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THE WORLD.**

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A WORD FROM THE VICE-CHANCELLOR

This has been a remarkable year for Bangor University: a year that has seen world-leading research identified in all of Bangor's 19 assessed subject areas in the Research Assessment Exercise, and a year in which world-renowned individuals joined us at Bangor to celebrate our 125th anniversary.

Despite the aspirations of our founders in 1884, few I imagine would have expected the University which they established with 58 students to have grown to become a thriving and world-renowned University with over 11,000 students. That we have achieved this level of success is testament to the tremendous contribution of our staff, students and supporters over many years.

There have also been many changes during the University's 125-year history – the details of which are outlined in a fascinating book written to mark our 125th anniversary by the Registrar, Dr David Roberts – however, the pace of change is continuously increasing and we need to ensure that we are at the cutting-edge of higher education in order to maintain Bangor's position as a world-leading University.

One example of this cutting-edge thinking is a development which must be one of the most exciting initiatives of its kind in Europe if not the world, a new £35m Arts and Innovation Centre, and I'm delighted to report that the Welsh Assembly Government has just announced the first tranche of funding for the project.

This will be a centre where Science meets the Arts, where students will learn new skills and be offered new opportunities for a brighter future. It will make a significant contribution to the economic regeneration

of the area and to our young people's futures. Although times have changed, these motives are remarkably similar to those which led to the establishment of the University 125 years ago. Today however, our young people face global competition for jobs and business, and we need to empower them with the skills to compete at this international level. This new centre will help us to ensure that not only are they able to compete at this international level, but that Bangor is at the forefront of global developments and innovation.

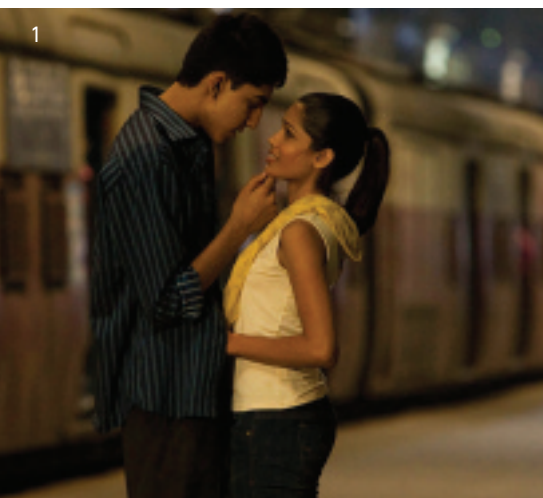
I cannot end this brief introduction without referring to the global financial crisis which has touched most people's lives in one way or another during the last year. Bangor, like every other University has been affected by this, and will continue to face its consequences for a few years to come. Despite this however, I am delighted to report that our financial position has strengthened further during the year. However, as public spending reduces we, in common with all Higher Education institutions, and indeed the whole public sector, will have some tough decisions to make if we are to remain the strong and vibrant institution that we presently are and go on to realize our aspirations.

The year ahead offers exciting new opportunities such as those resulting from the creation of a new NHS Wales structure to develop medical education here at Bangor. Combining this with our aspirations to develop a new Health and Technology Science Park and the Arts & Innovation Centre that I referred to earlier, and it's clear that Bangor University has the vision and confidence to become the world-leading University that our founders in 1884 would have been proud.

Professor R Merfyn Jones



HIGHLIGHTS 08/09



1. Oscar winner and Bangor graduate Danny Boyle and a scene from his film, *Slumdog Millionaire*.

2. Professor Merfyn Jones, Vice-Chancellor and Luis Juste, Director Santander Universities UK & Portugal sign an agreement.

3. Dr Kathy Hopewell, Higher Education Tutor of the Year.

4. Emeritus Professor Peter Williams of the School of Ocean Sciences received the Redfield Lifetime Achievement Award.

5. The Brabant Ensemble's latest CD is based on research by Dr David Evans of the School of Music.

Secretary of State for Environment, Food and Rural Affairs, Hilary Benn selected Professor Gareth Edwards-Jones, Professor of Agriculture and Land Use at the **School of Environment & Natural Resources** as a member of the newly formed Council of Food Policy Advisers.

Bangor graduate Danny Boyle swept the Oscars, with the film, *Slumdog Millionaire*, which he directed, winning eight Oscars, Danny Boyle receiving Best Director Oscar. Vice-Chancellor, Professor Merfyn Jones commented: "winning eight Oscars including Best Film and Best Director is the very pinnacle of achievement in the world of cinema. Nothing pleases us more than to learn of the successes of our graduates whether it is a spectacular success such as that of Danny Boyle or the individual achievements of graduates making a difference here in Wales and across the world."

