## Technology Strategy Board

Driving Innovation

### **Technology Strategy Board Update**

Dr Michael Sullivan Lead Technologist – Regenerative Medicine

Annual Tissue & Cell Engineering Society Meeting Newcastle 4<sup>th</sup> July 2014



#### The Technology Strategy Board

A national organisation promoting technology-enabled innovation...

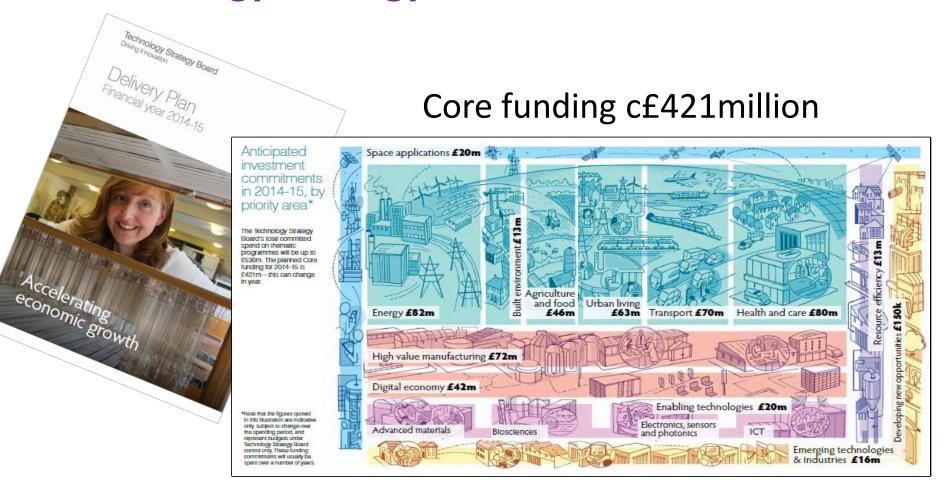
for business benefit, economic growth, and quality of life

#### **Investment Criteria**

- Does the UK have the capability?
- Is there a large market opportunity?
- Is the idea ready?
- Can the Technology Strategy Board make a difference?



#### **Technology Strategy Board 2014-2015**



#### The Toolset

Range of Tools with different objectives / characteristics

**Smart** 



Collaborative R&D

\_connect

Knowledge Transfer Partnerships



Knowledge Transfer Network

Launchpad



Innovation Knowledge Centres (IKCs)

Innovation Vouchers

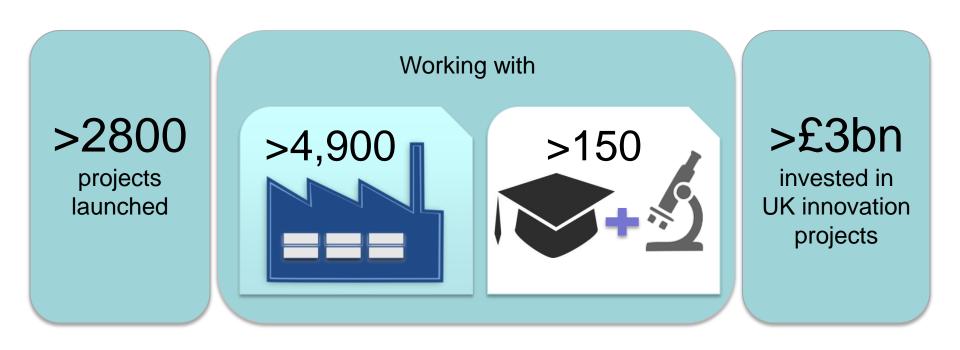
Feasibility
Studies

Entrepreneur Missions

Technology Strategy Board

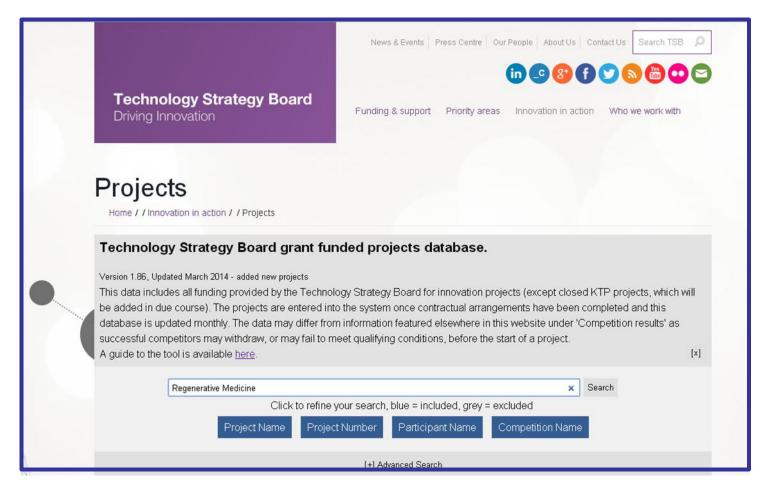
Driving Innovation

#### **Collaborative R&D since 2007**



Find out more at www.innovateuk.org

#### **Funded Projects**



https://www.innovateuk.org/projects

#### **Health + Care Activities**

- In Health + Care we address challenges through the following activities:
  - Stratified Medicine Innovation Platform
  - Assisted Living Innovation Platform
  - The Biomedical Catalyst
  - Regenerative Medicine & Cell Therapy Programme

