



UNIVERSITY OF
CAMBRIDGE
enterprise

1 0 Y E A R S

Annual Review 2016

“The University of Cambridge is more than a nursery for world-leading, cutting-edge research. It ensures that this research translates into life-changing benefits to society, both locally and globally. Cambridge Enterprise has embraced the fantastic challenge of making this happen over the past decade, with tremendous success, through encouraging the spirit of academic entrepreneurship and supporting researchers at all stages of the commercialisation process.”

Professor Sir Leszek Borysiewicz
Vice-Chancellor University of Cambridge

Who we are

In 2006 Cambridge Enterprise Limited was formed by the University of Cambridge to help students and staff commercialise their expertise and ideas. This Annual Review describes our work in 2016 and also celebrates our first decade.

The role of Cambridge Enterprise is central to the mission of the University, which for more than 800 years has contributed to society through the pursuit of education, learning and research at the highest levels of international excellence.

At Cambridge Enterprise, we help University researchers achieve the impact that's central to securing long-term funding for research. Our success is measured in the achievements of our academic partners as they bring their work to market, be it a new lead-acid battery paste recycling technology that is cleaner and cheaper than traditional methods or development of drugs to target RNA-modifying enzymes involved in the development of cancer.

We're here to make the world a better place by helping to create a legacy of products, services and advice that benefits not just the University and the UK, but everyone.



Some of the Cambridge Enterprise staff outside the Hauser Forum. Photo by Sir Cam.

From the Chief Executive

Dr Tony Raven

Our Annual Review this year marks the tenth anniversary of Cambridge Enterprise Limited, which I have been privileged to lead for the last five years.

Our success over those ten years is a tribute to the curiosity and creativity of an academic community that has, as illustrated in these pages, quite literally changed our world. Of course, changing the world has always been in the Cambridge DNA—from the world's first publishing house (Cambridge University Press in 1534) to the jet engine to DNA and whole genome sequencing.

In establishing Cambridge Enterprise, the University created a focus for supporting our academics and researchers in translating their great discoveries into societal benefit in fulfilment of the University's mission.

With the support and backing of the University, we are now better placed than at any time with the



financial resources and the team to deliver on the future potential of Cambridge research.

As the eminent physicist Niels Bohr commented, prediction is very difficult, especially about the future.

Ten years from now the world will be different in ways we cannot currently imagine. What we can predict with some accuracy, however, is that Cambridge academics will have played a key role in shaping this new world. And Cambridge Enterprise, along with our business and investor partners, will have had the privilege to have played a part in making it happen.

Teri Willey



Now more than ever, the world needs positive, principle-centred leaders and organisations. Cambridge Enterprise meets this need as an innovative, public-benefit oriented company

working at the interface of the for-profit and not-for-profit worlds.

Through a wonderful team of dedicated individuals, who have created a culture of cooperation across the University and community, Cambridge Enterprise supports the best scientists in the world

Chief Executive 2006 to 2011

in bringing ideas to the public through best business and investment practice.

"Doing good and doing well" is a mantra of the best entrepreneurs and resonates here in the results you will read about in this review. Congratulations to the Cambridge Enterprise team for ten years of continuous improvement and demonstrated impact.

It was a privilege to work with extraordinary colleagues at the University in founding Cambridge Enterprise ten years ago and heartening to see what an accomplished organisation Cambridge Enterprise has become.

I am delighted to join in celebrating the first decade of, and bright future for, Cambridge Enterprise!

What we do and how we do it

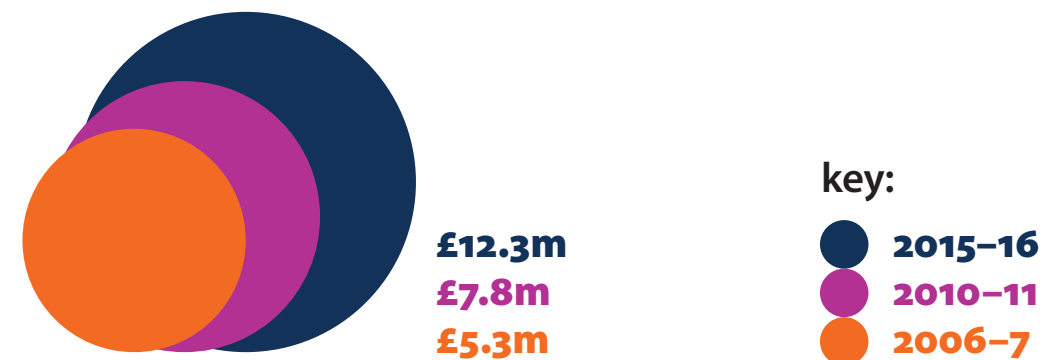
Cambridge Enterprise helps get ideas and inventions patented, licences granted and expertise shared. We support new start-ups and companies spinning out of the University.

We offer expertise in financing, consultancy and intellectual property (IP) management to University staff and students who want to commercialise their research or share their knowledge. Cambridge Enterprise provides funding, advice and contract management to members of the University, in departments from science, technology, engineering, maths and medicine to the arts, humanities and social sciences.

Whether our academic partners have the germ of an idea, expertise to share or have created intellectual property that they need to protect, Cambridge Enterprise is here to help.

These graphs summarise the work of Cambridge Enterprise Limited at five year intervals since our incorporation.

Cambridge Enterprise contribution amount returned to University & inventors



Technology Transfer

researchers supported



commercial & research licences



Consultancy Services

contracts signed



consultants



Seed Funds

amount invested



value created



Technology Transfer

Bringing science to market

Helping academics develop their ideas and inventions into opportunities that are attractive to business and investors is at the heart of Cambridge Enterprise and its Technology Transfer team, which focuses on both life and physical sciences.

The team supports academics and researchers in bringing their most promising ideas to market, assisting with the creation of new companies and developing licensing opportunities. We often work with academics whose ideas are in the very earliest stages of development.

We secure proof of concept funding to build prototypes and undertake market analysis. We bring together experts to scope and develop new technologies. We arrange development funding opportunities (public and charitable) and find development partners and investors. We negotiate and manage commercial deals through licensing IP, including patents, know-how, data and copyright.

This year, the Technology Transfer team signed 127 commercial and research licences and filed 146 patent applications.

