

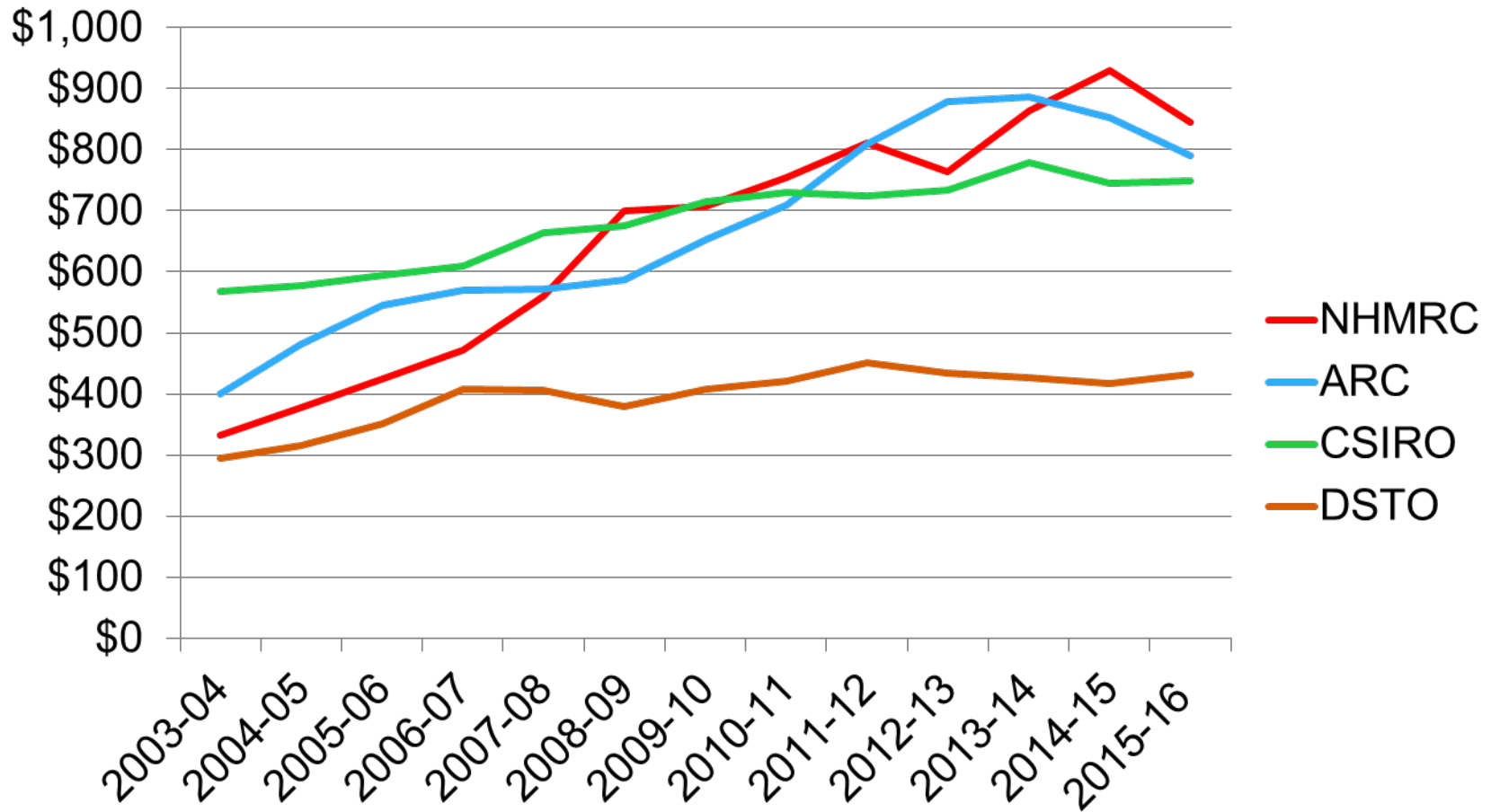
# Partner or perish: diversifying research funding



**Warwick Dawson**  
Director, Knowledge Exchange  
Division of Enterprise



# Selected research agencies 2003–2016 funding (\$m)



Source: Science, Research and Innovation Budget Tables 2015–16



Welcome to the ideas boom

### Culture and Capital

- Tax incentives for early stage investors
- Intangible asset depreciation

### Collaboration

- Critical research infrastructure
- Incentives for engagement
- Global innovation