Bangor University was among Wales' five major universities announcing their intention to work together and combine their strengths and talents to drive forward the knowledge economy in Wales as part of the St David's Day Group.

'Siarad', the largest collection of Welsh conversation ever created, was released by the University. Containing over 40 hours of spoken conversations from people who are bilingual in Welsh and English, the database will be of great use for all researchers into Welsh or bilingualism, no matter what their background. It was collected by researchers at the **ESRC Centre for Research in Bilingualism and School of Linguistics**.

Bangor University and Santander-Abbey signed a three-year agreement that will lead to the provision of university scholarships, international seminars, entrepreneurial activity, business incubators and research, as well as a range of other activities.

Inspiring tutor, Dr Kathy Hopewell, of the **College of Education and Lifelong Learning** was named the Higher Education Tutor of the Year in the annual Inspire Adult Tutor and Mentor Awards organised by NIACE Dysgu Cymru, advocates of adult learning in Wales.

A CD recorded by the internationally renowned Brabant Ensemble contained their recording of religious music, unheard since the sixteenth and seventeenth century. 'Music from the Chirk Castle Part-Books', released by Hyperion, was based on research by Dr David Evans of the **School of Music**.

Emeritus Professor Peter Williams, of the **School of Ocean Sciences**, was honoured for his outstanding contribution in his academic field. Professor Williams received the ASLO (American Society of Limnology and Oceanography) Redfield Lifetime Achievement Award for his contributions to our understanding of oceanic productivity, carbon cycling and metabolic balance and for his role in shaping current views on the importance of microbial processes in the oceans.



HIGHLIGHTS 08/09

In its annual review of English-language reference works published in all academic fields of study, *Library Journal*, the oldest and most respected publication in the USA covering the field of academic librarianship, has given pride of place to an encyclopaedia co-edited by Professor Peredur Lynch of the **School of Welsh** with Menna Baines, John Davies and Nigel Jenkins. *The Welsh Academy Encyclopaedia of Wales*, and its Welsh-language counterpart *Gwyddoniadur Cymru yr Academi Gymreig*, were published in 2008.

Bangor University launched its **Environmental Policy**, setting out the nine key areas that will be the focus of activities as the University strives to achieve continuous environmental improvement.

Dyfrig Jones, a lecturer in Media Studies and Media Production at the **School of Creative Studies**, was appointed a Member of the S4C Authority. His term of appointment is for four years from 20 April 2009 to 19 April 2013.

Dr Jordi Cornellà-Detrell of the **School of Modern Languages** visited Barcelona to receive the prestigious Premi Fundació Mercè Rodoreda for his study 'Writing between the Lines: Literature as a Response to Cultural and Political Repression in Franco's Catalonia'. This prize is awarded annually to the best unpublished study on 20th century Catalan literature. During the last twenty years it has been awarded to some of the most distinguished scholars working in the field of Catalan literature.

The iconic Environment Centre Wales building in Bangor won the RICS Wales 2009 Sustainability Award. The project became one of three buildings around the world deemed worthy of a commendation under the RICS Sustainable building category.

Professor Barrie Johnson of the **School of Biological Sciences** was one of nine UK scientists presented with a Royal Society award at the annual Royal Society *Labs to Riches* event in London. Professor Johnson was awarded a Brian Mercer Feasibility Award of £28,000. This will enable him to further develop his innovative and cost-effective means of both cleaning acidic mine pollution and retrieving metals contained in the waters.

Professor David Thomas, of the **School of Ocean Sciences**, was appointed one of 12 international Finland Distinguished Professors by the Academy of Finland. Under the programme, distinguished international researchers team up with the 'best of the best' in Finnish academic research. Professor Thomas will help run a five year Baltic 'Catchment to coast' project, an opportunity to forge links between Finnish and Bangor scientists in a research area that complements the Catchment to Coast initiative currently running under the Aber-Bangor Partnership.



