CONNECT

HANDCYCLE WORLD RECORD BREAKERS

ALSO IN THIS ISSUE

A GLIMPSE OF THE NEW ‘ROBOT HOME’
MARINE SCIENCE AND MICROPLASTICS
DOWNLOADING HISTORIES OF THE UNEXPECTED
WELCOME...

A message from our Vice-Chancellor

I mentioned in my speech at Graduation this summer how our academics are pushing the boundaries of knowledge. This is supported strongly by the stories in this edition of CONNECT. The research into marine litter and in particular microplastics is helping to tackle one of the most serious and often hidden environmental dangers that the planet faces. We also see how, through Project Nevada, staff and students combined to push the limits of achievement and break a world record.

The University’s mission is to transform lives and there are numerous examples across the campus and beyond of our success in this regard. This issue features an MFA Photography student who, on completing her masters degree, has gone on to win a series of national and international awards. We also learn how empowering women refugees in the Middle East to be entrepreneurial can alleviate poverty. I am sure many of us have been captivated by the Planet Earth II series on television and this issue features an associate lecturer who was lucky enough to work alongside Sir David Attenborough as a medic in the hot air balloon for the opening scene of the series.

Of course, we go into 2017 facing the challenges of both Brexit and the Higher Education and Research Bill but these will not detract from the core of what we do. We are in a good position with a refreshed strategy and a focus on working together as one team.

I hope you enjoy this edition and would like to take this opportunity to thank all our staff, students and partners for continuing to inspire and achieve great things. I extend my very best wishes to all for the festive season and for 2017.

Judith
Professor Judith Petts CBE
Vice-Chancellor
ROLLERCOASTER RIDE TO WORLD RECORD SUCCESS

The Guinness Book of Records has inspired countless people to strive for some of the most iconic – and outlandish – feats of achievement and endurance. Now, to that exalted roll call of record breakers, a team of academics and students from the University can add their names.

Led by Adam Kyte, in the School of Marine Science and Engineering, and spearheaded – almost literally – by former London Marathon winner Sarah Piercy, the team overcame near Hollywood biopic levels of disappointment to set a new speed record for women’s handcycling.

On the long, straight roads of Nevada, USA, in a machine designed in the workshops of Plymouth, the existing record was beaten by 0.1mph, and a certain amount of cosmic karma was restored.

“This record is the result of a five-year rollercoaster ride,” said project lead Adam, a Lecturer in Mechanical and Marine Engineering Design. “Sometimes I felt that it was an impossible dream, while at other times it has been one of the most fulfilling projects I’ve had the pleasure of being involved with. But it has enabled hundreds of students to learn about real-world engineering through the example of handcyle design.”

The University’s association with handcycling started just before it shot to popularity at the London Paralympics, following an approach by Alan Grace, former chairman of the Handcycling Association of the UK. On the back of that, work started in earnest with a view to taking a University team to the 2015 World Human Powered Speed Challenge.

Gaining support from local, national and international businesses, the team designed and built an eye-catching bike, and teamed up with Liz McTernan, ranked in the world’s top eight in her sport, to try and beat the then women’s benchmark of 21.39mph.

When it came to the record attempt, however, a pre-existing injury meant Liz was unable to compete at full power, although she was able to set a new record of 24.72mph on her own conventional racing bike. Adam, who himself proved the design’s effectiveness by piloting it to speeds in excess of 30mph, recalled: “Having spent many months on the project, it was unusually disappointing not to see it pushed to its full potential. But testing gave us enough data to calculate what might be possible, and for an untrained and inexperienced pilot to reach more than 30mph showed us what it could achieve.”

With that in the back of their minds, the team decided to try again in 2016, teaming up with Sarah – who won the women’s wheelchair race in London in 2000 – and help from Heroes ambassador Chris Jones.

They improved the bike, and began a programme of testing to ensure both athletes were happy with it. In July, however, there was another setback when Chris had to withdraw from the project for family reasons.

Undeterred, the team put their full support behind Sarah and to ensure she was in the best possible shape for the record attempt, worked closely with physiotherapists, nutritionists and sports psychologists from the Faculty of Health and Human Sciences. In testing at RAF St Mawgan, in Cornwall, she was close to world record pace, and so heading out to the United States, the team were in a positive mood.

