THE UNIVERSITY
of EDINBURGH

Annual Review 2017/2018

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the world
since 1583

The cover shows performance costume students from the University's Edinburgh College of Art who created capes for the choir at the Edinburgh International Festival's opening ceremony, *Five Telegrams*.

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Principal's foreword

As a demanding, yet hugely exhilarating, year draws to a close, I would like to thank everyone who has made me feel so welcome since I took up my post in February 2018. These are challenging times for higher education in the UK and I am grateful that I have been left such a strong legacy on which to build.

As we look to the tasks that we have set ourselves such as: improving student satisfaction; addressing areas highlighted in our first staff survey; widening access to the University, ensuring that this great institution remains globally relevant; and working productively with our partners in this wonderful city, they present many opportunities for us to continue to improve our University.

Our research quality is widely recognised and the excellence of our teaching and learning should match this. It is appropriate, therefore, that in this review we mark 10 years of recognising and rewarding outstanding teaching through the Edinburgh University Students' Association Teaching Awards.

We also take this opportunity to reflect on two stories that highlight the skills and creativity of our students: those from the Law School who have been closely connected with the winners of the 2017 Nobel Peace Prize; and the Edinburgh College of Art students who collaborated with our city's International Festival to create stunning designs for its opening extravaganza.

As a civic university, we are excited about making a long-lasting impact on the region's economic and social development. In one of many ventures enriching the University's relationship with its city, we highlight our Edinburgh Local initiative. Launched to create a vibrant dialogue between the University and its neighbours, it is the latest chapter in a narrative that dates back to our institution's earliest days.

We see further evidence of this commitment in a pioneering centre that will equip young people with highly prized digital skills. This new Digital Centre of Excellence, based at Newbattle Community High School in Midlothian, will focus on burgeoning disciplines that include robotics, data science, digital marketing and video production.

Excellence in research is indispensable for a world-leading university such as ours. We reflect on three such initiatives: biologists paving the way for new fertility treatments; veterinary researchers improving the wellbeing and productivity of cattle in developing countries; and new multidisciplinary approaches that are revolutionising NHS England for the digital age.

We also explore the benefits of collaborations that transcend borders despite the uncertainties posed by Brexit. The University of Edinburgh remains resolutely global in outlook, keen participants in the movement of people and, indeed, of the ideas that they carry, all of which help universities such as ours to flourish.

I thank everyone for their contributions to date and look forward to an exciting year ahead.

Tha bliadhna a bha dùbhlanach, ach glè bhrosnachail, a' tighinn gu crìch, agus bu mhath leam taing mhòr a thoirt don h-uile duine a tha air fàilte a chur orm bhon a ghabh mi an dreuchd agam sa Ghearran 2018. Tha sinn ann an amannan dùbhlanach airson foghlam àrd-ìre san Rìoghachd Aonaichte, agus tha mi taingeil gun do dh'fhàgadh dhomh dìleab cho làidir air am faodar togail.

A thaobh nan amasan a chuir sinn romhainn – leithid meudachadh na h-uimhir de dh'oileanaich a tha sàsaichte; dèiligeadh ri raointean a thàinig am follais sa chiad shuirbhidh de luchd-obrach; leudachadh cothrom air an Oilthigh; dèanamh cinnteach gum mair sinn mar ionad àrd-fhoghlam a tha cudromach san t-saoghal; ag obair gu tarbhach leis ar com-pàirtichean sa bhaile mhìorbhaileach seo – tha iad a' toirt dhuinn iomadh cothrom air sìor-leasachadh an Oilthigh againn.

Tha càileachd an rannsachaidh againn air aithneachadh fad is farsaing, agus bu chòir gum bi sàr-mhathas ar teagaisg a' co-fhreagairt ris. Tha e iomchaidh, mar sin, gu bheil sinn san lèirmheas seo a' comharrachadh 10 bliadhna de bhith a' toirt aithneachadh is duaisean airson sàr-theagasg tro Duaisean Teagaisg Chomann Oileanach Oilthigh Dhùn Èideann.

Tha sinn cuideachd a' gabhail a' chothruim seo gu bhith a' toirt am follais dà sgeulachd a tha a' sealltainn sgilean is cruthachalachd nan oileanach againn: an fheadhainn bho Sgoil an Lagha aig an robh dlùth-cheangal ri buannaichean na duaise Nobel airson sìth; agus na h-oileanaich bho Cholaiste Ealain Dhùn Èideann a cho-obraich le Fèis Eadar-nàiseanta a' bhaile gus èididhean iongantach a chruthachadh airson na cuirme-fosglaidh.

Mar oilthigh catharra, tha sinn dealasach gus buaidh mhaireannach a dhèanamh air leasachadh eaconamach is sòisealta na sgìre. Am measg an iomadh iomairt a tha a'

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beartachadh a' cheangail eadar an Oilthigh is a' bhaile, tha sinn a' tarraing aire don iomairt Dùn Èideann Ionadail. Air a cur air bhog gus còmhradh beothail a chruthachadh eadar an t-Oilthigh agus ar coimhearsnaich, tha an iomairt seo mar chaibideil as ùire ann an sgeul a tha a' dol air ais gu tràth-bhliadhnaichean an Oilthigh.

Tha sinn a' faicinn dearbhadh a bharrachd den dealas seo san ionad tùsaireach a bhios ag uidheamachadh òigridh le sgilean didseatach luachmhor. Bidh an t-Ionad airson Sàr-mhathas Didseatach, a tha stèidhichte ann an sgoil coimhearsnachd a' Bhatail Nuaidh ann an Lodainn Mheadhanach, a' taobhachadh ri cuspairean a tha a' sìor-fhàs, nam measg robotaireachd, saidheans dàta, margaideachd didseatach agus obair bhidio.

Tha sàr-mhathas rannsachaidh riatanach gun teagamh airson oilthigh de ar leithid a tha am measg an fheadhainn as fheàrr san t-saoghal. Tha sinn a' tarraing aire do thrì iomairtean an seo: bith-eòlaichean, a tha ag ullachadh na slighe airson leigheasadh bho mhì-thorrachas; rannsachairean air leigheas-sprèidh, a tha a' leasachadh sochair is torrachas nan ainmhidhean ann an tirean fo-leasaichte; agus na dòighean-obrach ioma-chuspair a tha a' cruth-atharrachadh NHS Shasainn airson an linn didseataich.

Tha sinn cuideachd a' tarraing aire do na buannachdan a thig à co-obrachaidhean a tha a' dol thairis air crìochan, a dh'aindeoin nam mì-chinntean a tha Brexit ag adhbharachadh. Mairidh Oilthigh Dhùn Èideann seasmhach nar sealladh cruinneil, agus tha sinn dealasach a bhith a' gabhail pàirt ann an saor-ghluasad de dhaoine agus, gu dearbh, de na beachd-smuaintean a bhios iad a' giùlan, oir bidh sin uile a' cuideachadh oilthighean de ar leithid gu bhith a' soirbheachadh.

Tha mi a' toirt taing don h-uile duine airson na rinn iad gu ruige seo, agus tha mi a' dèanamh fiughair ri bliadhna bheòthail ri teachd.

Professor Peter Mathieson MB, BS, PhD, FRCP, FRCPE, FMedSci
Principal and Vice-Chancellor

Vision

We deliver impact for society.

As a truly global university, rooted in Scotland's capital city, we make a significant, sustainable and socially responsible contribution to the world.

Mission

We discover, develop and share knowledge.

As a centre of academic excellence we aim to:

- provide the highest-quality research-led teaching and learning;
- challenge the boundaries of knowledge, research and disciplines;
- enable our graduates and staff to be exceptional individuals equipped to address global challenges;
- promote good health, economic growth, cultural understanding and social wellbeing.

Encouraging student talent to shine

Performance costume students partnered with one of the world's largest arts festivals to spotlight their talent on an international stage.

In 2018, students from Edinburgh College of Art (ECA) created 250 bespoke costumes for the opening show of the renowned Edinburgh International Festival.

More than 15,000 people gathered to watch the outdoor curtain raiser, *Five Telegrams*, which marked the centenary of the end of the First World War. Huge, colourful projections – designed by award-winning company 59 Productions – were beamed onto the city's Usher Hall facade, accompanied by music from acclaimed composer Anna Meredith.

The International Festival has been delighting audiences with its opening displays since 2015. The University has played a key role in these events each year, with students and academics working closely with producers to realise the Festival's bold vision.

Five Telegrams saw the event directors exploring new territory, adding a live performance element to the multimedia light show. A choir, positioned among spectators, sang and shone lights across the audience during one of the show's five movements.

University students were asked to create outfits for the singers that would make them stand out in the crowd and that reflected the event's central theme: communication during The Great War.

"We were first told about the project in early January," recalls performance costume student Rebecca Waites. "It sounded like the most amazing opportunity, although I don't think that we appreciated how big the event was until nearer the time."

The brief asked the second and third-year undergraduates to take inspiration from soldiers' personal communications from the front line during the First World War, specifically looking at information that was censored or redacted.

"We spent three months researching, designing and making," continues Rebecca. "As well as developing our ideas, we

> **" The students' creativity, positivity and determination never ceases to amaze me.**
> **Ms Megan Baker**

experimented with fabrics and materials to determine what would work for the event practically."

Programme Director Megan Baker – who proposed the idea of the Festival working with her students – led discussions with Event Director Richard Slaney of 59 Productions. "We needed a uniform look to the costumes in order for them to work together," she says. "They needed to reflect light, have a contemporary feel, and yet resonate with the emotions of soldiers from 100 years ago."

"When researching the original capes that the soldiers wore, we were struck by how modern they looked," she continues. "So that became the base shape for the designs using traditional wax cotton, the students then selected a colour palate using reflective foils to radiate light."

The students' designs were critiqued at every stage, with direct feedback from the event creators. "It was a really creative process," says student Callum Miller. "Richard Slaney hadn't worked with costumes for these events before, so we had to explain things really clearly. It was great to realise that you are an expert in your particular field, and I really felt that when working with Anna and Richard – there was a respect for our skills and opinions."

Mr Slaney agrees that co-designing the choir's outfits was a valuable endeavour: "Working with the performance costume students was a fascinating and brilliant experience," he states. "To put more than 30 individuals' thoughts and ideas into a unified costume design was a challenge, but represented the stories we wanted to tell."

He worked with the students to refine their proposals. Once they were signed off, the students began making seven capes each, decorating them in their own distinctive style. Rebecca's capes were covered in tiny holes, representing the messages redacted from

field postcards sent home and the emotional wounds that they left. Meanwhile, Lada Sotirova was inspired by pigeons that sent telegrams during wartime, and Cara MacDonald took her design from the mechanics of machines that sent messages.

The students' involvement in *Five Telegrams* was part of the Scottish Government's Year of Young People 2018, which celebrated people aged eight to twenty-six and showcased their talents. The initiative gave students a range of opportunities to help deliver the International Festival's flagship event. A number of students were hired to assist at the show and rehearsals, while others were invited to speak at stakeholder meetings during the summer.

Kathryn Weaver, a student who has been involved in more than 20 productions throughout her university career, took the opportunity to make new connections. "It was interesting to get an understanding of the logistics that go into a massive event such as *Five Telegrams*, and to see established professionals like Anna Meredith present their ideas," she says. "A number of people asked me about my ambitions and offered advice on routes into the industry – that was invaluable."

Five Telegrams provided a visually stunning and poignant start to the International Festival, receiving numerous five star reviews. The scale and ambition of the project reinforced Edinburgh as a major player in the creative arts, and underlined the value of partnership work across the city and beyond.

"The students' creativity, positivity and determination never ceases to amaze me," reflects Ms Baker. "It was a privilege to watch their confidence and ambition develop over the course of this project. For the International Festival to dedicate an event like *Five Telegrams* to our young people, and allow our students to take the reins as they did, was wonderful. It's clear to me that the future of our creative industries is in very good hands."

Top: ECA student designs and Ms Megan Baker with students.
Bottom: Students model their capes outside the Usher Hall.

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Paving the way for new fertility treatments

Edinburgh scientists made headlines around the world in 2018 by growing egg cells to maturity outside the human body for the first time.

The growth of human eggs in the laboratory by researchers at the University aims to support the development of pioneering therapies for women. The team was able to mature the eggs, which had been taken from women's ovary tissue at their earliest stage of development, to the point at which they could potentially be fertilised.

Professor Evelyn Telfer in the School of Biological Sciences led the work, which builds on 30 years of research. It could enable procedures to safeguard the fertility of girls with cancer ahead of potentially harmful treatment, such as chemotherapy, by maturing and storing their eggs for later fertilisation.

Studying human eggs requires live tissue, which can only be obtained from donors having treatment for related conditions. For this study, the research was possible thanks to donations of tissue from women having routine surgery.

Professor Telfer and her team work closely with medical experts in child cancer and fertility preservation, which allows them to approach potential donors. Specialist nurses work on behalf of the team to explain the research and offer support to prospective donors and their families.

As well as girls and young women with cancer, tissue is donated by women undergoing caesarean births, and transgender patients. Patients who are having tissue removed for preservation as part of their treatment may agree to give a small amount for research.

"Girls with cancer who have not yet reached puberty are offered fertility preservation in cases where clinicians think there is a good chance of survival," explains Professor Telfer. "Parents appreciate that when they are offered this, it's a good sign, and often they choose to also support our research."

