

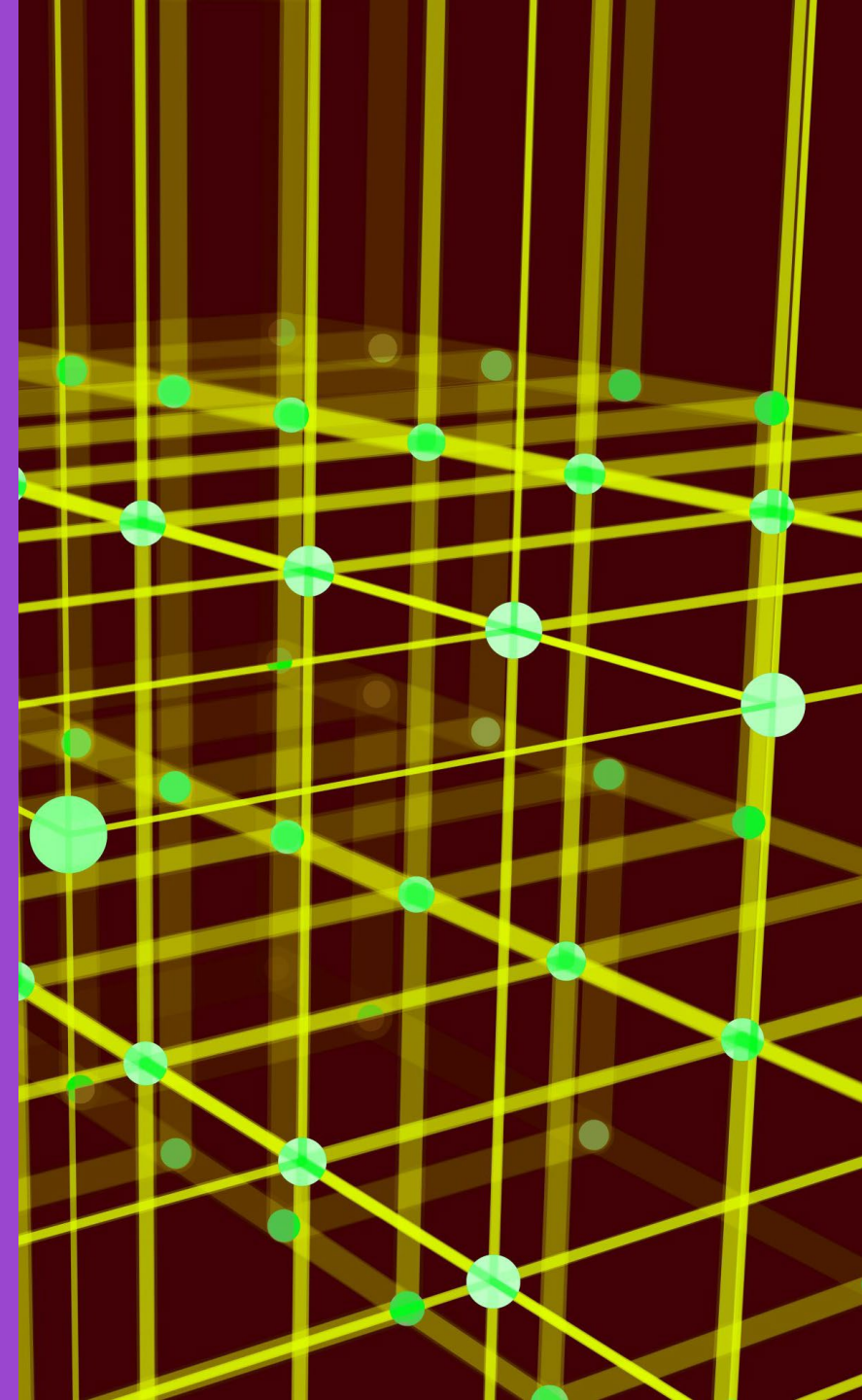
How Universities are Supporting the Commercialisation Ecosystem

