



# NORTHUMBRIA

Forecast: A Bright Future

Issue 13 UNIVERSITY NEWS



## We are No. 1 in the UK!

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48th in the UK

Among the world's Top 200 young universities

19 courses in the Top 30

## Highest ever ranking for Northumbria

Northumbria has climbed to 48th place in the 2018 Guardian University League Table – its highest ever position.

**M**oving up from 50th last year, this latest result reflects the University's continuing progress and represents an impressive overall improvement of 20 places in the past two years. The table ranks the country's 121 universities by scoring each institution against a range of aspects of the student experience, including satisfaction with teaching,

students' average entry tariffs and employability.

Northumbria is also ranked as the seventh highest in the UK on the 'value added' metric, which compares students' individual degree results with their entry qualifications. Using this metric to measure the progress of students from enrolment to graduation can show how effective the teaching is at a university.

The Guardian's league table places

Northumbria's Electronic and Electrical Engineering, Physics, Design, and Education courses in the top 20. Architecture, Nursing and Midwifery, Journalism, Publicity and Public Relations, Law, Building and Town and Country Planning, Health Professions, Civil Engineering and Criminology, are all ranked in the top 30.

The rise marks the University's highest ever position in the

Guardian league table, and follows another strong performance in this year's Complete University Guide where Northumbria moved up four places on the previous year to 55th. Northumbria is also ranked as the top university in the UK for graduate start-up businesses based on turnover. According to the latest Higher Education Business and Community Interaction Survey, turnover from Northumbria

graduate businesses for 2015/16 reached £69.2 million – almost £25 million more than the second placed institution. Northumbria is also ranked 9th in the UK for the number of graduates in professional or managerial roles, according to the Destination of Leavers from Higher Education Survey (DHLE) 2014/15.

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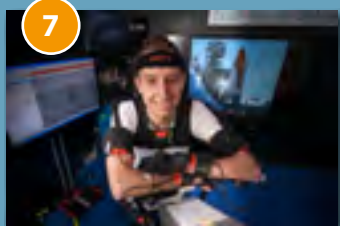
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### FRONT COVER

Professor Andrew Wathey CBE, Vice Chancellor and Chief Executive of Northumbria University, said: "This success reflects the research-rich learning and teaching at Northumbria, coupled with an outstanding student experience and excellent career prospects for our graduates. The University is on the right course to achieve its strategic vision focused clearly on quality".

Northumbria is ranked top 50 in the UK for research power and had the fourth largest increase in quality research funding (REF 2014). According to Times Higher Education, Northumbria had the biggest rise in research power of any university in the UK.

Northumbria continues to invest in its commitment to a future vision focused on quality and the student experience. A new partnership agreement with Santander, for example, will provide £150,000 of funding over the next three years to support 150 paid internship opportunities for students to gain valuable work experience. Last year the University announced a £52 million investment in its estate to create new teaching and research facilities. This builds on £200m invested in the previous decade.

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[www.northumbria.ac.uk/courses](http://www.northumbria.ac.uk/courses)

## Rising through the ranks

Improving entry standards, strong career prospects and good honours have all helped Northumbria University climb the league tables in the latest Complete University Guide 2018.

Northumbria moved up four places from the 2017 Guide to 55th, out of 129 institutions. Entry standards, the average UCAS tariff that students have when starting university, rose eight points to 369. The highest rank improvement was in Good Honours where Northumbria moved up 24 places with the percentage of students achieving a first or upper second-class honours degree increasing almost five points to 74.6%. There was also continuing improvement in employability, with the measure for career prospects for Northumbria graduates rising from 66% to 71.5%.

The 2018 league tables show a total of 19 subjects offered by the University rated within the top 30 in the UK, including three in the top 10; Librarianship and Information Management, Land and Property Management and Forensic Science. Additionally Nursing, Physiotherapy, Building, Architecture, Art and Design, General Engineering, Food Science and Occupational Therapy all featured in the Guide's top 20.

## Top 30 in the UK \*

**9th**  
Design and Crafts

**13th**  
Engineering: Electronic and Electrical

**18th**  
Education

**18th**  
Physics

**24th**  
Criminology

**25th**  
Nursing and Midwifery

**25th**  
Law

**26th**  
Civil Engineering

**28th**  
Journalism, Publicity and Public Relations

**28th**  
Health Professions

**29th**  
Building, Town and Country Planning

**30th**  
Architecture

\*Guardian League Table 2018

# It's the business!

Northumbria has celebrated the official opening of its new state-of-the-art Business Clinic by announcing an additional £150,000 funding from its partnership with Santander Universities UK.

The Business Clinic is part of the University's award-winning Business School; recognised as Business School of the Year in 2015 and more recently the first North East Business School to win the Small Business Charter for services to SMEs. Final year students in the Business Clinic provide a free consultancy advice service for clients, including small and medium-size enterprises (SMEs), multinationals, charities and not-for-profit organisations. Areas of focus include strategic operations or company expansion, human resources, finance, brand development, digital marketing and social media strategy, planning, logistics and IT.

Northumbria invested more than £800,000 to move the Business Clinic into its own vibrant, 500 square metre premises on New Bridge Street, near the centre of Newcastle. The offices include modern client briefing rooms, boardroom, reception area, and a conferencing and event space.

Building on this investment, the Business Clinic has also just secured funding from Santander Universities UK worth £150,000 over three years. This will provide Northumbria students and 2017 graduates with the opportunity to secure a paid summer internship with an SME. Northumbria's collaboration



L-R: Javier Rogla, Global Managing Director of Santander Universities, Matt Hutnell, Director of Santander Universities UK, Professor Andrew Wathey CBE, Vice-Chancellor and Chief Executive of Northumbria University, David Warcup from the Board of Governors at Northumbria, Lucy Winskell OBE, Pro Vice-Chancellor (Employability and Partnerships) Northumbria, Chris Sayers, Chair of Governors, Northumbria.

with Santander began in 2015, and has already provided £170,000 for internships, placements, scholarships and support for research activity.

The new funding was announced by Javier Rogla, the Global Managing Director of Santander Universities and Universia, during a special launch event for the new Business Clinic premises.

Speaking at the event, Matt Hutnell, Director of Santander Universities

UK said: "Our purpose at Santander is to help people and businesses prosper. Initiatives such as the Business Clinic at Northumbria University are excellent examples of how this can be achieved, with students gaining an insight into the working world whilst at the same time helping to drive growth in local SMEs. We're delighted to support the University on such a great initiative."

Professor Andrew Wathey CBE, Vice-Chancellor and Chief Executive

of Northumbria University, said: "Creating dedicated premises for the Business Clinic and re-affirming our partnership with Santander brings another dimension to the award-winning work of the Newcastle Business School at Northumbria University. The support that the University has received from Santander will help the Business Clinic's work with individual students, giving them skills informed by cutting-edge business research and improving their chances

of securing highly desirable jobs. It will help bring the University's talent, knowledge and expertise to bear in supporting a wide range of businesses and charities."

Nigel Coates, Director of the Business Clinic, said: "Few universities in the UK offer their business students the opportunity to work directly with business leaders but Northumbria is an exception. Since 2013, the Business Clinic has been supporting our final-year undergraduate and Masters' students to provide clients with a free-of-charge, full consultancy service under the supervision of experienced staff. The Business Clinic's new premises also offers the ideal venue for growing numbers of SMEs and social enterprises that are expressing their need to us for external engagement and networking opportunities."

To date more than 600 students have worked in the Business Clinic, advising over 145 organisations including the Dyspraxia Foundation, Northumbria Police, North West Ambulance Service, BALTIC Centre for Contemporary Art, Greggs plc, Helix Arts and Parker Hannifin.

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[www.northumbria.ac.uk](http://www.northumbria.ac.uk)

## Our courses are among the best in the world

Northumbria has had two subject areas rated among the best in the world in the latest QS World University Rankings.

Art and Design and Architecture and Built Environment at Northumbria scored highly in the annual rankings, which evaluate more than 4,400 universities around the globe across 46 different subjects. Northumbria has been ranked in the top 150 out of almost 1,700 universities for Art and Design, meaning it is in the top 8% institutions in the world for Art and Design Higher Education provision. Architecture and Built Environment at Northumbria also scored highly, ranking in the top 200 of such subjects worldwide. The QS World University Rankings are based on the academic reputation and employer

reputation of a university, as well as research citations and the impact of published work. The rankings allow prospective students to compare the world's top academic institutions by subject.

Professor Jon Reast, Pro Vice-Chancellor (International) at Northumbria University, said: "This is a superb result for Northumbria, with both our Art and Design and Architecture and Built Environment courses recognised as among the very best in the world.

"We have made significant investment in our facilities in both subjects – we recently opened a new Design:STEM Studio-Lab in our School of Design and are currently planning

an extension to our historic Sutherland Building to create improved studio spaces for the School of Architecture.

"This investment, along with the work of our talented academic staff in both subject areas, means we are attracting high quality students to courses in these subjects and are now consistently ranked highly in national and international higher education league tables."

To find out more about our award-winning courses visit our website or come along to one of our Open Days this summer.

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[www.northumbria.ac.uk/courses](http://www.northumbria.ac.uk/courses)



Art and Design and Architecture and Built Environment have been rated among the best in the world in the latest QS World University Rankings.

# 'Sun' like it hot!

Why is the Sun's outer layer so much hotter than its actual surface? This intriguing question is one of physics' greatest mysteries, but it could soon be answered thanks to the work of a Northumbria academic and an international team of researchers.

**D**r Eamon Scullion, from Northumbria's Solar Physics research group, has made a new discovery while working with colleagues from around the world, which could explain this mystery once and for all. The outer layer of the Sun, known as the corona, has a temperature of one million degrees but the surface, called the photosphere, is just 6,000 degrees. This is despite the two being only a few hundred kilometres apart. To better understand this mystery, the research team studied the movement of magnetic Alfvén waves using the Swedish Solar Telescope in the Canary Islands and recorded the presence of 'flux tubes'. These tubes transfer energy to the corona. This not only results in the corona being heated to a very high temperature but it is also the cause of solar wind, which can be detected on Earth through interference to electronic devices and the appearance of the Northern Lights.

Dr Scullion said: "This new discovery provides a novel solution to the long-standing puzzle of the Sun's coronal heating. It allows us to understand the physics of the



Dr Eamon Scullion has been researching why the Sun's outer layer is hotter than its surface.

solar atmosphere and the energetic processes involved in the Sun's make up in more detail.

"It opens up the possibility for further examination using high-tech solar telescopes, both in space and on the ground, including the four-metre Daniel K. Inouye Solar

Telescope (DKIST) in Hawaii, which Northumbria University is helping to build through our expertise in the field of solar physics.

"DKIST will be able to pick up unprecedented detail on the Sun's surface and Northumbria's Solar Physics research group are playing

a lead role in developing software to understand data from the telescope."

This breakthrough will help increase our understanding of the Sun and its potential impact on Earth, while the study of Alfvén waves is also important to other fields, including nuclear fusion research and black hole

jets. The research team behind this discovery was led by Dr. A.K. Srivastava from the Indian Institute of Technology and also included Professor Gerry Doyle and PhD student Juie Shetye of Armagh Observatory and Planetarium in Northern Ireland, Professor B.N. Dwivedi from the Indian Institute of Technology, Professor. K. Murawski and Dariusz Wojcik from the Maria Curie-Skłodowska University in Poland, Dr Marco Stangalini from the Istituto Nazionale Di Astrofisica in Rome and Professor Tom Ray from the Dublin Institute for Advanced Studies in Ireland, as well as Dr Scullion from Northumbria.

Northumbria's Solar Physics research group work within the University's Extreme Environments multidisciplinary research theme. Academics working in this area carry out pioneering research into challenging environments, from the Earth's surface, subsurface, and oceans, to its atmosphere and beyond into the Solar System.

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[www.northumbria.ac.uk/solar](http://www.northumbria.ac.uk/solar)

## From the surface of the sun to a theatre by the lake

Northumbria University's solar research group teamed up with a poet, composer and visual artist for a unique project at Cumbria's Words by the Water festival.

**S**taged at Keswick's Theatre by the Lake, the Imagining the Sun event saw poet Katrina Porteous, composer Peter Zinovieff and visual artist Helen Schell working with Northumbria academics who specialise in exploring the sun's activity and its impact on earth. Over the last few months, the group has been engaging with school children across the North East through Northumbria's NUSTEM team, to inform and educate young people on both the arts and science and how the two can work together. Their collaboration culminated in a unique performance during the Words by the Water festival, alongside other high-profile speakers and attendees such as broadcaster and festival president Melvyn Bragg, TV presenter Peter Snow, politician Vince Cable, and novelist

Salley Vickers.

During the performance, solar physicist Dr Richard Morton and NUSTEM director Dr Carol Davenport, both from Northumbria, worked with poet Katrina and artist Helen to demonstrate how creativity and imagination can help us discover more about the sun and articulate our understanding. In addition, Helen's visual artwork and Katrina's poems were featured in one of the theatre's gallery spaces for the entirety of the 10-day event, which included literary talks, lectures, discussions, workshops, book launches and special exhibitions. More information about the Imagining the Sun project can be found at <http://thinkphysics.org/imagining-the-sun/>

The NUSTEM project is based in Northumbria's faculty of Engineering and Environment

and aims to encourage and inspire the next generation of science, technology, mathematics and engineering students through a wide variety of educational events. Extreme Environments is one of Northumbria's eight Multidisciplinary Research Themes. Researchers from a range of disciplines are exploring conditions that challenge the existence of most known life forms on the Earth's surface, subsurface and oceans as well as its atmosphere and in the solar systems.

**DISCOVER MORE**



NUSTEM combines art and science to engage with young people.

# Enterprise take Northumbria to the top

Northumbria has been ranked as the top university in the UK for graduate start-up businesses based on turnover.



According to the latest report by the Higher Education Business and Community Interaction Survey (HEBCIS), turnover from Northumbria graduate businesses for 2015/16 reached £69.2 million – almost £25 million more than the second placed institution. Rising to the top from 3rd place in 2014/15 reflects the strength of business support at Northumbria to help students and graduates become successful entrepreneurs.

With HEBCIS also reporting a modest fall in the number of graduate start-ups last year – 3,890 against 4,000 the previous year – Northumbria's success demonstrates the sustainability and quality of its graduate businesses. It is also a measure of the level and value of enterprise support offered by Northumbria. Services such as Student and Graduate Enterprise, which provides enterprise skills training and free start-up support, are helping Northumbria graduates outperform the sector. Through the Northumbria Enterprise Business Support Project (NEBS), which recently secured a £1.2 million European Regional Development



Northumbria has been named No.1 for graduate start-ups. Pictured above graduate entrepreneur Owen Dixon.

Fund, the University's Student and Graduate Enterprise team is not only helping to launch new ventures and careers but also to grow businesses.

Graham Baty, Enterprise Manager at Northumbria, said: "The emphasis is on helping students and graduates create sustainable and successful businesses, and not on the number of new start-ups. Through the NEBS Project, the University is able to provide mentoring from industry

experts to get start-ups to the point of trading. Perhaps more importantly, the support continues even when businesses surpass the 12 months stage as this is where problems can arise."

Owen Dixon graduated from Business Studies at Northumbria in 2014 and went on to create Best Student Halls, a leading student accommodation comparison service. The business has over 100,000 rooms listed on its site and plans to add international properties in

the near future.

Owen said: "The support I have received from Northumbria has really helped me to focus on growing the business at a much earlier stage than if I was doing this alone. I have been able to benefit from their free hatchery space in the city centre, as well as bespoke mentoring that is really helping my business reach the next level."

Lucy Winskell OBE, Pro Vice-Chancellor (Employability and

Partnerships) at Northumbria, said: "Our track record for graduate enterprise is second to none. Entrepreneurial talent, energy and ambition run deep among our students and graduates, and we aim to support this by providing the best possible learning experience and opportunities for them to succeed as global graduates. This latest report by HEBCIS bears this out and shows that through our Student and Graduate Enterprise service and initiatives like NEBS, we are leading the way. The fact that so many of our start-ups are not only surviving but continuing to prosper beyond the crucial first three years is also testament to the quality of our support."

NEBS also offers a Graduate Internship strand. Again funded by the ERDF, this strand is focused specifically on small and medium sized businesses in Tyne & Wear and Northumberland to help 130 individual businesses find their next generation of talent. It can also contribute £3,825 towards the salary costs (minimum salary £17,000 pa pro rata).

Whether it is to support local businesses through graduate internships, or help launch graduate start-ups, Northumbria is leading the way in the higher education sector.

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[www.northumbria.ac.uk/nebs](http://www.northumbria.ac.uk/nebs)

## Student entrepreneurs named Rookie Champions

A team of Northumbria students has been crowned Rookie Champions at the 2017 Enactus UK National Competition.



From L-R: Jonny Forsey, Charlie Dutton-Brearley, Louise Fletcher, Megan Dawson, Ellie Beggs, Jonny Tatlow, Gemma Bacon.

Enactus is a worldwide organisation providing a platform for outstanding university students to use their entrepreneurial skills on special projects to improve the lives of those in need. There are Enactus societies in 56 universities. The Northumbria society was only set up a year ago, and includes Entrepreneurial Business Management students Jonny Forsey, Megan Dawson and Jonny Tatlow, International Business students Louise Fletcher and Ellie Beggs, and Sociology student Charlie Dutton-Brearley.

Each year, teams compete in an annual competition at ExCeL London where they present a 17-minute presentation of their work. This year the event brought together 750 students, 60 academics, and over 350 senior UK business leaders during the

two-day event. Northumbria's team focused on two projects. Soup Stories is a new food enterprise that aims to give refugees the confidence to start up their own businesses selling soup. The other project, Second Coat, aims to reduce the re-offending rate in the North East of England by providing employment opportunities for ex-offenders.

Enactus Judges, ranging from graduate employers to top business leaders, review how the teams have used their entrepreneurial skills to help change lives in an environmentally, socially and sustainable way.

Jonny Forsey, President of Enactus at Northumbria, said: "The competition was a great opportunity to meet like-minded student entrepreneurs, all of whom want to make a positive impact on the world. Having had the

support from both the Student Union and Newcastle Business School we were able to attend the competition and in front of over 1000 student and business leaders won the Rookie Champions!"

Kellie Forbes-Simpson, Graduate Tutor in Enterprise and Entrepreneurship at Northumbria and the team's University adviser said: "This is a fantastic achievement for the team and Newcastle Business School, putting Northumbria on the map in front of some of the top UK graduate employers and business leaders, showcasing the abilities and talents of our students."

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[www.enactusnorthumbria.org](http://www.enactusnorthumbria.org)

# Please sir, I want some more

The impact of children's holiday hunger on their health, academic development and life choices has been presented to MPs leading an inquiry into the problem.

Earlier this year, academics from Northumbria's Healthy Living Research Lab were invited to meet with the All Party Parliamentary Group (APPG) on Hunger to discuss their latest research. Dr Pamela L Graham, a Vice-Chancellor's Research Fellow and Emily Mann, PhD Researcher attended the meeting and presented their findings, which demonstrate that holiday hunger is a real issue across the whole of the UK, and one that has a significant impact on the lives of many families.

