Robotics research campaign launched

A meeting 20 years ago between two academics from opposite ends of campus sparked a research programme that is now offering new hope to stroke survivors.

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‘Fantastic’ announcement

Plans are being explored for potential collaborations with Channel 4 following the ‘fantastic announcement’ the corporation will locate its new national headquarters in Leeds.

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2023 PlasticFree pledge

Staff and students are being encouraged to “take up the challenge” after we teamed up with Leeds University Union in pledging to become single-use plastic-free by 2023.

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Revolutionising cancer diagnosis

Leeds has been awarded £10.1m from UK Research and Innovation to expand a digital pathology programme applying artificial intelligence research to cancer diagnosis.

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As we reach the end of a year of real and tangible progress at the University across a range of issues, we are celebrating the award of significant European research grants.

The European Research Council (ERC) has just announced awards of €573m to mid-career researchers from 40 countries, enabling them to build their teams and maximise the impact of their research. The award holders will carry out their projects at universities and research centres in 21 different countries across Europe, with 55 grants – the highest number of any country – coming to the UK.

The overall ERC budget from 2014 to 2020 is more than €13bn, as part of the Horizon 2020 programme. To date, the ERC has funded 9,000 leading researchers at various stages of their careers, and more than 50,000 postdocs, PhD researchers and others working at the frontiers of research. Such is the power of European partnership.

It is against this background that I congratulate Robbie Williams, Professor of Theoretical Philosophy, and Pietro Valdastri, Professor of Robotics and Autonomous Systems, for winning major consolidator grants in this round. Professor Williams’ €2m research programme – Group Thinking: New Foundations – aims to transform understanding of collective representation, its nature and its significance. It seeks to reveal the underlying unity between the facts that constitute the beliefs and desires of individuals and those of groups. Professor Valdastri’s €2.7m research programme – Novel Lifesaving Magnetic Tentacles – aims to test the fundamental principles that could enable intelligent tentacle-like robots to help surgeons by reaching deep into the human anatomy. This study will bring together robotics, magnets, manufacturing and medicine, and is the first time such robotic systems have been proposed.

Separate to the ERC grants, Dr Paolo Actis, from the School of Electronic and Electrical Engineering, has received €4m from the European Commission (EC) to lead a new project called Sentinel, training academic and industry researchers to apply ‘nanoelectrochemistry’ techniques to challenges from neurodegeneration to developing new energy materials.

In addition, Bruce Turnbull, Professor of Biomolecular Chemistry, has secured a further €4million from the EC. His highly interdisciplinary synBIOcarb European Training Network brings together chemists, structural biologists, biophysicists, cell biologists and protein engineers – who are pioneering the development of Synthetic Glycobiology – together with four SMEs that are leading industrial innovation in glycoscience and protein engineering.

Seen together, all these projects underline the rich diversity of our research, from the fundamental to the applied.

Since the Brexit referendum on 23 June 2016, the University has been awarded 100 grants by the EU with a value in excess of £51m – the seventh best record of any UK university.

It is therefore no surprise that I am keeping a close eye on events in Westminster. The agreement on the UK’s exit from the EU (now confirmed by the UK and the 27 EU nations) and the outline declaration for a future UK-EU relationship include a number of commitments that would provide greater certainty for universities, students and staff. This is, of course, subject to Parliamentary approval, with the vote on the Prime Minister’s proposed Brexit deal due to take place on Tuesday 11 December – the day this article is first published.

From the narrow perspective of higher education, ratification of the agreement would provide welcome commitments in relation to EU citizens’ rights; ongoing UK participation in Horizon 2020 and the Erasmus+ programme until their end dates; and the creation of a post-Brexit transition period lasting until (at least) 31 December 2020, during which there would be no substantive changes to immigration rules for EEA nationals entering the UK.

Further, the current outline declaration for a future UK-EU relationship lays foundations for the "terms for the UK’s participation in Union programmes, subject to the conditions set out in the corresponding (EU) instruments, such as in science and innovation, culture and education", which would translate to the UK’s role in Horizon Europe and the next Erasmus+ programme, both due to commence in 2021.

On the one hand, this leaves the way open to negotiate continued UK involvement in these important programmes; on the other, we have to recognise that the declaration is a high-level political document, leaving many key questions unanswered about future immigration policy for students and staff and the detailed terms of participation in Horizon Europe and Erasmus+.

In the unlikely event of a ‘no deal’ Brexit, the Government has confirmed it will protect several key areas unilaterally, with a particular emphasis on EU citizens’ rights, the position of EU students starting their studies in the UK in 2019, and the importance of underwriting existing commitments on structural funds, Horizon 2020 and Erasmus+.

At an operational level, the University is now part of the EU Settlement Scheme pilot project and work is underway on a wide range of issues that underpin our education and research mission. Given the significant downside of a ‘no deal’, I remain optimistic that good education and research relationships between the UK and the EU will remain in place in the future.

Brexit is, of course, only one of many new challenges to emerge in higher education during the past year. These include immigration, student funding policy and discussions about the best way forward for the Universities Superannuation Scheme. Separately and in combination, all four represent fundamental change and major risks to the future direction and funding of universities during the next few years.

Leeds is in a strong position to meet these challenges. The 2015-20 Strategic Plan, which has already achieved advances in education and research, will be carried through to completion. This includes some major upfront investments, including €150m in our academic staff and £520m to provide cutting-edge facilities and equipment for students and staff. Assuming that the key benefits are realised from these investments, we will have an excellent platform for the future.

The University also has a strong balance sheet, which means we can tackle the external financial risks in an intelligent and measured way. However, the nature and scale of these risks mean we cannot simply depend on increasing income during the next few years. On the contrary, we will have to slow down our commitment to further investment; carry out a comprehensive assessment of our cost base and embrace new ways of working to ensure continued academic and financial sustainability. This will be central to the Integrated Planning Exercise (IPE) – the University’s annual cycle of updating its planning assumptions and five-year financial forecasts – which will draw to a conclusion in spring 2019.

