

The background of the cover is a photograph of two students, a young man and a young woman, leaning over a stone balustrade in a grand, historic building. They are both looking upwards with expressions of hope and aspiration. In the background, ornate chandeliers with multiple glowing lights hang from the ceiling. The overall tone is warm and inspiring.

CARDIFF
UNIVERSITY

PRIFYSGOL
CAERDYDD

Cardiff University **Annual Review** 2015

www.cardiff.ac.uk

Introduction

by the Vice-Chancellor

2015 could not have started any better for Cardiff University, following the outstanding outcome of the 2014 Research Excellence Framework (REF), which put us in the top five UK universities for the quality of our research, along with Imperial College, the LSE, Oxford and Cambridge. This superlative achievement set the tone for what proved to be a year of significant and sustained progress in each of our key areas of activity.

Whilst this Annual Review must inevitably be selective, I hope it provides a fair reflection of our year. We have advanced our growing reputation for world-leading research, improved our students' experience and built our international profile. Our local communities have benefited too, as we help tackle poverty, boost the economy and improve the health, education and wellbeing of the people of Wales.

As Wales's leading research university we have broken new ground in many areas. From building the UK's first carbon positive house and undertaking the first ever trial of self-healing concrete to discovering the potential root cause of asthma and revealing a direct link between a healthy breakfast and good grades, our academics have continued to produce excellent research with real societal impact.

We secured another prestigious Queen's Anniversary Prize - our sixth - for our flagship MRC Centre for Neuropsychiatric Genetics and Genomics. This accolade is a testimony to our world-leading research in this important field under the outstanding leadership of Professor Sir Mike Owen.

In the autumn, we launched five new flagship University Research Institutes. The Research Institutes aim to develop cures for major chronic disease, reduce crime and increase security, harness 'Big Data' to tackle real-world problems, develop wiser methods of water use, and support the development of smarter energy systems. Sitting alongside our existing Research Institutes, they will bring strategic co-ordination to our efforts to address some of the biggest global research challenges.

We also secured our second Sêr Cymru appointment: Professor Diana Huffaker joined us from the University of California in Los Angeles. Her expertise in advanced engineering and materials will provide a real boost for our research in compound semiconductors.

Professor Huffaker's appointment is a great step forward in our partnership with industry; in this case with semiconductor company IQE. The partnership aims to bridge the gap between fundamental scientific research and real-world commercial applications.

It's very important that the interests of our students rank as highly as our research goals, and I'm proud to say that 2015 saw us secure our highest ever level of overall student satisfaction. The National Student Survey (NSS) found that 90% of our students were satisfied with their overall experience. Latest figures also show that our graduates are more likely to be in employment, further study or both within six months of graduating than those of any other Russell Group university.

Our students deserve no less than the best, which is why we have embarked on a multi-million pound investment programme to upgrade and improve our teaching and lecture facilities and unveiled exciting plans for a flagship Centre for Student Life. We are also consulting our student community on plans for a new library.

Excellence in teaching relies on more than just physical infrastructure, which is why in 2015 we launched The Centre for Education Innovation. The Centre will help to ensure that Cardiff academics deliver forward-thinking,

research-led teaching. The aim is for Cardiff to be at the forefront of new developments in education and for learning and teaching to be at the forefront of our academic activity.

I was also delighted that we were chosen as the winner of the Living Wage Champion Awards 2015 for the Wales region and became the only university in the UK to receive this recognition. The awards, coordinated by the Living Wage Foundation, celebrate Living Wage Employers that have made great contributions to communities and industries by implementing and recognising the life changing importance of the Living Wage.

We were delighted to be able to express our appreciation of the achievements of others connected with the University, Cardiff and Wales too. As well as celebrating the success of our 7,000 graduating students, Welsh rugby team captain Sam Warburton joined broadcaster Susanna Reid, JoJo Maman Bébé founder Laura Tenison MBE and British novelist Philippa Gregory to receive an Honorary Fellowship in recognition of their outstanding achievements in their field.

Raising our international profile was another key priority. The QS World University Rankings by Subject rank some 894 institutions across the world, examining over 100m citations and over 14,000 University programmes to create a list of the world's leading universities by subject area. Our top three highlights were: Architecture/Built Environment ranked at 29th in the world, Psychology ranked 36th and Geography at 38th. Cardiff overall stands at 122, up from 143 in 2013, so we remain on course to break into the top 100 as envisaged.



