

Research Wales Innovation Fund Strategy 2023/24 – 2027/28

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Section A: Overview

1. Strategic ambitions

Please provide an overview of your institution's five year approach to supporting knowledge exchange activities and how these will be supported by RWIF. You may wish to highlight broad areas which you are targeting, and how these align with your institutional mission and internal strategies. [max 250 words]

Swansea University embraces the full spectrum of academic and cultural endeavour, leading thinking and delivering research outcomes for the benefit of all. A research-intensive University located in one of the most deprived regions within Northern Europe (West Wales and the Valleys), we are an anchor university, creating economic, societal, cultural and health impact with global reach, remaining true to our 100+ year mission. Alongside discovery research, we foster ambitious collaborations, co-creating research and delivering transformative innovations with our partners. We are a community united in a common purpose; to make a difference to improve lives and futures across society and across borders. We promote and facilitate an exciting and thriving collaborative research culture, enabling impact.

Our approach to knowledge exchange is described in pillar strategies for

- **1. Research and Innovation**; Bringing People and Ideas Together; Embedding and Delivering Research Impact; and Productive Research Environment.
- 2. Enterprise; Unlocking talent: Enabling Environment; and Impact in Place
- 3. Sport and Civic mission.

Key to our delivering our ambition will be close working with National and Local Authorities, including the Swansea Bay City Deal and newly awarded Freeport.

Our key areas of R&I excellence:

- Al and digital
- Climate action/Net Zero
- Health and Wellbeing
- Future materials and manufacturing
- Place.

align to the Welsh Government's Innovation Strategy and the thematic areas of the Wales Innovation Network. We support our commitment to *place* through our ambition to establish a local and strategic challenges office and supporting activities in civic mission, such as in education, and developing active citizenship.



2. Capacity Grant

Provide some narrative on how your institution plans to make use of the £250k capacity grant included within RWIF. How will this be used to support and enhance capacity and incentivise and improve performance in knowledge exchange? [max 250 words]

Swansea University is proud of its leading reputation for collaborative research partnerships with other universities and with public authorities, charities and industry locally and across the globe. We are an internationally engaged University committed to solving local and global challenges, taking forward the levelling-up agenda at home and working in partnership overseas. This approach to cocreation continues to be an important cornerstone in our knowledge exchange ambition, to inform and influence practice and policy for economic and societal benefit.

We remain committed to maintaining and enhancing partnerships with key anchor companies, SMEs, the public and third sectors and with further education institution partners; in collaborations that grow critical mass (Research-and-Innovation-The-Vision-for-Wales-February-2022.pdf (hefcw.ac.uk)

We have identified time and capacity as a limiting factor to improving our performance in knowledge exchange. This was recognised in the 2021-2025 R&I Strategy, where we committed to develop staff exchanges programmes flowing in and between academia, industry, public and third sector organisations.

Through the 2023 RWIF capacity grant, we will establish an Impact Fellowship scheme to enable the mobility of talented researchers and professionals from industry, public bodies and third sector and academia to move between the sectors end enhance knowledge exchange with impact.

- We will fund staff exchanges to link our expertise with partners, building collaborations and improving the reach and significance of impact from knowledge exchange.
- We will continue to grow impactful innovation through recognising, valuing and supporting staff to engage in enterprise for societal and economic productivity, and leading to business growth.



Section B: Specific content

3. Commercialisation / income generating activity

RWIF has been designed to incentivise and reward performance, particularly in terms of external income capture.

Provide details of how RWIF will be used to enable your institution to grow its external income as measured by HE-BCI.

It is imperative that UK R&D remains financially sustainable into the future if it is to meet the ambitions of UK and Welsh Governments, and this relies on external income capture.

SU will focus on two areas of investment for external income growth:

- Enhancing productive engagement with partners with focus on collaborative research income from UK and Welsh Government, e.g., UKRI, Innovate Edge, Smart partnerships, Smart FIS and KTPs, Levelling Up funds and in bids to international funding agencies including Horizon Europe.
- 2. Providing an enabling environment making it easy for established partners and new partnerships to prosper. We will focus on improving: access to our expertise; engagement with contract research & facility access; the profile & participation in consultancy; and transparency for commercialising IP

Building on previous investments, we will

- 1. Engage with WIN, to support the delivery of the Network's aim of securing an additional £30m to Welsh institutions over the initial three-year period and increase number of bids at scale and in partnership across Wales.
- 2. Continue to invest in successful Enterprise, Knowledge Exchange and Innovation support to increase numbers of academics involved in collaborative bids and businesses engaging with the University.
- 3. Enhance our approach to engage with industry through an improved, agile funding-focussed advisory panel.
- 4. Provide further bid development support for KTP Smart partnerships and Smart FIS applications, to support an increased number of academics engaging with external partners.
- 5. Enhance activities of our commercialisation arm e.g. Swansea Innovations Limited, with focus on active management and commercialisation of IP (licensing, royalties and equity); and to establish a strategy for investment and investor engagement.

