

Innovate UK - Supporting Research Development & Manufacturing in Advanced Therapies

Ian Campbell

Director, Health & Life Sciences



@IanWCampbell

Innovate UK

Innovate UK – the UK's innovation agency

Innovate UK drives **productivity and growth** by supporting businesses to realise the potential of new technologies, develop ideas and **make them a commercial success**.

To **stay competitive as an advanced economy**, we need to do things that others cannot do, or to do things in different and better ways.



Investment of
£2.2bn
since 2007



industry match
funding taking
the total value
of projects above

£3.75bn



Up to
£16bn
in added value
to the economy



up to

£7.30

for every **£1**
we've invested.



We've funded around
11,000
projects



8,000
unique
organisations
involved

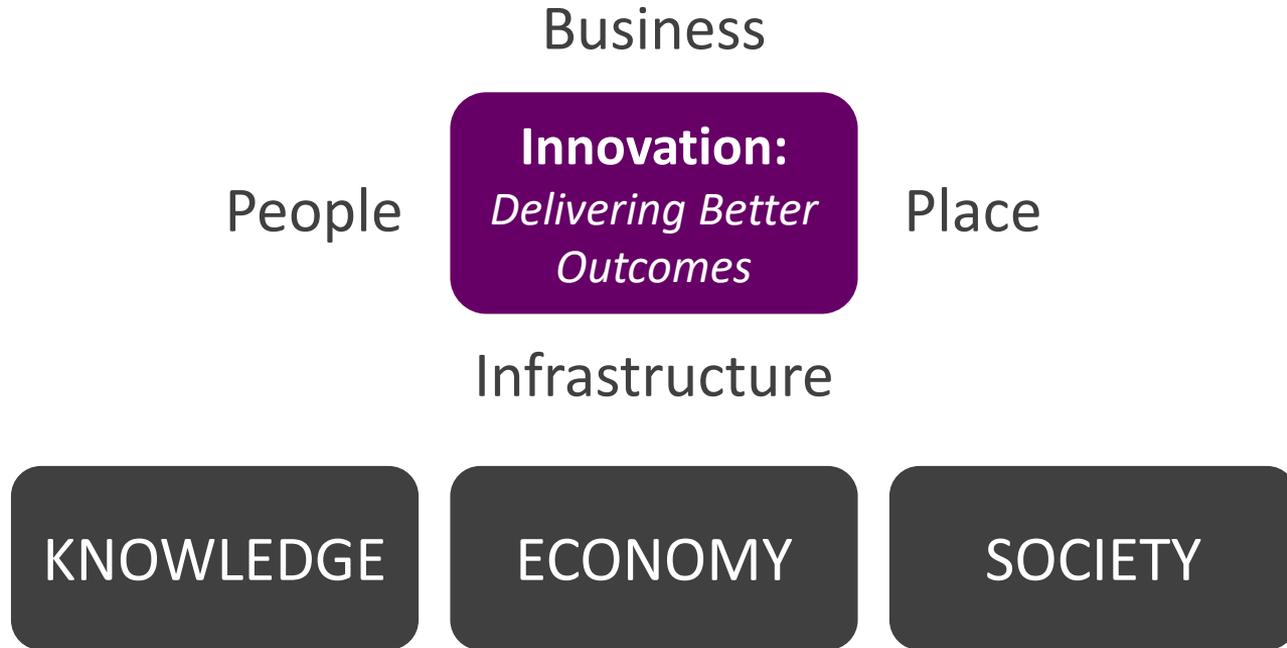
8 jobs for each
organisation
involved

70,000
jobs created in total



Innovate UK

Accelerating UK economic growth through funding and connecting **business-led** innovation



Economic / societal challenges

- Global population, + 2Bn to 9.7Bn by 2050
- +50% more food required by 2030
- Healthcare costs rising > GDP
- Prevalence of chronic illness & diet related disease increasing

Market potential

Sector	Market	Year
Pharmaceuticals	\$1.7Tn	2025
Healthcare IT	\$202Bn	2025
Medical Technology	\$583Bn	2025
Food (Retail)	\$4.0Tn	2016
Agriculture	\$2.4Tn	2016

Mechanisms

- CR&D competitions
- Catapults and Agri Centres
- Biomedical Catalyst
- AgriTech Catalyst
- SBRI
- KTP

Priority themes

- Precision Medicine
- Medicines Discovery
- Advanced Therapies
- Agricultural Productivity
- Food Quality

Partnerships

- BEIS, DH, OLS, DIT, Defra, DfID
- Devolved Administrations
- Research Councils
- ABPI, BioIndustry Association
- British In Vitro Diagnostics Association
- Agricultural Levy Boards

Place

- Heatmap of sector funded projects



Partnerships in health and life science



Department for
Business, Energy
& Industrial Strategy



Department
for Environment
Food & Rural Affairs



Department
for International
Development



Department
of Health



Home Office



Llywodraeth Cymru
Welsh Government



Ymchwil Iechyd
a Gofal Cymru
Health and Care
Research Wales



The Scottish
Government
Riaghaltas na h-Alba



CHIEF
SCIENTIST
OFFICE



Public Health
Agency
Research and Development

Invest
Northern
Ireland



NHS
National Institute for
Health Research



Scottish Funding Council
Promoting further and higher education



Scottish Enterprise



AGRICULTURE & HORTICULTURE
DEVELOPMENT BOARD



EUROPEAN
COMMISSION



bioscience for the future



Medical
Research
Council



Investing in research for
discovery and innovation



E·S·R·C
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Regenerative Medicine Programme 2009 – 2017

