Aligning public and private sector to drive growth

Dr Jo Dally
Head of Policy, Research Landscape
**Investment**

**Combined spend on R&D**
- OECD average: 2.4% of GDP
- UK: 1.68% of GDP

**Funding for strategic advantage**
- Industrial Strategy Challenge Fund
- Healthcare and Medicine

**Return on investment**
- For every £1 public R&D spend, private sector R&D output rises by 20p/year in perpetuity.

**A ‘Fresh Case’ for investment**
- Economic impact
- Social impact

---

**Pharmaceuticals** is consistently the top R&D performing sector.

---

1 The role of EU funding in UK research and innovation, Technopolis Group, 2007
3 Haskel, Hughes, Bascavusoglu-Moreau (2014) The Economic Significance of the UK Science Base
4 https://www.ons.gov.uk/economy
Annex 2: The role of EU funding in UK research and innovation

Impact

The ten disciplines that recorded the most funding from EU government bodies in their research grants and contracts income in 2014/15

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical medicine</td>
<td>£19.6m</td>
<td>£19.6m</td>
<td>£19.6m</td>
<td>£19.6m</td>
<td>£19.6m</td>
<td>£19.6m</td>
</tr>
<tr>
<td>Biosciences</td>
<td>£75.4m</td>
<td>£75.4m</td>
<td>£75.4m</td>
<td>£75.4m</td>
<td>£75.4m</td>
<td>£75.4m</td>
</tr>
<tr>
<td>Physics</td>
<td>£46.2m</td>
<td>£46.2m</td>
<td>£46.2m</td>
<td>£46.2m</td>
<td>£46.2m</td>
<td>£46.2m</td>
</tr>
<tr>
<td>Chemistry</td>
<td>£14.6m</td>
<td>£14.6m</td>
<td>£14.6m</td>
<td>£14.6m</td>
<td>£14.6m</td>
<td>£14.6m</td>
</tr>
<tr>
<td>IT, systems sciences &amp; computersoftware engineering</td>
<td>£59.4m</td>
<td>£59.4m</td>
<td>£59.4m</td>
<td>£59.4m</td>
<td>£59.4m</td>
<td>£59.4m</td>
</tr>
<tr>
<td>Electrical, electronic &amp; computer engineering</td>
<td>£29.2m</td>
<td>£29.2m</td>
<td>£29.2m</td>
<td>£29.2m</td>
<td>£29.2m</td>
<td>£29.2m</td>
</tr>
<tr>
<td>Mathematical, aero &amp; production engineering</td>
<td>£17.0m</td>
<td>£17.0m</td>
<td>£17.0m</td>
<td>£17.0m</td>
<td>£17.0m</td>
<td>£17.0m</td>
</tr>
<tr>
<td>Earth, marine &amp; environmental sciences</td>
<td>£34.5m</td>
<td>£34.5m</td>
<td>£34.5m</td>
<td>£34.5m</td>
<td>£34.5m</td>
<td>£34.5m</td>
</tr>
<tr>
<td>General engineering</td>
<td>£28.6m</td>
<td>£28.6m</td>
<td>£28.6m</td>
<td>£28.6m</td>
<td>£28.6m</td>
<td>£28.6m</td>
</tr>
<tr>
<td>Mathematics</td>
<td>£15.6m</td>
<td>£15.6m</td>
<td>£15.6m</td>
<td>£15.6m</td>
<td>£15.6m</td>
<td>£15.6m</td>
</tr>
</tbody>
</table>

Income from EU government bodies includes all research grants and contracts income from all government bodies operating in the EU, which includes the European Commission, but excludes bodies in the UK.

The ten disciplines that recorded the most funding from EU government bodies as a proportion of their total research grants and contracts income in 2014/15

- Archaeology: 28%
- Classics: 23%
- IT, systems sciences & computer software engineering: 30%
- Media studies: 27%
- Law: 26%
- Philosophy: 26%
- Modern languages: 24%
- Anthropology & development studies: 22%
- Business & management studies: 23%
- Chemistry: 23%

Income from EU government bodies includes all research grants and contracts income from all government bodies operating in the EU, which includes the European Commission, but excludes bodies in the UK.

EU R&D funding
- UK SMEs: 16.9%
- UK large businesses: 0.3%
Place

R&D in the East and West Midlands*

R&D in the UK as a whole

£4.58 billion

£31.63 billion

- Business
- Higher education
- Government and Research Councils
- Private non-profit

Please note that figures are rounded.


*In 2015 ONS data for East and West Midlands were combined for confidentiality.
UK research is international

UK-based researchers come from around the world, and work with people across the globe.

The UK was the largest recipient of foreign direct investment in R&D in Europe in 2014.

In 2015 over half of the UK’s research output was the result of an international collaboration and these collaborations are increasing.

Nearly 72% of UK-based researchers spent time at non-UK institutions between 1996 and 2012.

---

Any questions?