



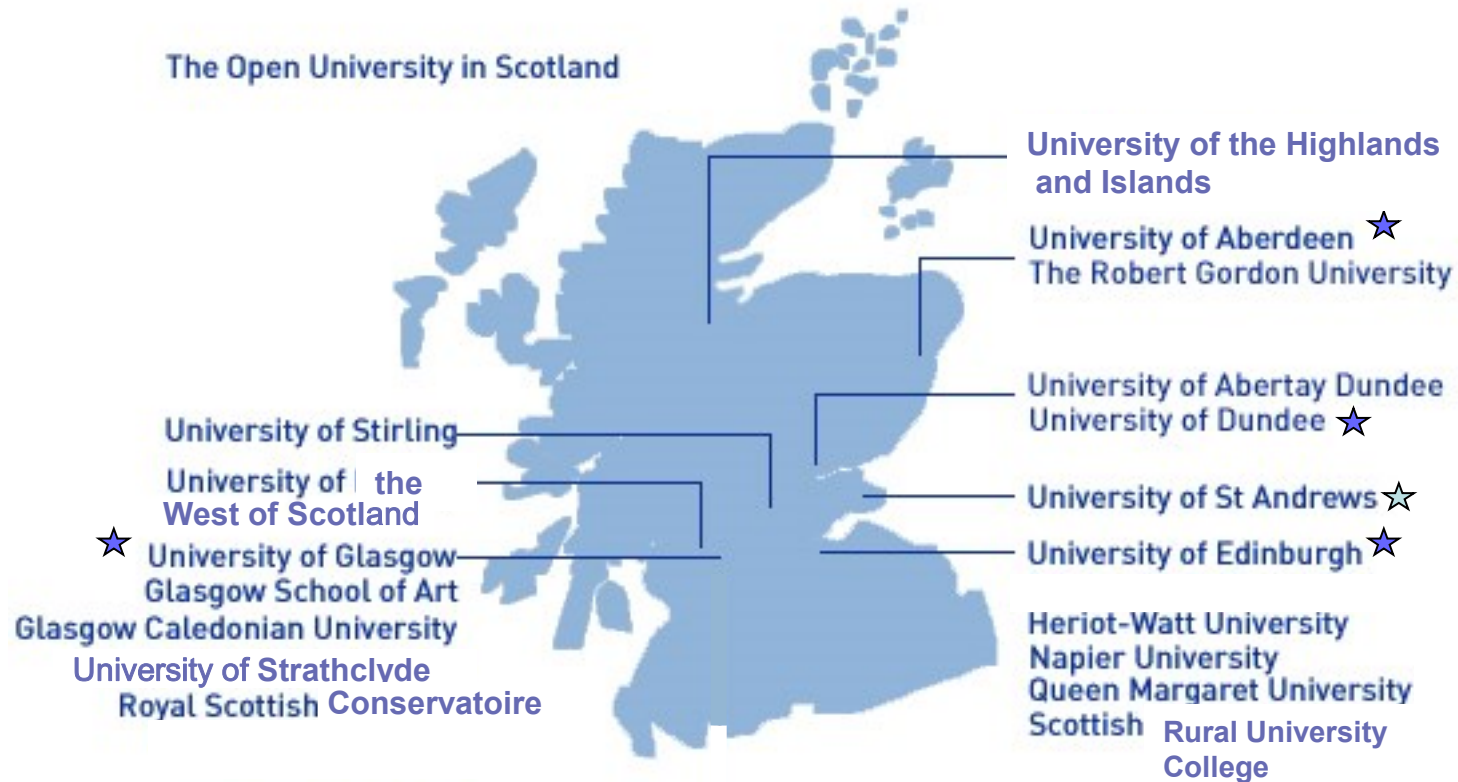
# Research funding in Scottish universities: A distinctive landscape in a wider ecosystem

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[www.universities-scotland.ac.uk](http://www.universities-scotland.ac.uk)  
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# Our Members