Technology
Transfer invested

£792k

in patents and
proof of concept
2015-16

6 *“The breadth of scientific understanding and industrial experience provided by both the operational team and the executive board means that Cambridge Enterprise ‘customers’ have important and effective access to expert advice and guidance. These connections are vital if we are to deliver on the fantastic opportunities generated within the University of Cambridge and ensure they have the best chance of realising their full potential on a global stage.”*

Dr Jane Osbourn *Vice President* MedImmune

Storm Therapeutics, a spin-out from the University's Gurdon Institute, is developing small molecule drugs to target RNA-modifying enzymes involved in the development of cancer. Image shows a real fluorescence microscopic view of cancer tumour cells.

Growing the portfolio

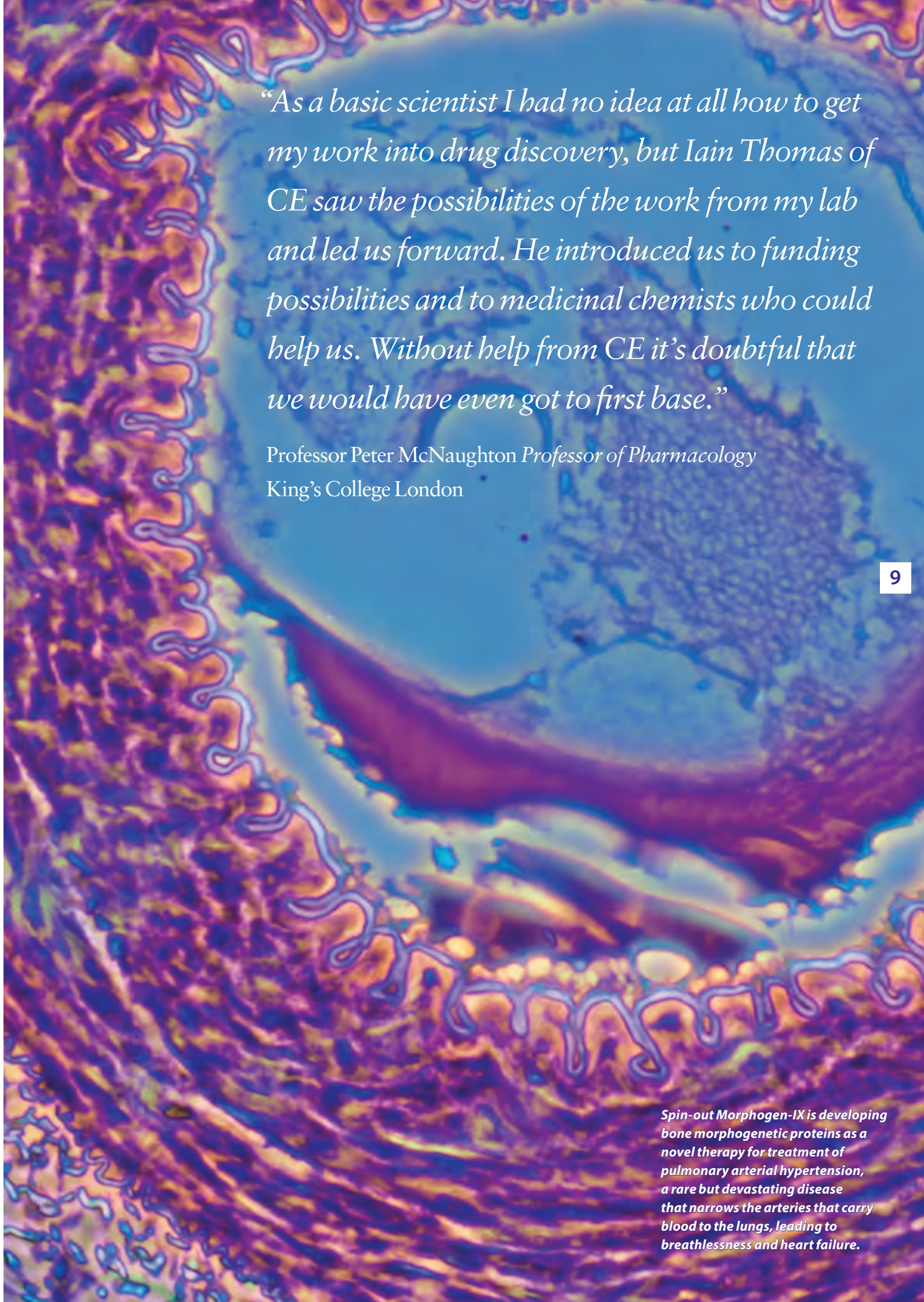
Cambridge Enterprise's Life Sciences team continues to have the pleasure of working across the University and at Cambridge University Hospitals on technologies ranging from psychiatric tests to gene therapy and from immune-oncology to sequencing tools. The team completed 30 commercial deals this year.

Notable deals included the founding of **Morphogen-IX**, which is developing a treatment for pulmonary arterial hypertension (PAH). PAH is a rare but devastating disease that narrows the arteries that carry blood to the lungs, leading to breathlessness and heart failure.

This year saw two great cancer companies founded on research and intellectual property from the University's Gurdon Institute and managed by CE's Life Sciences team: **Storm Therapeutics**, which is working on RNA-modifying strategies, and **Carrick Therapeutics**, which is targeting aggressive cancers. Carrick Therapeutics enjoyed the largest-ever early stage investment in a British university spin-out. With \$95 million in its coffers, Carrick aims to build Europe's leading oncology company.

The team also completed the sale of a technology package, an implant for the repair of small defects in cartilage and underlying bone and a portfolio of related patents to **Chondromimetics Ltd**. Second generation collagen-based products based on this technology have the potential to revolutionise the repair of bones and joints.


The Life Sciences team also worked on the creation of the **Apollo Therapeutics Fund**, a ground-breaking new consortium for drug development (see page 17).



“As a basic scientist I had no idea at all how to get my work into drug discovery, but Iain Thomas of CE saw the possibilities of the work from my lab and led us forward. He introduced us to funding possibilities and to medicinal chemists who could help us. Without help from CE it’s doubtful that we would have even got to first base.”

Professor Peter McNaughton *Professor of Pharmacology*
King's College London

Spin-out Morphogen-IX is developing bone morphogenetic proteins as a novel therapy for treatment of pulmonary arterial hypertension, a rare but devastating disease that narrows the arteries that carry blood to the lungs, leading to breathlessness and heart failure.