More than a day of travelling did little to deter their spirits, with the team (who consisted of students Matthew Sharram, Matthew Pearson, Louise Kiero-Watson, James Haslam, Daniel Bristow, William Kemp, Oscar Whitmarsh, and Bradley Smith, and technicians Julian Seipp, Richard Cullen, Rick Preston and Neill Frewings) arriving in the remote community of Battle Mountain to join the rest of the competitors who were competing for leg-powered (rather than arm-powered) records. They included Canadian Todd Reichert, who would go on to set a new overall recumbent speed record of 89.59mph, and 17-year-old Florian Kowalik, from the US, who powered his way to 65.93mph.

In her first run of the week, Sarah reached more than 23mph, but then a succession of technical difficulties – coupled with inclement weather – limited the number of runs they could do. Over the next few days, she continued to push herself and the bike to the maximum, but when the times came through they were consistently below 25mph.

Going into the final day, it was a real case of ‘now or never’ but all the hard work and very little sleep was rewarded when Sarah crossed the finish line with a maximum speed that looked to be just over world record pace. But there was still an agonising wait for it to be confirmed.

Surrounded by her team, and fellow competitors, the tension was palpable. But when the organisers read out the mark of 24.80mph, and confirmed the wind speed was also legal, the project’s ultimate dream of setting a new world record was realised, drawing a standing ovation from everyone else in the room.

Adam said: “We were all absolutely thrilled that Sarah broke the world record. It was an incredible effort and the result of sheer determination and the result of sheer determination and the result of sheer determination.”

Sarah added: “Becoming the handcyle world speed record holder has been the greatest sporting challenge of my life. Just a year ago, I would never have believed this could be possible but I owe everything to Adam Kyte and the Plymouth University engineering students who have made this happen. They have been such a wonderful team of people to work with.”
PLASTICS RESEARCH UNDER THE MICROSCOPE

It has been quite a year for Professor Richard Thompson, marine biologist, and the man whose research over the last decade has put microplastics pollution on the global map. In 2016, Richard was awarded a Ffolkeson Student Prize, the highest accolade in marine biology, and twice appeared on CBBC’s flagship career discovery programme All Over The Workplace. The show, which features two young people exploring a chosen career, focused upon marine biology, and having considered the full spectrum of the University’s expertise in the field, the producers asked if Richard’s plastics research could be a key topic.

As well as the scientific advances, Richard has done a huge amount of work with the media in recent years, and has contributed to documentaries and books. And he can vividly recall the moment in 2004, when a research ‘side line’ that had been in his words “he had been steadily chipping away at” via the term ‘microplastics’, he has been at the forefront of a huge scientific, ecological and socioeconomic push to do something about the problem of plastic waste in the environment.

“In many respects it is just the tip of the iceberg in terms of the quantity of plastic, but it is very symbolic of our wasteful use of resources and was a very good place to start with legislation. But if we really want to make progress, we have to start to look at the goods that are inside those bags. And considering microbeads in cosmetic products represents the best step toward addressing these products.”

The summons to the select committee was Richard’s third appearance in such a forum. Communicating the outcomes of his team’s research to policy has become an increasingly important aspect of his work, not just in the UK, but globally. From addressing John Kerry, the then US Secretary of State, to the climate bodies of both the UN and the EU, his expertise and knowledge is in high demand in the policy arena.

The government made the announcement in October 2016 that it would be introducing legislation to ban microbeads, which are commonly used in products such as facial scrubs and shower gels. It is one of many product areas that Richard has been testing, with recent work expanding to synthetic fibres released from textiles during laundering. This research led by PhD student Imogen Napper showed that hundreds of thousands of plastic fibres could enter the water column with each washing load.

“Someone said to me after the announcement was made on the cosmetics. ‘You must be really pleased’. Well I am, but on its own, it won’t solve the problem of marine litter. It’s an important step because it’s an avoidable source of debris, but we have a long way to go to substantially reduce the accumulation of litter in the environment.”

As the scientific evidence that helps us to prioritise what needs to happen first.”

Professor Richard Thompson

There were the summons to provide evidence to the Environment Select Committee in the summer, which put the topic of microplastic in the environment placed under a ministerial microscope. Then in the autumn there followed numerous national and international media calls in the wake of the government’s announcement that it would pass legislation to ban the use of ‘microbeads’ in cosmetics. And if that wasn’t examination enough, October found Richard playing a starring role of a very different kind, in CBBC’s flagship career discovery programme All Over The Workplace.

