



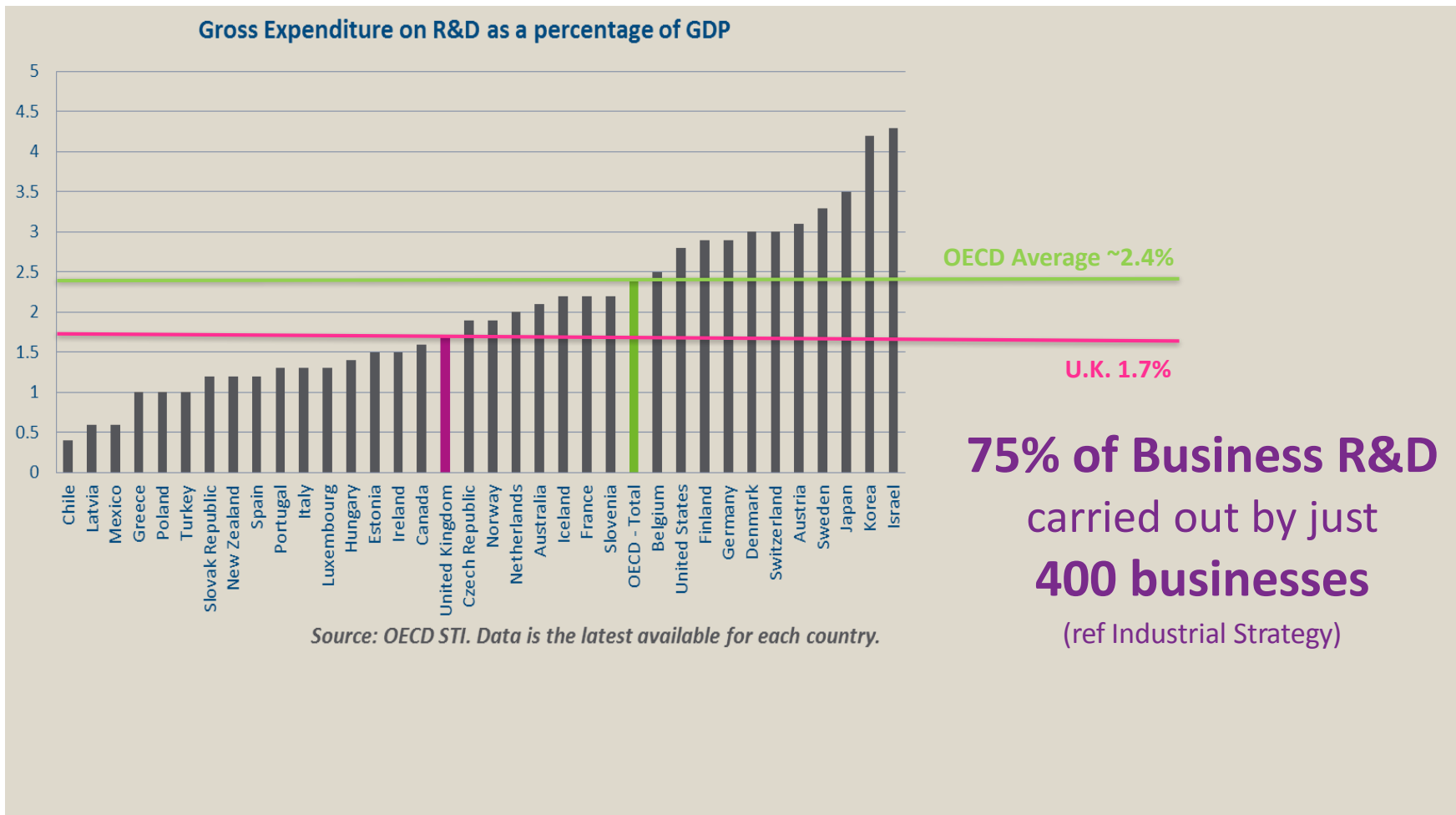
INNOVATION IMPACT AND BUSINESS

**Innovate UK, KTPS and the Industrial
Strategy Challenge Fund**

**Sophie Smith
Jane Pankhurst**

INDUSTRIAL STRATEGY

From 1.7% to 2.4% = +£13billion* pa of R&D



Industrial Strategy Grand Challenges



Ageing
Society



Clean
Growth



Future of
Mobility



AI and Data
Economy

UK Research
and Innovation





INDUSTRIAL STRATEGY

Key R&D announcements:

- **Industrial Strategy Challenge Fund:**
 - £1bn in wave 1
 - £725m for wave 2
 - £? wave 3
 - £? wave 4
- **Strength In Places Fund**
 - £115m
- **World class talent**
 - £300m
- **International collaborations**
 - £110m
- **Increased funding to Knowledge Transfer Partnerships**

This will lead to real-term increases in UKRI Council budgets of approximately 20%



What is KTP? Knowledge Transfer Partnerships explained

Jane Pankhurst and Sophie O'Callaghan



Knowledge Transfer Partnerships

- Transfer expertise to UK business
- Are part-funded by government. Innovate UK are lead funders
- Have been a key business support tool for over 40 years
- Are UK wide, with 650+ active projects nationally

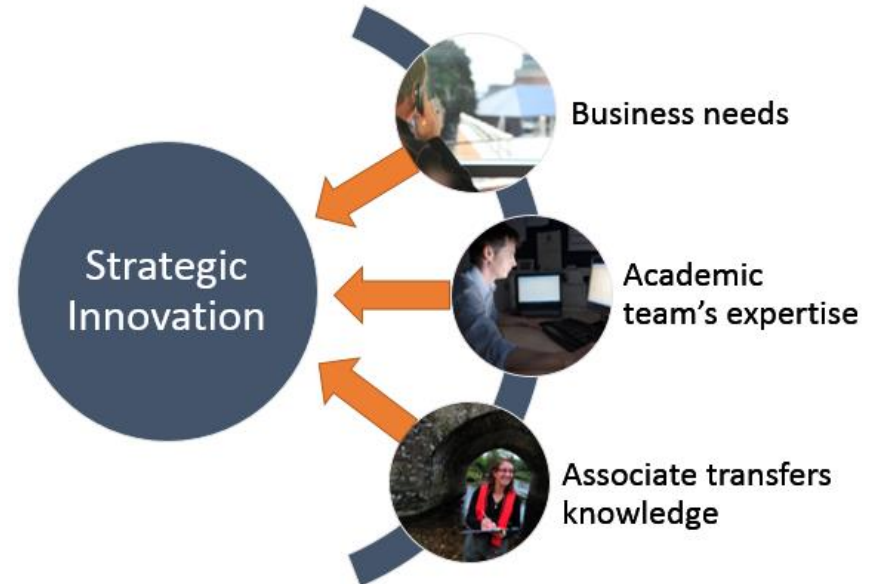
Innovate UK

UK Research
and Innovation



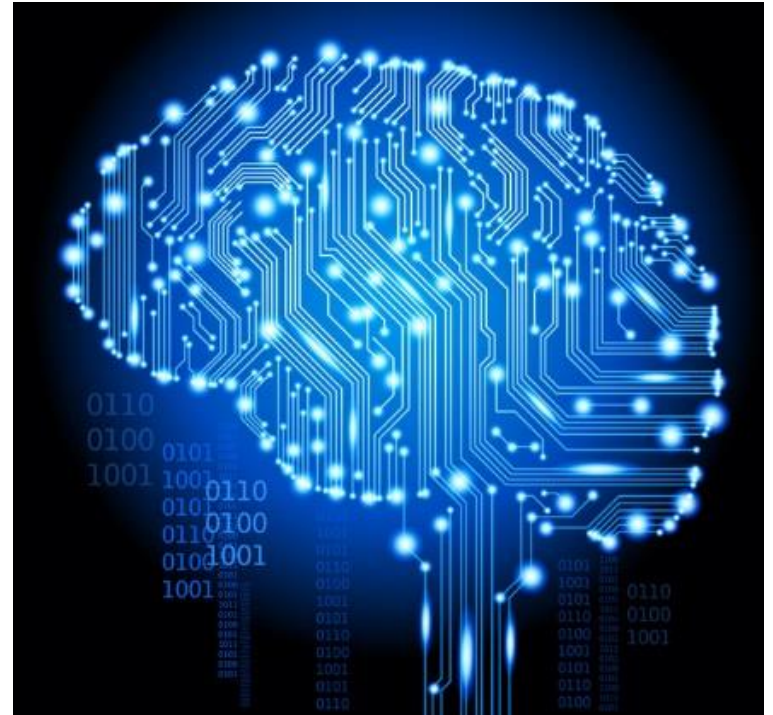
Partnership Structure

- A KTP is a collaborative project between a business and the University, which is facilitated by a high-calibre graduate (KTP Associate)
- The KTP Associate transfers knowledge between the academic team and the business