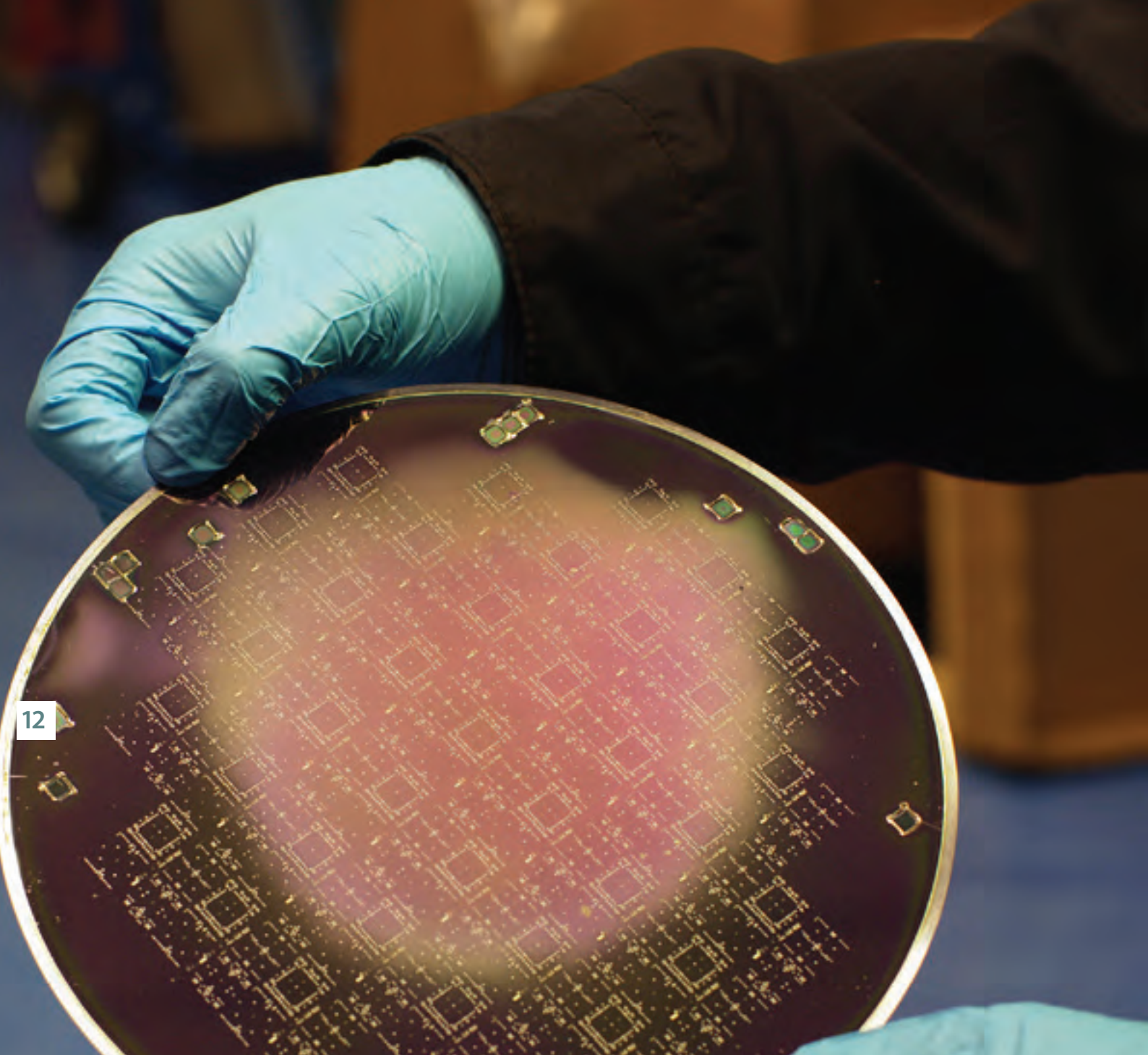
Cortical bone mapping, developed jointly by the Departments of Engineering and Medicine, measures the thickness of cortical bone with great accuracy. By detecting subtle changes in standard clinical scans, it can predict whether a person is at risk of fracture or osteoarthritis. Image by Drs Tom Turmezei, Ken Poole and Graham Treece.

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“Cambridge Enterprise is truly progressive when it comes to technology transfer. Its focus on the innovation eco-system as a whole, and genuine embeddedness with the wider range of stakeholders, is just what is required to turn inventions into products and services that deliver a social and economic impact.”

Dr Will West *Executive Chairman* CellCentric Ltd



Technology Transfer

Physical Sciences

Supporting innovation

Cambridge Enterprise's Physical Sciences team focuses on innovations arising from many areas of the University, from the Schools of the Physical Sciences and Technology to those of the Humanities. Together the Physical Sciences team completed 32 commercial deals this year.

Among the most significant was one with **Aurelius Environmental**, which has licensed a lead-acid battery paste recycling technology developed by Dr RV Kumar of the Department of Materials Science and Metallurgy. The technology, which is both cheaper and cleaner than previous methods, has the potential to transform the battery recycling industry (a \$14 billion market).

Eight19, which spun out of the Cavendish Laboratory in 2010, produces thin and flexible organic photovoltaic modules. The new technology developed in the University and licensed to Eight19 in 2016 promises enhanced silicon solar cell efficiencies.

New spin-out **8power** develops technologies to harvest power from ambient vibration, which means sensors with dramatically lower power consumption. The company's core technologies were developed by a team led by Dr Ashwin Seshia at the Department of Engineering.

SMAP Energy has developed novel analysis techniques and products to mine the mountain of energy consumption data from smart meters. Its data analytics service offers energy companies ways to analyse users' behaviour to make the energy sector more efficient.

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Keeping oil and water apart

Silicon MicroGravity is a spin-out based on the work of **Dr Ashwin Seshia** and a team of researchers in the Department of Engineering. Working with BP, the team developed a novel gravity sensor designed to improve oil recovery operations by locating and tracking subterranean water.