The Vice-Premier of the People's Republic of China, Madame Liu Yandong, marked a UK first when she unveiled a plaque symbolising the launch of a new college jointly led by Cardiff University and Beijing Normal University. Students of the new Cardiff-Beijing Chinese Studies Joint College will follow a collaboratively developed curriculum in Chinese Language and Cultural Studies leading to a dual undergraduate award by both universities.

One of our key aims is for 17% of our students to spend time studying, working or volunteering abroad during their studies at Cardiff. The evidence shows that this activity improves degree outcomes and makes students more likely to get a job when they finish.

We have now reached 16.2%, up from 12% in 2012, and we recorded the highest ever number of European work placements held by our students, thousands of whom took advantage of our increasingly popular *Languages for All* programme.

I'm delighted with this progress and am confident of reaching our target in 2016.

I am committed to education as a life-changing experience for the individual, but it's important not to lose sight of the impact that universities have more broadly.

A report from London Economics, published in 2015, found that Cardiff University contributes £2.7 billion annually to the UK economy, generating more than £6 for every £1 it spends.

Significantly, the report considered the benefits of learning and teaching, particularly the impact of students earning more as a result of their education and making a greater tax contribution. The combined impact of all Cardiff University's learning and teaching, measured as enhanced graduate earnings and taxation receipts, was £968m.

While we are critical to the economy of Wales, we're also committed to supporting the communities we serve.

Our flagship engagement projects continued their work with local people in Cardiff and more broadly in Wales, and our Wales for Africa Phoenix Project expanded the scope of its work in Namibia.

At the National Eisteddfod we had a greater presence than ever, while the CAER Heritage project in Ely continues to draw in great numbers of people from all backgrounds to work with our academics on this fascinating archaeological site.

We also ensured our presence was felt at major sporting events. Our sponsorship of the Velothon put us on the radar of an estimated million plus cycling fans worldwide and we were unveiled as the title sponsors for the IAAF World Half Marathon. The Championships were an excellent opportunity not only to be part of a major international sporting event but also to apply our research expertise and presence within the capital city.

Altogether, Cardiff University has a great deal to be proud of.

2016 is already shaping up to be a busy year. We can look forward to the opening of the new Cardiff University Brain Research Imaging Centre and further progress on completing our exciting plans to expand our teaching and research facilities and Innovation Campus.

I hope you enjoy reading this Annual Review, and look forward to building on our success in years to come.

Professor Colin Riordan

President and Vice-Chancellor,
Cardiff University

Research

Ranked amongst the top five universities in the UK for research excellence, we are an ambitious and innovative university that attracts some of the world's best researchers. We also have an emerging innovation culture which helps connect industry, business, and government with our academics. This helps to nurture student entrepreneurship and champions grassroots business development.

Five flagship Research Institutes launched

We launched five new flagship Research Institutes focused on tackling some of the world's most pressing scientific problems. The Research Institutes aim to develop cures for major chronic disease, reduce crime and increase security, harness 'Big Data' to tackle real-world problems, develop wiser methods of water use amid a growing global scarcity, and support the development of smarter energy systems. The launch brings the total number of dedicated Research Institutes to nine.

Good breakfast, good grades?

Our public health experts uncovered a direct link between pupils' breakfast quality and consumption, and their educational attainment. The study of 5,000 9-11 year-olds from more than 100 primary schools examined the link between breakfast consumption and quality and subsequent attainment in Key Stage 2 Teacher Assessments 6-18 months later.

The study – thought to be the largest to date looking at longitudinal effects on standardised school performance - found that children who ate breakfast, and who ate a better quality breakfast, achieved higher academic outcomes.

UK's first trial of self-healing concrete

The first major trial of self-healing concrete in the UK, led by a team of researchers from our School of Engineering, is being undertaken at a site in the South Wales Valleys.

The project is piloting three separate concrete-healing technologies in real-world settings, with a view to incorporating them into a single system that could be used to automatically repair concrete in the built environment.

Has the last defence against infection been breached?

One of our scientists uncovered that the last line of antibiotic defence may have been breached.

Working with colleagues in China, Professor Tim Walsh uncovered a new gene (MCR-1) that enables bacteria to be highly resistant to polymyxins.

The emergence of the MCR-1 gene in China heralds a disturbing breach of the last group of antibiotics – polymyxins – and an end to our last line of defence against infection.