Led by Professor Greta Defeyter, Faculty Associate Pro-Vice Chancellor Strategic Planning & Engagement, the Healthy Living Lab has carried out extensive, nation-wide research on this topic. The APPG on Hunger was chaired by Frank Field MP and included South Tyneside MP Emma Lewell-Buck MP. The group gathered oral and written evidence to gain a deeper understanding of the scale of the problem, its

impact on children's mental, physical and academic development as well as proposals for responding most effectively to it.

Research by Northumbria's Healthy Living team has shown that holiday clubs are a necessary resource to support families during the school holidays. In some cases, parents have been pooling food with friends, relying on cheap, processed foods, or even skipping meals themselves to ensure their children have enough to eat during the holidays. Holiday clubs help to alleviate these issues by offering families regular access to healthy meals. They also provide opportunities for parents and children to socialise with other families.

Professor Defeyter said: "Holiday hunger is a very real issue and it's shocking that in this day and age some parents are struggling to feed their children. The holidays can be a stressful time for many parents, but particularly so for families on low incomes, many of whom qualify for free school meals during term time. The additional cost of feeding a family of four during the holiday period is

approximately £30-£40 per week. This additional cost has resulted in many low-income families adjusting their shopping habits; buying less expensive food that is often laden with salt, fat and sugar because it is perceived as being more filling and better value for money than healthier options.

"We were delighted to be asked to present oral and written evidence to the inquiry. Northumbria is leading the way in the research into holiday hunger. There is a clear link between food and academic attainment – particularly in areas of poverty and among primary-age children. Not only does holiday hunger affect children's lives now but it may also have significant detrimental effects on their health and life chances in the future. There is a real need for accessible food and activity provision during the school holidays for children and young people in the UK. This is something that needs addressing as a matter of urgency."

The University is currently undertaking further research into holiday hunger. One project includes a collaborative PhD programme



From L-R: Professor Greta Defeyter and Dr Pam L Graham.

with Brakes, one of the UK's leading food wholesalers. This will evaluate its 'Meals and More' holiday club programme which supports the provision of holiday clubs in areas of socio-economic deprivation. The programme provides food and activities to enhance the health, social, and education of children, young people and their families. Other research projects at Northumbria will be focussing on community interventions, mapping of holiday hunger provision, and evaluating the

impact of holidays on health and wellbeing.

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[www.northumbria.ac.uk/health](http://www.northumbria.ac.uk/health)

# The next generation of arts teachers meet with MPs

Students and academics working in secondary education have been lobbying MPs about the vital role of teaching arts in schools.

Northumbria runs a one-year secondary school art, craft design, teacher education programme which has seen funding drop as more emphasis and investment is made in Science, Technology, Engineering, Mathematics (STEM) and other subjects. At an All-Party Parliamentary Group (APPG) for Art Craft Design in Education Committee earlier this year, Sophie Cole, the Programme Leader for Secondary PGCE Art, Craft and Design, at Northumbria and students Henna Javed and Sam Fairbairn were able to make a case for the arts. One of only four organisations to take part in the meeting, the Northumbria representatives discussed the challenges placed on the next generation of arts teachers and the benefits of committing to what they describe as the 'best career in the world'.

Sophie said: "It was a fantastic opportunity to promote the value arts subjects offer in secondary education. Art is the only subject, which encourages every child's creativity, independence and

wellbeing. It develops problem solving and communication skills, encourages self-esteem, lateral thinking and mastery - all skills which are personally invaluable but transferable to STEM and core subjects too and for future careers.

"Our graduate teachers have serious commitment to bringing the arts into secondary schools and have an outstanding level of knowledge and skills to ensure that children have access to the full range of art practices, as is their moral - and at the moment - statutory right. This is under threat as governments review the status of arts subjects in schools. This APPG gave my students the chance to tell MPs about the challenges posed to our next generation of art teachers by the unintended consequence of policy shifts away from supporting the arts in school."

Sophie continued: "At Northumbria we have a global reputation for providing academic excellence and the quality of our programme is clear, having been rated outstanding by Ofsted for over 15 years and achieving excellent feedback from

students on our performance. Despite a reduction in overall numbers applying to go to university to study art, as well as for teacher training in art courses across the UK, here at Northumbria we still achieve a high standard of applicants for our programme for what is a truly rewarding and highly important career choice.

"Our programme has rich and longstanding partnerships with schools who are equally committed to the arts and this is where the majority of training takes place. We also have great links with regional arts venues and museums especially the BALTIC whose support is phenomenal for our programme but also to art teachers regionally. We also have great relationships with artists and community groups and are interested in developing useful arts research that shows the positive impact art has on health and wellbeing. We are well supported by our North East region's arts community who know how important it is to welcome and retain the next generation of art teachers to inspire the nation's new



From L-R Henna Javed, Sophie Cole (Programme Leader for Secondary PGCE Art, Craft and Design) and Sam Fairbairn.

creative talent."

Henna, who studied a fine art degree, said: "I was very proud to represent Northumbria and the next generation of art teachers. Teaching art to secondary pupils is a great career, the personal and professional opportunities are amazing, and working with young people is eye opening and the subject is so engaging for all abilities and ages."

Sam, a graphic design graduate, added: "I was really nervous about talking to the Committee but art is something I am incredibly passionate about. Art education in schools is important because of the amount of

skills students can gain from taking an arts course as well as supporting literacy, visual learning, creativity, enjoyment and satisfaction. It's a really important part of school-wide education. For me it's a job for life – there is so much to learn."

**DISCOVER MORE**



[www.northumbria.ac.uk/education](http://www.northumbria.ac.uk/education)

# Northumbria writes the medical rulebook for astronauts



Dr Andrew Winnard, Lecturer in Clinical/Musculoskeletal Biomechanics at Northumbria is helping lead the way in Aerospace research.

Scientists at Northumbria, Newcastle, are helping to write the medical rulebook that will keep astronauts fit and healthy during long trips through the solar system.

While working at the European Astronaut Centre (EAC), in Germany, Northumbria's Dr Andrew Winnard realised there was very little evidence housed under one roof on what changes we expect to occur in astronauts during spaceflight – and what interventions work best to try and prevent these changes. Andrew also noticed that there was no process of systematic review for the entire aerospace medicine field, like there are for almost all other areas of medicine.

He recommended a systematic review group for aerospace medicine, to look at the effectiveness of current interventions to prevent health and fitness changes among astronauts and military and civil aviators that will help inform and shape future medical guidelines. This will also be used to inform medical practice here on Earth; such as in the treatment of lower back pain.

Northumbria has been working with experts from the University of Plymouth, the Aerospace Medical Association (AsMA), the European Space Agency (ESA), the Royal Air Force (RAF) the International Space university and Blue Abyss – the world's largest research, training and development pool for marine and aerospace – with the review group announced at an aerospace medicine conference in the US in May 2017. The group also launched their website <http://www.aerospacemed.rehab/> at the Aerospace Medical Association 2017 Annual Scientific Meeting in Denver, between April 29

and May 4 2017.

The Aerospace Medicine Systematic Review Group will facilitate the pooling of aerospace medicine studies and ensure that results of reviews feed into comprehensive guidelines that will result in major operational decisions.

Dr Winnard, Lecturer in Clinical/Musculoskeletal Biomechanics at Northumbria and Coordinator of the UK Space Environments Association, said: "The group is developing and publishing methods that can be used by anyone undertaking aerospace systematic reviews. These tools help researchers understand and assess what is good quality aerospace research.

"Already the ESA is hoping the group can help lead reviews to answer questions such as, what exercises will work in small spacecraft on short missions to the moon and back, compared to six-month stays on the International Space Station (ISS). We will be asking how the medical challenges will be different on the moon compared to what we are familiar with on ISS."

Northumbria has already worked with ESA and international collaborators including astronauts to conduct a systematic review of the effectiveness of exercise to protect the lower spine and pelvis from bone and muscle deterioration that happens in space.

The review found no current researched exercises are fully effective at preventing these deteriorative changes so post flight rehab is needed. Northumbria is now developing the

'Functional Re-adaptive Exercise Device', known as FRED, which has been created to combat the back problems astronauts often suffer when they return to earth.

Former NASA Astronaut Dan Barry said: "As more people go into space and as space exploration expands beyond low earth orbit, effective countermeasures to low gravity environments become even more essential for crew health and mission success.

"Existing literature on space health topics is widely scattered and of highly variable quality. A dedicated systematic aerospace medicine review group is important to provide a consistent, high quality assessment of findings that will lead to improved medical decisions."

Wing Commander Pete Hodkinson, Consultant in Aviation and Space Medicine for the RAF Centre of Aviation Medicine added: "Aerospace medicine like all other areas of medicine is striving to improve the evidence base to its practice. The establishment of an aerospace medicine systematic review group is a great step towards more evidence based practice in this field; it is warmly welcomed and strongly supported by the RAF Centre of Aviation Medicine."

**DISCOVER MORE** 

<http://www.aerospacemed.rehab/>

# Memory research has aroma of success

Research by Northumbria academics has revealed that the aroma of rosemary essential oil can enhance children's working memory and improve academic performance.

The study involved 40 schoolchildren, aged 10 and 11. Half of the children were put in a classroom where the air was infused with rosemary oil for ten minutes, whilst the other half were in a normal classroom, with no scent. The children were then tested individually in five areas, including how accurately they could remember a sequence of numbers and their recall of sentences or words in a list.

The analysis revealed that the children in the rosemary infused room received significantly higher scores than the children in the non-scented room. One of the tests was to recall words and this had the greatest difference in scores.

The research was carried out by Dr Mark Moss, Head of Psychology, at Northumbria. Dr Moss said: "We had carried out a previous study which demonstrated that the aroma of rosemary essential oil could enhance cognition in healthy adults. Knowing how important working memory is in academic achievement we wanted to see if similar effects could be found in school age children in classroom settings, and our research showed this to be the case.

"Why and how rosemary has this effect is still up for debate.

It could be that aromas affect electrical activity in the brain or that pharmacologically active compounds can be absorbed when adults are exposed to them.

"We do know that poor working memory is related to poor academic performance and these findings offer a possible cost effective and simple intervention to improve academic performance in children. The next step would be to carry out large-scale trials of aroma application in education settings."

The findings of the research were presented at The British Psychological Society's Annual Conference in May.

Northumbria's psychology research has significantly increased, placing the university second in the Alliance group of universities for world-leading research.

The university is ranked top 50 in the UK for research power and had the fourth largest increase in quality research funding (REF 2014). According to Times Higher Education, Northumbria had the biggest rise in research power of any university in the UK.

**DISCOVER MORE** 

[www.northumbria.ac.uk/research](http://www.northumbria.ac.uk/research)



Researchers found the aroma of rosemary oil enhanced children's memory.

# Teaching Excellence Recognised

**N**orthumbria University's teaching excellence has been recognised in a Silver Award in the Teaching Excellence Framework (TEF). The new national scheme is aimed at assessing the quality of undergraduate teaching in universities, colleges and other higher education providers. The award recognises that Northumbria delivers high-quality teaching, learning and results for its students, and consistently exceeds rigorous national quality requirements for UK Higher Education. In making the award the TEF panel noted that Northumbria University students 'achieve excellent outcomes'.

Commenting on the award, Professor Andrew Wathey CBE, Vice-Chancellor and Chief Executive of Northumbria University, Newcastle said: "This award clearly demonstrates the quality and high standard of our undergraduate teaching, and I congratulate our staff on the hard work that has led to this significant and encouraging achievement."

"The Silver Award reinforces Northumbria's growing reputation

for academic excellence. We are already one of the most successful universities in the UK in terms of student progress, ranked 7th nationally, and for employability, where we are ranked 9th in the UK for the number of graduates in professional or managerial roles."

As part of the assessment, the University had strong performances in the quality of its assessment and feedback to students, and academic support. It also performed above average in the proportion of students who successfully completed their studies and graduated. The TEF was introduced by the Government to build evidence about the performance of the UK's world-class higher education sector, complementing the existing Research Excellence Framework with an analysis of teaching and learning outcomes. In order to be considered for a TEF rating, higher education providers have to meet demanding national quality requirements. The TEF measures excellence above and beyond this. TEF measures excellence in three areas; teaching quality, the learning

environment and the educational and professional outcomes achieved by students.

Northumbria University has recently achieved its highest ever position in the 2018 Guardian University League Table, 48th, a rise of 20 places in the last two years alone. The University is also in the top 50 in the UK for research power and had the fourth largest increase in quality research funding (REF 2014) and is ranked as the top university in the UK for graduate start-up businesses based on turnover. More than half of the University's courses achieved satisfaction rates of 90% or above in the 2016 National Student Survey.

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[www.northumbria.ac.uk](http://www.northumbria.ac.uk)



Northumbria's City Campus.

## Northumbria toasts 25 years of achievement as a University

**F**riday 16 June marked the start of Northumbria University's 25th birthday celebrations with a reception in the Great Hall. Hosted by the Vice-Chancellor Professor Andrew Wathey, CBE and Chancellor, Baroness Tanni Grey-Thompson DBE (pictured) the event saw academic and professional staff toast Northumbria's first 25 years as a University.

The 16th of June is Northumbria's official birthday because it was on that day 25 years ago the Privy Council consented to change the name of Newcastle Polytechnic to the University of Northumbria at Newcastle. The official charter reading...

"... on the sixteenth day in June

1992, pursuant to the further and Higher Education Act 1992, the Privy council consented to a change of name of the said Higher Education Corporation to the University of Northumbria at Newcastle"

Since then, Northumbria University has evolved into one of the fastest rising universities in the UK: growing in stature, reputation and impact.

Over the coming months there will be a series of events to mark this quarter century of achievement and to look forward to the next 25 years.

Look out for further 25 years celebration events and stories soon.

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Vice-Chancellor, Professor Andrew Wathey CBE and Chancellor, Baroness Tanni Grey-Thompson DBE, at the celebrations.



# Big Interview: Professor Andrew Wathey CBE

This year marks the 25th anniversary of Northumbria achieving University status. With a year of celebratory activities and events ahead, Professor Andrew Wathey, Vice-Chancellor and Chief Executive of Northumbria, reflects on the University's past, present and future.

**Northumbria was granted University status in 1992 – how has the institution changed over the last 25 years?**

There is no doubt the Higher Education landscape today is dramatically different compared to 25 years ago, and the challenges we face are greater and more diverse. The University has gone through many changes and made enormous strides in this time – and the journey continues.

Most recently we have made significant investments in research, academic staffing, partnerships, the campus, our programmes – and above all in a quality-focussed strategy with the student at its heart, including a dedicated programme to transform the student experience. There has also been a radical change in our ambition, stature and outlook – we are now a 'challenger institution' in many ways, and are increasingly seen as such.

Our position across the various league tables continues to rise, this year we have been ranked 48th in the Guardian league table, our highest ever UK position, and over recent years have won prestigious awards, including the Times Higher Education Business School of the Year award, the Queen's Anniversary Prize for Higher and Further Education for our Student Law Office and seven of our academics have received highly regarded Leverhulme Fellowships.

**What are the challenges currently facing the Higher Education sector and how is Northumbria responding?**

We are currently in a period of unique change in UK Higher Education and sit at an exciting juncture following the approval of the Higher Education and Research Act 2017 – the most important piece of legislation for the sector in the last 25 years. This will impact on every aspect of our work, from research and teaching to assessment and tuition fees.

Many of the challenges we face today we have been preparing for



Professor Andrew Wathey CBE, Vice-Chancellor, Northumbria University.

over the last ten years. Following the introduction of the £9,000 fee in 2012 and the removal of the cap on student numbers, there was a significant increase in competition within the sector. At this point we had a choice about which direction we went in – whether we competed on quality or price. We chose the former and since then have developed a quality-led strategy which embeds research-informed teaching into the heart of the student experience.

Over the last decade we have transformed the quality of our teaching and research at a pace few in the sector have matched. We use our research to shape and inform our teaching in an ambitious academic learning community. Our inspirational lecturers are leaders in their disciplines and bring their professional links and practical experience to the classroom.

We are now in the Top 50 among UK universities for research power, according to the 2014 Research Excellence Framework (REF), the national assessment of research quality in UK universities. These results demonstrate that Northumbria has made a major step forward in research, reporting the largest rise in research rated as

world-leading and internationally excellent by the REF. There has been a significant increase in our research grants and contracting income, which has risen from £4.5m in 2011/12 to an expected £7.8m this year. We have had our first grants in excess of £1m and last year we achieved a £3m grant to develop a revolutionary new heating system using solar energy.

Through our focus on quality we have achieved strong student recruitment, simultaneously attracting more undergraduate students with higher entry qualifications and growth in post-graduate student numbers. This has placed Northumbria as the highest performing post-1992 university in terms of the average undergraduate entry points. Alongside this, we have also transformed our contribution to social mobility, with the gap between students who enter Higher Education from the most deprived, and most affluent areas, narrowing from 18% to just 5%.

We have also reviewed all of our courses, improving the quality of our teaching, ensuring that research informed learning is embedded in all that we do, the broader student experience and the future

employability of our graduates. Northumbria's teaching excellence has been recognised in a Silver Award in the Teaching Excellence Framework (TEF - the new national scheme aimed at assessing the quality of undergraduate teaching in higher education providers).

The award recognises that Northumbria delivers high-quality teaching, learning and results for its students, and consistently exceeds rigorous national quality requirements for UK Higher Education. The feedback from the TEF assessment noted that Northumbria University students 'achieve excellent outcomes' and we performed above average in the proportion of students who successfully completed their studies and graduated. We are already one of the most successful universities in the UK in terms of student progress, ranked 7th nationally, and for employability, where we are ranked 9th in the UK for the number of graduates in professional or managerial roles.

**Looking to the future, what are Northumbria's aims and ambitions for the next 25 years?**

Our Vision for 2025 to be a research-rich, business-focused, professional university with a global reputation for academic excellence, sets out our broad ambitions and direction. Our next University Strategy covering 2018-2023, will set out our plans for the immediate future. As we begin to formulate our strategy for the next five years we recognise that we have come a long way, but also that there is more to do. The best is yet to come.

Achieving our Vision will be how we meet the significant challenges ahead. Competition is likely to intensify further when we see a dip in the 18-year-old population over the next few years, which will then return to similar levels that we see now. The effects of globalisation will also have an impact on the sector and there will be major developments in technology which will transform the way we conduct our work, including the way we teach.

On the horizon, we also need to think about the disciplines and strengths that we will become nationally and internationally renowned for in the next 10 to 20 years – areas in which we, and others, could invest and in and where we could deliver real added value, impact and excellence. What could we be known for in the future?

The opportunities now within our grasp would not have been possible without the serious investment in quality we made five years ago. That investment is an ongoing process, to constantly evolve to meet the world's changing needs and work together to make a positive difference. Over the last 25 years, Northumbria has evolved into one of the fastest rising universities in the UK. So while there are challenges ahead, I am confident that Northumbria will continue its pace and direction of travel.

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[www.northumbria.ac.uk](http://www.northumbria.ac.uk)

# THE FUTURE OF COMPUTER AND INFORMATION SCIENCES

A new £7m building equipped with cutting-edge technology to support Computer and Information Sciences is currently under construction at City Campus, on the site of the former Rutherford Hall. *Northumbria University News* takes a look.



An architect's impression of the new Computer and Information Sciences building.