### Talent and Skills

- STEM and Digital Literacy
- Visas

### Government as Exemplar

- Business Research and Innovation Initiative
- Digital marketplace

**\$1.1bn over 4 years**



**Senator the Hon Simon Birmingham  
Minister for Education and Training  
Senator for South Australia**

**Media release**

21 November 2016

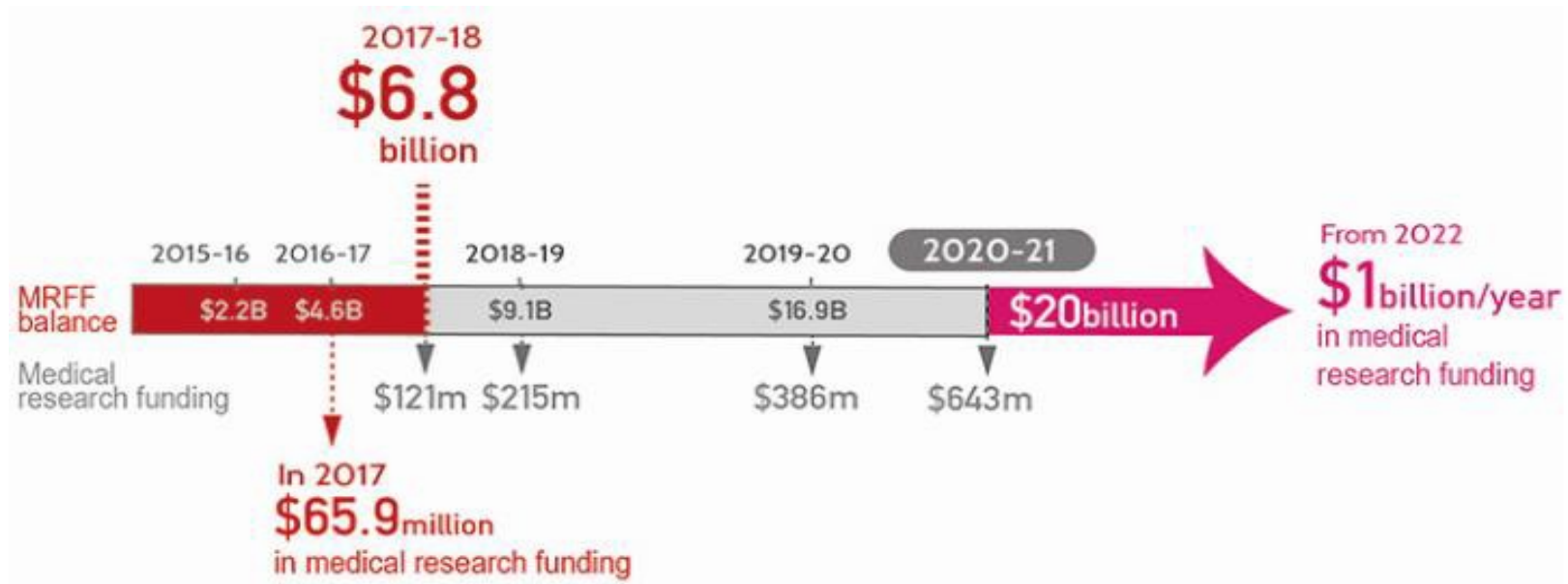
**2017 pilot to test impact, business engagement of researchers**

The Turnbull Government will pilot ways to measure the impact of university research and their engagement with business and industry in 2017 after today opening applications for institutions to take part ahead of a national rollout of the assessment system in 2018.