Transgender patients may choose to donate their ovaries following surgery as Professor Telfer explains: "All the transgender patients

> **"** **The University has fostered really good conditions for scientists and clinicians to collaborate.**
> **Professor Evelyn Telfer**

we have approached have agreed to donate their tissue – and for any eggs developed from that tissue to be fertilised, if we are able to take research to that stage. This has gifted us tissue from a range of ages, which is really valuable. We have an incredible team working with patients, and it is a very supportive environment."

The breakthrough is the latest in a history of reproduction science achievements at Edinburgh. In the late 1980s, Professor Telfer was in one of the first groups at Edinburgh to grow mouse eggs in the lab. When she set up her own lab in Edinburgh in 1992, she began working on other species including pigs, sheep and cows, to further her understanding of ovarian development.

Later collaborations, including with Professor Sir Ian Wilmut, famed for his cloning work, led Professor Telfer to further her investigations. "The University has fostered really good conditions for scientists and clinicians to collaborate," she says.

In the latest study, she worked with her established small team and clinical colleagues at Edinburgh alongside long-time collaborator Professor David Albertini at the Center for Human Reproduction in New York.

Scientists and medical experts worked together to develop substances – known as culture mediums – and carefully controlled conditions that would support each stage of egg cell development. The study lends insight into how eggs develop, which could aid research into other infertility treatments and regenerative medicine.

Professor Telfer's team is now working to improve the quality of eggs in the lab by optimising their growth conditions. By testing and improving these – such as the delivery of nutrients and oxygen – they aim to give eggs the best chance of making healthy embryos.

The team is also seeking regulatory approval to fertilise eggs. This would allow the use of

an in vitro fertilisation technique – injecting a single sperm into an egg – to see whether lab-grown eggs are fertile. By law, embryos obtained this way can be maintained for several days, affording an opportunity to study them.

As a limited amount of human tissue is available, the team continues complementary work in animal species – mainly using cow tissue, which shares some characteristics with human ovaries. Work is also carried out with other species, including mole rats and elephants. "With each animal we study, we always learn something, so we cast our net wide," says Professor Telfer.

Her team is also working in stem cells, which can form any kind of tissue in the body. Working out how these can become ovarian cells could have rich potential for generating eggs without ovarian tissue.

Following the team's latest achievement, Professor Telfer was nominated for an international award, as one of *Porter* magazine's Incredible Women of 2018. She was named alongside other women who have inspired by their actions – including the actor Meryl Streep, presenter Oprah Winfrey, and former first lady Michelle Obama.

As Professor Telfer's research moves closer to the point where it may help patients, she looks forward to seeing this delivered by clinical experts: "Our scientific work is very focused, but it becomes real when we engage with the public. When I hear people's stories, it can feel very emotional. Most women – although not all – hope to have children and I feel for those who cannot – they are very vulnerable."

"We do not want to be peddlers of false hope," she continues. "A balanced approach is needed in communicating our results. However, the feedback we have is overwhelmingly positive. We hope that we can contribute to making a difference for people with fertility issues."

Professor Evelyn Telfer and team in their lab at the University.

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Honouring excellence in teaching

Students at Edinburgh have been recognising and rewarding excellent teaching for the past 10 years through the Edinburgh University Students' Association Teaching Awards.

The first of their kind in the UK upon their launch in 2008/09, these annual prizes showcase the best contributions made to students' learning experiences each year. They also highlight the key part played by teaching excellence in the University's mission to discover, develop and share knowledge.

As in previous years, the most recent cohort of award winners embodies outstanding teaching at Edinburgh and its importance to the student experience.

"So much of teaching is about cultivating an atmosphere where people can share their ideas freely. Putting students at ease and making them feel safe and valued so they can express themselves is very important, and it really makes a difference," says Mr Alex Gapud, who won the prize for Best Student Who Tutors, one of 12 awards given out at the ceremony in April 2018.

Mr Gapud, who recently completed a PhD in anthropology, feels it is key that teachers nurture and challenge their students, to help them to think critically about the world in which they live.

"Working in an institution like this is an amazing opportunity and privilege," he says. "We're one of the universities that produce leaders in this society, who go on to do great things around the world. For me, that's why good teaching matters. If we can challenge, influence and help shape the kinds of people that our leaders become while they're still growing – isn't that a really powerful thing?"

These long-lasting impacts of good teaching are echoed by Dr Eleoma Bodammer, who won the Best Assessment Feedback Award.

"Good teaching can be transformational; a positive learning experience prepares and trains students to acquire the knowledge and academic skills to become specialists in their subject," says Dr Bodammer, who teaches German at undergraduate and postgraduate levels. "Giving good quality feedback plays a vital part in that. It supports learning,

> " Listening to students' voices is very important, because they are at the centre of the learning process.
> **Ms Sakie Chiba-Mooney**

develops skills and helps students to achieve their full potential. It is a key element of our academic role."

She continues: "As well as open and frank comments about the positive and negative aspects of an assignment, feedback should offer students a pathway forward and not just an assessment of past performance that is not made relevant for future improvement. This can only be done if lecturers have, and take, the time to produce detailed feedback. It can't and shouldn't be rushed."

Alongside providing meaningful, thorough critiques of assignments, listening to students' own feedback plays a central role in helping staff improve their teaching.

"Listening to students' voices is very important, because they are at the centre of the learning process," says Japanese language teacher Ms Sakie Chiba-Mooney, who received the Best Implementer of Student Feedback Award. "I always want to know how I can make my courses better. Students give me a lot of feedback – both good and bad – all of which helps me to improve. There are of course some things that teachers cannot change but, as long as we have clear learning objectives, often we can alter the approach to help students achieve their best."

This recognition of the importance of the student voice is shared by Professor Robert Mason, who teaches 20th-century US history, and won this year's Best Supervisor Award: "Edinburgh is a research-intensive university, but teaching is at the heart of what we do. That is why these awards are so valuable: they capture the student perspective on teaching."

The Students' Association this year received more than 1,600 nominations from students for more than 780 staff. As well as identifying individual teaching excellence, written comments submitted as part of the

nomination process help to influence best practice in teaching and support going forward. "The Teaching Awards are valuable in and of themselves as a reward and recognition scheme for exceptional teaching staff," says the Students' Association Vice President Education, Ms Diva Mukherji. "However, they are also a powerful contributor to discussions around teaching quality and the challenging question of what makes good teaching."

Each year, the Students' Association sends every School a summary report of their nominations, shortlisted nominees, winners and runners-up. This includes all of the comments students submitted about staff.

In 2016, the Students' Association secured a Principal's Teaching Award Scheme grant that allowed it to undertake extensive research on that year's nomination data. This identified four key themes in student perceptions of excellence in teaching: concerted, visible effort; charisma, personality and engaging teaching; breaking down student-teacher barriers and fostering student engagement; and consistency, predictability and stability of support.

The report included recommendations for the University, which was very receptive to the findings of the data analysis. It's an area the Students' Association is eager to build on in future.

"We're keen to see what else we can do with the data, and are always excited to work collaboratively with Schools and the wider University on projects that use student feedback to help improve teaching", says Ms Mukherji.

As the Teaching Awards enter a new decade, it is clear that members of the University community remain committed to listening and learning from each other in order to continue providing students with outstanding teaching experiences.

Top: Dr Eleoma Bodammer won the Best Assessment Feedback Award.
Bottom: **Winners and participants on stage at the event.**

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Turning livestock into a pathway out of poverty

A new centre has received backing to achieve its aim to improve the health and productivity of poultry and cattle in developing countries.

Philanthropist Bill Gates visited the University in January 2018 for an event showcasing Edinburgh's research to improve the health and productivity of livestock for vulnerable farmers around the world.

Some 200 people gathered on a crisp January morning to hear from the tech billionaire, who was joined by UK International Development Secretary Penny Mordaunt.

Addressing the audience, Mr Gates explained the reason for the visit: "We believe that the innovations being developed here can help turn livestock into a pathway out of poverty for hundreds of millions of people."

Nestled beneath the Pentland Hills, surrounded by grazing sheep and cattle, Edinburgh's Royal (Dick) School of Veterinary Studies campus houses the world's largest concentration of animal scientists, including The Roslin Institute.

The campus first came to Mr Gates' attention in 2015 during a learning visit – a series of private meetings to explore how Roslin's science might align with his charitable foundation's aims. As a result of that visit – and driven by the vision of former Roslin Director, Professor David Hume – a new Centre was created.

The Centre for Tropical Livestock Genetics and Health – an alliance between the University, Scotland's Rural College and the Africa-based International Livestock Research Institute – was launched with £10 million backing from the Bill and Melinda Gates Foundation. A further £4 million investment from the Department of International Development was announced at the event in January.

Professor Appolinaire Djikeng, Director of the Centre for Tropical Livestock Genetics and Health, explains: "We're aiming to leverage technologies and innovations that have been successful in advanced economies, as well as cutting-edge research outputs, and apply them in less developed tropical production systems.

> " I wanted to move away from blue sky research and work on something that will have a direct impact on improving human health and agriculture in Africa.
> **Professor Appolinaire Djikeng**

"In the UK cattle and sheep industries, for example, genetic tools are routinely available to breeders and farmers, helping them to improve the health and productivity of their stock. We don't have that in many low- and middle-income countries at the moment and the ambition is to change this."

Disease is a major problem. Herds are routinely decimated, with huge animal welfare implications and devastating consequences for the farmers and communities that rely on them.

Another problem is that hardier breeds adapted to warmer climates are often not the most productive. While breeds that have been selected over centuries for their bountiful productivity often fare poorly in dry, arid and disease-prone conditions. A typical cow in Africa produces around 10 times less milk than a typical British cow.

At the new Centre, teams are developing genomic tools and associated resources to improve tropical livestock productivity – such as milk yield, growth, meat and egg production – in breeds used in tropical production systems.

Researchers are exploring the genetic diversity of chicken breeds and carrying out performance analysis to identify birds that thrive in tropical environments, such as heat and altitude.

When they find an animal that consistently performs well, they collect biological samples and performance data to find out what sets that individual apart from others that do not. All of this information can be used to develop tools to identify the best animals to breed from.

The teams eventually hope to use gene-editing techniques to produce animals with desired characteristics. This technology has the potential to speed up the selective breeding process, such that gains that have

been made in the West over several decades could potentially be achieved within 10 years.

It is a very personal mission for Professor Djikeng, who originates from Cameroon. He spent more than 10 years forging a successful scientific career in the US before being drawn back to Africa and now to this role.

"I wanted to move away from blue sky research and work on something that will have a direct impact on improving human health and agriculture in Africa," he says. "I feel fortunate to be in this role, not least because Edinburgh is one of the best universities in the world, but because there is a long history of mobilizing UK scientific excellence for international development."

Next year marks the centenary of the Animal Breeding Research Department at the University. Some of the earliest breeding experiments were carried out in fields on the outskirts of the city. Today, the University's veterinary and agricultural research is ranked top in the UK, underpinned by decades of investment from the Biotechnology and Biological Sciences Research council.

Professor Eleanor Riley, Director of The Roslin Institute, believes Edinburgh is the only place in the world that can deliver on Mr Gates' strategic aims: "The breadth and depth of animal science we have is unrivalled. We can carry out fundamental research into the biology of animals, as well as sophisticated genetic analysis, and produce gene-edited animals all on one site."

"Our aim is to enhance animal productivity, health and welfare," she explains. "Healthier animals are not only more productive, they're better for the environment. Reducing waste, minimising greenhouse gases and preventing environmental degradation are just as important as increasing yields if livestock farming is to have a sustainable future as a pathway out of poverty."

Professor Appolinaire Djikeng in the University's Conventional Avian Facility.

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Celebrating the students promoting world peace

The Nobel Prize has celebrated world-changing excellence for more than a century, with many winners having strong links to the University of Edinburgh. In 2017, the Nobel Peace Prize added two more.

It was Edinburgh Law School graduate Mr Daniel Högsta who took the call from Mr Olav Njølstad, director of the Norwegian Nobel Institute. They had 10 minutes, he said, to prepare for the public announcement that the International Campaign to Abolish Nuclear Weapons (ICAN) – the Non-Governmental Organisation (NGO) Daniel worked for – had just won the 2017 Nobel Peace Prize.

"I wish I could say it was a totally smooth, professional operation to get our press release out, set up the press conference," says Mr Högsta. "But it was just manic."

Within the hour, in an Edinburgh café, Ms Dagmar Topf Aguiar de Medeiros, a PhD student in the Edinburgh Law School, received a text message from her mother. It read 'You guys actually won it'.

"I immediately looked it up online to see if it was true", says Ms Topf Aguiar de Medeiros. "I was so excited."

At the time, Mr Högsta was ICAN's network coordinator. It was his job to manage relationships with around 500 partner organisations, ensuring everyone had the most appropriate information to lobby the United Nations (UN) to secure the Treaty on the Prohibition of Nuclear Weapons.

Ms Topf Aguiar de Medeiros was a member of the Scottish delegation that spent 10 days in New York working with ICAN to convince world leaders to ratify the treaty. It was passed on 7 July 2017, making it the first legally binding international agreement to comprehensively prohibit nuclear weapons. The Nobel Peace Prize announcement followed in October.

For both Mr Högsta and Ms Topf Aguiar de Medeiros, the journey began in the University's Old College.

