



UNIVERSITY OF
CAMBRIDGE
enterprise

Introduction to knowledge transfer in Engineering

CUED Postdoc community

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Summary

- Overview of CE
- Technology Transfer (IP and Licensing)
- Consultancy
- Seed Funds
- Closer to home... KTFs and Enterprise Champions
- Getting in touch

What can I do with my new technology?

- Publish in academic journal / conferences
 - Recognition
 - Personal and project awareness into other institutions / companies
- Consultancy
 - Income
 - Contacts with business
- License / spin-out
 - “Open source” model / social enterprise
 - Commercial

Cambridge Enterprise was formed expressly to :



- aid the transfer of knowledge from the University via commercialisation
- aid staff and students in making their ideas more commercially successful; and
- produce a financial return for inventors, departments and the University

Cambridge Enterprise offers:

- experienced staff with diverse industry experience
- IP protection and management services
- proof of concept and early stage investment funding
- expertise in consultancy, intellectual property licensing, and company creation
- marketing and promotional support
- access to experienced mentors and other key advisors

Technology Transfer services

- “IP and Licensing”
- In co-operation with the academic:
 - Identification/evaluation of commercially valuable research results
 - Patent strategy, drafting and filing with qualified agents and counsel
 - IP case and portfolio management
 - Identification and engagement with commercial partners
 - Negotiation of commercial deals
 - Management of the post-deal relationship

Intellectual Property Rights – the main ones

- **Patents** protect how something works (product or process)
 - NB must be filed BEFORE public disclosure
 - E.g. conference poster, online publication, PhD thesis, non-confidential discussions
- **Know-How** e.g. technical information, data, knowledge, techniques
- **Copyright** protects expression of ideas including software code
 - IP policy – creator of code owns the copyright
 - Beware if multiple creators!

[Policy slides](#)

Consultancy services

“Peace of mind”

- UoC approved contract between client and CUTS
- Advice on costing and pricing (business sector, service & status)
- Cover from University’s PI and PL insurance policies

“Branding and Facilities”

- Allows use of University “branding”
- Allows use of UoC facilities (FEC costing)

“Painless administrative support”

- Negotiate business terms with client
- Review & draft contracts
- Invoicing & debt recovery; tax issues; pays staff and department and donates income into research accounts

CE Seed Funds

- Supporting academics in spinning-out new technology companies
 - Developing proposition and business model
 - Access to management and mentoring
 - Through investment for equity
 - As the company develops through the early stages

CE Seed Funds

Work alongside other teams in CE to provide support through advice and mentoring:

- Internal and external help in developing idea and business model
- CE mentors network – advice, contacts, management
- Portfolio network – 66 companies in portfolio, across range of sectors
- Early stage management – large network of early stage experts
- Access to investors: CEVP, angel relationships etc

CE Seed Funds

Support through University Venture Fund investment:

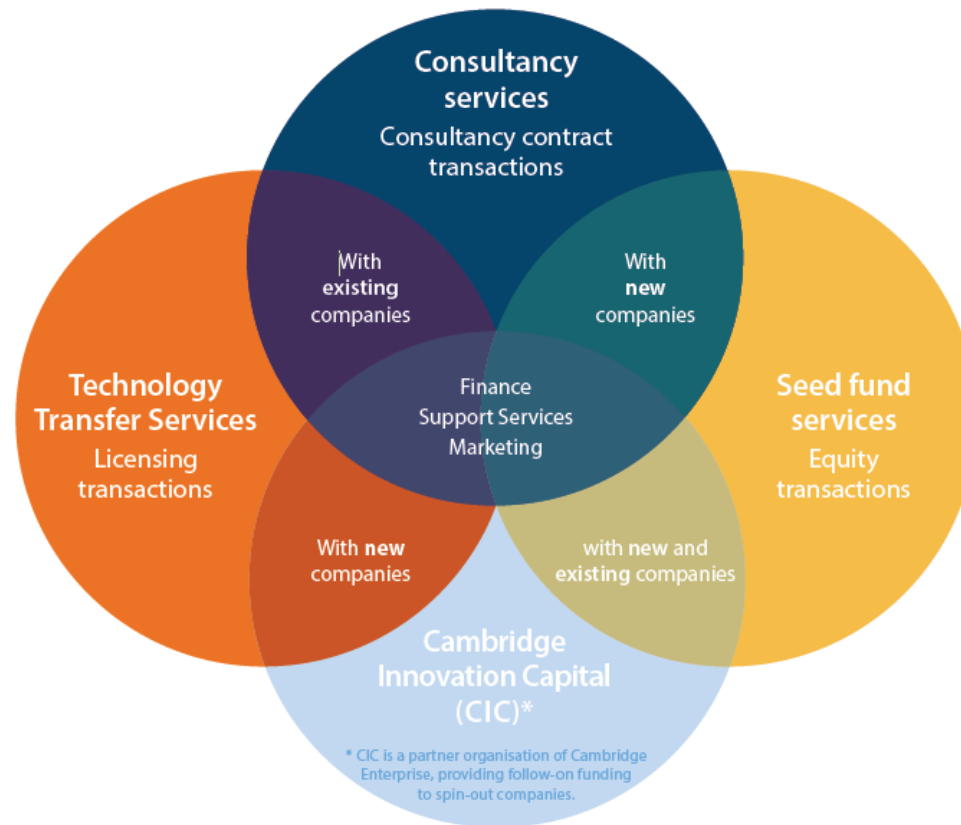
- Up to £15k to develop the proposition
- Fast 50 for more in depth due diligence/development
- Typically up to £250k per funding round; up to £500k per company
- Plus matching funds from EIS co-investment fund (UCEF)