1. Professor Barrie Johnson received the Royal Society Brian Mercer Feasibility Award.

2. Professor David Thomas was appointed Finland Distinguished Professor.



*"This marvellous ceremony confirms
and eloquently symbolises the
University's maturity and standing in
the academic world. Despite many
challenges throughout the 125 years
this institution has remained true to
its values – to high academic
standards and achievement,
recognised across the world –
but also to the unique community
and culture which gave us birth and
which succours us still."*

**Professor Merfyn Jones,
Vice-Chancellor.**

To mark the beginning of celebrations of the University's forthcoming 125th Anniversary year, the University awarded its first ever Honorary Degrees to four individuals whose achievements are judged to be of major international distinction. They were: **(1) Archbishop Desmond Tutu**, Archbishop Emeritus of Cape Town, a winner of the Nobel Peace Prize and former Chair of the Truth & Reconciliation Commission in South Africa; **(2) The Rt Hon Rhodri Morgan AM**, First Minister for Wales; **(3) Professor Sir John Meurig Thomas**, FRS, Honorary Professor of Solid State Chemistry, University of Cambridge; **(4) Sir David Attenborough, OM, CH**, broadcaster and naturalist.

TEACHING & LEARNING



LEARNING CAN HAPPEN IN THE MOST UNEXPECTED PLACES

Staff and students from the **School of Sport, Health & Exercise Sciences** embarked on the University's first ever medical research expedition in September. Already, as a result, some of the participating students have seen publication of their research papers, based on their own high-altitude research.

Eight students and two staff members travelled to the Himalayas. There, they completed one of the most remote and gruelling treks, climbing to over 6,000 metres in altitude and traversing the deepest gorge in the world. Added to this, they completed a series of scientific

experiments in often difficult and extreme conditions.

Numerous baseline tests had been completed at the University prior to the expedition. These were used to compare against the tests undertaken during the expedition.

The aim was to research human performance, body composition and psychological factors during long periods at high altitude. They also investigated whether supplementing the diet enables the body to cope better with the stresses of living at high altitude.

The findings of such work have relevance for the increasing number of people who travel to mountainous areas for pleasure and work, many of whom gain prior experience in Snowdonia. For example, ski resorts are often at high altitude and our armed forces currently operate in mountainous regions such as Afghanistan. What we learn about the body under extreme stress will also have medical relevance for other situations, including diseases where people suffer from fatigue and weight loss, such as kidney and lung disease.

"The aim was to research human performance, body composition and psychological factors during long periods at high altitude."



UNIQUE ISLAMIC BANKING COURSE

Students from overseas and the UK including individuals working in the international banking and finance sector were keen to enrol onto the first specialist MA and MSc degrees in Europe to offer an academic study of Islamic Banking; currently the fastest growing sector of the banking industry.

Islamic Banking is based on an understanding of the Koran and Sharia, and also on the fiqh, or Islamic jurisprudence. Not only are Islamic Banks and banking systems gaining ground, traditional 'western' banks are also developing products that are compatible with Islamic banking, in a growing recognition of customer needs. The Islamic financial sector as a whole may be relatively small, but is experiencing tremendous growth of around 20% a year.

"Islamic Banking offers a different banking model to the traditional 'Western' approach. The system is based on sharing the risk taking, whereby the bank becomes a direct investor rather than lending money for interest. Banks also replace the profit from interest by charging for entrepreneurial services such as buying and leasing assets to customers or bringing partners together for mutual benefit. Islamic banks have not been involved in the subprime crisis and have great prospects," explains Professor Phil Molyneux, Head of the **Bangor Business School**.

"Although there's great interest in the development of the sector both within Muslim and financial communities, there are few University-based courses available, and great interest in the topic among banking professionals" added Professor Molyneux.

A FIRST IN WALES

Sustainability is a key theme running across Welsh Assembly Government policies and is integral to the work and policies of many of our national public bodies. Employers in these fields need professional staff who understand and can discuss environmental sustainability in the Welsh language. That's why the University developed and launched a new and unique Welsh medium course in Sustainable Environmental Management.

The course leads to either a MA or MSc qualification and suits either those currently in full time employment in a related field, who want to improve their qualifications or recent graduates who want to move into this area of work.

"Our course has been meticulously planned and is the result of discussions with environmental bodies and employers such as the National Parks, Environment Agency, Countryside Council for Wales and the voluntary sector. It will meet employers' needs for potential high-calibre staff with a relevant background and who can discuss their subject confidently and professionally in Welsh," explains Geraint George, Course Director at the University's **School of Environment, Natural Resources & Geography**.



"It's vital that universities are able to prepare people for the workplace, and there is certainly a need for more Welsh-speakers in the environment sector," said Mr Roger Thomas, Chief Executive of the Countryside Council for Wales. "It's quite essential that an academic background is combined with professional and occupational experience including developing bilingual communication skills, and this is definitely what this unique course delivers."