#### Regenerative Medicine Programme

 Established in 2009 - initial investment of £21m from Technology Strategy Board and partners



 Prior to this, invested £20m+ in a portfolio of 30 projects involving 20 different companies



 Work to complement UKRMP, other Technology Strategy Board groups (e.g. Stratified medicine)



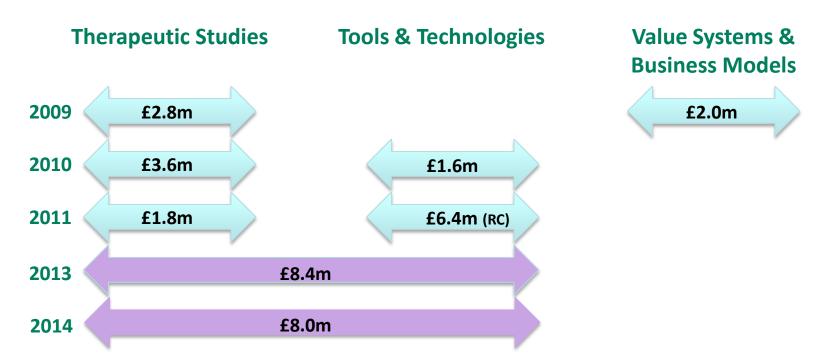
 Support wider definition of regenerative medicine and cell therapy





#### **TSB Regenerative Medicine Programme**

- Aims to
  - Underpin and enable best businesses to flourish
  - Build connected regenerative medicine community to develop medicines



#### Regenerative Medicine Programme

#### **Programme Achievements**

- 80 collaborative R&D and feasibility projects funded to date
- 5 therapies entering clinical trails for the first time
- 2 companies raising over £21m of further investment as direct consequence of program
- Companies establishing overseas operations for the first time
- Established the Cell Therapy Catapult in 2012
- Budget 2014 The Cell Therapy Catapult, through the Technology Strategy Board, awarded £55m to establish a large-scale cell manufacturing centre for Phase III clinical trials and commercial supply

































intelligent freeze drying















altrika































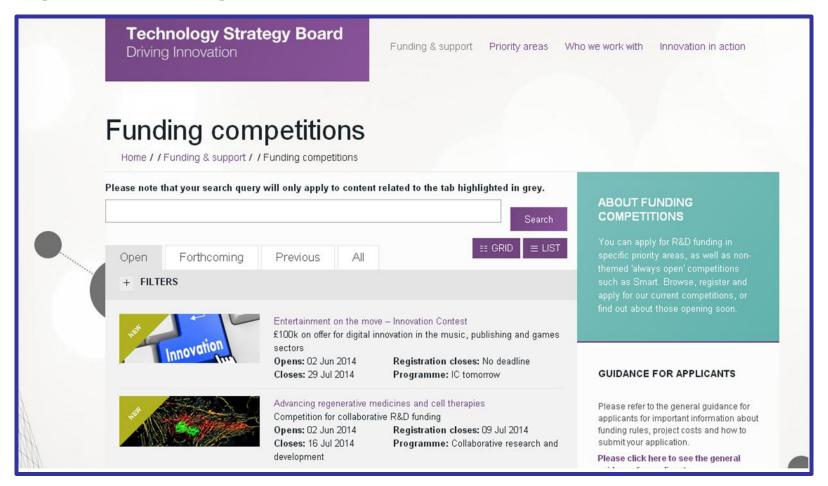






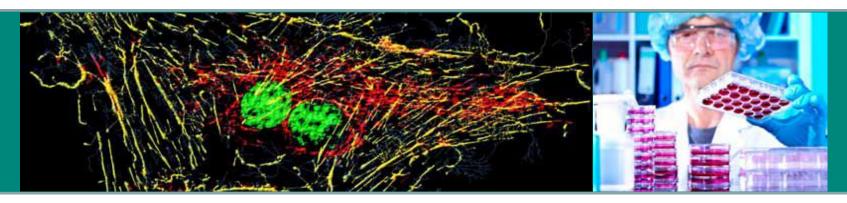


#### **Open Competitions**



https://www.innovateuk.org/funding-competitions





# Advancing Regenerative Medicines & Cell Therapies

Competition: 2 stage single-company and collaborative R&D

Opens: 2<sup>nd</sup> June 2014

Maximum project length: 3 years

Total investment: up to £8m

#### **Aims**

To advance the industry by addressing sector-specific challenges related to preparing regenerative medicines and cell therapies for use