★ Medical Schools



# Some key areas of research

- Renewable Energy and Marine Technologies/Environment
- Biomedicine and Life Sciences (including Stratified Medicine and Regenerative Medicine)
- Food and drink, including Animal Health
- Security (water, food, energy, information)
- Built environment, including Power Transmission and Transport Infrastructure
- Creative industries/Arts and Humanities/digital media
- Mobile/digital technologies/informatics
- Medical imaging and diagnosis



# Research performance

- Scotland leads the UK: 8% of population but
- 15.2% of UK Research Council grant funding (10% of all RC funding)
  - 12.3% of EU research budget in UK (HESA 2011/12)
  - and a higher proportion of world-class research departments (RAE 2008)
  - Less £/paper than 17 OECD comparators
  - Scotland leads the USA, Germany, Japan and others in citations per population



# Why?

- Funding mix: Infrastructure, strategic, competitive, local to international
- Priority of Research and Innovation in Funding from SG/SFC
- Institutional autonomy
- Collaboration
- Attracting the very best researchers



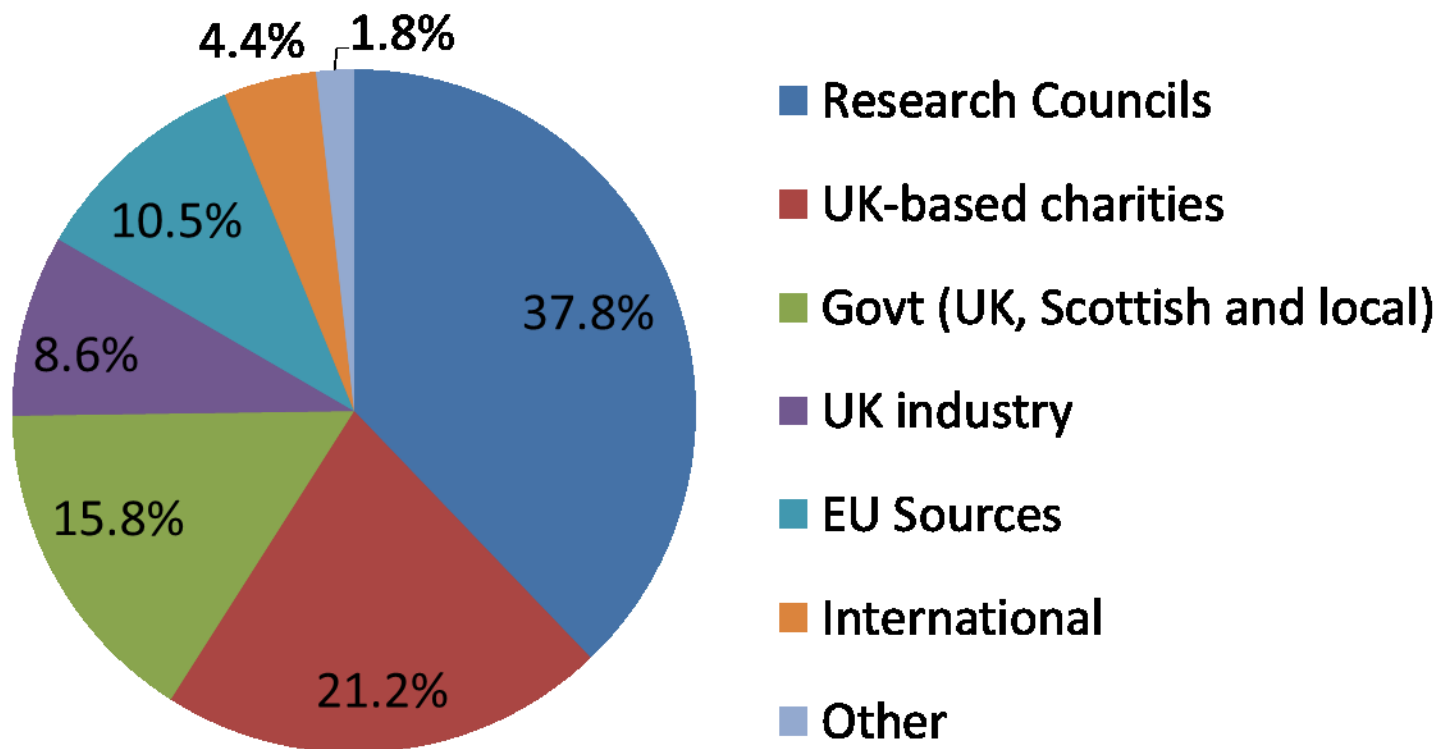
# Interdependence of funding streams

SFC Research Excellence Grant  
(£223m) for capability and capacity in  
universities, based on research quality  
(RAE / REF)

Key to winning...