Dr Peter Gooden

Director of Research and Enterprise Services

Outline

- Research and Enterprise @ UH
- Showcasing collaborative commercialisation within Healthtech
- A UH commercialisation case study



Facts and figures



Size and shape of the University

4



We have a turnover of circa £380 million



We have invested £41.5 million into our campuses over the past year



We have a total staff population of 3063 (UH only), 70% of whom are FT



Our total student population is nearly 35,000



Our 13,000-strong international student community come from more than 140 countries



We offer 550 undergraduate, postgraduate and research degrees across six schools of study

Research successes

5



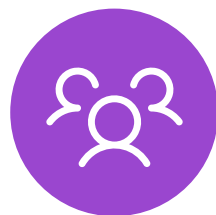
We are the top-ranked post-92 university for research impact



90% of our research has been judged as “internationally excellent” or “world-leading” in the REF 2021



We're in the top 25% of all universities nationally for research impact



We have risen 21 places in the REF 2021 rankings from 83rd to 62nd



In the Postgraduate Research Experience Survey (PRES) 2023 our overall satisfaction score was 81%, putting us higher than all our benchmark comparators (Russell Group, Alliance, Post-92 & global).

Top 25% of all UK universities
for research impact

632 number of businesses
we supported (2019-22)

£30m additional revenue those
businesses generated
from our support*

830 full-time jobs those
businesses created

740 hours of business mentoring
and consultancy we
provided (2021-22)

£12.3m value of research and
consultancy services
we provided (2020-21)

3,596 hours of business
advice we provided
on innovation, research
and development

992 hours of business advice
we provided on skills
and training

75% businesses that
approached us first

£40m amount our business
support is estimated to
have generated (2019-22)