> **" I never would have thought I would have had a part in a Nobel Peace Prize.**
> **Ms Dagmar Topf Aguiar de Medeiros**

In 2012, Mr Högsta was on the accelerated LLB programme for graduates in the Edinburgh Law School, but unsure of his next steps. That changed when Professor James Harrison, a lecturer in public international law, suggested Mr Högsta seek an internship with a small NGO to gain practical experience of the sector.

"I'm indebted to him for implanting that idea," says Mr Högsta. After sending out several applications, ICAN offered him an internship at their Geneva office after graduation.

ICAN's goal was the elimination of all nuclear weapons. Mr Högsta soon went from intern to communications assistant, then campaign assistant. In 2014, he became the network coordinator. By the time of the UN negotiations in 2017, it was an integral role.

"We all had to take responsibility," he says. "I was in a unique position in that I could see all the moving parts, from our lobbying at the UN to the work that our campaigners were doing in capitals. It was a very fulfilling and enjoyable position."

The signing was, he says, "emotional". Then came the Nobel Peace Prize.

At the ceremony in Oslo, the audience was a mixture of Nordic royalty, parliamentarians, and scores of campaigners that Mr Högsta had spent the last several years working with to secure the treaty. "It felt like a huge validation," he says. "To be deemed worthy of such a high honour and knowing what it would mean for the stature of our organisation; that was very energising."

Mr Högsta joins a distinguished line of Edinburgh alumni, staff and associates – such as Professor Peter Higgs and Sir Alexander Fleming – associated with the Nobel Prizes. In 2017 alumnus Dr Richard Henderson jointly won the Nobel Prize in

Chemistry and Professor Michael Rosbash – who was a researcher at Edinburgh in the early 1970s – shared the Nobel Prize in Physiology or Medicine.

Like Mr Högsta, Ms Topf Aguiar de Medeiros' association with the Nobel Prize began with a recommendation from within Old College's walls. She arrived in Edinburgh for her PhD in 2016 and was keen to work with voluntary organisations. Her supervisor, Dr Kasey McCall-Smith, suggested United Nations House Scotland, a civil society organisation.

Her first event was on nuclear weapons, held at the Scottish Parliament. She made connections and, bolstered by her legal training, she was invited to be part of the Scottish NGO delegation that would assist ICAN's negotiations at the UN.

In June 2017, Ms Topf Aguiar de Medeiros worked 14-hour days in New York lobbying, presenting and reporting. "It was a whirlwind," she says.

She feels very much part of the successes that followed. "ICAN encourages all its partner organisations to take pride in and feel ownership of the Nobel Peace Prize," she says. She was able to hold a copy of the prize at a celebratory event in London. "Because of this and the work I contribute locally to the disarmament campaign, I feel like I'm part of the movement that got us this treaty and the Nobel Peace Prize."

Ms Topf Aguiar de Medeiros is teaching while completing her PhD and finding her time with ICAN is having an impact in her classes.

"Often when students ask questions about treaty ratification, what the role of NGOs is, I find it valuable to have these experiences to demonstrate and answer the questions," she says. "I know that I can have an influence. I never would have thought I would have had a part in a Nobel Peace Prize by the age of 25."

Top: Mr Daniel Högsta (left) and Ms Dagmar Topf Aguiar de Medeiros.
Bottom: ICAN campaigning in New York, USA.

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Laying the foundations for a digital NHS

An interdisciplinary team of Edinburgh academics is leading a groundbreaking project to evaluate a government scheme aimed at revolutionising the National Health Service (NHS) in England for the digital age.

Researchers at the University's Usher Institute for Population Health Sciences & Informatics have been tasked with independently assessing the scheme's effectiveness, which could transform the NHS for the 21st century.

Digitisation has the potential to reshape healthcare, impacting on almost all conceivable disciplines, from aiding early diagnosis of cancers, to supporting better discharge of patients from hospital. Data-driven healthcare could also provide the framework for individualised care, supporting the move away from a one-size-fits-all approach into an era of personalised medicine, where large data sets shed light on the impact of individuals' lifestyles and genetics that influence their response to drugs and diseases.

Aziz Sheikh, Director of the Usher Institute and Professor of Primary Care Research and Development, believes that digitisation could have a huge impact on the clinical experience for patients, supporting doctors and nurses as well as administrative staff working at the coal face of the NHS.

"There is no shortage of quality improvements that could be made by effectively using digital technology within hospitals – the opportunity is absolutely phenomenal," he says. "However, we must make sure we approach digitisation correctly."

The UK Government-backed Global Digital Exemplars (GDE) programme is a flagship NHS England scheme that focuses on leading NHS hospitals that are already using digital technology to provide first-class patient care. Each GDE is a digitally mature NHS hospital site – a known centre of excellence – that could act as a springboard hub for advancing digitally-enabled healthcare.

A key aspect of the GDE project – borne out of recommendations from the National Advisory Group on Health Information Technology in England report, *Making IT*

> ❝ **There is no shortage of quality improvements that could be made by effectively using digital technology within hospitals.**
> **Professor Aziz Sheikh**

Work – is that it is independently evaluated as the scheme is rolled out. Academics at Edinburgh have joined forces with University College London and NHS Arden and Greater East Midlands Commissioning Support Units to assess the programme as it unfolds, offering a unique chance to mould the programme as it is rolled out.

Professor Robin Williams, Chair in Social Research on Technology and Director of the Institute for the Study of Science, Technology & Innovation at the University leads the evaluation project and believes that the GDEs could have wide-reaching impact.

"This is an unprecedented initiative to achieve nationwide learning by identifying successful examples of digital transformation," he says. "This knowledge of effective digital solutions and changes could then be made available across the NHS, transforming the healthcare system. Our input will also allow things to be reshaped or reprioritised as the project evolves."

Dr Kathrin Cresswell, Director of Innovation at the University's Usher Institute and scientific lead of the GDE evaluation, is impressed with the impact of the project: "It is exciting to see our research findings feeding back into policy and practice through continuous discussion with NHS England."

The research team is using a number of evaluation techniques, including interviewing people working within the NHS sites, from senior IT management staff to those working in patient-facing roles. They will also assess the effect of digitisation on reducing risks, looking at ways that IT could help improve safety by, for example, supporting busy wards to ensure that patients receive drugs at precisely the correct times. Relationships built between the GDEs and so-called fast follower sites will also be assessed, identifying networks that have been built to support shared learning.

While world-class digital infrastructure is key to improving the NHS, it is in itself not enough. Together with colleagues at Imperial College London and Harvard University, the academics have also developed a blended training programme – NHS Digital Academy.

This one-year course, co-led by Professor Sheikh and Lord Sir Ara Darzi of Imperial College London, is upskilling information technology professionals within hospitals across NHS England and NHS Scotland to improve digital leadership capacity and capability. It will extend to include NHS Wales from 2019. The final course is a result of collaboration from international experts and is composed of a mixture of online and residential modules with a real-life NHS-facing project to apply learning.

"Our inputs to the NHS Digital Academy will help to train a new generation of digital health professionals ready to put these skills into practice to benefit the health service for patients and staff alike", explains Dr Cresswell.

This year saw the NHS mark its 70th anniversary, a time to celebrate the achievements of the staff who care for the one million people seen every 36 hours in NHS England alone. As we look to the next 70 years, Professor Sheikh, who plays a central role in *The Lancet* and the London School of Economics' Commission: The Future of the NHS, is convinced that data will only become more important.

"This is a one-way street, we have to digitise," he explains. "Our team is committed to solving key challenges, including the best ways to ethically and safely house the precious data that are held within the NHS. What will become really important is that our data science capability in the UK and Edinburgh is a shining example of how to use data to transform care, experiences and outcomes for patients. I believe that we are in a fantastic position to support the NHS for future generations."

Professor Aziz Sheikh at the Old Medical School, one of the Usher Institute's locations.

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Building the school of the future

A University partnership is leading the way in putting data to work in the classroom.

Somewhere beneath the ground, at the entrance to Newbattle High School's new Community Campus, lies a tube containing multimedia representations of school life in 2017. The lid bears the inscription, "The Newbattle Centre Time Capsule To Be Opened in 2077".

Certainly by then school life will have changed, perhaps beyond recognition. However, work being done by the University, in partnership with Newbattle Community High School and Midlothian Council, may offer a hint of things to come.

Newbattle Community High School's new campus opened in June 2018, having been designated a Digital Centre of Excellence the year before. In September, it hosted a data science workshop to launch the City Region Deal's Data-Driven Innovation Initiative. Midlothian Council's objectives for the new facility are to develop an understanding of how digital technology enhances learning, and equip students for the future workplace.

Digital skills, systems thinking, and creativity are widely seen as important attributes for future employment, and data skills and know-how are at their core. For Depute Head Mark Davidson, that's where the partnership comes to the fore. "We've been working with the University, Skills Development Scotland and other partners in anticipation of a surge in ambition around data-driven innovation, centred on Edinburgh's goal of becoming data capital of Europe."

The University hosted a Continuing Professional Development day for staff, to explore what it means to be a Digital Centre of Excellence. "It's all very well to have fine words," explains Professor Judy Robertson, Chair in Digital Learning at the Moray House School of Education and lead academic in the partnership, "but you need teachers to go and put them into practice."

The day offered workshops such as using split classrooms to reduce from-the-front teaching, and a computational thinking and coding session. "It was a really good day, and the teachers were incredibly enthusiastic," says Professor Robertson.

> ❝ We have the ambition and the willingness to share with other schools how we are making change happen at Newbattle.
> **Professor Judy Robertson**

The team at Moray House, and their school counterparts, began developing ideas in more detail. They devised approaches to teaching and learning with digital technology for each subject area, not just in traditional qualifications like Highers and Nationals, but also in the vocational National Progression Awards and Foundation Apprenticeships.

"I visited the school recently for another data science workshop," Professor Robertson adds. "You can see the kids take a real pride in their new building. We have to make sure that doesn't wear off." That requires ongoing effort in the coming years. "You can't just call yourself a Digital Centre of Excellence and expect to be one. It takes a lot of hard work."

One contribution is the creation of a cohort of student digital leaders. They receive training to provide technical support for teachers, and for school and community events. This highlights their digital skills, teaches them responsibility, and promotes interpersonal development. "That's the kind of thing that will embed digital excellence in the longer term," says Professor Robertson. In addition, specialist learning technologists have been appointed to ensure seamless integration of technology in the classroom.

Another important factor can be found in the material side of digital technology. Working with data is not all theoretical, as digital learning consultant Mr Craig Steele is quick to point out. Brought in by the University to share his expertise in making data science attractive to young people, Mr Steele presents his flexible approach with infectious enthusiasm.

"There is a myth that computer programming is really difficult, or you've got to be a genius to do it, which is definitely not true," he insists. While some might show a particular aptitude for it, the reality is that many young people simply haven't had the chance to try their hand at working with data. Mr Steele

runs workshops at Newbattle inspired by the students' ideas, where they can try, fail, and try again, leading to some impressive results.

For instance, a data visualisation project called Everyone Makes a School is based on the principle that everyone matters to the school and can have an impact on it. "The idea behind it was that this fantastic new building is not just made of bricks and mortar, but by the people inside it," Mr Steele explains, describing how the project uses digital technology to celebrate the whole school community.

Data about movement in and around the campus will be collected and converted into signals that could, for example, power a mosaic of lights. "It looks best when there's full attendance," adds Professor Robertson. "When somebody's not there, there's a little bit missing." Eventually, the students will have created a unique piece of public, data-driven art, showcasing what it means to be part of their school.

Both the University and Newbattle are ensuring access to data science and technology for all, explains Professor Robertson: "We want it to become business as usual, something that everybody does."

"The other thing we'd like to do is make Newbattle Digital Centre of Excellence a knowledge sharing school," she continues. "We have the ambition and the willingness to share with other schools how we are making change happen at Newbattle."

Nobody can predict exactly what school will be like in 2077, but the University is offering a glimpse through its partnership with Newbattle and Midlothian. It will likely be an equitable and technologically-enabled place, porous to its community, where learning empowers all to achieve their best, and to have the chance to realise their dreams.

Top: Newbattle Community High School students.
Bottom: **Professor Judy Robertson** (left) and **Mr Craig Steele** with a student.

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Forging connections across the city

A new initiative is creating an enthusiastic dialogue and reinforcing the bond between the University and its neighbours.

If founding principles are ideals to be built upon, not merely markers of the past, then efforts to enliven the University's relationship with its city are to be warmly welcomed.

The Edinburgh Local initiative is the latest chapter in a narrative that dates back to the institution's earliest days. It honours Edinburgh's unique history as Britain's first civic university – founded by the Town Council in 1583 – and seeks to strengthen ties with the community of which it has been a part for so long.

Its aims are set out in the University's renewal of the Social Impact Pledge, a government initiative that encourages organisations to deliver projects that benefit community groups.

For Professor Lesley McAra, Assistant Principal Community Relations, it is a clear statement of intent: "Edinburgh has always been a great civic university but now the approach is more systematic, better resourced and more strategically integrated with research and learning."

Such aspirations, fitting for a world-leading university proud to be rooted in Scotland's capital, would have pleased the renowned sociologist and town planner, Patrick Geddes, who – more than a century ago – urged his fellow Edinburgh scholars to 'think globally and act locally'.

Geddes' exhortation chimes with Professor McAra's conviction that great education and insightful research are worthless if people see no benefit: "We aim to put our research and education in the service of the community, building a symbiotic relationship with the city – not one that's top down but one that works with local people."