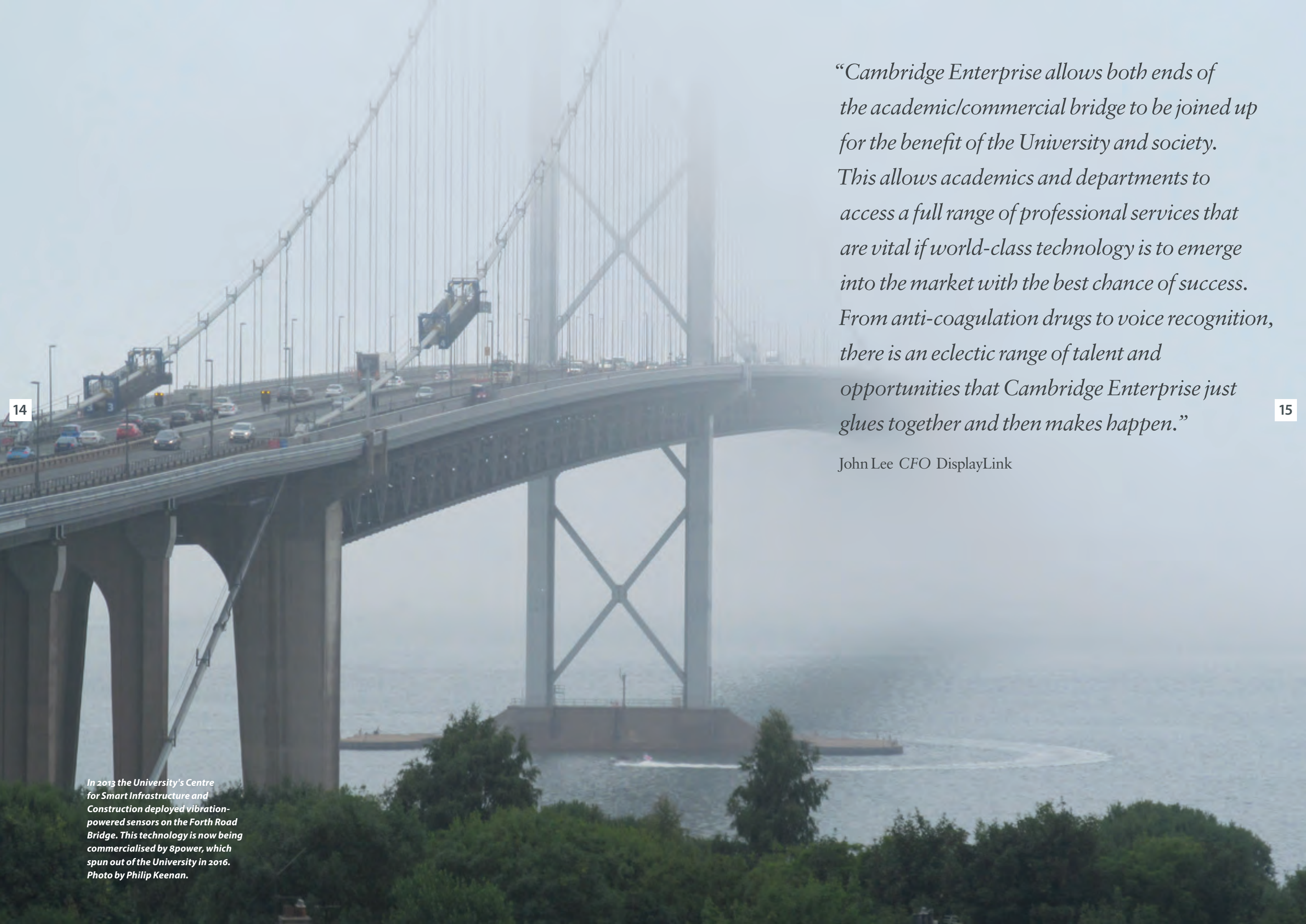
Sensitive enough to measure one billionth the level of Earth's gravity, the sensors are also sufficiently small and robust to be plunged deep into boreholes. Once the water has been found, reservoir engineers can protect against the damage it can cause by leaking into a production well. SMG estimates that the technology could improve yields on conventional reservoirs by up to 2 per cent.

Design work, which began in 2010, led to several generations of prototypes and provided experimental validation of the underlying approach. After a successful test in 2012, BP funded a follow-on project. The first field trial in a production well is scheduled for 2017.

"Water management is an increasingly important issue for BP and the whole industry, so we are excited about the potential for SMG's technology to help us pinpoint where water is within a reservoir and enable us to take mitigating action."

