

University IP and Technology Transfer
perspectives from the UK
with references to
experiences
at UCL

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TARHAN ASSOCIATES

Introduction

- ❑ Accountant
- ❑ Founded and ran FreeMedic PLC
- ❑ Now known as UCL Business PLC
- ❑ Built up over 25 years
- ❑ Retired end of 2018



My team at UCLB

Where?



- ❑ Established over 180 years ago
- ❑ Today – 980 professors and 6000 academic/researchers
- ❑ £1.4 billion annual turnover
- ❑ Ranked **8th** in the QS World University rankings for 2020 and **15th** in the Academic Ranking of World Universities - 2019 (**3rd** in Europe)
- ❑ Exceptional research strengths

London's global university

When and why?

- ❑ Freemedic PLC incorporated 1993
- ❑ Object was to make profit
- ❑ It was a “business”
- ❑ Evolved into a business with a social mission to:
 - ❑ Support UCL’s research impact agenda
 - ❑ Enhance UCL’s reputation
 - ❑ Help UCL’s long term sustainability

UCLB 25 years on

- ❑ Wholly owned subsidiary
- ❑ Company – virtual to actual
- ❑ Employees – nil to 50 +
- ❑ Turnover £750K to £25M
- ❑ Projects 10 to 800
- ❑ Portfolio value £5M to £250M

UCL Business PLC



25 years and going strong

Historical perspective across UK

- ❑ UK Universities and later UK Government has been experimenting – still continues.
- ❑ Most major universities established TT activity in the late 80's early 90's
- ❑ Most focussed on income/profit
- ❑ Freemedic/UCLB was set up to commercially exploit IP generated by the medical school and later the whole university.

It was all about income

Government “engagement/support”

- ❑ Commenced late 90's
- ❑ 1999 University Challenge Seed Fund
- ❑ 2000-2004 Higher Education Reach-Out to Business and the Community (HEROBAC) provided project funding to universities.
- ❑ From 2001 Higher Education Innovation Fund (HEIF) introduced a designated stream of grant funding

Focus started to change

HEIF

- ❑ 2001/2 - 2004/5 HEIF 1 competitive £77M
- ❑ 2004/5 - 2005/6 HEIF 2 competitive £187M
 - ❑ Focus on **economic benefits to UK**
- ❑ 2006/7 - 2007/8 HEIF 3 formulaic (but capped) with competitive element £234M.
 - ❑ To support a broad range of knowledge transfer activities to deliver **direct and indirect economic benefit to the UK**
- ❑ 2008/9 - 2010/11 HEIF 4 formula based £396M
 - ❑ To support a broad range of knowledge transfer activities resulting in **economic and social benefit to the UK.**

Focus expands gradually

Gradual shift in UCLB mission too!

“In Britain, a Tech-Transfer Operation Where Profits Aren't the Only Goal”

Article in the Chronicle of Higher Education
Nov 2010,

<https://www.chronicle.com/article/A-Tech-Transfer-Operation/125532>

Emergence of “Impact”

HEIF 5 and link with Impact

- ❑ UK Government committed to provide incentives which enhance the **economic and social impact of research**
- ❑ 2011/12 to 2016/17 HEIF 5 2008/9 –
 - ❑ Funding continued at £150M pa. Formula was reformed with focus on performance (moving away from supporting capacity building)
 - ❑ Highest performing institutions were financially incentivised, To support a broad range of knowledge transfer activities resulting in **economic and social benefit to the UK.**
 - ❑ Requirement to work with **Research Councils** to ensure overall **research impact agenda** was delivered coherently

HEIF 6

- ❑ Knowledge exchange strategies submitted in 2016
- ❑ 2017 -2022 £210M pa funding
 - ❑ Cap raised
 - ❑ Incentives provided
 - ❑ Formula driven and funding based on performance data collected annually.

5 year commitment

The Data

- ❑ Previously known as **Higher Education Business Interaction (HEBI)** survey now the **Higher Education Business & Community Interaction (HE-BCI)** survey
- ❑ Longest running dataset on KE activity with five Date fields:
 - ❑ Research related activities
 - ❑ Business and community services
 - ❑ Regeneration
 - ❑ **Intellectual Property**
 - ❑ Social community and public

IP is an integral element

Intellectual Property

- ❑ **Disclosures and patents filed by or on behalf of the University**

 - Number of disclosures

 - Number of new patent applications filed in year

 - Number of patents granted in year

 - Cumulative patent portfolio

 - Number of patents filed by an external party naming the university as an inventor

- ❑ **Licence numbers (including patents, copyright, design, registration and trade marks)**

 - Software and Non-software licences granted SMEs, Other (non-SME) commercial businesses and

 - Non-commercial organisations

 - Total number software and non-software generating income

- ❑ **IP income (including patents, copyright, design, registration and trade marks)**

 - Software and Non-software licences income from SMEs, Other (non-SME) commercial businesses and Non-commercial organisations

 - Other IP income SMEs Other (non-SME) commercial businesses

 - Sale of shares in spin-offs

 - Total IP revenues

 - Total costs

Usual IP metrics

Research Impact - background

- ❑ **Research Assessment Exercise (RAE)** commenced 1986 through to 2008
- ❑ To evaluate the quality of research undertaken by UK universities
- ❑ Frequency - 5 years or so
- ❑ Peer reviewed rankings given
 - ❑ Unclassified
 - ❑ 1* recognised nationally
 - ❑ 2* recognised internationally
 - ❑ 3* internationally excellent through to
 - ❑ 4* world leading
- ❑ Rankings determine research funding (QR)
- ❑ Replaced by the Research Excellence Framework in 2014.

Research Excellence Framework

- ❑ Assesses
 - ❑ the quality of **outputs** (weighted 60%) (e.g. publications, performances, and exhibitions),
 - ❑ their **impact** (weighted 25%) beyond academia, and
 - ❑ the **environment** (weighted 15%) that supports research.
- ❑ KE is relevant for REF impact which is defined as:

"an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia".

Next REF - 2021

What about KEF?

- ❑ Knowledge Exchange Framework
- ❑ Announced in 2017 and formally launched for consultation in 2019. Aims to provide

“More accessible information and data for universities to understand and improve their own performance.”

“More information for businesses and other users of university knowledge and resources”

“Increased public visibility and accountability for HEIF (£250M pa)”

Summary

- ❑ Times change - in 1993 it was about “the money”
- ❑ In 2019 it's about “the impact”
 - ❑ Research reputation – league tables
 - ❑ Economic development
 - ❑ Sustainability

Thank you