

HIGHER EDUCATION WALES CONTRIBUTION TO THE DEPARTMENT OF BUSINESS INNOVATION AND SKILLS REVIEW OF POSTGRADUATE PROVISION IN THE UK

About Higher Education Wales

HEW represents the interests of Higher Education Institutions (HEIs) in Wales and is a National Council of Universities UK. HEW's Governing Council consists of the Vice-Chancellors and Principals of all the HEIs in Wales.

Introduction

The purpose of this response is to provide examples of good practice of collaboration in postgraduate study in Wales.

Knowledge Economy Skills Scholarships

The Knowledge Economy Skills Scholarships (KESS) is an excellent example of academics partnering with regional companies of all sizes to create new knowledge through collaborative research and maximise our contribution to the economy. It shows how the Higher Education sector in Wales collaborates to meet the skills and innovation needs of businesses in Wales.

Led by Bangor University, in partnership with Wales' other Universities, KESS will be backed with £21 million from the Convergence European Social Fund (ESF) through the Welsh Assembly Government with further funding from Higher Education Institutions and the private sector. Benefiting from European Social Funds (ESF), KESS will support collaborative research projects (Research Masters and PhD) with external partners based in the Convergence area of Wales (West Wales and the Valleys). KESS will run from 2009 until 2014 and will provide 400+ PhD and Masters places.

Each scholarship will provide an annual bursary of up to £13,300 as well as research and business training tailored to each individual.

Both the Research Masters and PhD elements are integrated with a high-level skills training programme, leading to a Postgraduate Skills Development Award. Participating HEIs include; Aberystwyth University; Swansea University; Swansea Metropolitan University; University of Glamorgan; Cardiff University; UWIC; University of Wales, Newport and Glyndwr University.

The key objectives of the project are as follows:

- Increase the research capacity of SMEs by linking with a PhD / Masters project;
- Encourage SMEs to undertake research and recruit researchers;
- Prepare and train individuals to contribute to research as professionals;
- Support the development of key technologies in the Convergence area;
- Promote Higher-level Skills Development in the Welsh workforce.

KESS is closely aligned to meeting the higher-level skills needs of the Welsh Assembly Governments' priority economic sectors and will prioritise projects in the following sectors:

- Digital Economy
- Low Carbon Economy

- Health and Bioscience
- Advanced Engineering and Manufacturing

KESS, alongside the other collaborative ESF Convergence HE projects, Access To Master, Work Based Learning and Foundation Degree, provide 'demand responsive' accredited provision for key growth sectors in the economy. KESS is unique in Europe in the way it uses ESF support to deliver collaborative research projects and higher-level skills training in partnership with employers.

Case Studies:

Jennifer Brierley was recently awarded a first class honours BSc Sport, Health and Physical Education at Bangor University and is one of the first students to become part of the KESS programme. Through the university's School of Sport Science and Exercise Sciences, she will lead a research project alongside Blizzard Protection Systems Ltd, an award winning SME based in Bethesda, Gwynedd. The research will be conducted on the efficacy of their Reflexcell™ survival products for protection of humans in extreme environments, equipping her with the skills necessary to pursue research projects with other businesses. Jennifer Said: "I am delighted to have the chance to undertake this research and its collaborative nature will be invaluable in my career development. Without the support from the KESS project it would be highly unlikely that I would be able to undertake further study and training."

www.blizzardsurvival.com.

The KESS studentships are targeted towards specific areas that are critical to the economic future of Wales. For instance, the studentship with Calon Wen organic milk co-operative is looking at ways to increase the viability of on-farm Anaerobic Digestion. This encapsulates the key themes of sustainability as it will help develop a new wave of 'green technologies', which will improve the rural economy and reduce emissions of greenhouse gases. The academic supervisor for the project Dr Prysor Williams said: "The input of Calon Wen is vital in ensuring that the new knowledge created by the research and the skills developed by the student are of real relevance to the rural economy."

www.calonwen.co.uk.

Dafydd Hardy Estate Agents one of the leading estate agents in North West Wales is sponsoring a project linked with Bangor's School of Creative Studies and Media examining Web 2.0 and the promotion of local community and economies through this technology. Dafydd Hardy, Director said "We are very excited about sponsoring our student, their research will help us understand the emerging opportunities from Web 2.0 and as a company we place a strong emphasis on investing in skills'.

www.dafyddhardy.com.