£17.3m 'green light' for UK's first Compound Semiconductor Research Foundation

A £17.3m award that will put us at the cutting edge of semiconductor technology was announced by the UK Government.

The funding, unveiled by the former Universities Minister Greg Clark MP, will underpin the Compound Semiconductor Research Foundation – the first of its kind in the UK, with potential to become one of the leading clusters in Europe.

The award adds to £12m already pledged by Welsh Government to support the Foundation. The funding will strengthen bonds between Cardiff headquartered IQE Plc, the leading global Compound Semiconductor wafer supplier, and the University.



‘Smart’ carbon positive energy house

Experts from our Welsh School of Architecture designed and built the UK’s first purpose-built, low-cost energy smart house, capable of exporting more energy to the national electricity grid than it uses. The house, designed by Professor Phil Jones and his team, meets tough targets for zero carbon housing set by the UK Government.

Zero carbon energy performance involves a combination of reduced energy demand and renewable energy supply, using the electricity grid to import and export energy. Electrical and thermal storage have also been used to allow energy generated at the house to be used directly by the occupiers.

Education

Our aim for our students could not be clearer: we want their experience to be a byword for excellence, where our students actively take part in their experience and benefit from an environment of top quality research. Academic life at Cardiff University is challenging, innovative and rewarding.

Centre for Education Innovation

We unveiled our new practice-focused university-wide resource to support the delivery of excellence in learning and teaching. The Centre for Education Innovation provides a safe environment for academics to review, confirm, and challenge learning and teaching. It will help new academics to develop and grow in this area and will strive to ensure that our academics are at the top of their game when it comes to delivering forward thinking research-led teaching.

THE World University Rankings

A rise of 26 places saw us break into the top 200 in the Times Higher Education World University Rankings. The jump to 182nd followed on from our highest position for five years in the QS World University Rankings. The results built on our excellent performance in the QS rankings by subject.

Top marks for employability

New figures revealed that Cardiff University graduates are more likely to be in employment, study or both within six months of graduating than any other leading Russell Group university.

According to the latest Higher Education Statistics Agency (HESA) Destinations of Leavers from Higher Education figures, the percentage of full-time first degree leavers in 2013/14 who were employed, studying or both was 95.5 per cent, or 2,895 out of a total of 3,035. The figure ensured that we were ranked



Pictured is Wyn Davies, Teacher, School of Pharmacy and Pharmaceutical Sciences, who was appointed as a result of Coleg Cymraeg Cenedlaethol funding

the Russell Group's highest in the student employability stakes – ahead of leading UK universities like Oxford and Cambridge. It also confirmed Cardiff University as Wales's top ranked university.

Boost for Welsh language provision

We received a major funding boost from the Coleg Cymraeg Cenedlaethol for more Welsh medium lecturers. The Coleg, (College) works to ensure more study opportunities for Welsh medium students and will help us invest in teaching positions for Pharmacy, Medicine and Healthcare Sciences.

£38m investment in learning and teaching spaces

The University embarked on a £38m investment programme to transform learning and teaching spaces around the University over the next five years. Work varies from cosmetic improvements to major reshaping of spaces where required. It also includes providing everything from audio, visual and IT equipment to a high-quality furnishings project started in the summer. Similar improvements will be made - following further consultation with staff and students – in future years.



National Student Survey

We recorded our highest level of overall student satisfaction. The 2015 National Student Survey (NSS) found that 90% of students were satisfied with their overall experience.

Up 1% on the previous year, the results put us above both the Welsh (85%) and sector-wide (86%) average for overall satisfaction. It also placed us in third place among the Russell Group of elite UK universities.

Engagement

Our Transforming Communities programme made a real impact in 2015 with staff across all three Colleges of the University working hand in hand with local communities to bring the projects to life. Transforming Communities consists of five flagship engagement projects that work with Welsh Government, other Welsh organisations and communities in Cardiff, Wales and beyond in areas such as health, education and wellbeing. The University also works with its communities through a diverse range of other engagement activities that enrich our research, teaching and learning.

Creating safer communities

Emergency services took to the streets of a Cardiff suburb for an action-packed week of activities aimed at making people safer in their community. Safety Week featured themes such as road safety, health, fire safety and Neighbourhood Watch, in direct response to ideas generated by people living in Grangetown. The event was organised through a collaboration between Grangetown Community Action and Cardiff University's Community Gateway project.

