



THE UNIVERSITY *of* EDINBURGH

EDINBURGH ²⁰¹⁹ FRIENDS

STORIES OF
PHILANTHROPY
AND THE FUTURE

A sea
change



Contents

04

Milestones

A look back at projects supported by donors



4

08

An Edinburgh for everyone

Widening participation for all sectors of society



8

12

Out of the corporate closet

Meet the Somewhere MBA LGBT+ Scholarship recipient



14



18

14

Protecting our most valuable resources

Collaborating to find effective treatments for dementia



24



32

16

Technoethics

The impact of artificial intelligence on humankind

18

Saving our oceans

Improving biodiversity through aquaculture

24

Talking sense

Breaking down barriers among different cultures

28

Our values are the future of teaching

Shaping future learning through community values

31

Global generosity

A snapshot of our donors

32

Three decades of impact

How legacy giving has benefited the University

34

A social contract

Law alumna Karina McTeague on why she supports the University

Visit www.ed.ac.uk/edinburgh-friends for online browsing, digital downloads and monthly supplements.

Published by Development and Alumni
The University of Edinburgh, Charles Stewart House,
9-16 Chambers Street, Edinburgh EH1 1HT, Scotland, UK
T: +44 (0)131 650 2240 E: alumni@ed.ac.uk
www.ed.ac.uk/development-alumni

Editor: Brian Campbell
Design: Connect Publications
www.connectmedia.cc
Print: Allander

The University of Edinburgh is a charitable body, registered in Scotland, with registration number SC005336.
The University of Edinburgh Development Trust is a charitable body registered in Scotland, with registration number SC004307.

Philanthropy and the appetite for risk

The University of Edinburgh can tell inspiring stories that couldn't be told in the first place if it weren't for the generosity of our supporters, ranging from monthly direct debit contributions and larger endowments, to alumni who volunteer their time to mentor students. Your impact is extraordinary. The pages of this magazine prove that many times over. Thank you.

When we talk of the impact of giving, there is a crucial dimension that tends to be overlooked. We don't tend to talk about the level of risk sometimes involved, or, indeed, the appetite for risk from donors as they consider priorities for their own generous giving.

Here at Edinburgh we take forward many programmes across campus – made possible with your support – where results can be strongly anticipated. These include supporting scholarship programmes that identify outstanding students who could not afford to either begin or finish their studies without philanthropic support (see page 12 to read the story of Teale, one of our talented MBA students). The impact on all these students is immediate and enormously powerful, backed up by the fact that graduation rates for scholarship-receiving undergraduates from less advantaged backgrounds more than meet those of their student peers at Edinburgh.

Supporting our research programmes,

however, is a much more nuanced affair. The level of 'impact risk' for the growing body of research gifts we receive is subject to many more variables and a greater degree of uncertainty (albeit coupled with great optimism).

Like all research, if the results were known and guaranteed before the work started, it wouldn't be proper research; we can't guarantee results, no matter how committed our academic and wider partners are to make a difference in the world.

We can, however, safely state that all research findings accelerated by philanthropy, whether positive or negative, whether in the realm of seeking to improve public policy, or in seeking to address debilitating diseases, make an important contribution. They add to the body of publicly available knowledge from which other researchers in Edinburgh and far beyond will benefit.

Gifts for research programmes open up new career-launching opportunities for PhD and postdoctoral researchers, and often help us build key international research collaborations on societal agendas that transcend national boundaries. These are real and important, if sometimes indirect, impacts provided by philanthropy.

When you read our interview with the inspiring researchers working on dementia care on pages 14 and 15, I hope you will share our pride in the important shared

sense of mission they have in their work. And, of course, philanthropic funding for research can sometimes help directly unlock transformational breakthroughs for the benefit of society. Just not every time!

Sheer excellence

Those of us lucky to work in the field of engaging donors in university programmes, whether with our students, researchers or partners, revel in discussion about their appetite for risk. However high or low that may be, and whatever their personal motivations for charitable giving based on their values, life experiences and what matters to them most in the world, we will be able to find substantive activity programmes to match.

All parties understand that the greatest risk of all is envisaging a world where lack of public or private financial resources diminishes the positive impacts on society provided by the sheer excellence that has characterised this University, its students, and its research since 1583.

On behalf of the whole University community, thank you again for your interest, time and support.

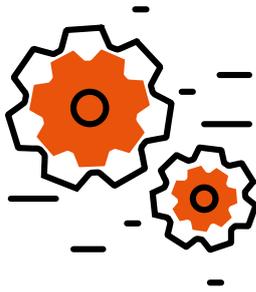


Chris Cox
Vice-Principal,
Philanthropy and Advancement



Milestones

Our review of the past academic year, showcasing projects that have been funded by the philanthropic support of individuals and organisations



Understanding autism

The Patrick Wild Centre, which conducts research into autism spectrum disorder, fragile X syndrome and other intellectual disabilities, received a legacy funding boost with the final instalment from Dr Alfred Wild's estate. The centre was established in 2010 with support from Dr Wild, whose brother Patrick was severely autistic, and Gus Alusi and Reem Waines, whose son has fragile X syndrome. Since the centre opened, it has initiated the first medicine trials for fragile X syndrome, completed studies of non-medical therapies and pioneered techniques to conduct MRI scans in people with intellectual disability and autism spectrum disorder.

New Steinways strike a chord

Students at the Reid School of Music can now make music on a new fleet of Steinway pianos – widely considered among the best in the world – thanks to a generous bequest from former student Thomas Laing-Reilly. Students and staff visited the Steinway & Sons factory in Hamburg to choose the pianos. Their arrival in Edinburgh was celebrated with a public performance from the renowned Piano Circus ensemble, and culminated with students and staff joining in a selection of works involving all 28 pianos, which have since been transferred to their new home in Alison House. The addition of the pianos has helped the Reid School of Music achieve All-Steinway School status, the piano-maker's hallmark of excellence in musical education.



Talbot Rice Gallery patrons

The University's Talbot Rice Gallery has launched its first Patrons Programme, giving supporters the chance to contribute to new artistic talent and community outreach projects. Philanthropic support has helped the Gallery bring the work of world-renowned artists to Edinburgh, as well as support new work by emerging artists.

A generous bequest has enabled the Reid School of Music to gain All-Steinway School status





Award-winning journalist Lindsey Hilsum, broadcaster and alumna Sally Magnusson and best-selling author Olivia Laing at this year's James Tait Black Prizes

Philanthropic support celebrated

A lecture theatre at the University's Medical School has been renamed the Shirley Hall in honour of the philanthropic contribution of Dame Stephanie Shirley. The IT pioneer has been a supporter of medical research, committed to improving understanding of autism and other developmental conditions, and has made a significant contribution to research at the Patrick Wild Centre.



Dame Stephanie Shirley unveils the plaque in her honour at the University's Medical School

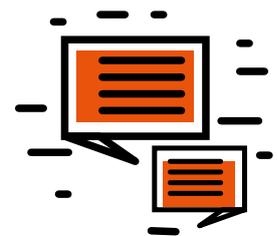
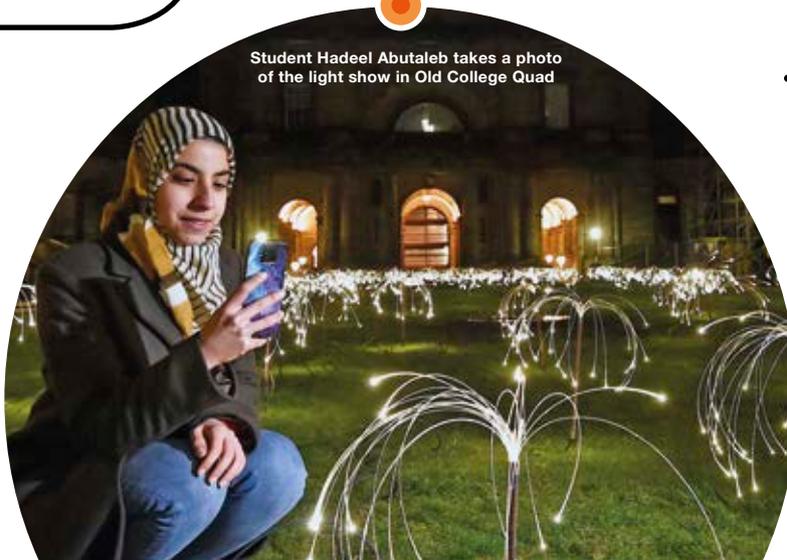
Lighting up student's charitable legacy

Hundreds of fibre-optic flowers were lit up in Old College Quad to mark the 20-year anniversary of a charity founded by a former student. Ellie Maxwell, who died from cancer 10 years ago, launched Firefly International while she was studying English and Philosophy. The charity supports young people in areas of conflict through art and education. An award to support students who manage charities was launched as part of the celebrations. The Ellie Maxwell Award will offer £500 in funding and support for University of Edinburgh students who are developing ideas for promoting social change through their charities.

100 years of amazing books

This year, the James Tait Black Prizes, the UK's longest-running literary awards, marked their centenary. The awards were set up in 1918 following a legacy gift from Janet Tait Black, part of the renowned threadmaking family J & P Coats. The prizes celebrate the best novels and biographies as selected by Edinburgh literature academics and postgraduate students. A drama category was added in 2013 and a short story prize for postgraduate students was offered for the centenary. This year's winning books were *Crudo* by Olivia Laing and *In Extremis: The Life of War Correspondent Marie Colvin* by Lindsey Hilsum.

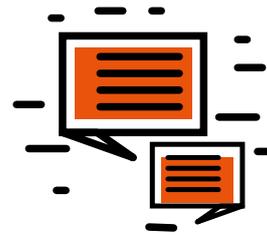
Student Hadeel Abutaleb takes a photo of the light show in Old College Quad





Reaching out to refugees

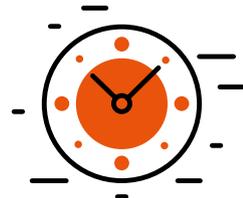
Fundraising undertaken by members of the local community has helped a University-based project reach out to refugee children in Greece using the power of music. Led by Senior Lecturer Dee Isaacs, the team from the Windows on our World project returned to Greece in the summer to host music, play and singing sessions for displaced children up to the age of 14, to help them process trauma and rebuild a sense of security and confidence. Windows on our World is part of the Music in the Community course, led by Dee, which explores how music can be applied as an educational, social, artistic or therapeutic tool.



