Increasing Research Income Grants v. Contracts
Increasing Research Income

Grants v Contracts

Jonathan Cant – Research Grants & Contracts Manager
Presentation Flow

• University of Hull
• Context
  – Research Environment
• Funding to collaborate with Industry
  – Innovate UK
• Transforming Research and Enterprise
• Case Study – Innovate UK Project
• Case Study – Project Aura
WHERE IS THE UNIVERSITY OF HULL?
Throughout its distinguished history the University of Hull has placed research and enterprise at the core of its academic offering. In 2013 research and enterprise – competing on quality through innovation – remains central to the University’s vision for the future.
The Allam Building, home to a new biomedical research facility tackling cancer and other major diseases, was officially opened in July 2013.
On 22nd March, 1973, a research team at the University of Hull made a breakthrough that led to the birth of the first generation of LCDs (Liquid Crystal Displays). Their thinking revolutionised electronic displays around the world and has continued to inspire screen technology today.
Dr Catherine Wynne has been awarded a British Academy Conference Support Grant to host the Bram Stoker Centenary Conference (12-14 April 2012).
UK Landscape and key sector trends
Definitions

• **Research grants and contracts**

  • **Research** can be defined as original investigation, undertaken to gain new knowledge and understanding, which may be directed towards a specific aim or objective. It can use existing knowledge in experimental development to produce new or substantially improved materials, devices, products and processes including design and construction. It excludes routine testing and analysis of materials, components and processes.

  • The term ‘**research grant**’ is restricted to research projects funded by the UK research councils, charities and the higher education funding bodies.

  • All other externally financed research projects are classified as ‘**research contracts**’.
Trends in the Sector

• The funding landscape for HE research is changing:
  – Funding is concentrated with the top institutions receiving the largest proportion of both grant and QR funding
  – The policy landscape is evolving and efficiency drives are having a significant impact
  – Collaborative and challenge led research is becoming more important, leading to larger grants
  – The above changes are in an increasingly competitive sector
HE Research Grant Income

Research Income

Change in Research Funding 2010/11 – 2014/15

Source: HESA
Landscape

White Paper
- QR & grant funding to remain.  
  supporting excellence wherever it is found
- Potential change to REF ownership
- Commits to REF before 2021

Stern Review of REF
- Fully reviewing all aspects of REF
- Reports in summer 2016
- Will inform design of the next exercise
- Impact on institution will be important

Nurse Review of the Research Councils
- The Research Councils will be brought together into one body (UK Research & Innovation)
- Research Councils will keep their individual remits
- Potential for higher levels of cross council opportunities
Project lead

• Usually industry led (Large, SME or Micro)
• Occasionally
  – Local authority led (e.g. Urban programmes)
  – NHS led (e.g. Health demonstrators)
  – HEI led (e.g. some international collaborative calls)
• Very much depends on the nature of the call
Innovate-UK Core Budget

<table>
<thead>
<tr>
<th>Year</th>
<th>Budget (£ Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015/16</td>
<td>£547m</td>
</tr>
<tr>
<td>2016/17</td>
<td>£561m (+2.6%)</td>
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Funding available

- Large Industry: 50%
- SMEs: 60%
- Micro: 70%

Must have clear contributions from the company to support the project

Typically must be industry led

- HEIs / Research organisations: 80% of fEC
- Charities / Local Authorities: 100%
Offer conditions

- Signed **Conditional Offer Letter** by all beneficiaries
- Signed **Collaboration Agreement** by all partners
- Bank details / Company no. on headed paper
- **Financial forecast** for each participant
- **Detailed project plan** broken down into work packages with estimation of resources and timescales required
- **Milestone register** showing key milestones and cost of each milestone
- **Exploitation plan** identifying market and business opportunities
University of Hull
Current performance
research income
Research Income 08-09 (All Sources)
Research Income 14-15 (All Sources)
Summary

• Landscape
  – Efficiency is a key driver in the sector. The amount of cash in the system is not expected to change significantly
  – Investments will be increasingly delivered via longer, larger grants and thematic programmes
  – Collaboration and challenge driven research is becoming more important

• Focus research investment
• Focus on collaboration
• Continue to improve research support infrastructure
Focussing our research engagement and innovative enterprise

From the Strategic plan 2016-2020:

As a university with a research-driven mission, we aim to significantly increase our level of research and enterprise activities, outputs and impact, recognising research and enterprise as part of a continuum.