Opportunity to engage with the Catapult network if appropriate

#### **Competition Expectations**

- Two stage application (expression of interest, full application)
- Projects to be business led
- Single company, or collaborative projects:
  - Research organisation participation in a project should not exceed 50%
- Project costs to be £500k to £2.5m
- Projects to last between 1-3 years
- Industrial Research
  - 60% funding for micro/small/medium company
  - 50% funding for large company

#### **Scope Stream 1**

#### Stream 1: Support for preclinical & clinical development

- Preclinical testing

   (e.g. efficacy, safety, cell environment, cell migration, self-repair, differentiation)
- Formulation and delivery
   (e.g. incorporation into devices or scaffolds, combination delivery)
- Clinical trials

   (e.g. Phase 1 and 2 trials, determining and improving outcomes)
- Scale-up and manufacturing

   (e.g. transition to GMP, introducing scalable cell culture methods)

#### **Scope Stream 2**

## Support for development of underpinning tools & technologies

- Product safety and/or efficacy
   (e.g. new model development for testing, new companion biomarkers)
- Manufacturing at scale

(e.g. automation and reproducibility, bioprocessing, cell/product characterisation, delivery, transport, storage)

Welcome applications concerned with modernising methods /processes

- greater efficiency
- cut the time involved in getting products to market

## **Cell Therapy Catapult**

Competition provides opportunity to engage, where appropriate, with the Cell Therapy Catapult enquiries@ct.catapult.org.uk



- Established by TSB in 2012
- Make the UK a global leader in development, delivery & commercialisation of cell therapy
- Taking therapies into clinical trial, so de-risking future investments
- Provide technical expertise & infrastructure to develop manufacturing processes for GMP
- Understanding health economics, business models, and regulatory environment



### **Competition Briefing**

- Briefing document describes scope of the competition
- Has its own application form and Guidance for Applicants
- Is posted on our web site

Briefing Document and Guidance for Applicants are key to understanding what we seek to support

Briefing event webinar: tsb innovate adobecon

tsb.innovate.adobeconnect.com/p1hkwcilr8/



## **Key Dates**

| Competition opens                         | 2 June 2014            |
|---|------------------------|
| Applicant Briefing day                    | 10 June 2014           |
| Registration deadline                     | 9 July 2014 at noon    |
| Expressions of interest deadline          | 16 July 2014 at noon   |
| Stage 2 opens (for invited applications)  | 14 August 2014         |
| Deadline for receipt of full applications | 8 October 2014 at noon |
| Full stage applicants informed            | November 2014          |



- TSB and MRC jointly investing £180m over first 3 years to:
- Support healthcare R&D carried out in partnership between clinicians, academics and industry (SMEs)
- Drive translation of innovative ideas into marketable products and services
  - more rapidly and more effectively
  - > ensuring maximum healthcare impact
- Deliver economic growth

#### **Current Status (business-led projects):**

Rounds 1,2,3&4 combined: out of 563 proposals
 received (requesting £521m); 122 funded = £96.8m

Round 5: 80 Early + Late stage proposals and 75
 Feasibility proposals requesting over £100m total;

 23 Feasibility projects funded = £3.2m.
 Assessment of Early and Late stage still in progress

• Round 6: 84 Early + Late stage applications received.



#### Key Dates Round 7: Late Stage only

| Time line                                       | Dates                                |
|---|--------------------------------------|
| Competition Open                                | 5 <sup>th</sup> June 2014            |
| Registration Closes                             | Noon 23 <sup>rd</sup> September 2014 |
| Deadline for EOI applications                   | Noon 1 <sup>st</sup> October 2014    |
| Applicants Informed of decision                 | 24 <sup>th</sup> October 2014        |
| Full Stage opens (for invited applications)     | 27 <sup>th</sup> October 2014        |
| Deadline for submission of the full application | Noon 26 <sup>th</sup> November 2014  |
| Full Stage Applicant Interview (TBC)            | February 2015                        |
|   |                                      |
| Full briefing and MedTech Workshop: 24th June   | Queens Hotel, Leeds                  |



#### **KTN Ltd**

#### Knowledge Transfer Network

#### One Knowledge Transfer Network

#### •Key roles:

- to encourage cross-sector innovation, by coordinating collaboration between business and the research base
- to encourage business-to-business collaboration, particularly between companies from quite disparate sectors

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