Future plans for 2023-2028 include;

- introducing improved support capacity to increase innovation-led collaborative bids.
- development of a new enterprise platform to attract experienced partners and SMEs, supporting productive relationships, facilitating the range and breadth of engagement that results in growth of collaborative research income e.g., through enhanced KTPs, contract research, CE and CPD, and for consultancy.



- support for a business partnering approach to develop, maintain and manage key relationships aligned to strategic priorities providing a coordinated one-University approach that improves commercialisation metrics, new business growth and skills development.
- providing seed-corn project funding to support the development of sustainable consultancy in strategic priority areas, building on research excellence and innovation hubs with clear pathways to impact.
- investing in further legal support to improve the ease and efficiency of contracting with us.
- enhancing IP commercialisation, developed with and without partners, through newly appointed commercialisation managers, and increase engagement with investors to increase return on investment.
- introducing a new fund to support our patent portfolio and to consider investing in emerging IP, supplementing recent UKRI-awarded Impact Accelerator Account funding.

With significant investment over the past 10 years, SU has embraced a highly effective co-location innovation hub model for collaborative working which we are extending e.g. in CISM, ILS, SAIL, IMPACT. We will collaborate with the Royal Academy of Engineering (RAEng) Enterprise Hub to support scale ups and spin outs. Future investments funded through Swansea Bay City Deal during this period include the Campuses project and SWITCH which will further accelerate Innovation Hub activity, supporting our goal to improve social and economic prosperity for Wales.

3.1 Provide details of your institution's strategic KPIs for commercialisation and income generating activity:

- 1. Sustain our top 20 position in the UK for collaborative research income
- 2. Increase contract research income by 10% per annum
- 3. 10% per annum increase in numbers of staff engaged in income-generating collaborative research.
- 4. 10% year on year increase in income generated through commercial access to Facilities/equipment,
- 5. Developed an improved platform for external stakeholder engagement
- 6. Grown back IP disclosures to more than 100 per year by 2028,
- 7. Threefold increase in income from IP by 2028.
- 8. Established a pipeline and increased the number and value of collaborative bids submitted e.g. to Innovate Edge, KTP, Smart, RAEng, iCURE
- 9. Increased WIN engagement and outcomes e.g. increased number of bids submitted with partners in Wales.
- 10. Monitored our achievements in relation to the requirements of the KE Concordat



4. New business growth and skills support

Outline the support you intend to provide for new start-ups, spin-offs, and meeting the targets of schemes such as the WG's Youth Entrepreneurship Programme.

Our inaugural Enterprise Strategy 2023, commits us to deliver a step change in staff and students enterprise activity. We will:

- Enhance an open, trusted & dynamic enterprise environment.
- **Unlock talent,** making enterprise possible, easy, normal, rewarding and accessible for all.
- Support delivery and funding of collaborative and translational research and innovation, enterprise creation, working on cutting-edge solutions that address some of the world's most pressing challenges.
- Respond to the needs of our nation and our global partners Swansea staff and graduates are global citizens that successfully contribute to society and the economy across the world.

Provide information on where RWIF will add value to existing activities, and where it allows you to invest in further growth.

We will add value to existing activity, by a focus on inclusivity; RWIF will enable us to develop **training resources and increase capacity** coupled with workshops, CPD sessions, and seminars to enhance the skills relevant to enterprise activity across our community. Through the strong reputation established by the ION Leadership Programme we will develop programmes for SME entrepreneurship, and through relationships across the Swansea Bay City Deal region, we will develop programmes with PCET partners.

Outline how RWIF will be used to develop a culture of entrepreneurship and innovation for students, graduates and members of staff.