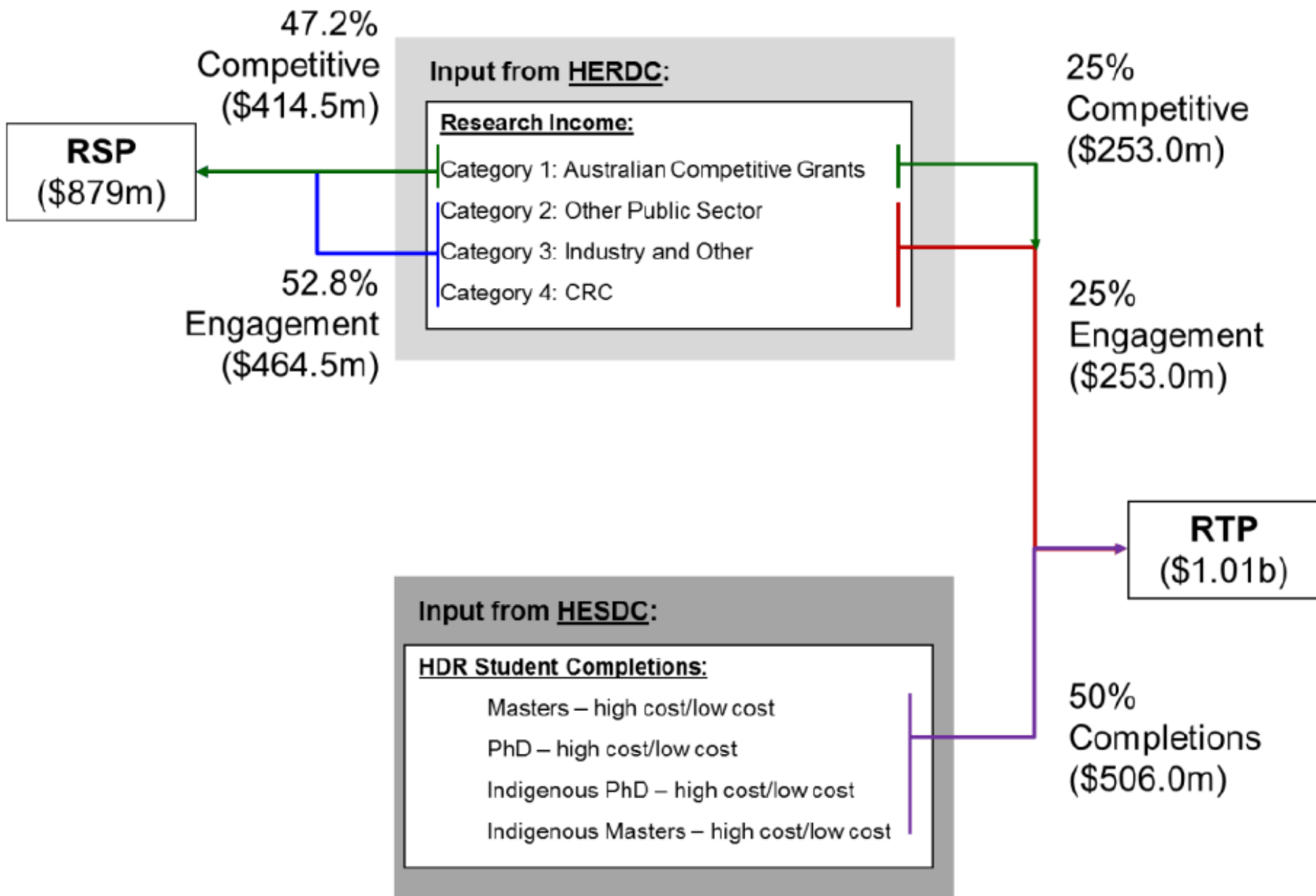
Minister for Education and Training Simon Birmingham said the pilot was the next step in the Turnbull Government's National Innovator and Science Agenda to ensure that taxpayer funds were being targeted at research and initiatives that would ultimately pay dividends for Australian young people, old people, mums and dads.

"The 'Engagement and Impact Assessment' is about incentivising the smart and talented people working in our labs and universities to better focus on research that has wider economic and social benefits," Minister Birmingham said.

# \$20Bn Medical Research Future Fund



- **\$18M** national alliance of clinical trial networks
- **\$8M** to support fellowships for clinical researchers
- **\$10M** to Advance Health Research and Translation Centres
- **\$10 million** to boost preventive health



Note: funding amounts as at Budget 2016-17

# Government Incentives

- NSW Tech Vouchers
  - Up to \$15K matched by company (NSW based)
- Commonwealth Innovation Connections
  - Up to \$50K matched by Australian company
- Australian Research Council Linkage Grants
  - ~\$350K from government over 3 years, 25% minimum cash from company, 75% in kind
- NHMRC Partnership Grants
  - Up to \$1.5m from government for up to 5 years, matched with cash/in kind from partner organisation(s)
- NHMRC Development Grants
  - Development Grants are available for 1-3 years. Applicants are required to fully and clearly justify their requested budget.
- Co-operative Research Centre Projects
  - Up to \$3m from government over 3 years, matched in cash and in-kind from 2 Australian companies