The first few months of next year will cast light on the likely impacts of these external challenges – Brexit, funding, immigration and pensions. It will be important to prepare for future developments in a measured and systematic way, whilst completing our existing Strategic Plan and articulating a longer-term vision for the University, which will enable us to thrive deep into the 2020s. None of this can be handled without detailed engagement, discussion and consultation with staff and students, and this will be a feature of the coming year.

Despite uncertain times, I hope all students and staff will have a restful and restorative break with friends and family during the holiday period… and I take this opportunity to thank you for all you have achieved in 2018 – this is much admired and greatly appreciated.

Vice-Chancellor, Sir Alan Langlands
Plans are already being explored for potential collaborations with Channel 4 following the ‘fantastic announcement’ the corporation will locate its new national headquarters in Leeds.

The biggest change to the structure of the organisation in its 35-year history will involve the city becoming home to 200 Channel 4 jobs, including key creative decision-makers responsible for commissioning content and programmes from producers across the UK.

Not only will this trigger significant investment in the city, the move also opens up exciting possibilities for collaborations between the University and the corporation.

Sir Alan Langlands, Vice-Chancellor, said: “The arrival of Channel 4 in Leeds is an exciting and significant development for the city and the region that we are so proud to be a part of.

“We look forward to the creativity and collaboration that will spring from new partnerships, and the potential opportunities for our students. As a top three university for Media and Communication Studies, according to this year’s Times/Sunday Times Good University Guide, and as an institution that prides itself on its enlightened approach to business, we are confident the University will be able to play a significant role in the city’s overall capacity to collaborate with, and support, Channel 4.”

Dr Beth Johnson is Associate Professor in Film and Media, and Director of Student Education in the School of Media and Communication.

She said: “This is a fantastic announcement for Leeds but, more broadly, it’s great to see such a significant media organisation commit to tackling some of the most urgent challenges facing our media.

“The School of Media and Communication looks forward to welcoming Channel 4 to the region, and to working together to understand these issues and build a new future for public broadcasting.

“Channel 4’s regional base in Leeds will provide an important and meaningful opportunity for students across the region to access a significant media organisation in a way that has not previously been possible. Such access provides a platform for students to re-imagine what contemporary media might be and do.”

The arrival of Channel 4 in Leeds is an exciting and significant development for the city and the region that we are so proud to be a part of.

Sir Alan Langlands, Vice-Chancellor

Regarding the possible research potential, Dr Johnson added: “In many ways, the remit of Channel 4 – to ‘foster the new and experimental … encourage pluralism, provide a favoured place for the untried and encourage innovation in style, content, perspective and talent’ – is a remit that speaks to the University, the city and the region as a whole. It’s a compelling alignment, and a hugely exciting one.”

About the Reporter

The Reporter is the University’s colleague magazine, produced by the Internal Communications team.

If you have an idea for a story or want to comment on this issue, please contact us at the.reporter@leeds.ac.uk or 0113 343 8562.

The front cover shows Professor Martin Levesley, who is using robotics technology to offer new hope to stroke survivors.

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News

Single Out: 2023PlasticFree pledge

Staff and students are being encouraged to “take up the challenge” after we teamed up with Leeds University Union (LUU) in pledging to become single-use plastic-free by 2023.

Single-use plastic items are designed to be used only once before they are thrown away or recycled.

The campaign – Single Out: 2023PlasticFree – crucially commits the University and LUU to phase out single-use plastic across the board, not just in catering and office spaces.

Dr Louise Ellis, Director of Sustainability at the University, said: “This is a huge commitment and a big challenge for us, but we are determined to play our part by acting together to reduce our plastic footprint.

“We’ve already made so much progress, with strong recycling rates and catering initiatives, such as our reusable cups, becoming an integral part of our operations.

“We hope this pledge inspires all staff and students to take up the challenge of collectively reducing our use of throwaway plastics, across campus and beyond. Everyone can play their part.”

Chris Morris, LUU Union Affairs Officer, said: “We are looking forward to working in partnership with the University to make sure we all have a positive impact on this future-defining issue for the planet.”

The campaign will profile the University’s influential research into the environmental, social and economic impacts and opportunities of plastics in materials and processes.

Sir Alan Langlands, Vice-Chancellor, added: “This new drive will also have a series of targets to reduce use of all kinds of plastic, improve recycling capabilities and build on our ground-breaking research to tackle this important global challenge.”

Professor Dame Jane Francis, Director of the British Antarctic Survey and prominent polar scientist, is the University’s Chancellor. She said: “As a leading research university, we also have an important role in developing expertise. From working on alternatives to plastics and helping improve waste management, we’ll be supporting the difficult challenges ahead to ensure plastics don’t end up in the natural environment.”

Support the #2023plasticfree pledge on Twitter @UoL_Sus, Instagram @uol_sus or email plasticfree@leeds.ac.uk with your ideas.

“ This is a huge commitment and a big challenge for us, but we are determined to play our part by acting together to reduce our plastic footprint.

Dr Louise Ellis, Director of Sustainability

New Blueprint for sustainability

After eight successful years of the Green Impact scheme, we have launched the next exciting stage of our journey towards becoming a sustainable organisation.

Blueprint provides a framework for sustainability that allows Schools, Services and the people within them to work on the environmental and social issues that matter most to them.

It ensures any sustainability work is aligned to School or Service-specific challenges and looks to identify opportunities for further improvement and greater collaboration.

Dr Louise Ellis, Director of Sustainability at the University, said: “The real achievement with the scheme is in the journey you choose to take.

“Every Blueprint will be different, but all of them will be aligned to the University’s core values and directly linked to the Sustainability Strategy.”

Teams self-assess their progress every year, after which trained student auditors will validate their assessment. All of the Blueprint teams will then have their achievement and progress recognised at the University’s Annual Sustainability Awards.

Email Sustainability Services at sustainability@leeds.ac.uk or visit www.sustainability.leeds.ac.uk/blueprint/ to sign up to the scheme.
Leeds researchers have been awarded £10.1m from UK Research and Innovation (UKRI) to expand a digital pathology and artificial intelligence (AI) programme across the North of England.