Akira Kirton *Commercialisation Director* BP Ventures

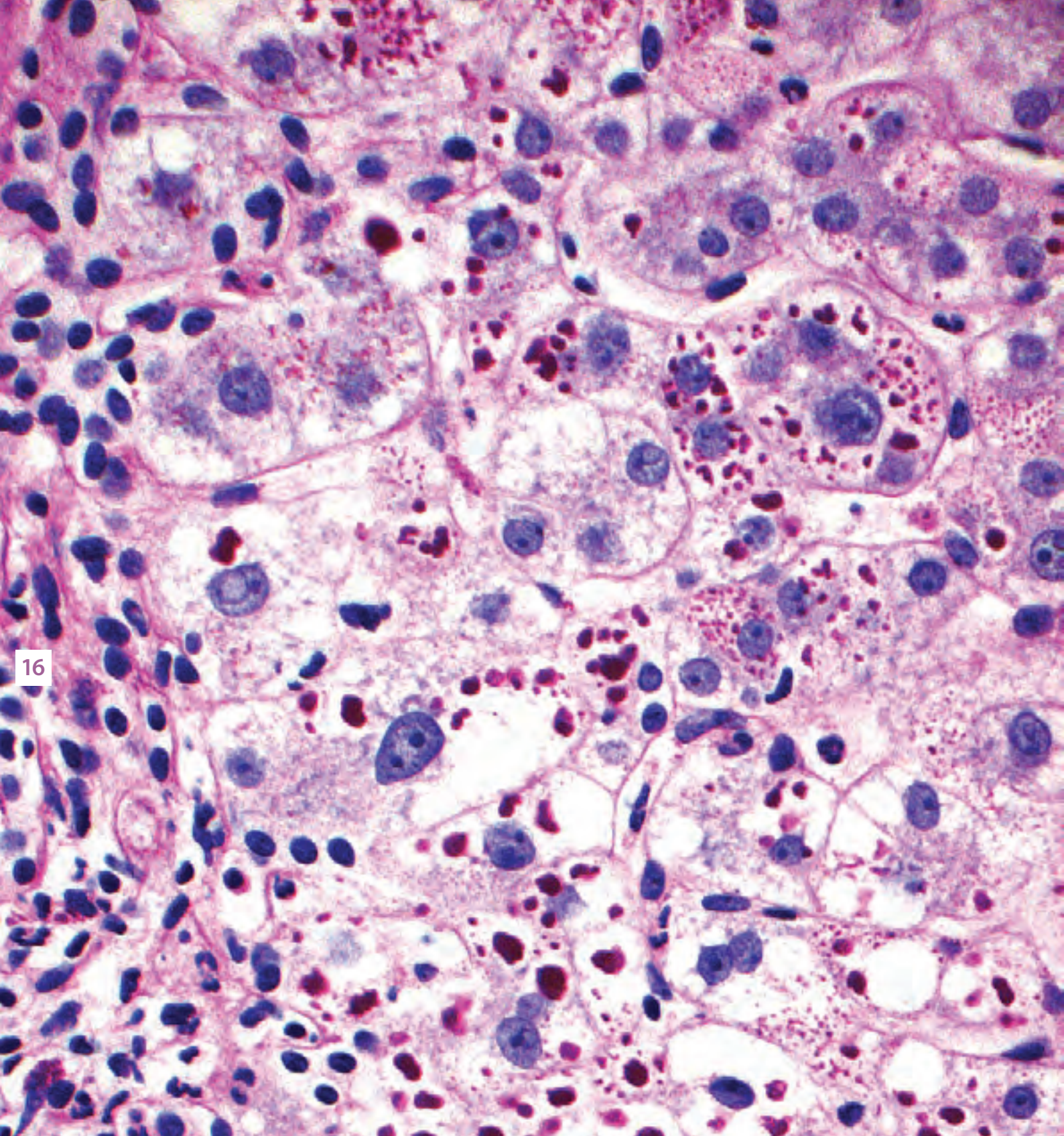
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“Cambridge Enterprise allows both ends of the academic/commercial bridge to be joined up for the benefit of the University and society. This allows academics and departments to access a full range of professional services that are vital if world-class technology is to emerge into the market with the best chance of success. From anti-coagulation drugs to voice recognition, there is an eclectic range of talent and opportunities that Cambridge Enterprise just glues together and then makes happen.”

John Lee CFO DisplayLink

In 2013 the University's Centre for Smart Infrastructure and Construction deployed vibration-powered sensors on the Forth Road Bridge. This technology is now being commercialised by 8power, which spun out of the University in 2016. Photo by Philip Keenan.



Apollo Therapeutics Fund

In drug discovery, the period between getting promising results in an academic lab and receiving real interest from an investor or pharmaceutical company is called ‘the Valley of Death’—and not without good reason.

Discovering and developing potential new therapeutics requires not just money but also expertise and delivery of industrial-type science rapidly. Most candidates succumb to a lack of resources and expertise along the way, long before it’s possible to know whether they might have yielded a superb new therapeutic.

In 2016 Cambridge Enterprise and partners launched a revolutionary new fund that bridges the canyon between academic lab and commercial interest: the £40 million Apollo Therapeutics Fund.

Backed by the technology transfer offices of three top universities (University of Cambridge, Imperial College London and University College London) and three global pharmaceutical companies (AstraZeneca, GlaxoSmithKline and Johnson & Johnson), Apollo will invest in very early stage therapeutic opportunities arising from the three universities.

Critically, Apollo’s core drug discovery team will lead the process, leveraging the expertise of Apollo’s pharmaceutical partners. The team will build and implement the right discovery projects and Apollo will invest at a pace that will make traditional translational funds look glacial.



From clinical research to drug discovery

The first project to be backed by the Apollo Therapeutics Fund is **Dr Ravi Mahadeva’s** search for a small molecule drug to treat Alpha-1 antitrypsin deficiency (AATD).

AATD is a disabling and ultimately fatal genetic disorder encoded by a single mutation that promotes self-aggregation of aberrant-form antitrypsin (Z-AT) in the liver which results in very low levels of normal-form antitrypsin in the lungs. People with Z-AT

develop emphysema and cirrhosis of the liver early in life. (Pictured here are the pink aggregates in liver tissue that are typical in Z-antitrypsin disease.)

There is currently no effective long-term treatment for the disease.

Dr Mahadeva, Consultant Respiratory Physician at Addenbrooke’s Hospital (Director of Cambridge Antitrypsin Centre), Associate Lecturer, University of Cambridge, has a 20 year interest in AAT.

“Cambridge Enterprise has fielded enquiries from and handled interactions with over 100 companies interested in technology developments from the NanoPhotonics Centre—life would be completely impossible without them!”

Professor Jeremy J Baumberg *Department of Physics*
University of Cambridge

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The Cambridge Centre for Smart Infrastructure and Construction installed a host of innovative sensors in a disused, cast iron railway tunnel in order to monitor stresses caused by excavation of a gigantic Crossrail tunnel directly underneath. About 70 per cent of London’s underground tunnels are of similar Victorian construction. Photo by Matt Wilcock.

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“Cambridge Enterprise’s support has allowed me to focus on strategic questions. Knowing that important details around legal agreements and company structure were in professional and trustworthy hands has been invaluable.”

Professor Henning Siringhaus *Hitachi Professor of Electron Device Physics* University of Cambridge *Founder* Plastic Logic/FlexEnable

The business of company creation

For the fourth consecutive year Cambridge Enterprise Seed Funds outdid itself, making 14 investments in promising companies for a total of £5.3 million. During this period, the University has also received £6.2 million from realised investments.

Seed Funds supports the creation of companies based directly on University research or people, investing up to £1 million in each from a £16 million evergreen fund. This year alone, Seed Funds has returned £4.9 million to the fund from the sale of shares in four companies.

Working with the Physical Sciences team, Seed Funds supported the work of **PervasID**, which is developing a highly reliable wide area RFID system, and **8power**, which develops smart sensors for industrial applications (see page 13). In conjunction with the Life Sciences team, we supported **Psyomics**, a spin-out that aims to improve the prevention, diagnosis and treatment of neuropsychiatric disorders; **Carrick Therapeutics**, a unique new venture bringing together top cancer research and drug experts to create Europe's leading oncology company; and **Fluidic Analytics**, which is developing a technology to characterise proteins in a rapid, accurate and cost-effective manner. Seed Funds also invested in **Healthera**, which focuses on pharmacy-integrated, personal health management apps.