University supports *Who's in Health?* campaign

Our Dean of Medicine joined healthcare professionals to help raise the aspirations of young children by talking about the huge range of career opportunities in medicine.

Professor John Bligh visited Tredegarville Church in Wales Primary School in Cardiff, as part of the *Who's in Health?* campaign, an initiative aimed at giving primary school children an insight into life as a healthcare professional, to inspire them and show how important literacy and numeracy is for any future profession.

Observing the Universe from the classroom

Primary school children in Wales were given the chance to explore the Universe using high-tech telescopes around the world, thanks to new funding awarded to one of our outreach projects. Sitting in the comfort of their classroom, the schoolchildren are able to investigate the many wonders of the cosmos by controlling telescopes remotely over the internet.

The initiative is part of the next phase of our *Universe in the Classroom* outreach project, which has received a further three years funding from the National Science Academy of the Welsh Government.



Eisteddfod 2015

Our experts shone a spotlight on some of the most important issues facing Wales, at Wales's National Eisteddfod

Culture and heritage featured as strongly as ever, including talks on ground-breaking Mabinogion research and how Welsh language dialects evolve over time.

A fresh look at the Festival and surrounding community was provided by www.llaisymaes.com, the Eisteddfod's digital newspaper. It is run by Cardiff University students and the University's Centre for Community Journalism, which also held workshops to enable more and better Welsh language digital journalism to be created and shared.

We also launched our *Welsh for All* programme which encourages our students to learn Welsh alongside their regular studies.



Pictured is former PhD student Supachai Cheunjitwongsa who learnt Welsh alongside his PhD in the School of Dentistry

Mencap Cymru and Cardiff law students launch toolkit

A series of new guides aimed at helping adults with a learning disability and their carers access health and social care services were launched by Mencap Cymru in conjunction with our School of Law. The toolkits aim to empower the carers and families of adults with learning disabilities and help them navigate their options to access services to which they are entitled.

City's roots brought to life in community film

A major community excavation of one of Wales's most significant Iron Age hill forts, was documented in a new film.

Working with CAER Heritage Project lead artist Paul Evans, and film-maker Jon Harrison, pupils from two local schools worked in small groups to create short animation sequences for the animated film, entitled *CAER HEDZ*.

The CAER Heritage Project is a collaborative research project between Cardiff University, Ely and Caerau Communities First, local schools and local residents. The project centres on one of Cardiff's most important, but little-known, archaeological sites, Caerau Iron Age hillfort.

Making an impact and saving lives

The Phoenix Project is using Welsh expertise in collaboration with the University of Namibia to provide the country's first specialist anaesthesia training. Namibia has just a handful of specialist anaesthetists so surgery and critical care often rely on medical officers who have had little anaesthesia training.

Five senior anaesthetists from south Wales headed to a remote region of southern Africa to provide life-saving training as part of our unique project. The intensive course in a desert-like area of Namibia equipped medical officers with vital skills in anaesthetics and critical care.

Approximately 16 medical officers – who work in clinics, hospitals and community settings in Namibia – were trained over two weeks in Oshakati hospital in the far north of the country close to the Angolan border.



International

Our global community, reputation and partnership are at the heart of our identity. We want to attract the highest calibre students, academics and researchers from around the world, further enhancing the learning experience for students and bringing a wider perspective to our teaching and research.

Supporting Nepal's post-disaster efforts

Our research aided the immediate rescue efforts in Nepal by providing a real-time assessment of further landslide risks following devastating earthquakes in Nepal. Dr Robert Parker and his team from our School of Earth and Ocean Sciences developed a unique program, known as *ShakeSlide*. The computer program provided disaster assessment teams with invaluable information in providing post-earthquake assessments.

Wales's first degree in Portuguese launched

The Portuguese ambassador visited the University to launch Wales's first degree in Portuguese.

His Excellency Mr Joao de Vallera formally launched the new degree at a 'Festival of Portuguese Culture' event organised by the University and attended by staff, students, Camões Institute representative Regina Duarte and Portuguese poet and novelist Ana Luísa Amaral.

Our School of Modern Languages joined a select group of UK universities to sign an agreement with the Camões, Instituto da Língua e da Cooperação - the Portuguese government agency responsible for supporting the teaching of Portuguese in schools and universities. The agreement paves the way for the introduction of a newly-validated Portuguese degree programme.

