RDI Landscape Review - Invitation for Views Submission

The value of university alliances

A critical and relatively new part of the UK RDI organisational landscape is university alliances. University alliances bring together institutions who recognise the value of collaborative endeavour, and the need to work together to address shared missions, all of which are relevant to the research, development and innovation ecosystem.

The GW4 Alliance supports the research-intensive universities of Bath, Bristol, Cardiff and Exeter, spanning England and Wales in a geography that receives comparatively low levels of public investment in RDI activities. The fundamental role of GW4 is to drive and inspire the collaborative research, development and innovation that addresses major societal and governmental challenges and priorities, and informs policy at national and international levels. Our region is recognised for its world-leading research and innovation, including in aerospace, microelectronics, energy generation, environmental technologies and digital systems.

GW4 has made strides through strategically focussed investment and collaboration in grand challenge areas such as climate change and antimicrobial resistance. Founded in 2013 the institutions directly provide the funding for GW4 coordination, and a programme of development and support, enabling our universities and non-academic partners alike to be able to work at pace and scale. As a coordinating unit, we are able to pivot our collective priorities programme in response to the changing landscape and associated needs of research and innovation. The strategic investments we make as an Alliance adds value across our region.

Our expertise and investments speak directly to the 2020 Ten Point Plan for a green industrial revolution, the 2021 Innovation Strategy which seeks to "ensure our research, development and innovation institutions serve the needs of businesses and places across the UK", as well as the Sustainable Development Goals, 2021 Life Sciences Vision, the levelling up agenda and a broad recognition of the importance of the civic mission of universities. The strength of our four universities working together enables a rich and powerful enhancement to the opportunities for non-academic partners across the region in terms of their own RDI activity, and the ambitions of government. We work closely with our regional powerhouse, the Western Gateway, to identify mutually beneficial ambitions for the South West England and South Wales area. We recognise through our partnership that together we can navigate and shape shared futures to build and enable a thriving regional ecosystem and create regional economic growth and inclusive, prosperous and sustainable societies.

Our history is embedded in the strength of our doctoral training, our institutions host over 30 doctoral training partnerships and centres. Our geographical proximity means our PhD researchers are able to be supervised across our institutions more easily, and any student registered as a PhD student in a GW4 university, has freedom of movement between our institutions, opening up access to expertise and training like no other consortia. This relationship offers our industrial partners the confidence to invest and develop projects with us, and offer placements to our students, enhancing their experience and the researchers that we produce.

GW4 works to catalyse opportunities at scale and supports its researchers, this includes:

- * Delivering training and development for early career researchers and technicians, activities which speak directly to the BEIS R&D People and Culture Strategy.
- * Investing directly in new research communities that reach across our universities, this pump-priming funding has delivered a £20 return on investment for each £1 spent, through securing external funding for research, innovation, facilities and training.
- * Working with our regionally based partners to enable effective innovation and policy change. Our Net Zero programme supports work in sustainable transport and mobility for the South West and South Wales, making just transitions across our diverse population and economies. We are working with our regional









powerhouse, the Western Gateway, on the decarbonisation of energy systems and articulating the opportunity of and strategic priorities for a regional hydrogen economy.

University alliance driven coordination

Our relationship with other university research alliances means we are able to better understand the challenges of the ecosystem across the UK and recognise where the different groups of universities are able to work most effectively. We are working together, with JISC and UKRI, on a long-held challenge for the university sector which has been the ambition to more effectively enable technical infrastructure and equipment sharing. The current legal framework relevant to sharing equipment often makes what should be a very smooth process, very difficult in practice.

University alliances are increasing the visibility of technicians in our universities, a key profession that facilitates the RDI ecosystem. Recognising the often-insular roles that technicians have within their institutions, in GW4 we run a professional development seminar series, and have successfully created a network of colleagues empowering our combined technical workforce, and enabling efficiencies in training and resilience of our technical infrastructure.

The alliance infrastructure not only networks academics but professional services staff. For example, our GW4 Climate Alliance brings together the sustainability leads from across our institutions to share best practice and address the collective challenges we face in evolving our estates and operations. This also forms the foundations of work utilising our universities as living labs, testbeds for sustainability, building and energy transformation in order to achieve Net Zero.

Our convening power reaches beyond our institutions. GW4 have strategic partnership with the National Trust in the South West and Wales, creating a programme of research that supports the National Trust strategy and builds on the full breadth of our disciplinary strengths. The GW4 Water Security Alliance bought together over 500 academics and worked with water companies across the whole of the UK, establishing state of the art infrastructure, facilities, equipment and training. GW4 also funds a joint post with the National Centre for the Replacement, Refinement and Reduction of animals in research. We are also working with the British Academy across nine universities in the region to support early career researchers in the humanities and social sciences. Similarly, we coordinate with the life science clusters across the UK and work with the Academy of Medical Sciences. These reciprocal relationships serve to embed academic programmes in external organisations and support best practice and change across our institutions and support the wider RDI ecosystem.

Conclusion

The growing enthusiasm for university alliances reflects the power of the approach and the benefits of formalised collaborative activity. The GW4 presence in the South West and South Wales enables an effective and powerful position for the region, that can ensure university research, development and innovation is strengthened across the ecosystem. The innovative relationships university alliances enable, makes them a significant driver for change, of both economic impact and the research, development and innovation landscape.