In line with the WG Innovation Strategy we are developing creativity and enterprise in students as they transition through education, supporting graduate employability by developing skills for the workplace, or as a next generation entrepreneur. RWIF will be used to support a student enterprise team, who will actively engage in marketing materials e.g. Invent for the Planet, used in student recruitment and with students at all levels from the start of their academic study at Swansea. The student enterprise team will contribute to enterprise education so that it is embedded in the curriculum. We will continue to meet the targets of Wales YES scheme.

From 2023, our PGR community will engage in Enterprise Education, with a focus on developing high value outcomes arising from R&I-led enterprise. We will prepare them to engage with external organisations e.g. RAEng and with funded competitions such as the UKRI-funded iCURE and Biotechnology YES programmes. Our updated IP Policies will provide clarity to PGRs on their participation in and expectations from enterprise activity, ensuring that we embrace the diversity of contribution across the research community.

RWIF will support commercialisation managers involved in the development of training materials and CPD sessions. We will further develop staff awareness of



accessing support and opportunity in enterprise through staff induction and linking opportunity for impact and enterprise to the staff recruitment processes. The activities of our commercialisation managers will encourage enterprise that responds to needs of the wider economy, society, culture, public policy or services, health, the environment or quality of life through the spirit of entrepreneurship, not only for commercial causes but also social good – we will enable enterprise in all its forms.

4.1 Provide details of your institution's strategic KPIs for new business growth and skills support

- Developed and delivered academic staff and student training programmes in entrepreneurship and enterprise including in IP, commercialisation, and engagement with external stakeholders.
- Secured a top 20 position in the UK for number of spin-outs and graduate/staff start-ups that are active over 3 years by 2028.
- Meet targets of Wales YES scheme.
- Designed in Entrepreneurship within the University's plan for curriculum review, and increase the number of programmes with embedded entrepreneurship
- Developed and adopted a University-wide approach to CPD provision for enterprise
- Engaged with FE Colleges in the region productively to develop enterprise skills provision.
- Capitalised on the RSLP local skills workforce requirements to develop a pipeline of CPD programmes which meet local needs.
- Increased the number of local business attendees on skills programmes/CPD



5. Civic Mission and Public Engagement

Outline how RWIF will support continued or new activity across your communities. Place-based civic mission is broad, incorporating a vast range of activities including support within the community to meet the skills needs of industry, HE-FE partnerships in skills, innovation and engagement, public engagement through research, and helping to address societal challenges. Support for the community within university premises for e.g. events, lectures etc, would also be a means of supporting civic mission. Further guidance on this section is available in Circular W23/12HE. Your response should be framed in terms of social and economic prosperity for Wales. [500 words max]

We continue to support strong community links and have a proven track record of working effectively with major employers, supported by RWIF-funded I&E staff, including Health Boards, Local Authorities, and private and third sector organisations. We have effective partnerships with FE colleges and schools that we are seeking to build further, and most recently have signed a collaboration agreement with Gower College around Sport as part of our commitment. We have and will continue to contribute to the social and cultural life of our community through, for instance, our Taliesin Theatre and Great Hall, the Egypt Centre, our South Wales Miners' Library and Richard Burton Archives, and the International Dylan Thomas Prize.

We have invested significantly in supporting education and skills (e.g. through Technocamps), and in supporting innovation (e.g. through co-located incubator space) and are a key partner in the Swansea Bay City Deal, where we are involved with the Supporting Innovation and Low Carbon Growth project, supporting skills and talent development, and where we lead the Life Sciences, Wellbeing and Sport Campuses initiative. The recent Celtic Freeport bid covering Milford Haven and Port Talbot is supported by the University and will be a focus for future regional engagement to meet the needs of industry. Our programmes, such as AgorIP and Accelerate have established a national reputation for open innovation. We work in tandem with our partners to co-create, exchange and develop knowledge and skills on an ethical and equitable basis and have a strong retained connectivity to successful staff and student spin-outs that deliver impact, creating jobs and economic growth locally and nationally.

We thus seek to promote activities that prioritise impact in place through the following:

- Public engagement through research
- Skills development and sector skills support for the region
- City Deal/Strategic Regional engagement
- Open innovation framework

We will

Publish our Civic Mission and Sport Strategies.