Ready in early 2018, the building will be the base for a community of 1,200 students and 85 academic staff enabling them to innovate, learn and research together, and share their ideas and practice with one another.

The Computer and Information Sciences department at Northumbria encompasses the University's research and teaching in computer science, games, animation and visual effects, computer forensics and security, digital networks, website technologies, Internet of Things (IoT), library management, big data and information sciences.

Computer Science is one of the University's strongest research areas with 58% of outputs ranked world-leading or internationally excellent according to REF 2014, making Northumbria the leading Modern University in the North East for research power.

The new flexible facility will have a brand-new entrance to visitors and students to the University, with a bright and airy atrium which will allow for events and presentations

from students and employers as well as additional student study space.

Other floors will see a mix of research spaces and specialist teaching as well as a 'Maker Space', which will allow students to informally collaborate, test and work on new ideas and projects.

As a low carbon and sustainable "Smart Building" complete with a specialised Building Management System, including its heating, cooling and ventilation, it will be able to run itself efficiently and sustainably. This 'Living Lab' will also support student learning and link into the Digital Living and Future Engineering research areas, both core strands of the University's Multi-Disciplinary Research Themes (MDRT).

The building will also offer improved links with the community, employers and industry. This includes the University's Knowledge Transfer Partnerships, which support businesses wishing to make a strategic change requiring expertise not currently available in-house. The partnership between the University and Industry helps to develop

research that is mutually beneficial for both parties.

Dr. Graham Sexton, Head of Department of Computer and Information Sciences, said: "The new building gives the University a wonderful new platform to teach as well conduct vital research which could have a very real impact on the world around us, and offers further opportunities to link with the wider community. Students will have access to the very latest technologies to allow them to learn in an environment, which is totally focussed on equipping them with the knowledge and understanding of the new technological advances that are happening all around us."

Computer Science at Northumbria ranks 5th in the sector and 1st in the North East for sustained employment one year after graduation according to the latest Longitudinal Education Outcomes (LEO) data.

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[www.northumbria.ac.uk](http://www.northumbria.ac.uk)



2nd Floor Computer Network, Security and Internet of Things labs.



First Floor Interaction Design and Digital Games facilities.



Third Floor Big Data Lab and Staff & Student research areas.



Ground floor atrium event space, open study area and video wall.

# Law students win access to justice award

The significant voluntary contribution Northumbria law students make to their community has been recognised with an award from a national charity.

Students and representatives of various educational institutions across the country attended the House of Commons for the annual LawWorks & Attorney General's Student Pro Bono Awards 2017 – and Northumbria's Student Law Office won the Access to Justice Award category. The prestigious event was endorsed and hosted by the Attorney General, The Rt Hon Jeremy Wright QC MP with His Honour Sir Robin Knowles CBE, a High Court judge, as host.

LawWorks, the national charity behind the awards, encourages and supports solicitors and law students in carrying out legal pro bono work. Students are recognised for providing their time and expertise on a voluntary basis.

Northumbria's Student Law Office was up against three rivals for The Access to Justice Award, sponsored by the Access to Justice Foundation. The award is given to the educational body



Students at work in the Student Law Office; L-R Karl Lynch, Paige Lewis, Rebecca Logue.

or individual student considered to have made the most significant contribution to the promotion of access to justice. Northumbria's students won after impressing the judges with their dedication to putting pro bono at the heart of

a lawyer's career'. Northumbria Law School was also praised for its 'exceptional clinical model and outstanding educational and community impact'.

The Student Law Office provides a legal advice and assistance service

where final year students offer a full range of legal activities for their clients; researching issues, drafting documents, representing clients in court and tribunals, negotiating settlements and obtaining compensation. The Student Law

Office has recovered over £1 million in compensation for clients since 2008.

Paul McKeown, Director of the Student Law Office at Northumbria University, said; "A university is an integral part of the local community and has a responsibility towards that community. Winning this award recognises the invaluable work of all the staff and students in promoting access to justice and providing legal support to people within our region and beyond."

This is not the first time Northumbria Law School has won at these awards, it has been the recipient of the 'Best Law School' accolade a record three times. In 2013 Northumbria received the coveted Queen's Anniversary Prize for Higher Education for the outstanding community work of the Student Law Office.

**DISCOVER MORE** 

[www.northumbria.ac.uk/about-us/academic-departments/northumbria-law-school](http://www.northumbria.ac.uk/about-us/academic-departments/northumbria-law-school)

# Golf clubs turn to business students for a slice of advice

When two North East golf clubs wanted to sharpen up parts of their operational game, they paired up with a team of business students from Northumbria.

The two clubs are in very different areas of the region, but in equally scenic settings. Allendale Golf Club's nine-hole course is situated among the Northumberland hills in an area of outstanding natural beauty, while Whitley Bay Golf Club's 18-hole course enjoys stunning views of the coast and countryside. Each had very different reasons for seeking help. For Whitley Bay Golf Club, with over 800 active members, the focus was on how to make better use of the facilities to generate additional income, without compromising the positive experience of the existing regular players. By contrast, Allendale Golf Club has a smaller membership of 128 individuals. With many older players, there were concerns over how to both maintain and increase membership levels going forward. At the same time as the Club is run mainly by volunteers it is difficult to provide staff for all the facilities.

Following recommendations from friends and acquaintances, they both enlisted the help of the Business Clinic at Newcastle Business School – a pioneering initiative where students form a 'consultancy firm' to provide free advice for clients. Students are asked to analyse a problem, consider possible solutions and provide a detailed report and full presentation of their recommendations. The real-world experience benefits their learning experience, and can enhance career prospects. Allendale was advised by Katie Eastwood, Lily Johnson, Rachael Russell and Chloe Tully, from Team Endeavour Consultancy. Whitley Bay worked with Four Bridges Consultancy, made up of Ashleigh Foster, Heather Johnson, Kirsty Huggins and Megan Barratt.

Colin Wraith, Chairman of Allendale Golf Club, said: "They were excellent. Their work provided a great refresher for us when looking at different areas we could develop,

especially their review of possible community initiatives. We will be sharing their findings with the general committee for discussion. Overall I have to say they were extremely professional, the work was of a fantastic quality and the whole experience has been great."

Keith Williamson, one of the directors at Whitley Bay Golf Club, added. "The students were very easy to work with. The research they provided was thorough and relevant and it was great to get a fresh insight from four non-golfers. Their report is now with members of our committee and we will be looking to discuss their findings at future meetings."

Since it started just a few years ago, more than 600 students supervised by Business Clinic staff have advised over 145 organisations. The total value of the students' pro bono consultancy has been estimated by the client organisations to exceed £700,000.

Nigel Coates, Director of the



L-R: Ashleigh Foster, Megan Barratt, Steve Combe (Director/Chairman WBGC) Keith Williamson (Director WBGC) Alan Gair (immediate past Captain, WBGC) Kirsty Huggins, Heather Johnson. Ashleigh, Megan, Kirsty and Heather worked together as 'Four Bridges Consultancy'.

Business Clinic. said: "We have found that the Business Clinic is not only a great learning experience for our students, but a huge opportunity for organisations of all kinds, large and small, local and national, to get the kind of comprehensive advice they might otherwise be unable to access. Feedback has been extremely positive across from those organisations we have worked with, and we are looking forward to supporting more businesses in the years to come. We would

encourage any firms considering getting involved to get in touch."

The Business Clinic's consultancy services are available to all types of businesses from SMEs and multinationals through to not-for-profit organisations.

**DISCOVER MORE** 

[nb.consultancy-projects@northumbria.ac.uk](mailto:nb.consultancy-projects@northumbria.ac.uk)

# Bright idea earns design student top award

A Northumbria Design for Industry student has been awarded the top prize in an international lighting design competition.



Jimin Jeon's winning design.

Third year student Jimin Jeon impressed judges at the annual Design in Light awards with her reinterpretation of a traditional lantern. She collected her £1,000 prize money during a ceremony organised by the Lighting Industry Association (LIA), where she met with key industry representatives, including panel members Simon Terry of Anglepoise, Russel Cameron of Innermost and Peter Hunt of the LIA.

The competition is open to students on UK design courses, as well as recently qualified designers. This year more than 50 designs were entered, with six making it through to the final. Of these, five were by students from Northumbria's Design for Industry course, with Tom Butterfield, Dan Genner, Conor Kirkpatrick and Joe Pendrich shortlisted alongside Jimin Jeon.

Jimin said: "I was hugely honoured to win the Design in Light competition. It was a great opportunity to be able to present in front of judges and receive feedback from them. I'm really thankful to my professors for all of their help and encouragement."

Northumbria Senior Lecturer in Design for Industry, Anthony Forsyth, said: "We ran a brief to design lighting as an option for our third and fourth year students. With recent advances in lighting technologies, including programmable LEDs, students have fantastic opportunities to prototype lamps, which invite new ways of interacting with lighting.

"As part of the brief, all of the students were asked to develop working prototypes and were encouraged to submit their work to the Delight in Light competition. Our success in the competition is strong evidence of the skills and sensibilities of students on the Design for Industry and 3D Design programmes."

Northumbria's design programmes are delivered internationally, with partnerships including the BINUS-Northumbria School of Design in Indonesia and the Academy of Design in Sri Lanka.

**DISCOVER MORE** 



Students from across the University flocked down to be inspired by entrepreneurial graduates.

# Graduate entrepreneurs back for student festival

Northumbria's entrepreneurial alumni came back to their roots in March to deliver inspiring talks and workshops as part of the University's first Student Enterprise Festival.

The two-day festival attracted students across the University to get involved in inspiring talks, practical workshops and networking opportunities to give them the enterprise skills to get them career ready. Students interested in setting up their own business or wanting to expand their enterprise skills for their future career, took part in a packed programme of activities including pitching and confidence workshops and ideas generation sessions. They also got the chance to network with likeminded students, enterprise staff and Northumbria's own graduate entrepreneurs.

Animation graduate Peter Bakare was one of those who joined the event to tell his story. Peter is the founder of Nutri Troops, a company which educates children and young people about healthy lifestyles through animated storytelling. Emma Fielding, a final year Business Management student, also spoke about the inspiration behind her idea and what it was like start a business while still at university. Her business, CompareMyTravel, is an app that allows users to

search and compare air, rail, coach and car travel in one search. Business Leadership and Corporate Management graduate, Kieron Day, also spoke to students about his business, Outfit Toolkit, which he set up during his Enterprise Placement. The company even has celebrity followers including Justin Timberlake.

Graham Baty, Enterprise Manager at Northumbria University, said: "It's fantastic to see that our first ever Student Enterprise Festival has had such a positive response from students. Events like these are a great way to provide unique ways for students to gain new skills that will help them to go on and be successful in their business or career ventures."

"It was great to have some of our graduate entrepreneurs back on campus to tell their story to current students, I can't thank them enough."

Northumbria University's Student and Graduate Enterprise service provides free start-up support and enterprise skills training across the University's community of students and recent graduates. The team were ranked No.1 in the UK



Peter Bakare, founder of Nutri Troops, talks to students.



for graduate start-ups based on the combined turnover of businesses (HEBCIS 2015/16).

For more information about Northumbria's Student and Graduate Enterprise team email [nu.enterprise@northumbria.ac.uk](mailto:nu.enterprise@northumbria.ac.uk).

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# Taste of success

Northumbria business students have triumphed for a second year running at the annual Greggs Marketing Challenge.

Now in its fifth year, the Challenge is aimed solely at marketing students. Teams from Northumbria, Newcastle, Sunderland and Teesside Universities were tasked with presenting their recommendations and ideas on how to attract more young adults to the Greggs' brand. Despite being the only undergraduate team, the Northumbria team were able to follow up last year's success with another win against postgraduate opposition.

The Northumbria team, Jack Taylor, Emily Sinclair, Alex Henderson, Charlotte Bell, Matthew Party

and Libby Garrick, developed a strategy for re-branding Greggs' successful Balanced Choice range. Extensive research revealed that consumers wanted more than just low fat options, so the team recommended offering a new range with an emphasis on low fat, low calorie but full of protein. They also developed a "Tapp and Collect" service for extra convenience. These ideas were presented to a panel of experts, including Malcolm Copland, Commercial Director of Greggs; Graeme Nash, Head of Customer and Marketing at Greggs; Gordon Bethell, Managing Partner at Creative Race; and Jenna Toffany,



From L-R: Newcastle Business School lecturer Kirk Dodds, students Libby Garlic, Charlotte Bell, Alex Henderson, Pro Vice-Chancellor John Wilson, students Emily Sinclair, Matt Parry and Matt Sutherland.

Founder and Strategy Director of Let's Talk Strategy.

Following its win, the team from Northumbria had the opportunity to spend a day at Greggs' head office in Newcastle.

Matt Sutherland, Programme Leader for BA (Hons) Business with Marketing Management at Newcastle Business School, said: "The Greggs

Marketing Challenge is one of the most prized business competitions for students in this region, and to win it for a second year running against postgraduate opposition is a significant achievement. Pitching and then presenting their ideas to senior business leaders was a valuable experience outside of their core learning modules, that will boost

their confidence and enhance their employment prospects when they graduate. Winning is also testament to the creativity and calibre of our students here at Northumbria.

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[www.northumbria.ac.uk/nbs](http://www.northumbria.ac.uk/nbs)

## Students raise over £7,500 for charities

Northumbria University has pledged a donation of over £7,500 to the Northumbria Students' Union charities following the completion of this year's National Student Survey (NSS).

Running from February to April, the annual NSS asks all final-year students across the country to give their opinions of their time at University. The results help institutions to understand the experience of its students and to inform change. It also gives prospective students further material on where and what they want to study.

As added incentive for students to take part in the survey, Northumbria promised to donate £2 to the Students' Union charities for every entry completed. By the end of the survey students helped to raise over £7,500 which will be divided between St. Oswald's Hospice, Childreach International

& The Brain Tumour Charity.

Professor Peter Francis, Deputy Vice-Chancellor of Northumbria University, said: "The annual National Student Survey is a really important barometer as it allows us to see how students have enjoyed their time at Northumbria during their studies. I am delighted that so many of our students took the time to let us know about their experiences here, and by doing so raising a fantastic amount for some very worthy charities."

Adam Crawley, President of the Northumbria Students' Union, said: "The NSS is a good opportunity for students to tell the University about their time here, as well, as how it might be improved for those coming to Northumbria. It's really fantastic that so many students took part in the

survey, raising lots of money for our chosen charities."

In 2016, Northumbria University scored an average of 86% overall satisfaction, and performed above the sector average in the areas of providing academic support; prompt and clear assessment and feedback; and in personal development.

The National Student Survey results for all Universities will be published by Higher Education Funding Council for England (HEFCE) and Ipsos MORI, later this summer.

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[www.northumbria.ac.uk](http://www.northumbria.ac.uk)

## Busy bees bringing new café venture to life

Two Northumbria University graduates have turned their passion for quality coffee and food into their dream business by opening an independent coffee shop. Hive Coffee Company is the first business venture for Art graduate Sarah Daglish and International Business Management graduate Eve McPadden.

The pair, both 25, graduated from Northumbria in 2014 and have spent the last two years working with The Prince's Trust and the charity Groundwork South Tyneside and Newcastle to develop their business plan. They have now launched Hive – a coffee shop and café serving a range of vegan, vegetarian and gluten-free meals, with an emphasis on locally sourced, healthy ingredients.

The venture began when the pair responded to an invitation from Groundwork, which works with the community and organisations to make changes to create better neighbourhoods and build skills and job prospects. The Charity, in partnership with South Tyneside Council, stepped in to manage Jarrow Hall and the former Bede's

World museum next door, with the Hive Coffee Company café located on the ground floor Grade II-listed former manor house. The pair were further motivated after undertaking a course in entrepreneurship run by The Prince's Trust.

Sarah said: "The course helped us to ensure our business plan was sound – we were put through lot of tests and given some great feedback which allowed us to develop our ideas. Once we had developed a sound business plan we were able to access a low interest loan from The Prince's Trust which allowed us to get the business up and running."

**DISCOVER MORE**



[www.hivecoffeecompany.uk](http://www.hivecoffeecompany.uk)

# Three in a row for 'outstanding' partnership

Northumbria's latest Knowledge Transfer Partnership (KTP) with Renown Engineering has been officially awarded the highest grade of 'outstanding'.

**R**enown Oil & Gas Ltd is a specialist engineering service provider to the oil and gas industry and a long-term partner of the University. Based in the North East and part of the Renown Group, the company has been working with Northumbria's department of Mechanical and Construction Engineering on two previous KTPs with the third recently receiving the top grade by funding body Innovate UK. This makes it three 'outstanding' ratings in a row for Northumbria and Renown.

This latest success follows a visit to Northumbria earlier in the year by a senior UK Government representative for innovation and industrial collaboration. Dr Ian Brotherston, head of the KTP programme at Innovate UK, which has rated a number of the University's partnerships as 'outstanding' in the past. KTPs are three-way partnerships, which see a graduate (known as an associate) work within a business to lead a strategic project. They are supported by the company, as well as a university, which provides academic advice, expertise and research facilities.

The KTP programme has been running nationally for over 40 years. Northumbria has been the academic partner on a wide variety of successful KTPs in recent years, providing exciting job opportunities for graduates and new product or service innovations for businesses. The scheme has also given academics at Northumbria the opportunity to further their research by applying it within an industrial setting. During Dr Brotherston's visit, seven of Northumbria's current and recent KTP associates delivered presentations on their experiences and discussed the positive impact of KTPs on their career and the business impact for their host company. Academic departments from across the university were represented in the five projects showcased, including two 'double-associate KTPs' where associates from Northumbria's Business School and School of Design collaborated on a project. The 'Knowledge Transfer' technologies involved included Analytical Chemistry, Strategic Marketing, Industrial Design, UX (user experience) Design and Advanced Materials.

Dr Brotherston said: "I was delighted to accept the invitation to visit Northumbria University and meet recently finished and ongoing



From L-R: KTP Associates Chinyere Okolo, Callum Whitehead, Tim Thomas and Rachel Bentham, head of the KTP programme at Innovate UK Ian Brotherston, KTP Associate Ellie Jones, John Clayton of Innovate UK and KTP Associates Tom Winstanley and Fan Cleverdon.

KTP Partnerships. I was particularly pleased that the presentations on the day were given by the KTP Associates and, as usual when I attend such events, I was mightily impressed by both the outcomes of the KTP projects and the Associates themselves.

"I am privileged to lead a programme that continues to deliver outstanding benefits to all the partners in the projects and I was delighted to hear of the important role KTP plays in the ambitions of a vibrant university such as Northumbria."

During his visit Dr Brotherston gave an update on the KTP programme and new opportunities which are being introduced within the Government's Industrial Strategy.

George Marston, Pro Vice-Chancellor (Research and Innovation) at Northumbria, said: "We have built up a strong track record of delivering successful KTPs here at Northumbria and were delighted to showcase some of these to Dr Brotherston during his visit.

"KTPs provide excellent employment opportunities for those graduates with the drive to succeed and we are keen to highlight the significant career opportunity of KTPs to our current students and graduates.

"At Northumbria we pride ourselves on our partnerships with industry and KTPs are another way we are growing and strengthening these connections. The businesses we have worked with have reported improved competitiveness, productivity and performance, as well as a growth in profits and job creation."