Addressing gender equality in the law

The Law School made a commitment to addressing gender inequality in the legal profession with the relaunch of its Edinburgh Foundation for Women in Law. The Foundation seeks to help anyone who identifies as a woman working in law by providing safe spaces for facilitating conversations around the inclusion and equality necessary to break down the barriers preventing them from reaching their full potential.

Read our interview with alumna Karina McTeague, co-founder of the Foundation, on page 34.



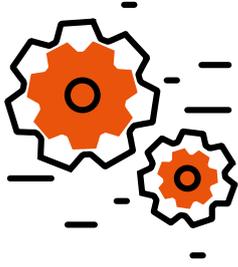
Saving a piece of geological history

This year, the University launched a campaign to keep the notebooks of pioneering Scottish geologist Charles Lyell (a mentor of Charles Darwin) in Scotland, to give us a chance to better understand one of the greatest scientific minds of the last 200 years. Lyell influenced generations of scientists through his popular books and lectures and is credited with providing the framework that helped Darwin develop his evolutionary theories. The notebooks had been in private hands and were due to be sold abroad. Pledges from 1,164 individuals, together with gifts from organisations including the National Heritage Memorial Fund and the John R Murray Charitable Trust, and the University's own contribution, enabled the purchase of the notebooks, which shed light on a number of contemporary concerns including climate change and species diversity. They will be made accessible to students, researchers and the public through exhibitions and digitisation.



Image courtesy of Sotheby's

J.K. Rowling has gifted an additional £15m to the Anne Rowling Regenerative Neurology Clinic



Record intake for Mastercard Foundation Scholars

Last academic year, the University welcomed its highest intake of African students enrolled on its Mastercard Foundation Scholars Program to date. A total of 71 students from African countries including Ethiopia, the Gambia, Rwanda, Sierra Leone and Zambia were supported to undertake undergraduate or postgraduate study at Edinburgh. The programme aims to provide outstanding African scholars who have limited educational opportunities in their home countries the chance to develop their full academic and leadership potential.

J.K. Rowling donates £15m to MS research

The author J.K. Rowling has donated £15.3m to the University of Edinburgh to help improve the lives of people with multiple sclerosis (MS) and similar conditions. The investment – which is inclusive of Gift Aid – will help create new facilities and support vital research at the University's Anne Rowling Regenerative Neurology Clinic.

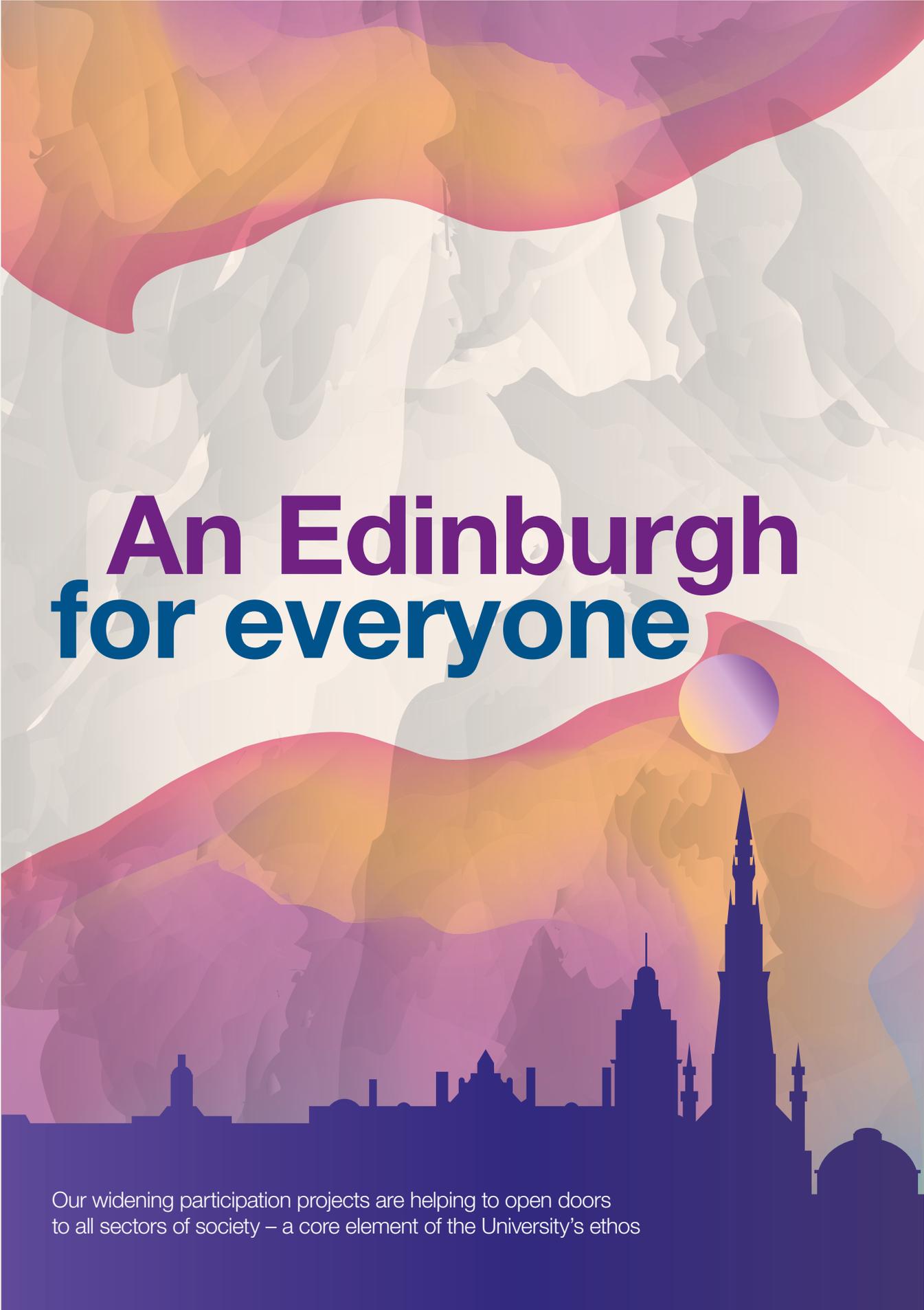
The Clinic was set up following a previous donation from Ms Rowling in 2010 and is named in memory of her mother who died of MS aged 45. It has established itself as an

integrated care and research facility focusing on MS and neurological conditions with the aim of bringing more clinical studies and trials to patients.

Ms Rowling said: "I am delighted to now support the Anne Rowling Regenerative Neurology Clinic into a new phase of discovery and achievement as it realises its ambition to create a legacy of better outcomes for generations of people with MS and non-MS neurodegenerative diseases.

"It's a matter of great pride for me that the Clinic has combined these lofty ambitions with practical, on-the-ground support and care for people with MS, regardless of stage and type."





An Edinburgh for everyone

Our widening participation projects are helping to open doors
to all sectors of society – a core element of the University's ethos



Bristo Square – that great public space bookended by the late-Victorian grandeur of McEwan Hall and the 1970s straight-lines of Potterrow – opened in 1983 to mark the University of Edinburgh’s 400th birthday.

For many people arriving after crossing George IV Bridge from the north, the square is their first encounter with the University. It is open and accessible. The buildings are arched around the central circular arena, as if beckoning everyone in.

Well, that’s one interpretation. Here’s another.

“Most groups we work with don’t think Bristo Square is for them,” says Melanie Smith, one of the University’s widening participation managers. She works with children in the city’s primary and secondary schools. “Same with George Square or Old College. They think they can’t walk across it. They just don’t see our spaces as part of their city.”

Getting into the University of Edinburgh has always been hard. Entry requirements and competition for places are high. It is a dynamic that befits its profile as one of the world’s top universities.

Edinburgh has an equally long history of finding ways to ensure that talent is the defining reason why someone is offered a place, rather than material means. Over the years, many barriers to entry have been torn down.

But many remain. As their nature and specificity are changing, so too is the University’s response.

Laura Cattell is the University’s Head of Widening Participation. She came into post in 2016 and launched the University’s strategy in 2018.

“For me, widening participation is about two things,” she says. “One is making sure that we as an institution are more representative of wider society. We are a huge influencer – we need to make sure our voice is able to speak for a diverse range of people.

“The other thing is removing the barriers and creating opportunities for as many people as possible. Our Principal often says that if you agree that talent is equally distributed across society, then why would we wish to just work with only a small section of it?”

Edinburgh is not working in isolation. In 2017,

the Scottish Government set the target that by 2030, students from the 20 per cent most deprived backgrounds should represent 20 per cent of entrants to higher education as a whole.

There are several milestones to be met en route, including that by 2021 at least 10 per cent of full-time first degree entrants come from these deprived areas. Edinburgh met this target three years early.

This is not the only area where the University is going beyond what it is tasked with.

Whereas the Scottish Government targets are focused on entry into university, Edinburgh’s strategy has four strands looking at the whole student journey. It begins with dispelling myths and raising aspirations in school children, even as early as primary school, followed by supporting talented students to get in with flexible admissions and financial support. Once they arrive, students



Above: Laura Cattell, Head of Widening Participation



If people face barriers getting to University, we want to try to remove those and make it as wide an opportunity as possible

are supported to succeed. Finally, there is support for graduates to progress into careers that befit their talent.

This is why the University doesn’t talk about widening access – which is just one facet – but widening participation.

For Edinburgh to be genuinely successful, the whole institution needs to take responsibility, and as our Widening Participation strategy states: “We all have a role to play in making this happen”.

“That is incredibly challenging in somewhere this size, but we have to recognise the immense collateral when we work together,” she says. “This is





Above and below: attendees at an Access to Creative Education in Scotland (ACES) event, held by the University for school students interested in studying a visual creative subject

not just one team dealing with this; this is up to 15,000 staff and 35,000 students. Everyone needs to get on board – and so far we’ve had brilliant engagement from staff, students, alumni and wider supporting networks.”

So, beyond the strategy, what is the University doing practically to widen participation? According to Laura, they have learned from research that although they are a valuable and critical aspect to widening participation “scholarships are not the golden ticket, and neither is contextual admissions”.

In recognition that educational disadvantage starts at a young age, the University runs more than a dozen projects engaging with school-age children. These include Educated Pass, which works with local football clubs; well-established partnerships such as the Lothian Equal Access Programme for Schools, which provides advice for students traditionally under-represented in higher education; and new programmes such as YourEd (see opposite page).

Laura stresses that these projects are not explicitly recruiting students for the University of Edinburgh. It

“**I’m pretty clear that what we are doing is not charitable work. We would miss a trick if we didn’t do this. It benefits us hugely**”

is about broadly raising aspirations and ensures that students realise that higher education could be an option for them.