Greg Clark, Secretary of State for Business, Energy and Industrial Strategy (BEIS), made the announcement, which forms part of the Industrial Strategy Challenge Fund.

The successful partnership bid, led by the University and Leeds Teaching Hospitals NHS Trust (LTHT), embraces a network of nine NHS hospitals, seven universities and 10 industry-leading medical technology companies, called the Northern Pathology Imaging Co-operative (NPIC).

The UKRI funding is boosted by an initial investment of £7m from the companies involved in the programme.

The consortium is now poised to become a globally-leading centre for applying AI research to cancer diagnosis.

Sir Alan Langlands, Vice-Chancellor, said: “New technologies such as artificial intelligence have the potential to transform how we diagnose cancer and other diseases, and the University is making great advances in this area.”

Dr Yvette Oade, Chief Medical Officer at LTHT, said: “This is a really exciting step for patients because computers using artificial intelligence can be trained to recognise the patterns of disease. Machines will support clinically-trained pathologists to diagnose cancer faster, better and at lower cost.

“We can also explore how to use digital pathology as part of precision medicine to ensure patients receive treatments tailored to their disease. This is a huge opportunity for Yorkshire to lead in this new area and further enhance our position as a hub for medical technology.”

The work will stimulate AI research locally in academic and business sectors, creating jobs and supporting economic growth across the Leeds City Region.

This is a huge opportunity for Yorkshire to lead in this new area and further enhance our position as a hub for medical technology.

Dr Yvette Oade, Chief Medical Officer at LTHT

Exciting new plans for innovation district

Exciting proposals for a brand new hospital development to transform Leeds General Infirmary (LGI) have been welcomed by the University.

Plans by Leeds Teaching Hospitals NHS Trust (LTHT) for two state-of-the-art buildings, including a dedicated Children’s Hospital on the LGI site, have been submitted to Leeds City Council.

They are part of an ambitious, long-term vision for LGI, which aims to revolutionise health services for patients in Leeds and the wider region.

The University enjoys a long-standing partnership with LTHT based on clinical and academic research and innovation, teaching and strategic development in the city.

And this landmark development will see LGI become the cornerstone of the new Leeds Innovation District, strengthening links between the hospital and the University.

Nexus – our new £40m innovation centre – is the first tangible asset in the Leeds Innovation District. It will support our partnerships with LTHT, harnessing research capabilities across areas such as medtech, cancer, cardiovascular, musculoskeletal, clinical trials and digital health.

Dr Martin Stow, Nexus Director and Leeds Innovation District board member, said: “We’re thrilled to be at the heart of the new Leeds Innovation District, and LTHT’s plans represent an exciting opportunity to put Leeds at the cutting-edge of healthcare innovation.”
An ambitious sculpture honouring revolutionary science will feature prominently on the side of the new building. The two-storey artwork by Sara Barker has been given the green light by Leeds City Council’s planning department.

The design will feature on the Sir William Henry Bragg Building, which is under construction in Woodhouse Lane and honours Sir William’s pioneering research in developing X-ray crystallography at the University in the early 20th century. Bragg and his son were awarded the 1915 Nobel Prize in Physics for their work.

Within the sculpture lies symbolism that alludes to the Bragg equation, which explains the relationship between X-rays directed onto a crystal and their diffraction, allowing the atomic structure of materials to be investigated. Parts of the sculpture will be finished with iridescent paint, so it changes colour as viewed from different angles. This type of paint was developed by Professor Helen Gleeson, the current Cavendish Professor of Physics at Leeds – the same position held by Bragg in his day.

The new building is scheduled to open in late summer 2020, and the dramatic sculpture reflects the University’s ambition to deliver a step-change in the research activity in engineering and physical sciences, to enhance a culture of multi-disciplinary working and support significant advances in our understanding of the physical world.

Dr Jim Young, Programme Director for the building, said: “We are extremely pleased this beautiful artwork has received planning permission from the council. It is a unique and intelligent piece of art and I look forward to seeing it in all its glory.” Not only will this visually enhance the landscape outside the Roger Stevens Building, it will also provide research-led teaching opportunities for students.

Work has begun on an innovative project to improve the Roger Stevens cooling pond.

The imaginative scheme – led by Estates Services – features floating ‘islands’ containing a range of plants to increase biodiversity and enable ecosystems to flourish, creating an extra ‘green’ dimension to this part of campus.

Teams from across campus worked together to co-create a solution for the site, which improves natural water quality and reduces operational costs.

The installation of sensors within the pool will also provide live data on water quality and a variety of environmental parameters, which will be made available to staff and students for interdisciplinary, research-led teaching.
Campus

Building a campus for the future

The University’s commitment to delivering world-leading research and exceptional student education and experience continues to manifest itself in an ambitious plan to deliver a campus for the future.

Featured here is a timeline of key campus development projects and anticipated completion dates.

Priestley Building – Completed
The investment at the School of Earth and Environment has created multi-disciplinary meeting and teaching spaces for staff and PhD students. A new collaborative space for the Priestley International Centre for Climate marks the establishment of both the Priestley Centre research platform and a Leeds Met Office Joint Research Unit.

Faculty of Biological Sciences’ new laboratory – Completed
A new two-storey laboratory building will host teaching from January 2019. Following this, in Early Spring, an 18-month project to refurbish areas in the existing Garstang and Astbury buildings will begin. The investment and improvements will continue driving forward the growth of research income and create a new, flexible model for open laboratory and office environments, facilitating collaborative working.

Nexus – Early 2019
Situated in ‘Discovery Way’, a major new pedestrian entrance to the University campus from Woodhouse Lane, Nexus is spread across six floors and will be a hub for the growing innovation community in Leeds. Nexus will seamlessly connect businesses to the academic expertise, talent and facilities across the University.

Parkinson Building improvements works – May 2019
This project involves upgrading the iconic Parkinson steps and handrails, together with the installation of an external lift, making it possible for wheelchair users to enter the building using the main entrance.