For technology companies that have the potential scale to return investment.

Cambridge Innovation Capital may provide follow-on funding for select companies.

[More info](#)

Cambridge Enterprise



Enterprise Champions and Knowledge Transfer Facilitators

- CE works closely with departmental and interdisciplinary Enterprise Champions from both academic and administrative fields
- Often a good local first point of contact for you
- Other SRI Champions e.g. Cambridge Big Data, Energy@Cambridge – see our website for details
- “Academic” – Tim, Chris R, Philip, Arokia
 - Working with CE
- Administrative (KTFs) – Helen (IfM, Whittle), Chris P (Div B), Alexandra (main site)
 - Career direction, fellowships, grant proposals, company sponsorships, network of contacts within and outside university

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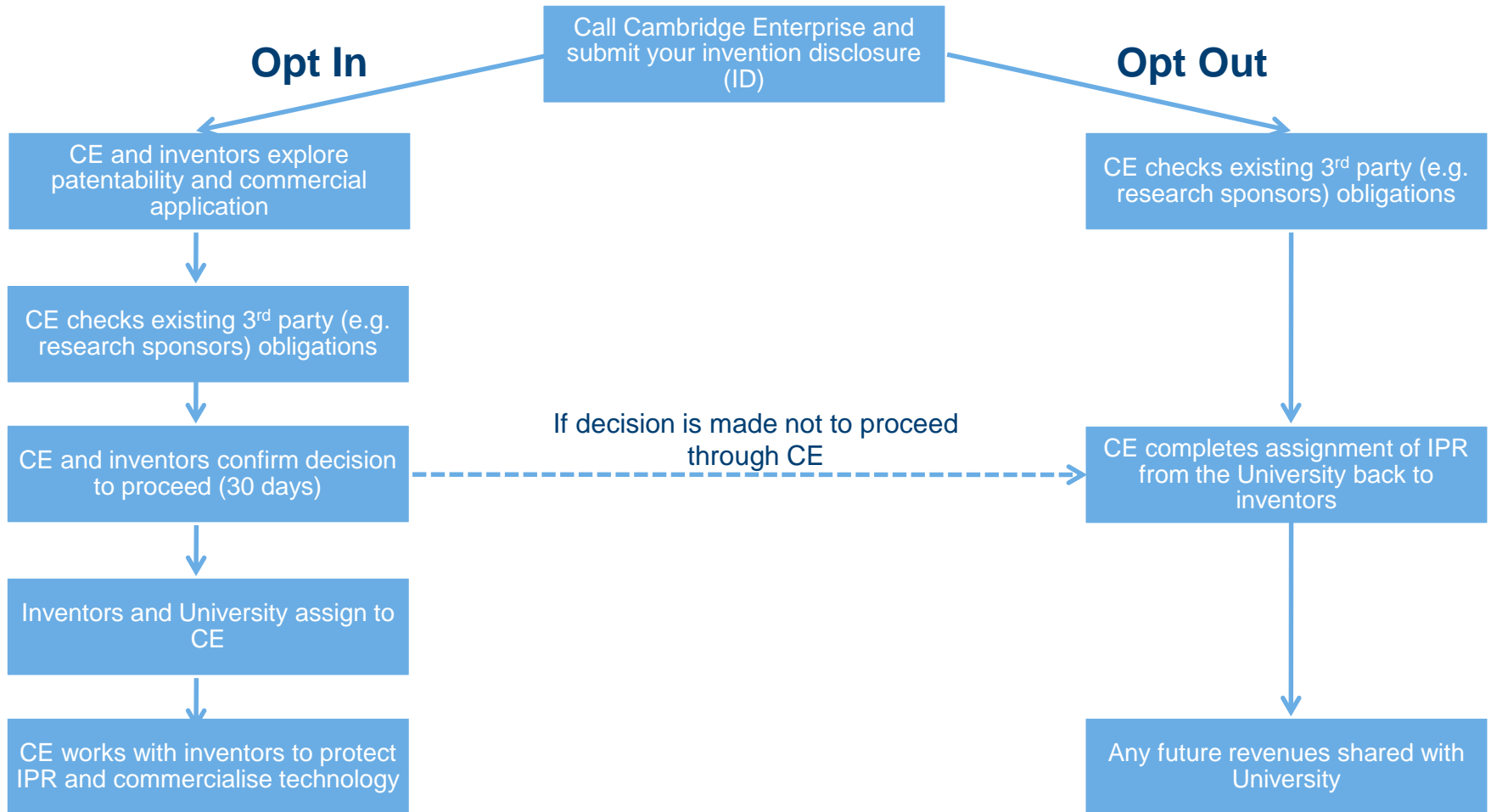
The screenshot shows the Cambridge Enterprise website homepage. At the top left is the University of Cambridge Enterprise logo. The navigation menu includes 'About us', 'Our services', 'Case studies', 'News', and 'Contact us'. The main banner features a dandelion against a blue sky with the text: 'We provide the help you need to get your ideas off the ground' and a 'Read more' button. Below the banner are three service cards: 'Start a company' (with an image of people clapping), 'Be a consultant' (with a 'Read more' button), and 'Commercialise your research' (with the text 'We can help you develop your ideas into attractive investment opportunities'). At the bottom, there is a paragraph: 'At Cambridge Enterprise, we help students and academics form and fund spin-out companies, bring new ideas to market and share University expertise with industry and government. How can we help you?' and another 'Read more' button. A search bar with the placeholder 'I'm looking for...' is on the right. The footer shows the URL 'http://www.enterprise.cam.ac.uk/our-services/academics-researchers-and-students/commercialise-your-research/' and a zoom level of 100%.