The philosopher David Hume would have approved. The Scottish Enlightenment's great minds were keen to advance knowledge for society's benefit, mixing lofty ideals with earthy realism. Such collaborative approaches, said Hume, only begin 'when we start spilling our sweat'.

> " **Community engagement goes to the heart of what a modern university should be all about.**
> **Professor Lesley McAra**

The hard work has already begun. Moves to establish a Centre for Homeless and Inclusion Health at a city medical practice are bearing fruit. Working with the NHS, the City Council and other partners, University researchers aim to enable practice staff to support pathways out of homelessness. They are also developing study initiatives and student-led services that will help improve the health and wellbeing of homeless people.

Elsewhere, students are working with community groups to enhance digital literacy and support employability as part of the University's Digital Ambassadors programme. As part of the previous pledge, students offered advice to older people at a day centre and held drop-in sessions at a city library. The renewed pledge sees them supporting a Muslim women's resource centre and a city-based charity tackling social issues.

The University has also pledged to support sustainable start-up social enterprises on campus that offer goods and services to the local community. This builds on the work of a pilot that helped to establish businesses focused on improving society or the environment. In addition, 20 local groups have received £70,000 through the University's Community Grants Scheme, which backs efforts to tackle pressing social issues and seeks to create a range of informal learning opportunities. Among those benefitting are projects that provide support for children with disabilities, tackle the causes of poverty and aid vulnerable women.

"We want to support local groups that share our values of inclusion, cultural enrichment and creation of opportunity," says Professor McAra. "Our focus is projects that might not otherwise receive funding."

Students are also helping to transform a city centre square blighted by anti-social behaviour into a safer, more dynamic space enjoyed by all. Having been invited by community police and the City Council to

contribute ideas to make Hunter Square more welcoming, students consulted local residents and businesses and re-imagined a space that is full of life, open and inviting.

Students are now addressing similar concerns at nearby Nicolson Square where their conversations with local people who have experienced homelessness are helping to shape the response. Hearing those stories has not only influenced the students' design ideas, but will also inform how the University engages with Southside residents in future.

Getting involved in the community enriches the experience of those who are new to the city as students on the MasterCard Foundation Scholars Program demonstrate. The scheme, which supports African students with outstanding leadership potential, includes a summer school based around community projects in the city. This experience helps them build the skills they will need when they return to Africa and benefits local projects in the process.

It is a development that delights Professor McAra: "Community engagement goes to the heart of what a modern university should be all about. We not only want local people to come into the University, but also want to take the University out into the community."

Research suggests a work in progress: while three out of four people agreed the University is a world-class institution and took pride in its achievements, nearly two thirds knew nothing of what the University does and never use its facilities. Only one in five had visited the University website. Edinburgh Local seeks to address this. By clicking on Local on the University's home page, anyone can access information about a raft of community activity. "Communication is vital," concludes Professor McAra. "An institution such as ours should be intricately involved with its city. We want people to know that we are a university that's in, and with, and for its community."

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The Students' Association Teaching Awards 2017–18

Celebrating the very best of the teaching and support staff at the University, the Students' Association Teaching Awards has become an important recognition of those who make an enormous positive impact to the student learning experience.

The Students' Association received more than 1,600 nominations for 780 staff members and the ceremony was held in April 2018 at Teviot Row House, home to the University's Student Union.

Student feedback on teaching and assessment can provide helpful, perceptive ideas and can ensure academics keep courses up to date, making them as relevant as possible.

The winners are shared here, accompanied by the insightful and positive comments from the students that nominated them.

Best Implementer of Student Feedback Award
Ms Sakie Chiba-Mooney
School of Literatures, Languages & Cultures

"Not only did she take our feedback into consideration but she also completely reconstructed our class and handouts... so that the very next lesson after discussing the feedback we would be able to have a lesson more tailored to our needs."

Best Personal Tutor Award
Dr Jamie Cole
School of Physics & Astronomy

"Throughout my university work, Jamie has consistently had belief in my abilities, even when I have doubted them myself. At times when I have failed exams and felt stupid, he has always focused on the strengths that I have demonstrated and I have left feeling far more positive."

Best Course Award
Dr Zubin Mistry
School of History, Classics & Archaeology

"His enthusiasm for the topic and his passion for allowing us this opportunity to examine evidence in new lights from such relevant positions is extremely stimulating and challenging."

Best Supervisor Award
Professor Robert Mason
School of History, Classics & Archaeology

"Robert is a perfectionist, and he invests himself in my work – offering feedback to make sure my argument's as sharp as it could be. However, when the work's good, he also recognises that. He's not of the kind that offers feedback for the sake of it."

Best Practice in Inclusive Learning and Teaching Award
Dr Katherine Inglis
School of Literatures, Languages & Cultures

"Katherine represents what is truly wonderful about learning: being taught by someone who is truly energised by the materials, compassionate, and... imparts information not for the sake of later exam regurgitation but to engage her students in a meaningful dialogue with the text."

The Award for Teaching in Veterinary Medicine
Mr Alessandro Seguino
The Royal (Dick) School of Veterinary Studies

"I have never been taught by a lecturer that so obviously has their students' learning as their upmost priority, and this shines through with his fantastic teaching style, resulting in extremely effective, high-quality and enjoyable teaching."

Best Assessment Feedback Award
Dr Eleoma Bodammer
School of Literatures, Languages & Cultures

"Normally, I find essay feedback an incredibly mixed bag, but Eleoma's feedback on essays is direct and to the point, but is never overly critical to the point where you feel beaten down by what you're reading."

The Van Heyningen Award for Teaching in Science and Engineering
Dr Richard Gratwick
School of Mathematics

"If someone would have told me in week one that I would give a five-minute presentation in week 10 to a group of other students and two tutors, I would not have believed them. But I did and the confidence to get up and do that was mainly down to Richard and the way he organised his skills section of the course."

Best Student Who Tutors Award
Mr Alex Gapud
School of Social & Political Science

"The most passionate, supportive and thorough tutor I have ever had. He ensures every student is aiming for their best, and inspires through being an exceptional role model."

The Ian Campbell Award for Teaching in the Arts, Humanities and Social Sciences
Dr Sean Brocklebank
School of Economics

"The best lecturer I've had. He engages everyone in the room by breaking down complex theories and ideas. He makes the lecture slides entertaining and funny."

Best Support Staff Award
Ms Sue Renton
School of Social & Political Science

"As a student who has struggled a bit at university, Sue has always been there to support me. She always asks how I am doing or if there is anything she needs to do for me. This person is absolutely one of a kind and she really deserves an award."

The Kendell Award for Teaching in Medicine
Dr Kim Picozzi, Edinburgh Medical School

"She is fantastic at organising intellectually stimulating courses and her lecture style is fun and engaging. Her lectures are by far the best I have received at the University and I always actively looked forward to her lectures as a highlight of my working week."

www.eusa.ed.ac.uk/teachingawards

Review of the year

A selection of news and events from August 2017 to July 2018

August 2017
Students excel in international Hyperloop competition

An Edinburgh student society called HypED took part in the final of a prestigious contest to design a revolutionary new form of transportation, known as Hyperloop. First proposed by billionaire inventor Elon Musk, the futuristic system is intended to transport passengers over land in pods travelling at around 750mph in a near-vacuum tube.

HypED was the only team from the UK to reach the final of the SpaceX Hyperloop Pod Competition II. They joined 24 other teams at the event in Hawthorne, California.

Elsewhere, HypED's commercial team was successful in the Hyperloop One Global Challenge, which tasked teams with developing detailed plans for the world's first Hyperloop system route. HypED's proposed route from Edinburgh to London was chosen as one of just 10 winners.

www.hyp-ed.com

September 2017
Investing in social improvement

The University invested £1 million in a new partnership with Big Issue Invest, the social investment arm of The Big Issue Group, one of the world's most recognised social enterprises and home to the award-winning street magazine.

The money will go into Big Issue Invest's Social Enterprise Investment Fund II, which supports social enterprises and charities that are finding innovative solutions to social problems, such as homelessness, social exclusion and youth unemployment. It is the largest financial investment in social enterprise ever made by a UK university.

"As a university, we believe that it is our responsibility to use our financial power to deliver a positive impact for society," said Professor Lesley McAra, Assistant Principal Community Relations.

www.ed.ac.uk/local

October 2017
Africa-led research tackles infectious diseases

A new initiative was announced with the aim of allowing teams of scientists from Africa and the UK to pool their expertise to find solutions to the problems of infectious diseases and emerging epidemics across Africa.

Through the £7 million initiative – named Tackling Infections to Benefit Africa, or Tiba, after the Swahili word to cure infection – researchers will seek to develop better treatments for conditions such as malaria and sleeping sickness, and better prepare for epidemics such as Ebola. Teams in Africa will be supported by experts in infectious disease and global health at Edinburgh.

"We are working closely with governments and drivers of health policy, to ensure recommendations from research are taken up and the people of Africa can benefit from our collective findings," said Professor Francisca Mutapi, Tiba Deputy Director at the University.

tiba-partnership.org

November 2017
Keeping ice loss on the radar

Researchers developed new high-resolution maps of the land beneath the West Antarctic Pine Island Glacier. The maps are developed from a survey, the most detailed to date, carried out during the Antarctic summer of 2013 to 2014 by a team on snow vehicles equipped with radar sensors, which surveyed around 1,500 square kilometres of ice.

"Detailed understanding of this diverse landscape, and how that will impact on ice melt from Antarctica's fastest disappearing important glacier, will give us valuable clues as to how warming in this region will impact on global sea level," explained Dr Robert Bingham, from the School of GeoSciences.

The study was led by the University in collaboration with the British Antarctic Survey, the Universities of Swansea, Exeter and Aberdeen, and partners in the US and New Zealand.

www.ed.ac.uk/geosciences

December 2017
A bright future for new institute

An anonymous donor pledged £10 million to support the University's new Edinburgh Futures Institute, which brings together researchers from across the University with other partners to tackle major issues across the world. The gift will help transform the city's former Royal Infirmary into a state-of-the-art home for the Institute.

Vice-Principal Professor Dorothy Miell, Head of the College of Arts, Humanities & Social Sciences, said: "The world is experiencing major changes: climate volatility, political discontent, advances in artificial intelligence, economic upheavals. We need different ways of thinking about these issues and of devising new solutions. Edinburgh Futures Institute will make that difference."

The development, due to be completed in 2021, will include a public piazza, garden spaces and a multifunctional space for events and lectures.

www.efi.ed.ac.uk

January 2018
Initiative boosts financial growth

The University announced that it will play a key role in a new body, FinTech Scotland, which aims to promote sustainable economic growth in Scotland. The partnership involves the Scottish Government, the private sector and the University. It will be hosted by Edinburgh Innovations, the innovation management service of the University.

The FinTech Scotland team will focus on bringing together a number of key drivers for growth, including the ideas of entrepreneurs and innovators, the resources of the financial sector, and the economic and social objectives of the public sector.

Dr George Baxter, Chief Executive Officer at Edinburgh Innovations, said: "We're proud to play a role in the establishment of FinTech Scotland as we pursue Edinburgh's ongoing strategic commitment to the delivery of skills and talent in this sector."

www.edinburgh-innovations.ed.ac.uk

August 2017

September 2017

October 2017

November 2017

December 2017

January 2018

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February 2018
Committing to a low carbon future

The University announced its plan to complete its transition out of fossil fuel investments within three years. The decision, approved by the University's ruling body, the University Court, follows the commitment made in 2016 to become carbon neutral by 2040.

Edinburgh is at the forefront of research internationally on climate change and the technologies and policies to mitigate the effects of climate change. It has already invested more than £150 million in low carbon technology, climate-related research and businesses that directly benefit the environment since 2010.

"Climate change is one of the world's biggest challenges," said Professor Charlie Jeffery, Senior Vice-Principal. "Over the past few years, we have thought hard about how to respond to that challenge. This change in our investment strategy is a vital step on that journey."

www.ed.ac.uk/sustainability

March 2018
Supporting Modern Apprentices

Young people who are gaining a foothold in the world of work at Edinburgh marked their achievements during Scottish Apprenticeships Week in March.

The Modern Apprenticeships initiative enables young people to earn while they acquire the skills they need to succeed in their chosen career. It is a structured programme leading to a qualification accredited by the Scottish Qualifications Authority.

Scottish Apprenticeships Week is a celebration of the benefits that apprenticeships bring to businesses, individuals and the economy.

Each Modern Apprentice receives on-the-job training, often alongside further education. Laura Ferguson (pictured), a Modern Apprentice in Mechanical Engineering in the University's School of Informatics, who also spends part of her week at Edinburgh College, said: "I feel very involved and supported in my apprenticeship. When I am learning new skills, I enjoy the way that these are shown and explained to me."

www.ed.ac.uk/human-resources/recruitment

April 2018
Success at the Commonwealth Games

Elite athletes with University links helped Scotland to its most successful overseas Commonwealth Games, in Australia. Leading sportsmen and -women took nine medals, including gold, silver and bronze awards, at the Games. University swimmers and divers excelled in the pool, claiming a total of eight medals in a number of events, while a silver medal was won in the 400-metres hurdles.

Sport science student Grace Reid (pictured) became the first Scottish female diver to win a medal at the Commonwealth Games, taking gold in the one-metre springboard diving.