Leeds University Business School (LUBS), Phase 2, Newlyn Building – Spring 2019
Construction of major new central teaching facilities supporting the success and growth of LUBS and the School of Law is underway. A multi-million-pound investment scheme at Mount Preston Street will provide additional central teaching space.

Details of all projects can be found at www.campusdevelopments.leeds.ac.uk
Alumni campaign launch

Making a ‘step’ change

Donations from alumni and friends of the University to the Footsteps Fund have already supported a range of research projects.

Brain cancer

While the treatment of many cancers has seen major improvements, the prognosis for brain cancer patients has barely changed in 20 years.

Leeds researchers, led by Professor Susan Short, are pioneering a revolutionary viral therapy, which could one day give real hope to patients.

Almost 800 Footsteps Fund donors responded to our appeal, enabling the team to recruit specialist Neuro-Oncology Research Radiographer, Sharon Fernandez. Her work will be crucial both to recruiting patients onto trials of new therapies and giving them the best possible experience during their treatment.

This support has also enabled us to appoint a research technician, who will use mouse models to replicate drug and imaging trials – and test out new ideas in the lab.

Heart disease and diabetes

Professor Mark Kearney, British Heart Foundation Professor of Cardiovascular and Diabetes Research, is leading ground-breaking research into the link between these two conditions – a field for which Leeds is internationally renowned.

Type 2 Diabetes is a growing problem throughout the world, related to environment and nutrition, and a significant cause of mortality and morbidity. And the outcomes for heart patients with diabetes are much worse.

Gifts to the Footsteps Fund allowed Mark to recruit outstanding young graduate, Nele Warmke, to join the research team.

Microbubbles

Leeds researchers are investigating how tiny bubbles can be used to deliver drugs to treat cancer.

Professor Steve Evans and his team designed and built the HORIZON machine, which can produce up to a billion of the bubbles in just three minutes. They believe the bubbles could carry medication around the body, before delivering it directly where it is needed, avoiding the devastating side-effects of chemotherapy.

Thanks to the support of Footsteps Fund donors, the team is now looking to recruit a Post-Doctoral Research Associate to examine how microbubbles can be used to address a variety of further medical conditions, including targeting vascular disease and delivering oxygen to unborn babies.

A meeting 20 years ago between two academics from opposite ends of campus sparked a research programme that is offering new hope to stroke survivors.

“It wasn’t something I knew anything about at all,” says Martin Levesley, recalling that first meeting with Bipin Bhakta, from the Faculty of Medicine and Health.

“My field was aerospace,” says Martin, now Professor of Dynamics and Control in the School of Mechanical Engineering. “I’d come to Leeds to work on vibration engineering, so Bipin’s idea came completely out of the blue.”

The idea was simple: “He asked if we could build a robot, which would mimic the work of a physiotherapist and help people who have suffered strokes to regain use of their arms and hands. He said: ‘You’re an engineer, surely you could do this. How hard can it be?’ It was a fascinating challenge.”

It addressed a particular need for the stroke patients Dr Bhakta – later Professor of Rehabilitation Medicine – treated at his clinics in the Leeds Teaching Hospital NHS Trust.

“Typically, a stroke destroys vital connections that allow us to carry out basic motor tasks,” Martin explains. “Physiotherapy is aimed at rebuilding neural pathways, so patients ‘relearn’ how to send signals from their brain to their hands and arms and regain the function they enjoyed before the stroke.”

Though crucial to the patients’ independence, physiotherapy on the upper limbs is not the primary focus of their treatment. Instead, the NHS – pressed for space and resources – concentrates on patients’ lower limb movement, so they can be up and moving.

“The focus is really on getting people out of hospital to receive their care in the community,” says Martin.

Once home, the rehabilitation continues, though for their upper limb movement, stroke patients receive only short one-to-one physiotherapy sessions. While they may be prescribed an exercise regime to follow at home, patients often find this dull and repetitive.

Bipin saw robotics as the way to overcome these challenges. A device that patients could use in their own home would give them physiotherapy as frequently and for as long as they wish without the need to visit hospital. And by linking the device to a computer screen, the exercises could be made more stimulating and interesting.

After years of research, testing, trial – and plenty of error – Martin and his team have...
Brightest minds pioneering the research project

Young researchers – from the very brightest undergraduates through to PhD students and post-doctoral researchers – have worked on the project, building, testing and refining the robots and creating new games.

Adam Metcalf is a former British Army vehicle mechanic and, after a tour in Afghanistan, came to Leeds to study engineering with a view to working on military hardware.

But an Undergraduate Research and Leadership Scholarship changed the direction of Adam’s studies, allowing him to join the stroke research team during his summer vacation, working on the design of the robotic arms.

Having graduated in July with a First, Adam is now studying for a PhD with the stroke rehabilitation engineering group, examining and comparing control strategies for MyPAM.

He said: “I’m looking at a more complex control strategy, to determine whether the extra cost of this would translate into genuine patient benefit, especially during the early stages of their rehabilitation. My aim is to have a finished system by the end of my PhD.”

The University’s Footsteps Fund is supporting Professor Levesley’s work to help develop this technology. See www.leeds.ac.uk/StrokeRehabRobotics for details of how you can get involved.

Brain activity is going under the microscope as the research team seeks new ways to help stroke survivors.

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The University’s Footsteps Fund is supporting Professor Levesley’s work to help develop this technology. See www.leeds.ac.uk/StrokeRehabRobotics for details of how you can get involved.
The University has officially launched a new project outlining its commitment to further support estranged students.

The StandAlone Pledge has been signed by Professor Tom Ward (pictured), Deputy Vice-Chancellor: Student Education.

StandAlone – a charity that supports estranged adults – has challenged all universities to develop their support for students facing such hardships, enabling them to succeed in higher education.

Estranged students are those studying without the support or approval of a family network. Estrangement can be caused by a wide range of issues, from abuse, honour-based violence or forced marriage, to clashes in religious or political beliefs, LGBT+ issues, or even just attending university against their family’s wishes.