- Contribute to the social and cultural life of our diverse communities.
- Develop the Local and Strategic Challenges Office, to provide holistic, cohesive and co-creational approaches to working with external partners (Public Services Boards, Health Boards, City and Growth Deals, Regional Learning Partnerships), to better understand and address the employment and skills needs of local communities and industries, identifying and addressing how we can support sector skills gaps and opportunities that align to our research, innovation and enterprise strengths.
- Engage with Schools and FE institutions in areas of research strength and strategic priority areas such as the new Curriculum for Wales, Sport & Mental Health, and supporting Technocamps.
- Further strengthen our regional partnerships and links to our spin-outs e.g. by bringing in new partners through Freeport-supporting activities and embedding stakeholders in the broader aspects of our work, from research and innovation, to learning, teaching and student employability.
- Extend an open innovation framework for our partners to engage, working tandem with our partners to exchange knowledge and develop skills on an ethical and equitable basis, supporting the local community through social enterprise and in developing active citizenship.

5.1 Provide details of your institution's strategic KPIs for civic mission and public engagement

- 1. Local Challenges office established.
- 2. Public lectures and cultural events hosted in-person and through online platforms.
- 3. Delivered impact from public engagement in research.
- 4. Developed and implemented a roadmap for supporting the Celtic Freeport initiative.
- 5. Developed a framework to deliver innovation skills across all sectors using digital and in-person formal/informal learning.
- 6. Supported companies with advice/signposting.
- 7. New KE partnerships identified and developed with external stakeholders.

Through engagement with the Universities Wales Civic Mission Network and sharing good practice with other HEIs, we have identified institution-specific civic mission pillars (*City and Region, Enterprise, Schools and Colleges*, and *Civic Engagement*), which align to Welsh Government strategic priorities, and the key themes/principles from the Universities Wales Civic Mission Framework.



Section C: Alignment to policy and priorities 6. Alignment to Welsh and UK Policy

Describe how your RWIF strategy aligns with relevant place based regional, Welsh, and UK policies such as e.g. local city region / regional growth deals. (See Circular W23/12HE, paragraph 30) [500 words max]

Swansea University was founded by industry, for industry, and industry remains at the heart of its research and innovation strategy. Our approaches to business growth are gaining widespread attention and traction:

- -Our model of Co-location of business and academia exemplified by the Science and Innovation Bay Campus (and the Institute of Life Sciences) where industry and researchers innovate together, resulting in a quicker transition to market.
- -Our model for commercialisation of research, now being scaled up to deliver commercialisation activity focussed on pipeline-building and deal flow to maximise economic potential.

These approaches provide the underpinning for the university support of the Swansea Bay City Deal, to increase skilled jobs, business opportunities, and accelerate enterprise, much needed to support the region making Swansea a more desirable area for student-business start-ups, retaining skilled graduates in the area along with attracting more students to study at Swansea. The City Deal project, through its integrated programme and portfolio of projects, delivers against the UK Government Industrial Strategy and associated Sector Deals/Strategies, which recognises the importance of developing key institutions and promoting excellence within the regions to drive key priority sectors building on existing clusters.

On a regional level, Swansea University will continue to work closely with the Welsh Government to align our strategic vision with the Welsh Government's strategic aspirations for economic development and innovation. Our research and innovation activity aligns with the WG's Innovation Strategy and aims for a stronger, fairer, greener Wales; our expertise in areas such as health and wellbeing and climate action is in harmony with the strategy's mission-based approach.

Aligned to the Welsh Government's Prosperity for All-Economic Action Plan, we continue to work in partnership with employers and further education colleges to deliver innovative courses and extra curriculum activities that meet the needs for higher-level skills with a particular focus on meeting skills shortages in priority sectors that depend on STEMM, management, and health related subjects.



In the wider strategic context for Wales, we are committed to the Welsh Government's Well-being of Future Generations Act 2015, and the "Be the Spark" Movement, encouraging Innovation-driven entrepreneurship.

Swansea University embraces the Welsh Government's Youth Entrepreneurship Strategy; it provides an extremely effective framework for supporting and promoting enterprise within the University and with external stakeholders on a domestic and national level. In a changing world, need and demand for entrepreneurship, and particularly entrepreneurial students, as a fundamental requirement for development and growth, as recently emphasised by government, e.g. Welsh Government's "Prosperity for All" (EAP), UK Government's Industrial Strategy, Graduate Outcomes consultation and the Diamond Review.

Through emerging opportunities from CTER, we will develop further our engagement with FE and will begin to develop our relationships with FE partners to deliver on aspects of our RWIF projects where appropriate.