Nine students signed up for the first course, supported by the Higher Education Funding Council for Wales' Welsh Medium Teaching Development Centre.

INVESTING IN RESEARCH SCHOLARSHIPS

A £5m investment over five years in new research studentships and bursaries will drive postgraduate expansion at Bangor University. The programme is part of the University's 125th anniversary celebrations.

Prof Hilary Lappin-Scott, Pro Vice-Chancellor for Research & Enterprise at the University said: "The new Scholarships scheme offers opportunities to the very best students, nationally and internationally, to work with the University's leading academics and rising stars. This investment in research scholarships is part of our strategy to grow research excellence, research capacity and to further enhance our dynamic research environment."

Vice-Chancellor Professor Merfyn Jones added: "A strong postgraduate community

is an essential element of any international research-led university. As well as contributing to the further growth of our already vibrant postgraduate community, the new programme will extend the University's research capacity and enhance the stature and profile of our research."

"The programme will also have a beneficial impact on the wider community as many of the postgraduates will be working with industry, business and other bodies, making our research accessible to the wider community."

The majority of the Bangor 125th Anniversary Scholarships will be fully funded studentships, covering all fees for three years plus an annual maintenance allowance. A number of research studentships are also available for outstanding international students.



TEACHING & LEARNING



"Bangor University has the fairest workload of any UK university..."

FAIREST WORKLOAD OF THEM ALL!

Bangor University has the fairest workload of any UK university according to the annual *Times Higher Education* Student Experience Survey. The University was also ranked 15th overall in the UK for Student Experience.

Over 12,000 students took part in the survey of 101 universities. It asked students to rank different facets of the university experience in order of importance.

The survey is based on aspects deemed important by the students themselves. It covers issues ranging from the high quality of staff and lectures and well-structured courses to the community atmosphere and environment around the campus, high quality facilities as well as aspects such as accommodation, security and the cost of amenities and whether they'd recommend the university to a friend.

Bangor University Registrar Dr David Roberts said: "We have a strong student focus at Bangor so it's pleasing to hear that our students rank the fair work-load highly. We put great emphasis on the academic

aspect of university life, such as high quality lectures and staff, well structured courses as well as considering the needs of the individual student."

"Students also rate the social life, activities and societies, and a good atmosphere and environment in and around the University as being important."

"Bangor certainly meets those needs with our focus on excellent teaching and student support and the University's location and environment provides an excellent backdrop for an enthusiastic and active student community."

Bangor's students also rated good support and welfare, as well as good relationships with teaching staff highly, again underlining the University's focus on excellent teaching and student support.

"Bangor University performs well in a variety of student surveys, and satisfaction levels and overall experience are consistently good," added Dr Roberts.



Siân Lloyd opens the Ffriddoedd Site.

RENEWING FFRIDDOEDD

The first phase of the University's £39m investment in the Ffriddoedd student residential site saw 700 students being accommodated in six newly opened halls. These secure the University's ability to offer current and future students affordable top-quality accommodation.

In total, the investment created 1,136 new en-suite rooms, with the second phase having been successfully completed for the start of the 2009/10 academic year. As well as adding new capacity, the new halls replace the older Emrys Evans, Llys Tryfan and Plas Gwyn Halls, built during the 1960s and 70s. The whole project has also involved remodelling the site and providing improved pathways through the site.

The first phase also saw the opening of

'BAR UNO' an exciting, contemporary new Cafe-bar. BAR UNO provides a social hub and is an integral part of the remodelled Ffriddoedd site.

"Along with Maes Glas and our sports facilities, our Ffriddoedd site now offers students and staff a fantastic range of modern amenities," said Mike Goodwin, Director of Estates. "The University's aim is to centralise its student accommodation at Ffriddoedd, to create a 'student village' feel."

"This major development undoubtedly enhances the quality of the student experience at the University and illustrates our commitment to student care at Bangor," commented University Vice Chancellor, Professor Merfyn Jones.



NEUROSCIENCE GETS PHILOSOPHICAL!

A new line of research in psychology is being developed at **The School of Psychology**. Professor Guillaume Thierry is developing 'neurosemantics' as a field of research. Neurosemantics refers to how the mind draws meaning from the world - arguably one of the most important functions of the mind.

The award of a five-year European Research Council grant of £870,000, the only one made to Welsh researchers from this new funding source, will enable researchers to investigate how the brain relates pieces of meaningful information to

one another: images, sounds and spoken or written words. For instance, seeing a picture of a leaf almost instantly activates the concepts of tree, autumn, fire, even green and the sound of wind, and abstract concepts such as nature, life and death.