University revenue sharing from licensing technology

Net Income (opt in) <i>RPI adjusted to 31/12/14</i>	Inventor(s)	Department(s)	CE
£0 - £133k	90%	5%	5%
£133k - £266k	60%	20%	20%
>£266k	34%	33%	33%

Net Income (opt out) <i>RPI adjusted to 31/12/14</i>	Inventor(s)	Department(s)	CE
£0 - £66k	100%	0%	0%
>£66k	85%	7.5%	7.5%

Opt In / Opt Out



Costing and Pricing

- Professional fees: often around £1,250 per day [sector & status dependent]
- “Expert witness” work can command much higher fees (£250-500ph)
- Beware fees < c.£400pd [plumbers, mechanics often charge >£75ph]
- Don’t charge rates that are subsidized by public funding
- Add-on management fee = 12.5% of consultant’s fee
- Avoid fixing a fee before talking to CE
- Do not break down costs provide one price for the deliverables
- Departmental costs - by agreement between consultant and HoD. As per University financial regulations
- VAT & other taxes

[back](#)

CE Seed Funds

Ongoing support as company develops:

- Board seat – bringing wide early stage experience
- Portfolio network provides access to many support services (finance, IP, HR etc), non-execs and management
- University of Cambridge backing, which brings brand value and influence

Key message: quality investor

- Friendly, early stage, strategic seed fund + co-investment fund
 - £12 M plus matching funds
- Financial returns demonstrate quality of our investments
- High quality network through mentors, portfolio companies, co-investors, early stage management
- University backing brings influence

A Selection of Technology Companies Formed by University of Cambridge Staff & Students

BlueGnome Ltd



Statistical Modelling Software for
Drug Discovery
www.cambridgebluegnome.com
October 2001

Breathing Buildings Ltd



Novel Low Energy Ventilation
System
www.e-stack.co.uk
January 2006

Cambridge Display Technology Ltd



Application of Light Emitting
Polymers
www.cdtltd.co.uk
July 1992

Cambridge Flow Solutions Ltd



Consultancy & Provider of CFD
Software
www.cambridgeflowsolutions.com
February 1999

Cambridge Semiconductor Ltd



Power Electronics
www.camsemi.com
July 2000

CEDAR Audio Ltd



Signal Processing
www.cedaraudio.com
February 1989

Enval Ltd



Recycling & Environmental
Technologies
www.enval.com
February 2005

Granta Design Limited



Software for Engineering Materials
IT
www.grantadesign.com
April 1994

Hypertag Ltd



Wireless Information Access &
Proximity Services
www.hypertag.co.uk
December 2003

Metalysis Ltd



Generic Electrolytic Processes
www.metalysis.com
October 2001

Plastic Logic Ltd



Development of Plastic
Semiconductors
www.plasticlogic.com
November 2000

ZinWave Ltd



Unified Wireless Infrastructure
www.zinwave.com
November 2000