The development of Investment Zones, where the five priority areas outlined (Digital and Tech; Green Industries; Life Sciences; Advanced Manufacturing; and Creative Industries) are well aligned with our own areas of research excellence and priorities for developing impactful innovation underpinned by our RWIF strategy.

7. Well-being of Future Generations Act 2015

Provide specific information on how the RWIF strategy will support the seven goals, and five ways of working in <u>the Well-being of Future Generations Act 2015</u>; [250 words max]

Swansea University's civic mission commitments echo, reaffirm and re-energise the University's original place-based mission and align with the Wellbeing of Future Generations (Wales) Act 2015.

Through our RWIF strategy, we address the seven well-being goals of prosperity (through economic growth), resilience (via a robust and diverse product range in a variety of global markets and enterprises), equality (through wealth generation across socio-economic groups); health (via development of new technologies); Cohesiveness (e.g. CS-Connected has integrated all semiconductor industry and HEs within South Wales and is now linking with schools and the public); vibrant culture and language (through our commitment to our Welsh heritage and culture); and global responsibility.

Our strategy represents a **long-term**, **integrated model**, with a community and industry-driven agenda supported by innovative, **collaborative** R&D, Knowledge



Transfer **involving** all sectors and helping the public sector and government **prevent** problems, including using smart technologies.

The university continues to build on our partnerships with regional organisations so that we can collaborate effectively to improve the wellbeing of people in the city and region and wider society developing an entrepreneurial culture and ecosystem, to develop the regional economy, and grow social innovation and enterprise.

8. Impact on Welsh Language

Outline the positive impact RWIF investment will have on opportunities to use and support the Welsh language. Where appropriate you may wish to refer to the themes in the Cymraeg 2050 action plan.
[250 words max]

At Swansea we are fully committed to actively supporting, promoting, and enriching Welsh culture and the Welsh language, and providing an inclusive and supportive working and learning environment for all.

We provide opportunities for all members of the University who can, to use the Welsh language and so strengthen the University's image in Wales and beyond as a bilingual institution.

The Welsh Language Standards are at the heart of the University's ambition to become a truly bilingual institution. All of our materials (online and hard copy) are bilingual. This Scheme reflects the University's increasing commitment to the Welsh language, how it encourages its use, and promotes opportunities for its use. The University is also committed to promoting the uptake of the Welsh language services that it offers. The Welsh Language Standards demonstrate the same commitment by providing high-quality bilingual services to the members of public that come in contact with the University. By treating Welsh and English 'on the basis of equality' the University continues to ensure that the public have the choice to communicate with the University using either English or Welsh and to receive a service in their chosen language.

We will also follow the Cymraeg2050 action plan's goal to lead by example by embracing the Welsh language and culture and ensuring these are incorporated into our collaborations with international partners where possible and appropriate.

More details on the University's Welsh Language Policy can be found at: http://www.swansea.ac.uk/media/Swansea%20University%20Welsh%20Language%20Scheme.pdf



Section D: Use of Research Wales Innovation Funding

How is your RWIF allocation 2023/24 being used to deliver the strategy set out in Section B, and what are your anticipated priorities for the use of RWIF funds in future years? [250 words max – or append a table outlining broad investment areas]

RWIF allocation by the three themes:

Supporting Research & Innovation Excellence / UKRI Support/ Placed Based Innovation / Regional Economic Regeneration/ Commercialisation, IP and Tech Transfer - £1,741k

A further 200k is allocated to maintaining our IP portfolio Student & Graduate Enterprise, Employability and Skills – £560k Civic Mission and Public Engagement – £388k

We also include an allocation to support Reporting, Data and Output Management - Research and Innovation – £170k

total budget/year	theme 1	theme 2	theme 3
23/24	67%	19.50%	14%
£2,871,000	£1,923,570	£559,845	£387,585

Capacity Grant – Valuing staff, impact sabbatical/impact case study development £250k

We will review performance against anticipated outcomes at the end of each year in order to ensure that the fund supports our strategic ambitions and rewards and recognises good performance.

Re	ction E: gulatory Requirements B: HEFCW may request furth	er information / clarification on any of these areas
i)	Welsh Language Standards (2018) [Use the drop down menu]	This strategy complies with Welsh Language Standards 2018
ii)	Equality Impact Assessment [Use the drop down menu]	Choose an item.

HEFCW circular W23/12HE: Annex A



iii) Well-being of Future Generations Act (2015) [Use the drop down menu]	This strategy will contribute towards the aims of the WFG Act 2015
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