European work placements double

2015 saw more than 100 of our students travelling to Europe for work placements as part of their Cardiff University student experience. Not only do these work placements provide students with 'real world' experience, but they can forge collaborative ventures with a range of institutions. This helps us attract funding to transform our innovative ideas into Europe-wide research programmes.

We have well over 300 bi-lateral agreements with institutions across Europe, and each year we welcome approximately 350 European Erasmus+ students.

Promoting UK higher education on the global stage

The Vice-Chancellor, Professor Colin Riordan joined a senior delegation to India, led by the UK Secretary of State for Business, Innovation and Skills Sajid Javid MP and the Minister for Universities and Science Jo Johnson MP, designed to celebrate existing links and promote the UK as a study destination for international students.

India provides more international students to the UK than almost any other country – second only to China – with 19,750 students from India studying at all levels. Some 300 students from India study at Cardiff University each year.

Enter the Dragons

China's highest ranking female politician oversaw the signing of an historic agreement between the University and a top ten Chinese University.

Vice-Premier of the People's Republic of China, Liu Yandong, marked a UK first when she unveiled a plaque symbolising the launch of a new college jointly led by Cardiff University and Beijing Normal University.

Students of the new Cardiff-Beijing Chinese Studies Joint College will follow a collaboratively developed curriculum in Chinese Language and Cultural Studies leading to a dual undergraduate award by both universities.

Tackling the decline in modern foreign languages

A new scheme aimed at tackling the 'serious decline' in the take up of modern foreign languages by school pupils in Wales was launched. Initially a pilot, the major intervention is aimed at increasing the take up and attainment of modern languages at secondary schools across the country. It is funded by the Welsh Government as part of its *Global Futures* strategy aimed at supporting modern languages in schools in Wales. Under the new scheme, modern foreign language undergraduates will be recruited and trained as student mentors and coaches and will be partnered with school students in their respective areas.



Pictured are Carwyn Jones, First Minister for Wales, Liu Yandong, Vice-Premier of the People's Republic of China, and Professor Colin Riordan, Vice-Chancellor, Cardiff University.

Philanthropy

Philanthropy is key to Cardiff University's mission to create and share knowledge and to educate for the benefit of all.

2014-15 was a year of fundraising success thanks to the generosity of more than 700 donors from 16 countries worldwide. In this year, donors promised over £3.6m in new gift pledges including multi-year pledges of support from organisations such as the Wolfson Foundation and Santander.

100% of all funds raised goes directly to Cardiff University research and student support and will positively impact generations to come.


A big part of our philanthropic income comes from generous donors who choose to leave Cardiff University a gift in their will. These legacy gifts play a significant part in helping to shape our world – from educating today's brightest minds to finding solutions to some of society's biggest challenges.

A generous gift left in their will by Reginald and Marlene Roberts is helping Welsh students like Martika Mann (**Medicine 2012-**) to continue their studies despite their circumstances.

Martika said:

“I am extremely lucky to have been selected to receive a bursary. Without the support, I do not know how I would have continued my degree. I now feel I can focus my time on where it is most needed - in the library and on the wards learning from patients.”

In 2014-15, legacy gifts from £8,000 to £75,000 added up to more than £140,000 of support for Cardiff's students and life-changing research. Every gift received made a lasting impact.



Cardiff University is hugely grateful to all donors. Your continued support is helping to save, change and enrich lives in Wales and beyond.

“Why can’t we live 100 years – or rather, return here 100 years hence – and see the results of that work for which we and our friends have laboured?” Lord Aberdare, 1884



Cylch Caerdydd

Cardiff University and its predecessor institutions were founded with generous philanthropic support.

In recognition of the continued importance of philanthropic gifts, this year the Vice-Chancellor founded **Cylch Caerdydd**, a very special club to recognise donors who give £1,000 or more to the University during each academic year.

Cylch Caerdydd gifts help the University transform ideas into reality quickly and efficiently, and make a crucial difference in elevating Cardiff's teaching and research to the next level.

“It’s a matter of getting the message out that a gift is enough to transform a current student’s experience. There’s a compelling case that the institutions that influenced what you have become deserve your support, which is why I am proud to be a member of Cylch Caerdydd.”