Project Criteria

1. Strategically relevant to the business
2. Addresses a business challenge/priority
3. Requires expertise from a University (i.e. innovative)
4. Tangible benefits: improved productivity, performance



Project Features

- Projects last between 12 and 36 months
- KTP Associate is jointly recruited, employed by the University and based at the business's premises
- Academic team commits 0.5 days per week to the project



Benefits for Businesses

- Embed new capabilities and expertise
- Exploit new opportunities
- Improved performance
- Recruitment opportunity
- Projects are part-funded



Benefits for Academics

- Develop strong industrial relationships
- 'REF' eligible research income
- Impact case studies
- Publications/conference papers
- Apply research to industrial problems



Benefits for Associates

- Fast-track career development
- Bespoke training programme
- Close mentoring and support from a range of people
- 70% offered post-project employment



Annual KTP Budget Estimate

Standard annual KTP budget	£
Associate Employment Costs	45,000
Associate Development	2,000
Travelling & Subsistence	2,250
Equipment & Consumables	1,500
Academic supervision, programme management, admin support	32,540
Total	83,290

Funding

SME

67%

Large business

50%



Support from University of Exeter

- Project development
- Manage application process
- Associate recruitment
- Administration and support
- Relationship management



Contact us

Jane Pankhurst

Jane.pankhurst@exeter.ac.uk

01392 725457

Sophie O'Callaghan

s.v.g.ocallaghan@exeter.ac.uk

01392 722273



Industrial Strategy Challenge Fund



- Builds on the UK's world-class research base and delivers the science that business needs to **transform existing industries** and **create new ones**
- **Accelerates commercial exploitation** of the most exciting technologies the UK has to offer the world to ensure that scientific investment truly **delivers economic impact, jobs and growth right across the country**
- Programmes delivered by the fund will be **industry-led** and powered by **multi-disciplinary research and business-academic collaboration**
- Delivered by **UK Research and Innovation**, the single voice for the UK's research and innovation landscape

UK Research
and Innovation

Second Wave of Challenges

Transforming construction



Data to early diagnosis & precision medicine



From data to early diagnosis and precision medicine

Transforming food production



Next generation services



Energy revolution



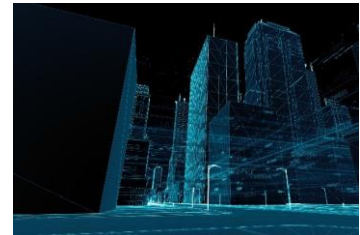
Healthy ageing



Audience of the future



Quantum technology



UK Research
and Innovation



INDUSTRIAL STRATEGY CHALLENGE FUND WAVE 3 TBC...

- Expressions of interest to determine the Wave 3 challenges went out end of April 2018.
- 252 EOIs in total.
- UKRI will use these EOIs to inform both Wave 3 and Wave 4 Challenges
- The selected challenges will open in April 2019

INDUSTRIAL STRATEGY CHALLENGE FUND WAVE 3 TBC...