They face particular challenges in accessing student finance. Lack traditional support networks and are at high risk of homelessness, especially during vacations or as they finish their course. About 70 estranged students are currently studying at Leeds.

Professor Ward said: “Here at Leeds, we believe all students should have the opportunity to realise their potential, regardless of their background, and we recognise the particular challenges faced by estranged students.

“The signing of the pledge is just the first step in our commitment to supporting estranged students.”

Leeds already has many successful schemes from which estranged students can benefit, but the University has also identified areas where it could do more, and signing the pledge is a major part of that project.

One key development has been the creation of a package of accommodation support, which includes a guaranteed place in University residences 365 days a year, as well as a waiver of the security deposit until student loans are received.

Students can also apply to the Hardship Fund, the criteria for which are being reviewed to ensure all estranged students are eligible to apply for support during the summer vacation.

Call for Change Champions

Do you want to play a part in the future of student education administration?

The Student Lifecycle Programme (SLP) is recruiting a network of Change Champions to drive positive change in our systems and processes during the next four years.

The SLP is looking for people from across the Faculties, Schools and Student Education Service to advise, support and challenge the programme team on all areas of the student experience, from enquiries through to graduation.

Anyone who plays a part in student education administration can apply. A separate academic advisory team is being set up, along with a student focus group, but the Change Champion network is a wider group for everyone who wants to be involved.

You will provide expert insight to help shape the programme’s focus and will act as a key contact between the SLP and your team. You’ll be canvassing views and acting as your team’s voice as the University embarks on a long-term transformation that will help the people who do the work to define their roles.

Being part of the Change Champions team will also give you, as an individual, the chance to drive your own personal and professional development in areas such as presentation skills and team working.

The SLP will shortly be issuing a role profile for the Change Champions team, but email the SLP team at SLP@leeds.ac.uk to register your interest. And visit the SLP In Depth page at www.leeds.ac.uk/studentlifecycleprogramme for further information.

New apprentices

The first ever cohort of students has been welcomed on to a new computer science degree apprenticeship launched in partnership with the University.

Leeds has teamed up with PwC – the global professional services firm and one of the UK’s largest graduate employers – to develop the programme, aimed at growing the next generation of technology talent in an increasingly digital world.

The innovative degree programme will see students combining university life with practical work-based technology projects.

At the end of the four-year course, those meeting the performance criteria of both the University and PwC will earn a degree in Computer Science and continue their career at the firm.

Gryphons’ first Varsity victory

History was made on Wednesday 3 October when the University beat local rivals Leeds Beckett to win its first ever Leeds Varsity.

This is an iconic event in the city’s sporting calendar, and consists of fixtures across the year culminating in one final day of competition, where 50-plus fixtures are played and the winner crowned.

Leeds Beckett has walked away with the trophy for the past 13 years, but this year it was finally the turn of the Leeds Gryphons.

Life-saving skills

More than a thousand people have learned life-saving CPR skills thanks to the success of a student-led campaign.

Volunteers from the School of Medicine’s Clinical Skills Team staged a series of drop-in sessions on campus and in the city centre, as part of the global Restart a Heart Day initiative.

Sessions also supported the University’s recent initiative in which 17 new defibrillators were installed across campus.
People

Our Women of Achievement 2018

The outstanding achievements of 15 female colleagues and students were recognised at this year’s Women of Achievement Awards.

Held for the fifth time, the Awards are a key part of the University’s Leeds Gender Framework. They celebrate the significant contributions and impact the winners have made across the University and beyond.

The Awards were hosted by Professor Lisa Roberts, Deputy Vice-Chancellor: Research and Innovation. Alumna and Chief Executive of the Southbank Centre, Elaine Bedell, gave a keynote speech and presented winners with their certificates.

Winners were all nominated by their peers, and represent academic and professional staff, as well as students, from across the University. They share a common commitment to excellence and have performed outstandingly in their fields, whether this be in research, student education or student experience, scholarship, leadership of key University initiatives, or supporting administrative and technical activities.

Our Women of Achievement 2018

- Professor Barbara Evans School of Civil Engineering
- Dr Claire Eldridge School of History
- Professor Claire Honess School of Languages, Cultures and Societies/Leeds Doctoral College
- Dr Cristina Stefan School of Politics and International Studies
- Elizabeth Kapasa School of Mechanical Engineering
- Professor Fiona Meldrum School of Chemistry
- Professor Jane Nixon Leeds Institute of Clinical Trials Research, Faculty of Medicine and Health
- Dr Julia Steinberger School of Earth and Environment
- Dr Katie Field School of Biology
- Lenka Vráblíková School of Fine Art, History of Art and Cultural Studies
- Dr Louise Ellis Sustainability Services
- Pamela Macpherson-Barrett Head of Policy, Funding and Regulation, Strategy and Planning
- Professor Pinar Akman School of Law
- Professor Wändi Bruine de Bruin Centre for Decision Research, Leeds University Business School

Double appointment for Nexus

Nexus – the University’s new £40m innovation centre – has strengthened its team with the appointment of two experienced figures from the worlds of research and innovation.

Adding to a dedicated team responsible for facilitating productive new working partnerships and collaborations between businesses and the University, Chelsea Hardy joins Nexus as Engagement Manager.

She will be responsible for initial liaison with organisations, matching business needs to the University’s research, facilities and talent.

As Collaboration Manager, Dr Harrison Evans will provide Nexus members with seamless access to the academic expertise, facilities and talent at Leeds, and will oversee its existing commercial relationships across Research and Innovation and the wider University. He will also be intrinsically involved in building relationships with businesses in the Nexus community.

New Chair for White Rose

Sir Alan Langlands has been appointed as the new Chair of the White Rose University Consortium (WRUC).

The WRUC combines the strengths of the partner universities – Leeds, Sheffield and York – to add value from joint activity across research, knowledge exchange, learning and teaching.

Established in 1997, the WRUC has helped secure in excess of £180m of external funding for collaborative initiatives.

Sir Alan, Vice-Chancellor at Leeds, said: “I am delighted to be appointed as the next Chair of the White Rose.”

