning and gamified sustainability engagement and green skills platform and delivers immersive learning, supported by a recognition and rewards system, to allow organisations to increase their sustainability upskilling. They have engaged with people in over 28 countries with 175,000 stickers collected and have won numerous awards for their leadership in sustainability engagement.

Stickerbook continues to speed up their development, thanks in part to a recent pre-seed funding round in which Ventures was an investor. They have joined the CleanTech cohort at the Cambridge Institute for Sustainability Leadership, where their team has become a part of the 52-strong entrepreneurial community at The Canopy.

“ Cambridge Enterprise Ventures is an essential support column in the growth of our business. Their first investment gave us much more than financial support – it gave us confidence to go on and focus on shifting from an idea to a real commercial venture. Their support also significantly contributed to confidence from our private investors at a critical growth inflection point. ”

JOHN ISHERWOOD
CO-FOUNDER AND CEO, OBLIQUITY

SECURED PRE-SEED FUNDING

NU QUANTUM

SHAPING THE FUTURE OF QUANTUM COMPUTING

Current quantum computers face a bottleneck in assembling a sufficient number of qubits, hindering their transformative potential. Nu Quantum's Quantum Networking Unit (QNU) offers an ingenious solution by interconnecting discrete Quantum Processing Units (QPUs), paving the way for efficient, scalable and integrated quantum computing.

Nu Quantum's breakthrough will unlock practical quantum computing and the multitude of applications it offers. The foundations for Nu Quantum's pioneering work lie in Dr Carmen Palacios-Berraquero's time as a researcher at the Cavendish Laboratory, and support from Founding Advisor Professor Mete Atatüre, a world expert on quantum optics, devices and their applications.

From the early stages of commercialising her patent to developing the company's strategy and business plan, and then securing seed funding through Ventures, Carmen views Cambridge Enterprise as instrumental in Nu Quantum's growth.

SECURED **£9.1m** in Pre-Series A funding

“ Large-scale, fault-tolerant quantum computing will bring about the technological revolution of our generation. We have built an exceptional team dedicated to the mission of building the quantum networking infrastructure necessary to make this a reality. We are grateful to the investors who share our vision for their support as we scale and commercialise our solution. ”

DR. CARMEN PALACIOS-BERRAQUERO
FOUNDER AND CEO, NU QUANTUM

VENTURES SUSTAINABILITY PORTFOLIO

In 2021, Cambridge Enterprise Ventures launched a Sustainability Initiative as part of the University's leadership on and commitment to Net Zero. It includes dedicated investments in sustainability focused startups and spinouts.

£2m (up to) available for each company

28 investments in 15 companies

£7m+ committed since 2021

£190m raised by companies to date

9 new companies launched

£0.5bn total market cap

THE UN SUSTAINABILITY GOALS REPRESENTED BY PORTFOLIO COMPANIES



Zero Hunger



Affordable & Clean Energy



Industry, Innovation & Infrastructure

12 GO

Responsible Consumption & Production

13 GO

Climate Action



“It’s a privilege to see game-changing technologies needed for a true NetZero 2050 coming out of the University; I cannot think of a better or more important sector to be investing in.”

CHRIS GIBBS

INVESTMENT DIRECTOR, CAMBRIDGE ENTERPRISE VENTURES

CAMBRIDGE SPINOUTS TRANSFORMING OUR WORLD...

A TIMELINE OF CAMBRIDGE SPINOUTS



Biovitrum AB	Vivamer Ltd																		
TeraView	Cambridge Theranostics Ltd	zinwave																	
Chroma	METALYSIS	Delta G																	
PHICO	HyperTAG	B.S.C.R. Limited	Inotec	AM LTD	CAMBfix Limited														
CamSemi	smart	AVEX CORPORATION	CellCentric		FXT														
Inview	Coolanalgesia	York Pharma plc	iLexIR		ÁRQUER														
Metris Therapeutics	akubio	HUBER-SUNNER	eneSYS		enval			E3Bio											
Sprnger	Cambridge Biotechnology Limited (CBT)	Procognia	Cambridge Lab on Chip Ltd (CamLOC)		Sentinel	deepmatter		RainDance											
Water Intelligence	CADcentre	SURFACE GENERATION	Ampika Limited		horizon	Breathing Buildings		ActicAx Inc.			Cambivac® Ltd	PervasID							
Pronostics Ltd	BlueGnome	FIBERCORE	Camfridge	Cambridge Semiconductors Ltd	Xen Project	Paramata Limited		Green PB Limited			Sphere Fluidics	Cambimune							
polight	genapia	Lumora	George Innovision	O-FLO CNT Innovation	TIGENIX			CAMBRIDGE CMOS SENSORS	PneumoCare		Camantys	DEFINIGEN							
PLASTIC LOGIC	DANOLABS	DRW	expedeon	kaptivo	OptiSynx	Autonomy	GRL	Greedy Intelligence Ltd	Eight19	vocalig									
11	12	12	9	3	9	5	2	5	1	6	5								
2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011								
8	7	10	18	17	17	12	16	9	6	16	12								
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023								

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