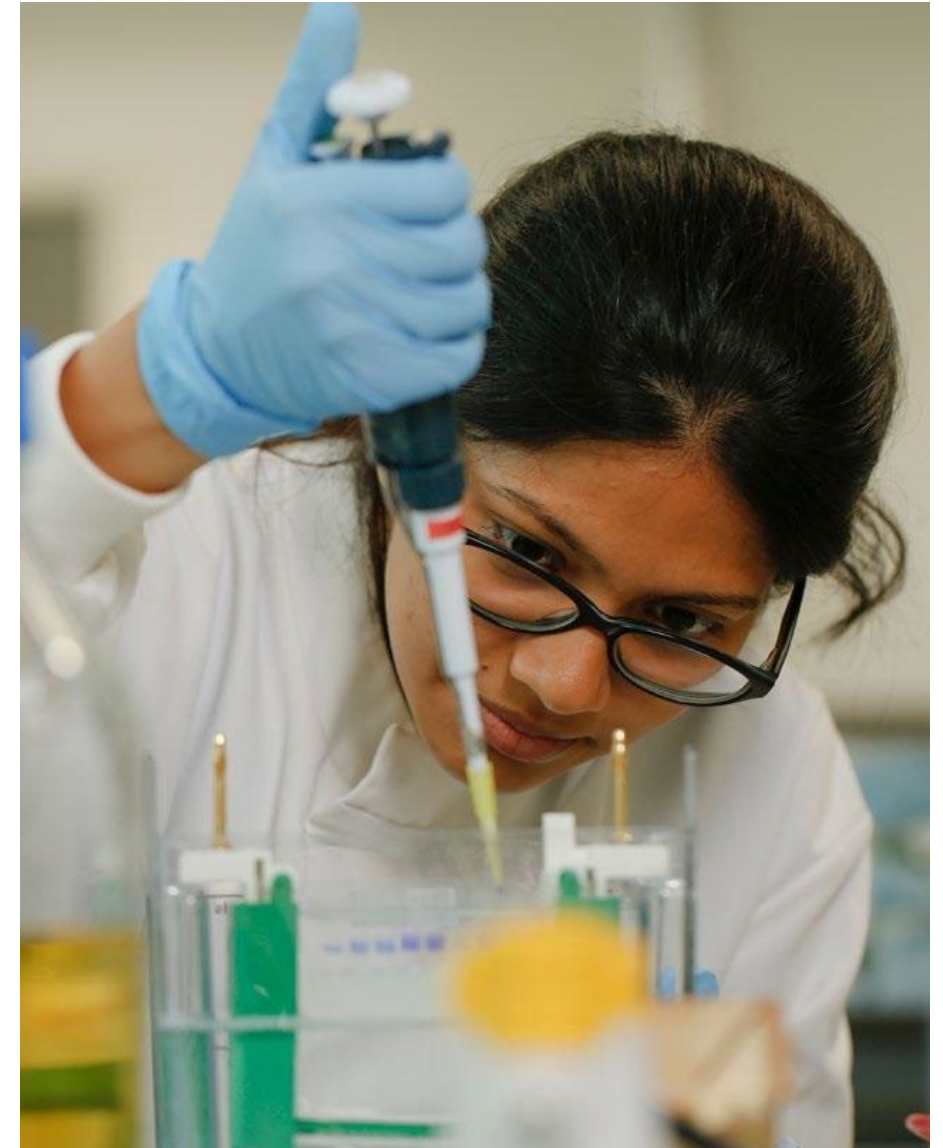
Herts Open for Business

Supporting businesses to grow through innovation

To maximise knowledge exchange **income** and drive **impact** by enabling R&D collaborations with industry and other key organisations.

KEY MESSAGES TO OUR CLIENTS

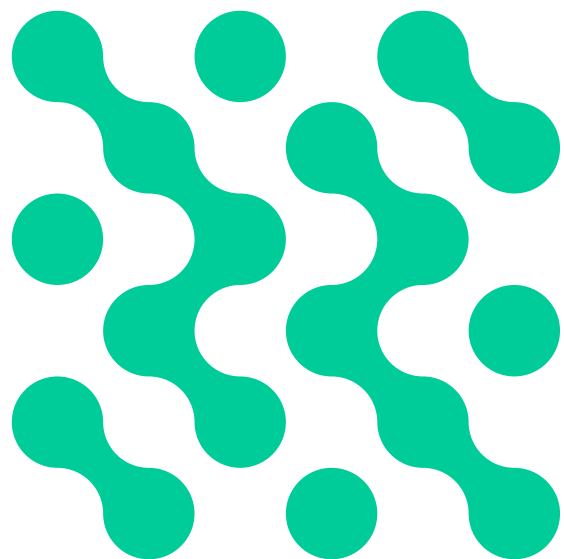
- We have expertise and facilities to enable your business to solve problems or access new opportunities
- We deliver impact for our clients
- Your future success is our motivation
- We want to build a long-term relationship and provide value at every stage of your innovation journey



Research and Insights through KE

- Research and Innovation collaborations with industry driving **added value** and **impact**
- Facilitating the development of applications through bid writing, coordination and guidance on finance, legal and policies
- **2023/24: £14.2m** research grant awards + **£13.5m** for new Biodetection Hub
- Currently, over **50** long term research collaborations are underway supported by KE funding (e.g. KTPs, KEEP+, ERDF)
- Achieved additional grant income of over **£35M** across capital, innovation and skills provision since 2020.





HTCC

Healthcare Technologies
Capability Connector



Research
England

University of
Hertfordshire **UH**

IMPERIAL



Healthcare Technologies Capability Connector



The UK's Life Science sector is vibrant and of vital importance to the economy. However, a **key challenge** as it looks to grow and remain **competitive**, is to **create the conditions for innovations to scale at pace** by facilitating access to space, specialist labs, equipment, research and manufacturing expertise.

HTCC aims to **respond to this challenge by linking -up London-based SMEs and innovators to ecosystems in the larger Hertfordshire and Bedfordshire regions** which are ready to support innovation at scale. Equally, we are keen to link up investment networks in London, with SMEs innovating across the wider region.