In truth, it has been quite a remarkable number of years for Richard. Ever since he and research colleagues published a landmark paper in Science in 2004, which they first coined the term ‘microplastics’, he has been at the forefront of a huge scientific, ecological and socioeconomic push to do something about the problem of plastic waste in the environment.

“He says: “It was a Tuesday after the May Bank Holiday. I came into the office and the red light was on my phone – there was a dozen messages from journalists. I turned on my computer and there were two pages of emails with more enquiries – from the Today programme to the World Service. That educational side of our work is really important, but you need to take care that the message is communicated accurately. I believe I have a far better chance of doing that if I work with the media and external bodies. Sure, there is a risk that someone will misinterpret something you say, but the topic is too important to disengage from. It relates to everyone.”

Certainly struck a chord with the BBC, who approached the University in September to ask if they could collaborate on an episode of their popular programme All Over The Workplace. The show, which features two young people exploring a chosen career, focused upon marine biology, and having considered the full spectrum of the University’s expertise in the field, the producers asked if Richard’s plastics research could be a key topic.

So Richard and two skippers of the University’s Falcon Spirit research vessel gave up a Saturday to take the youngsters and the film crew out on Plymouth Sound to collect water samples. They then returned to the Marine Station to film some testing in the labs.

“It was a long day for the youngsters, but the weather was good to us and we were able to showcase our research,” Richard says. “Hopefully the programme will be useful to students considering studying marine biology, but it also helps us to get the message about marine litter out to a young audience. If we can achieve a small change with a large number of people then it will have a big impact.”

With new avenues of enquiry opening up all of the time, including the testing of entirely new product lines such as paints and sunscreens, Richard’s work with microplastics shows no signs of slowing down.

“There is an overarching philosophical discussion to be had here,” he concludes. “The majority of our plastics come from oil, which is non-sustainable, and 40% is single use and disposed of within a year of production. We need to design these single use items so they can be captured via recycling at the end of their life. This will help reduce the accumulation of waste and at the same time reduce our use of non-renewable carbon sources. There are certainly aspects that justify legislation, but it is the scientific evidence that helps us to prioritise what needs to happen first.”

Richard on board, Falcon Spirit, with students from marine biology.
HISTORY TALES OF THE UNEXPECTED


Well, they are all topics that have been explored by Professor James Daybell and Dr Sam Willis in their Histories of the Unexpected podcast series, which has rapidly gained a national following since its launch in September.

Backed by Dan Snow’s History Hit Network, the series of 20-40 minute shows, recorded as a conversation between the two friends and colleagues, were among the top 15 most downloaded podcasts on iTunes at launch, and have regularly been inside the top 40 since.

“People may think there’s nothing unexpected about the past, or about history,” says James, Professor of Early Modern English History, and Director of the Arts Institute at the University. “But this series adopts a new approach to exploring our past. The 20th century, and the concept of a series of alternative histories began to take shape. Very quickly they had brainstormed a list of 150 potential topics that covered everything from objects and animals to themes and phrases. “We pick four topics and then we go off to research them on our own,” adds James. “We don’t tell each other what we’re doing so when it comes to recording the programme, there is a genuine sense of mystery about what is going to happen. We introduce the topic via a freewheeling conversation around how you might think about an unexpected history. Usually we have prepared two or three case studies, but the rest is improvisation and seeing where the story goes.”

Having experimented with various locations, the duo now record their podcasts in a soundproof studio using professional equipment used in which they shut themselves away back-to-back, each in a single take.

“One of the most memorable podcasts was on the history of the box,” recalls James. “I’d had a student come up to me with this velvet covered box that had been found on a skip, and inside there were 500 letters dating back to World War II, which transformed it into an archive.”

“I then showed James a picture of a young man lying in a box, holding a rope attached to a bell,” adds Sam. “It was a safety coffin, something that came into existence during the 18th century, and it’s fair to say that the conversation took a left-field turn at that point.”