The Northumbria KTPs represented at the event were:  
**Business: Parker Hannifin (UK) Ltd**

KTP Associates: Ellie Jones (strategic marketing), Callum Whitehead (industrial design)

Northumbria academic leads: Matthew Lievesley (Reader in Human Centred Problem Solving at Northumbria Design School), David O'Leary (Senior Lecturer, School of Design), Fraser McLeay (Professor of Strategic Marketing Management at Newcastle Business School), Nigel Coates (Principal Lecturer, Newcastle Business School)

Impact: Parker Hannifin's KTP with Northumbria has seen a number of successful strategies developed and shared across several of its European manufacturing sites and the company's headquarters in the US. As well as increasing Parker Hannifin (UK) Ltd.'s annual profit before tax by £1.5m within the next three years, this KTP has helped position the company's facility in Gateshead as a thought-leader in product and marketing innovation.

**Business: Multichem Ltd**

KTP Associate: Dr Tom Winstanley

Northumbria academic leads: Justin Perry (Professor of Chemistry within Northumbria University's Department of Applied Sciences), John Dean, (Professor of Analytical and Environmental Sciences), Michele Carlin (Senior Lecturer in Applied Sciences).

Impact: This KTP led to the creation of a new type of permanent ink, which passes strict

environmental and child safety regulations. This has resulted in several large orders for Multichem, which is now producing 20% more ink each month. Following the completion of the KTP, Dr Tom Winstanley has been appointed as product development manager at Multichem.

**Business: Reproflex 3 Ltd**

KTP Associates: Fan Cleverdon (Strategic Marketing), Tim Thomas (UX Design)

Northumbria academic leads: Fraser McLeay (Professor of Strategic Marketing Management at Newcastle Business School), Vignesh Yoganathan (Senior Lecturer and Programme Leader, Digital Marketing), Matthew Lievesley, Reader in Human Centred Problem Solving at Northumbria Design School), Ian Hewitt (Senior Lecturer, Design for Industry).

Impact: The project aims to develop an innovative service-oriented e-Pre-Media Management Service, enabling adoption of appropriate international market-entry strategies and collaboration throughout the supply chain to fully service local and global FMCG customers. On completion of the KTP, Fan Cleverdon will begin a full-time PhD. Tim is carrying out a part-time Masters during the KTP.

**Business: Thomas Swan & Co Ltd.**

KTP Associate: Rachel Bentham (Strategic Marketing)

Northumbria academic leads: Michele Rusk (Enterprise Fellow at Newcastle Business School), Fraser McLeay (Professor of Strategic Marketing Management at Newcastle Business School)

Impact: The KTP started in

September 2016 with the aim of developing a market-led commercialisation capability for the Advanced Materials (including graphene) and Custom Manufacturing Divisions. This will include improved understanding of potential markets and alignment of product and services with these markets.

**Business: TechnipFMC**

KTP Associate: Chinyere Okolo (Advanced Materials)

Northumbria academic leads: Fawad Inam (Associate Professor & Associate Head of Mechanical & Construction Engineering Department), Sergio Gonzalez Sanchez (Lecturer, Mechanical and Construction Engineering)

Impact: The aim of this KTP, which started in January 2016, is to develop a hose for subsea umbilical applications in varying and extreme temperatures and pressures. Chichi Okolo won the best poster presentation award at her very first conference: 3rd International Conference on Structural Nano Composites, Aberdeen, 12-15 Sep, 2016 and the KTP team have published three papers on KTP research outcomes to date.

If your business is working on a project that would benefit from a new way of thinking, a Knowledge Transfer Partnership with Northumbria University could be the solution.

**DISCOVER MORE**



[www.northumbria.ac.uk/ktp](http://www.northumbria.ac.uk/ktp)

# Finnish partners share in pioneering patient safety project

A leading Finnish expert in the field of applied sciences spent a week working closely with Northumbria University academics on an EU-funded research project to improve patient safety.

**D**r Susanna Tella is a Senior Lecturer at the Saimaa University of Applied Sciences (SUAS) in Lappeentanta, Finland, and holds a post-doctoral position with the University of Eastern Finland. She spent the week working alongside Northumbria's Dr Alison Steven, a Reader in Health Professions Education, on SLIPPS (Shared Learning from Practice to improve Patient Safety) - a project led by Northumbria University on which Dr Tella is a key collaborator.

Errors, mishaps and misunderstandings are common and around one in 10 patients suffer avoidable harm. These incidents impact upon patients, their families, health care organisations, staff and students. SLIPPS is responding to the challenge to improve patient safety education. Co-funded by the Erasmus+ Programme of the European Union, SLIPPS is an innovative three-year education

and research project that will draw on the real experiences of health and social care students in work placements across five European countries.

Led by Dr Steven, the team includes Professor Pauline Pearson, also from Northumbria, and colleagues from six partner universities: Saimaa University of Applied Sciences in Finland; the University of Alicante in Spain; the University of Eastern Finland; the University of Genoa in Italy; Østfold University College in Norway and Lappeenranta University of Technology, in Finland. Outcomes from the research project will help inform teaching at Northumbria, equipping students with the most up-to-date understanding, which in turn will help them in their chosen career paths.

During her visit to Northumbria, Dr Tella spent time meeting and interacting with nursing students and presenting her doctoral work to an audience of academics and students from across several departments.

"Our collaboration has been very fruitful from the very beginning," she said. "We share the same

interest on patient safety and how to learn from each other. In my experience, this has been very effective, international teamwork. A lot has been achieved to develop international collaboration, not just between ourselves and schools but more widely. The five country EU-project that Northumbria University and Dr Steven are leading, is a very good example."

In March, Dr Alison Steven and Professor Pauline Pearson gave a keynote speech at the prestigious International Conference hosted by the Royal College of Nursing Education Forum. The key note entitled '*Education for Patient Safety: Sharing learning from national to international contexts*' covered previous national research undertaken by Professor Pearson and Dr Steven, and Dr Steven then went on to outline and discuss the Northumbria-led SLIPPS project.

**DISCOVER MORE** 

[www.northumbria.ac.uk/nursing-midwifery-health](http://www.northumbria.ac.uk/nursing-midwifery-health)



Finnish academic Dr Susanna Tella with Northumbria University's Dr Alison Steven.

# Winning hearts and minds in India

A Northumbria University academic and world-renowned surgeon is playing the lead role in bringing heart and lung transplants to state-run hospitals across India.

**S**tephen Clark, Professor of Cardiothoracic Surgery and Cardiopulmonary Transplantation in Northumbria's Department of Applied Sciences, is helping the Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS), in Lucknow, northern India, to establish its first heart and lung transplantation programme.

Until now, only a few heart transplants have ever taken place in India, and these have been carried out in private hospitals due to previous complex licensing issues. Anyone requiring such life-saving surgery would have to travel long distances and pay prohibitively high costs.

Professor Clark, a former Director of Cardiopulmonary Transplantation at Newcastle's Freeman Hospital, is mentoring SGPGIMS surgeons through their first operations. He will also help to establish more transplantation units across India and provide distance support to medical staff once they are up and running.

Professor Clark told Northumbria University News: "I have been doing

heart and lung transplants for around 17 years at the Freeman Hospital and am widely involved nationally and internationally, with doing this kind of knowledge and skill-sharing work and helping to establish or assist other transplant units for a number of years now.

"I have helped heart and lung transplant units in Egypt, Turkey and Sri Lanka, but the project in India is the biggest undertaking, because of the size of the country and the number of units that want to start doing heart transplants. The country has a rising population with serious conditions such as heart failure, high blood pressure and diabetes, so there is a huge need for heart and lung transplantation to become more widely available."

SGPGIMS is a 1,000-bed hospital catering for a huge population of 200 million, in one of the largest states in India. It has established itself as a premier institute for teaching, training and research over the last 25 years. The hospital is now fully equipped and capable of launching a heart and lung transplant unit with its license and all logistical support

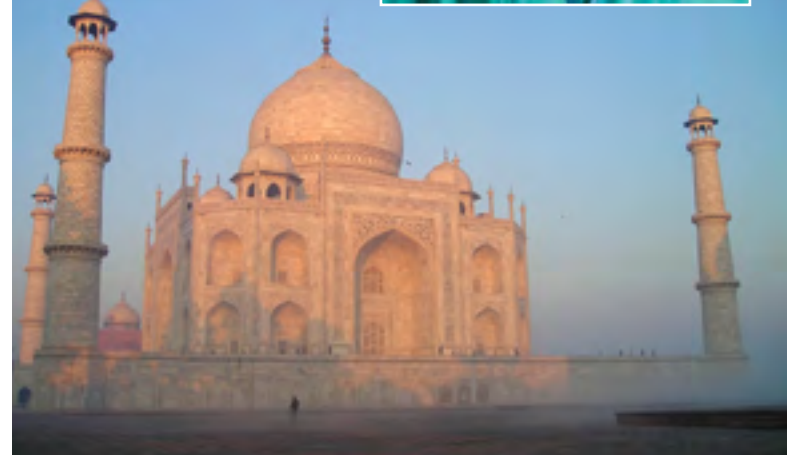
provided by the hospital and the Indian Government.

Dr Gauranga Majumdar, Professor in Cardio-Thoracic and Vascular Surgery at SGPGIMS, attended the annually held International Heart and Lung Transplant Course, led by Professor Clark, at Newcastle's Freeman Hospital last year to gain initial experience, skills and knowledge prior to Professor Clark's visit to his institution in India.

He explained: "I myself, along with fellow colleagues Professor Surendra Agarwal and Dr Bipin Chandra, have benefitted tremendously from the course at Newcastle's Surgical Training Centre. We want to extend our heartfelt gratitude to Professor Clark for all the help he has provided in visiting, guiding and mentoring our heart and lung transplantation unit. We look forward to a long-term collaboration between our two hospitals."

**DISCOVER MORE** 

[www.northumbria.ac.uk/nursing-midwifery-health](http://www.northumbria.ac.uk/nursing-midwifery-health)



Stephen Clark, Professor of Cardiothoracic Surgery and Cardiopulmonary Transplantation. (Top Right).





Pre-nursing course graduates Front row L-R - Rachel Culyer, Julie Derbyshire (Senior Lecturer and the Course Leader) and Lisa Smith.

# Graduates nursing the future

This summer, Northumbria will see the first 11 students in the UK graduate from a new pre-nursing course delivered jointly with the NHS. *Northumbria University News* spoke to staff and students involved in this pioneering programme.

**L**isa Smith will be among the first cohort of students to graduate. She worked as a health care assistant at City Hospitals Sunderland NHS Foundation Trust for six months on a cardiology ward before starting her nursing degree at Northumbria University.

“I had been thinking about going into nursing for a few years,” Lisa said, “but I didn’t have any experience. I was particularly attracted to the pre-nursing course as it was recruiting specifically for values rather than experience. I always thought I would make a good nurse but I didn’t have any health care experience.”

“I am really excited about my new career as there are so many opportunities open to me now I have graduated. The support you gain from Northumbria University and the Trust during the programme is fantastic. My friends and family are so proud of my achievement and after all the hard work we are looking forward to the graduation ceremony.”

Lisa has secured a nursing role working in the accident and emergency department at South Tyneside Hospital.

Julie Derbyshire, Senior Lecturer and the Course Leader at Northumbria University, has been involved in the development of the programme from the start. She said: “Nursing is a wonderful and rewarding career. However, it isn’t necessarily right for everyone and this course provides an excellent

opportunity for aspiring student nurses to gain real life experience first to discover if it is the right vocation for them.

“Northumbria University has delivered nursing programmes for over 20 years and has an excellent reputation for delivering academic excellence and for innovation in nurse education and training; offering a number of routes into nursing. This programme is a great example of that, using a new approach to nurse training whilst ensuring high quality education and training.

“The pre-nursing course has proved very successful and this is thanks to our joint working with the NHS trusts. There is a very thorough recruitment process for the course and an excellent support programme for the participants. We are delighted that out of the original recruits they are all graduating this year apart from one who loved being a health care assistant so much she decided to stay in the role and another who went on to train as a chiropodist.”

Julie continued: “I am incredibly proud of all the students, they have worked extremely hard. Having worked as a health care assistant first has definitely provided them with an advantage going into their degree. I am confident they will go on to have fantastic and rewarding careers.”

The new programme was introduced in 2013 as part of a national pilot scheme by the NHS education and training arm, Health Education England. The programme

was set up following a report into care failings at Mid Staffordshire NHS Foundation Trust. The aim is to provide aspiring nurse students with experience in caring by working as a paid healthcare assistant for up to a year before starting a degree to see if nursing is the right career choice for them. Northumbria is one of only six universities nationally, and the only one in the North East, to successfully deliver the pre-nursing programme. Education England.

From the outset, City Hospitals Sunderland NHS Foundation Trust, South Tyneside NHS Foundation Trust and Gateshead Hospitals NHS Foundation Trust have been involved in the programme. They have also provided health care assistant positions for the students as well as development, training and further placements whilst they have been studying for their degree.

The programme has been so successful in the North East that it has been expanded, with further students taken on each year and Newcastle Hospitals NHS Trust, Northumberland, Tyne and Wear NHS Foundation Trust and Northumbria Healthcare NHS Foundation Trust are also now becoming involved.

Rachel Culyer spent a year working as a health care assistant at Sunderland and Newcastle Hospitals. She said: “Working as a health care assistant gave me great experience and just confirmed the fact that it was what I wanted to do. It also allowed me to learn first-hand about

ward routines, hospital values and all the fundamentals of caring. It really helped me in my first year as a student nurse, providing a real step up.

“The support you receive from the staff at Northumbria University and NHS Trusts is amazing too. I would definitely recommend it as a route into nursing. At the end of the day you feel like you’ve made a difference and it’s not every job you can say that about.” Health care assistant posts were also provided to some of the students in primary and community care. Stacey Ramsey, from South Shields, worked as a health care assistant for a year as part of the course at South Tyneside Hospital working at the minor injuries unit and in the community.

She said: “I’d completed a psychology degree and as part of careers advice I learned more about mental health and nursing. However, I knew you needed experience and unfortunately I hadn’t any so working as a health care assistant was a great stepping stone.”

Katie MacKay-Christie lives in Chester-le-Street and worked as a health care assistant for ten months at the Queen Elizabeth Hospital in Gateshead. She said: “I’d been working in retail for eight years and really wanted to work in health care but I struggled getting any experience. Thanks to the course, I have gained the fundamentals of caring as well as invaluable experience and a real appreciation of the role. It also provided me with

the re-assurance that it was what I wanted to do. I love nursing and can’t wait to start my new career.”

Sophie Bell also lives in Sunderland and worked as a health care assistant for ten months at City Hospitals Sunderland NHS Foundation Trust. She said: “I joined straight from college having completed my A levels. I always wanted to work in a hospital and to look after patients but hadn’t any experience. The pre-nursing course gave me more confidence; I could not have talked to patients beforehand, now I’m speaking at conferences as part of my degree!”

Jill Smith, the Strategic Workforce Development Manager at Health Education England north east office said: “Health Education England has been very pleased that this programme has supported the development of new applicants to the nursing workforce. It has provided opportunities for potential students who may not have had the required experience to be appointed direct to a nursing degree.”

Applicants for the pre-nursing programme still have to meet the UCAS entry requirements for the three-year degree course. Health Education England has provided funding to NHS trusts to support the programme and is evaluating the pilot nationally.

**DISCOVER MORE**



[www.northumbria.ac.uk/nursing](http://www.northumbria.ac.uk/nursing)

# Improving sustainability together

Environmental sustainability is a key priority for Northumbria University and each year, staff and students get involved in a variety of activities which aim to help us all reduce our carbon footprint. In an ongoing bid to deliver significant improvements in sustainability, a range of events and initiatives have already taken place at Northumbria this year. These include Go Green Week, installing new solar panels and organising sustainability awards.

## Northumbria students sow seeds for success

A group of green-fingered Northumbria students were the proud winners of the first ever student prize at this year's Jesmond's Glorious Gardens Competition.

Jonny Forsey, Charlie Dutton-Brearley, Jaimine Mistry, Kyle Moore and Chloe Lipton dug their way to victory after they decided to roll their sleeves-up and tend to their front garden.

Jonny and Charlie said "Gardening is a bit of a random departure to be honest, but the chance to win a prize for sorting out the space for summer was too good to miss".

The competition is held annually by Jesmond Residents Association, and is aimed at improving the often neglected spaces in front of Tyneside Terraces in the area.

Tony Waterston of Jesmond



The winning garden in this year's Glorious Gardens Competition.

Residents Association said "This is the first time we have opened the competition specifically to students. We recognise that they form a large percentage of the community and their contribution to making the environment an enjoyable place to live is an important one. To see how Jonny, Charlie and the team have improved their space is impressive and will hopefully encourage more students to take up the trowel

next year!"

The team's efforts were toasted with some well-earned refreshments from category sponsors, Wylam Brewery.

**DISCOVER MORE**



[www.northumbria.ac.uk/sustainability](http://www.northumbria.ac.uk/sustainability)

## Campus future is brighter thanks to solar boost

Northumbria University's Pandon Building, home to professional support services and the Faculty of Engineering and Environment, is the latest building on campus to be kitted out with PV solar panels, in perfect time to make the most of the summer sunshine.

The new panels and specialist monitoring equipment have the power to generate around 23,000 kWh of electricity per year – the same as the annual electricity consumption of almost six family homes.

The installation of PV panels at Pandon Building follows similar additions at Northumberland Building, Sport Central and Coach Lane Sports Centre and demonstrates the University's strong commitment to protecting the environment.

In total, the panels installed across Northumbria's buildings have the ability to generate 183,000 kWh of electricity per year and will save more than 80 tonnes of CO<sub>2</sub> annually.

The installation will also allow students and academics to carry out important research into future power networks and how they can be integrated and optimised in a bid to reduce the damaging impact energy generation has on our planet.

You can find out more about our solar installations by visiting [www.northumbria.ac.uk/about-us/campus-services](http://www.northumbria.ac.uk/about-us/campus-services) and looking out for our environmental sustainability page.



The solar panels on the roof of Pandon Building.

## Northumbria celebrates all things Green

From cookery classes to carbon tours and food banks to Nordic walking, the focus at Northumbria was on all things sustainable as staff and students celebrated Go Green Week 2017 earlier this year.

The annual University event encourages all staff and students to find out more about protecting the environment and make small changes which could have a big impact on the planet.

Northumbria's week of activities kicked off with a dedicated Go Green Week Fair, where staff and students were able to have a go at eco-driving, test their light-switch reflexes and discover some top tips for saving money and helping the environment in the process.

In total more than 20 different events, demonstrations and

talks took place throughout the week, all providing advice about reducing our individual carbon footprint.

Cycle mechanics from Dr Bike were on hand to provide free bike servicing and bike tagging to encourage sustainable travel. And a food fair, showcasing some of the many local producers who supply the University's restaurants and cafés, saw more than 1,200 samples enjoyed by staff and students.

During Go Green Week staff and students also donated hundreds of items for a local foodbank, providing nearly 200 meals for families in need.