University of Hertfordshire **UH**

IMPERIAL





The programme

01

Academic research translation – **Proof of Concept funding** and commercialisation support provided by all partners to new academic innovations emerging from within the three partner institutions.

02

Accelerator programme for UK SMEs, involving access to senior academic expertise, access to specialist infrastructure and support across the partnership including incubator spaces and labs.

03

MarketReady Academy – training and development of commercialisation skills within research cohorts as well as executive level mentoring for founders and entrepreneurs.



University of
Hertfordshire **UH**

IMPERIAL



PROOF OF CONCEPT

£400k invested

8 projects

Developing a R&D and
commercialisation strategy



01

PROOF OF CONCEPT FUNDING

PROJECT	DESCRIPTION
MICROBIA	Microbial based solution to defeat neurodegenerative disease.
EMBED	Accelerating bone healing with implantable electronics.
SIFTR	Targeting tumours with drugs designed in humans.
INFORMIX	Pharmaceutical microstructure measurement.
PULMONARY INFECTION	Real-time diagnosis of pulmonary infection for patients in intensive care.
VIBROSENSE	Device to improve sensitivity in stroke patients.
IMPERIAL DIAGNOSTICS	Early detection and monitoring of cancer.
SEPSIS	Detection of biomarkers for enhanced patient outcomes.

PROOF OF CONCEPT

£400k invested

8 projects

Developing a R&D and
commercialisation strategy

01

PROOF OF CONCEPT FUNDING

KPI	DESCRIPTION
4 POC projects advancing to TRL 6	<ul style="list-style-type: none">○ <i>Embed Biotech (IMP)</i>○ <i>Pharmaceutical Microstructure (UH)</i>○ <i>Vibrosense (UH)</i>○ <i>Microbia (IMP)</i>
2 exploitation vehicles developed	<ul style="list-style-type: none">○ <i>Embed Biotech (IMP)</i>○ <i>SIFTR (IMP)</i>○ <i>Informix Pharma (UH)</i>
3 new patents filed.	<ul style="list-style-type: none">○ <i>Pulmonary Infection (CU)</i>○ <i>Pharmaceutical Microstructure (UH)</i>○ <i>Microbia (IMP)</i>