Lyndon Bigmore (BEng 1981)
Founding Member of **Cylch Caerdydd**

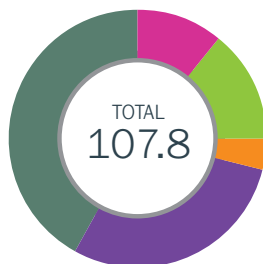
To join this exceptional group of people visit:

www.cardiff.ac.uk/cylch-caerdydd

Financial Performance

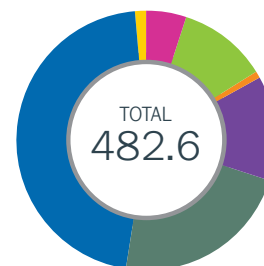
Research Grants and Contracts Income

Key	£M
Other	11.9
EU and Overseas	15.1
Industry and Commerce	4.3
Public Corporations, Local Authorities, UK Government	31.5
Research Councils and Charities	45.0



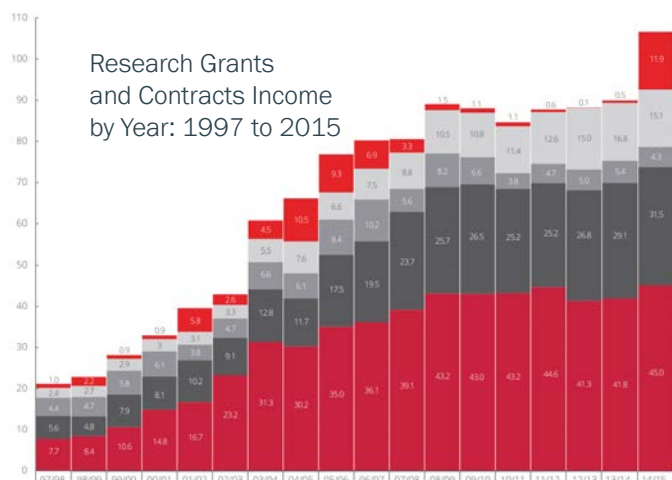
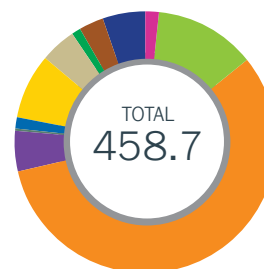
Income

Key	£M
Residences and Catering	25.2
Services rendered	52.1
Endowments and interest receivable	3.9
Funding Councils grants	67.4
Research grants and contracts	107.8
Fees and support grants	219.8
Other operating income	6.4



Expenditure

Key	£M
Academic Services	8.5
Academic Schools	56.7
Staff costs	262.8
Depreciation	22.7
Interest payable	1.2
Residences, Catering and Conferences	6.4
Research grants and contracts	36.7
Premises	21.1
Administration and Central Services	5.4
Other expenses	13.6
Other services rendered	23.6



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To request a copy of the Annual Review in large print format contact the Communications and Marketing team on 029 2087 0298, email: communications@cardiff.ac.uk

Comments and suggestions regarding this review are welcome and should be sent to Claire Sanders, Director, Communications and Marketing, communications@cardiff.ac.uk

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Graduation and Honorary Fellows

Welsh rugby team captain Sam Warburton joined broadcaster Susanna Reid, JoJo Maman Bébé founder Laura Tenison MBE and British novelist Philippa Gregory in receiving Honorary Fellowships, which are awarded to individuals who have achieved outstanding recognition in their field.

Graddio a Chymrodyr er Anrhydedd

Ymunodd capten tîm rygbi Cymru Sam Warburton, â'r ddarlledwraig Susanna Reid, sylfaenydd JoJo Maman Bébé, Laura Tenison MBE a'r nofelydd Prydeinig, Philippa Gregory i dderbyn Cymrodoriaethau Er Anrhydedd, sy'n cael eu dyfarnu i unigolion sydd wedi cael cydnabyddiaeth ragorol yn eu maes.



£2.6m of new funding for lightning lab

The Universities and Science Minister, Jo Johnson visited the University's Morgan-Botti Lightning Laboratory in September and committed £2.6m to its PROTEST research project. The project, which is also being led by Airbus, will develop new ways of protecting modern aircraft from lightning strikes.

£2.6m ar gyfer labordy mellit

Ymwelodd y Gweinidog Prifysgolion a Gwyddoniaeth, Jo Johnson, â Labordy Mellit Morgan-Botti y Brifysgol ym mis Medi, ac ymrwymodd £2.6m ar gyfer ei brosiect ymchwil PROTEST. Bydd y prosiect, sydd hefyd yn cael ei arwain gan Airbus, yn datblygu ffyrdd newydd o amddiffyn awyrennau modern rhag cael eu taro gan fellt.