This year saw the fourth University of Cambridge Enterprise Fund (UCEF), which has helped support the University efforts to stimulate economic growth. It has invested £2.15 million across seven companies in a period of seven months. A fifth Enterprise Fund was launched at the end of 2016.

This year we made
14 investments,
totalling

£5.3m

Celebrating a successful exit

In June, Cambridge CMOS Sensors (CCS) celebrated as it was acquired, in an all-cash transaction, by ams AG, a global leader in environmental sensing.

Spun out of the University's Department of Engineering in 2008, CCS designs and builds unique gas sensors with applications such as air quality monitoring, breath analysis, domestic gas detection and medical diagnostics. The tiny, ultra-low-power sensors are set to be integrated into smartphones, wearables and smart home devices.

The team behind CCS—**Professor Florin Udrea** and **Professor Bill Milne** of the University of Cambridge and **Professor Julian Gardner**, of the University of Warwick—has worked together for over 20 years.

We supported CCS throughout its development, with initial seed funding and subsequent investment from Cambridge Enterprise Seed Funds and UCEF. "We are particularly grateful to Cambridge Enterprise, our first investor, for their belief in our innovation, team and the tremendous business opportunities", said Professor Udrea.





Consultancy Services

Sharing knowledge and expertise

Consulting is a highly effective means for academics to share their insights with industry, government and the public. And it's not a one-way street. Among other benefits, consulting often yields data and examples researchers can take back into their classrooms and labs.

The mission of Consultancy Services is to support University staff, researchers and postgraduate students serving as consultants. The team provides guidance, negotiates contracts and deals with time-consuming matters such as billing.

Consultancy Services worked with 200 academics in 2015–16. Among them was anthropologist **Piers Vitebsky**, who responded to a request from North-Eastern Federal University in Yakutsk, Russia, to help its social scientists master the process of getting research into Western scientific journals. **Nick Atkins**, University Lecturer in Turbomachinery, worked for the English Institute of Sport making thermal images of cyclists preparing for the Rio Olympics. **Liz Hide**, Museums Officer for University of Cambridge Museums, crafted case studies about London's Natural History Museum for advocacy purposes. Neurobiologist **Jenny Morton** from the Department of Physiology, Development and Neuroscience advised a design company in Eindhoven on enriching workplace environments. And Consultancy Services also supported **Jennifer Schooling** and her colleagues in the University's Centre for Smart Infrastructure and Construction in their work with 41 industry partners.

This year, with our support,
200
consultants provided expertise to
245
clients

Healthier pigs worldwide

The Pig Improvement Company (PIC) does what its name suggests: develops better pigs. Unlike farmers of yore, PIC uses the latest genomics techniques to select for desirable traits and turns to veterinary experts for insights on disease. **Dr Dan Tucker**, of the Department of Veterinary Medicine, serves as PIC's Global Health Assurance Consultant.

Although Tucker had been consulting privately with PIC for some time, when the company proposed a closer working relationship, he asked Cambridge Enterprise for advice. Our team negotiated a contract that ensured he could work for PIC for a fixed number of days each year while also continuing his research at the University.

Tucker's research focuses on bacterial diseases of pigs. Its long-term goal is reduced reliance on antibiotics. His work for PIC ensures that breeding is done safely and efficiently, so that health issues do not interfere with genetic improvement. Tucker also works to improve animal welfare standards in countries lacking effective farm animal welfare laws.

"The connection with industry is two-way, benefitting both industry, through access to leading research, and the University, through opportunities for our staff and funding," Tucker said. "The project allows my work to reach the real world, and it's good to see the benefit of my research in action."

Supporting the Cambridge Cluster

Established by Cambridge Enterprise and backed by the Cambridge University Endowment Fund, Cambridge Innovation Capital plc (CIC) invests in and develops IP-rich companies emerging from the University of Cambridge or based in the Cambridge Cluster.

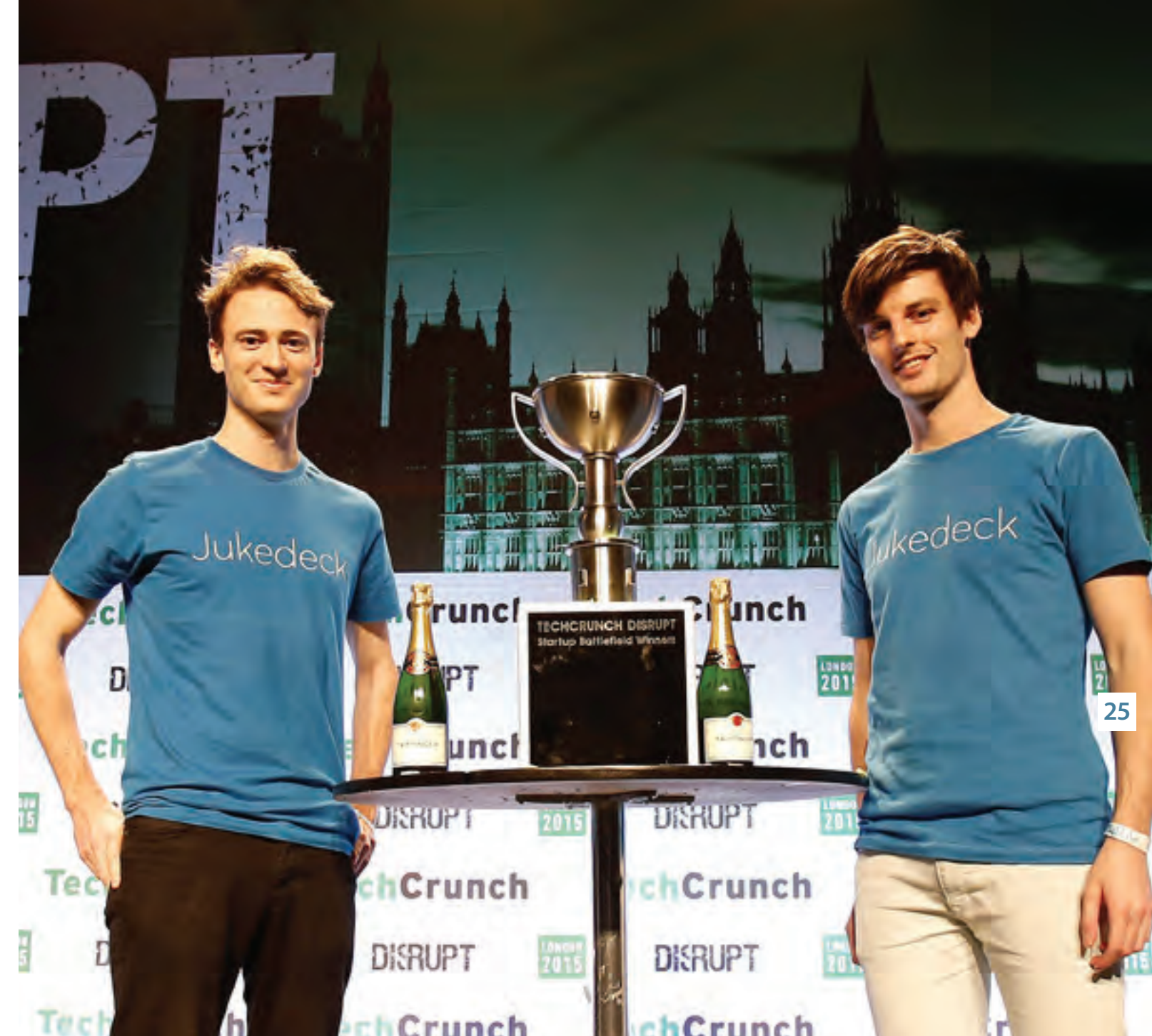
In 2015–16 CIC made eight investments, committing £20.5 million of the £50 million then available to invest.

