

## **(DRAFT) SFC Research Strategy 2017-18**

SFC acts for all Scotland's people to make sure we have, and benefit from, strong colleges and universities. An important facet of this work is making sure Scotland's universities are able to explore and improve the world by doing excellent research. Research gives us the knowledge and techniques to deal with current challenges, address future challenges and create future opportunities. SFC is responsible for supporting Scottish university research structures which generate, test and share ideas. We do this by investing effort and resources, and by stimulating change in the sector so that that research environment remains strong, now and into the future.

In this time of extreme change, this Research Strategy will be used by SFC:

- To drive and explain SFC's actions in support of the Scottish research base
- To deliver our part in the Scottish Government's Economic Strategy 2016 expectation that as a nation we: "Continue to support the high-impact, world-class research of Scotland's Universities ..."

- Together with other SFC strategies<sup>1</sup>, to deliver SFC's overall Strategic Plan 2015-18
- To guide our approaches to influencing the complex contemporary policy environment, nationally and internationally, as it affects Scotland's research base

### **SFC's Strategic Plan 2015-18: ambition**

By 2025, Scotland will be:

"... the best place in the world to learn, to educate, to research, and to innovate..."

...with colleges and universities making a major contribution to Scotland's social, cultural and economic development."

### **SFC's Strategic Plan: outcomes**

- High-quality learning and teaching.
- World-leading research.
- Greater innovation in the economy.

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<sup>1</sup> SFC is also developing a new Innovation Strategy. This is being informed by the outcomes of the Scottish Government's 2016-17 Enterprise and Skills Review. SFC's Research and Innovation Strategies will interact and be mutually reinforcing.

## **SFC Strategic Plan 2015-18**

### **If we are successful, by 2025:**

- Scotland will be a country of discovery where talented researchers from across the world come together to explore, challenge, and address some of the most fundamental questions facing our society.
- Our universities will have a world-leading reputation for the impact of their research; from addressing our future energy needs to revolutionising medicine and our healthcare.
- Scotland will be nurturing, developing and training the international research leaders and Nobel Laureates of tomorrow.
- Our universities will continue to have world-class facilities, a global reputation and standing, and international connections and collaborations.

In addition, the Scottish research base will be robust and resilient; shape and respond to international challenges and opportunities, and; support, and draw on, the sector's work in education and innovation.

Our Strategic Plan 2015-18 groups SFC's overall strategy for world-leading research support under three headings:

- i Research competitiveness
- ii Research training
- iii International connections

These are expanded below.

## Research competitiveness

Countries throughout the world are also seeking to improve their research capability and create knowledge economies. In the face of increasing competition, economic challenges and changing policy structures, we need to maintain, improve and grow our world-leading research base. In addition to our Strategic Plan actions, we will:

- **Continue to work in partnership with the university sector.** This partnership on policy direction is an effective one. Research pooling, entrepreneurial training, researcher development, open access publishing, open data and other policy directions have been pursued in partnership. This is a key Scottish feature and one that sits close to the heart of this Strategy.
- **Build on the opportunities offered by UK developments in the dual-support of research** to further strengthen links with partner supporters of research and its applications (the Research Councils and InnovateUK). SFC will maintain and build on its relationships with the other three funding bodies of the UK, particularly (following the passing of the UK HE and Research Act 2017) links with Research England.

## Strategic Plan commitments

### *What we will do in partnership:*

- Invest in, and support, the development of a university research base that is world-leading and improving its reputation and standing in the world.

### *Strategic actions for SFC*

- We will prioritise our investment in research on developing world-leading and internationally excellent research.
- We will invest strategically in collaborative research initiatives – such as research pooling – which increase Scotland’s research competitiveness and achieve value for money.
- We will work with universities and other stakeholders to leverage increased levels of research investment in Scotland.
- We will invest in the digital infrastructure to support researchers and research groups, including through our investment in JISC.
- We will support the role that the Royal Society of Edinburgh – Scotland’s National Academy of the Sciences, Arts & Humanities, and Commerce – plays in promoting excellence in learning and research.