**DISCOVER MORE**



[www.northumbria.ac.uk/sustainability](http://www.northumbria.ac.uk/sustainability)

## Planet smart students rate university staff

A group of student volunteers have been meeting Northumbria staff to find out how well the University's different faculties and services are doing in reducing their carbon footprints.

As part of Northumbria's Green Impact scheme, teams from across the University have been making changes in their offices and buildings in support of the 'Improving Sustainability Together' agenda.

The sustainable scheme sees staff pitching in to develop action plans to reduce their impact on the environment and working towards achieving Gold, Silver or Bronze sustainability awards.

From day to day changes, such as recycling and turning off electrical items, to the bigger commitments, including hosting events and

arranging food bank collections, staff have made big steps in reducing their impact on the environment.

In order to assess how well they are doing a group of trained student volunteers met with staff to find out what the different teams have been doing to meet their action plan goals. The dedicated students were impressed with what they discovered and have since handed out a record number of awards including six gold awards, four silver and two bronze.

The scheme aims to encourage staff and students to work together collaboratively to deliver significant improvements in sustainability. Northumbria has recently seen fantastic reductions in its carbon emissions and is proud to be a Fairtrade accredited university.

Damon Kent, Director of Campus Services, said: "At Northumbria University we are committed to reducing our carbon emissions by 32% by 2020. In the past year we are delighted to have been awarded the Silver EcoCampus Award and we have also risen to 40th place in the People and Planet University Green League which shows what we are doing is having a positive impact. It's great to look back over the year and see all of the fantastic events, initiatives and changes staff and students have made to care for our environment."

## Why veterans struggle to seek help for substance misuse



Dr Matt Kiernan, Associate Professor of Mental Health and Veteran Studies with attendees at the research event.

The University's Northern Hub for Veteran and Military Families' Research recently published its findings into why veterans with substance misuse have difficulty in seeking and engaging with support for their condition.

The research project, funded by the Royal British Legion, lasted for 18 months and involved interviews with 31 British veterans - 20 of whom had alcohol issues - and six senior health and social care commissioners based in the North East. The findings are now being used to improve services for veterans.

Veterans who took part in the study revealed that excessive alcohol consumption was viewed as the norm during their service career, and that they themselves did not recognise it as an issue or accept that their alcohol consumption was excessive. This perception, and their own relationship with alcohol, resulted in the veterans delaying their engagement, taking on average 18 years for them to seek this help. By this point the veterans had serious and multiple issues, such as mental or physical health and/or social problems, making it even more difficult to provide support. Three quarters of those interviewed who sought help only did so when they became homeless and 15% when going through the criminal justice system.

Dr Matt Kiernan, Associate Professor of Mental Health and Veteran Studies at Northumbria

University and a former Lieutenant Commander in the Queen Alexandra's Royal Naval Nursing Service, led the research. He said: "Heavy drinking was reported as a large part of normal life in the forces by those involved in this research. Only when they left did they realise that this was not the case in society as a whole. During the interviews, we did find that when veterans encountered services who do have knowledge and understanding of their issues, they are more likely to open up and confront their problem. "We are hoping that this research will help those involved in providing support to veterans, to gain a deeper understanding of the barriers veterans face when engaging with care, and to encourage them to collaborate to provide a much more holistic pathway of care to address veterans' needs."

The key findings of the research were presented to a range of organisations involved in supporting veterans. Representatives from the NHS, Clinical Commissioning Groups, Local Authorities, the Ministry of Defence, the Royal British Legion and charities, as well as a number of veterans attended the event.

The researchers are now working with some of the organisations



Dr Matt Kiernan.

involved in providing care for veterans to help focus on how services can be more responsive to their needs, including the provision of training.

Matt continued: "The reaction to the research has been very positive. We are pleased that organisations involved in providing care to the veterans are responding and ultimately we would like to see the creation of an integrated health and social care pathway for veterans with substance misuse problems."

**DISCOVER MORE**

[www.northumbria.ac.uk](http://www.northumbria.ac.uk)

## Northumbria Pro-Chancellor elected to prestigious position

Chris Sayers has been announced as the new Chair of The Committee of University Chairs (CUC) – the national body for governance standards in UK Higher Education.

Chris, who is Pro-Chancellor and Chair of the Board of Governors at Northumbria

University, succeeded Geoff Dawson, Chair of the Board & Pro Chancellor, Sheffield Hallam University. Chris Sayers became Chair at Northumbria in July 2012 after joining the University's Board of Governors as an external member in 2010. He is currently in his third three-year term as Chair at Northumbria after being reappointed in November 2016. Prior to joining the University, Chris was the BT Group Regional Director for the North East, building on a successful leadership career with BT of 26 years, which included managing the local government sector across the UK for BT Global Services.

Speaking about his new appointment, Chris said: "All higher education institutions are facing a period of change, as we come to terms with a new regulatory framework. As we see more diversity in the sector and excellence being found in different institutional and governance models, the role of the CUC becomes all the more important. Chairs will not only benefit by staying abreast of developments, but I believe they should also have an opportunity to influence

the way the relationship between government and the sector develops. CUC will need to work with all sector stakeholders where it can."

Professor Andrew Wathey CBE, Vice-Chancellor and Chief Executive of Northumbria University, Newcastle, said: "I am delighted that Chris Sayers has been elected as Chair of the CUC. Chris is an excellent choice to represent the interests of the UK's governing body chairs in their common aim to promote excellence in governance standards across the HE sector. I am sure he will bring the same high level of skill, commitment and enthusiasm to this role that he brings to the Board at Northumbria."

John Rushforth, Executive Secretary CUC, said: "We are delighted that Chris has taken on this role and we look forward to working with him during his term as Chair. The CUC owes many thanks to outgoing Chair Geoff Dawson, for his strong leadership of CUC at this time of change for the HE sector."

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[www.northumbria.ac.uk/about-us/leadership-governance/chair](http://www.northumbria.ac.uk/about-us/leadership-governance/chair)



Chris Sayers, Chair of the Board of Governors at Northumbria University

# THE CONVERSATION UK

*The Conversation* is a collaboration between news editors and academics to provide informed news analysis and commentary that's free to read and republish.

At Northumbria, our academics have been working with *The Conversation* to produce independent, quality current affairs journalism on some of the latest topics to hit the news.

Here are some of our top picks...



## What does President Macron mean for Brexit?

In light of the recent campaign for the French Presidency, new leader Macron has openly voiced his strong views on his aversion to Brexit. Senior Lecturer in French and Politics at Northumbria University, **Ariane Bogain** discusses what this means for Britain.



## Even zoos can no longer protect rhinos from poachers

With news of a four-year-old rhinoceros having been poached of his two horns in a Parisian Zoo, **Tanya Wyatt**, Professor of Criminology at Northumbria University, explores how professional criminals seek huge profits from this sort of activity and whether zoos are high targets.



## Richard Nixon's authoritarian loathing of the media lives on in Donald Trump

Donald Trump certainly isn't at the height of popularity when it comes to the media, branding unfavourable reports as "Fake News". Associate Professor and Reader in History and American Studies, **Randall J Stephens** explores how Trump shares similarities with Nixon in dealing with media backlashes.



## NASA sent a twin to space to study nature versus nurture – and we're starting to get results

A twin experiment in space was conducted by NASA to establish the impact that space has on our bodies. Associate Professor of Musculoskeletal Health **Nick Caplan** discusses the findings and how this could help us prevent diseases on Earth.



## How to embrace urban living, but avoid an apocalypse

With the Chinese Government having recently unveiled plans to construct a city three times the size of New York, Professor of Architecture **Paul Jones** talks pollution, poverty, disease and death, and how future or urban cities will cause great damage, unless we change the way we plan for the future.



## Time crystals: how scientists created a new state of matter

The story of "time crystals" – a new state of matter – was an idea started by Nobel Prize winner Frank Wilczek in 2012. Senior Lecturer in Physics **Rodrigo Ledesma-Aguilar** explores how this was theorised, disproved, revamped and finally created in just five years.





**The things every child with autism wishes you knew**

The world can look incredibly different to a child on the autism spectrum. PhD Researcher in Autism, Family and Communication, **Helen Driver** alongside Research Psychologist and Senior Lecturer in Child and Family Wellbeing, **Joanna Reynolds** present their 10 tips in understanding and respecting children with autism.



**Lego Batman: the darkest knight yet?**

The Lego Batman Movie recently hit cinemas across the globe and has been a worldwide phenomenon. However, does the film have a more sinister edge than initially thought? Lecturer in Film, **Andrew Ross**, explores how filmmakers have delved into the popular character's more 'toxic' elements.



**Sylvia Plath: just because she wrote about her life doesn't mean it's public property**

Renowned emotive poet, Sylvia Plath, lived a sensationalised life with fellow poet Ted Hughes. Now, her letters to her former therapist are set to be published later this year. **Claire Nally**, Senior Lecturer in Twentieth-Century English Literature, discusses the Hughes-Plath marriage, and whether the public are entitled to Plath's unpublished writing.



**There's a technology that could stop Facebook Live being used to stream murders – but it has a cost**

With Facebook containing 1.86 billion active users, conflict has arisen with the conventional ethos of social media and the content that users are able to publish, particularly through the rising popularity of the Facebook Live stream function. Senior Lecturer in Computer and information Sciences, **Honglei Li**, discusses how text and video 'mining' could be used to automatically detect violent language and behaviour.



**What it's really like to live with dementia**

Dementia is a disease which currently effects 850,000 people in the UK. Senior Lecturer in Adult Nursing **Sue Tiplady** discusses how people living with dementia, as well as their carers, families and communities, manage with day to day life and how this indiscriminate disease can affect anyone.



**Rural pubs really do make countryside communities happier – but they are closing at an alarming rate**

It's a case of use them, or lose them. Professor of Entrepreneurship and Regional Economic Development, **Ignazio Cabras** talks about the importance that rural pubs hold in communities and why it is important that we value them.



**Five things the DUP will want in return for rescuing a Conservative government**

In light of the recent hung parliament result in the UK general election, Theresa May has called for parliamentary support from Northern Ireland's Democratic Unionist party (DUP). Vice-Chancellor's Research Fellow **Connal Parr** discusses what this could mean for Britain and what the party may expect in return for its support.



**India must be more transparent about disease threats**

The first case of Zika in India was discovered in November 2016, with further cases to follow. It remains unclear as to why the government decided against announcing this public health threat for almost six months. **Santosh Vijaykumar**, Vice Chancellor's Senior Research Fellow in Digital Health, reflects on the ongoing low levels of transparency in India's health system and the global ramifications that this could have.



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From L-R: Dr Heather Robson (Associate Pro-Vice Chancellor, Strategic Planning and Engagement) Paul Polman (Unilever CEO), Professor Steven Kyffin (Pro Vice-Chancellor, Business & Engagement), Chawisa Deesomboon (PhD student), Sarah Morehead (Programme Leader, Performance Product Design MA)

# Unilever-Northumbria partnership praised during CEO visit

Northumbria is well known for its strong links with industry and partnerships with business, enabling students to gain valuable real life experience during their studies and creating employment opportunities following graduation. One of Northumbria's longest running partnerships, with consumer goods company Unilever, was praised by the company's CEO during a recent visit to the university.

Over the last 12 years, academics and students from Northumbria's School of Design have worked alongside Unilever's research and development teams to help establish new and innovative ways of meeting the company's sustainability targets in relation to packaging, water-use and energy. During a visit to Northumbria, Unilever CEO Paul Polman credited the university's mix of creative talent and practical use of real world techniques for the success of the partnership.

He said: "Northumbria really is unique and the relationship we have with the University brings many benefits to us as a business. Being able to tap into so many creative minds is very beneficial, but there is also the right mix of theory and practicality. Many of the projects we have worked on with Northumbria are real world challenges and the ideas produced have been applied to our business, resulting in changes to the way we work."

Mr Polman has a long association with Northumbria and the North

East. He lived in Newcastle during the 1990s while working for Procter and Gamble and in 2000 was awarded an honorary doctorate from Northumbria in recognition of his innovative approach to implementing sustainable business strategies.

During his visit, Mr Polman visited Northumbria School of Design's new Design:STEM (science, technology, engineering and mathematics) Studio-Lab, where new technologies are being developed which could be used by Unilever across its product range in the future. This includes exploring and designing new, more environmentally friendly alternatives to traditional plastics, as well as 'smart' materials such as chromogenics. These smart materials react to a range of external or environmental factors, such as temperature, by subtly changing their shape. For example, the lid of a shampoo bottle could react to warm water, making it easier to open in the shower or bath.

Mr Polman also met with a number of academics and students including Raymond Oliver, Professor

in Interactive Materials, who is leading the research being carried out, as well as PhD student Chawisa Deesomboon, who Unilever is sponsoring as part of its partnership with Northumbria. Professor Steven Kyffin, Pro Vice-Chancellor (Business & Engagement) at Northumbria, said: "Our partnership with Unilever has already resulted in some really exciting design innovations addressing important issues around sustainability, and with the launch of our new Design:STEM Studio-Lab facilities, we hope there will be many more to come. It was great to show Paul the investment we have made in our design facilities and give him a sense of the types of research we will be carrying out and the impact it could have for packaging in the future."

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Professor in Active and Interactive Materials Raymond Oliver with Unilever CEO Paul Polman.

# Northumbria Pro Vice-Chancellor honoured with design award



Pro Vice-Chancellor Professor Steven Kyffin (Business and Engagement).

Northumbria University Pro Vice-Chancellor Professor Steven Kyffin has received a prestigious award recognising his outstanding contributions in the field of design.

Steven, Pro Vice-Chancellor (Business and Enterprise) at Northumbria, has been awarded with the prestigious 'Support Inspire, Achieve' Award by the Institution of Engineering Designers (IED) in recognition of his work encompassing academic learning, research and industrial practice. In particular, his decision to commit to contributing to the leadership of the design discipline from within the academic context.

Previous winners of the Support, Inspire and Achieve Award have included such eminent designers as Dyson's billionaire inventor Sir James Dyson; Apple's Chief Design Officer and Northumbria alumnus Sir Jonathan Ive; British industrial designer Sebastian Conran; Formula 1 engineer, Adrian Newey, and Sir Alex Moulton, best known for designing automotive suspension systems and starting a revolution in small-wheeled lightweight bicycles.

Steven graduated from Northumbria University in 1981 with a first class honours in Design for Industry. He continued his education at the Royal College of Art, London, where he gained his Master of Design.

Following graduation, he joined the London consultancy scene, started his own consultancy, and in the late 1980s was invited back to the Royal College as Programme Leader for Industrial Design, later becoming the School's Director. This marked the start of his longstanding contribution to design research and education in the academic context.

Steven joined Royal Philips Electronics in the Netherlands in

1998 where, as Senior Director of Design Research and Innovation, he was responsible for design research worldwide. As a member of the Philips Design Global Management Team, Steven headed up Philips Design's European Commission research activities and led their University Relations Programme, through which he supported many University lead Research programmes in Europe, Asia and the US.

He was awarded an Honorary Doctorate by Northumbria in 2009 for his outstanding contribution to design research and innovation. Steven returned to the University as Dean of the School of Design in January 2010, following a successful period of senior leadership in industry.

Steven told Northumbria University News: "I imagine I am in a rare position, where I have spent a number of years working in professional practice; private consultancy; corporate strategic design leadership, as well as in the academic education and research contexts. I have always tried to connect the four worlds in enabling this amazing discipline to contribute to creating a 'better' future in all its different ways.

"So, it's fantastic that, perhaps, the IED has recognised the importance of positioning design as one of our strategic leads in the search for both cultural and economic growth.

"I am humbled to be in the company of such esteemed designers who have previously won this award for such huge contributions through their practice. I am committed to

continue to help provide the energy and leadership to guide the design discipline into the future through the Academic context".

The Support, Inspire, Achieve award is made annually for outstanding contributions in the field of engineering design, design management, education and training or design philosophy, with the awardee presented with the Gerald Frewer Memorial Trophy.

Gerald C. Frewer died prematurely in April 1978 at the age of 56. He was a practising designer at the Kennedy Space Centre, and was known to most IED members through his lectures and articles on the American Space Programme, to which he contributed, from the early days of Project Apollo through to the Space Lab and the early years of the Shuttle Project.

Northumbria's design programmes, ranked 9th in the UK in the 2018 Guardian University League Table, are delivered internationally, with partnerships including the BINUS-Northumbria School of Design in Indonesia and the Academy of Design in Sri Lanka. Partners include household names such as Unilever, Procter & Gamble, Abercrombie & Fitch, Microsoft, Mars, Dunhill, Mulberry, Samsung, Philips, Nike and Intel.

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## Firefighters in safe hands thanks to Northumbria's designs

Students from the School of Design have been working with Tyne and Wear Fire and Rescue Service to create innovative new safety equipment for firefighters.

During a live project sponsored by safety equipment specialists Draeger Safety UK, 36 students from Northumbria's Design for Industry course had the opportunity to test their creative solutions to the hazards faced every day by firefighters. Focusing on new and innovative ways for firefighters to communicate with each other while working, the students had to base their choice of materials on a number of considerations. For instance, firefighters work in high temperature environments, but also with water, while materials also need to be anti-static and non-sparking to reduce the risk of igniting gases. The top three student designs were selected at an event at Byker Community Fire Station and will be progressed into working prototypes.

Matthew Lievesley, Director for Engagement and Enterprise at Northumbria's School of Design, said: "Design is a process that begins by understanding the needs of people working in real situations, so a design challenge such as this is fantastic experience for our students, and being able to work alongside industry experts and the firefighters themselves has been of huge benefit.

"It is fantastic to think that firefighters up and down the country could soon be using sophisticated Draeger communications equipment, which incorporates the innovative work of students here in the Design School. "We are very grateful to both Tyne and Wear Fire and Rescue Service and Draeger Safety UK for their support with this project and are very excited about seeing how the designs progress."

At the start of the project, the students were visited by members of Tynemouth Community Fire

Station's Green Watch and given the chance to try out the safety equipment currently used, as well as ask questions about the conditions faced by firefighters at the scene of a fire.

Northumbria student Siyi Gu said: "When the firefighters visited, our team were surprised at how heavy the equipment they use is. There is almost no space for them to carry more fire-fighting tools, so we wanted to make a positive difference to their high risk work through our design."

Fellow student Dylan Wiener added: "The opportunity to design for a profession that operates in some of the most high-pressure environments was really exciting and an incredible opportunity to gauge just how much thought has to go into making sure these products work day-in and day-out."

Mark Hayes, Station Manager at Byker Community Fire Station, said: "It was an absolute pleasure to be involved in this project and to see so many young people positively engaged in furthering their education.

"I was very impressed with the research the students put into understanding the work we do and the challenges we face as firefighters. They had considered the need for practical robust solutions to using equipment in hostile environments and their finished designs reflected this."

Northumbria's award-winning School of Design works with a range of industry partners including global organisations such as Unilever, Samsung, Phillips, Nike and Intel, to ensure its students are at the cutting-edge of business innovation.

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[www.northumbria.ac.uk/design](http://www.northumbria.ac.uk/design)



Staff and students from the School of Design pictured with representatives from Tyne and Wear Fire and Rescue Service and Draeger Safety UK.

# REVEAL

architecture arts design media

## Creative talent revealed

### Passion for fashion

Graduating students from across Northumbria's fashion degree courses have been showcasing their work to top industry representatives across a number of high profile events.