These investments included seed funding for **Morphogen-IX**, alongside Cambridge Enterprise Seed Funds. CIC also invested further funds in **Jukedeck**, another Cambridge Enterprise Seed Fund investment, and in **Storm Therapeutics** (formerly Icen Therapeutics).

Additionally, CIC invested in a number of other Cambridge Cluster companies: **Geospock**, which provides a real-time, scalable database for the big data needs of businesses, **Cambridge Medical Robotics**, a developer of next-generation robotic systems for keyhole surgery and **Audio Analytic**, a leader in intelligent sound detection software.

In addition, CIC provided further funds to existing portfolio companies **Inivata**, which measures and evaluates circulating tumour DNA to improve cancer management, and **Origami Energy**, which is developing a platform for the intelligent, active management of distributed energy assets.

£20.5m
committed
to investments
in 2015–16



Music is everywhere these days


Whether we're shopping, eating out, watching videos online or playing computer games, we are accompanied by a soundtrack that—at least when done well—adds atmosphere to our lives. Finding music of the right length, tempo and mood is often, however, a costly and time-consuming exercise.

University of Cambridge graduate and music scholar **Ed Rex** saw a potential solution to this problem. He realised that if computers could be taught to compose decent music, they could supply bespoke, cheap and royalty-free tracks.

Armed with plans to turn this idea into a business, Ed turned to Cambridge Enterprise in 2012. CE supported the company, named Jukedeck,

through its first two years and provided seed funding. When it was big enough to fly the nest, CIC was the logical place to look for further funding. Thus Jukedeck's first follow-on funding round, in mid-2014, became the first co-investment of CE and CIC.

Fast-forward 18 months and Jukedeck's team now numbers 19 tech-savvy musicians. As the company has grown, CIC's involvement has too. CIC led a £2 million funding round in December 2015, which helped the company promote its first commercially available product, Jukedeck MAKE. It was launched at London TechCrunch Disrupt 2015, where Ed Rex and co-founder Patrick Stobbs (pictured) took top honours on the Startup Battlefield.

A scanning electron microscope (SEM) image showing a complex, squid-like structure of a graphene oxide membrane. The structure consists of numerous thin, elongated, and interconnected filaments that radiate from a central point, resembling the tentacles of a squid. The background is a dark, textured surface, likely the substrate on which the membrane was grown. The overall appearance is highly porous and intricate.

This squid-like structure was captured on a free-standing graphene oxide membrane while taking its SEM images. A novel, mass scalable electrode fabrication process is being developed by the Department of Engineering for carbon-based electrodes in which reduced graphene oxide serves as a single-component, conductive binder with multifunctionality for supercapacitors with outstanding performance. Photo by D T L Galhena.

“CE is a remarkable organisation. Its success is due to outstanding professional staff that understand what makes technology valuable and work closely with dedicated advisors who bring the right level of experience and judgement to investment decisions. It is this combination that makes CE uniquely successful.”

Henry Kressel *Managing Director* Warburg Pincus

“Cambridge Enterprise was pivotal in the creation of VocalIQ Limited from initial business plan, through investment and final acquisition. Many thanks from us, the founders.”

Steve Young *Chairman* Blaise Thomson *CEO* VocalIQ

And the winner is...

We ran the Cambridge Postdoc Enterprise Competition for the second time this year, a business plan contest created by Cambridge Enterprise and the Entrepreneurial Postdocs of Cambridge to encourage postdocs of the University to think entrepreneurially.



Our finalists this year were so outstanding that the judges chose two first prize winners, each receiving £20,000 investment. They were **CamGaN Devices**, created by Dr Giorgia Longobardi and her team, whose Gallium Nitride (GaN) technology can improve power consumption in electronics, and **Netwookie**, created by Dr Max Bock, which helps job seekers in developing countries by matching them with employers through a digital platform.

An additional prize of £7,500 was sponsored by the External Technology Assessment function of The Coca-Cola Company. It was awarded to **SynBioSeas**, created by Dr Giorgio Divitini. It has a sustainability focus and has developed a way to extract valuable components from shellfish waste.

Enterprise Champions

Enterprise Champions are an invaluable link between Cambridge Enterprise and the University, acting as a first point of contact for colleagues and encouraging commercialisation and consultancy as potential routes for sharing ideas and expertise.

Covering more than 50 areas of the University, Champions form an essential two-way communication channel for sharing news about their departments, Cambridge Enterprise updates and information from the central University on topics such as impact, research policy and other matters.