“There is a motivation to do this work from a community engagement perspective as well seeing it contributing to social mobility more broadly,” she says. “It shows a maturity and confidence on our part, but I want to be clear that what we are doing is not charitable work. We benefit hugely from this work – we get to know and understand our local communities, our schools, and most critically we get to meet talented learners and their families who go on to enrich our student population with their range of life experiences. We would miss out if we didn’t engage and nurture this talent.

“It benefits society at large. It’s a common sense thing to do.”

As part of its commitment to widen participation for students across the UK, not just Scotland, the University has announced the creation of Access Scholarships. The scheme – worth between £1,000 and £5,000 per year of study – comes into effect for 2020 entry and replaces several existing funds, simplifying the process.

Students who have an experience of being in care or are estranged from their parents will automatically receive the maximum amount.

This move is one of many that recognise that certain groups need particular support. “It recognises the immense strain that not having family support can have when you are starting university,” says Laura.

For this particular cohort, a member of the widening participation team meets the students before they start to ensure they have the means to travel to Edinburgh and money to buy the essentials once they arrive. “It’s not uncommon in the past for those students to bring their stuff in bin liners,” says Laura.

Other groups have specific barriers that need torn down. For asylum seekers and refugees, language is





Melanie Smith

TRANSFORMING YOUNG LIVES

Melanie Smith says: “I’ve seen the transformation. I have seen those who go from being a little school pupil aged 15 standing outside Old College, all nervous and not wanting to talk to anyone, to being a qualified professional brimming full of confidence.

“It’s phenomenal.”

Melanie has witnessed many metamorphoses during her years as part of the University’s widening participation team. In 2018 she was appointed to launch YourEd, a new scheme that intends to change more lives through the University partnering with 12 schools.

“We see it as an interface between the University and the schools, so that they could have access to our resources,” she says. “As a partner school, they should feel like an extension of the University.”

YourEd was established because the University realised that some schools were falling through the gaps. They were either not covered by Scotland’s network of widening participation schemes or were not a priority school within one.

Melanie’s team then worked with the selected schools – all within a 50-mile radius of Edinburgh – to



Participants at this year’s Sutton Trust Summer School. The University partners with the Trust to allow students from state-funded schools and colleges the chance to sample university life and higher education study

create a bespoke service based on their needs, strengths and situations to deliver whatever was necessary to raise the aspirations of those pupils.

In its first year, YourEd’s activities have included campus visits for students, sessions with pupils on how to write personal statements and fill in UCAS forms, and a conference about life at the University for S3 pupils.

The ambition is to scale up and roll out the YourEd model beyond the areas

surrounding Edinburgh.

Melanie hopes it will increase the number of nervous 15 year olds from every kind of background entering university.

“You then hope they will go out and diversify into whatever occupation they choose and pay it forward,” she says.

“Widening participation – and YourEd – is just saying ‘you are welcome here’. It is about making sure those that want to, and are able, can.”

a major issue. Therefore, the widening participation team helps run homework clubs and English language lessons for Syrian refugee children.

For students on the Asperger’s spectrum, the buzz of welcome week can be overwhelming and harm orientation. To help, they are invited to start a week early, with tailored sessions showing them around campus.

And the Insights Programme continues to help students to develop the confidence, skills and connections to consider a range of careers through introductions to alumni working in a wide range of sectors and environments. The Programme is funded by alumni donations and is on course for further expansion, with more student participants and alumni volunteers, and by taking place in more countries around the world.

There is much more to come too. Plans are

afoot to create widening participation programmes for students across the world, building on the success of the Mastercard Foundation Scholars Programme, which provides scholarships to African students with huge potential and little means.

Other schemes in development include bespoke mental health support for widening participation students and foundation years to aid entry into the more selective and challenging courses such as medicine.

The University is up for the ever-changing challenge of tearing down the obstacles that prevent people from realising that Edinburgh – Bristo Square and all – is for them.

“As we break down these barriers, we will discover new ones,” says Laura. “We should be ready and able to respond. And we will be. As society changes, we will keep evolving.”

FURTHER INFORMATION

If you would more information on supporting widening participation at the University, drop a line to David Haines at david.haines@ed.ac.uk

Out of the corporate closet

As the first recipient of the Somewhere MBA LGBT+ Scholarship, Teale Failla is proud to be a leader in creating a business world where a diverse workforce is viewed as an asset

When Teale Failla embarked upon her mission to uproot how business is done, she instantly felt like an outsider.

"I would go to these MBA fairs and felt I was unlike everyone," says the film-maker and writer from New York. "It was very intimidating. I kept asking myself, do I really want to do this?"

The answer that always came back – fuelled by a potent mixture of clear-eyed purpose and gnawing frustration – was that she did.

The business world, she says, needs to see diversity, specifically around the LGBT+ community, as an asset. In many places, however, it is still considered a threat.

Teale has experienced this first hand. In one media job, a colleague who harassed her and several of her co-workers went unpunished. In another, a boss told her that she should "get out of her gay bubble".

"Ultimately, you can't be the best if you are treated less than other people," she says. "All these things led me to think I would like to have a much larger impact than I'm having now."

Which is how she found herself at MBA fairs – places where the business world can have a smothering uniformity of appearance and purpose – wondering where to start and questioning if change was even possible.

The University of Edinburgh Business School piqued her interest and then she heard about the Somewhere MBA LGBT+ Scholarship.

"That was the clinching factor," she says. "When I saw this scholarship, it became about a lot more than just the money. It leapt out. This was tailored for me."

The £10,000 scholarship was set up this year in collaboration with Somewhere, a social enterprise that aims to break down the barriers to LGBT+ inclusion in business.

For Teale, it signalled that "not only are we welcome, but we are valued". It is the first LGBT+ postgraduate scholarship in Scotland and second only in the UK to Cambridge. Teale is the scholarship's first recipient.

It is a vital development, says Somewhere founder Kathryn Pierce.

"The corporate closet is very real and very much alive," she says. "Until boards and business spaces become far more openly and proudly diverse, and difference is valued as a strength rather than a threat, things will not change.

"I believe it is a function of higher education to embolden people to stay out of the closet, to live authentically and be supported enough to enter a heteronormative business world with confidence and pride."

The scholarship's aim is to do just that. Creating LGBT+ entrepreneurial role models – such as Teale – is key, as well as making business more representative of their societies.

This, according to Kathryn, will benefit everyone, from customers to shareholders.

"Put simply, the world isn't white, straight and cisgender male, though the current power

“

Ultimately, you can't be the best if you are treated less than other people



structures predominantly are,” she says.

“It’s quite clear to see that the greater the diversity of voices, the greater capacity we have to create and maintain a fairer world, which represents society as it actually is.

“Diversity in business is also smart business – consumers want to support more inclusive and ethical companies, and young people especially so. Arguably there is a commercial driver for better representation, as well as a moral one.”

Teale agrees: “The scholarship is a fantastic step

and part of that change,” she says. “Business can be an absolute tool for good. We can turn this around and business schools can lead the charge.”

With Somewhere and the University’s Business School, Teale has found allies in her mission. Once she completes her year-long programme, she plans to work to increase visibility of LGBT+ in TV networks or production companies.

“I’d also like to write the lesbian version of *The Young Ones*,” she says. “I think the world needs that.”

The outsider has entered the building.

Protecting our most valuable resources

An estimated one million people in the UK are projected to be diagnosed with dementia by 2025. Attacking our most valuable resources as humans, it erodes our thinking skills and our memories, destroys our personalities and takes an enormous toll on patients and their families. But pioneering collaborative research in Edinburgh is bringing us ever closer to effective treatments

While much of the dialogue around dementia is bleak – there are no drugs that can stop decline and countless failed trials – projects in Edinburgh provide a beacon of hope. The University’s Centre for Dementia Prevention (CDP) – led by Professors Craig Ritchie, Jean Manson and Charlotte Clarke, representing clinical, social and basic sciences – was established to understand brain changes in early dementia and factors that influence its onset. Figuring this out will be key to the ultimate goal – preventing dementia.

Recent evidence shows that Alzheimer’s disease – the most common cause of dementia – attacks the brain decades before symptoms. The CDP works with participants in their 40s and 50s to pinpoint the first psychological and biological changes that dictate the likelihood of developing dementia. Scientists believe that the delay between brain changes and the onset of symptoms offers

a window of opportunity to alter the course of the disease.

Professor Tara Spires-Jones, Programme Lead at the UK Dementia Research Institute at the University of Edinburgh, is a lab-based neuroscientist whose work focuses on

synapses – tiny connections that allow chemical and electrical information to flow between brain cells and that are key to learning and memory. Synapse loss is thought to be vital in the progress of Alzheimer’s disease, ‘leaking’ proteins into the brain’s cerebrospinal fluid (CSF) as they go. Exactly how these proteins might relate to cognitive changes is unknown, but could be a key early marker of disease.

A new PhD study is set to harness the multi-discipline approach of CDP, investigating synaptic proteins in CSF and how this relates to cognitive data from participants. By using the expertise and equipment found across Edinburgh, this CDP study has a unique opportunity to bridge the gap between science and patient care.

Tara believes that bridging that gap is important in everyday lab life and that bench-based researchers can make special efforts to learn from people with dementia. Lab members have recently taken part in a scheme set up by former lab member Dr Chris Henstridge to link scientists with affected families, named Dementia Buddies.

“We find Dementia Buddies so motivating because we see how real people’s lives are affected. It changes our research perspective too as we find out what research questions could be most important to people who are actually living with dementia,” says Tara. Working



Research works. If you look at cancer and HIV, there’s been a huge amount of investment and now there are life-changing treatments



THE DEMENTIA BUDDY SCHEME

The pioneering dementia 'buddy scheme' brings together University researchers and people living with dementia to enable them to learn from each other. It's headed by Dr Chris Henstridge from the Centre for Discovery Brain Sciences. His team believes that the project will offer some hope to people living with dementia and help them

to understand how much work is going on to try and understand this disease.

Dr Henstridge says that the scheme is bringing together two groups who do not normally communicate: "One group of people are those who are living with dementia in the community. The other group of people are researchers like myself who spend all their time

at the bench trying to understand the disease. We read about it all the time, but we don't really get the opportunity to experience and interact with people who live with the disease on a daily basis."

