

15 November 2023

Paul Davies
Chair
Economy, Trade and Rural Affairs Committee
Welsh Parliament
Cardiff Bay
Cardiff
CF99 1SN

Dear Mr Davies

Research and Development

HEFCW welcomes the opportunity to provide the Economy, Trade and Rural Affairs Committee with evidence to inform its 'snap-shot' inquiry into the current position of the research, development and innovation landscape in Wales. Our response is from the perspective of our role as the public body operating between Welsh Government and higher education providers. We regulate and provide funding for higher education teaching and research, and apply our influence and expertise to help deliver Welsh Government priorities for higher education that also have wider societal and economic benefits. We have provided links to other documents which provide additional information, context and evidence.

On 1 April 2024, HEFCW will be dissolved and its functions will transfer to the Commission for Tertiary Education and Research (the Commission). Our response below refers to the future role of the Commission in relation to research and innovation where appropriate.

What challenges are Welsh businesses facing in terms of awareness of, and access to, public research and development funding?

HEFCW's [Research and Innovation: The Vision for Wales](#) (2022) sets out short-term goals, medium-term milestones and long-term ambitions for maintaining an excellent research base that supports innovation that boosts productivity, is global in perspective, collaborative and has a strong sense of place. One of the four pillars of the Vision is 'collaboration', including 'collaborations that link expertise in universities with key anchor companies, SMEs, the public and third sectors and with further education institution partners; collaborations that grow critical mass within Wales and build new partnerships across the UK; collaboration with international researchers and organisations'.

While neither HEFCW nor the Commission may fund businesses directly to carry out research or innovation, we consider collaboration between business and universities

Mr Rob Humphreys
Cadeirydd | Chair

Dr David Blaney
Prif Weithredwr | Chief Executive



critical to delivering a thriving community of challenge, change and achievement that will meet economic, social and civic ambitions across Wales, the UK and the world. One key aim of our funding approach, as described below, therefore is to support universities to be able to build strong and effective relationships with business and industry.

Businesses also need support to engage and grow through such collaborations, and such solutions should recognise the differences in local economies. This requires engagement with key local stakeholders in co-creating effective innovation approaches, including universities, building on unique local strengths and assets. The landscape for funding needs to be clear and coherent, and easily understood by those who access it. This is particularly relevant for SMEs (including microbusinesses), who make up the majority of the Welsh economy, who do not have the time or the staff capacity needed to involve themselves in long and complicated funding processes. It can be particularly difficult for microbusinesses to find the necessary co-investment due to their scale. Investing in universities and in the knowledge and expertise that universities can share and exchange with these businesses offers them a greater opportunity for success and expansion and to contribute to the local economy.

What differences are there between funding for universities and funding for industry innovation? Are there regional disparities in the allocation of funding?

HEFCW's funds innovation in universities through the [Research Wales Innovation Fund](#) (RWIF). This is designed to support the broad range of knowledge exchange activities that contribute towards economic and social impact, including the wider civic mission role of institutions. The funding provides an incentive for universities to work with businesses, public and third-sector organisations, community bodies and the wider public.

In order to provide stability for universities and enable them to implement plans for long term strategic investment, the second phase of RWIF funding from 2023/24 will:

- Be based on approved five-year strategies, with annual monitoring and review
- Maintain the same funding method for at least three years, and potentially up to five years subject to any decisions of the Commission
- Use measures to limit the variation in funding received by individual universities year on year, while still rewarding strong performance in the funding method indicators

RWIF allocations include an annual £250k capacity grant to all institutions, which aims to support growth and good practice, enable more collaborations, and ensure stability across the sector.

The [RWIF funding method](#) is based on performance in a series of metrics as recorded through the HE Business and Community Interaction survey. These are total income, CPD learner days, income from spin-offs, and number of graduate start-ups still active after three years. This approach is broadly equivalent to that used by Research England and the Scottish Funding Council for their core funding for university innovation. As universities use this core funding to underpin and strengthen their capacity to bid for UK-wide competitive grants, it is important that Welsh universities are able to do so from a level playing field.