The academics, researchers and facilitators who serve as our Enterprise Champions come from a wide range of backgrounds—from those undertaking collaborative corporate research and starting companies to those fundraising and balancing the demands of academic research and business.

Enterprise Champions meet two to three times a year, both as a whole and in smaller groups by research interest. The meetings provide a chance to network as well as a forum to exchange information, discuss hot topics, hear from guest speakers and share their thoughts with University policymakers.

International Outreach Programme



The International Outreach Programme is now in its fifth year and continues to provide advice, training and support to governments and universities around

the globe that want to improve the commercialisation of their research and knowledge base.

The year started with the delivery of the Top 500 programme for the Ministry of Science and Education, Poland, the nine-week course was delivered to two groups comprising 40 and 35 people. CE delivered other training programs to universities from Norway, Nigeria and Chile as well as the Malaysian Innovation Agency and the Serbian Innovation Fund.

An exciting new programme with the Foreign and Commonwealth Office in Istanbul launched in autumn 2016 and continues into 2017. It provides training support for Turkish technology transfer offices.

Outreach to the academic community

Providing advice to an external customer as a new consultant can be daunting for researchers. Many have not had experience reviewing commercial contracts, setting a daily charge rate for their services or managing insurance and liability issues.

More and more academics have become aware of the benefits and impact of undertaking consultancy work that can sit alongside their research interests.

Cambridge Enterprise recognised a need for training and in 2015 created the **Consultancy 101 Workshop**, open to all University staff to attend without charge, whether or not they have previously worked as a consultant. We have now run the session three times and over 100 people have attended. As the sessions have been oversubscribed, we are creating an online version of the session that will be available in 2017.

Financial performance 2015–16

Cambridge Enterprise income

Years to 31 July	2015–16 £000	2014–15 £000
Income generated by Cambridge Enterprise operations	15,987	11,182
University and Higher Education Innovation Fund (HEIF) funding	2,200	1,489
Income for services and other income	921	827
Income before returns from equity realisation	19,108	13,498
Equity income to Cambridge Enterprise and University Seed Funds	6,522	16,492
Total income	25,630	29,990

Cambridge Enterprise IP investment, distributions and operating costs

Years to 31 July	2015–16 £000	2014–15 £000
Investment in IP assets (patent and proof of concept)	(792)	(979)
Distributions to academics and external parties	(9,205)	(13,680)
Distributions to University (departments' share of IP and gift aid from academics)	(4,209)	(8,441)
Returns to University of Cambridge Seed Funds	(4,942)	(3,713)
Operating costs (staff and other costs)	(3,887)	(3,333)
Total expenditure	(23,035)	(30,146)
Net income/(expenditure) for the year	2,595	(156)

Group accounts

The group income and expenditure summary comprises consolidated results for Cambridge Enterprise Limited and its wholly owned subsidiary company, Cambridge University Technical Services Limited, presented in a management accounts format.

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Where Cambridge Enterprise's income goes

Returned to University Seed Funds	£4,941,662
Academics and others	£8,623,864
Departments (divided by school)	£4,209,182
Payments to external parties for direct costs	£2,277,894
Support for Cambridge Enterprise	£1,571,354
Investment in patent assets and proof of concept	£791,555
Payments to external parties for equity realisation distributions	£64,216
Charitable donation to the University	£29,942

Income paid or donated to departments (divided by school)

School of the Biological Sciences	£1,858,644
School of Technology	£1,326,429
School of Clinical Medicine	£352,262
School of the Humanities and Social Sciences	£342,730
School of the Physical Sciences	£275,157
Other	£41,362
School of Arts and Humanities	£12,597

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Economic impact

Since 2011 eleven companies started with Cambridge Enterprise have either been sold or listed for a combined valuation of **£1.3 billion**.



Governance and structure

Cambridge Enterprise is a wholly owned affiliate of the University of Cambridge.

Board of Directors

Chair

Sir Keith O’Nions

Non-Executive Directors

Professor Alan Blackwell

Charles Cotton

Dr Jane Osbourn *(from 25/09/15)*

Debu Purkayastha *(from 25/09/15)*

Professor Nigel Slater *(from 01/01/16)*

Professor Florin Udrea

Professor of Interdisciplinary Design

Cambridge Phenomenon Limited

Vice President of Research & Development, MedImmune

Entrepreneur-in-Residence, Octopus Investments

Pro-Vice-Chancellor (Enterprise)

Professor of Semiconductor Engineering

Executive Directors

Dr Tony Raven

Dr Paul Seabright

Chief Executive

Deputy Director

Company Secretary

Dr Jonathan Nicholls

Registry, University of Cambridge

Nominated Officer of the Shareholder

Andrew Reid

Director of Finance, University of Cambridge

Senior Management Team

Dr Tony Raven

Dr Paul Seabright

Boris Bouqueniaux

Dr Anne Dobrée

Dr Malcolm Grimshaw

Shirley Jamieson

Mark Parsons

Ruth Queen

Dr Iain Thomas

Dr Amanda Zeffman

Chief Executive

Deputy Director

Head of Support Services

Head of Seed Funds

Head of Physical Sciences

Head of Marketing

Head of Finance & Accounting

Head of Human Resources

Head of Life Sciences

Head of Consultancy Services

Investment Committee

Charles Cotton

Dr Barbara Domayne-Hayman

Pam Garside

Dr Iris Good

Dr Hermann Hauser

Dr Andrew Herbert

Dr Richard Jennings

Dr Derek Jones

Dr Henry Kressel

John Lee (Chair)

Professor Chris Lowe

Professor Duncan Maskell

Professor Sir Keith Peters

Dr Tony Raven

Andrew Sandham

Dr Robert Swann

Professor Steve Young

Cambridge Phenomenon Limited

Biotechnology entrepreneur

Healthcare investor

Biotechnology entrepreneur

Amadeus Capital Partners Limited

Computer technology entrepreneur

Technology transfer consultant

Babraham Bioscience Technologies Limited

Warburg Pincus LLC

DisplayLink Limited

Professor, Institute of Biotechnology

Senior Pro-Vice-Chancellor

Emeritus Regius Professor of Physic

Cambridge Enterprise Limited

Biotechnology entrepreneur

Technology entrepreneur

Professor of Information Engineering

Cambridge Enterprise Limited
University of Cambridge
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