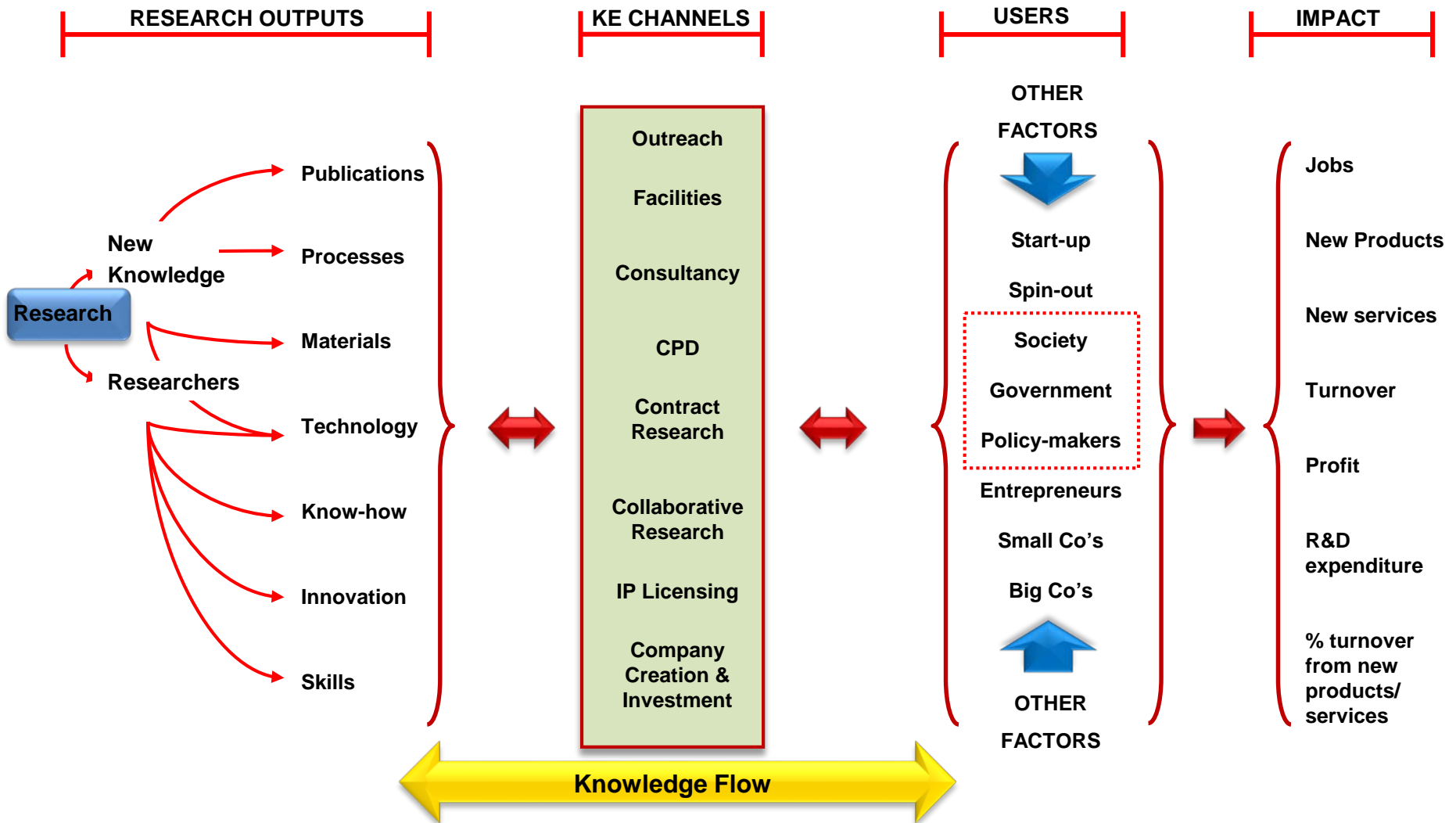
# In Closing (or opening??)

- The obsession with IP commercialisation has been a distraction/done us a disservice.
- Engagement is a core part of the university mission and necessary precursor to Impact
- More Engagement is happening than we are given (or giving ourselves) credit for and we need to recognise the value and scale of all the channels.
- We can significantly increase engagement by
  - giving permission
  - recognising the value
  - incentivising it.
- UNSW is structuring to optimise Knowledge Exchange as a key part of our 2025 strategy