"Our Gold Coast representatives have been truly inspiring," said Mr Jim Aitken, Director of Sport and Exercise at the University. We hope their achievements will encourage everybody to become more involved in sport at some level and to reap the rewards it can bring."

www.ed.ac.uk/sport-exercise

May 2018
A new sculpture and buildings unveiled at Easter Bush

Her Royal Highness The Princess Royal visited the Easter Bush Campus to unveil a 15-foot sculpture titled 'Canter' by the creator of 'The Kelpies', Andy Scott. The campus hosts the largest concentration of animal science and welfare expertise in Europe.

The sculpture forms the centrepiece of the entrance plaza to a new hub for staff and students, the Charnock Bradley building. The building is home to the Roslin Innovation Centre, which provides laboratory and office space for animal and veterinary science start-up companies, a gym and the Easter Bush Science Outreach Centre.

Her Royal Highness, who is Chancellor of the University and Patron of the Royal (Dick) School of Veterinary Studies, also opened the School's newly expanded equine hospital.

www.ed.ac.uk/easter-bush-campus

June 2018
Creating a home for student wellbeing

Work began on a new £8 million health and wellbeing hub for students in Bristo Square. The building will see Edinburgh's Student Counselling and Disability Services brought together with the medical practice and pharmacy for the first time. The building will provide an accessible entrance, a calming wellbeing lounge and consultation rooms.

The Edinburgh University Students' Association fed into the design process for the new Wellbeing Centre. "It is crucial that students are able to access support while at university and we are excited to see this project going ahead," said Ms Esther Dominy, 2017 Vice-President (Welfare) of the Students' Association.

The centre, scheduled to open in late 2019, is part of a £200 million investment over the next eight years in student facilities, which will include expanded learning spaces, a major new student centre and enhanced sports facilities.

www.ed.ac.uk/students/health-and-wellbeing

July 2018
Friends' holiday photos give social media users the blues

A survey of Facebook users showed that 90 per cent of people are likely to feel low when they see friends' travel posts. Researchers from the Universities of Edinburgh, Exeter and Falmouth, and Stockholm School of Economics analysed data from more than 800 people aged 18 to 70 in anonymous online surveys and telephone interviews.

Users born before 1980 said that travel envy motivated them to book a holiday while those born after 1980 were more likely to go on a digital detox or feel motivated to do other things to improve their mood, such as online shopping.

Lead Researcher Dr Ben Marder at the University's Business School said: "These findings show how those somewhat idyllic posts by friends on social media are likely to make us feel sad in our own lives and take measures to make us feel happier."

www.business-school.ed.ac.uk

February 2018

March 2018

April 2018

May 2018

June 2018

July 2018

Honorary graduations

Those awarded honorary degrees between 1 August 2017 and 31 July 2018

Ms Chimamanda Ngozi Adichie
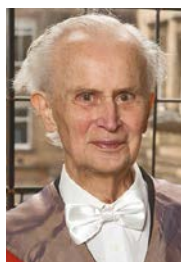Author
Doctor of Letters

Professor Robin Antony Duff
Specialist in philosophy of criminal law
Doctor of Laws

Ms Mairi Crawford Hedderwick
Illustrator and author
Doctor *honoris causa*

Mr Jonathan David Kinross
CEO of the Grassmarket Community Project
Doctor *honoris causa*

Professor Ronald Eaton Asher
Professor Emeritus of Linguistics, University of Edinburgh
Doctor of Letters

The Honourable Dr Kirsty Duncan MP
Member of Parliament for Etobicoke North (Ontario), Canada
Doctor *honoris causa*

Professor James Hough
Research Professor in Natural Philosophy, University of Glasgow
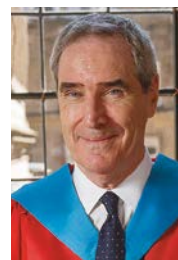Doctor of Science

Professor Ernst Frideryk Konrad Koerner
Linguistic historian
Doctor of Science in Social Science

Mr Brian James Ashley
Former director of the School of Community Studies at Moray House
Doctor *honoris causa*

Dr Sylvia Alice Earle
Marine scientist, explorer and conservationist
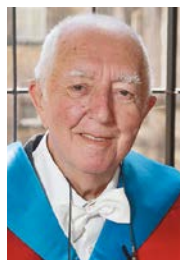Doctor of Science

Professor Michael Grant Ignatieff
President and Rector of Central European University, Budapest
Doctor of Science in Social Science

Professor Joyce Lishman
Emeritus Professor in Social Work Education, Robert Gordon University
Doctor *honoris causa*

Ms Rachel Ann Margaret Barrie
Whisky Maker at BenRiach and Glendronach Distillery Co Ltd
Doctor of Science

Professor Emeritus John Eric Thomas Eldridge
Professor Emeritus of Sociology, University of Glasgow
Doctor of Science in Social Science

Dr Takahiro Iwasaki
Artist
Doctor *honoris causa*

Professor Joni Christine Lovenduski
Professor Emeritus in Political Science, Birkbeck College, London
Doctor of Science in Social Science

Professor Sheila Macdonald Bird, OBE
Former Programme Leader of the MRC Biostatistics Unit, University of Cambridge
Doctor of Science

Professor Christine Mary Rutherford Fowler
Master of Darwin College, University of Cambridge
Doctor of Science

Dr Hywel Ceri Jones
Founding father of the Erasmus student mobility programme
Doctor *honoris causa*

Mr Angus Donald Mackintosh MacDonald, CBE
Retired chartered accountant
Doctor *honoris causa*
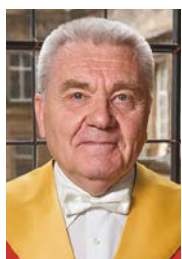
Professor Jean-Pierre Bourguignon
Honorary Professor, l'Institut des Hautes Études Scientifiques (IHES)
Doctor *honoris causa*

Professor Andrea Goldsmith
Stephen Harris Professor of Engineering, Stanford University
Doctor of Science

Dr Alan Curtis Kay
President of the Viewpoints Research Institute, USA
Doctor of Science

Mrs Louise Livingstone Martin, CBE
Chair of SportScotland and President of Commonwealth Games Federation
Doctor *honoris causa*

Ms Frances Mary Morris
Director of Tate Modern
Doctor *honoris causa*

Professor Joan Wallach Scott
Professor Emerita, Institute for Advanced Study, School of Social Science, Princeton
Doctor of Science in Social Science

Dr William Ury
International negotiator and mediator
Doctor *honoris causa*

Dr Denis Mukwege
Surgeon and humanitarian
Doctor of Medicine

Ms Eleanor Veronica Elizabeth Sharpston, QC
Advocate General at the European Court of Justice, Luxembourg
Doctor of Laws

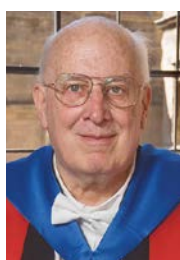**Professor Moshe Yaakov Vardi**
Professor in Computational Engineering, Rice University, USA
Doctor of Science

Professor Joseph Jude Norton
Champion of the study of international financial regulation
Doctor of Laws

Mr Alan Smith
One of the founders of the Erasmus Programme
Doctor *honoris causa*

Mr John McKenzie Verth
Retired Central Biosciences Services Operations Manager, University of Edinburgh
Honorary Fellowship

Professor Dame Linda Partridge
Research scientist in biology and genetics of aging
Doctor of Science
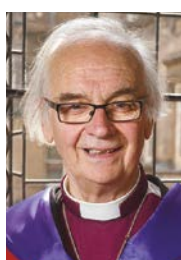
Right Reverend Brian Arthur Smith
Former Bishop of Edinburgh (2001–2011)
Doctor of Divinity

Ms Rosamund Claire West
Editor-in-Chief of *The Skinny* magazine, Radge Media
Doctor *honoris causa*

Dr R Byron Pipes
Distinguished Professor of Engineering, Purdue University, USA
Doctor *honoris causa*

Dr Robin Thompson
Lawes Senior Fellow, Rothamsted Research (agricultural research centre)
Doctor *honoris causa*

Mr Maurice Aiden Wren
Chief Executive Officer, Refugee Council UK
Doctor *honoris causa*

Professor Louise Mary Richardson
Vice-Chancellor, University of Oxford
Doctor *honoris causa*

Professor Alison Joan Tierney, CBE
Retired Professor of Nursing Research, University of Edinburgh
Doctor *honoris causa*

Madam Liu Yandong
Vice-Premier, Peoples Republic of China
Doctor of Letters

Awards and achievements

A selection of accolades bestowed upon staff, students, alumni and associates of the University of Edinburgh between 1 August 2017 and 31 July 2018

Queen's Honours

New Year Honours 2018

The Very Reverend Professor Iain R Torrance, Honorary Professor in Early Christian Doctrine and Ethics, received a Knighthood in recognition of his service to the Church, theological education, interfaith dialogue, the army and work to combat homophobia.

Lady Susan Rice, of the University Court, received a Damehood in recognition of her services to business, the arts and charity in Scotland.

Professor Lesley McAra, Assistant Principal for Community Engagement, was appointed Commander of the Order of the British Empire (CBE) for services to criminology.

Professor Andrew Morris, Vice-Principal, Data Science, was appointed CBE for services to science in Scotland.

Derek Bell, Honorary Professor in the College of Medicine & Veterinary Medicine, was appointed OBE for services to unscheduled care and quality improvement.

Dr Fiona Bradley, Honorary Fellow at Edinburgh College of Art and Director of the Fruitmarket Gallery, was appointed OBE for services to the arts.

Professor Margaret Frame, Science Director at the Edinburgh Cancer Research UK Centre and MRC Institute of Genetics & Molecular Medicine, was appointed OBE for services to cancer research.

Dr Angela Thomas, Honorary Professor in the College of Medicine & Veterinary Medicine, was appointed OBE for services to the regulation of public health.

Ms Hayley Walters, Welfare and Anaesthesia Veterinary Nurse at the Royal (Dick) School of Veterinary Studies, was appointed Member of the Order of the British Empire (MBE) for services to veterinary education and animal welfare.

Professor Kathy Whaler, Chair of Geophysics, was appointed Officer of the Order of the British Empire (OBE) for services to geophysics.

Birthday Honours 2018

Dr Alison Elliott, latterly Associate Director of the Centre for Theology & Public Issues, was appointed CBE for public service.

Professor Carole Hillenbrand, Emerita Professor of Islamic History, was appointed CBE for services to the understanding of her subject area.

Dr Ethel Quayle, Senior Lecturer in Clinical Psychology, was appointed CBE for services to the online welfare of children and young people.

Professor Andrew Calder, former Head of the Division of Reproductive and Developmental Sciences (which later became part of the MRC Centre for Reproductive Health), was appointed MBE for services to obstetrics and gynaecology.

Andy Chadwick, Honorary Professor in the College of Science & Engineering, was appointed MBE for services to the science of carbon capture and sequestration.

University Awards

Chancellor's Awards 2017

Professors Charles Cockell, Chair of Astrobiology in the School of Physics & Astronomy, and Alison Koslowski, Personal Chair of Social Policy and Research Methods, received the Award for Teaching.

Professor Polly Arnold, Crum Brown Chair of Chemistry in the School of Chemistry, received the Award for Research.

Professor Francisca Mutapi, Personal Chair of Global Health Infection and Immunity, School of Biological Sciences, received the Award for Impact.

Professor Devi Sridhar, Professor of Global Public Health, and Dr Mirko Canevaro, Reader in the School of History, Classics & Archaeology, received the Rising Star Award.

Principal's Medals 2017

Professor Aziz Sheikh, Director of the Usher Institute of Population Health Sciences & Informatics, received the Exceptional Service Medal in recognition his team's work in allergy and respiratory research.

Alexandros Angelopoulos and Sam Kellerhals, undergraduates in the School of GeoSciences, received the Contribution to the Community Medal in recognition of their work in developing Project Elpis, which provides refugee camps with solar hubs to charge mobile phones.

Tam Dalyell Prize for Excellence in Engaging the Public with Science

The Prize was awarded to Dr Niki Vermeulen, Senior Lecturer in the History and Sociology of Science, and Dr Bill Jenkins, former Cultural Engagement Research Fellow, for their tour app Curious Edinburgh.

Research recognition

All Party Parliamentary Group on History and Archives

Sir Tom Devine, Emeritus Professor in the School of History, Classics & Archaeology, received a Lifetime Achievement Award in Historical Studies.

Association for Computational Linguistics

Mark Steedman, Professor of Cognitive Science, received a Lifetime Achievement Award for his outstanding contributions in the areas of syntax and semantics.

The Council of Europe

Bill Gilmore, Emeritus Professor of International Criminal Law, was awarded the Medal of Honour for his contribution to international efforts to combat the financing of terrorism.

The European Convention for Constructional Steelwork

Professor J Michael Rotter, Emeritus Professor of Civil Engineering, was awarded the Charles Massonnet Award, which honours outstanding lifetime contribution.

Nobel Prize in Chemistry

Dr Richard Henderson, Physics alumnus and honorary Doctor of Science, was jointly awarded the Nobel Prize in Chemistry for developing cryo-electron microscopy.

Nobel Prize in Physiology or Medicine

Professor Michael Rosbash, former researcher at the University in the early 1970s, was jointly awarded the Nobel Prize in Physiology or Medicine in recognition for his work in circadian rhythms.