Sir Alan’s role commenced on 1 August.
In the news

Dr Bernadette Moore (Food Science and Nutrition – MAPS) led a study that highlights high sugar levels in most yogurt products, particularly organic yogurts and those marketed towards children. The study received wide media coverage, including the BBC, The Guardian, Huffington Post and more than 50 regional radio stations.

Dr Adriane Esquivel Muelbert and Professor Oliver Philips (Geography), with a team of more than 100 scientists, have assessed global warming’s impact on thousands of tree species across the Amazon rainforest, assessing the winners and losers from 30 years of climate change. Their analysis found that the effects of global warming are altering the rainforest’s composition of tree species, but not quickly enough to keep up with the changing environment. This was featured in National Geographic, the Daily Mail, The Independent and more.

Dr Richard Cubbon (LICAMM – Medicine and Health) has led research that has found nearly one in four deaths in people with heart failure are caused by sepsis, and created a profile to identify patients most at risk. The research was featured in the Daily Mail, The Sun, Yorkshire Post and others.

Professor Manuel Gloor (Geography) co-authored a study with former Leeds research fellow, Dr Jonathan Barichivich, of more than 100 years of river level records from the Amazon, which showed a significant increase in frequency and severity of floods. The findings could help predict the probability of flooding extremes in advance and help mitigate the impacts for urban and rural Amazonian populations. This was featured in The Independent, Daily Mail, Metro and many more.

Professor Peter Selby (LICAP – Medicine and Health) has co-authored research that suggests Brexit could have a catastrophic impact on UK cancer research and may trigger a researcher crisis. The study found there is an increasing number of scientific papers on cancer published by teams with at least one non-UK European-born member of staff. This received wide media coverage on the ITV website, in the Daily Mail and more than 50 regional newspapers.

Dr James Tate, Dr John Nellthorp and Dr Zia Wadud (all ITS – Environment) and PhD researcher Kate Palmer (Engineering) have led research that found pure electric cars cost less over four years than petrol or diesel cars in the UK, US and Japan, but China is poised to lead the market. The research was featured in the Daily Mail and MSN UK.

Dr Caroline Orfila (Food Science and Nutrition – MAPS) discusses on BBC Radio 4 her recent research that suggests the lack of fortification in gluten-free food may increase the risk of micronutrient deficiencies for consumers who depend on these products. This was also featured in the Daily Mail.

Professor Sheena Radford and Professor Neil Ranson (FBS) have used the world’s most powerful microscopes to reveal the structure of ‘amyloid’ proteins, which underpin diseases like Alzheimer’s or Type 2 diabetes. Knowing what the proteins look like is the first step to disrupting their activity. Their findings have been featured in the Yorkshire Post and Science Daily.

Ruairi O’Driscoll (Psychology – Medicine and Health) is quoted in an article concerning a study he led, which suggests many fitness trackers are not very accurate at measuring how much energy people burn. This study received coverage in United Press International and many more.

Dr Elizabeth Ilett and Dr Rob Berkeley (both LiCAP) have led a study investigating reovirus, which has shown renewed promise of viruses in the treatment of cancer, after new research revealed they retain their cancer-killing ability even when injected into the bloodstream. This study received coverage in Reuters, Business Insider, Yahoo and many more.

Professor Stephen Burkinshaw (Design – AHC) is quoted in a BBC News article looking at University spin-out company Xeros, which makes washing machines that use polymer beads to reduce water use by 80%. He said nylon polymers “have an inherent polarity that attracts stains” and can replace most water in a laundry cycle.

Dr Mat Callister and Professor Richard Neal (both LIHS – Medicine and Health) were featured in the Yorkshire Post for leading the Leeds Lung Health Check, a new mobile screening trial in the city designed to help detect the early signs of lung cancer. The unit will be at Elland Road until Friday 21 December 2018.

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Honours

Researchers join forces to win award

Researchers from Leeds and Queen’s University Belfast have won the prestigious 2018 European Health Award. The coveted accolade honours initiatives that help tackle some of Europe’s most pressing health challenges.

The award-winning project is part of a pan-European partnership between cancer patients, healthcare professionals and cancer researchers, called the European Cancer Concord® (ECC).

One of the key outputs from the research has been the development of a 70:35 Vision – 70 per cent long-term survival for all cancer patients across Europe by 2035.

Peter Selby, pictured above, is Professor of Cancer Medicine at Leeds and President of the ECC. He said: “This is a superb example of how cooperative European activities that involve sharing best practice between countries can result in top-class prize-winning initiatives.”

In a joint statement, Professor Ian Greer, President and Vice-Chancellor of Queen’s University Belfast, and Sir Alan Langlands, Vice-Chancellor at Leeds, said: “We are immensely proud that an initiative, which was developed and conducted by Queen’s University and the University of Leeds, has been recognised across Europe as a quality exemplar of best practice.”

Professor Lawler, Chair in Translational Cancer Research at Queen’s University Belfast and ECC Vice-President, said: “Cooperation is the key to this initiative. We need to compete, not against each other, but against our common enemy – cancer.”

Celebrate staff successes

Here we highlight the achievements of colleagues in a host of awards and honours.

Email internalcomms@leeds.ac.uk if you or one of your colleagues would like to be featured in Reporter or the monthly For Staff spotlight.

Dr Amanda Maycock, Associate Professor in Climate Dynamics at the Institute for Atmospheric and Climate Science, has received a Philip Leverhulme Prize 2018 and an Arne Richter Award for Outstanding Early Career Scientists from the European Geophysical Union for her work on Earth’s climate.

Dr Saurabh Lal, Research Fellow at the School of Biomedical Sciences, has received the Heinz Mittelmeier Research Award for Applications of Ceramic Implants in Endoprosthetics from the German Orthopaedic Association (DGÖOC) for his outstanding research and development work.

Dr Laura Britten, from the School of Biomedical Sciences, has been elected Fellow of the Higher Education Academy through the University’s Professional Recognition in Student Education (PRiSE) scheme. She has been elected in recognition of her commitment to being part of the vibrant student education community and continued professional development of teaching and support of learning at the University.