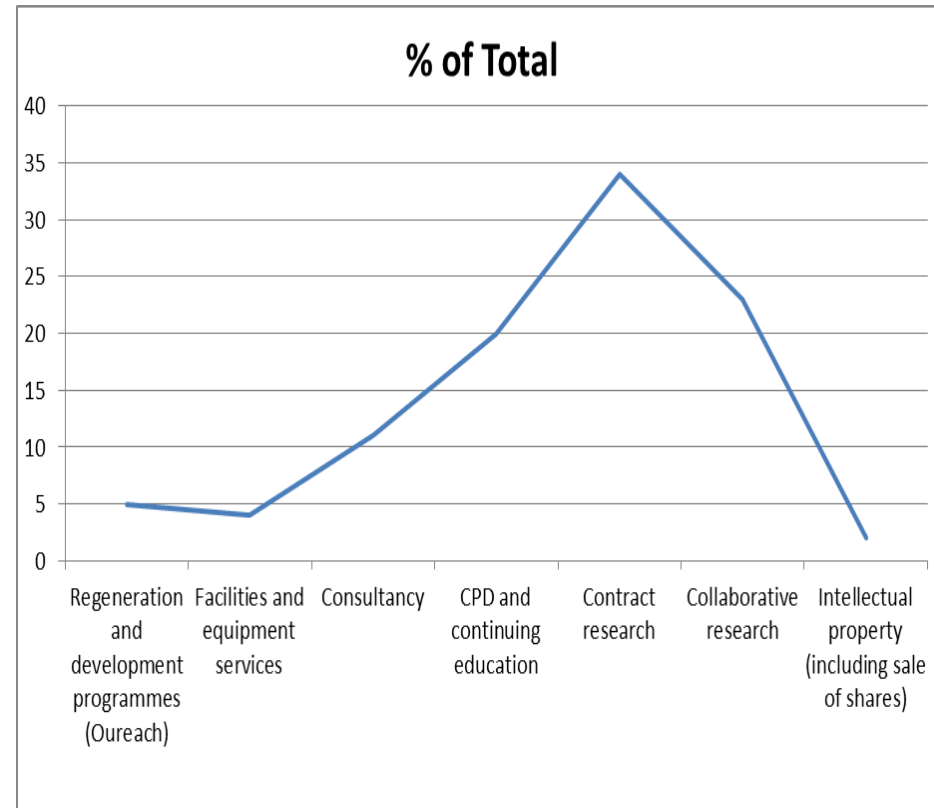


# Knowledge Exchange Model



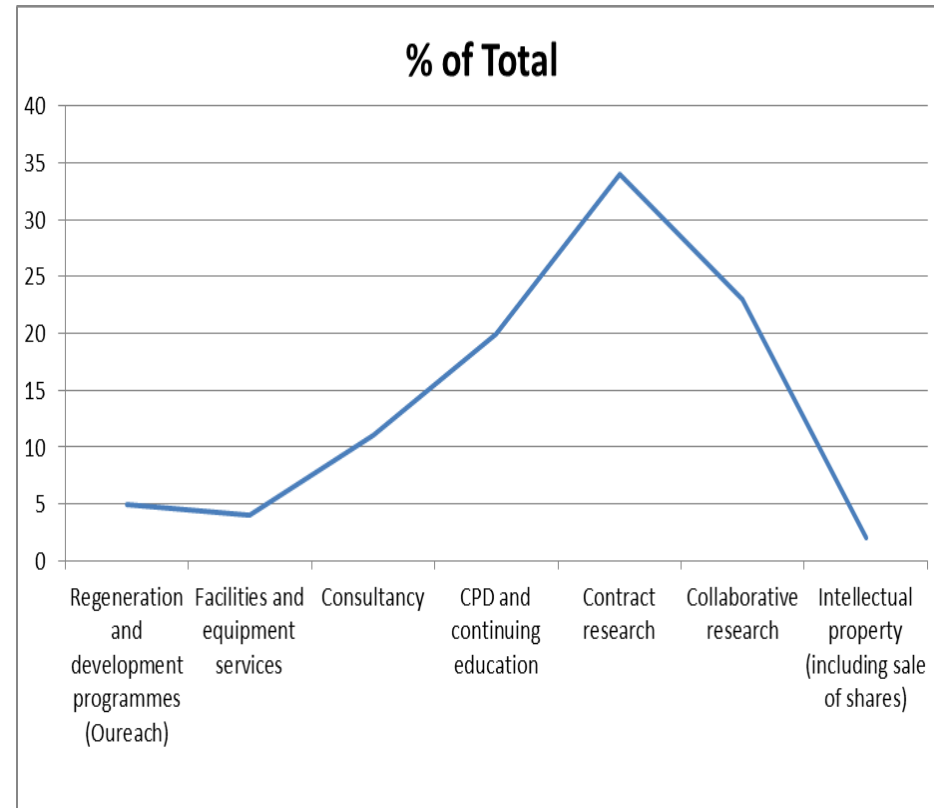
# UK Data

- 57% of the total is represented by contract and collaborative research
- CPD and Consultancy contribute over 30% combined
- IP is the smallest single component