The pilot project was initially funded by an NHS Lothian Accord Bursary and has since received funding from the Alzheimer's Society.

with clinical teams at CDP has also been invaluable for advancing their basic science: "A lot of ideas are generated over a cup of tea. I might tell the team about some exciting lab results and the clinicians will say 'okay, great, but how will that look in a patient?' We push each other to be the most effective that we can from multiple angles."

On the patient-facing side, Dr Laura McWhirter, a psychiatrist and clinical researcher, studies cognition. Her work with CDP participants is focused on better distinguishing between those with a neurodegenerative disease, such as Alzheimer's, and those whose cognitive decline is due to another cause. Laura is testing if these insights could help improve the accuracy of clinical trials: "Is part of the reason that trials are failing because we are actually trialling drugs with the wrong people?" Her data may shed light on some aspects of why so many pharmaceutical studies have led to such disappointing results.

While some of us will develop dementia no matter what, due to unlucky genetic and developmental makeup, studies suggest that others might be able to reduce risk and that lifestyle factors are key to prevention. So how can we as individuals ensure brain health as we age? "Physical activity keeps your brain healthy and leading a healthy lifestyle in midlife could be key. There is less evidence that lifestyle changes can help once you have the disease, but keeping healthy and exercising could help reduce risk", says Tara.

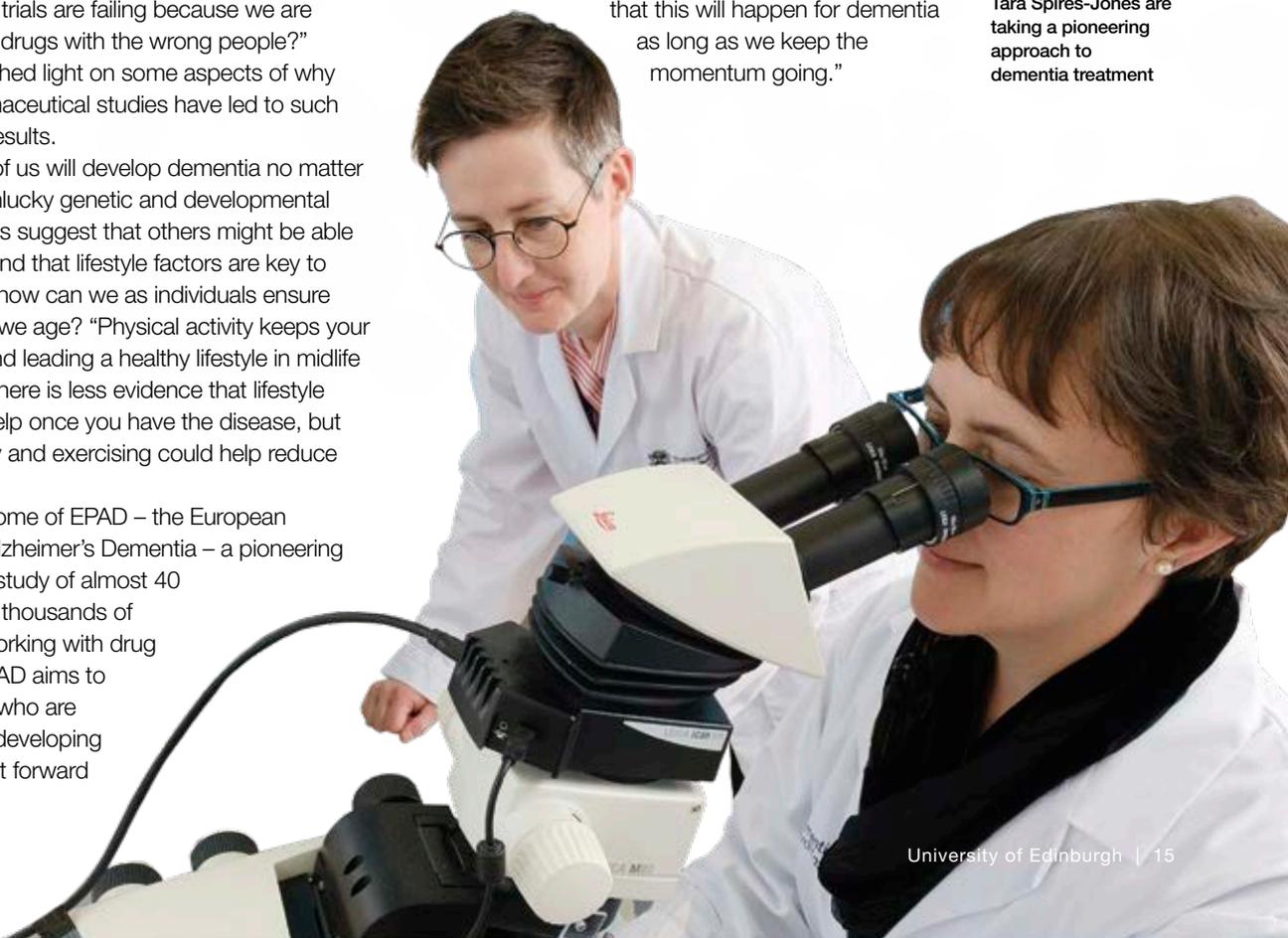
CDP is the home of EPAD – the European Prevention of Alzheimer's Dementia – a pioneering pan-European study of almost 40 institutions and thousands of participants. Working with drug companies, EPAD aims to identify people who are most at risk of developing dementia to fast forward

the search for effective interventions.

Tara believes that these types of pioneering approaches mean that we should be optimistic. "Research works," she says. "If you look at cancer and HIV, there's been a huge amount of investment and now there are life-changing treatments. The same will be true for Alzheimer's disease and other dementias if we continue to invest and bring smart people in.

"This type of scientific research results in life-changing treatments. I am convinced that this will happen for dementia as long as we keep the momentum going."

Dr Laura McWhirter (left) and Professor Tara Spire-Jones are taking a pioneering approach to dementia treatment



Technoethics and the pursuit of human flourishing

As the University continues to develop its research into the crucial role that data science and artificial intelligence will play in the world's future, Dr James Eglinton, Meldrum Lecturer in Reformed Theology at the School of Divinity, considers the impact on our ethical codes and human character, and how they can lead to meaningful and sustainable progress for the whole of society

How should we think about the role of technology in the pursuit of human flourishing? At the outset of the 21st century, the moral status of technology in relation to human wellbeing is ambiguous. Ours is the age in which robot-assisted surgeons and remotely controlled combat drones carry out their tasks with equally startling precision, and where the same information technology suppresses one population by denying them information and enriches another by granting them free access to it. Our inventions are a blessing to some and a curse to others. For that reason, the greatest questions about technology take us beyond our inventions to focus on their human creators. What are we to make of the ingenious creatures whose tools are found everywhere on our planet and even litter the surface of the moon?

Inherently interdisciplinary

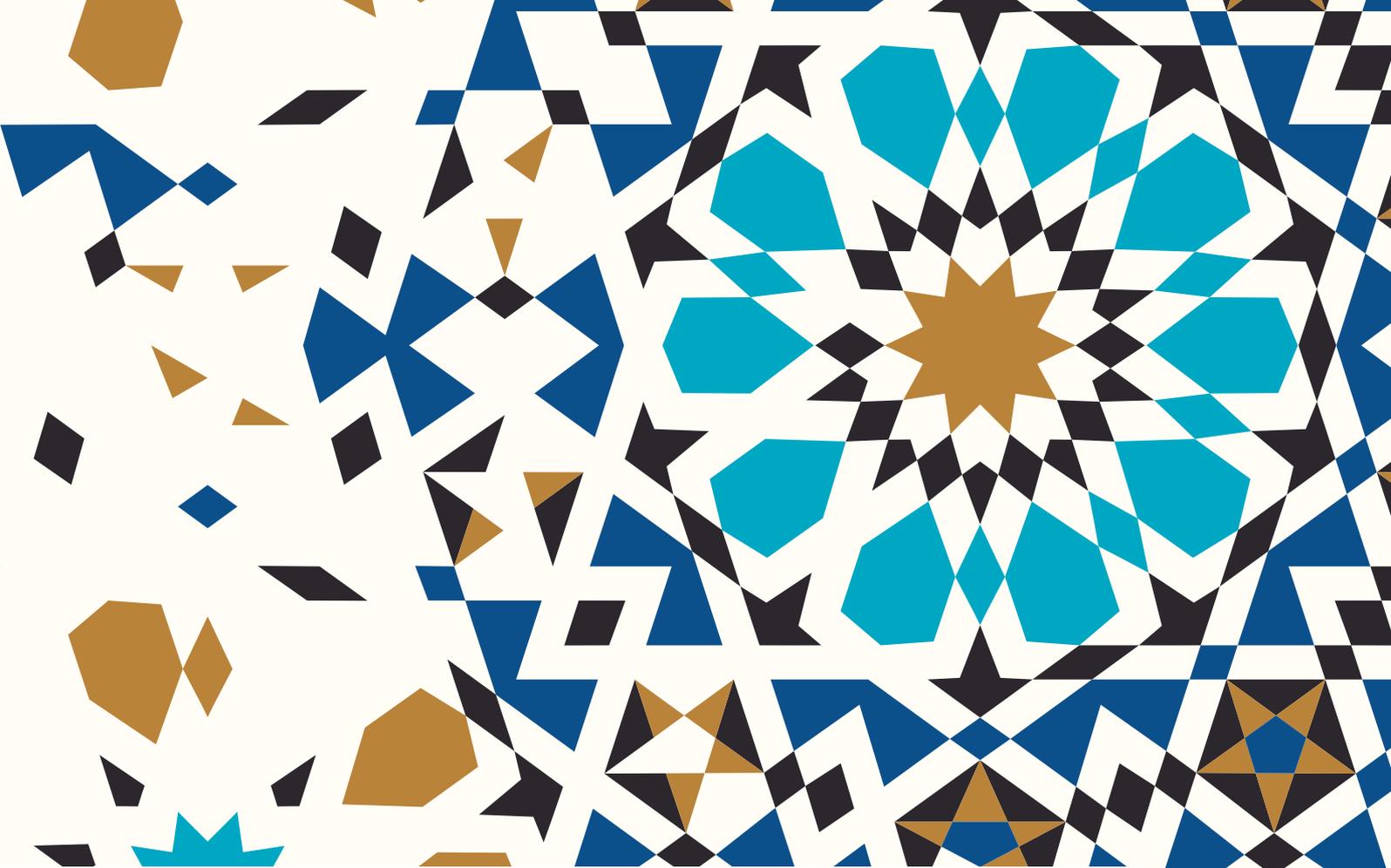
On their own, the STEM disciplines that drive technological progress cannot answer the profound questions raised by their astounding efforts. They tell us which developments can take place, but must lean on expertise found elsewhere in the academy when forming judgments on which of these should proceed. In this space, the emerging area of technoethics – an increasingly important field across the University of Edinburgh – is inherently interdisciplinary, bringing different kinds of knowledge from the realms of science, engineering, and the

humanities to explore issues of profound relevance across the planet. As such, within the academy, technoethics is everyone's concern. After all, its questions can only be answered with reflection on the likes of business studies, politics, medicine, economics, philosophy and theology. As a place in which these diverse avenues of inquiry intersect, our own University makes a unique contribution to this growing field. Indeed, the work of the Edinburgh Futures Institute (EFI), where a significant programme of research and education is under development, draws together academics from fields as diverse as machine learning, law, design informatics, economics, and politics to investigate these very issues.