HEFCW currently allocates £15m a year through RWIF. Our Council has recognised that in principle this should be increased to £25m a year should budgets allow, to achieve greater equivalence with funding allocated to universities elsewhere in the UK. This aligns with the recommendation of the [Diamond Review](#), subsequently supported by the [Reid Review](#).

Do the research interests of universities and industry differ and, if so, what actions can be taken and by who to ensure the interests of both sectors are catered for?

Universities and industry play important, complementary roles as part of the wider research and innovation ecosystem, as set out in the recent [review of the UK research, development and innovation landscape](#) led by Sir Paul Nurse. The Commission will have strategic duties to 'contribute to a sustainable and innovative economy' and to 'promote collaboration and coherence in tertiary education and research'. While it will be for the Commission to determine how it enacts these duties, taking into account the strategic priorities set for it by Welsh Ministers, taking a holistic view and building relationships with stakeholders across the ecosystem will be important.

Universities have a strong track record of translating research into economic, environmental and societal impact. Wales is one of the most efficient countries at translating its research income into high impact research for countries of a comparable size. In the last Research Excellence Framework (REF) 2021, Wales performed strongly with 31% of research deemed to be world-leading, with a further 50% internationally excellent. In terms of impact, Welsh universities exceeded the UK average (87%) with 89% deemed to have an outstanding or very considerable impact on society.

[Analysis of the 280 impact case studies](#) from Welsh universities submitted to REF 2021 demonstrates the contribution Welsh university research makes to economic transformation, in turn leading to the generation of employment opportunities. A third of case studies reported financial impact, with tangible results including the creation of more than 2500 jobs across the public and private sectors. 70% of case studies reported impact in Wales, with over a third relevant to key Welsh Government priorities of climate change and net zero, Cymraeg 2050, children and young people, national well-being indicators, and productivity.

How can universities and businesses better interact and collaborate with each other?

Recent data show that Welsh universities are successfully growing the scale of their interaction with business. The follow data are taken from the HE Business and Community Interaction (HEBCI) survey returns 2021/22 and are among the key indicators HEFCW use to measure progress against our Vision.

- £254m in total HEBCI income for 2021/22, which represents a 15.9% increase since 2020/21 (compared to a 10.7% increase UK-wide, and the strongest growth across the four UK nations)
- £58.7m in regeneration and development income to Welsh HEIs, up from £54.4m in 2020/21 (UK total: £324m)

- 27 active social enterprises, up from 20 in 2020/21 (UK total: 710, up from 499 in 2020/21)
- 102 spinoffs that have lasted at least three years (UK total: 1,444) in 2021/22 (2020/21: Wales 95; UK total: 1,379)
- Collaborative research income 25% to £115m, up from £92m in 2020/21 (UK total: £1.9bn; UK total 2020/21: 1.8bn). This represents 6.1% share of UK total.
- Contract research income (with SMEs and non-SMEs) £33m, up from £30.2m in 2020/21 (UK total: £1.6bn, UK total 2020/21: £1.4bn)
- CPD learner days delivered – 314,423 (UK total: 3,906,709)

European Structural Funds were a major source of funding for research and innovation activities within Welsh universities. The funding supported a range of activities including capital provision (buildings and equipment); access to specialist facilities and expertise for SMEs; collaborative research; provision of specialist training; and graduate work experience. In particular, the funding enabled universities to collaborate more effectively with the SME community which forms the backbone of the Welsh economy.

An example of direct economic impact achieved through this funding is the ASTUTE 2020 project, which was a collaboration between 4 Welsh universities (Swansea University, Cardiff University, Aberystwyth University and the University of Wales Trinity Saint David). The project enabled SMEs in the Welsh manufacturing sector to access expertise and equipment within partner universities to support the development of new products and services. The final evaluation of the project concluded that ASTUTE's work created economic impact in excess of £200m in West Wales and the Valleys, and delivered an outstanding return of over £8 of economic impact for every £1 invested.

Universities play an important role in the talent pipeline for research and innovation through developing entrepreneurial skills in their students and supporting start-ups and staff spins outs. European Structural Funds were also used for retaining and developing talent with over £860m invested into skills and employability projects. This investment has exceeded the initial target of over 100,000 all age, high-quality apprenticeships and created more than 21,000 traineeships with employers across Wales.