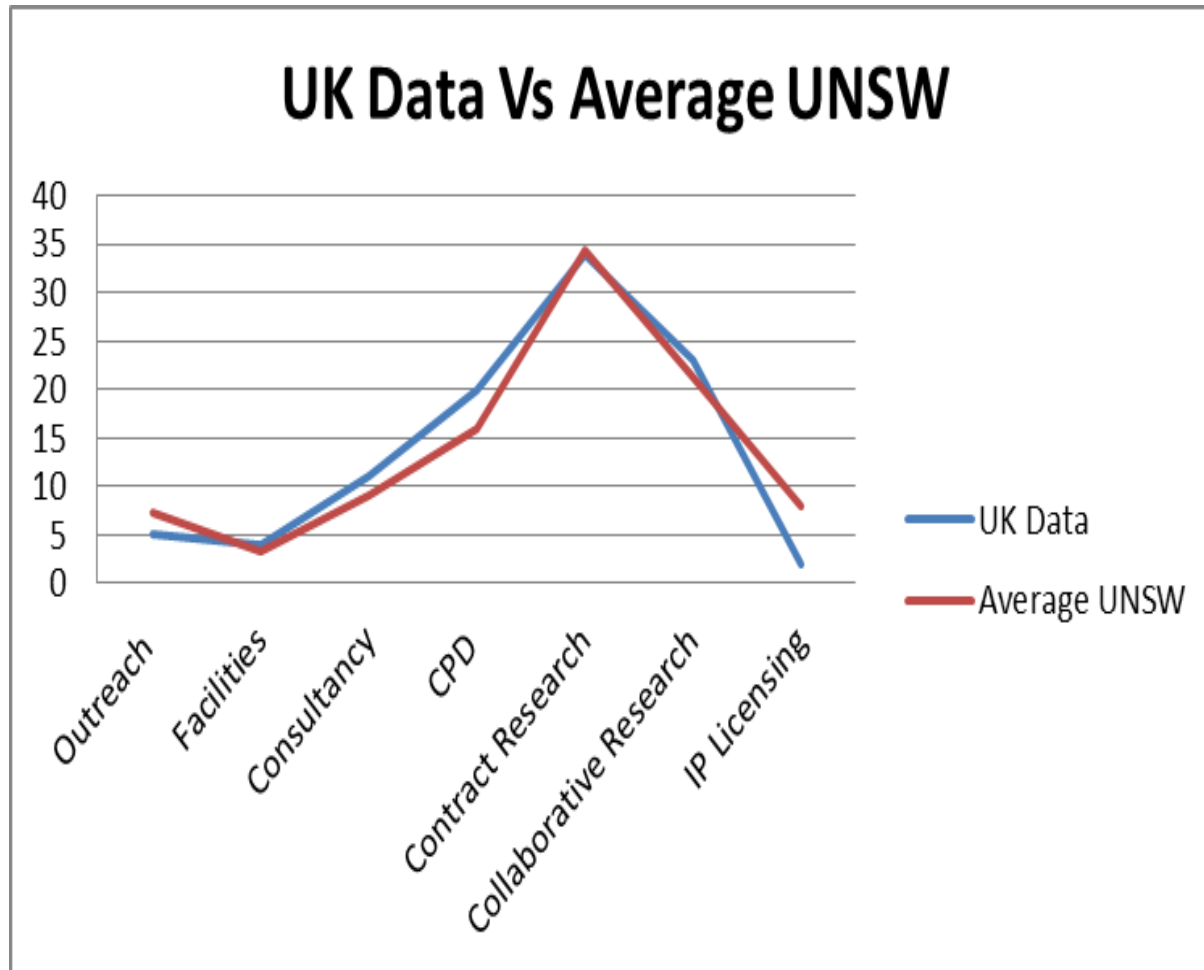


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# UNSW Data compared with UK Data



# Easy Access IP

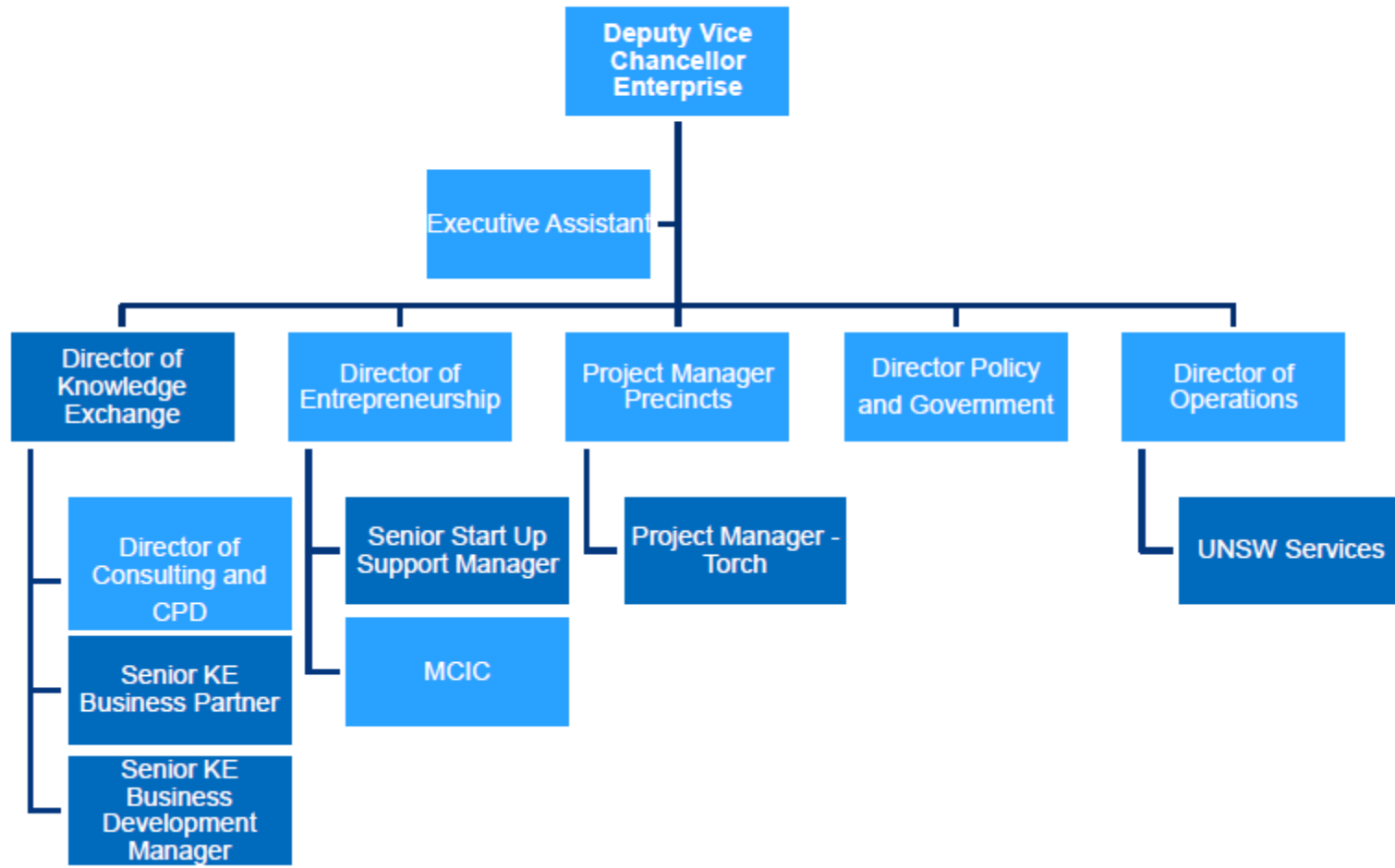
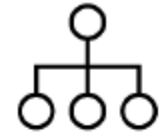
We seek to licence most of our IP for free to partners who can demonstrate how it will benefit the community, society or economy