The pair have recorded more than 40 podcasts now, and a total of 52 weekly shows have been scheduled, with a history intern from the University providing technical support in addition to the professional production team at the History Hit Network. They have also attracted advertising in the form of BMW and Sky Atlantic as well as cinema releases. They were one of the broader headlines on iTunes shortly after launch, an editor’s choice, and new and notable on iTunes USA. Each episode is currently averaging over 10,000 downloads, and they achieved over 100,000 downloads in their first six weeks. They have also been invited to do a live podcast at the Chalke Valley History Festival in the summer.

“We believe this is the way to get history to give you a buzz of excitement as you come to realise how everything links together in unexpected ways,” Sam says. “Take the orange: we do not want to teach you who was the first to discover it, or grow it, or import it. And we’re less interested in the first person to make orange juice. But we want to tell you how it was used to make secret ink and was instrumental in the Gunpowder Plot, and how it is actually linked to dogs, the invention of clinical trials and modern medicine.”

But does this success – and the success of Dan Snow’s other programmes – signal the curtain call for traditional modes of history, via television and radio?

“No, I certainly don’t think so,” says Sam. “The enduring popularity of that presenter-led tradition of history programmes on television,” adds James. “This is about engaging new audiences, and being at the forefront of new digital channels. Studying history at university is more than ever about thinking of opportunities to share your knowledge and enthusiasm for a particular subject, and the possibilities for doing that are almost endless.”

The Histories of the Unexpected podcasts are available to download free at http://historyhit.unexpected
There is recognition that action is needed to address social inequality, relative poverty, stalling economic growth and community divisions at an international level as well as at home.

But as nations come to terms with the shifting political, social and economic landscape, so it is perhaps creating opportunities for those outside the political elite to potentially influence the global agenda as never before.

“If Brexit has shown us anything, it is that we have a divided community,” said Charles Dorr, Manager of the new Institute for Social, Policy and Enterprise Research (iSPER), at the University. “In light of this, there is recognition that action is needed to address social inequality, relative poverty, stalling economic growth and community divisions at an international level as well as at home.

Academic expertise can be hugely important in helping to meet those challenges, and if we are going to tackle them we need to do so through the kind of interdisciplinary collaborations that iSPER can foster.”

Based within the Faculty of Business, iSPER joins the University’s seven existing research institutes, spanning the spectrum of marine and earth sciences, arts, health, medicine, pedagogy and sustainability. And it will share their core aims of encouraging collaborative research of the highest quality, building on existing areas of excellence highlighted by the Research Excellence Framework in 2014 and assisting in the delivery of research-led teaching.

“This is not just about People, Organisations and Work; Markets, Innovation and Competition; Maritime Logistics, Chain Innovation through Advanced Technologies; Crime, Justice and Society; or Product and Service Value. It is about the ability to bring these together to find outcomes that meet the funder’s requirements,” said Charles. “And this kind of approach has already proved successful in academics from across the University securing funding from the Global Challenges Research Fund.”

With its members drawn from fields including business, criminology, economics, government, law and tourism, the ambition for iSPER is that it can leverage its considerable expertise to achieve a measure of potential influence. And its founding research groups are aiming to build upon previous research successes and generate even greater impact. They are:

- Crime, Justice and Society;
- Maritime Logistics, Business and Policy;
- Markets, Innovation and Competition;
- People, Organisations and Work;
- Product and Service Value Chain Innovation through Advanced Technologies
- Responsible Entrepreneurship and Social Innovation.

Professor Jingjing Xu, Associate Dean (Research) in the Faculty of Business and iSPER’s Director, said: “In many respects, the launch of iSPER has been a long time coming. The institute provides that vehicle for academics within the faculty before but there has never been a brand with which to associate our research and to bring the excellence we have across many subjects under one umbrella.”

Another of its key focuses will also be around providing support for individuals, to ensure there is assistance available to boost their work and profiles regardless of what stage they are at in their careers.

Professor Tikos, Dean of the Faculty of Business, added: “In order to be outstanding, researchers at any stage of their career – from PhD students to professors – need to be supported. The beauty of having an institute is that you can build a research environment to meet those needs, while creating something that facilitates new conversations and collaborations. It also gives us a brand with which to associate our research, and to bring the excellence we have across many subjects under one umbrella.”