Consider the relationship of technology and theology, for example. What can theology – a scholarly discipline primarily concerned with

“
The greatest questions about technology take us beyond our inventions to focus on their human creators”





knowledge of the divine – contribute to today's questions on technology and human flourishing? While religious doctrine seems relatively unimportant to the everyday concerns of many of today's secular Westerners, the opposite is true for most contemporary non-Westerners. In 2019, more than half of the world's 7.7 billion people identify as either Christian or Muslim. For the most part, the people who make up this combined Christian-Muslim majority live outside the idiosyncratically irreligious West (and this is to say nothing, of course, about the world's 1.1 billion Hindus, 500 million Buddhists, or 20 million Jews).

Locally, our University finds itself in a predominantly irreligious city. Globally, however, we find ourselves in an overwhelmingly religious world. As such, our University's inclusion of the critical study of theology is an important part of our general claim to be a globally-focused institution. Were it not so, our community would have nothing to say about the single most important factor in the lives of billions of our fellow humans.

The good life

More specifically though, how might the study of theology contribute to discussions around technology and human flourishing? Across the globe, the meaning of 'human flourishing' varies. In some cultures, humans are seen as flourishing when they are enabled to follow radically individualistic ideals, while others believe humans do best when community takes precedence over

individuality. For some, humanity will flourish through liberation from notions of the transcendent, while others see the same goal as inconceivable if human life is not ordered in the light of the divine.

There is no uniform view of the good life that strikes all humans as self-evidently true. Rather, our diverse conclusions on human flourishing are formed by a myriad of factors. For many, these conclusions are indelibly marked by the religious concerns that inform their most basic notions of human worth and purpose in this world. To ignore that particular factor would be to envision technoethics as an approach that imagines all people to be secular Westerners, or that can only address that segment of the human population.

Such an approach would have little to say, however, to those whose understanding of human beings and the swords/ploughshares they fashion is formed differently. As a place of rich interdisciplinary exchange, thank heavens, our University allows for loftier ambitions than that.

£5m INVESTMENT

Baillie Gifford has pledged £5 million to support University research into the challenges and opportunities around emerging technologies – including machine learning,

accelerated automation, and financial innovation. Professor Shannon Vallor will join the University's Edinburgh Futures Institute in February 2020 as the first Baillie Gifford Chair in the Ethics of Data and Artificial Intelligence.

HOW AQUACULTURE CAN SAVE OUR



R OCEANS

The humble sea cucumber is helping villagers in Madagascar secure a better future – and reaping huge benefits for the area’s marine biodiversity



In 2001

Edinburgh undergraduate Alasdair Harris left the slate-grey waters of the Firth of Forth and travelled to the south-west coast of Madagascar, a place of ultramarine sea and blinding white sand.

His mission was to explore the local coral reefs, one of the largest such ecosystems in the world. By his own admission, he arrived armed only with “extraordinary hubris and a shiny degree in zoology”.

Both were rendered near useless by what he encountered in the middle of the Indian Ocean. Decades of over-fishing and rising sea temperatures had destroyed the reefs and much of the sea life.

According to the local Vezo communities, in the 1980s fishermen could fill an entire canoe with fish in just a few hours. Now, with dwindling stocks, that had become a fantastical tale to tell children around campfires.

Isolation and poverty meant that these communities were extremely vulnerable to such changes. They were dependent on fishing for food, income and identity. There was no alternative.

“What that trip taught me aged 21 was that science alone was interesting, but wasn’t going to shift the needle on any of the fundamentally human challenges and tragedies that people in Madagascar were facing,” says Dr Harris.

“My scientific skills alone weren’t going to affect change. I needed to roll up my sleeves and get alongside these people.”

He never really left.

Fast forward to 2015. The University of Edinburgh and the Prince Albert II of Monaco Foundation had recently signed an agreement and were looking for ways to collaborate. And so Dr Meriwether Wilson found herself by the yacht-flecked marina in Monaco.

A Senior Lecturer in Marine Science and Policy, she was attending the Monaco Blue Initiative, the Foundation’s platform for discussing current and future global challenges for oceans management and conservation.

Dr Harris was also there. In the intervening years, he had set

“

My scientific skills alone weren’t going to affect change. I needed to roll up my sleeves and get alongside these people

Right: Vezo woman holding a sea cucumber in Tampolove



© Blue Ventures / Louise Jasper

Blue Ventures' Aquaculture Technician Toto collecting seaweed in Belo sur Mer, western Madagascar



Al Harris, right, and Meriwether Wilson, far right

© Blue Ventures / Garth Cripps



© Blue Ventures / Steve Rociffle

up Blue Ventures, an NGO dedicated to protecting marine biodiversity in ways that benefit coastal people. He was already seeing significant results. Almost 20 per cent of Madagascar's coastline was now under community management.

It was, by Dr Wilson's admission, a "capricious" meeting. But when discussions progressed with the Foundation about a funded project, she instantly thought of Blue Ventures as a partner.

"They were so hardcore," she said. "There was a shared ethic of empowering others and enabling change. Plus, we both just love being in the water."

They arranged to meet to discuss possible joint projects that would harness both organisations' strengths to help conserve the oceans.

"I thought, what do we have in common?" says Dr Wilson. "We could work on mangroves or blue carbon. But Al said, no, it's going to be sea cucumber aquaculture." She smiles and pauses, recreating the original bemusement. "I said, well, we'll have to think about that one."

Sea cucumbers are the unlikely heroes of this story. Grey,



➔ wrinkled and distinctly uncharismatic, once she heard about these bloated worm-like invertebrates, Dr Wilson quickly came around to their potential impact.

Since 2018, with funding from the Prince Albert II of Monaco Foundation, the University has partnered with Blue Ventures to work with two villages in Madagascar that have been ravaged by over-fishing, population growth and climate change.

Blue Ventures has been working with locals to develop sea cucumber farming for the past 10 years. Alongside seaweed aquaculture, sea cucumber farms reduce dependency on capture fishing by providing another way for communities to make a living. Rather than removing life from the fragile sea, the farms are adding to it. Sea cucumbers help maintain the sea bed and, therefore, help maintain stocks of other marine life.

“It’s a form of aquaculture that is having net positive ecological benefits,” says Dr Wilson. “There’s no pollution going in, no sea lice. It’s a very simple story, but it expands one’s view of what is marine conservation.”

However, the reason why it has been successful so far – with 162 farmers between the two villages – is not down to a romanticised ideal of returning the sea to an Eden-like state. It’s down to cold, hard economics.

Sea cucumbers are considered an aphrodisiac in Asian markets and can be sold for high value. Juvenile sea cucumbers cost \$0.14. Once grown, they are sold for \$1. The average monthly income per farm is more than \$65, more than three times that of the area’s average household income.

To conserve the ocean, says Dr Harris,

Below: Seaweed farmer, Tampolove



© Blue Ventures / Brian Jones

Above: members of an aquaculture business training group discussing their plans for sea cucumber and seaweed aquaculture



© Blue Ventures / Antoinette Rougier





Edinburgh geosciences students at work with colleagues from Blue Ventures in Madagascar



© Blue Ventures / Garth Cripps

you must conserve the communities that depend on it.

“It is about mobilising people for rather than against conservation. You go to any part of the world, typically coastal communities will be up in arms against conservation, as that means denying access.

“But here that whole relationship has been shifted by changing that antagonistic dynamic, from one in which fishermen and women are seen as a threat to conservation to one that sees communities as the drivers of conservation.”

Staying true to Blue Ventures’ community first ethos, all the farms are planned, zoned and led entirely by locals, building upon traditional customs and social codes.

The University provides the technology, scientific advice and international contacts. For the last 18 months, Dr Wilson’s team has been modelling how best to farm sea cucumbers in shallow lagoons, investigating how variations such as sea grass, water quality, sediment and tides affect production.

“It’s a bit like gardening,” she says. “If you plant the wrong thing at the wrong time in the wrong place, you’ll either have not enough of it or too much.”

Edinburgh geosciences students have also worked with locals to map who has access to the farming programme, who benefits and what the barriers are.

“These are people’s

livelihoods,” says Dr Wilson. “It’s nice that we can, in theory, explain what needs to change.”

The sea cucumbers’ impact since their arrival into the lagoons of Madagascar has been significant. As well as the economic return and associated social benefits, there has been a replenishment of the coral reefs and recovery of fish populations within marine refuges established by local communities.

Building on the collective learning on how to establish sea cucumber farms, the project is being scaled up and rolled out in other communities on the island and further afield. Blue Ventures are already training communities in Tanzania, with great demand for similar support elsewhere.

Dr Harris’s wide-eyed trip in 2001 continues to cause ripples.

“Had Edinburgh not taken a massive gamble on an undergraduate who had a dream to take a bunch of fellow students to a country that he knew nothing about and explore coral reefs, none of this would have happened,” he says.

“Not many universities would enable students to have that entrepreneurial endeavour. But with a University start-up now employing more than 250 staff in low-income coastal areas across the Indian Ocean, Edinburgh has created a legacy here with tremendous impact.”

820,000

football pitch-sized areas of ocean and marine habitat managed by communities working with Blue Ventures

23,750

sea cucumbers harvested to date

+50%

of farm leaders are women

90%

of global fish stocks are either overfished or fully fished

Talking sense

The Bilingualism Matters research centre is showing that the ability to speak more than one language has many benefits beyond communication



Professor
Antonella Sorace

When Katarzyna Przybycien and her husband moved to Scotland in 2005 and had children, they, like most parents with different native languages, faced a dilemma: should they bring up their children speaking her Polish mother tongue or her husband Angel Morales-Aguilar's Spanish language? And what about speaking English?