As an internationally engaged anchor institution, our research and enterprise activities will provide solutions to global as well as local and regional challenges. The quality and impact of our research and enterprise will be benchmarked on an international level, and international collaboration and cooperation will be encouraged.
We will:

• Deliver world-class research by enhancing our researcher cohort, organisational structures and supporting systems and environment.

• Review support structures for research and enterprise, early career researchers and postgraduate research students, and build organisational capacity in enterprise delivery.

• Prioritise our investments in research to improve our institutional position in the next Research Excellence Framework (REF).

• Create a robust research community, is based on an empowered researcher cohort, respects and recognises contribution, and nurtures talent.

• Increase the proportion of our research and enterprise which is funded externally.

• Promote interdisciplinary research activities and a collaborative approach, embedding the University-level institutes.

• Build strategic partnerships with industry, the public sector and other educational institutions to strengthen our research and enterprise endeavours.
We will (2):

- Exploit our intellectual property and know-how through spin-out companies, commercial vehicles, licensing and the development of services.
- Champion open access publication and other forms of open scholarship to enhance the dissemination and impact of our research and enterprise.
- Be a ‘postgraduate-friendly’ university, ensuring that postgraduate students benefit from an integrated student experience that supports their personal, professional and career development.
- Enhance our postgraduate students’ study environment, and ensure that their need for social spaces is met.
- Broaden our engagement with research and industrial partners, and establish strategic relationships where it is beneficial to do so.
- Participate in the Humber LEP, liaise with other LEPs, and engage with relevant governance, industrial and business organisations and in response to devolved authorities as they unfold.
Immediate priorities for the R&E centre:

• Review support structures for research and enterprise, early career researchers and postgraduate research students, and build organisational capacity in enterprise delivery.

• Build strategic partnerships with industry, the public sector and other educational institutions to strengthen our research and enterprise endeavours.

• Exploit our intellectual property and know-how through spin-out companies, commercial vehicles, licensing and the development of services.

• Participate in the Humber LEP, liaise with other LEPs, and engage with relevant governance, industrial and business organisations and in response to devolved authorities as they unfold.
Our Challenge – Stand Out Amongst the Crowd
Over 120 UK universities
Over 22,000 global universities
Why a new structure?

We need to support the delivery of the new strategic plan and the implementation of the new shape of the University. In doing so we must ensure the following:

• **Alignment** – the central team is aligned with delivery in the faculties and other professional services.
• **Investment** – continue to spend the additional investment (£500k) given to the central team last year to improve the University’s research and enterprise performance.
• **Influence** - the central team has the senior positions to have influence in decision making for key issues.
• **Specialist Skills** – deliver excellence in performance through the development of specialist skills and focused delivery.
• **Resilience** - there is organisational capability and capacity to minimise ‘single points failure’.
• **Development** – there are pathways for progression and the potential for individual development.
• **Systems** – there are robust systems, policies and procedures to ensure efficient operations and consistent delivery.
Research & Enterprise Proposed Structure
What it means to our team - Research

A new structure will:

• Transform our approach to supporting researchers and the University’s ambition to develop a robust and ambitious research community.
• Support and drive the development of mutually beneficial research collaborations.
• Align our service with the new faculty structures and the Research Institutes.
• Provide grant lifecycle support and develop effective processes and procedures to maximise the quality of submitted proposals.
• Deepen our relationships with funding bodies and maximise our funder intelligence.
• Ensure the successful implementation of RIS and its roll-out to the research community.
• Provide enhanced resource to support high quality research and impact, ensuring the best possible outcome of the next Research Excellence Framework (REF).
• Ensure the University keeps abreast of current research policy and has the right governance structures in place to react to a changing research landscape.
Case Study

Enhancing the end-to-end journey
Case Study: Enhancing the end-to-end journey

- PI: Amar Ramudhin (Director of Logistics Institute)
- Project: Liverpool-Humber Optimisation of Freight Transport (LHOFT)
- Consortium
  - Peel Ports (Industrial lead)
  - University of Hull
  - Lancaster University
  - ABP Ports
  - Unilever
  - Oxford Rail Transport (SME)
  - Rail Freight (SME)