Professor Animesh Jha, from the School of Chemical and Process Engineering, has been elected as a Fellow Member of The Optical Society. He has been honoured specifically for significant achievements in the engineering and development of novel glass and glass-ceramic materials, and devices for photonic and bio-photonic applications, as well as for actively serving the optical community.

Professor Steven Freear, from the School of Electronic and Electrical Engineering, has been awarded the Distinguished Service Award by the Institute of Electrical and Electronics Engineers (IEEE) for his accomplishments as an Editor-in-Chief of the IEEE Transactions on Ultrasonics, Ferroelectrics and Frequency Control.

Dr Amanda Maycock, Associate Professor in Climate Dynamics at the Institute for Atmospheric and Climate Science, has received a Philip Leverhulme Prize 2018 and an Arne Richter Award for Outstanding Early Career Scientists from the European Geophysical Union for her work on Earth’s climate.

Jennifer Spragg, Postgraduate Researcher at the School of Chemical and Process Engineering, has been awarded the Ashok Kumar Fellowship 2018 by the Institution of Chemical Engineers and the UK Parliamentary Office for Science and Technology, and will advise MPs on chemical weapons policy issues.

Alan Turing Institute Fellowships

A total of 24 researchers from the University will begin Fellowships at The Alan Turing Institute, as part of our shared commitment to make great leaps in data science research to change the world for the better.

The prestigious two-year Fellowships, which are the next stage in a partnership announced earlier this year between the University and the UK’s national institute for data science and artificial intelligence (AI), are awarded to individuals with proven research excellence in data science, AI or a related field.

The 24 Fellows, who cover a range of disciplines and represent multiple Faculties across the University, will join the Turing’s existing community of researchers, who are advancing data science and AI to address a number of ambitious challenges facing science, society and the economy.

Leeds Institute for Data Analytics (LIDA) will play a major role in the coordination of projects and activity amongst Turing Fellows and their research teams.
Public engagement

High standards are honoured

The University has marked another year of fantastic public engagement (PE) work.

The 2018 Public Engagement with Research Awards – which saw a very high standard of entries – have been presented to researchers across a range of Faculties.

Applications were reviewed by a panel of external experts, including the Director of the National Co-ordinating Centre for Public Engagement, Heads of PE at other Russell Group universities and managers from the Wellcome Trust and UK Research and Innovation (UKRI).

Dr Alexa Ruppertsberg, Head of PE, said: “The PE awards recognise people for excellent public engagement or patient involvement and engagement. Our judging panel was delighted to review applications of such a high standard.”

Delivering Research in Partnership Award Winner: Professor Ingrid Sharp and Dr Corinne Painter (School of Languages, Cultures and Societies)

This project was developed in close collaboration between cultural and gender historians working within German studies, together with theatre company Bent Architect. The partnership told the story of the 1918 German Revolution that brought the First World War to an end, focussing on the ordinary populace, specifically women, who actively opposed the war and supported the revolution.

Disseminating Research Results Award Winner: Dr Elizabeth Gaston, Dr Jane Scott and Ian Rees (School of Design)

This PE activity disseminated the findings of recent knit design research, using botanical models of growth to inspire shape-changing knit-work undertaken by Dr Jane Scott, and the performance craft methodology developed by Dr Elizabeth Gaston during her PhD research. In collaboration with the Crafts Council and Leeds Arts University, a series of connected activities were introduced through four-day workshops in schools, aimed at transforming knowledge and engagement with textiles for pupils in the Yorkshire region.

Developing Research Ideas Award Winner: Elspeth Mitchell and Sarah Harvey Richardson (School of Fine Art, History of Art and Cultural Studies)

Elspeth and Sarah worked with two groups of secondary school girls in Leeds on a programme to explore the power of images and confront the ways social media and ‘selfie culture’ shape attitudes and beliefs about women. They organised sessions with a group of girls from their defined audience, exploring personal experiences, introducing inspirational artists and equipping participants with image-making tools and techniques. These activities culminated in a public exhibition visited by 200 people.

Engagement Excellence: Class of 2017/18

The Engagement Excellence Scheme is a programme that aims to support upcoming stars in PE/Patient and Public Involvement and contribute to improving impact and dissemination of research.

Congratulations to Dr Sophy Barber (Dentistry), Dr Jessica Hammett (History), Dr Claire Brockett (Mechanical Engineering) and Dr Clare Harley (Healthcare).

New public engagement criterion is increasingly being used to determine academic promotion at the University.

Figures show use of the criterion in successful applications has risen from a quarter to a third since it was introduced in 2016/17.

The Faculty of Arts, Humanities and Culture leads the way with 37% of successful applications, but the PE team is delighted to see a significant increase from the faculties of Engineering, Environment and Medicine and Health.

Three quarters of successful applicants using the criterion were from the Research and Innovation route, highlighting the importance of leadership or involvement in public engagement activities with research.

Research Development Fund applications

The next round of applications for funds to support involving the public in shaping or developing research ideas is now open.

There have been more than 20 applications under the Research Development Fund Awards Scheme since September 2017, with in excess of £8,000 committed to date and £2,000 paid to successfully completed projects.

Supported by Wellcome Trust ISSF funding, awards of up to £500 are available to support patient/public/stakeholder involvement or engagement in the research design stage. The next round of awards is open until 4 January 2019.

See www.leeds.ac.uk/ResearchDevelopmentFund for further information and to apply.
Events

Goodbye to all that?
Legacies of the First World War
Until 31 January 2019 at the Treasures of the Brotherton Gallery

What happened after the guns fell silent on the Western Front?

One hundred years after the Armistice on 11 November 1918, this exhibition explores the legacies of the First World War. Learn about the stories of the children, women and men who experienced the conflict and the lasting impact on their lives.

The exhibition tells the stories of people in Yorkshire, and beyond, getting used to life after the 'War to End All Wars'. With themes of grief, memory, disability, women’s rights and politics, the stories still resonate today.