Professor Nikolaos Tzikos, Dean of the Faculty of Business, added: “I SPER is the final piece of the puzzle. We have always had outstanding academics within the faculty conducting world-leading research, but perhaps without the coordinated support and encouragement to engage with a wider audience. The new university provides that vehicle and will enable us to celebrate our current successes and ensure plenty more follow in the future.”
Ray Jones, in the School of Nursing and Midwifery, as co-investigator, Angelo welcomes elderly people from a care home in the city to the centre, where they interact with ‘Pepper’, the newest addition to the family, courtesy of Japanese company Softbank.

“We were among the first in Europe to receive a Pepper, and ‘she’ will be at the heart of a number of projects,” Angelo says. “In MoveCare, we will be able to study how people interact with her in a more realistic home-like scenario, rather than a laboratory with white walls. There is a great deal of interest in researching and developing robots to be used as domestic home helps for the elderly and the disabled.”

MoveCare is one of nine current projects, representing an income to the University of around £4 million, and which have some 15 PhD students, and five post-doctoral researchers attached. Among that PhD population are seven funded by the Marie Curie scheme, each working on one of three projects: APRIL, SECURE and DCOMM, covering the topics of personal robotics, safe robot interaction, and communication using gestures, respectively. It is an indication of the importance being placed upon the subject of ‘collaborative intelligence’ – where humans and robots learn from one another to achieve a task.

“Industries are moving into AI and robotics, particularly in areas such as deep learning, which uses deep neural networks,” Angelo says. “We have been working in that field for a number of years already so this gives us a significant advantage. Indeed, we have undoubtedly contributed to this growth.”

Robot learning has been at the heart of a number of Professor Tony Belpaeme’s projects over the past decade, and his latest, L2TOR is transplanting that principle to schools and language learning. The three-year Horizon 2020 initiative is focusing on teaching English to native speakers of Dutch, German and Turkish, but also teaching Dutch and German to children whose first language is Turkish.

Using the Nao robots from the ALIZ-E project, children are invited to take part in a language game that involves learning numbers, spatial language and basic vocabulary through storytelling. Even in its early stages, L2TOR has found that the most cutting-edge speech recognition software cannot cope with the grammatical idiosyncrasies of children aged 4–6. It has also revealed a number of new avenues for enquiry, including the use of ‘deep learning’ to help the artificial intelligence overcome its inability to read emotion in faces.

“As was the case with ALIZ-E, we are exploring the possibilities and the boundaries of AI and robotics,” says Tony. “It is not a straight line from A–B, but that is part of the challenge and excitement. We are still a number of years away from robots being able to interact with people on a deep level, but we’re making progress all of the time.”

L2Tor is already generating huge interest in both the educational and robotics sectors, and entertainment giants Disney has even invited one of the project academics to work with its technologists in a bid to improve the experience of its theme parks.

The presence of Disney – and the likes of Honda, and the US Airforce, with whom Angelo is working on a project called THRIVE, looking at the issue of trust with robots – is a very important one. At a time when Google has purchased the company DeepMind, commercial interest in robotics and AI is at an all-time high, which creates new avenues for funding.

“One area that I think we can move into is human–car interaction,” Angelo confirms. “We have a growing relationship with Honda, so we have applications in the pipeline that focus on AI and cars.”

With Brexit on the horizon, the change of funding landscape will be especially challenging for robotics research, and will call upon every competitive advantage we can muster. And that’s why Robot Home is an important asset in CRN5’s continued evolution.

“Plymouth is now among the main players in the field, and we make a major contribution to the Engineering and Physical Sciences Research Council Robotics and Autonomous Systems network,” adds Angelo. “The difference between us and the likes of Bristol, Edinburgh and Sheffield, is that they can draw upon multiple universities to create a bigger critical mass. But with our links to industry (for example, strategic partnership with Aldebaran-Sofbank Robotics), and our focus upon interdisciplinary projects, we are able to run innovative studies on social and learning robots, create and test more realistic scenarios, and this helps us with future grant applications, impact case studies, and commercialisation opportunities.”
A VISION OF OPTOMETRY

On a flight home from holiday in 2010, a University senior leader had a chance conversation with a local eye care specialist, who questioned why – when the South West urgently needed eye care specialists – Plymouth didn’t offer an Optometry degree.

Fast forward to 2016, and two optometry cohorts have graduated, student numbers have more than doubled, and nearly £1 million has been secured in research funding. It’s safe to say that Optometry has been an eye-opening success.

