**University of Dundee response**

**Independent Review of SFC's Research Pooling Initiative**

**Q1a. What has been the impact of the initial research pooling initiative?**

At the University of Dundee, we have had a mixed experience with the SFC Research Pooling Initiative. We participated in most of the research pools (with the exception of CHEM and MASTS), and our experiences were mixed in terms of the levels of engagement institutionally and amongst individual members of academic staff.

In the general case, investment in national and regionally-significant shared facilities has increased collaboration and strengthened competitiveness, and the University of Dundee benefitted in the early days of SULSA there were significant investments e.g. the £10M investment in phenotypic screening facility in our University. Pump-priming of in the form of academic appointments was also important and we benefitted from one staff appointment in the early days (Prof Andrew Hopkins). With lower levels of funding these benefits naturally fade as new initiatives evolve.

SUPA funds at the University of Dundee were primarily used to install a Physics at the Life Sciences (PALS) interface laboratory facility within the School of Life Sciences. This is enabling the development of advanced non-commercial optical and acoustic imaging and spectroscopy instrumentation. A new Physics for Life Sciences SUPA research theme was begun at the start of the SUPA II, which brought in expertise in this area from Dundee and Aberdeen. Dundee used the SUPA II funding to enable a successful bid to the Wolfson Foundation to enable the construction of an internationally competitive PALS facility embedded in the UK's top School of Life Sciences. The staff responsible for the development of the SUPA II–Wolfson funded PALS laboratory won an EU Seventh Framework Programme Marie Curie Initial Training Network (ITN) innovative PhD doctoral training programme, which funded 13 PhD students primarily working in the Dundee PALS laboratory.

The University of Dundee has derived benefit from SRPe funding including (i) several (6-8) partially funded PhD studentships awarded from NRP, ETP; (ii) several (5-8) peer and PECRE awards from NRP and SRPe; and (iii) 1-2 industrial partnership projects from NRP. In terms of the results of SRPe NRP funding, the Offshore Renewable Institute (Dundee, Aberdeen and RGU) attracted more than it cost to establish (but was discontinued 2017-18). A pan-Scottish SRPe graduate school in engineering is planned to be fully established by the end of 2019. However, it is not clear whether or not successes in terms of appointments and new collaborative research programmes have emerged at the scale expected.

In relation to SAGES much was anticipated as a means to galvanise environmental and geoscience across Scotland, but our experience in Dundee was that all the key decisions were made by the coordinating team and resource allocation, meaning a very heavily skewed allocation of infrastructure , academic staff and PhD students went to Glasgow and Edinburgh. In effect the incentives for engagement were not necessarily there for the remainder of the geoscience community effectively consolidating and strengthening power in the Central Belt. Dundee did gain a studentship and some fractional appointments, but very disappointingly the promise of SAGES to generate legacy around national doctoral training programmes , e.g., two NERC DTPs were established, neither of which UoD was able to penetrate and consequently loss of access to NERC studentships is a major negative outcome. Naturally, as an institution UoD has to reflect on why it has not been more successful in making collaborative advantage from the opportunities that were undoubtedly there.

**Q1b. What lessons can be learnt from the research pooling initiative?**

In their current forms, the Pooling Initiatives did not always foster collaborative approaches between Universities, as there is competition for funding. As a smaller research institution, the University of

Dundee has been left out of DTC developments driven by some of the research pools and going forward it would be important for us to ensure improved governance to enable a fairer and more equitable distribution of funds.

Benefits derived were directly linked with individual academic engagement with the pools. With regard to the SRPe, there has been low level of engagement in pooling philosophy from University of Dundee academics compared with other Scottish universities. The advanced manufacturing and advanced robotics themes have already attracted large amounts of external funding and the hope is that the other strategic themes can do the same. The SRPe has generated a large number of industrial PhD studentships, which seem to have been awarded predominantly to other Scottish Universities. Whilst it is up to University of Dundee staff to become involved, from an institutional perspective, this has been difficult to monitor and channel to ensure the activities developed by the research pools aligned with University strategic priorities and gain the appropriate level of academic engagement. More involvement of Research Support Offices in the management of the research pools would address this issue. Alternatively, providing individual block grants for impact acceleration to universities would allow universities such as Dundee to nurture excellence in strategic areas, thus allowing us to focus and generate impact.

**Q2a. In the current research landscape, what is the perception of, and role for, the pools?**

Whilst research pools should have a role to play in terms of pooling excellence, collaboration and shared research infrastructures, within the current funding landscape, single-disciplinary pools have a challenge to address the interdisciplinary agenda.

There have been activities to bring researchers together across disciplines, for instance a SULSA AMR Conference which was a vibrant event and perceived as successful. A SUPA workshop, held on 15 January 2018 to discuss how SUPA and SULSA could work together to access the Industrial Strategy Challenge Fund, which did not, however, lead to any substantive outcomes from what we could gather. This reflects the need for improved involvement of University support structures to fully realise the potential.

Knowledge exchange and industry engagement is a priority of government policy and the Pools' activity should reflect this by leading on partnering with industry.

More facility sharing and a fund to catalyse this would be desirable (e.g. the equivalent of the assay development fund to enable access to Scotland's facilities e.g. CryoEM, NMR, sequencing, metabolomics etc.).

**Q2b. Should research Pools have a continuing role in the Scottish research base?**

Pool activity needs to reflect the current government priorities – internationalisation, working with industry, and global challenges, and policy development. If the allocation of research investment was on an individual basis tied to the research excellence grant and through university innovation funds (e.g. Impact Acceleration Block Funds/Grants to the University) it would be possible to focus on areas of excellence.

For SRPe, the pooling approach can be potentially very beneficial in the engineering context, particularly in this new phase where the regional partnerships have been essentially dissolved into a much more proactive SRPe.

In the event that pooling was discontinued, it would be important to have something on the table that was equally attractive. There is a concern that in this case the SFC would not return the full amount to individual partners.

**Section 3: Anything else**

There may be opportunities to do something major on a BREXIT theme. It will be important for Scotland to promote itself as being welcoming to European colleagues. One possible way to achieve this would be to fund European Career Establishment fellowships allocated to Universities proportionately based on research excellence.