ACCELERATION PROGRAMME

Over £500k invested in 15
SMEs

R&D and commercialisation
support

Academic expertise

1-2-1 mentoring



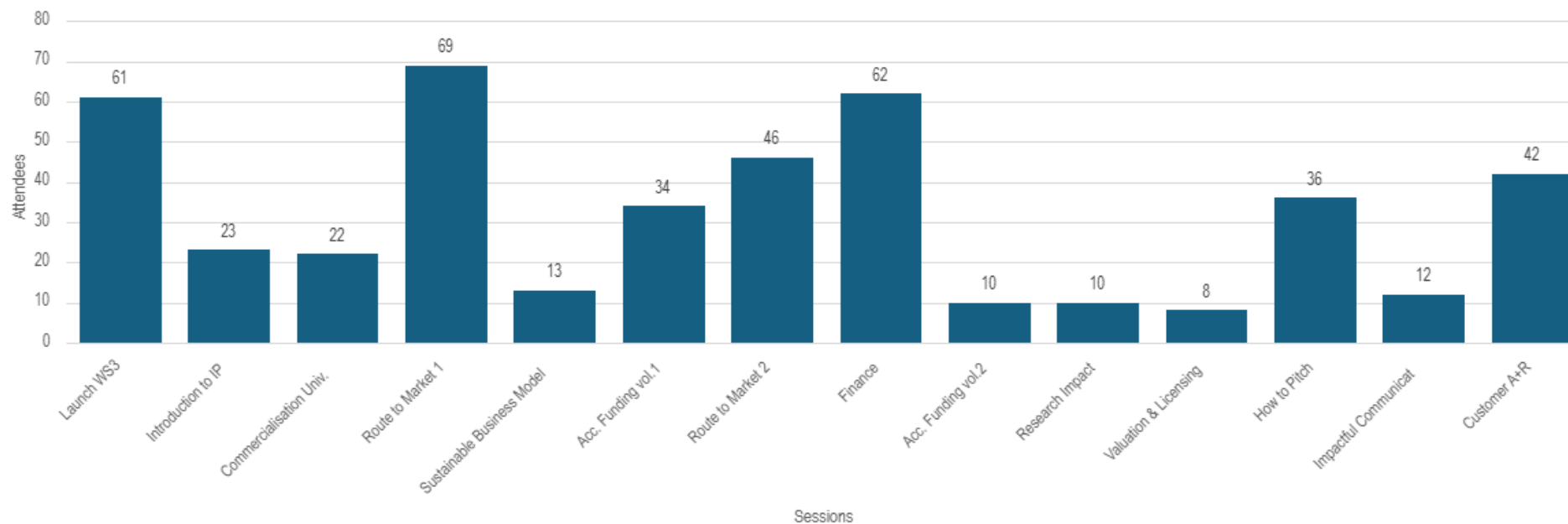
02

ACCELERATION

KPI	DESCRIPTION
6 embedded researchers providing meaningful value for SME's	8 embedded researchers involved in 15/17 projects (2 from UH and 6 from CU).
1-2-1 mentoring delivered.	300 hrs 1-2-1 mentoring delivered.
5 new products/ services ready for market	<ul style="list-style-type: none">○ <i>Reneural (UH)</i>○ <i>Briteyellow (UH)</i>○ <i>Aga Nanotech (UH)</i>○ <i>SurgeryAI (UH)</i>○ <i>Cambridge Surgical Models (CU)</i>○ <i>Neurobright (CU)</i>○ <i>GoAssistive (IC)</i>
3 supported companies receiving grant funding or investment	<ul style="list-style-type: none">○ <i>Srotas Health (UH)</i>○ <i>Reneural (UH)</i>○ <i>GoAssistive (IMP)</i>○ <i>IngeniumAI (IMP)</i>○ <i>Aga Nanotech (UH)</i>○ <i>UpLyft (IMP)</i>
3 new research collaboration beyond accelerator projects.	<ul style="list-style-type: none">○ <i>Aga Nanotech (UH)</i>○ <i>UpLyft (IC)</i>○ <i>GoAssistive (IC)</i>○ <i>Neurobright (CU)</i>

**03**

MarketReady Academy



KPI	DESCRIPTION
30 hrs of training delivered	38/30 hrs of training delivered.
40 researchers trained	49/40 researchers trained.
Up to 80 research staff attending training	185 research staff attending training.

Case study: ImmuONE – a TT success story

16

'A novel in-vitro model for predicting lung toxicity'

- 2018: UH PhD student Abigail Martin iCURE Accelerator submission based on LMS research – awarded £35k for market awareness
- 2019: iCURE program completed and ImmuONE registered
- 2019: ImmuONE awarded £300k funding from InnovateUK for product commercialisation
- 2019: ImmuONE begins lease agreement with UH for renting laboratory space in Science building
- 2020: ImmuONE joins UH Business Incubator
- 2021: ImmuONE awarded CRACK-IT grant (£600k) to improve in vitro assays to be free from animal-derived products
- 2022: Moves to 1800 sqft grow-on facilities in Stevenage
- **2023: Received £2m investment from Mercia Ventures and Pioneer Group**
- **2025: ImmuONE currently employs ~15 staff with significant turnover**



Case study: ImmuONE – a TT success story

17

'A novel in-vitro model for predicting lung toxicity'



Female-led ImmuONE bags £2M for 3D human lung model to test drugs

BY ABHINAVA PRABHU · OCTOBER 26, 2023 · 3 MINUTE READ



Thank you

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