Further information on the project and its eligibility criteria is available on the KESS website: www.bangor.ac.uk/kess

Prince of Wales Innovation Scholarships

The University of Wales has launched the Prince of Wales Innovation Scholarships (POWIS) to attract 100 of the brightest university graduates from the world's best academic institutions to work on research projects within Welsh companies. Supported by European Structural Funding, the private sector and the University's own resources, this £11.4 million programme will bring in the best talent to help improve the Welsh economy. As a result, graduates will undertake three-year placements with Welsh businesses, working on science and technology based projects that are of direct relevance to enhancing the innovative capacity of each participating company.

The aim of the programme is to bring the best global graduates to work within Welsh industry to help build up research capacity and enhance innovative potential. By identifying a specific research project, each participating business will recruit a qualified graduate to develop its Research and Development capability and cutting edge thinking. Supported by academic supervisors, the project will focus on developing research that will result in new patents, new products, processes and technologies and the creation of spin-out new firms or cost centres to pursue the commercialisation opportunities.

For potential scholars, the annual stipend will be one of the highest in the world - £20,000 per annum - and tuition fees will be waived by the participating institutions. The scholarship holder will also receive a research grant of £5,000 to cover the cost of equipment, books and travel.

These projects will not only enhance the R&D capability of businesses, but will boost their capacity to develop new market-led processes, products, technologies and services, thereby improving the innovation potential and the competitiveness of the Welsh economy. To make the most of the talents available, the University of Wales is also establishing a full support programme to enhance the capacity and capability of each graduate, thus ensuring that they are fully contributing to the activities of the participating company. Innovation scholars and participating businesses will be invited to participate in a number of events throughout the course of the programme, with the emphasis on innovation management, leadership and entrepreneurship. Entrepreneurs and executives from the best international companies will act as lecturers and advisors, providing participants with the benefit of their experience and expertise in the field of business innovation.

The Prince of Wales Innovation Scholarships will make a significant impact on innovation in Wales and has the capacity to help change the Welsh economy. Already, a number of high technology innovative firms have signed up to the project to help the University ensure that innovation and enterprise become a by-word for the Welsh business sector and to show that a small economy can punch above its weight and compete successfully with the best in the world.

The University of Wales has been in detailed discussions with some of the world's leading research universities in the Europe, the USA and Asia to discuss ways of collaborating on this project and bring some of the best students to Wales. The University of Wales has met with the President of the University of California to examine how both institutions could work together to develop innovation within Wales. With over 50 per cent of the high technology firms established in Silicon Valley being started by non-Americans, California has demonstrated that the attraction of graduate talent from overseas can boost the economy.

Another demonstration of the commitment of the link with global talent is the formal partnership with the Massachusetts Institute of Technology (MIT), one of the most entrepreneurial universities in the World.

The University of Wales is proud to have the support of its chancellor, HRH the Prince of Wales, who has given his full blessing to the programme and is passionate about supporting, whenever he can, its activities during the next six years. At the launch of the scholarship programme in May at House in London, HRH the Prince of Wales, said

“It seems to me entirely fitting that an institution which was created through the determination and enthusiasm of the ordinary people of Wales should choose to work in the service of those people and I am proud, as the University's Chancellor, to lend my support to the Scholarships ... they are, I think, a very practical – and very exciting – answer to how higher education can help the Welsh economy in a time of crisis.”

In October, twenty three scholarships were approved for support by an independent panel of experts. Supervised by Welsh academic institutions, these will be based in a range of Welsh companies operating at the cutting edge of technology in areas as diverse as software applications for the construction industry, cutting edge medical research, advanced manufacturing, fuel efficient engines and LED lighting technologies.

For more information on the Prince of Wales Innovation Scholarships visit www.globalacademy.org.uk or email powis@wales.ac.uk.

Conclusion

The Knowledge Economy Skills Scholarships and the Prince of Wales Innovation Scholarships will develop Wales' knowledge and science base and enhance its contribution to economic prosperity as the world emerges from recession. In an increasingly competitive global environment, science is vital for a successful 21st century economy, and business needs to have ready access to the latest developments in science and technology. These scholarships will help ensure we incorporate innovation into the goods and services we produce and export around the world. By focusing on bringing the best academic talent to bear on the Welsh business community, the University of Wales believes that this programme will make a real difference to the potential of the Welsh economy and, more importantly, will signal to graduates and businesses alike that Wales is open for business and ready to innovate.

Elizabeth Clark, Higher Education Wales
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