To access, potential partners must:

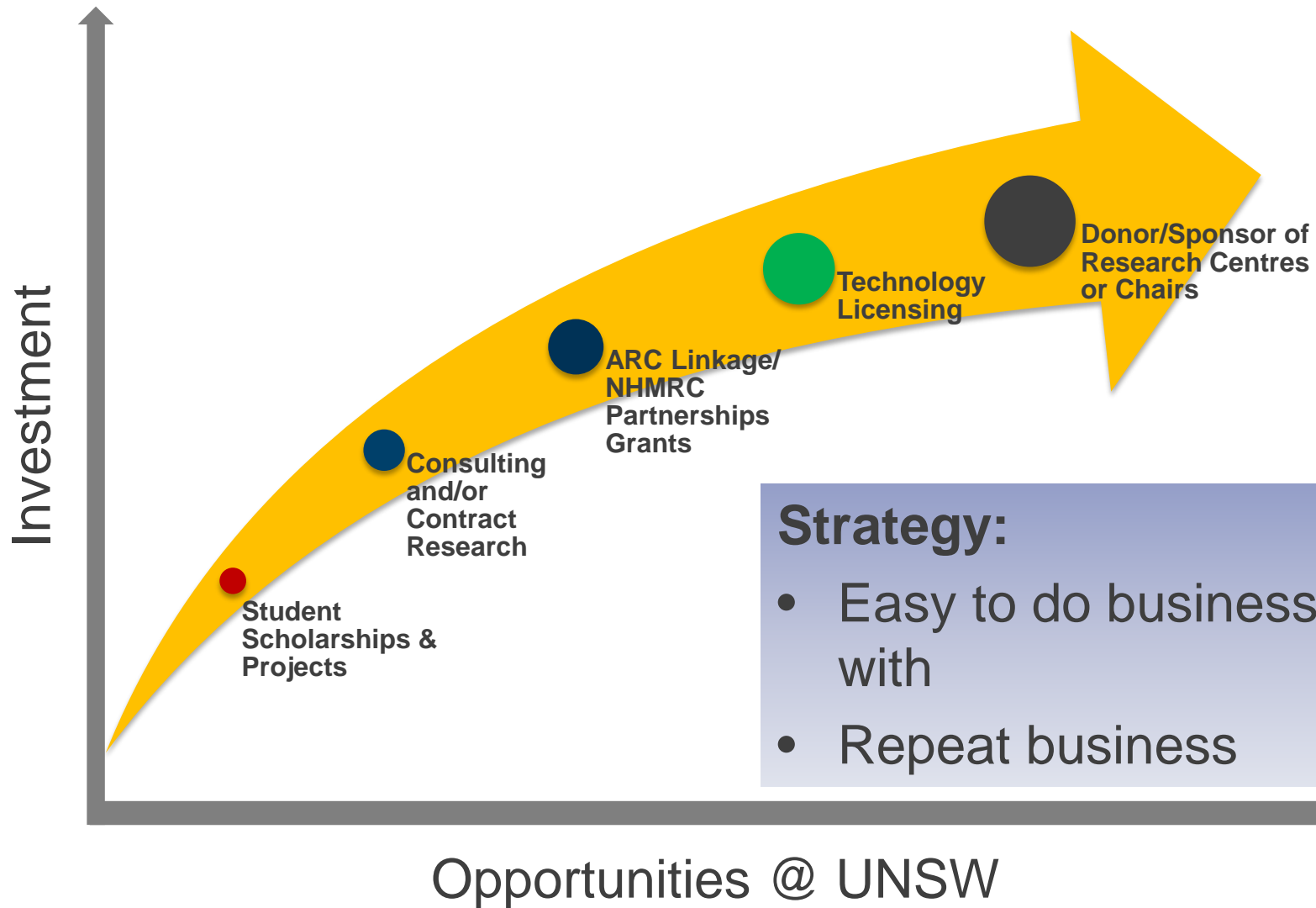
- Demonstrate benefit to the economy
- Guarantee our right to do research
- Acknowledge the University's contribution
- Do something within three years