Philip Leverhulme Prize

Dr Naomi Appleton, Senior Lecturer in Asian Religions, received the Award for Philosophy and Theology.

RNA Society Lifetime Achievement Award

Jean Beggs, Professor of Molecular Biology, was honoured for his innovative contributions in the field of RNA (ribonucleic acid) biology.

Royal Society Medals

Sir Adrian Bird, Buchanan Professor of Genetics, received the Buchanan Medal for his work on the neurodevelopmental disorder Rett Syndrome; William Hill, Emeritus Professor of Animal Genetics, received the Darwin Medal for his contribution to the understanding of the genetics of quantitative traits and response to selection; and Professor Cait MacPhee, Personal Chair of Biological Physics, was awarded the Gabor Medal for her contributions to understanding protein aggregation that inform approaches to diseases such as Alzheimer's and diabetes.

Royal Society of Chemistry

The following staff were awarded prizes: Euan Brechin, Professor of Coordination Chemistry (Tilden Prize); Professor Guy Lloyd-Jones, Forbes Chair of Organic Chemistry (Pedler Award); Professor Polly Arnold, Crum Brown Chair of Chemistry (Sir Geoffrey Wilkinson Award); and Professor Ying Zheng, Chair of Chemical Reaction (Applied Catalysis Award).

Royal Academy of Engineering

The following staff have been awarded Chairs in Emerging Technologies: Jason Reese, Reguis Professor of Engineering, and Susan Rosser, Professor of Synthetic Biology. The Academy will support a full-time 10-year research project.

School of Engineering and Institute for Digital Communications alumnus, Dr Iain Scott, was awarded a Silver Medal for his contribution to the development of radar technology.

Royal Statistical Society

Colin Aitken, Professor in the School of Mathematics, was awarded the Howard Medal. His work is an outstanding example of how a statistician can integrate with those in a substantive area.

Making an impact

Ada Lovelace Medal

Professor Gordon Plotkin, School of Informatics, was selected by the British Computer Society as the computing award winner.

Cognitive Science Society

Kenny Smith, Professor of Evolutionary Linguistics, was elected to the Society's Governing Board following a public vote.

Council for Science and Technology

Professor Joyce Tait, Director of the Innogen Institute, a collaboration between the University and the Open University, was appointed to the Prime Minister's Council for Science and Technology.

Edinburgh Award

The former Principal and Vice-Chancellor of the University, Professor Sir Timothy O'Shea, received the city's annual accolade.

Queen's Anniversary Prize

The University received the prestigious Prize in recognition of more than 40 years of research achievements in improving women's health around the world.

Rising stars

British Society for Immunology

Dr Calum Bain, Centre for Inflammation Research, was elected as an Early Career Trustee on the Society's Board of Trustees.

Royal Scottish Academy New Contemporaries

Fourteen 2017 graduates from the Edinburgh College of Art were selected to exhibit at the Royal Scottish Academy's New Contemporaries exhibition. Awards were made to Sophie Edwards, Giulia Gentili, Lara Hirst, Claire Longridge and Craig Waddell.

Fellowships

Academy of Medical Sciences

The following staff were elected Fellows: Professor Giles Hardingham, Associate Director of UK Dementia Research Institute Edinburgh Centre; and Professor Keith Matthews, Professor of Parasite Biology.

Academy of Social Sciences

The following staff were made Fellows: Viviene Cree, Professor of Social Work Studies; Professor Jonathan Crook, Deputy Dean and Director of Research, University of Edinburgh Business School; and Jonathan Spencer, Reguis Professor of South Asian Language, Culture and Society.

British Academy

The following staff have been elected Fellows: Douglas Cairns, Professor of Classics, and Jonathan Spencer, Reguis Professor of South Asian Language, Culture and Society.

Royal Academy of Engineers

The following staff were made Fellows: Professor Sir Timothy O'Shea, former Principal and Vice-Chancellor of the University; Professor Michael Davies, Jeffrey Collins Chair of Signal and Image Processing; and Professor Anton Ziolkowski, Deputy Head of the Earth & Planetary Science Research Institute.

Royal Historical Society

Dr Zachary Purvis, Leverhulme Early Career Fellow in the School of Divinity, has been elected a Fellow.

Royal Scottish Geographical Society

Dr Beth Christie, Programme Director of the Learning for Sustainability programme at the Moray House School of Education, was awarded an Honorary Fellowship.

Royal Society

Two members of staff have been elected Fellows: Professor Polly Arnold, Crum Brown Chair of Chemistry; and Professor Wenfei Fan, Professor of Web Data Management, both in the College of Science & Engineering.

Royal Society of Edinburgh

The following staff have been made Fellows: Professor Giles Hardingham, Associate Director of UK Dementia Research Institute Edinburgh Centre; Philip Best, Professor of Extragalactic Astrophysics; Douglas Cairns, Professor of Classics; Siddharthan Chandran, Director of the Euan MacDonald Centre; Sarah Curtis, Honorary Professor in the School of GeoSciences; Professor Michael Davies, Jeffrey Collins Chair of Signal and Image Processing; Elaine Dzierzak, Chair of Haematological Regeneration; Charles ffrench-Constant, Professorial Fellow in the College of Medicine & Veterinary Medicine; Robert Henderson, Professor of Electronic Imaging; Catherine Heymans, Professor of Observational Cosmology; Ruth King, Thomas Bayes' Professor of Statistics; Professor Fiona Mackay, Director of genderED; Michela Massimi, Professor of Philosophy Science; Christopher Ponting, Professor of Medical Bioinformatics; Professor Jo Shaw, Salvesen Chair of European Institutions; Professor Catherine Sudlow, Director of the Centre for Medical Informatics; Professor Moira Whyte, Head of the Medical School and Sir John Crofton Professor of Respiratory Medicine.

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Financial review

The University is in a strong, financially sustainable position which creates degrees of strategic freedom for responding to the political, regulatory and economic uncertainty facing the UK Higher Education sector. While financial performance during the year shows a reduced operating surplus of £27m (2017: £56m), due to revenue investment to improve future performance, the balance sheet has strengthened with total net assets increasing to £2.2bn (2017: £2.0bn).

Total income in 2017/18 was £984m which represents an increase of almost 6 per cent from last year with a similar source of funds mix. Tuition fees accounted for 32 per cent of the University's total income and research income grew by 5 per cent on the previous year to £280m, continuing a strong trend reflecting the University's continued success in securing competitive research grants and contracts. Despite the shadow of Brexit, 14 per cent (2017: 12 per cent) of the total research funding was received from European Union (EU) Government bodies. The University continues to closely monitor the longer-term outlook for EU research funding in the context of Brexit related issues while maintaining and strengthening links to other European universities.

Total expenditure in 2017/18 was £957m, up almost 10 per cent year on year, with staff costs representing 55 per cent of this total. Other operating expenses include expenditure on student accommodation, scholarships and bursaries, library services, research projects, utilities and premises maintenance costs, and administration costs. Other operating expenses (excluding depreciation) for the year were £359m, a 12 per cent increase on last year. This increase reflects the growing student population, total staff costs and the important capital investment programme; the latter causing the University's depreciation charge to increase by 29 per cent to £60m. This correlates directly to the University's drive to improve its estate for the benefit of students and staff and to create a world-class estate (including important heritage buildings) for a world-class university.

Fifty-nine per cent of the total comprehensive income for the year relates to a £101m actuarial gain on the pension fund. The actuarial gain is a non-cash movement and is not a measure of the University's operational financial performance or surplus generation. It is simply the difference, year on year, of revisions to the estimated value of the pension scheme assets and liabilities in the University's own defined benefit pension scheme.

Certain assumptions are used to value the future liabilities of the pension scheme and also the assets belonging to the scheme. These estimates reflect changes to the actuary's assumptions as a result of another year's experience in population mortality and the scheme's own staff member profiles. The actuarial gain or loss can vary greatly from year to year depending on the remeasurements which have taken place.

The University's Estates Capital Plan was approved by Court in June 2018. Projected spend over the next 10 years is circa £1.3bn.

Each project has a unique business case that reflects how it will be funded through capital contributions from third parties and/or subsequent operating cashflow from new business. A number of these projects are directly related to the City Region Deal and require significant capital investment in early years to develop the physical infrastructure to support City Region Deal activity. Some £230m of capital grant will be provided by the government over the next decade. The £250m of new debt secured by the University at a very competitive rate in 2017/18 will also support implementation of the Estates Capital Plan.

The University Cash and Cash Equivalents balance at 31 July 2018 was £236m (31 July 2017: £250m).

To help facilitate funding of its ambitious estates programme, the University used its balance sheet strength to secure an additional £250m of long-term debt at attractive rates through a private placement, some of which was used to refinance expensive existing debt. Improvements to our forecasting and budgeting process gave us the confidence to make changes to our risk appetite to allow for a lower operating surplus, increased level of debt and lower interest cover as we invest for the future.

The University continues to develop its approach to integrated reporting. The 2017/18 *Annual Report and Accounts* document focuses on the value created by the University for its stakeholders, through the framework of integrated reporting. Our value model explains how the University draws on multiple capitals and helps to demonstrate an overall net positive impact for the University's specific stakeholders, society in general and the natural environment in which we operate. Our objective is to make the world a better place by delivering a positive impact through our graduates and our staff.

The above information reflects the audited accounts for the year to 31 July 2018, published in December 2018. Further information can be found at **www.ed.ac.uk/finance/accounts** or by contacting the University's Finance Department directly.

Consolidated statement of comprehensive income and expenditure for the year ended 31 July 2018

	Total 2018 £m	Total 2017 £m
Income	984	929
Expenditure	(957)	(873)
Operating surplus	27	56
Gain on disposal of fixed assets	–	8
Gain on investments	43	66
Surplus for the year	70	130
Actuarial gain/(loss) in respect of pension schemes	101	(5)
Total comprehensive income	**171**	**125**
Represented by:		
Unrestricted comprehensive income	130	69
Endowment comprehensive income	32	49
Restricted comprehensive income	9	7
	171	**125**

Consolidated balance sheet as at 31 July 2018

	2018 £m	2017 £m
Fixed assets	1,741	1,617
Heritage assets	213	212
Investments	571	531
Net current assets	241	266
Total assets less current liabilities	**2,766**	**2,626**
Creditors: amounts falling due after more than one year	(386)	(319)
Pension provisions	(163)	(261)
Total net assets	**2,217**	**2,046**
Restricted reserves		
Income and expenditure reserve – endowment reserves	424	392
Income and expenditure reserve – restricted reserves	57	48
Unrestricted reserves		
Income and expenditure reserve – unrestricted reserves	1,528	1,398
Revaluation reserve	208	208
Total reserves	**2,217**	**2,046**

Appointments

Appointments commenced between 1 August 2017 and 31 July 2018

Arts, Humanities & Social Sciences

Personal Chairs

Professor Rowena Arshad
Personal Chair of Anti-Racist and Multicultural Education

Professor Stefan Bilbao
Personal Chair of Acoustics and Audio Signal Processing

Professor Stephen Bowd
Personal Chair of Early Modern History

Professor Mary Brennan
Personal Chair of Food Marketing and Society

Professor Matthew Chrisman
Personal Chair of Ethics and Epistemology

Professor Paul du Plessis
Personal Chair of Roman Law

Professor Adam Fox
Personal Chair of Social History

Professor Alison Koslowski
Personal Chair of Social Policy and Research Methods

Professor Stephen Neff
Personal Chair of War and Peace

Professor Larissa Ryazanova-Clarke
Personal Chair of Russian and Sociolinguistics

Professor Kenny Smith
Personal Chair of Evolutionary Linguistics

Professor Genevieve Warwick
Personal Chair of History of Art

Professor Nuala Zahedieh
Personal Chair of Economic and Social History

Professorships

Professor Christine Cooper
Chair of Accounting

Professor David Cooper
Chair of Accounting

Professor Doreen Coyle
Chair of Languages and Classroom Education

Professor John Devaney
Centenary Chair of Social Work

Professor Leonardo Felli
Head of School and Professor of Economics

Professor Peter Flett
Director of MBA Programmes

Professor David Fox
Chair of Common Law

Professor David Garland
Professorial Fellow in Criminology

Professor Jens Hagendorff
Chair of Finance

Professor Morten Jerven
Chair of Africa and International Development

Professor Sarah Kettley
Chair of Material and Design Innovation

Professor Andrew Lang
Chair of International Law and Global Governance

Professor Linda McKie
Head of School of Social & Political Science and Personal Chair of Sociology and Social Policy

Professor Aaron Moore
Handa Chair of Japanese-Chinese Relations

Professor Melissa Terras
Chair of Digital Scholarship and Founding Director of the Centre for Digital Scholarship

Honorary Professors

Professor Jane Aldgate
School of Social & Political Science

Professor Lee Buchheit
School of Law

Professor Dragan Gasevic
Moray House School of Education

Professor Ian Gow
School of Literatures, Languages & Cultures

Professor Sir Mark Jones
Edinburgh College of Art

Professor Carolin Kreber
Moray House School of Education

Professor Sir Jonathan Mills
Edinburgh College of Art

Professor Belinda Thomson
Edinburgh College of Art

Professor Catherine Woods
Moray House School of Education

Professor Paul Wright
Moray House School of Education

Medicine & Veterinary Medicine

Personal Chairs

Professor Matthew Bailey
Personal Chair of Renal Physiology

Professor Debby Bogaert
Personal Chair of Paediatric Medicine

Professor James Boardman
Personal Chair of Neonatal Medicine

Professor Mark Bronsvoort
Personal Chair of Veterinary Epidemiology

Professor Kev Dhaliwal
Personal Chair of Molecular Imaging and Healthcare Technology