"Why do humans perceive meaning in the world? This is a philosophical question to which we can only hope to begin to find an answer and which is at the heart of civilisation and of science," says Professor Thierry. "Constructing, storing, accessing and manipulating meaning are arguably the most crucial of all mental activities and

the fundamental factor that makes us qualitatively different from animals."

The neuroscientists will be using eye-tracking, brain imaging and other techniques in exploring this research theme.

"Bangor's combination of expertises in infant language development and bilingualism provides a unique opportunity to tackle this new exciting field of neuroscience," commented Professor Oliver Turnbull, Head of Bangor's School of Psychology.

RESEARCH

BANGOR LEADS ON VISUAL COMPUTING

Bangor University is leading the first One Wales national research centre; the Research Institute for Visual Computing in Wales. The Institute strengthens research partnerships between computer science departments in Bangor, Aberystwyth, Cardiff and Swansea universities, while raising Wales' international status as an innovative and forward looking country.

Visual computing exploits the latest digital technologies and includes the production of computer imagery for science and entertainment, as well as understanding information in images and video. Techniques developed at the Institute will be used in science, engineering, arts and humanities, medicine and industry.

For the **School of Computer Science**, the £1 million investment that this brings has attracted new researchers

to Bangor to consolidate existing expertise in areas of medical and informational visual computing and enabled them to extend their capabilities into new areas of research.

Professor Nigel John explains: "Advanced visualisation techniques are at the heart of modern technology and are part of a fast moving and innovative field. As well as building on our established research themes we will be at the forefront of new areas in digital computing such as high-dynamic range imaging."

Bangor University is also coordinating the knowledge exploitation aspect of the Institute, with the Technium CAST acting as a catalyst to ensure that business and industry access the information and knowledge that they need to take advantage of research developments in the constituent parts of the Institute.

"...world leading research was found in all of Bangor's 19 assessed subject areas..."



HIGH STANDARD OF RESEARCH RECOGNISED

Bangor University is the only Welsh University to top any of the 67 subject tables in the UK Research Assessment Exercise (RAE), which measures the quality of university research.

The submission for research in Accounting & Finance by Bangor's **Business School**

was judged as being world-leading and it also leads the UK table, ahead of all other universities conducting research in this area. The **School of Electronic Engineering** was also placed in second position in the UK in a subject where the expectation is that massive capacity is required to produce research of this calibre.

In fact, world leading research was found in all of Bangor's 19 assessed subject areas with nearly 50% given the top grading of 3* and 4*.

In addition, **Sports Science** and **Welsh** were placed in the top 10 in the UK in their respective units of assessment and **Psychology** 11th in the UK.

In the Arts & Humanities, the **School of Music** had 90% of its research staff rated as world leading or of international quality.

And 90% of research staff in the Earth Systems and Environmental Sciences field which includes **Ocean Sciences** were also rated as world leading or of international quality.

Vice-Chancellor, Professor Merfyn Jones said "Bangor's research progress is growing year on year. We have areas of real world excellence as well as all round strength. We are in the research elite for many subjects and this reinforces other evidence demonstrating the quality and scale of our expertise in areas which cross subject boundaries."

"Conducting research of national and international standing has far-reaching benefits. Our students learn from lecturers who are at the forefront of knowledge in their various fields. By working with business, industry, service providers and policy makers the knowledge created at Bangor University is applied to benefit the world," added Professor Jones.



A replica medieval seal, courtesy of National Museum Wales

WELSH SEALS PROVIDE WINDOW TO OUR PAST

The image on a seal used to authenticate and close documents, provides a fascinating window into how medieval people, towns, monasteries and other bodies wanted to be perceived, at a time when only kings and magnates could expect to commission a portrait or be pictured in a rare book.

Historians at Bangor and Aberystwyth Universities are reviewing over five thousand seals relating to Wales, held at the National Library of Wales. They're asking what the seals actually tell us about the people who commissioned them, interpreting their own image of themselves and what they can tell us about the society that produced them.

Academics at both institutions will share their expertise under the Arts & Humanities Research Council (AHRC) funded project; part of the Aberystwyth -

Bangor partnership. The project will also bring the seals to a wider audience through a travelling exhibition and placing the information on-line.

"The twelfth-century marks a period of transition from an oral culture to a written one, so seals were being used more often to authenticate written land transactions and so forth. By the end of this period, most farmers and merchants had their own seals, and indeed by the late middle ages most landholders, even of quite low social status, had them," explained Dr Sue Johns of the **School of History, Welsh History & Archaeology**.