New online resource of contemporary Welsh language

The first ever large-scale corpus of the Welsh language was announced. Our experts will play a key role in the project which will break new ground as a key language resource, compiling an initial data set of 10m Welsh words.

Adnodd Cymraeg cyfoes newydd ar-lein

Cyhoeddwyd y corpwys graddfa fawr gyntaf erioed o'r iaith Gymraeg. Bydd ein harbenigwyr yn chwarae rôl allweddol yn y prosiect fydd yn torri tir newydd fel adnodd iaith allweddol, gan lunio set data cychwynnol o 10m o eiriau Cymraeg.



2015

Our Year in Pictures | Ein blwyddyn mewn lluniau



The IAAF/ Cardiff University World Half Marathon Championships

We were unveiled as title partner for a major athletics event featuring many of the world's best runners. The Championships were the biggest half marathon to be held in Wales and the most significant athletics event hosted in the country since the 1958 British Empire and Commonwealth Games.

Pencampwriaeth Hanner Marathon y Byd IAAF/ Prifysgol Caerdydd

Cyhoeddwyd y Brifysgol fel partner teitl ar gyfer digwyddiad athletau pwysig a fydd yn denu llawer o redwyr gorau'r byd i Gaerdydd. Cynhelir Pencampwriaeth Hanner Marathon y Byd IAAF/Prifysgol Caerdydd yn y ddinas ar 26 Mawrth 2016. Hwn fydd yr hanner marathon mwyaf i'w gynnal yng Nghymru a'r digwyddiad athletau mwyaf arwyddocaol yn y wlad ers Gemau'r Ymerodraeth Brydeinig a'r Gymanwlad yn 1958.



Wales's most powerful MRI scanner arrives

A giant £6m MRI scanner with superior power to detect disease inside the human brain arrived at the new Cardiff University Brain Research Imaging Centre. The MRI scanner will help researchers to study a range of neurodegenerative and psychiatric disorders including dementia, schizophrenia and depression.

Sganiwr MRI mwyaf pwerus Cymru yn cyrraedd

Cyrraeddodd sganiwr MRI enfawr gwerth £6m, sydd â gallu eithriadol i ganfod clefyd yn yr ymennydd dynol. Ganolfan Delweddau Ymchwil yr Ymennydd ym Mhrifysgol Caerdydd. Bydd y sganiwr MRI yn helpu ymchwilwyr yn CUBRIC i astudio amrywiaeth o anhwylderau niwroddrywiol a seiciatryddol gan gynnwys dementia, sgïtsoffrenia ac iselder.

Has asthma's root cause been uncovered?

Our scientists identified the potential root cause of asthma and an existing drug that offers a new treatment. Working in collaboration with scientists at King's College London and the Mayo Clinic (USA), they described the previously unproven role of the calcium sensing receptor (CaSR) in causing asthma, a disease which affects 300m people worldwide.

Ydy achos sylfaenol asthma wedi'i ganfod?

Mae'n bosib fod ein gwyddonwyr wedi canfod achos sylfaenol asthma ynghyd â chyffwr sy'n bodoli eisoes sy'n cynnig triniaeth newydd. Gan weithio ar y cyd â gwyddonwyr yng Ngholeg King's yn Llundain a'r Clinig Mayo (UDA), mae'r ymchwilwyr wedi disgrifio'r rôl, nad yw wedi'i brofi o'r blaen, a chwaraeir gan y derbynnydd synhwyro calsiwm (CaSR) wrth achosi asthma, clefyd sy'n effeithio ar 300m o bobl ledled y byd.





'Maths Saves Lives' scooped prestigious prize

A University project, which uses mathematical modelling to unravel the complex reasons behind delays on hospital wards to cut waiting times and save lives, secured a prestigious Times Higher Education award. The 'Maths Saves Lives' project won the 'Outstanding Contribution to Innovation and Technology' category, which acknowledges and promotes breakthroughs that could significantly enhance commercial or public sector operations.