Professor Ian Duguid
Personal Chair of Cellular and Systems Neuroscience

Professor Elizabeth Grant
Personal Chair of Global Health and Development

Professor David Hay
Personal Chair of Tissue Engineering

Professor Caroline Hayward
Personal Chair of Quantitative Trait Genetics

Professor Jayne Hope
Personal Chair of Immunology

Professor Richard Mellanby
Personal Chair of Comparative Medicine

Professor Steven Pollard
Personal Chair of Stem Cell and Cancer Biology

Professor Tara Spires-Jones
Personal Chair of Neurodegeneration

Professor Sarah Walmsley
Personal Chair of Respiratory Medicine

Professor Scott Webster
Personal Chair of Medicines Discovery

Science & Engineering

Professorships

Professor Yanick Crow
Chair of Genomic Medicine

Professor Rowland Kao
Chair of Veterinary Epidemiology
and Data Science

Professor Dominic Moran
Professor of Agriculture and
Resource Economics

Professor Josef Priller
Chair of Brain Inflammation and
Repair

Professor William Wood
Chair in Tissue Regeneration and
Repair

Honorary Professors

Professor Sheila Bird
Deanery of Molecular, Genetic &
Population Health Sciences

Professor David Burt
Royal (Dick) School of Veterinary
Studies

Professor Helen Cameron
Edinburgh Medical School

Professor Sharon Cameron
Deanery of Clinical Sciences

Professor Jennifer Darnell
Deanery of Biomedical Sciences

Professor Ian Finlay
College of Medicine & Veterinary
Medicine

Professor John Hammond
Royal (Dick) School of Veterinary
Studies

Professor Neal Uren
Deanery of Clinical Sciences

Professor William Wallace
Deanery of Molecular, Genetic &
Population Health Sciences

Personal Chairs

Professor Rosalind Allen
Personal Chair of Biological
Physics

Professor Arend Bayer
Personal Chair of Wall-Crossing

Professor Philip Camp
Personal Chair of Theoretical
Chemistry

Professor Xianfeng Fan
Personal Chair of Particulate
Materials Processing

Professor Alison Hulme
Personal Chair of Synthesis and
Chemical Biology

Professor Andy Kerr
Personal Chair of Climate and
Low Carbon Innovation

Professor Victoria Martin
Personal Chair of Collider Physics

Professor Francisca Mutapi
Personal Chair of Global Health
Infection and Immunity

Professor Daniel Nussey
Personal Chair of Evolutionary
Ecology

Professor Pankaj Pankaj
Personal Chair of Computational
Biomechanics

Professor Guido Sanguinetti
Personal Chair of Computational
Bioinformatics

Professor Eric Schirmer
Personal Chair of Nuclear
Envelope Biology

Professor Michael Shaver
Personal Chair of Polymer
Chemistry

Professor Dušan Uhrin
Personal Chair of NMR
Spectroscopy

Professor Roman Zwicky
Personal Chair of Theoretical High
Energy Physics

Professorships

Professor Lynne Regan
Chair of Interdisciplinary Science

Honorary Professors

Professor Fabio Badalamenti
School of GeoSciences

Professor Edward Jefferys
School of Engineering

Professor Javier Martin-Torres
School of Physics & Astronomy

Professor Maurizio Mencuccini
School of GeoSciences

Professor Robert Procter
School of Informatics

Professor Thomas Simpson
School of Chemistry

Professional Services

Claire Barnish
Director of Support Services
Accommodation, Catering and
Events

Ian Gordon
Director of Impact
Enhancement
Business School

Andy Shanks
Director of Student Wellbeing
Student Services

Ashley Shannon
Director of Operations
Corporate Services

Bridgeen McCloskey
Director of Professional Services
School of Engineering

Gosia Such
Director of User Services
Information Services Group

Grant Spence
Director of Alumni Relations
Development and Alumni

James Saville
Director of Human Resources

Jennifer Milne
Deputy CIO, Director of
Applications Development and
Operations
Information Services

Lisa Dawson
Director of Student Systems
and Administration
Student Services

Suzanne Thompson
Director of Health and Safety

Theresa Merrick
Director of Communications
and Marketing

Tom Angus
Head of Small Projects and
Minor Works
Estates

Howard Marriage
Entrepreneur in Residence
Medicine and Veterinary
Medicine College Office

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Appendix 1

Research grants and other sources of funding between 1 August 2017 and 31 July 2018

Awards

| College	Award total
Medicine & Veterinary Medicine	£229.44m
Science & Engineering	£146.44m
Arts, Humanities & Social Sciences	£25.13m
Professional Services	£2.68m
Total	**£403.69m**
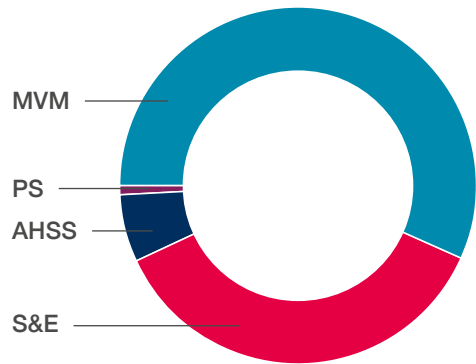
Applications

College	Number	Application total
Medicine & Veterinary Medicine	1,037	£533.08m
Science & Engineering	985	£547.26m
Arts, Humanities & Social Sciences	591	£141.59m
Professional Services	9	£3.47m
Total	**2,622**	**£1,225.40m**
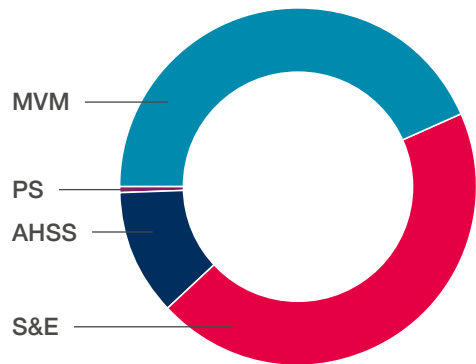
Pie chart shows the Applications total.

Awards by source

Sponsor type	Award total
EU – Government	£43.26m
EU – Industry	£1.87m
EU – Other	£1.52m
Overseas – Charities	£4.92m
Overseas – Industry	£9.23m
Overseas – Other	£6.21m
UK – Charity	£100.51m
UK – Government	£35.93m
UK – Health Authorities	£0.05m
UK – Industry	£12.26m
UK – Research Council	£186.58m
UK – Universities, etc.	£1.34m
Total	**£403.68m**
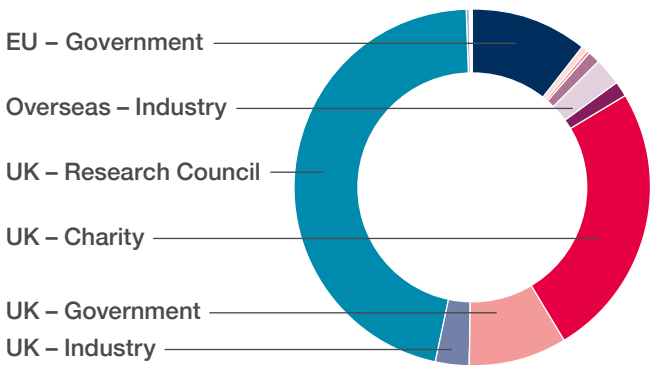
Note: The amounts set out the total project value of research grants funded from these sponsors. The sponsor will have contributed this whole amount, with the exception of some governmental sources (including research councils) and charitable sources, who fund the majority, with the balance being received indirectly via the Scottish Funding Council.

Data is based on an extract from the University live research management system, in September 2018.

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Where our funding came from

Country	Funders	Country	Funders
Australia	5	Korea, Republic of	2
Belgium	4	Netherlands	7
Canada	4	Norway	4
China	1	Saudi Arabia	1
Denmark	5	Spain	1
Finland	1	Sweden	8
France	3	Switzerland	6
Germany	6	Taiwan, Province of China	2
Hong Kong	1	United Kingdom	240
India	1	United States	52
Ireland	1	Vietnam	1
Japan	4	**Total**	**360**

Benefactions

Amount donated	Number of donations
£1–£999	6,221
£1,000–£9,999	333
£10,000–£99,999	85
£100,000–£999,999	26
£1,000,000+	6

A total of £23,405,081 was donated by 6,671 donors.

The University is very grateful to all of its donors.

Number of non-UK funders
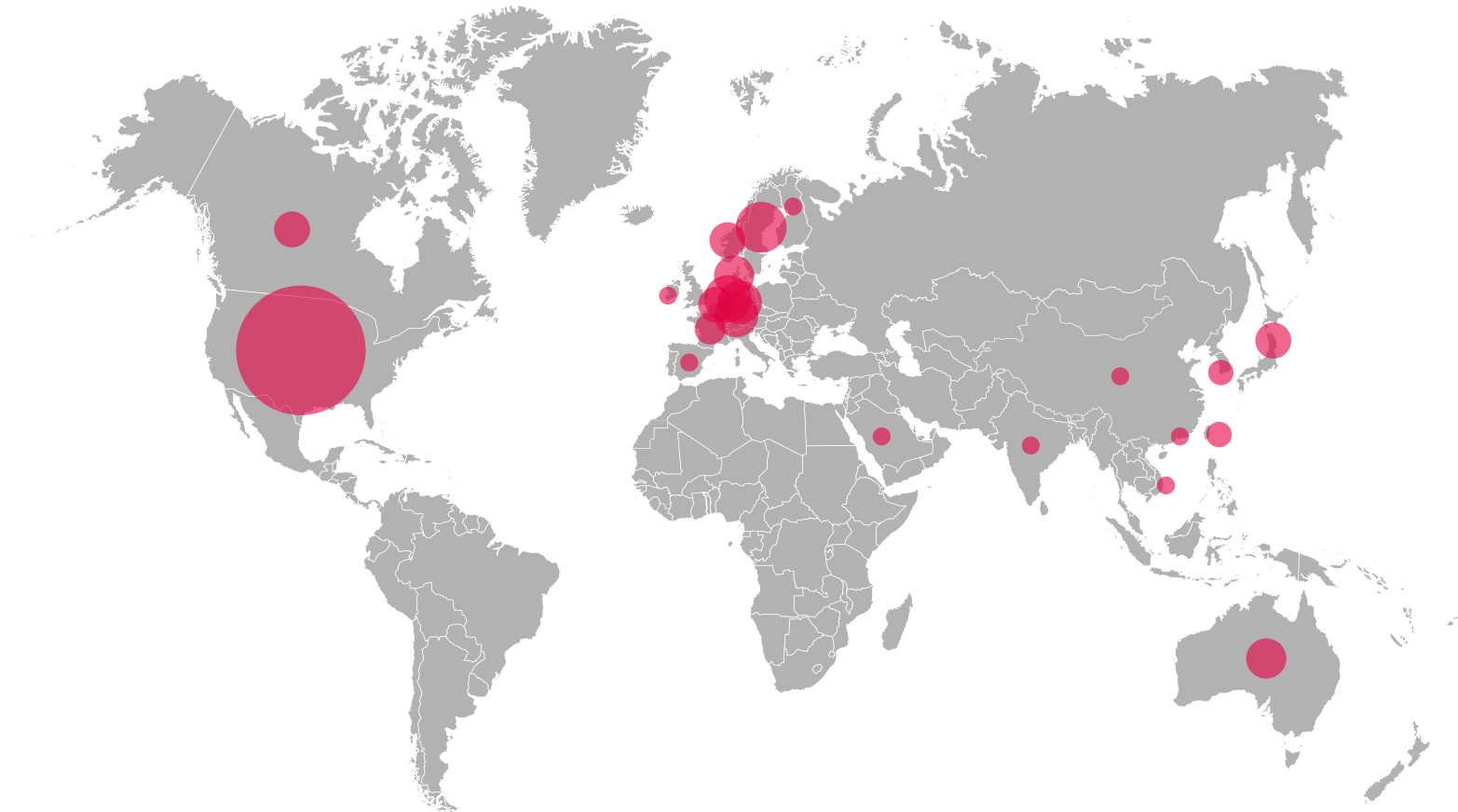
Appendix 2

Student numbers

Level of study by College
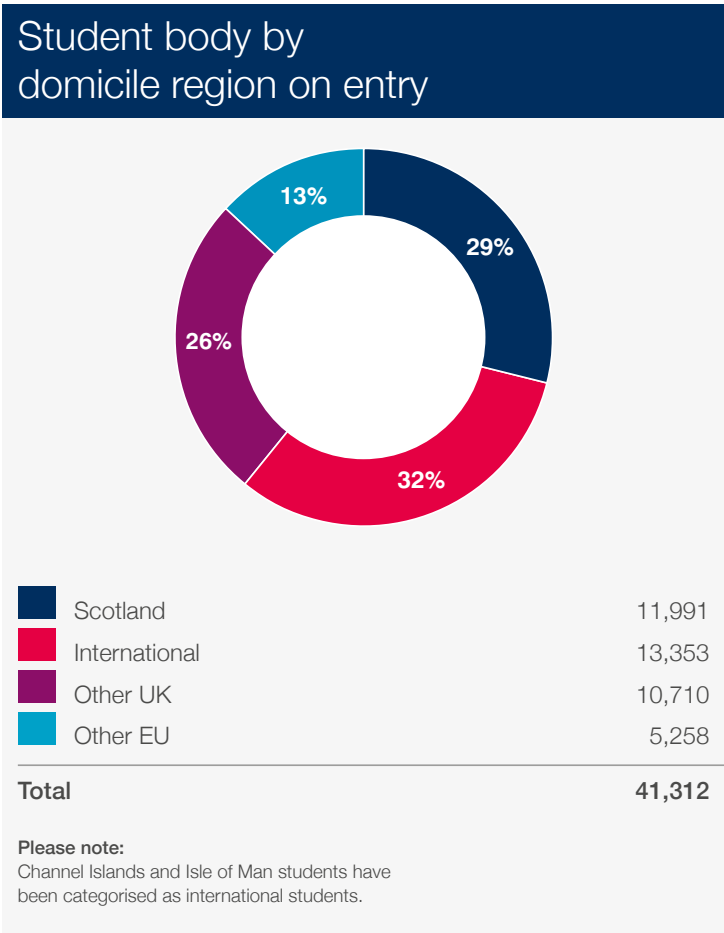
	UG	PGT	PGR	Total
Arts, Humanities & Social Sciences	16,133	5,949	2,119	**24,201**
Medicine & Veterinary Medicine	3,061	2,449	1,211	**6,721**
Science & Engineering	6,757	1,383	2,250	**10,390**
	25,951	9,781	5,580	**41,312**