"Changes in culture and fashion can be traced in images on seals through the period, medieval women's wear changes as does the armour of knights seen in seals. They often depict heraldry or other symbolic images" she added.

UNIVERSITY RESEARCH ASSISTS WELSH SMALL BUSINESSES

As the UK slid into the worst recession since the early 1930s, a major piece of work undertaken by Professor Dermot Cahill and Ceri Evans of the **Law School** has identified key barriers that make it difficult for small businesses in Wales to benefit from public sector procurement.

Research for the project, 'Barriers to Procurement Opportunity', was conducted by Bangor University & Trinity University College Carmarthen's TenderWise Research Group in a report co-written with Glamorgan University. Funded by the Welsh Assembly Government's Making the Connections Improvement Fund, administered by Value Wales, the research focused around the initial contact that firms have with public sector buyers, in particular issues surrounding the pre-qualification process and the use of "approved lists".

In total, 16 key recommendations were made to Andrew Davies, Minister for Finance & Public Services, including developing a database to hold common core pre-qualification data to eliminate the need for SMEs to duplicate information for different public sector buyers, and a key

recommendation that all contracts over £25,000 should be advertised on Sell2Wales (the public sector opportunities web portal). Such a measure will improve awareness of such opportunities particularly for smaller businesses that rely on lower value contracts to sustain their business models.

The report recommendations were welcomed by the Minister and will now be carried forward under the direction of Value Wales, the 'arm' of the Welsh Assembly Government charged with leading public sector procurement improvement.

Professor Dermot Cahill, Head of the School of Law, TenderWise Research Director, and also appointed by the Minister to the Business Procurement Task Force, said: "With businesses folding due to the credit crunch, it is now more important than ever that we identify and ameliorate unnecessary tendering barriers which inhibit businesses from competing on merit for valuable public sector contracts. Winning and losing such contracts can often be the difference between survival and extinction in this increasingly hostile economic climate."

*"...a major piece of work undertaken by the **Law School** has identified key barriers that make it difficult for small businesses in Wales to benefit from public sector procurement."*

RESEARCH

"The three year €4m European funded project involving partners... across Europe from the Baltic to the Mediterranean is being led by Professor Gary Carvalho at the School of Ocean Sciences."



Fishermen who follow the rules, such as those of the Amity II, will benefit from the scheme.

IDENTIFYING FISH FOR ENVIRONMENTAL AND CONSUMER PROTECTION

Even when the fish is battered and on your plate, one of a new set of tools being developed will be able to identify not only the type of fish you're eating, but also its race and where it came from.

These new tools, being developed by a Bangor University-led project, will be a valuable addition in the armoury of those charged with protecting the world's fish stocks. Globally, illegal, unrecorded and unregulated fish catches amount to twice the value of catches by the European Union fishing fleet, and undermine efforts to produce a sustainable high-value fish market.

The new tools will be sufficiently rigorous to provide evidence in a court of law. This will provide the legal framework to enforce fisheries conservation retrospectively without having to rely on detection at sea. The ultimate aim is to defend fish stocks, by detecting and prosecuting those involved in catching and trading in illegal and unregulated fish stocks, at any point in the supply chain.

The three year €4m European funded project involving partners representing industry, academia, forensic scientists and policy makers across Europe from the Baltic to the Mediterranean is being led by Professor Gary Carvalho at the **School of**

Biological Sciences.

"These tools will safeguard fisheries for the benefit of the industry and consumers alike. They will ensure that those fishermen following sustainable fishing practices do not have their efforts undermined. They will ultimately enable governments, conservationist and the industry to manage recovery of stocks for the long term good of the industry

This will provide consumers with the confidence that they are enjoying the high-end sustainable product that they have chosen," said Professor Carvalho.

COMMUNITY



USING YOUR LOAF

What connects a prize winning loaf of bread with a university? The link may not be obvious, but at Bangor University's **Henfaes Research Centre**, scientists and agronomists are researching alternative high value crops that have a ready, value-added market for local farmers.

One such successful project crop is 'naked' barley, being used to great effect by one local bakery.

As well as the demand for local food, health concerns and the healthy properties of barley and oats have placed these traditional Welsh cereals very much in vogue. Barley contains beta-glucan, a type of soluble fibre that can lower cholesterol and slow the release of sugars into the bloodstream (low GI), helping to reduce the risk of heart disease, diabetes and obesity.