Final year students from Fashion, Fashion Design and Marketing and Fashion Communication courses recently attended Graduate Fashion Week in London. The annual event features work by students and graduates from some of the most innovative universities around the world and includes catwalk shows, exhibitions, awards, live talks and workshops by leading names from the fashion industry.

During the week, an impressive 17 Northumbria students were shortlisted for awards with success for Fashion Communication students Ede Dugdale and Hollie Bell, who were named runners up in the Fashion Photography Award and Drapers' Fashion Publication Award respectively. In addition, Fashion Design and Marketing student Alexandra Ward was runner up in the Mothercare Childrenswear Award.

One of the highlights of the week was Northumbria's catwalk show. Featuring collections from 17 Fashion students, the show was watched by more than 500 invited guests, including fashion industry representatives. It was also streamed live around the world through the Graduate Fashion Week website.

Graduate Fashion Week aims to promote new talent within the fashion industry and help create a bridge between graduation and employment. It has launched the careers of successful designers such

as Christopher Bailey MBE, Stella McCartney, Giles Deacon, Matthew Williamson and Julien Macdonald.

Ahead of Graduate Fashion Week, students also had the opportunity to show their work closer to home at the annual Newcastle Fashion Show, which took place at BALTIC Centre for Contemporary Art in Gateshead. One of the region's most anticipated fashion industry events, the show attracts industry names, global brands, business leaders, academics past and present and design alumni.

Kristen Pickering, programme leader for Fashion at Northumbria University, said: "We are very impressed by the craftsmanship and creativity of this year's students from all three programmes and were extremely proud and excited to share their work. It has been very rewarding for teaching staff to witness final collections take shape with both the BALTIC and Graduate Fashion Week exhibitions the perfect platform for the students to launch their careers. Both catwalk shows are closely watched by industry, bringing interest to our exhibition stand to view student portfolio's. Graduates are very fortunate to have these opportunities of launching what we hope will be exciting career prospects.

"Over the last four years, the students have worked hard and shown dedication and commitment developing key skills needed

to succeed in this industry. The student's efforts are already paying off. A large number of this year's cohort have secured, or are at the interview stage, with high-profile brands across the fashion industry, nationally and internationally. We'll be watching their careers with anticipation and fully expect our students to go onto great things."

Northumbria's award-winning BA (Hons) Fashion, Fashion Design and Marketing and Fashion Communication Programmes are renowned for the calibre of their 'business-ready' graduates. All three have a hugely impressive list of alumni, with graduates employed internationally at global brands such as Tom Ford, Joseph, Barbour, Burberry, Richard Nichol, River Island, Top Shop, Next, Celine, Givenchy, Lanvin, Tommy Hilfiger, Abercrombie & Fitch, Old Navy and Ralph Lauren.

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Live exhibition at the Newcastle Fashion Show.



Work by Fashion Communication students at Graduate Fashion Week.



Live exhibitions at the Newcastle Fashion Show.



Collections on display at Graduate Fashion Week.





Live exhibitions at the Newcastle Fashion Show.



Student work on display at Graduate Fashion Week.

## Fashion Focus: Genevieve Devine



Northumbria Fashion graduate Genevieve Devine was the winner of last year's Graduate Fashion Week 25th Anniversary Tu Scholarship Award. Since then she has worked with the Sainsbury's team to develop a nine-piece collection, taking inspiration from her own graduate line. Northumbria University News caught up with Genevieve to find out more about her experiences over the last year.

### What attracted you to studying fashion at Northumbria University?

Newcastle is a special city with a unique art scene and wonderful people. I went to open days all over the country and Northumbria stood out because of its strong focus on craftsmanship.

### What was your experience of taking part in the degree shows?

Watching my collection come down the runway was a surreal and rewarding experience. Having work shown at Graduate Fashion Week and BALTIC are amazing opportunities and we had access to so many industry insiders, allowing us to network and kick-start our careers.

### How did you secure the internship with Tu?

My tutors showed the judges my portfolios at Graduate Fashion Week and I was invited to an initial interview. I then made it through to the final when I was told the scale of the prize. Myself and the other finalists then presented our work to the judges, including designer Holly Fulton and the design team at Tu. I certainly was not expecting to win and it was such a surprise when my name was called.

### Describe a typical day in your role at Tu

Each day brings something new. I learnt so much about garment production while developing my graduate collection into an accessible collection for Tu. I worked on the digital design and fabrication then had the

amazing opportunity to go to India where I worked directly with suppliers. The Scottish fashion designer Holly Fulton is my mentor and has guided me through this process and given me an invaluable insight into the way the industry works. This has included visits to her studio and many phone calls for advice. Day to day I work on the Premium and Workwear collections where I can be designing, drawing, researching and presenting womenswear garments.

### Your collection has launched in Sainsbury's stores nationwide – how does it feel to see your designs on display and being worn?

It is an incredible feeling seeing someone connect with one of my designs. Doing the collection for Tu has given me amazing press coverage that I never would have dreamed of getting straight out of university. Having my work being so accessible to women from all walks of life is really exciting.

### Any advice for current students looking to pursue a similar career?

Never be afraid to ask for help and be open to new experiences – one opportunity which may not have been the direction you were expecting to head in can lead to others that you never would have experienced otherwise.

**DISCOVER MORE**



# Setting the stage for success



The cast of *Love and Information* with director Steve Gilroy.

Two thought provoking plays were performed in the North East for the first time recently as part of Northumbria University's graduating Performing Arts students' final degree shows. The performances of Edward Bond's play *Human Cannon* and Caryl Churchill's *Love and Information* took place at Northern Stage and provided the students with an opportunity to showcase their skills to potential employers and industry professionals.

**H**uman Cannon is set during the Spanish Civil War and tells the story of the village of Estaroban and peasant farmer, Agustina Ruiz. The play was directed by Fiona MacPherson, Senior Lecturer at Northumbria, who believes the issues it raises resonate strongly in light of recent global events. She said: "This is a play about what it means to be human in a world that can often feel inhuman. It explores war, morality, democracy and social justice – all issues which are as pertinent right now as they ever have been."

*Love and Information* features over one hundred characters and explores human connections and the role of love and humanity in an age of continual access to more and more information. Director Steve Gilroy, playwright and principal lecturer at Northumbria, said: "The students took a highly professional approach to an important play which speaks directly to these modern times. This was the first time this play has been produced in the North East and it was a fantastic opportunity for Northumbria students to contribute to the cultural offer and vibrant artistic landscape of Newcastle."

The plays marked the end of the students' three-year Theatre and Performance BA (Hons) degree course and aimed to replicate the experience of auditioning for, rehearsing and staging a professional theatre performance. Both were carefully



Performances of *Human Cannon* (above) and *Love and Information* (below).



selected to challenge the students and allow them to gain new skills and experience. For example, in *Human Cannon* the students perform live music while in *Love and Information* the students play numerous characters.

Both Steve and Fiona have extensive professional experience working within the performing arts, including directing, writing and running their own production companies. Fiona said: "We aim to create a professional environment, giving the students an authentic experience of what being involved in a theatre production entails and preparing them for the real

world once they graduate. This is their opportunity to make connections, network and meet potential employers. We have been incredibly impressed with the talent, creativity and enthusiasm of the students this year. They delivered thoroughly professional and thoughtful interpretations of both plays."

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## Designs for Everyday Life

Northumbria's award-winning School of Design took a bite out of the Big Apple at the International Contemporary Furniture Fair (ICFF) in New York.

**D**esign academics Rickard Whittingham, Trevor Duncan, Colin Wilson and David Irwin, alongside five graduate Designers in Residence, presented their project, 'Tools for Everyday Life', at this summer's fair. Northumbria won the 2012 Editors award for best accessories during one of their previous visits to New York with US manufacturers and retailers putting Northumbria products in their stores following the win. The University returned to New York this year, with new additions to its collection, as part of the British European Design Group pavilion (BEDG).

Following this year's show, Rickard said: "The main thing we took away from this year's show has been the opportunity for recent graduates just starting their own design practices to showcase their work alongside established brands. The best way of learning the 'ins and outs' of the business of design is to directly engage with retailers and manufacturers. The US market has really responded well to the Northumbria University brand of doing things again this year."

He added: "This was our sixth time at ICFF, but we don't exhibit in the design schools section of the fair because the point of us going is for the products we show not to be seen as student projects but as market-ready pieces by recent graduates who are starting business. The award in 2012 was a bit of coup because we were up against established

brands from around the world. "David Irwin has exhibited with us in NYC before and has new products in production with Juniper design based in Brooklyn as a result. One of our Designers in Residence Will Baugh had his Keyway ruler product 'picked up' by the MOMA store three years ago when we set a project for all the Northumbria exhibitors to design and make rulers."

Northumbria's latest Designers in Residence, Jane Speers and George Riding, who are both 3D Design graduates, were also among the group and attended the ICFF for the first time. The 'Tools for Everyday Life' Project is led by a combination of staff, graduate Designers in Residence and other recent graduates. The project aims to promote Northumbria's brand of industry facing design education. Northumbria has been ranked in the top 150 out of almost 1,700 global universities for Art and Design, meaning it is in the top 8% institutions in the world in this subject area.

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[www.northumbria.ac.uk/design](http://www.northumbria.ac.uk/design)



New York, USA.

# Remembering the future of art

Parallel exhibitions by Northumbria BxNU Master of Fine Art (MFA) students launched at BALTIC 39 in Newcastle.



Images from this year's MFA exhibitions at BALTIC 39.

*Remember Most What Never Happened* was on display at the city centre gallery and brought together work by 10 artists graduating from Northumbria this summer. The BxNU MFA is a unique two-year course, run by Northumbria in partnership with BALTIC Centre for Contemporary Art and based in the vibrant studio culture at BALTIC 39 on High Bridge, Newcastle. This year, the graduating artists made work that ranged and shifted across performance, video, photography, sculpture, installation and intervention. The exhibition utilised the project

space on the top floor of BALTIC 39, which provided an ideal platform for their ideas to unfold, with artwork also spilling out into the public spaces of the building.

Northumbria Senior Lecturer in Fine Art, Sandra Johnston, who teaches on the BxNU MFA, said: "Throughout the programme, the artists are encouraged to self-direct a rich spectrum of experimentation, guided by their own curiosity and interests. A distinctive feature of the course is how these individual trajectories then also coalesce into collective exhibition making – a process that is simultaneously demanding, enlivening and revealing. *I Remember Most What Never Happened*, conceived

by the third graduating cohort of the BxNU MFA, proposes a zeitgeist born of indulgence, suggestion, and invention."

Meanwhile on the first floor at BALTIC 39, the mid-point exhibition by the first year BxNU MFA students was also on display. *In Games We Create Worlds* highlighted the choreography of objects, and the ways in which control is suggested through the construction of space.

Sandra added: "*In Games We Create Worlds* marks the mid-point of the BxNU MFA programme where the artists bring the diverse trajectories of their individual practices together to present a collective exhibition; it is a pivotal point in the course,



where the experimentation and exploration of the first year of study tips towards the potential of new directions to come."

A collaboration between BALTIC Centre for Contemporary Art and Northumbria, the BxNU Master of Fine Art degree is unique for its innovative approach and the high-level professional and creative environment the students experience. Based in the vibrant studio culture of BALTIC 39 in the centre of Newcastle, the students follow their own personal research interests whilst also working collectively to produce a professional exhibition on graduation. The course is one of the key elements of Northumbria's successful strategic

partnership with BALTIC.

*I Remember Most What Never Happened* and *In Games We Create Worlds* ran from 31 May-18 June 2017 with a preview night on 8 June. The exhibitions formed part of REVEAL 2017, Northumbria's annual celebration of its creative courses, including Architecture, Art, Design and Media. Northumbria has been rated as having one of the best Art and Design programmes in the world in recent QS World University rankings.

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[www.baltic39.com/mfa](http://www.baltic39.com/mfa)

## And Venus was her name

A student film about disabled drag performer Venus Dimilo has been recognised with an award from the British Film Institute (BFI) at the UK's most important festival for young filmmakers.

The documentary created by Northumbria graduates Faye Carr-Wilson and Magenta Sharp won the Hiive Future Film Award after seeing off competition from almost 200 submissions. The award, created to recognise the next generation of filmmakers, is judged each year by a panel of BFI and film industry experts. *Venus* was named the winner of the award from a final shortlist of five for its original and compelling exploration of female empowerment and disability through the art and community of drag performance. As winner of the award, the film was given a special screening at the BFI Future Film Festival for filmmakers aged 16-25. In addition, Faye and Magenta will receive industry mentorship and a cash prize of £750.

Faye said: "I'm so pleased that *Venus* is being recognised, it's been really encouraging. Winning such big awards with BFI was pretty unexpected and we've had some great opportunities come off the back of it, which we can't really discuss yet, but we're hoping to keep the momentum up and hopefully do a lot more with the film."

Magenta added: "I'm so proud of what we have achieved with *Venus* so far, and hope that Faye and I can continue to make films which deal with themes and issues we care about. I'm also incredibly thankful to our subject Sophie for trusting us so much with her story and letting us stick a camera in her face so often."

The pair produced *Venus* as their final year graduation film while studying on Northumbria's Film and TV Production degree

course. They were supported by a production team, which included fellow students Richard Hewitson, Jordan Chang and Thomas Edgar. Following the BFI success, *Venus* was also named the winner of the Editing award in the Royal Television Society's 'Regional Student Award: Craft' category.

Robert Jefferson, Programme Leader for Film and TV Production at Northumbria, added: "There was never any doubt this team would be recognised for their dedication, imagination and human approach."

In addition to its recent award success, *Venus* has also been screened at a variety of festivals across the UK, with more to come, including; Scottish Queer International Film Festival, Leeds International Film Festival, Leeds Queer Film Festival, Fringe! Queer



Drag performer Venus Dimilo – the subject of Northumbria graduates Faye Carr-Wilson and Magenta Sharp's award winning film.

Film & Arts Festival and Flatpack Film Festival. Northumbria's Media Production degree was founded in 1986 and has built up an impressive reputation for the quality of its graduates. The course's leading alumni includes cult director Neil Marshall (*Dog Soldiers*, *Centurion*,

*Game of Thrones*), producer Samm Hailay (*Better Things*, *Self Made*) and writer Sean Conway (*Ray Donovan*).

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[www.northumbria.ac.uk/media](http://www.northumbria.ac.uk/media)

# Volunteering to create new knowledge

Northumbria University and the Swedish Red Cross have joined forces to explore the role of volunteers in conflicts.

As the recent atrocities in Syria have shown, volunteers are often on the front line of delivering humanitarian assistance in conflict settings. Northumbria's Professor Matt Baillie Smith, from the University's Centre for International Development, is leading a new research collaboration with the Swedish Red Cross. This research is investigating the experiences of volunteers in conflict and crisis settings in seven countries - Afghanistan, South Sudan, Sudan, Myanmar, Honduras, Ukraine, and Sierra Leone - with the goal of better understanding what it means to be a volunteer in conflict.

Professor Baillie Smith said: "We rarely hear the voices of volunteers in conflict settings, and yet it is local volunteers who are at the forefront of humanitarian efforts, particularly in places where the infrastructure is damaged or international aid workers have

been withdrawn."

Through a jointly developed 'listening' approach, teams of researchers have spent time in each country to better understand what it is like for volunteers in conflict settings, including the issues that affect them most and things they would like to change.

Dr Nisha Thomas, a researcher on the project who recently completed a PhD at Northumbria on volunteering in collaboration with the NGO VSO, added: "The data reveals the significant risks that volunteers face during conflicts, and the longer term impacts it can have, not least through the traumatic events they have witnessed. It shows how volunteers are creative and improvise to be able to help, and that their voluntary work may last many years through sustained conflicts."

At the heart of the collaboration between Northumbria and the Swedish Red Cross has been an emphasis on co-production. Project design, data collection and analysis has all been jointly developed, with practitioners playing active



District of Aleppo, Helloq (under armed opposition control). Syrian Arab Red Crescent volunteers retrieving dead bodies from the streets of Aleppo. Photographer: TAYYAR, I. Copyright: ICRC / Syrian Red Crescent.

roles in fieldwork and developing data analysis.

As Professor Baillie Smith said: "By working in this way, the research process can help team members develop their own practice, whilst the findings can support new training and learning opportunities as well as

policies that protect and support local volunteers in conflict settings.

"The recent events in Syria have focused attention on local volunteers in conflict, but volunteers play and have played critical humanitarian roles across the world for many years. This has often been below the press

radar, or been hidden by the focus on international volunteers. Hopefully we can go some way to changing this."

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[www.northumbria.ac.uk/international](http://www.northumbria.ac.uk/international)

# Antarctic still at risk of climate change

Researchers at Northumbria remain concerned about the effects of rising temperatures on Antarctica's vulnerable coastline following their latest study.

Researchers at Northumbria remain concerned about the effects of rising temperatures on Antarctica's vulnerable coastline following their latest study. Northumbria and Edinburgh University have been carrying out research in Antarctica, which shows that central parts of the region's ice sheet have been stable for millions of years, even when conditions were considerably warmer than now, but that coastal areas remain at risk. The study of mountains in West Antarctica is helping scientists improve their predictions of how the region might respond to continuing climate change. The findings also show how ice loss might contribute to rising sea levels. Researchers from Edinburgh and Northumbria studied rocks on slopes in the Ellsworth Mountains, whose peaks protrude through the ice sheet. By mapping and analysing surface rocks, including measuring their exposure to cosmic rays, the scientists calculated that the mountains have been shaped over a million-year period, beginning in a climate some 20 degrees warmer than present. The last time such a climate existed in the mountains of Antarctica

was 14 million years ago when vegetation grew in the mountains. The region's climate at that time would have been similar to that of modern day Patagonia or Greenland. This marked the start of a period of cooling and the growth of a large ice sheet that extended offshore around the Antarctic continent. Glaciers have subsequently cut deep into the landscape, leaving a high-tide mark known as a trimline, in the exposed peaks of the Ellsworth range. The extended ice sheet cooled the oceans and atmosphere, helping form the world of today. The new study by researchers at Northumbria and Edinburgh is among the first to find evidence of this period in West Antarctica. Professor John Woodward, Northumbria's Associate Pro-Vice Chancellor for Research and Innovation in Engineering and Environment, said: "Sometimes it is almost impossible to imagine the view from these mountains for the millions of years of earth history during which these bedrock surfaces have remained unchanged. "Understanding how such a long-lived landscape can still remain so vulnerable to changing climate is a complex problem for scientists to

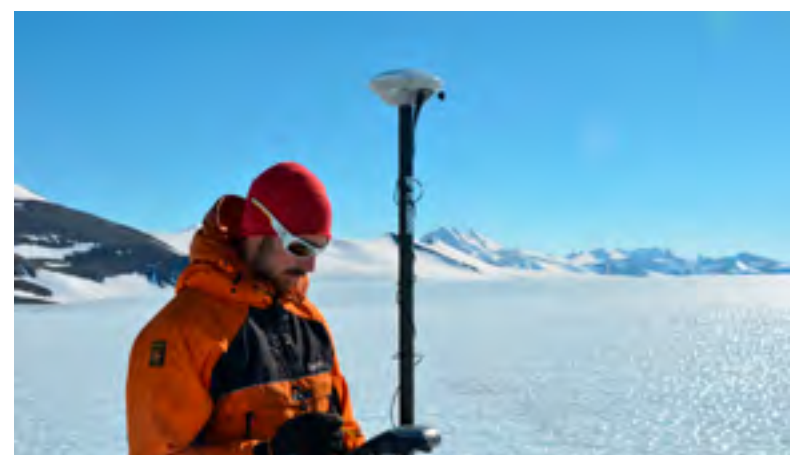
solve. This work helps us explain some of this complexity and points the way to future change as our climate warms."