UG undergraduate
PGT postgraduate taught
PGR postgraduate research

Student body by College

■ Arts, Humanities & Social Sciences	24,201
■ Medicine & Veterinary Medicine	6,721
■ Science & Engineering	10,390
Total	**41,312**

Student body by domicile region on entry

■ Scotland	11,991
■ International	13,353
■ Other UK	10,710
■ Other EU	5,258
Total	**41,312**

Please note:
Channel Islands and Isle of Man students have
been categorised as international students.
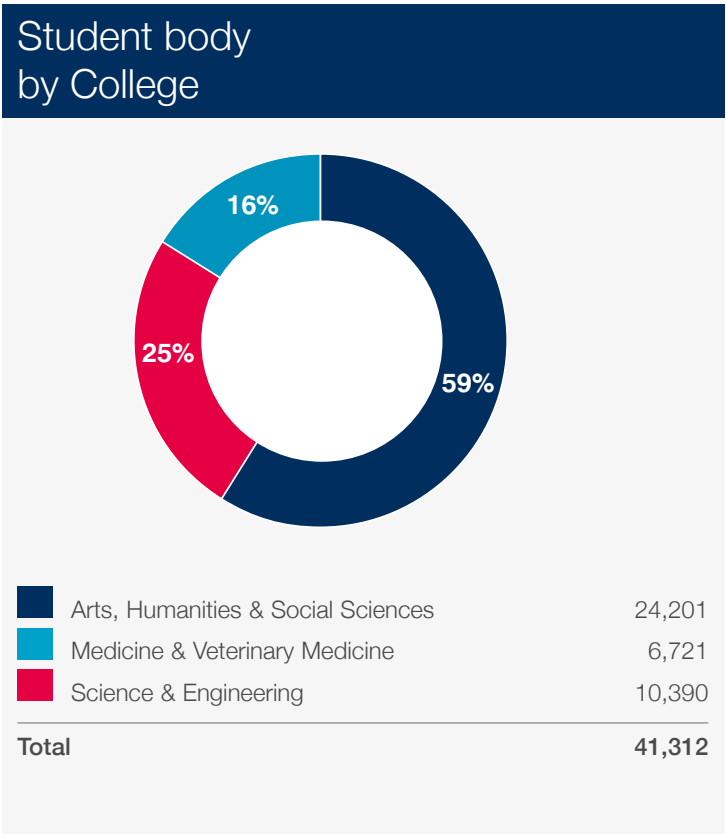
Student body by level of study and gender

Legend:
- Male
- Female
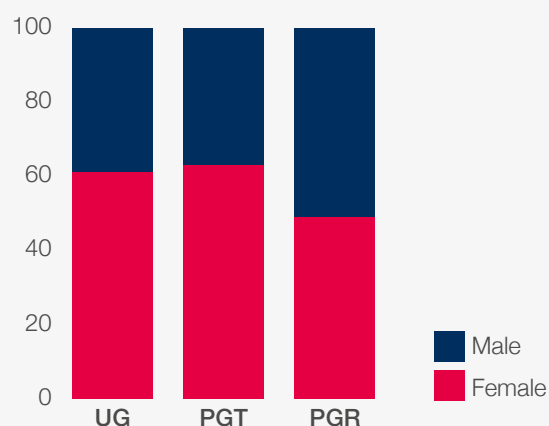
Please note:
Out of 41,312 students 55 are of non-disclosed gender.

Student body by level of study and mode

Legend:
- Full time
- Part time
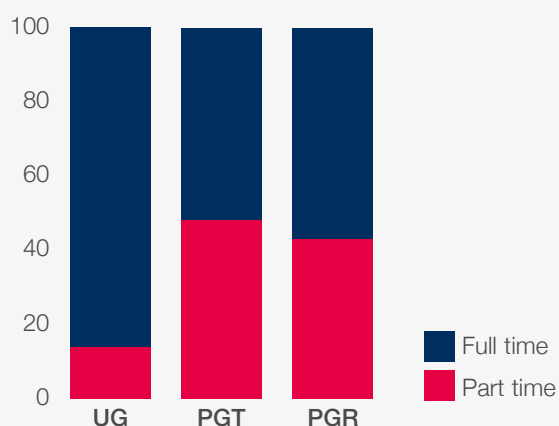
Top 20 non-UK domicile on entry

Country	Value
China	3,624
United States of America	2,964
Germany	676
Canada	637
Hong Kong	487
Italy	482
Australia	473
France	467
Spain	455
Malaysia	451
India	434
Greece	403
Ireland	376
Singapore	338
Netherlands	255
Norway	219
Poland	218
Switzerland	206
Sweden	196
Cyprus (European Union)	186

Legend:
- International
- European Union
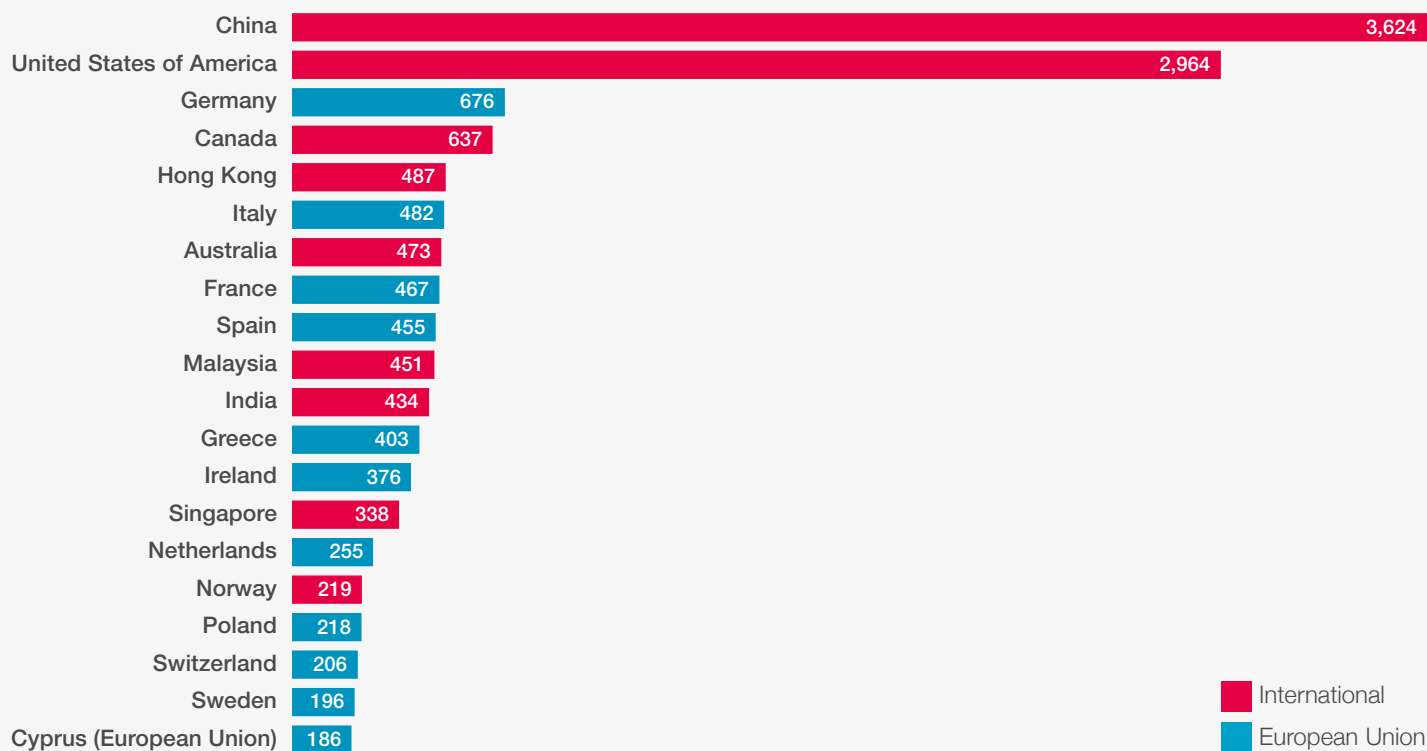
Please note:
The figures above represent all students matriculated during the session, with the exception of those exiting or interrupting their studies within five weeks of the first semester start date. Visiting students, part-time and distance learning students, and students on collaborative programmes are included. Domicile on entry is declared by the student when first matriculating onto their programme.

Appendix 3

Undergraduate applications and acceptances

2009		Male	Female	Total
Applications*		22,523	25,299	**47,822**
Acceptances		2,479	2,870	**5,349**
2010		**Male**	**Female**	**Total**
Applications*		21,601	25,657	**47,258**
Acceptances		1,631	2,190	**3,821**
2011		**Male**	**Female**	**Total**
Applications*		18,549	22,189	**40,738**
Acceptances		1,981	2,895	**4,876**
2012		**Male**	**Female**	**Total**
Applications*		20,371	27,188	**47,559**
Acceptances		2,281	3,224	**5,505**
2013		**Male**	**Female**	**Total**
Applications*		21,707	29,227	**50,934**
Acceptances		2,286	3,177	**5,463**
2014		**Male**	**Female**	**Total**
Applications*		22,984	32,353	**55,337**
Acceptances		2,365	3,385	**5,750**
2015		**Male**	**Female**	**Total**
Applications*		24,563	34,898	**59,461**
Acceptances		2,395	3,714	**6,109**
2016		**Male**	**Female**	**Total**
Applications*		25,345	36,755	**62,100**
Acceptances		2,452	3,745	**6,197**
2017	**Non-disclosed gender**	**Male**	**Female**	**Total**
Applications*	8	25,735	37,218	**62,961**
Acceptances	<5	2,594	4,161	**6,759**
2018	**Non-disclosed gender**	**Male**	**Female**	**Total**
Applications**	<5	24,263	36,271	**60,535**
Acceptances	<5	2,458	3,944	**6,402**

Please note:
* Number of applications received in each cycle for entry in the same year or deferred entry the following year.
** According to UCAS, there was a 2.5% drop in the 18-year-old population in the UK compared to 2017.

ENTRY YEAR

- Applications
- Acceptances
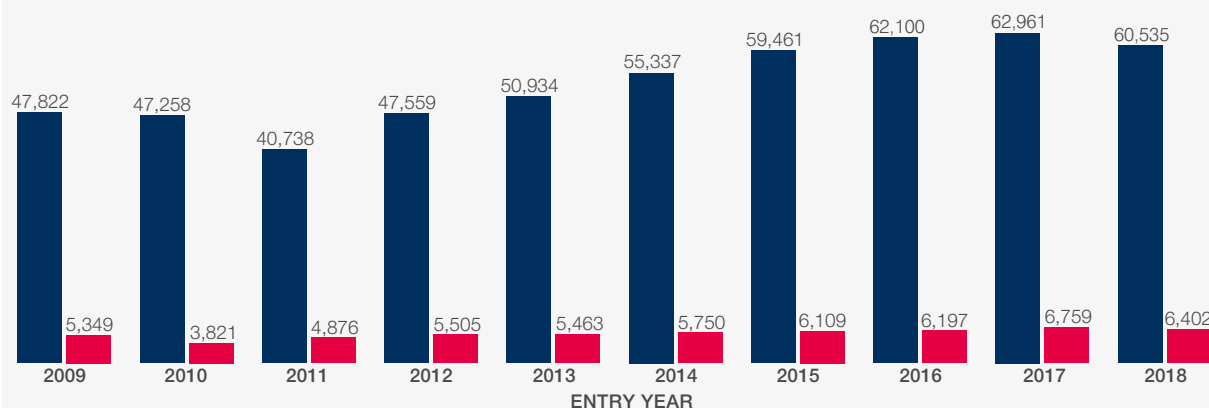
Please note:
Figures for 2011 include Edinburgh College of Art (ECA) acceptances but exclude ECA applications.
Figures from 2012 onwards include both ECA applications and acceptances.

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