An innovative system of natural selection that Bangor scientists have already proved to produce tough, well-adapted varieties in

the developing world is being used to develop a Himalayan 'naked' barley variety that is suitable for local growing conditions.

The success of this particular project, one of many currently under way, is borne out by local bakery, *Popty Cae Groes*. The bakery's artisanal-style naked barley loaf sold well at the local stores and went on to win Reserve at the True Taste of Wales 2008. The bakery is currently developing further products using the naked barley, including soda bread and barley crumble fruit tarts.

Naked barley grown by farmers in the region is now being trial-processed for breads and breakfast cereals and it is hoped to increase the area grown using seed produced at Henfaes.

The naked barley project is joint-funded by the Welsh Assembly Government (as part of the Supply Chains Efficiencies Scheme) and HGCA.

SOLVING A PROBLEM FOR EUROPEAN FARMING

An innovative system developed at the **School of Environment, Natural Resources and Geography** (SENRG) looks set to solve a real issue for farmers throughout Europe and change EU regulations.

Since 2003, farmers have not been permitted to bury dead animals. The Animal By-Product Regulations (ABPR) (1774/2002) state that dead livestock must be collected by an approved contractor and then be incinerated or rendered. This has severe financial, biosecurity and practical implications for the livestock industry.

However, scientists at SENRG have developed an innovative on-farm containment system for dead livestock. The essentially simple system involves placing the carcasses inside a sealed vessel which is heated to 40°C, where it rapidly decays through microbial and enzymatic degradation, leaving only liquid waste after 3-6 months.

The project has received £140,000 of

funding by the Welsh Assembly Government and Hybu Cig Cymru (Meat Promotion Wales). The findings of the work drew considerable interest from countries all over Europe, following an invited presentation to Members of the European Parliament (MEP) and their scientific advisers and heads of policy, at the European Commission, Brussels.

In the light of the findings, the European Commission has already decided to amend the Regulations to allow for on-farm containment of dead animals. The project has received considerable support from farming unions and groups and government alike including Welsh Rural Affairs Minister Elin Jones. Speaking in Brussels, MEP Jill Evans said "the bioreducer is an environmentally and economically sustainable solution to the problem of disposing of dead livestock. The success of the co-operation between the Welsh Assembly Government and Bangor University will mean that Wales is leading the way on this important issue in Europe."

"The success of the co-operation between the Welsh Assembly Government and Bangor University will mean that Wales is leading the way on this important issue in Europe."



SHAPING WALES' FUTURE

Bangor's **School of Social Sciences** is part of a £9m project that will help government, policy makers, and businesses tackle major social problems in Wales.

The Wales Institute of Social and Economic Research, Data and Methods (WISERD), one of Wales' new National Research Centres, brings together leading university social scientists to develop a more detailed picture of the people of Wales through the collection, analysis and dissemination of data in areas from economic activity and growth to education, community participation, health and social care. WISERD will play a vital role in the coming years, informing policy makers and practitioners as post-devolution Wales enters a further period of change and uncertainty.

Professor Howard Davis, Bangor co-director of WISERD said: "This represents an important opportunity for us to conduct cutting edge policy-relevant, high quality

academic research for the benefit of the people of Wales at a time of considerable economic and social change."

Professor Ted Gardener, Head of Bangor University's College of Business, Social Sciences & Law said: "Social science research at Bangor has internationally renowned experts in the study of economic and social change, culture and community, health and lifestyles. The Institute will ensure that research will compete with the best internationally and will have practical applications for the benefit of every community in Wales."

The project is jointly funded for three years by the Economic and Social Research Council and Higher Education Funding Council for Wales. Also contributing are Cardiff, Aberystwyth, Swansea and Glamorgan Universities. WISERD also has a partnership with the ESRC's National Centre for Research Methods at the University of Southampton.

MEMORIAL ARCH RESTORED

Eighty-six years after being opened by Edward, Prince of Wales on November 1, 1923, the North Wales Heroes' Memorial, better known as the Memorial Arch, has undergone a major refurbishment funded mainly by the University. The building's clean, bright stone once again looks striking in daylight while new lighting illuminates the building's features in the evening.

More importantly, the work, costing nearly £200,000 has enabled the University to provide public access once again to the historic Memorial.

With the whole project being managed by the University's Estates & Facilities

Department, the renovation included removal and replacement of the ground floor, repair to the lead downpipes and surface water drainage, repairs, re-pointing and specialist cleaning of the stonework to all elevations, french polishing of the internal oak joinery, repairs and improvements to the electrical installation and repairs to external lamps.