SME INVOLVEMENT

IMPORTANT
Key Reasons for Success

- Strong consortium representing key stakeholders in the problem
- Planning the EOI with a view to success at 2nd stage
  - Work packages, estimates of resources, timelines
  - Meetings for 2nd stage pre-arranged in diary
  - Use of organised shared project spaces (Box)
  - 3 strong bid writers (UoH (2), Peel Ports)
Case Study
Project Aura
&
The Hull Open Access Innovation Centre

Reducing the offshore wind ‘Societal Cost of Energy’ through R&D, innovation, teaching & training across the whole supply chain, from design-to-decommissioning – bringing the sector together to support global long-term industry growth through collaborative competition
Offshore Wind in the Humber – Class 101

Key Facts

- UK is the world's biggest OSW market
- Dogger Bank, Hornsea & Norfolk = 20GW (5x Drax)
- Current UK capacity 95GW
- ca. 3300 turbines
- £100bn
- Unique scale globally
- Turbine lifetime 25 years
- Humber is close for O&M

Swept area: 2.6 football pitches
Opportunities for the University of Hull

The University already has academics active in areas that can have a major impact on the offshore wind sector:

- Energy Resource Analysis
- Environment Impact Assessments
- Base Design & Seabed Science
- Health & Safety
- Operation & Maintenance
- Logistics & Supply Chains
- Business Methods
- Blade Design & Manufacture
- Health & Safety

University of Hull & Project Aura – Lowering the Societal Cost of Offshore Wind Energy
The Concept – Meeting Industry Need

Working experiences from each area feed into all others – to build innovation into all lifecycle stages

Value Creation Areas
- RGI projects
- Teaching & Training
- Consultancy
- Reputation
- Commercial
- Influence
- Collaborative RD&I

Project Aura - Blades Full Supply Chain, Design-to-Decommissioning – Bringing RD&I and Teaching & Training organisations together (flexible business savvy and friendly working approaches)

Consultancy, Reputation, Commercial, Influence, Collaborative RD&I

Influence RGI projects Teaching & Training

UoHull, UoSheffield, UoDurham, ORE Catapult, NCC, ETI
Centrica, Statkraft, DONG, SSE, E-ON, Vattenfall

Vestas, Siemens, Blade Dynamics

A2Sea, RES Offshore, Centrica, Siemens, MPI, Boston Energy

University of Hull & Project Aura – Lowering the Societal Cost of Offshore Wind Energy
University of Hull & Project Aura – Lowering the Societal Cost of Offshore Wind Energy
Project Aura – Delivery Across all TRLs

Uni of Hull, other HEIs and Research Orgs

Industry & Companies

H-OAIC, AMRC, OREC etc.

Market Readiness (technology and processes)

TRL 1
Basic principles observed & reported
Technology concept and/or application formulated

TRL 2
Analytical and experimental critical function and/or characteristic proof-of-concept

TRL 3
Component and/or validation in laboratory environment

TRL 4
Component and/or validation in relevant environment

TRL 5
System model or prototype demonstration in relevant environment

TRL 6
System prototype demonstration in an operational environment

TRL 7
Actual system completed & proven through test & demonstration

TRL 8
Actual system proven through successful operation

TRL 9

MRL 1

MRL 2

MRL 3

MRL 4

MRL 5

MRL 6

MRL 7

MRL 8

MRL 9

Research Councils etc.

Private Sector

InnovateUK / EU
For the University of Hull, Project Aura will:

- Promote the University of Hull nationally and internationally as a leading provider of offshore energy research, teaching, innovation and agenda-setting

- Provide University of Hull academics with unique powerful access to industry and academic partners, collaborative research and enterprise projects

- Allow University of Hull students to work, learn and research alongside cutting-edge industry projects

- Increase the University of Hull’s teaching and training capacity – e.g. through enhanced U/G Degrees (inc. placements), Graduate Apprenticeships, apprenticeships and CPD courses

- Put the University at the centre of a growing consortium of major and influential academic and business organisations – reputation and influence growth

N.B. Value creation will significantly ramp-up post 2020 as activities become established
Project Aura
Transforming the University of Hull

University of Hull & Project Aura – Lowering the Societal Cost of Offshore Wind Energy
Thank You For Your Attention Any Questions?