Fortunately, at this time, Katarzyna came across a leaflet published by the Bilingualism Matters research centre at the University of Edinburgh. The centre, which has received support from philanthropic donations to the University, researches language learning and provides advice on the latest studies into bilingualism on its website; information that reassured Katarzyna that letting her children learn both languages would actually help the development of their English – and bring them other benefits too.

Seeing how her children's language development thrived over the next few years, Katarzyna later joined the Bilingualism Matters centre as a Research Co-ordinator, working with its Director, Professor Antonella Sorace, who set up the unit in 2008.



Professor Sorace is an internationally known specialist in bilingualism and language development and established the centre as a way of conducting much-needed research into this often-misunderstood area, as well as communicating the research findings on bilingualism to enable people to make informed decisions based on scientific evidence.

Many myths have grown up around multilingualism. In the past, it was commonly thought that bringing up a child with two languages would slow their development, but this stance has been reversed in recent years where the media have sensationalised research findings to claim that having more than one language will make people smarter, more creative and even 'cure' dementia.

There is some truth in these recent

claims, as research has shown that bilingualism is beneficial for children's development. Children exposed to different languages become more aware of different cultures and other people's points of view and they tend to also be better than monolinguals at 'multitasking' and focusing their attention.

More recent research also suggests that learning another language may have benefits in later life, delaying the onset of dementia symptoms and slowing cognitive aging, even when people learn a second language later in life.

Professor Sorace said: "The Bilingualism Matters centre was started as a public engagement service for parents and teachers in Edinburgh about this topic. We started small, giving talks to people, but we quickly became more visible because there is a more general lack of understanding about 



It's the fact of having more than one language in the brain that matters – it doesn't matter what those languages are



multilingualism. We've developed our public engagement over the years and now we are called on to give advice to a wide range of sectors including educationalists, health practitioners and policy-makers."

Such is the success of the Bilingualism Matters model of public engagement that other universities around the world have adopted it and the centre has grown into an international network with 27 branches in three continents.

This public engagement is particularly important in the education and healthcare sectors as children learning two languages will have gaps in their vocabulary and understanding, which in the past could have been put down to 'slow development' and they would have been referred to speech therapists or for extra support at schools.

Bilingualism is also often seen as incompatible with a range of developmental conditions, including dyslexia, developmental language impairments, and autism. However, more research-based information is needed before making wide generalisations. The team is now researching multilingualism in children on the autism spectrum to see whether its effects could be neutral or even positive in some cases.

Professor Sorace said: "Our research looks at the attributes of people who have two or more languages, looking for commonalities as well as strengths and weaknesses, but our point is that it's the fact of having more than one language in the brain that matters – it doesn't matter what those actual languages are."

Research shows that the benefits of being multilingual are both linguistic and cognitive. Having more than one



A second language should be seen as a resource and not a threat

language makes it easier to understand how language works in general, and therefore makes it easier to pick up further languages.

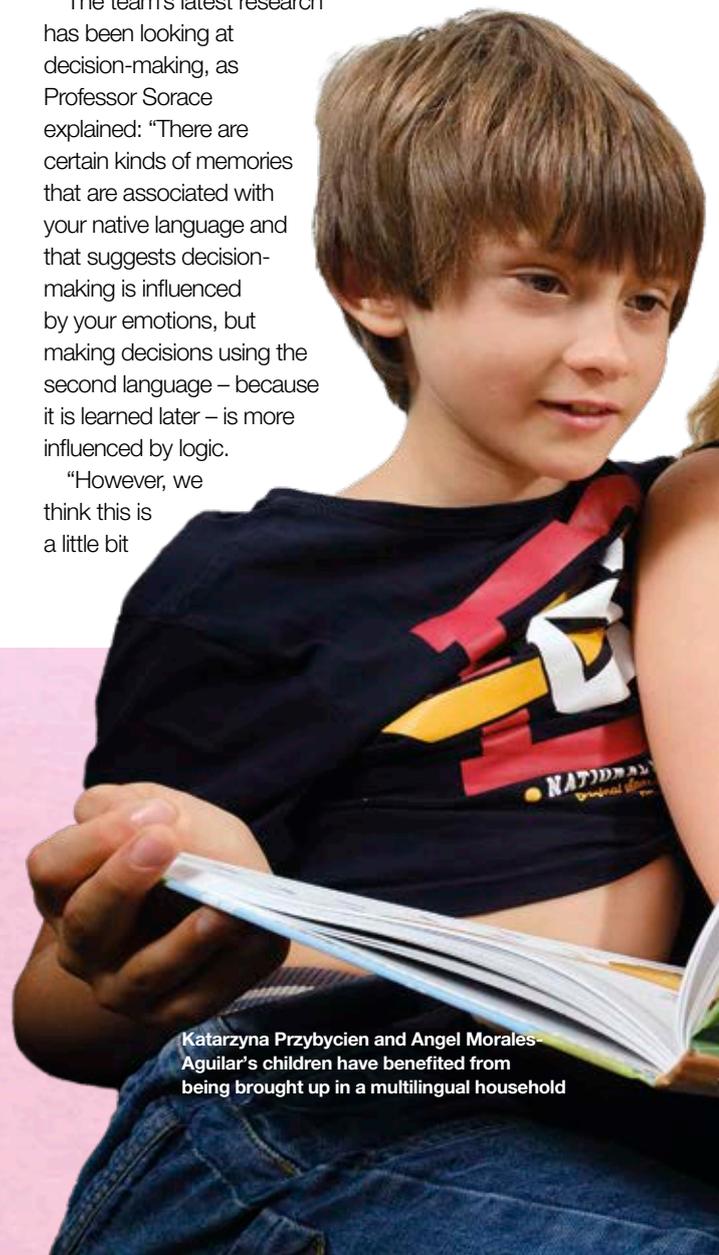
Katarzyna can attest to this with her children, who grew up speaking both Polish and Spanish at home. She said: "I found that reading in one language helped them read in another language, and they have really picked up English from their friends and the popular culture

that surrounds them without me intentionally teaching them English at all."

The cognitive benefits of being multilingual are also noticeable. In general, multilinguals have better developed mechanisms of attention and cognitive control and have a better ability to understand other people's points of views as well as being able to switch from one task to another with high degrees of concentration.

The team's latest research has been looking at decision-making, as Professor Sorace explained: "There are certain kinds of memories that are associated with your native language and that suggests decision-making is influenced by your emotions, but making decisions using the second language – because it is learned later – is more influenced by logic.

"However, we think this is a little bit



Katarzyna Przybycien and Angel Morales-Aguilar's children have benefited from being brought up in a multilingual household



simplistic as fluency and experience are also important factors. For example, I have lived in this country for a long time, so I have lots of emotions that I have experienced in English. We need more research in this area.”

Professor Sorace’s team has also conducted research projects for the Scottish Government and other Scottish agencies – recently on learning Chinese at primary school – as well on European-wide projects such as Advancing the European Multilingual Experience, which looks at, among other things, regional and minority languages in Europe, such as Gaelic in Scotland and Sardinian in Italy.

The centre also looks at language against the backdrop of the current migration crisis, ever-increasing globalisation and in terms of personal identity and heritage. Its Language, Place and Identity project explores children’s own perceptions of heritage and community languages, such as

looking at what promotes or detracts from children wanting to be multilingual and developing their language skills, in family, community and school contexts.

This is a big issue for people coming to live in the UK from

another country where English is not their mother tongue. While their language is part of their identity and culture, there can be pressure for the children to use their new-found English to integrate and fit in with their contemporaries at school. They may even beg their parents to not speak in their native language in front of their friends to avoid embarrassment.

This repression of identity can be particularly pernicious in societies where more populist governments hold sway, placing the focus on ‘cultural purity’ and creating social and political pressures on people where multilingualism can be discouraged.

Professor Sorace said: “Populist attitudes do not go well with multilingualism. Populism means focusing on themselves and excluding ‘others’, such as immigrants. It creates an atmosphere of fear and mistrust of these ‘others’, and the language they speak is a proxy for that.”

Increasing globalisation is also another threat to multilingualism, particularly to minority languages, and that is why Professor Sorace and her international network of researchers are keen to promote the benefits of having more than one language regardless of what languages those are.

She explained: “Globalisation is not a friend of linguistic diversity. That’s why we need to persuade people that these languages should be maintained because multilingualism provides benefits to both children and adults. A second language should be seen as a resource and not a threat.”





Professor Siân Bayne

Our values are the future of teaching

It's often assumed that technology is the main driving force behind the evolution of teaching, but the University has emerged as an important advocate for using community values to shape an effective future for learning and the student experience

“We're combining futures thinking with a design-based approach,” says Professor Siân Bayne, the University's Assistant Principal for Education. She has also been leading *Near Future Teaching*, a recently completed innovative project that saw Siân and her team work with more than 400 students and staff to produce a vision for a preferred future for teaching and learning at Edinburgh. Their work was ambitious, combining extensive research, workshops, and events – interviewing key people around campus and creating a series of videos that probed the trends and themes that emerged as crucial to those invested in improving the experience of learning.

“The purpose was to really understand the values held by the University community,” says Siân. “Then we could work out how they can be applied to digital education and the future of teaching in general. The workshops and events brought out very real and exciting trends, which we then used to map a future for university teaching. Emerging ideas were tested with staff and students, and we also took into account our future students by testing with about 60 school pupils.

“We saw this an exercise in co-design. This wasn't about building a vision driven by predicting technological change, but about building one based on the values of our own community.”

One bold tactic that allowed the team to test these values was the use of Future World scenarios – a series of possible and plausible situations for the world in the near future. In one, the University is imagined as part of a fiercely competitive sector, under pressure to provide opportunities for a growing global appetite for higher

education, while simultaneously suffering from tighter immigration controls that have resulted in a decrease in international students. Another envisions the rise of technology contributing to a movement toward micro-credit, where conventional higher education degrees become less important than lifelong learning.

The scenarios encouraged conversations that sought out the practical challenges and opportunities each created, and how the values could be used to allow learning to continue to thrive in these conditions.

“This really helped us define the role of technology and digital education in relation to our



THE TEAM'S WORK IDENTIFIED FOUR KEY VALUES:

- **EXPERIENCE OVER ASSESSMENT –**
Students must have the space to think big and take risks. Shifting focus away from assessment and performance measurement to a more challenging and engaging student experience as a whole.
- **DIVERSITY AND JUSTICE –**
Higher education is a social good. The strength of Edinburgh's diverse and international student body should inform how we mould and shape the curriculum. Social justice must be at the heart of what we do.
- **UNIVERSITY AS COMMUNITY –**
Technology must bring people together in meaningful, ethical ways. The values of the university community should be at the heart of the technological decision-making.
- **PARTICIPATION AND FLEXIBILITY –**
Students should have a lifelong relationship with the University. Students would like to have more say over defining curricula and programmes of study and we should be opening up the University to more flexible and interdisciplinary ways of studying.