# Income earned by Scottish HEIs from research grants & contracts 2010-11



**Total income from research grants & contracts: £610m. 13.5% of the UK total.**

# Knowledge Exchange in Scottish universities

Effect of SFC's Knowledge Transfer Grant (£70k per HEI and £13m allocated based on income metrics):

- Links with 26000 organisations (>50% Scottish), worth £380m
- 28 per cent of UK spin-out companies (19 % ten years ago)
- 29 % of consultancy undertaken with SMEs in the UK
- £1.3bn GVA from links outwith Scotland

Harvard University research income (\$833m) similar to top 8 Scottish universities (\$862m), but they produce (2010/11):

| Institution(s) | Disclosures | Patents | Licences | Spinouts | Royalties (\$m) |
|----------------|-------------|---------|----------|----------|-----------------|
| Harvard        | 351         | 213     | 85       | 9        | 13.8            |
| Top 8 Scottish | 334         | 164     | 171      | 15       | 11.7            |





# Collaboration....

- Between academics
  - Between disciplines
  - Between institutions
  - Between sectors
  - Internationally
- ...to achieve scale and quality of global significance, attracting the very best

Universities  
Scotland



The logo for Interface, consisting of two stylized eyes or shapes facing each other.

**Interface**  
The knowledge connection for business

**Making profitable partnerships  
across all sectors**

Six circular icons arranged in a path, each representing a different sector: a scientist in a lab, a piggy bank, a factory, a landscape with a sign, a green field with solar panels, and wind turbines.

Scottish Funding Council  
Highlands and Islands Enterprise  
Sòbairt na Gàidhealtachd 's nan Eilean  
EUROPE & SCOTLAND  
European Regional Development Fund  
Investing in your Future  
The Scottish  
Government

And a joint, and UK leading, approach to  
'easy access IP' and standard contracts

# Interface

[www.interface-online.org.uk](http://www.interface-online.org.uk)

For small businesses to access expertise in Scotland's universities and research institutes. In 2012-13:

- Supported 306 Scottish SMEs
- issued 401 expertise specifications to research partners(21% annual increase)

As a result:

- 15% created or safeguarded jobs
- 23% developed new products or markets
- 40% expect to introduce new products or services in next 3 years.



# Innovation Centres

Supported by The Scottish Funding Council,  
Highlands and Islands Enterprise and  
Scottish Enterprise.



# Innovation Centres

Up and Running:

- Stratified Medicine
- Digital Health Institute
- Sensor and Imaging Systems (IC-SIS)

Launching in February 2014:

- Industrial Biotechnology

At final stage of negotiation:

- Aquaculture
- Oil and Gas
- Construction
- Data Lab ('Big Data')



Universities  
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Ministerial advice in Sept 2011 called for:

“The harmonisation of systems and approaches to establishing linkages between academia and industry across the whole of the sector [to] help simplify the academic landscape for business”

# Collaboration across borders

- TSB Catapult Centres
- National Facilities



# Research and the referendum: Scottish Government

- Cross-border ecosystem important, and Scotland makes an exceptional contribution
- Optimism on the prospects of negotiation of a shared research infrastructure, a 'common research area'
- Range of research collaborations, including improved Scottish Government research support, Horizon 2020, closer relationships with other small research-intensive nations

# Research and the referendum: UK Government

- The whole UK is stronger through the Scottish contribution to research ecosystem
- Scepticism around continuation of this ecosystem in the event of independence expressed in terms of a progressive divergence of priorities
- Open to the possibility of negotiation of a shared research infrastructure between Scottish and remnant UK Governments



# Conclusion

- The Referendum result
- Post-Referendum negotiations



- It's in our interest to sustain the cross-border collaborative ecosystem, whatever the result of the referendum



# Thank you

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