# Proposed high level organisational structure



# Partnership Pathway/Menu



# Industry....researcher perspectives.



## Partner / End-user perspective

Researchers **lack understanding** of what the partner needs and how they operate

Partner **time lines** driven by factors beyond the experience of many researchers

Must be **easy to find** and access the relevant expertise

Knowledge created by researchers is rarely in a form that can be **easily translated** or adopted

**Confidentiality and competitive advantage** is paramount for industry

**Inelegant but practical** solution is sufficient

## Researchers perspectives

Partners don't know how to **engage** in collaborative research

**Cultural challenges** and expectations management of partners re: researcher incentives, student involvement and timelines

Research **incentives and reward systems** not aligned with partner engagement

Researchers networking tends to focus on **academic** rather than external partner collaboration.

Prefer the **perfect** solution



# Common Ground

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Graduate Recruitment

Awards

Scholarships

Guest Lectures

Mentorships

Industry Nights

Site Visits

Internships

Co-op Sponsorships

- Design Projects
- Honours Research
- High Degree Research
- Consulting
- Facilities Access
- Laboratory Access
- Tech Vouchers
- Long Term R&D
- Grant Funding



# Benefits to researchers

- Access research projects with high global impact potential
- Application of fundamental research to industry problems
- Long-term research partnerships with SMEs, Australian and International companies
- ARC Linkages and NHMRC Development Grants and other leveraging
- Opportunities for students and post docs
- Access to industrial research centres or equipment/expertise not available on campus
- Reputational growth as the Australasian destination for innovative research
- Diversification of research funding sources

B3.1 UNSW Innovation and Entrepreneurship: We will embed **innovation and entrepreneurship** into our research and education culture

B3.2 UNSW Knowledge Exchange Agent: We will champion and promote **knowledge exchange**

# How to get engaged?

- Technology briefs

- ✓ What you do
- ✓ Problems you can solve
- ✓ Why this technology is innovative/important/more advanced

- Capability statement

- ✓ Your capabilities behind a single technology/innovation
- Language
  - ✓ Chinese language skills are essential (yourself or group member)
  - ✓ Technical briefs and capability statement need to be bilingual
- Torch team can align your capability with Torch companies
- Use your own networks and contacts

 <p>Optimal Faculty/Unit/Centre placement Type the title of your technology here</p>	 <p>学院/部门/中心名 技术/研究领域名称</p>		
<p>DESCRIPTION OF YOUR TECHNOLOGIES What your technologies can do</p>	<p>COMPETITIVE ADVANTAGES OF YOUR TECHNOLOGIES</p> <ul style="list-style-type: none"><li>• Introduce the current standard</li><li>• Describe the advantages and benefits of your technologies (could be lower cost, better material, better safety, simplified production process, assay optimization) and potential applications</li></ul>	<p>概况 技术是什么？有何创新点？</p>	<p>近期研发进展情况 你所研发的新技术或成果与目前市场现状（如有需要，可包括专利号或文献）</p>
<p>SPECIALISTS IN xxx Brief introduction/background of your group (1-2 sentences)</p>	<p>SELECTED RECENT PROJECTS and TRACK RECORD Insert any contract research or industry related working experience here</p>	<p>技术特点 请简要介绍主要介绍的核心技术（作品名称、核心技术区域、关键技术）</p>	<p>采用的研究开发方法 请介绍所采用的研究方法（如生物信息学、基因组学、大数据分析等）</p>
<p>THE TOOLS OF OUR TRADE Resources (e.g. infrastructure/Technologies (e.g. animal/disease models) available</p>	<p>OUR EXPERTS List of key personnel and their expertise. May include portrait photos if preferred</p>	<p>技术核心竞争优势 • 减少实验成本开支 • 缩短研发周期/提高效率（如降低成本、提高效率等） • 提供安全性的保障、优化生产流程、优化治疗方案等；以及该技术带来的其他竞争优势</p>	<p>研究人介绍 请介绍研发团队的核心成员以及其专业领域（如生物、医学等）</p>
 <p>新南威尔士大学火炬创新中心 Torch Innovation Centre at UNSW</p>	<p>More information contact: Title/Name/Email/Phone/Website</p>	 <p>新南威尔士大学火炬创新中心 Torch Innovation Centre at UNSW</p>	<p>更多详情请联系：请输入联系人姓名/邮箱/电话/网址</p>

# Remember.....

- It takes lots of time, energy and commitment to build partner relationships
- The path is full of delays and blockages
- Don't give up - Persevere, be determined, and resilient
- Just one trusted long term external partner can lead to multiple opportunities, including referrals
- Your research has real impact when put into use in society – keep pursuing this goal
- We are here to be active partners with you

# In closing...



Partner or perish  
Engagement – Partner – Impact  
Multiple Touch Points  
Multiple Channels  
Stimulate Supply & Demand  
Domestic and International  
Complementary support