It took less than nine months from that original meeting for the Optometry course to be professionally approved, with the first students welcomed in 2011. And as the University’s School of Health Professions celebrates the course’s fifth anniversary, Dr Philip Buckhurst, Associate Professor in Optometry, reflects on how far it has come since the very beginning.

“Optometry is only offered at 11 universities in the UK,” he said. “Plymouth was the ninth to introduce it. And there had long been a need nationally for an eye health training centre in the South West, and as soon as the idea was adopted, everything moved very quickly.”

The course, like many of those in other health professions, is a balance of research-informed teaching and clinical practice. From their first year, students observe and assist local opticians, and in 2013, the University opened its Centre for Eye Care Excellence (CEE), based near the main campus on Gibbon Street. The practice offers students the chance to carry out supervised training on members of the public and such is the success of the initiative – and the growth in student numbers – that CEE has expanded onto the campus itself, with a second practice opened in November 2016 in the Wellbeing Centre.

Both facilities, which follow a model similar to the Dental Education Facilities, are home to advanced instrumentation and used by undergraduate and postgraduate students, with qualified optometrists on hand to supervise students and deal with more complex patients.

Phil said: “We welcomed 32 students in the first year, with a view to reaching 72, but wanted to take our time in order to roll out the course comfortably, ensuring quality. This year we had our full intake of students, with 13 full-time staff up from the original four of us five years ago.”

Students, particularly in their final year, spend a lot of time with members of the public: from contact lens clinics and spectacle dispensing to paediatric care, they experience everything encountered by a real-life optometrist. Most clinics are free of charge, and customers receive 20% off the list price of any spectacles if they sit for a student.

As well as welcoming people genuinely looking for eye examinations, the centres have a number of volunteers who kindly sit for the same test with several different students, and new patients are always being sought.

To complement the hands-on learning, the 13-strong team of academics prides itself on teaching both theory and transferable skills. For example, a second-year module delves into entrepreneurship, with emphasis on investigating the legal and ethical issues around managing a business.

The team’s research activity has in turn fed into its teaching, including in areas such as binocular vision and neurophysiology and a range of eye diseases. Around £900,000 has been secured in research funding in its five years, with specialisms in myopia (short-sightedness), glaucoma and vascular disease, visual psychophysics, and cataract and refractive surgery.

Interdisciplinary projects have also been undertaken by the Eye and Vision research group in the Institute of Health and Community, with studies alongside psychologists on how variations in vision can affect cognitive process, and research alongside other health professionals on how vision affects balance.

Professor Paul Artes, leader of the research group, said: “Vision is responsible for more than 80% of input to the brain, so research encompasses how we see, what we see, and in turn how these processes affect other parts of the body and mind. It really is a multidisciplinary area that is hugely important to our understanding of many other aspects of health, and its findings can have a significant impact on patients.”

The course is also currently overseeing seven PhD students looking at various aspects of vision science, including one investigation into how the use of smart technology affects the eyes and vision.

This research topic of choice sums up what many students have praised about the course – its relevance to the real-life profession and everyday life. Such has been its level of success that 89% of its 2015 graduates went on to full-time employment or study within six months of leaving, and its NSS scores show that 95% of its students found the course intellectually stimulating.

“It’s amazing what has been achieved in such a short time, and the same can be said of our academic and teaching endeavour over the last five years,” added Professor Graham Sewell, Head of the School of Health Professions. “And it demonstrates once again just how central the University is to building a healthy and sustainable health professions workforce both in the region and further afield.”
Dr Lucy Obolensky, programme lead for the Global and Remote Healthcare masters degree within the Plymouth University Peninsula Schools of Medicine and Dentistry, supported Sir David Attenborough as a medic in the hot air balloon sequence for the opening scene of the series. And it’s just the latest example of Lucy’s long-running engagement work with the broadcaster.

“I’ve been working with the BBC intermittently over the last decade, mostly teaching advanced medical skills to crews visiting remote parts of the world,” says Lucy. “On this occasion, I was asked to be a part of a team of doctors seconded to different programmes in the series.

“I was expected and rather than supporting Sir David I actually ended up on top of him! Luckily, no harm was caused to our national treasure!”

For the island-focused programme, Lucy spent five days with Sir David and the team at Chateau d’Aix in Switzerland – and it all went smoothly up to a point.