The research, published in *Earth and Planetary Science Letters*, was carried out in collaboration with the Scottish Universities Environmental Research Centre. It was funded by the UK Natural Environment Research Council and supported by British Antarctic Survey. Professor Woodward and his colleagues from Northumbria are part of the University's Extreme Environments research theme. Academics working in this area explore conditions that challenge the existence of most known life forms on the Earth's surface, subsurface, and oceans as well as its atmosphere and in the solar systems. Northumbria offers a range of courses in Geography and is ranked Top 30 in the UK based on research power following the results of the Research Excellence Framework 2014.

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[www.northumbria.ac.uk/geography](http://www.northumbria.ac.uk/geography)



Northumbria researchers working in Antarctica.



The Ellsworth Mountains, Antarctica.

# Humble origins for ambitious eco homes project

A Northumbria architecture graduate has been working with staff and students from the University to develop homes on a North East site believed to be too challenging to build on.

Northumbria graduate Richard Marsden teamed up with Professor Paul Jones and a group of six MArch (Master of Architecture) students to design eight bespoke properties at Humbledon Hill, Sunderland. By working with his former tutor and the University's current architecture cohort, Richard was able to give the students valuable real-life experience while benefiting from Northumbria's expertise in Architecture and Built Environment. The four-acre site at Humbledon Hill presented a number of design challenges and restrictions, including an ancient Bronze Age hillfort, designated as a scheduled monument in 2011, situated within the plot. Working closely with English Heritage and Natural England, and combining the students' creativity with Professor Jones' knowledge and Richard's entrepreneurial flair, the team proposed a development of eight homes, sensitively designed to reflect the historic and environmental significance of the site. Work to prepare the site for development started in February this year with the first home due to be completed by the end of 2017, and the whole development finished by the end of 2018.

Richard, who is a Director at Building Design North Ltd (BDN), said: "This is a really unique site and so required a unique approach when it came to the development. While I was studying at Northumbria I was lucky enough to work on real-life design projects and so know how beneficial this can be and I wanted to give other students the same opportunity. I also wanted this development to push the design boundaries and felt that the creativity and flair the students could provide would be of huge benefit to the project."

Each of the students involved in the project was asked to design a

four-bedroom executive eco home. The properties all have an energy efficiency and environmental impact A rating, the highest available, and include features such as locally sourced larch cladding, context-specific green roofs and solar panels.

Environmental and historical sensitivities were at the heart of the design process, with most of the homes built into the lower stretches of the hill, tucked behind an existing line of trees. This preserved the secluded area at the top of the hill as an open space, with meadow species planted to preserve any archaeology for future reference. Sustainability has also been considered at all stages of the development, for example, the stone removed during the initial hillside cutting stage of the development will be used to create the roads and driveways on the site.

Paul Jones, Professor of Architecture at Northumbria University, said: "As a university we recognise the value of working closely with industry to offer our students real-life experience to

complement and enhance their academic activity. Being involved in this project was a fantastic experience – it was an extremely challenging site but also presented real opportunities in terms of innovation and modern design techniques.

"As an architect Rick could have designed the houses himself, but recognised the potential value to the students who were given the opportunity to produce a high quality eco-house design, and for those whose schemes were chosen, they are now seeing their work realised.

"At Northumbria we aim to foster a collaborative community of students, staff and graduates and this project is an excellent example of this."

DISCOVER MORE



Architectural designs for the Humbledon Hill project.



The BRIDGE project aims to tackle the construction skills shortage.

## Bridging the gap in the construction industry

Northumbria is working in partnership with two colleges to tackle a vital skills shortage in construction after being awarded £400,000 funding.

The University has teamed up with Gateshead College and Derby College following a recent national report showing that 179,000 jobs will need to be filled between now and 2021 to meet the industry's needs. To address this growing problem, the three institutions have launched the BRIDGE (Building Routes Into Degrees with Greater Equality) Project, which will research the causes of the skills shortage. This project will focus on why there are particularly low numbers of certain groups, such as women, people from disadvantaged backgrounds, ethnic groups, and other minorities, enrolling on construction courses. The project has attracted £400,000 funding from the Higher Education Funding Council for England (HEFCE) Catalyst Fund and will engage with a range of businesses and stakeholders. This will include current and prospective construction and built environment students, apprentices and trainees, as well as current and former professionals from the industry.

Professor Becky Strachan, Associate Pro Vice-Chancellor for Strategic Planning and Engagement within the Faculty of Engineering and Environment at Northumbria University, said: "This funding from HEFCE will allow us to investigate the barriers and develop solutions to attract a more diverse set of people to study construction and built environment programmes at higher and further education level.

"Our aim is to widen access and open up opportunities for students, enabling a future workforce with a

wide range of rich talent, regardless of age, background or gender. The outcomes from this project should also be applicable to other sectors with similar workforce diversity issues.

"We already work closely with a range of employers to design industry relevant programmes – for example we will soon launch a new Chartered Surveyor degree apprenticeship created in partnership with industry representatives. We also have experience of widening access through our NUSTEM initiative (formerly Think Physics), which we will draw on during this project.

"We believe the BRIDGE Project will stretch the boundaries of traditional approaches in response to demand and have real impact on future workforce development."

Northumbria has an excellent track record in Widening Participation to university education and recently led a three-year HEFCE-funded project, NUSTEM to drive engagement from underrepresented groups, particularly women, in Science, Technology, Engineering and Mathematics disciplines. The University has also co-invested £6.7m into new world-class STEM facilities in recent years. This has been followed by a further £52m campus investment, which will see new Architecture Studios and a new Computer and Information Sciences building being constructed on campus to drive academic excellence in these subjects.

DISCOVER MORE



[www.northumbria.ac.uk/construction](http://www.northumbria.ac.uk/construction)

# Eureka moment for Northumbria's 'smart' researchers

Two Northumbria researchers working in smart surfaces have won a prize in the Eureka and Discovery category of the Engineering and Physical Sciences Research Council's (EPSRC) annual photography competition.

Senior lecturer Dr Ben Bin Xu and PhD student Ding Wang's prize-winning photograph is a visually striking image of a thin elastic material, which has been heavily compressed during their research. The pair are members of the Smart Materials and Surfaces Lab with the faculty of Engineering and Environment at Northumbria. Their current research, funded by a £97k grant from the EPSRC, is focused on the micro-mechanics of soft materials such as gels and silicone elastomers and how these can be used in future engineering applications.

Dr Xu, a senior lecturer in Mechanical and Construction Engineering at Northumbria said: "While the wrinkling, buckling and folding of the surfaces of thin films, such as aging skin or the crumpling of a thin film device, are traditionally seen as faults, this wrinkling can actually be

used to improve multifunctional chip devices for use in biology, tissue engineering and chemical engineering. This photo, captured by Ding Wang during our research, is a wonderful visual representation of the work we are carrying out. For the image to be recognised in this very prestigious national competition is a fantastic achievement."

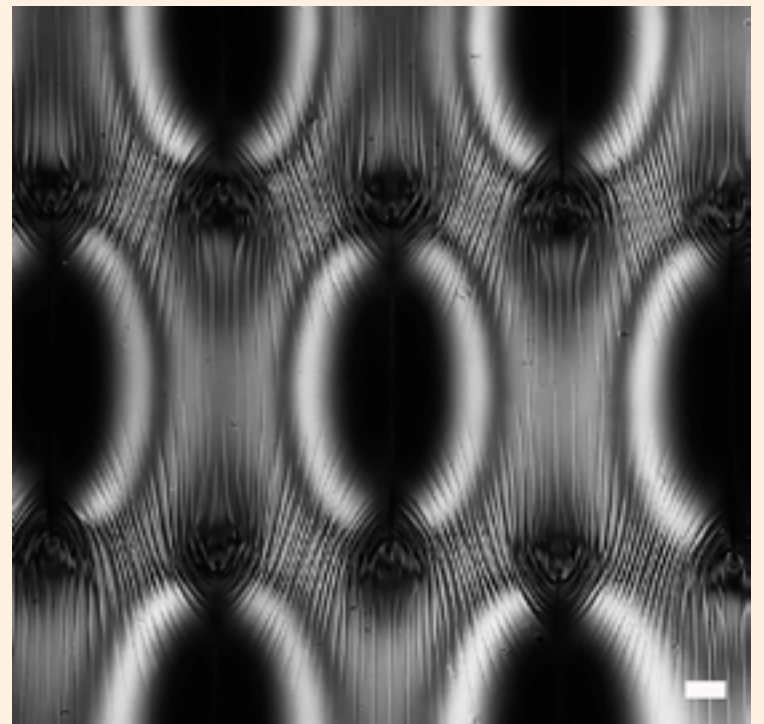
The EPSRC's Science Photography Competition is now in its fourth year and is open to all EPSRC-funded researchers. This year the competition attracted more than 100 entries across five categories – Eureka and Discovery, Equipment and Facilities, People and Skills, Innovation, and Weird and Wonderful.

Competition judge Dr Helen Czerski said: "Scientists and engineers are often so busy focusing on the technical details of their research that they can be blind to what everyone else sees first: the aesthetics of their work. Science is a part of our culture, and it can contribute in many different

ways. This competition is a wonderful reminder of the emotional and artistic aspects of science, and it's great that EPSRC researchers have found this richness in their own work."

The EPSRC is the main funding agency for engineering and physical sciences research and invests £800 million a year in research and postgraduate training, building the knowledge and skills base needed to address the scientific and technological challenges facing the nation. Northumbria offers a range of fascinating courses in the field of Mathematics, Physics and Electrical Engineering, with a number of research groups at the University driving breakthroughs and discoveries in these disciplines.

DISCOVER MORE



Not all wrinkles are unwanted, by Senior Lecturer Dr Ben Bin Xu and PhD student Ding Wang.

# United Nations asks Northumbria professor to help address global problem

Eliminating the practice of Female Genital Mutilation (FGM) is a step closer thanks to the expertise of a Northumbria academic.



Professor Ngianga-Bakwin Kandala

A world-leading biostatistics expert, Professor Ngianga-Bakwin Kandala was invited to a prestigious United Nations (UN) conference in April to discuss his analysis of the complex social, cultural and environmental reasons why FGM occurs. His work in statistical analysis and modelling will help policy makers understand the causes of FGM and design solutions, which could help eradicate this global problem. Using

data provided by National Statistics Offices, charities and NGOs to identify FGM hotspots, Professor Kandala focused his analysis on Kenya in the first instance and presented these findings at this year's joint UNFPA-UNICEF Female Genital Mutilation/Cutting (FGM/C): Accelerate Change conference.

Professor Kandala, who is based in Northumbria's Mathematics, Physics and Electrical Engineering department, said: "The Bayesian method of analysing data allows us to take all the complex social, cultural and environmental factors into account to produce a far more accurate and multi-dimension view of the situation and how it is changing over time.

"We can then present these findings in a way which allows policy makers to understand the problem and design bespoke solutions for individual countries or communities.

"This is the first time data in relation to FGM has been analysed using this method and on this scale

and I was delighted to be asked by the UN to present my findings at the Accelerate Change conference."

Professor Kandala has spent the last 15 years working with organisations such as the World Health Organisation, children's charity UNICEF and the UK's Department for International Development (DFID) to map global health and disease in developing countries using statistical analysis. In recent years, he has played a major role in helping establish a group to train biostatisticians in Africa.

Alongside his work in developing countries, Professor Kandala is also interested in studying the relationship between air pollution and health in developed countries, including the UK, in the future. This would include studying links between Mono-nitrogen Oxide, sulphur dioxide, particulate matter, benzene, heart failure, hospital admissions and mortality and mapping health trends in relation to air pollution.



The United Nations.

Speaking about Professor Kandala's invite to the UN, Professor Glen McHale, Pro Vice-Chancellor (Engineering & Environment), said: "The work Professor Kandala is carrying out is of global importance and is an excellent example of the type of internationally significant

and ground-breaking research being carried out by our academics here at Northumbria."

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[www.northumbria.ac.uk/maths](http://www.northumbria.ac.uk/maths)

# Northumbria leading the way in human-computer research

Researchers from Northumbria exploring the complex interaction between humans and computers have presented their latest work at an international conference.



Denver, Colorado, where this year's CHI conference took place.

Earlier this year, a team of 12 academics travelled to Denver, Colorado to speak at the ACM (Association of Computing Machinery) Conference on Human Factors in Computing Systems (known as CHI) – an annual event which sees experts from around the world gather to share their latest findings. The team from Northumbria have been involved in a total of 24 new research papers, addressing issues of Human-Computer Interaction in a wide variety of application areas, such as support for ageing and care settings, home technology use, civic participation and new design methods for developing interactive devices. Professor David Kirk was among the Northumbria contingent and co-author of five of the new research papers, presented for the first time at CHI.

He said: “The ACM CHI conference is one of the most important events for academics working in the field of Human-Computer Interaction and gives researchers the opportunity to

discuss new ideas and cutting-edge developments in technology in this very exciting and fast-moving area.

“At Northumbria we have developed really innovative ways of working with colleagues across different faculties and departments to combine our research power and expertise, and our work in the area of Human-Computer Interaction is a great example of this.

“We have academics specialising in areas such as participatory design, social computing, cybersecurity, digital identities, sustainability and the Internet of Things. We are exploring both the design of new technologies and the ways in which we live and work in the digital age.”

Northumbria is home to the Northumbria Technology for Humanity Lab (NORTH Lab) – one of the largest Human Computer Interaction research groups in the UK. NORTH Lab brings together a community of researchers from across the University's different faculties and departments, including Design, Psychology and Computer and Information

Sciences.

Interdisciplinary research is at the heart of Northumbria's work and the university has recently established eight multi-disciplinary research themes (MDRTs). Each MDRT includes academics from across different departments, with the aim of sharing knowledge and expertise to find innovative solutions to some of the world's greatest challenges.

Academics from both the Digital Living and IDEATE MDRTs are attending the CHI 2017 conference. Researchers within Digital Living explore the human-centred design of smart cities, practices of living and working in the digital age, big data, digital identities and the security of digital information. The researchers leading IDEATE are exploring how creative design can be put into practice to realise and explore possible futures, and, in turn, foster innovation.

**DISCOVER MORE**



[www.northumbria.ac.uk/research](http://www.northumbria.ac.uk/research)



Henk Jonkers, of Delft University of Technology in the Netherlands (right), pictured with Dr Alan Richardson, reader in Mechanical and Construction Engineering at Northumbria.

## Concrete savings thanks to Northumbria research

Self-repairing concrete, which could save the UK £80 billion in repairs, was among the research discussed at an international seminar at Northumbria.

Repairing cracks in concrete structures can be time consuming and expensive, but academics at Northumbria and Delft universities are working to develop a self-repair system which uses natural bacteria to seal cracks, preventing so-called ‘concrete cancer’. Henk Jonkers, of Delft University of Technology in the Netherlands, revealed the latest findings during an event at Northumbria earlier this year. His seminar discussed the research of Dr Alan Richardson, reader in Mechanical and Construction Engineering at Northumbria, who is a pioneer of this innovative proposal and appeared alongside his Dutch counterpart.

Dr Richardson said: “The cost of repairing the UK's aging concrete infrastructure is estimated to be £80 billion. The work involved in carrying out these repairs is labour intensive and an expensive job for both the tax payer, who funds infrastructure via taxation, and the individual owners of structures.

“Self repairing materials can significantly reduce the cost of repairs as well as lowering the environmental impact from repair systems to structures. Our proposed self-repair system

is available when and where required without any human intervention and with a zero environmental impact.”

The self-healing concrete uses a ground-borne bacteria - bacilli megaterium - to create calcite, a crystalline form of natural calcium carbonate. This can then be used to fill existing cracks and block the concrete's pores, keeping out water and other damaging substances to prolong the life of the concrete. The bacteria is grown on a nutrient broth of yeast, minerals and urea and is then added to the concrete. With its food source in the concrete, the bacteria breeds and spreads, acting as a filler to seal the cracks and prevent further deterioration. It is hoped the research could have enormous commercial potential through further development and extended testing. Northumbria's researchers in the field of Future Engineering are working to create the next generation of innovative solutions to the UK's engineering needs.

**DISCOVER MORE**



# International Summer Academy attracts high praise

Northumbria Law School has hosted a Summer Academy event specifically exploring topical global issues in international criminal justice and their impact on peace and security.

The Summer Academy, which was co-ordinated by Northumbria Law School's Doctor Mohamed Badar and Professor Sue Farran, and Doctor Tanya Wyatt from Arts Design and Social Sciences, included presentations by senior judges and eminent scholars from around the world. It was held as part of ongoing work by the University's Environmental and Global Justice multidisciplinary research theme, in partnership with Northumbria Law School, the Department of Social Sciences and the Northumbria Centre for Evidence and Criminal Justice. Appeals Chamber Judge and former President of the Special Tribunal for Lebanon Sir David Baragwanath, highlighted some key challenges addressed by citing the words of UN Secretary-General António Guterres, describing: "A new global threat



Senior judges and international academics meet at Northumbria.

of terrorism that is impacting the whole world and that cannot be neglected by anyone anywhere".

Judge Baragwanath added, "Academic leaders and international judges discussed with a wide range of young scholars of international criminal law how with international cooperation the law can play an informed, well-planned and vigorous part in meeting the global threat. Among the

proposals identified for realising the potential of international criminal law were public education, and adding to political and other resources of States and UN institutions, a coordinated international legal counter-terrorism regime."

Speakers and participants were impressed with the quality of debate, and the organisation of the event.

Doctor Hakeem Yousef,

Reader in Global Legal Studies, Birmingham Law, said: "The Summer Academy was excellent in terms of the topicality of the theme, the lectures, the breadth and diversity of the speakers and the keenness of the participants. Distinguished speakers attended lectures and actively contributed to the question and answer session. That is uncommon in my experience and it greatly enriched the experience of the participants."

Judge Howard Morrison, President of Appeals Division, the International Criminal Court, The Hague, added: "An excellent conference with important topics and a wide range of expert input.

Professor John Wilson, Pro Vice-Chancellor for Northumbria Law School said: "The sessions were of extremely high quality, generating discussion at strategic level between participants of global significance. What was particularly impressive was the collegiate nature of the event. This encouraged the postgraduate and undergraduate students who attended to take a full part in the proceedings."

**DISCOVER MORE**



[www.northumbria.ac.uk/summeracademy](http://www.northumbria.ac.uk/summeracademy)

# Graduates are inspiration for success

An internship scheme managed by Northumbria has shown its value by providing a graduate with his first career move – and Newcastle-based advertising agency Everything Different with a talented employee.