The display is co-curated by PhD students Eilis Boyle and Alexander Shaw, together with Professor Alison Fell.

The exhibition displays items from the University’s Special Collections, including objects from the Liddle Collection of material from the two world wars.

Features of the exhibition include:

Brought together by grief

Ernest Blackburn, from Leeds, was reported missing in 1916. His widow, Sarah, was not told of her husband’s death until eight months later. The exhibition displays letters from Lily Daws to Sarah. The women had never met, but their husbands fought together – they looked to each other for advice and comfort.

What about the women?

The deaths of more than 700,000 men prompted a post-war myth of ‘surplus women’. This meant women were regularly given advice about how to find husbands, such as in 1938’s Live Alone and Entertain, a copy of which forms part of the exhibition. Marjorie Hillis and Bertina Foltz’s book suggested “getting the man with the meal”.

Entry to the exhibition is free. Visit www.leeds.ac.uk/galleries for further information and opening times.

Staff Festival 2019: Save the date!

Make sure you save the date for next year’s instalment of the hugely popular Staff Festival.

Organisers are planning the entertainment extravaganza for Friday 28 June 2019, with some exciting new additions in store following staff feedback from the 2018 event. All will be revealed nearer the date!

Held in July, ‘A Festival of Making’ featured a packed programme, including workshops, refreshments, live music, games and competitions for all ages. Thousands of people flocked to campus to enjoy the celebrations, with a subsequent survey revealing the vast majority of those attending thoroughly enjoyed the mix of activities. But there is always room for improvement!

LOGIK Centre manager and Staff Festival project manager, Jo Westerman, said: “We’re going all out to try and make next year’s Staff Festival the best ever.

“Our dedicated committee members have already been meeting to start the planning process, and we hope as many staff as possible will mark the day in their diaries to join in the fun.”

Be Curious 2019: A Brave New World

University researchers will be embracing a Brave New World when they showcase their work in a hugely popular public engagement (PE) event.

This is the theme for Be Curious 2019. Taking place on Saturday 30 March 2019, it once again seeks to engage the general public in the pioneering studies undertaken in Leeds.

With more than 40 family-friendly activities on offer, the 2018 instalment of the annual attraction demonstrated yet again why this has become a favourite way for many researchers to share a flavour of their work with the community, while others see it as the perfect opportunity to take their first steps in PE. Many of those who attend the event are children enjoying their first taste of university life.

Promoting your events

Do you want to promote a University-related event to colleagues, students or the general public? If your event is official and supported by the University, the Internal Communications team can help you promote it. Simply click on the ‘Submit your event’ button on the For Staff homepage. If you have a good image you would like to use alongside your event listing, please email this to internalcomms@leeds.ac.uk. Images need to be high quality.
Tell us a bit about yourself
I bring to my role at the University experience of working on a large-scale IT Programme in the NHS for more than 12 years, supporting stakeholders and end users through project implementation into ‘business as usual’. In my role as Account Manager on the NHS Electronic Staff Record Programme, I was focused on engaging key stakeholders in maximising their functionality use and deriving associated benefits in alignment with local and national workforce agendas.

What does your new job involve?
I will be responsible for driving forward the adoption of innovative, sector-leading digital education systems at the University, and enabling end user (staff and students) involvement in enhancing digital systems already in use. The Digital Education Systems Manager is a new role for the University, created to focus on the delivery of new digital education systems, and the enhancement of systems already in use, in alignment with the Digital Strategy for Student Education and the Blended Learning Strategy. I will work closely with the Dean of Digital Education, Professor Neil Morris, to fulfil this remit.

What are the strategies?
The Digital Strategy for Student Education sets out the University’s expectations for the provision of digital technologies and services across the institution, to enhance the quality of the student experience. This encompasses the provision of University-wide digital education systems, such as Lecture Capture and Minerva (Portal and VLE), Blackboard Collaborate and Rosetta Stone, as well as external learning platforms Coursera, FutureLearn, Blackboard Open Education, iTunesU, Box of Broadcasts and the Jisc Store. The Blended Learning Strategy describes the University’s expectations about the ways in which digital technologies, tools and systems should be used to enhance the student experience, providing a flexible and inclusive curriculum.

What excites you about this role?
I’m passionate about the benefits digital systems can afford to end users and organisations. I’m very excited to take on this new role, which offers the opportunity to lead digital education implementation projects and create relationships with system suppliers and partners, service providers and other stakeholders, to ensure the provision of an excellent experience for staff and students.

What projects and initiatives are you currently working on?
We recently completed a tender process to select a supplier to deliver a Mobile Voting solution for the University. Top Hat Monocle will work with University stakeholders to deliver this technology, with the pilot project running during the current academic year. The functionality will provide institution-wide in-class voting capabilities to encourage active learning in teaching sessions. I will also be leading on the establishment of a formal mechanism to obtain feedback from staff and students on the digital education systems being utilised. This will be achieved through the creation of user groups reporting into the digital education system’s Operation Groups and Digital Education Committee. The creation of these groups is pivotal to ensuring digital education systems remain fit for purpose, and to enable staff and students to shape the future developments of the functionality in use.

So, what does the future hold for digital education at the University?
The University is currently exploring possibilities for an e-marking solution and an e-portfolio system, to work in conjunction with existing digital education systems already in use. In the longer term, I’m committed to maintaining a knowledge of cutting-edge digital education systems as they become available in the wider market place, and supporting the Dean of Digital Education to ensure the institution retains its reputation for delivering new and innovative solutions to its staff and students, ensuring consistency, flexibility, efficiency and accessibility.

How can we get involved?
Further information about the Digital Education Systems detailed in this feature can be found at www.digitaleducation.leeds.ac.uk and www.leeds.ac.uk/ITKnowledgeBase.

This sounds like a big project. What do you do to relax away from work?
I have family in Barcelona. I love to visit the city and nearby Sitges. I have a four-year-old son, who is a big train fan, so we often enjoy a family day out on a beautiful old fashioned steam train! I also enjoy an occasional spa day or going to the cinema.