Innovate UK

Regenerative Medicine Programme

- Established in 2009 - through £20m investment from Innovate UK and partners
- Work to complement UKRMP and other Innovate UK groups (e.g. Stratified medicine)
- Support wider definition of regenerative medicine and cell therapy



Supporting the UK regenerative medicine & advanced therapies sector

£75m

Regenerative
medicine + cell &
gene therapy CR&D
grants

+£36m

Additional
funding from
industry

>147

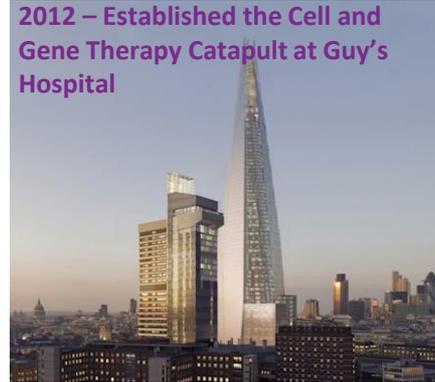
R&D projects
funded

In addition to our Regenerative Medicine & Cell Therapy themed CR&D competitions companies have been successful in securing grants through
Biomedical Catalyst
Smart
KTP
Materials & Manufacturing and other themed competitions

Cell and Gene Therapy Catapult

- Established by Innovate UK in 2012
- Taking therapies into clinical trial, de-risking future investments
- Provide technical expertise & infrastructure to develop manufacturing processes for GMP
- Understanding health economics, reimbursement and business models
- Help businesses manage the regulatory environment
- 2014 - CGTC, through Innovate UK, awarded £55m to establish a large-scale manufacturing centre for Phase III clinical trials and commercial supply

2012 – Established the Cell and Gene Therapy Catapult at Guy's Hospital



2017 – Cell and Gene Therapy Manufacturing Centre at Stevenage to open



Advanced therapies project lead companies



Advanced therapies project lead companies



Cell Medica:

Transforming patients' lives through cellular immunotherapy

- Phase I/II clinical trial of cell therapy for treatment of **infection in bone marrow transplant paediatric patients**
- GOSH, Newcastle, Manchester
- Company growth from **4 to over 70 employees**
- Secured **£110m series B and C funding**



Oxford Biomedica: Multi-million gene therapy deal



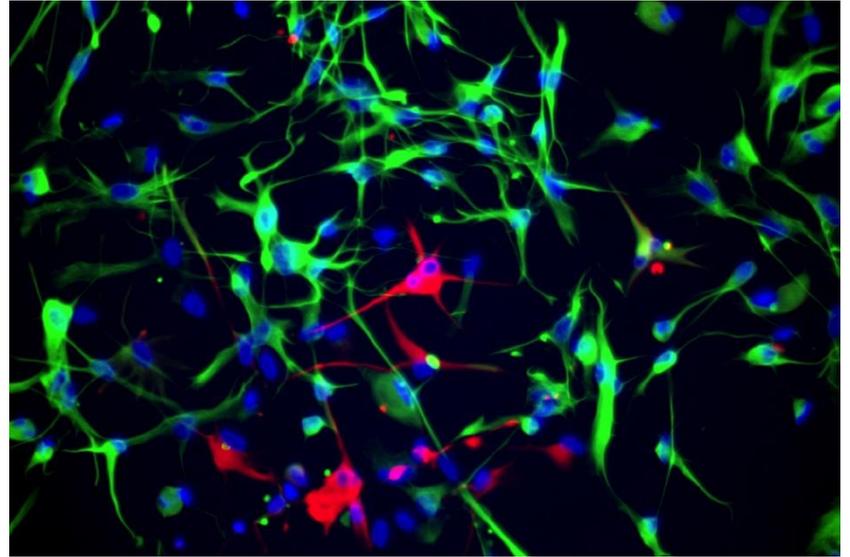
- Various funding awards, including from the **Biomedical Catalyst**
- **Clinical trials and manufacturing of gene therapy** for Parkinson's and corneal graft rejection
- **\$90 million deal with Novartis**, plus other deals with, e.g., GSK, Sanofi, Green Cross LabCell



ReNeuron:

Working in collaboration to scale-up manufacturing

- Collaborating with the **Cell and Gene Therapy Catapult and academia** to scale-up manufacturing
- Process technology, assay and quality by design expertise
- Over **£68m investment** including support to develop new base in Wales



ReNeuron

TrakCel

- £150K **LaunchPad** award
- Collaboration with the **Cell and Gene Therapy Catapult**
- £125K **Welsh Government** investment
- £315K award within **Horizon 2020** cancer cellular therapies consortium
- Announced **20 new jobs**, growth 15 to 35 staff, 2015-2018



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TRAKCEL TO CREATE 20 CARDIFF JOBS

10th Dec 2015 Wales

Stephen Farrell
Digital Staff Writer

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Cardiff-based Trakcel plans to create 20 jobs, supported by Welsh Government funding, following the commercial launch of its new technology.

The expansion, which is expected to create 20 jobs over two years, has been supported by £125,000 in business finance from the Welsh Government to help scale up its operations as it moves from research and development to

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Cardiff's TrakCel gets £315k grant for cancer cell therapy

11 January 2016 South East Wales

A company has won a £315,000 European investment to take part in a cell therapy project to help treat cancer.

Cardiff-based TrakCel develops software for clinical trials, and will join forces with research groups and manufacturers for products which are being used to fight cancer.

We can't stop thinking
about the future

Ian Campbell – Director – Health and Life Science

Email: ian.Campbell@innovateuk.gov.uk



@IanWCampbell

Innovate UK

North Star House, North Star Avenue, Swindon SN2 1UE

Tel: +44 (0)1793 442 700

Email: support@innovateuk.gov.uk

www.innovateuk.gov.uk