'Gwobr bwysig i 'Mathemateg yn Arbed Bywydau'

Mae prosiect o dan arweiniad y Brifysgol, sy'n defnyddio modelu mathemategol i ddatgelu'r rhesymau cymhleth am oedi ar wardiau ysbytai, i leihau amseroedd aros ac i achub bywydau, wedi ennill gwobr Times Higher Education uchel ei bri. Mae'r prosiect 'Mathemateg yn Arbed Bywydau' wedi ennill y categori Cyfraniad Rhagorol at Arloesedd a Thechnoleg, sy'n cydnabod ac yn hyrwyddo datblygiadau a allai wella gweithrediadau masnachol neu sector cyhoeddus yn sylweddol.

Doctoral training partnership

The future of biomedical research in the UK received a vital boost thanks to a new collaborative PhD training programme worth £4.6m. Largely funded by the Medical Research Council (MRC), the new award to the GW4 Alliance will help fund over 50 postgraduate research students over the next three years.

Partneriaeth Hyfforddiant Doethurol

Cafwyd hwb hanfodol i ddyfodol ymchwil biofeddygol yn y DU yn sgîl rhaglen hyfforddiant PhD gydweithredol newydd gwerth £4.6m. Bydd y dyfarniad newydd, sydd wedi'i ariannu gan y Cyngor Ymchwil Meddygol (MRC) yn bennaf, yn ariannu dros 50 o fyfyrwyr ymchwil ôl-raddedig dros y tair blynedd nesaf.

GW4

Fellow of the Royal Academy of Engineering

Professor Karen Holford was elected a Fellow of the Royal Academy of Engineering, one of the highest national honours an engineer can receive. The award recognises Professor Holford's distinguished research career in industry and academia, as well as her commitment to outreach activities and promoting engineering as a career.

Cymrawd yr Academi Beirianneg Frenhinol

Etholwyd yr Athro Karen Holford FREng (BEng 1984, PhD 1987) yn Gymrawd yr Academi Peirianneg Frenhinol - un o'r anrhyddedau cenedlaethol mwyaf y gall peiriannydd ei debyn. Mae'r anrhyddedd yn cydnabod gyrfa ymchwil nodedig yr Athro Holford mewn diwydiant ac yn y byd academaidd, yn ogystal â'i hymrwymiad i weithgareddau allgymorth ac i hyrwyddo peirianneg fel gyrfa.



Ser Cymru appointment

Professor Diana Huffaker, a leading expert in compound semiconductors (CS), was appointed to lead a new research laboratory with the power to turn the city into a global hub for CS research and exploitation.

Penodiad Sêr Cymru

Penodwyd un o arbenigwyr blaenllaw'r byd mewn lled-ddargludyddion cyfansawdd (CS) i arwain labordy ymchwil newydd gyda'r pŵer i droi'r ddinas yn ganolfan fyd-eang ar gyfer ymchwil ac ecsbloetio CS.

National Software Academy launched

A National Software Academy, set up to train and educate the next generation of software engineers in Wales, was launched by the University and Welsh Government.

Run in partnership with the Alacrity Foundation in Newport, the three-year degree programme (BSc Applied Software Engineering) has been set up by our School of Computer Science and Informatics to address the current unmet demand for skilled software engineers in Wales.

Lansio'r Academi Meddalwedd Genedlaethol

Lansiwyd 'Academi Meddalwedd Genedlaethol' ar gyfer hyfforddi ac addysgu'r genhedlaeth nesaf o beirianwyr meddalwedd yng Nghymru gan y Brifysgol a Llywodraeth Cymru.

Sefydlwyd y rhaglen gradd tair blynedd (BSc Peirianneg Meddalwedd Gymhwysol), a gaiff ei rhedeg mewn partneriaeth â Sefydliad Alacrity yng Nghasnewydd, gan yr Ysgol Cyfrifiadureg a Gwybodeg i fynd i'r afael â'r galw am beirianwyr meddalwedd medrus yng Nghymru, nad yw'n cael ei ddiwallu ar hyn o bryd.



Conserving the history of space exploration

Alumna Lisa Young (BSc 1996) who graduated with a degree in Conservation of Museum Objects and Archaeology, was at the heart of the conservation work on Neil Armstrong's spacesuit from his walk on the moon in 1969.

Cadwraeth hanes archwilio'r gofod

Roedd y cynfyfyrwr Lisa Young (BSc 1996), a raddiodd gyda gradd mewn Cadwraeth Gwrthrychau Amgueddfa ac Archaeoleg, wrth ganol y gwaith cadwraeth ar y siwt ofod a wisgodd Neil Armstrong wrth gerdded ar y lleuad ym 1969.