She says: “Everything up there was phenomenal, the most amazing views. We had a bit of a bumpy landing though – the basket tipped the opposite way to that which we were expecting and rather than supporting Sir David I actually ended up on top of him! Luckily, no harm was caused to our national treasure!”

In the programme devoted to ‘the urban environment’, Lucy accompanied Sir David to the top of The Shard for a two-day shoot. “We walked right to the top – 300 steps and Sir David barely stopped for a breather. He was quite amazing.”

It is quite a contrast to her daily duties as a GP and University clinician, albeit the planetary focus does chime with her long-time interest in global and remote healthcare. Since 2000, she has completed more than 20 expeditions, including to Africa, South and Central America, India, Tibet and Vietnam. She was the medic for the Help for Heroes Kilimanjaro Summit and she also teaches advanced medical skills to explorers and expedition leaders at the Royal Geographical Society and the BBC.

Lucy has helped to run hospital partnerships in Kenya, setting up primary healthcare services and initiating programmes such as the Kenya Orthopaedic Project; the Nanyuki-Torbay Partnership; and founding the charity Exploring Global Health Opportunities, an umbrella charity that supports health and social programmes throughout Kenya.

She has a close working relationship with The Northern Rangelands Trust, an organisation that supports communities and conservation in an area of north Kenya which borders Somalia, and over the past five years has helped them to implement a healthcare system where there was previously nothing and where people live at least six hours away from the nearest functioning hospital.

She says: “We know that there are hundreds of medically-trained professionals out there who may be thinking about taking time out to work overseas, and the training is available for them to hone their skill set to suit the clinical, physical and cultural challenges they may face. For me, the opportunity to make a real difference to communities in Kenya over years of visits has been humbling and an honour. I first visited those communities as a newly-qualified doctor and since then I have visited on a regular basis, even taking my children as the years have gone by.

My family and I are now a part of that community and words cannot describe how special and life-affirming that is. My advice to any doctor looking to make a contribution overseas is to go for it – it makes such a difference to the communities we work with, ourselves as professionals and, indeed, our partners back here in the UK.”

The University’s MSc Global and Remote Healthcare programme was one of the first of its kind in the UK and supports the continuing professional development of doctors working around the world, from the heat of Sub-Saharan Africa to the extreme cold of Antarctica. As well as its remit in education, the programme is also the incubator for life-changing research and sustainable projects in health and social care in countries where they are needed. And that clearly extends to working with – and safeguarding – one of the world’s most popular and respected television presenters.

“It’s an indication of the broad appeal that Sir David has that everyone in my family, from my nine-year-old nephew to my husband and my granny, was as excited about this opportunity as I was,” Lucy adds. “His popularity spans generations and he was an absolute joy to work with.”
Siân Davey: Picture Perfect

From that moment, my immediate world opened up and I realised I had everything I needed right in front of me.

Receiving a visit from CONNECT at her home on the Dartington Estate in Totnes, Siân is—as usual—doing a myriad of things at once. She has been up since 5am to get her children ready for the day ahead and has just returned from her daily yoga class which, she admits, is the one time she can truly slow down and switch off. Now though, she is back at full tilt and as we talk, is packing up copies of her book Looking for Alice to take with her to another awards ceremony; this time in Paris.

“I had quite a turbulent upbringing and wanted to put the world to rights,” she says, looking back to her first experiences at university, when she enrolled on a fine art degree at the University of Brighton. “So I switched to politics and social policy, but then when I got to my graduation, I realised that I didn’t want to go into social work or housing like my fellows on the degree. I knew that in order to find my path, I first had to find myself.”

This Siân did by taking herself away from family and friends to enrol at a Tibetan Buddhist monastery in Scotland. It enabled her to reflect upon life and spiritual practice, helping her to respond to the world around her rather than just railing against it. Indeed, it shaped her career for the next 15 years, as she began to practise as a humanistic psychotherapist.

It was only after a series of traumatic personal events that she picked up her camera and started taking pictures, realising that it was helping to relieve her personal pain. In her words, how she saw the world was in the pictures she was producing.

“Siân says. “He reminded me that what I do best is to work intuitively. From that moment, my immediate world opened up and I realised I had everything I needed right in front of me.”

Those words continue to inspire and support me to this day.”