- **Work to reinforce Scotland's cross-disciplinary collaborative responses to thematic challenges**
- **Foster Scotland's ability to leverage additional benefit** from the base created by use of our Research Excellence Grant (REG) and other funding streams.
- **Make the definition of research excellence that we use in making decisions on research support clear.** This will be consistent with that used by SFC and its partners in the Research Excellence Framework (REF), make reference to Originality, Significance and Rigour, and consider the reach of its influence and standing, and the vitality and sustainability of the supporting research environment.
- **Contribute to the design of REF2021.** This supports research excellence through comprehensive assessment and recognition of research, including interdisciplinary research, and impact (broadly defined). International calibration and peer review are intended to remain at the heart of this assessment of research outputs, impact and research environment. This provides us with indicators of institutional capacity to produce future excellence.
- **Work to develop a broad recognition of, and support for, research in *all* disciplines and the fundamental and applied contributions they all make.** This is vital to the future health of our universities and to the contribution they make to society. The breadth of research in Scottish universities, across all disciplines, is valued through REF, and therefore through REG.

## Research training

The development of researchers, from PhD to on-going career support, is central to our future success. In addition to our Strategic Plan actions, we will:

- Use mechanisms including the REF, the Concordat on Researcher Development, and the Athena Swan programme, to **support universities in recognising, supporting, developing and retaining the best researchers** regardless of gender or other characteristics.
- Work with Research Councils and (pooled) graduate schools to further **develop the training, employability, entrepreneurial capacity, mobility and international outlook of PhD students**, recognising that their skills are valued throughout the greater Scottish economy, and that research careers are non-linear.
- Work with national and individual Crucibles and with the RSE to **develop early career researchers**.
- **Examine the resourcing of PhD training in Scotland** and work with partners to develop practical proposals for improvement.

## Strategic Plan commitments

### *What we will do in partnership:*

- Support the development of the next generation of research leaders in Scotland from all communities and backgrounds.

### *Strategic actions for SFC*

- We will support the training and development of postgraduate teaching and research students.
- We will promote equality of opportunity in the career progression of all researchers, whatever their background or community.

## International connections<sup>2</sup>

An international perspective and presence remain vital for the continuing strength of Scotland's research base. The international community of researchers in Scotland is highly valued by universities and by Scottish Government – as evidenced by the Scotland Welcomes the World event series. The international context in which Scotland's researchers operate is changing. In addition to our Strategic Plan actions, we will:

- Support the engagement of research pools and individual research groups in **developing overseas links** using SFC funds (for the pools) and working with the Connected Scotland partnership.
- Act to maintain and develop Scotland's **participation in international research networks**, including positioning Scotland to participate in opportunities such as the Global Challenges Research Fund.
- Encourage Scotland's participation in UK, and other, **research opportunities with an international agenda/impact**.

- **Monitor the level of participation by international staff and students** in Scottish research and engage to mitigate negative impacts of any change.

### Strategic Plan commitments

#### *What we will do in partnership:*

- Help develop a research base that promotes Scotland's international reputation, attracts talent from across the world, and is well-connected internationally.

#### *Strategic actions for SFC*

- We will work with Connected Scotland to promote the international engagement of Scotland's universities.

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<sup>2</sup> SFC is currently developing a Strategy and Action Plan on International Engagement (2017)

## Measuring Progress

We will know we are making progress towards our aims and objectives if:

- We measure the number of overseas researchers attracted to Scotland and retain high numbers in a post-Brexit environment (using HESA statistics).
- Our research reputation is maintained or improved, measured against international comparators (using the REF exercise and the World university rankings).
- Our research income continues to be above expected UK norms.
- The impact measures of the REF exercise are competitive against UK comparators and if the impact resulting from universities support for Innovation Centres, Interface and other commercialisation channels increases.
- The number and standard of PhD students and early career researchers is maintained or grown where appropriate.
- We can show that equality and diversity has been built into the implementation of our strategy.

## Strategic Plan 2015-18

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- Scotland will be nurturing, developing and training the international research leaders and Nobel Laureates of tomorrow.
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