With the changes to the funding landscape following the UK's departure from the EU, alternative structures, systems and sources of funding are needed to maintain the momentum achieved. Following Professor Graeme Reid's report for Universities Wales, [Strength in Diversity](#), HEFCW has provided funding to enable the creation of the [Wales Innovation Network](#) (WIN). Through WIN, universities will seek to build on their diversity to create partnerships with each other and with public authorities, businesses and charities which offer additional competitive strength and facilitates greater knowledge exchange.

How effective is Welsh Government's Innovation Strategy likely to be in supporting research, development and innovation in Wales?

The Innovation Strategy is a welcome acknowledgement by Welsh Government of the importance of innovation to address the challenges of government, industry, academia and the third sector. It is an opportunity to align UK and Wales' priorities in a way that provides a more coherent policy and funding landscape for Wales. Implementation of the Strategy will require a coordinated approach both across funding, ensuring investments in research, innovation and skills align, and across the activities of various

stakeholders to better support innovation within Welsh businesses, universities and other public sectors.

The Innovation Strategy also acknowledges the important role that the Commission will have in supporting research, innovation and skills development within Wales. The Commission will have responsibility for overseeing and improving coordination between the different constituent parts of the tertiary education system. This will enable the development of learner pathways and skills required to meet industry, regional and national needs. We welcome the emphasis placed on developing a culture of innovation in Wales. This commitment is aligned with the UK Government's R&D People and Culture Strategy which aims to bring the best out of people and enable talent and ideas to flow freely between academia, business and other sectors.

The Innovation Delivery Plan includes an action for Welsh Government to work with HEFCW (and in due course the Commission) and the tertiary education sector to increase funding from external sources. These funds will be allocated primarily on a competitive basis, and therefore our universities need to be able to compete effectively in order to secure a significant return for Wales. We are clear that the excellence needed to achieve success in competitive grant schemes needs to be underpinned by a strong and sustainable research and innovation base, supported by consistent levels of core funding, which HEFCW allocates via its QR (Quality Research) and Research Wales Innovation Fund streams.

Progress made in respect of the Welsh Government response to the Fifth Senedd report on 'Research and Innovation in Wales'.

We recognise that there have been significant changes to the wider landscape for research and innovation since the publication of the report in 2019, including the creation of the UK Shared Prosperity Fund, and the developing role of UK Research and Innovation, as well as the continuing impact of the Covid-19 pandemic and financial crisis. This means that in some cases the recommendations now have less relevance.

Research and innovation in Wales remain underfunded compared to the other UK nations. Increases in the budget allocated to UKRI, and through them to Research England, have not been mirrored in HEFCW's budget. The ambitions for additional funding set out in the Diamond and Reid Reviews have not been realised, but HEFCW was able to reintroduce funding for innovation and engagement, via RWIF, in 2019/20. Recent data show that Welsh universities are capturing increasing amounts of funding from external sources (an 18% increase in research council income between 2020/21 and 2021/22), and we will continue to work with them and WIN to maintain this momentum.

We welcomed the [publication](#) by the previous Chief Science Advisor for Wales of five priorities for research, development and innovation. We continue to work with Welsh Government to ensure coordination in contributions to policy development at a UK level. Welsh Government have invited HEFCW to be an external member of the Research and Innovation Strategic Engagement Group (RISE), and are observers on our Research Wales Committee, an arrangement which HEFCW will recommend is continued by the Commission.

As the Commission becomes operational and takes on its full functions, this will enable further aspects of the 2019 recommendations to be taken forward. The Commission will not have a remit to fund organisations outside the tertiary education sector, so coordination will be required with Welsh Government to ensure that approaches and funding strategies are complementary in contributing to achieving Welsh Government priorities and enabling a strong, thriving research and innovation community of challenge, change and achievement that will meet economic, social and civic ambitions across Wales, the UK and the world.

Yours sincerely

A handwritten signature in black ink, appearing to read 'David Blaney', written in a cursive style.

David Blaney