- Bio-economy
- Safe and resilient cities
- Plastics
- Circular Economy



Ageing Society

- Mental Health
- Medicines Manufacturing



Clean Growth



Future of Mobility

- Space
- Future Mobility



AI and Data Economy

- Digital Manufacturing



INDUSTRIAL STRATEGY CHALLENGE FUND – what does it mean for UoE

- Managed by UKRI (Research Councils and Innovate UK)
- Focussed on driving UK economy
- Translational research TRLs 3-6
- Not all funds are open to Universities.
- **All calls require collaboration**
- Emphasis on multidisciplinary
- Short timeframes usually about 7 weeks



INDUSTRIAL STRATEGY

UNIVERSITY OF EXETER ACTIVITY & UEBS

OPPORTUNITIES

- AI & Data Driven Economy Theme
 - Industrial Strategy Wave 2 Theme: Next Generation Services
 - Link to ATI: Interest is in social science/science connections not just physical sciences
- Clean Growth
 - Industrial Strategy Wave 3 Theme: Circular Economy explicitly mentioned
- Food Production
 - Wave 2 and 3: Food Supply chain and agriculture business models.
- Healthy Ageing
 - Industrial Strategy Wave 2 and 3 Themes in: Healthy Ageing, Mental Health and Early Diagnosis: Opportunities around business models and Technology.

INDUSTRIAL STRATEGY CHALLENGE FUND

DEVELOPING A BID

- Method of applying varies depending on the competition or call:
 - Research Councils
 - Innovate UK
- Innovate UK:
 - online application process with 10 set questions, all with individual weighting
- Academic partners are also required to complete a Je-S form
- Research Services will support bids via Research Council. IIB support on Innovate UK bids (with RS input)
- Let RS and IIB know as early as possible

INDUSTRIAL STRATEGY CHALLENGE FUND

KEY CONTACTS

Challenge	Academic lead	IIB lead	I:UK Challenge lead
Transforming Construction	Allen Alexander	Julie Lewis Thompson	Mike Pitts (interim)
Transforming Food Production	Sarah Gurr	Alex Huke	Calum Murray and Andy Cureton (interim)
Healthy Ageing	Linda Clare	Emma Bland	tbc
Data to early diagnosis and precision medicine	TBC	David Whitehouse	Nick Medcalf (interim – Medicine Manufacturing)
Next Generation Services	Andi Smart	Sophie Smith	Stephen Browning (interim)
Quantum	Saverio Russo	Conrad Gillespie	Sir Peter Knight (interim)
Audiences of Future	John Plunkett	Brigid Howarth	Andrew Chitty
Prospering from the Energy Revolution	Lars Johanning	Jim Grant	Rob Saunders (interim)



INDUSTRIAL STRATEGY CHALLENGE FUND

DEVELOPING A BID

- IIB Support:
 - Connecting you to partners and build consortia
 - Establishing if an opportunity is the right one to pursue
 - Work with partners to submit the bid
 - Identify academic collaborators
- Considerations
 - Partners (internal and external)
 - Timelines



ACTIVITY TIME

Scenario A)

*A tech focused SME who has been looking to break into the agriculture sector has approached the Business School about partnering on the **Productive and sustainable crop and ruminant agricultural systems** funding opportunity. We have not worked with this organisation before and they are still formulating what the project will look like.*

Read the competition documentation and discuss the following:

- What is the opportunity to the Business School? Think about:
 - The role UEBS can play
 - The funding potential to UEBS
 - How could different UEBS departments feed into this challenge?
 - Who else across the University should be involved?
- What are the risks?
 - The timescale
 - The collaboration
 - Alignment to research agenda
- Is this an opportunity we want to pursue?



ACTIVITY TIME

Scenario B)

You have intelligence that £8 million from the Next Generation Services challenge has been held back for a second funding round due to be launched at the end of the year. You do not yet know the dates or the shape of the competition or whether it will come through a Research Council or Innovate UK, however you have seen some information about the Challenge and think that it aligns well to your research interests. You also know that the last round was open for only 7 weeks.

Read the Challenge Overview and discuss the following:

- What steps would you take to ensure you are ready to bid for the next round once it is launched?
- Think about:
 - Who would your partners be? (academic and external)
 - Do you have existing relationships or will you need to identify new partners? If so how will you identify new partners?
 - How would you develop your partnership idea?
 - Who else at the university would you involve?
 - When would you start planning this activity?



ISCF SUMMARY

- Response varies depending on the opportunity
- Emphasis on multidisciplinary research
- All competitions require industrial collaboration (most Innovate UK competitions require industry to lead)
- Competitions usually have short windows so planning and identifying partners early is key
- IIB support is available to help you shape your ideas and collaborations
- Look out for upcoming networking workshops.

Questions?