Grant assistance from organisations including CADW and the War Memorials Trust along with contributions from local councils, civic societies, organisations and individuals from across north and mid-Wales supplemented the University's substantial financial commitment to maintaining this Grade II listed landmark.



Students volunteers make a valuable contribution to the community.

STUDENT VOLUNTEER PROJECTS REWARDED

The work of student volunteers at Bangor was acknowledged with the creation of a major new student award that will benefit community projects in and around Bangor.

Initiated by previous High Sheriff of Gwynedd, Dr Dewi Roberts, and presented by the current High Sheriff, Mr Peter Rogers, the High Sheriff's Award for Students of Bangor University rewards individual students who volunteer in the community, or are involved in volunteer projects at the University.

Presenting the Awards, Mr Peter Rogers congratulated the students for putting their time and effort in on top of their studies to contribute to the student community and the wider community through their work.

Five individual Student Awards were made to students involved in Student Volunteering Bangor; "Nightline", the voluntary student helpline; and Sunday Coffee Group, a project in conjunction with Contact the Elderly charity. Awards were also made to

specific projects. The Sunday Coffee Group received £550 towards their project, while SV Bangor projects Sblat and Splodge; arts and crafts based activities for children of different age groups and Nightline receiving £175 each towards their work.

"I have been impressed by some of the excellent voluntary work in the community carried out by Bangor University's students and feel that such work should be acknowledged and assisted. This Fund rewards individuals and funds projects across the community. By making significant sums available to the groups and projects that students work with, the community will also benefit from the Fund," said Dr Dewi Roberts.

Student volunteering is a vital feature of the University community and student experience. Volunteering opportunities are available to Bangor students through a number of routes. They enable students to contribute to their community, while also gaining valuable experiences.

COMMUNITY

"The new Centre will be a lively focus for creativity and performance as well as for innovation in science, technology and creative industries;"

PONTIO

While work progressed to develop the University's plans to create an exciting new Arts & Innovation Centre, the University also recognised the need for an interim programme of events during the period up until the new Centre opens.

Seeing the continuum of arts activities and audience in and around Bangor as vital to the ultimate success of the project, the University appointed its first Arts Development Officer, with support from the Arts Council of Wales. The challenge to be met was to find new venues and a programme of events in and around Bangor.

PONTIO (Bridging) is the appropriate name for an interim programme of events - in both published and online format. A new innovation for the City is that, for the first time ever, many arts related events taking place in and around Bangor, whether organised by the University or by other

groups or bodies are brought together in one promotional package.

Added to this Dyfan Roberts, the Arts Development Officer, worked to create a new Cabaret season of events at the University's Powis Hall and to present drama workshops and performances in some new settings around the city.

In addition to maintaining a menu of artistic fare for the city, the new role is also key in defining the artistic vision and developing the artistic element of the business plan for the Arts & Innovation Centre and for forming strong links with providers in the area and funding bodies.

The new Centre will be a lively focus for creativity and performance as well as for innovation in science, technology and creative industries; all this in an unique and iconic building.



'Dr Jazz', Dyfan Roberts and Mayor of Bangor, Cllr Jean Forsyth launch the new Pontio events programme.

CELEBRATING 125 YEARS



A varied range of events has enabled members of the University and community to celebrate the University's 125th Anniversary.

Here are some highlights from events held so far:

1 Internationally renowned Irish singer Mary Black and her Band delighted the audience at the Prichard Jones Hall.

2 A packed Prichard Jones Hall rocked to the Super Furry Animals, here we see the band's front man Gruff Rhys.

3 Many local organisations, companies and University business partners attended a Gala Dinner which ended with a performance by Only Men Aloud!

4 A Party was held for the children of University staff. Entertainment was

provided by Bangor alumnus, Caryl Parry Jones; magician, Cariad and the Fflach-Bang chemistry show team under Dr Robyn Wheldon-Williams' supervision. SV Bangor, the volunteering group at the Students' Union provided assistance.

5 A School of Chemistry lecture by Sir John Meurig Thomas FRS, sponsored by the Royal Society of Chemistry, was one of a number of celebratory events held by Schools to commemorate the Anniversary.

6 A book on the history of the University, authored by University Registrar, Dr David Roberts was launched, along with the opening of an exhibition of the history of the University.

7 Professor Eric Sunderland, former Principal of the University, opened an Art Exhibition of items from the University's Art Collection.