University community, what it stands for and just how it should react to the very plausible scenarios we created,” says Siân. “Through this, we were then able to establish a set of aims and objectives, including around being more community focused and embracing technology as part of daily life, as well as being forward-looking and challenging for learners and understanding the University in a world so reliant on data. We’re now working to take these forward through the University’s student experience projects, as well as initiatives such as the Edinburgh Futures Institute, a location for ground-breaking interdisciplinary teaching.”

Distance education

Meanwhile, valuable information has been gleaned from another project that’s also helping to shape teaching at Edinburgh. This time, the focus was on the experience and views of the University’s distance students. *Distance education and being ‘at’ Edinburgh* was part of the Principal’s Teaching Awards Scheme, which is funded through alumni donations.

Again, Siân was the project lead. She says: “Among other things, this project revealed that people value the quality of the teaching at Edinburgh, as well as the



flexibility offered by being a distance student. For the most part, respondents felt intimately connected with their teachers and peers. It appears that our use of digital technologies to build online communities is being effective for these students.

“One surprising finding in this case was that students who never came to Edinburgh – and have no expectation that they’ll do so – are really attached to the idea of the campus. For example, they often use images of Old College as a screensaver on their laptop.”

Taking fundamental lessons from these projects and other activity, Siân believes the values-based approach is crucial in helping to make sure that teaching in Edinburgh is driven by a distinct strategy. “It’s important to have a very clear story to tell about digital technology and why we are making particular choices.”

She also emphasised the advantages of the co-design methodology that was used by the Near Future Teaching project. “We were able to work systematically across the University to co-build a specific vision. This is a new way of doing things and it was very productive in this case. It’s something we’d want to do more of in the future.”

VIDEO VOICES

A number of the interviews conducted for the *Near Future Teaching* project have been edited into short, thematic videos and

made available online. Here are some of the views expressed by students and staff. See more at: www.nearfutureteaching.ed.ac.uk



“
It should be education that we’re focused on... to encourage curiosity... and general development of intellectual skills

John Lee,
Professor of Digital Media,
Edinburgh School of Art



“
It’s important to teach or learn empathy. In technology, human behaviour is studied but not taught and I think it’s an important value to have

Elaine Ford, Graduate,
BSc, Biological Sciences



“
There will be a massive uptick in the use of augmented reality. It can help with accessibility issues for people to learn and develop

David Creighton-Offord
Information Security Consultant,
Information Services

Global generosity

A snapshot of our donors illustrates that philanthropy spans a broad spectrum of backgrounds, nationalities and ages



GIVING RANGE (and number of donors)

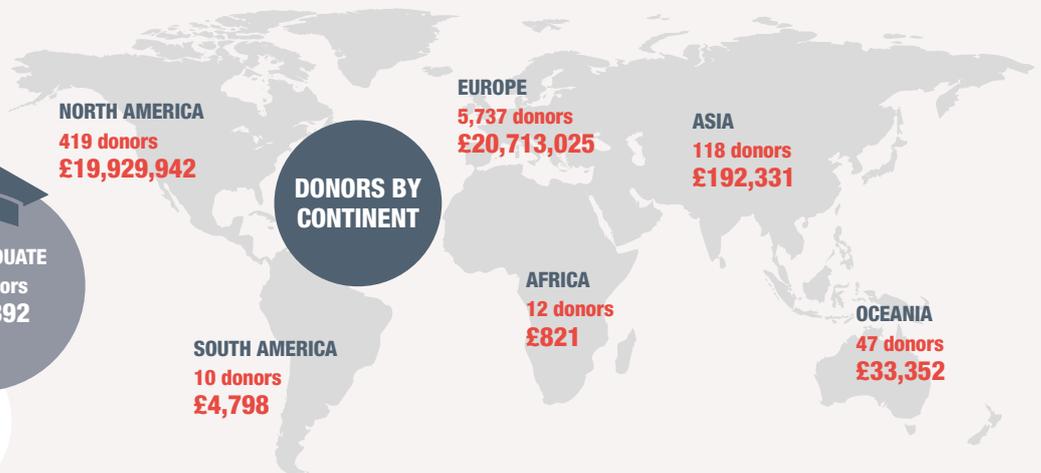
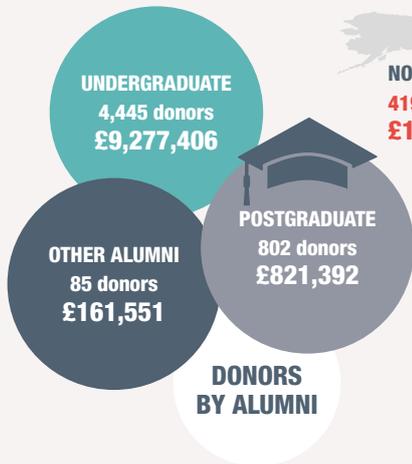
<£10k 6,261	£15k-£25k 27	£50k-£100k 19	£250k-£500k 7	£1m-£5m 5
£10k-£15k 17	£25k-£50k 32	£100k-£250k 22	£500k-£1m 2	>£5m 1

OLDEST DONOR

99
YEARS OLD

YOUNGEST DONOR

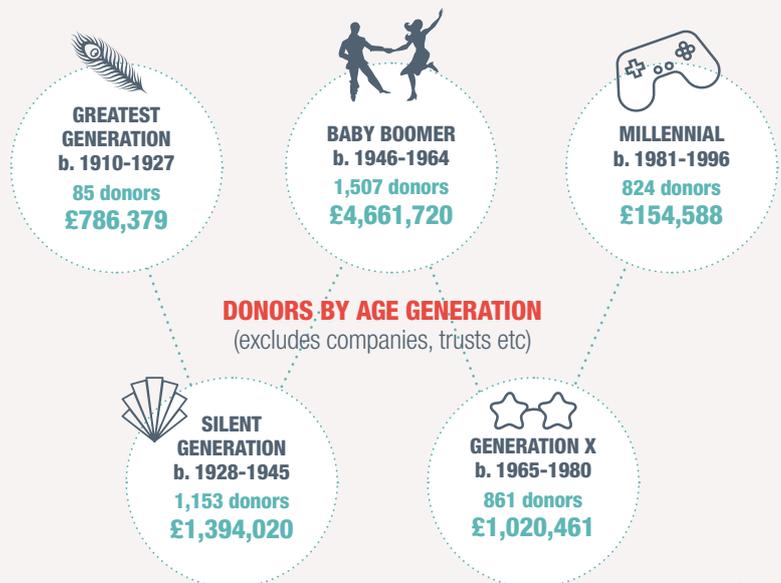
19
YEARS OLD



Area of giving	Number of donors	Total donated
Student and campus projects	6,277	£17,360,067
Medicine and Veterinary Medicine	1,515	£10,483,197
Arts, Humanities and Social Sciences	311	£8,541,654
Science and Engineering	206	£828,324
Other	40	£120,431

Fund type	Number of donors	Total donated
Scholarships	2,354	£19,275,512
Research	1,504	£10,864,936
Capital projects	102	£3,499,285
Teaching	263	£234,160
Other restricted*	679	£1,421,287
Unrestricted**	3,447	£2,038,492

Donor type	Number of donors	Total donated
Trusts and foundations	61	£23,887,842
Alumni	5,342	£10,316,423
Company	53	£4,133,053
Other individual	909	£2,368,158



TOTAL DONATED 2018/19

£41,010,294



*gifts received for specific projects or areas
**gifts that the University can channel into other priorities

Three decades of **IMPACT**

Legacy giving has helped support teaching, learning and research at the University of Edinburgh since its foundation in the 16th century. Today, supporters who pledge a legacy gift in their wills become part of the Carlyle Circle, a group that will celebrate its 30th anniversary next year. To mark the occasion, we look back across the past three decades to reflect on some of the ways legacy giving has benefited our University, its people and our wider community

1990s

INSPIRING VISIONARY THINKING

The 1990s was a dynamic time for research and development in computing and cognitive science and technologies with the creation of our School of Informatics in 1998. The School brought together the department of artificial intelligence, the centre of cognitive science and the department of computer science. But it needed a home.

Ten years later, the £40 million Informatics Forum opened on Crichton Street, finally bringing the School's research activities under one roof in a contemporary, collaborative space, as ground-breaking and innovative as the work it would nurture and inspire.

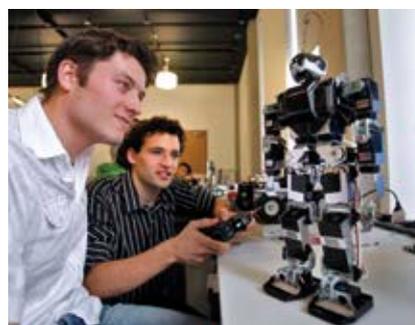
It would also be the perfect home for a bequest



of artworks from Scottish sculptor and artist Eduardo Paolozzi, given to the University in 2005. The Edinburgh-born artist regularly explored themes such as the relationship between humans and machines, the representational and the abstract, the organic and the artificial. He was especially inspired by Alan Turing and his Turing Prints were among the artworks to be displayed at the Forum, along with four sculptures.

Today the School is among the world's top five world-leading centres of research and teaching in computation, information and cognition, and has generated 61 start-ups and spinouts in the past six years alone, contributing significantly to the local economy.

When you consider the achievements of Informatics, it would be difficult to think of a more fitting place for Paolozzi's works to be seen and appreciated, prompting ideas and discussion among an enlightened community of more than 1,000 students and researchers.



Above: Informatics students learning with robots (Paul Dodds); left: sculpture by Eduardo Paolozzi (Stuart Bremner)

IT STARTED WITH A LEGACY...

Robert Reid, Bishop of Orkney, left provision in his will in 1558 for the foundation of a college in Edinburgh to teach the 'new learning', and his bequest formed part of the money used by the town council for the foundation of the Tounis College – today's University of Edinburgh – in 1583.

MORE INFO

Visit www.ed.ac.uk/legacy-giving or email legacy-giving@ed.ac.uk For more information on legacy giving.