Advertising graduate Ben Hayward has joined Everything Different on a 26-week paid internship facilitated by the Northumbria Enterprise and Business Support (NEBS) service. The internship is part of a scheme part-funded by the European Regional Development Fund (ERDF). Ben is already gaining valuable experience by contributing to a major transformation project at Everything Different as the company adapts to fundamental changes in the advertising sector brought on by digital and social media.

Everything Different has successfully recruited interns over a number of years and now views developing graduate talent as an important strategy for expansion.

Yousaf Khalid, Managing Director of Everything Different said: "Graduates like Ben have been a key part of our growth for the past six years, and will continue to be a key part of our growth moving forward. The grant support we receive



Ben Hayward and Yousaf Khalid at Everything Different.

by working with institutions like Northumbria helps pay for graduate training. It means we can subsidise the investment we are already making in the candidates, rather than using it as a bottom-line tactic".

"Due to a changing environment in our sector we had to cut back on our headcount and look at how we were going to grow the business and where we were going to develop our core offering. Ultimately, the inspiration

for a new direction arose from fundamental shifts already taking place in the world of advertising".

Traditional advertising methods are being challenged by what the sector describes as peer 'influencer communications', across social media, consumer review sites, video-sharing sites and more.

Yousaf added: "We looked at technology and at skillsets and we thought that, actually, we're going

to be better-equipped if we employ graduates who are immersed already in the digital culture. Of course, while graduates are well equipped with new ideas and knowledge, they are not necessarily going to be the "finished article". Real-world work is usually needed to realise a graduate's potential. This investment of both time and money is often rewarded, and the ERDF-funded internship model does a lot to help offset the short-term costs".

Victor Ottaway, Graduate Internship Manager at NEBS, said: "The NEBS ERDF grant project has a number of objectives, but an overall aim is to ensure that small and medium-sized businesses can access help to invest in their next generation of talent, become more competitive and commercially sustainable. Everything Different's graduate development strategy, aided and abetted by the grant funding, seems to really embody the spirit of that aim, and stands as a great example of a grant intervention doing exactly what it is meant to do."

The NEBS graduate internship scheme aims to help 130 individual small and medium-sized businesses in Tyne & Wear and Northumberland find their next generation of talent. It can contribute £3,825 towards the salary costs too (minimum salary £17,000 pa pro rata).

**DISCOVER MORE**



[www.northumbria.ac.uk/NEBS](http://www.northumbria.ac.uk/NEBS)



## Northumbria extends international collaboration

Northumbria Law School has strengthened a partnership it has with the Law Society of Ireland by providing expertise and online presentations for a Massive Open Online Course (MOOC).

**M**OOCs are a free online course open to all, and are designed specifically for large numbers of participants.

Northumbria Law School already offers its much-in-demand Advanced Legal Practice LLM programme jointly with the Law Society of Ireland in Ireland. It has now also collaborated with the Society's Diploma Centre on its 2017 MOOC 'Employment law in the digital era: Brexit, borders and offices without walls – challenges and impacts in uncertain times'. The five-week course, which launched in May and is available until the end of July 2017, has already attracted more than 3,000 online participants from all over the world.

Northumbria academics are contributing to the MOOC through recorded and streamed lectures and presentations, live question and answer sessions and interactive online discussion forums. The approach illustrates Northumbria Law School's commitment to technology enhanced learning, and widening access to legal education to those who are unable to take part in more traditional study routes.

The MOOC considers new and emerging employment law from the perspective of the employment law and industrial relations framework in Ireland. It looks at how changing practices such as more flexible hours and

working from home challenge the traditional boundaries of the employment relationship.

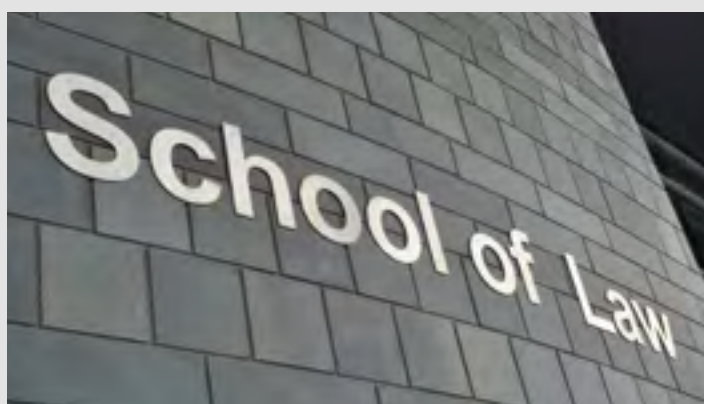
Typically, in the context of Brexit, the MOOC also highlights the commonalities between the employment law framework in Ireland, England & Wales that could potentially provide UK firms with a level of familiarity when engaging in business and employing staff in Ireland, that may not be present elsewhere in the European Single Market.

Doctor Mark Brewer, Head of International Development for Business and Law at Northumbria, said: "The Law Society of Ireland is the professional body for solicitors in Ireland, and we are delighted to be extending our partnership with them. We were the first British university to have an academic partnership with the Society, and this latest development reflects the growing success of Northumbria's collaboration activities and international partnerships."

Participants who complete the five-week MOOC successfully can obtain a Certificate of Completion awarded by the Law Society of Ireland.

To sign up visit: <https://mooc2017.lawsociety.ie/>

**DISCOVER MORE**



# Doing justice to environmental law and green criminology



Supreme Court Judge, Lord Carnwath.

## Environmental law was on the agenda when a Supreme Court Justice gave a public lecture at Northumbria.

**T**he Right Hon Lord Carnwath of Notting Hill, speaking for the first time in Newcastle, discussed environmental case law from senior courts around the world and identified key themes and challenges. Drawing on his nearly 50 years' of experience practising law, he explored how the legislative, executive and judicial branches in different countries have responded to international developments in this area of law. Northumbria has a strong focus on environmental law and green criminology and recently established an Environmental and Global Justice multidisciplinary research group – one of eight groups set up with the aim of conducting world-class research in response to today's global challenges.

Dr Tanya Wyatt, Associate Professor in Criminology at Northumbria University and Environmental and

Global Justice lead, said: "Lord Carnwath is an expert in his field and we were delighted that he was able to share his knowledge and experience with us here in the North East."

"Environmental law is an area in which we are currently conducting much research and we were very interested to hear what Lord Carnwath had to say and how this can feed into our own work here at Northumbria."

After studying law at Trinity College, Cambridge, Lord Carnwath served as Attorney General to the Prince of Wales from 1988 to 1994 and practised mainly in planning and environmental law. He was appointed to the Court of Appeal in 2002 and has been a Justice of the Supreme Court since 2012. Lord Carnwath is also a member of the UNEP International Advisory Council on Environmental Justice and Honorary President of the UK Environmental

Law Association.

Northumbria University's Public Lecture Series celebrates the achievements of leading Northumbria Professors alongside high-profile external speakers such as Lord Carnwath. The speakers involved come from all walks of life and cover a wide variety of topics – from business and economics to health and the arts. For more information about Northumbria's Public Lecture series, or to book a place, please visit [www.northumbria.ac.uk/publiclectures](http://www.northumbria.ac.uk/publiclectures)

Northumbria offers a variety of criminology courses through its department of social sciences and law courses through Northumbria Law School.

**DISCOVER MORE**



[www.northumbria.ac.uk/law](http://www.northumbria.ac.uk/law)

# England call up for Northumbria lecturer

Northumbria University lecturer Andy Coyles has been appointed as the Head Coach for the English Universities Men's National Football Team.

Andy, who teaches within the department of Sport, Exercise and Rehabilitation, led the English Universities Team at the Home Nations Tournament when it took place in Edinburgh in April this year.

The English Universities programme seeks to develop talented individuals and selects top athletes from universities across the country to make up a national squad to represent England in the Home Nations tournament. With close to 200 of the best footballers in the English Higher Education sector, Andy finalised a 16-man squad, ready for competition against Scotland and Wales.

In addition to his work at Northumbria, Andy has been heavily involved working within high performance environments, having coached at three of the leading Premier League football

academies. Prior to relocating to the North East, Andy's most recent club was Stoke City FC, working with their Under 16's. Having coached young elite footballers at academy level over a ten-year period, Andy has recruited and nurtured the best young talent in Manchester, Stoke-on-Trent and the surrounding areas.

Andy told Northumbria University News: "I was delighted to be appointed as the Head Coach for the England University side. To represent your country at any level is an honour and an absolute privilege. Within my role, I will be working with a number of talented individuals who will be looking to showcase their talents at International level. Since my appointment, the squad has begun to forge a real togetherness and there is a positive atmosphere both on and off the field."

Prior to Andy's appointment at Northumbria, he was the area lead in Exercise and Sports Coaching at Manchester Metropolitan University (MMU). Alongside Andy's teaching

commitments at MMU, he had huge amounts of success in all BUCS competitions as the Head Coach for their men's footballing side, working with players over a nine-year period. Over those nine seasons, the team achieved five league titles and were winners in three National finals.

His primary responsibilities at Northumbria include teaching on the BSc programme in Sport Coaching, with further teaching and research interests lying predominantly within coach education, coaching behaviours, sports pedagogy and social integration of sports students. Andy is a keen sportsman alongside his academic duties and has played football semi-professionally for Workington AFC prior to taking up a number of coaching roles.

DISCOVER MORE



England call up for Northumbria lecturer Andy Coyles.

# Northumbria Sport having a ball

Northumbria University staff, students and alumni celebrated another incredible year of sport in style at the 2017 Sports Ball.

It was an emotional occasion, as outstanding achievements and contributions to sport were recognised by a packed audience at Newcastle's Civic Centre.

Northumbria has retained the Stan Calvert Cup four years running, in the UK's largest varsity competition against Newcastle University, while Team Northumbria has secured a top 10 position in the 2016/17 British Universities & Colleges Sport (BUCS) National League Table.

Director of Sport, Colin Stromsoy, acknowledged the importance of the students' contribution to Northumbria's sporting successes.

"As always, the sports ball is the highlight of my year," said Colin. "It's the only occasion where we all come together and celebrate everything that has happened in the last 12 months."

"So much happens throughout the year in different venues and places and at different levels throughout the University. We have volunteers, interns, participants, performance



Professor Jon Reast, Pro Vice-Chancellor (International).

athletes, Olympians, Paralympians and it's important that their achievements are recognised.

"It has been an amazing year. We finished eighth overall in the BUCS standings and there was more success in national league sport than ever before. In addition, there were more volunteers, students and staff all making a difference. The Sports Ball is a reflection of the past year and that's why there is such energy, enthusiasm

and passion for the event."

A large amount of time and effort went into organising the event, which would not have been possible without the Student Sports President Emily Watkinson.

Emily will soon vacate the position which she has held for the past year and enjoyed a standing ovation for her contribution to Northumbria sport.

"It was very emotional giving the final speech," said Emily. "Being Student Sports President has been an absolute privilege and I'm proud that everyone has had such a good experience this year."

"Northumbria sport to me is a family. When you come here as a new student, sport is the most effective way of bringing people together. Having seen the individual and team awards it's obvious that everyone loves being a part of this amazing family."

DISCOVER MORE



[www.northumbria.ac.uk/sport](http://www.northumbria.ac.uk/sport)



Guests at the 2017 Sports Ball.

# African youngsters benefit from Northumbria generosity

Northumbria University Sport staff and students are on a mission to ensure young people in Africa are dressed for success after sending clothing and equipment to Zambia.

Ten resistance machines from the Sport Central gym and a huge collection of surplus sports kit has been loaded into a 40ft container bound for Lusaka. Northumbria staff are already collecting more clothing with a second container due to leave Loughborough University for Zambia later this summer.

“Once again we are sending two groups of students to Lusaka this summer as part of The Wallace Group Volunteer Zambia Programme,” said Sport Services Assistant (Community And Foundation) Brogan O’Connor. “As part of our commitment to the programme we collected up as much of the old Northumbria kit as we could find and bundled it into bags. Those bags were piled into a massive container - along with the resistance machines - and we just about filled it. The equipment and kit will be of huge benefit to the groups of under-privileged children who we work with in Zambia. They have very little.”

Volunteer Zambia students Jack Preston, Ellen Duke, Jas McNaught,



Northumbria University has sent a lorry load of clothing and equipment to Zambia.

Claire Harper, Molly Carter and Corey Hastings joined staff members Brogan O’Connor and Alex Delves in loading the equipment and kit.

Director Of Sport Colin Stromsoy told Northumbria University News: “They did a fantastic job for a great cause. I’ve been to Zambia and seen first hand just how much this container is needed. The children over there have no kit and very little chance of getting any. In terms of personal

and professional development our students already get so much out of the Volunteer Zambia programme but to know they have made a key contribution even before they arrive in Lusaka is fantastic. I can only imagine how excited the children will be when they open those container doors and discover what’s inside!”

Volunteer Zambia sees students from Wallace Group universities travel to Lusaka each summer with



the intention of promoting healthy lifestyles and AIDS awareness through sport.

Northumbria has been involved in the programme for more than a decade with the invaluable work of staff and students benefitting thousands of disadvantaged children.

**DISCOVER MORE**

[www.northumbria.ac.uk/sport](http://www.northumbria.ac.uk/sport)

## BACK COVER

The big prizes kept on coming throughout the 2016-17 season with men’s volleyball firsts lifting the BUCS championship title. Northumbria Snowsports enjoyed their best year yet with four golds and Suraj Soren won jitsu’s individual gold for the third successive year to go down in Northumbria University Sport history.

Rugby Union built on a positive start to life in the newly launched BUCS Super Rugby competition to take the end-of-season Sevens title. Meanwhile Northumbria’s boxing club continued to punch above its weight, with students Hasan Ahmed, Alex Farrell and Callum Redding all securing gold medals.

“Of course we want to celebrate the gold medals and the championship titles but that only tells part of the story,” Colin Stromsoy told Northumbria University News. “Northumbria Sport is about participation and team work at every level and for every gold medal success there are scores of students and staff working tirelessly to ensure we remain at the forefront of university sport in the UK.”

## DISCOVER MORE

[www.northumbria.ac.uk/sport](http://www.northumbria.ac.uk/sport)

# Hannah and her sisters

A Northumbria University student has become a big hit with the boxing community after landing a top coaching award and edging closer to her Olympic dream.

Hannah Dawson, a second year Applied Sport and Exercise Science student, is the 2017 Streetgames Young Coach of the Year after seeing off competition from across the UK. Hannah won the prestigious Streetgames award as a result of her work with the Knockout Sisters programme in Fenham, Newcastle. The groundbreaking scheme aims to get women active and boost their self-confidence and self-esteem through boxing.

The budding boxer has also made it through to the final stages of Team GB’s selection process as national coaches seek to identify future Olympic talent.

“For me, coaching has created so many different opportunities,” said Hannah. “Without it I would never have discovered my love for boxing and the discipline, commitment and motivation it has given me. Through coaching I have been lucky enough to

share this with others. Watching the women I coach improve dramatically since the beginning - and to have them share my passion for how good it makes you feel - has been an incredible experience.

“It has been so rewarding seeing the positive impact that I am having on their lives - not just physically, but mentally and socially too. Some of them even featured on the radio and TV with me! I have thoroughly enjoyed delivering each and every session and I feel very humbled, as well as very surprised, to have won the Young Coach of the Year award. It really was the icing on the cake after an amazing year both coaching and taking part in boxing.”

Although Hannah was originally drawn to boxing as a coach, her passion for the sport has led to her picking up the gloves and getting in the ring. The rookie fighter made an instant impression after joining Northumbria boxing coach Mark Telford at an open session last year.

“Hannah has become a fantastic

boxer in her own right and it’s no surprise that she made it through to the final selection process for Team GB,” said Brogan O’Connor, Sport Services Assistant (Community and Foundation) at Northumbria Sport. “As well as having made a life-changing impact on the girls she coaches, her contribution to the Knockout Sisters scheme has made a real difference to her.

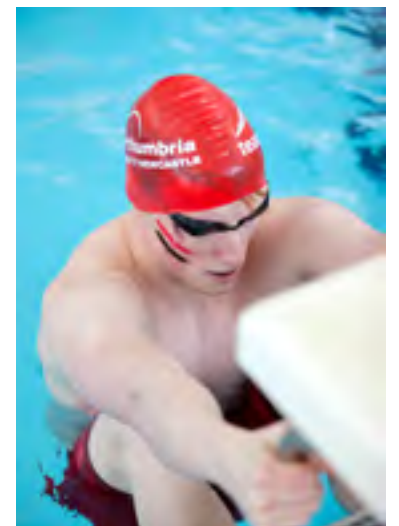
“Hannah’s work ethic and enthusiasm is fantastic and she is adored by all of the girls who attend her sessions in Fenham. Her hard work has got the programme recognised on the BBC show Inside Out and The One Show have also talked to her about her work. Everyone at Northumbria Sport is extremely proud of what Hannah has achieved in a very short space of time and she is a fantastic ambassador for the University.”

**DISCOVER MORE**

[www.northumbria.ac.uk/sport](http://www.northumbria.ac.uk/sport)



Northumbria’s female boxers pack a punch.



One of Northumbria’s swimming team.



Men’s Rugby players in action.

## SPORT

# Top 10 university in the UK for sport and facilities



**7th** in the UK for sport facilities

**Stan Calvert Champions**

**Top 10** in BUCS league

Northumbria is celebrating another excellent year of sport successes.

## Sports stars enjoy golden year

Northumbria University's student athletes have enjoyed a stellar year of sporting success to secure another top 10 finish in the British Universities and Colleges Sport (BUCS) league.

**H**ighlights included the men's Rugby League first team lifting the championship title for the first time and women's first team Futsal "mini-football" squad claiming a fourth successive championship at London's Copperbox Arena.

Once again, Northumbria dominated in the pool to claim an astonishing 16 gold medals in the BUCS long and short course swimming championships in Sheffield. To add to an ever-growing

string of victories, Lucy Turner claimed double gold in the long jump and heptathlon ahead of what could be the most exciting summer yet for Northumbria athletics.

Another incredible year in the pool was underpinned by the individual performances of Great Britain Paralympian stars Harriet Lee and Andrew Mullen, who claimed seven and six golds respectively. Lucy Turner's double gold reinforced her reputation as one of British athletics' ones to watch and her success followed hot on the heels of fellow

Northumbria athlete Charlie Myers who claimed pole vault gold in the BUCS indoor championships.

But it was the Rugby League first team that sprang the biggest surprise of the sporting year, ending Leeds Beckett's 12-year winning streak to lift the BUCS title. If the women's Futsal firsts went into their final as favourites then winning, an unprecedented fourth successive national title exceeded all expectations.

"It is no easy task for our student athletes to combine their off-field studies with the commitment and

determination required to enjoy on-field success," said Northumbria University's Director of Sport, Colin Stromsoy. "However, year after year we see them doing just that and they are a credit to their university. I am very proud of the way that we support and encourage those athletes every step of the way.

"That support comes from coaching staff and the wider University working together in partnership with organisations like the Talented Athlete Scholarship Scheme (TASS) to ensure students can gain both

an excellent degree and progress as athletes. I want our students to remember their time at university with pride - knowing they achieved everything they set out to achieve. I think this year's results across the board prove that we are getting the balance right and continuing to establish Northumbria as a hub for sporting excellence."

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