1996

Richard Thomson is appointed Watson Gordon Professor of Fine Art, the sixth person to assume the role, 116 years after the brother and sister of Scottish painter John Watson Gordon set up the professorship in his memory

2001

Chrissie Miller bequests £246,000 to the School of Chemistry for student bursaries

2005

Artist Eduardo Paolozzi bequests artworks to the Informatics Forum

2006

One of the world's largest woodwind instrument collections comes to Edinburgh, thanks to a bequest from Professor Sir Nicholas Shackleton

2000s

BETTER PROSPECTS FOR MATERNAL HEALTH

Last year pregnant women attending the Tommy's Centre in Edinburgh were eight times less likely to have a stillbirth than those attending clinics not specialised in helping obese women – an outcome that demonstrates the Centre's mission to help women with severe obesity to have safe and healthy pregnancies.

The opening of the Edinburgh Tommy's Centre for Maternal and Fetal Health heralded an exciting period in reproductive health research, supported significantly by a legacy gift from Albert McKern. The 1917 Edinburgh graduate wrote his will on a scrap of paper shortly before he died at a Japanese prisoner-of-War camp in 1945, requesting that proceeds from

his estate be given to medical research, specifically to alleviate women's "pain and distress" during labour, after his family had benefited from his assets. His gift was shared between Edinburgh, Sydney and Yale universities, 10 years after his last son's death.

More than 60 years after McKern wrote that will, his wishes have found a fitting home in the Edinburgh Tommy's Centre. Led by Professor Jane Norman, an Edinburgh graduate, and a team of specialist doctors and midwives, the centre has trained more than 10 PhD students in maternal and fetal health research, published more than 100 papers in peer-reviewed journals and provided care to more than 1,000 pregnant women in its clinics during the decade since it opened.

In 2016, the centre opened its preterm birth clinic with NHS Lothian,

offering a specialist service for women who are at higher risk of having a preterm birth or late miscarriage.

Women who are referred to the clinic also have the opportunity to participate in research studies to help the team understand more about why preterm birth happens.

Not only is the Edinburgh Tommy's Centre making a positive difference, helping many women in Edinburgh experience safer pregnancies, as the only clinic of its kind in the UK its ground-breaking research is helping to enhance understanding around how to prevent preterm labour.

When Albert McKern wrote that will all those years ago, he probably had no way of imagining that this action could lead to supporting women in Edinburgh and around the world have safer, healthier pregnancies.



2010s

SHARING KNOWLEDGE BETWEEN GENERATIONS

When the University's Main Library's ambitious redevelopment project was revealed in 2012, it had transformed the interior of the iconic building into a contemporary, student-focused space fit for 21st-century learning and research. Launched by Edinburgh graduate and novelist Ian Rankin, the project's grand reveal marked an exciting milestone for the history of the library and, indeed, the University.

As one of the most important libraries in Scotland, it holds 3.8 million books, e-books and e-journals. It has provided a second home to countless students at many stages of their academic lives, it looks after an impressive collection

of historic artefacts, books and objects dating as far back as the 16th century, and it offers a slice of architectural history through its Basil Spence design.

The Main Library is a great source of pride for the University community and it is remarkable to think that its origins go as far back as 1580 with a single bequest of 276 theological books from city advocate Clement Littill. This foundation collection can still be accessed today.

The Main Library's most important manuscript collection comes from 19th-century scholar David Laing, a Scottish expert on early books and manuscripts who travelled across Europe acquiring precious volumes. In the 20th century, Edinburgh graduate and advocate James Cathcart White donated a collection of books and a significant sum of



Library Conservator Emily Hicks holds the first edition of *De revolutionibus* by the mathematician and astronomer Nicolaus Copernicus (Neil Hanna Photography)

money that is still used to buy books and manuscripts today.

The Main Library may have transformed its physical appearance, but this important resource will always be more than a building. At its heart is the idea that this library is a powerful collection of ideas and knowledge, shaped by an impressive community of thinkers who will continue to benefit generations of future leaders, innovators and influencers.

2008

The Tommy's Centre for Maternal and Fetal Health opens with support from Albert McKern's legacy, more than 60 years after he wrote his will

2014

83 per cent of nursing research is ranked as world-leading or internationally excellent in the Research Excellence Framework, decades after William Gardner bequeathed a fund to support nursing research at Edinburgh in honour of his wife Elsie Stephenson

2016

The Centre for Regenerative Medicine receives a legacy gift worth £57,864 from Joanna Zlotnik, four years after opening

2019

The Patrick Wild Centre receives a final legacy instalment from Albert Wild to continue its groundbreaking research into autism spectrum disorders, fragile X syndrome and intellectual disabilities

A social contract

The support Karina McTeague gives to Edinburgh Law School and her backing of the Edinburgh Foundation for Women in Law is her way of saying ‘thank you’ for the opportunities the University has provided her, and to offer opportunities for those coming through now

I was the first in my family to go to university. I studied law in the early 1980s and went on to have a rewarding career in corporate law. I would never have thought my law degree would lead me to banking and then to the Financial Conduct Authority.

I’m so aware that potential students are worried about the debt they would need to take on to attend university. There aren’t the grants that I was lucky enough to have as a student. That’s why I contribute to supporting a law student who would otherwise struggle financially to go to university. I don’t see this as philanthropy – that’s too grand a word; I just see it as doing my bit for others.

I’m very proud to be an alumna of the Edinburgh Law School, and grateful too because that’s where I met my lifetime partner, and fellow alumnus, Ewan Malcolm. When I heard the Law School was raising money for refurbishment, it was a chance to support such an important institution and to celebrate our relationship. It makes me smile that future students will be continuing to learn in this refurbished space, in the very lecture theatre in which Ewan and I met.

I’ve been enormously privileged during my life. Luck always plays some part, but luck needs help. I wouldn’t have had so many opportunities in my working life without the great education I received from the Law School. It gave me an excellent technical

legal education. Studying jurisprudence (the philosophy of law) also instilled in me the important role the legal profession plays in supporting society and protecting the rule of law; the law is there to serve the public, not just the private individual.

I also co-founded the Edinburgh Foundation for Women in Law along with Professor Lesley McAra, the first female Dean of the Edinburgh University Law School. The Foundation’s purpose is to help female lawyers reach their full potential by breaking down barriers to progression.

The catalyst was a conversation Lesley and I had which revealed that, despite law graduate gender parity for more than 30 years, women are still facing real difficulties in reaching the top of the Scottish legal profession. That surely can’t be right in this day and age, and doesn’t reflect well on a profession whose role it is to ensure social justice.

I personally think it’s just human nature to want to help others. That said, I do worry about an increasing reliance on philanthropy as government funding of the welfare state is cut.

Going back to jurisprudence, I’m a strong believer in the social contract. I owe a debt to society, reflecting the benefits I’ve had of a good education and good jobs. For me, that translates into a responsibility to do what I can to pay back into the contract for others who have fewer opportunities. That’s what drives my support for Edinburgh University.



The Edinburgh Foundation for Women in Law has relaunched with the theme ‘Spaces for Voices’ under its own Director, University tutor and researcher Annie Sorbie. It uses digital platforms and events to facilitate important conversations around equality and diversity.

www.spacesforvoices.law.ed.ac.uk



I owe a debt to society, reflecting the benefits I’ve had of a good education and good jobs

Contacts

If you would like to speak with someone about supporting the University, please drop a line to the relevant person.

College Advancement and Health Philanthropy

This team works to increase alumni engagement and philanthropic funding opportunities for the University's schools and colleges, and for health programmes.

Chloe Kippen

College Advancement and Health Philanthropy

chloe.kippen@ed.ac.uk

+44 (0)131 650 2232

Martyn Dempsey-Caddick

Arts, Humanities and Social Sciences

martyn.dempsey-caddick@ed.ac.uk

+44 (0)131 650 9737

Chris Allen

Science and Engineering

chris.allen@ed.ac.uk

+44 (0)131 650 9168

Philanthropy and Donor Relations

This team works with academics, philanthropists, individual donors, corporate partners, and trusts and foundations to support projects, students and research across the University.

Liz Reilly

Philanthropy &
Donor Relations

l.reilly@ed.ac.uk

+44 (0)131 650 2234

Roy Biddle

Trusts and Foundations

roy.biddle@ed.ac.uk

+44 (0)131 651 4364

Lucy Buchanan

Alumni Giving

lucy.buchanan@ed.ac.uk

+44 (0)131 650 2236

David Haines

University Programmes

david.haines@ed.ac.uk

+44 (0)131 651 4406

Morag Murison

Legacy Giving

morag.murison@ed.ac.uk

+44 (0)131 650 9637

Picture credits

Stuart Bremner

Paul Dodds

Neil Hanna

Scott Richmond

Mike Wilkinson

Laurence Winram

Blue Ventures / Louise Jasper, Garth Cripps, Steve Rocliffe, Brian Jones

OUR ENVIRONMENTAL RESPONSIBILITIES

The University of Edinburgh is committed to reducing its impact on the environment through the use of sustainable, renewable and ethical resources. *Edinburgh Friends* is printed on 150gsm 100% recycled uncoated (offset)/130gsm 100% recycled silk Revive paper. Revive is a fully carbon balanced recycled paper product accredited by the Forestry Stewardship Council (FSC). The FSC is an international non-profit, multi-stakeholder organisation that promotes responsible management of the world's forests by setting standards on forest products, along with certifying and labelling them as eco-friendly. The envelope is fully recyclable; however, please check your relevant local authority's recycling policies before disposing of the magazine/envelope.

To find out more about how you can support the University, visit www.ed.ac.uk/giving

Privacy statement

All personal information is held securely by the University and in accordance with Data Protection Law. We use information about you because we have a legal obligation to do so, you have provided consent, or we believe it is in our legitimate interest. The data we hold will be used by the University, or other parties acting under the instructions of the University, for a range of activities. These include sending publications and information, offering benefits and services, organising events, membership administration and in our fundraising and volunteering programmes. We do not and will not sell any of your personal information to third parties. We conduct due diligence and research into the philanthropic interests and means of a limited number of individuals to help decide whether and on what basis to approach them, and to ensure that our fundraising activity is directed in the most appropriate and effective way. If you'd like to find out more, you can view our full privacy notice on our website www.ed.ac.uk/development-alumni/privacy. If you wish to update your details or how we contact you, or to opt out of our communications, please email yourdata@ed.ac.uk or write to us at Development and Alumni, University of Edinburgh, Charles Stewart House, 9-16 Chambers Street, Edinburgh EH1 1HT or call us on +44 (0) 131 650 2240.



EDINBURGH²⁰¹⁹
FRIENDS

STORIES OF
PHILANTHROPY
AND THE FUTURE