She has become one of the most decorated and celebrated emerging photographers in the country, with a focus upon the quiet and intimate moments of family life. Lauded by critics and subject to commissions from international organisations, it is fair to say that Siân Davey’s world has changed dramatically since she enrolled on—and graduated from—the MA Photography programme at Plymouth.

“Siân says. “One of the best days of my life was when I met Alice, using her camera to capture the personal and emotional development of their mother-daughter relationship. With it has come a string of accolades, including a New York Photo Award, the Lens Culture Emerging Talents Award, and Best Emerging Photographer at the Pingyao International Photography Festival. And the book itself was named one of The Observer Books of the Year 2015. Siân says: “When I started out, I never thought my work would be received as it has. It has been quite difficult to adjust, not only because of the accolades but also the learning of new skills. But I also recognise how privileged I am to be doing something I love, and I hope that whatever happens in the future that is something I will be able to retain.”
It was on a working family farm in East Yorkshire that Tom Hutchinson first began to form an appreciation of the environment and its impact upon human health. It wasn’t just the cattle, the sheep, or the crops that triggered the process, nor his father’s careful maintenance of the landscape with traditional hedgerows, field borders and meadows full of curlews and other wading birds. It was also their proximity to major urban areas on the Humber and Tees estuaries, with their polluted waters entering the North Sea, which frequently made media headlines during the 1980s.

It’s an interest that has come to define his career; one that has taken him around the world, through commercial and governmental science, before landing in academia. Now the University’s new Professor of Environment and Health Sciences in the School of Biological Sciences, Tom is looking to use some of that experience, and the connections he has made, to enhance his teaching and research at Plymouth.

“From my scientific training, I feel there is an absolutely fundamental link between human health and wildlife health,” Tom says. “And that has direct implications for the sources of our drinking water, the quality and security of our food supplies, and the well-being of children and families in being able to enjoy and connect with a healthy natural environment. That has been the opportunity to study natural environment. That has been to enjoy and connect with a healthy

It was the opportunity to study environmental biology at King’s College London that set Tom on his way, although he would soon return as a research scientist, working for ICI on a project to tackle the ‘legacy chemicals’ that were contaminating the environment surrounding major industrialised centres.

“The pollution from cities, particularly in the North East, was so great that there were lots of human waste and toxic chemicals, with hardly any oxygen in the rivers,” he says. “But thanks to the scientific work and industrial investment in clean up, we’ve seen a huge success story: the otters are back, the aspens and other fish-eating birds have returned, and we have seal populations again. We have brought these rivers and UK coastal waters back to life.”

Based at Brixham, in the laboratory that years later would effectively be given to the University by AstraZeneca, Tom also investigated the use of chemicals in agriculture, the impact of pesticides on the environment, and the search for less harmful alternatives (such as those based upon chrysanthemums). This involved extensive travel around the United States, and the foraging of Environmental Protection Agency and University contacts that he now uses to support placements for Plymouth students.

Tom’s association with the University actually dates back to 1991 when he enrolled on a part-time PhD, funded by ICI, on the effects of organic chemicals and metals on the immune system of marine life. He completed it five years later under the guidance of the late Professor Margaret Manning.

“Margaret was a pioneering scientist in the field of wildlife immunology and an outstanding mentor,” Tom says. “She was President of the International Society of Comparative Immunology, and her huge contribution to the reputation of the University should not be underestimated. But spending time in the South West also gave me a perspective on the opportunities here in relation to the environment, particularly freshwater and marine.”

As the company evolved through mergers—from ICI to Zeneca and AstraZeneca—so Tom’s role shifted into the pharmaceutical healthcare sector, and he began to consider the environmental impact of medicines and the manufacturing facilities required to make them. It took him off to AstraZeneca’s R&D Headquarters near Stockholm for two years, before he moved back to the UK to become Head of Science for Environment and Health at Plymouth Marine Laboratory. Two years later, he joined the Centre for Environment, Fisheries and Aquaculture Science (Cefas), one of Defra’s science agencies, where he advised on the environmental safety assessment of chemicals in marine and freshwater ecosystems and fisheries.

Already an Honorary Professor at Exeter and Brunel universities, Tom applied for the post of Associate Professor of Ecotoxicology at Plymouth in 2013, and three years on he has been made Professor, delivering his inaugural lecture on the subject of ‘Endocrine Disrupting Chemicals’.

“The overarching theme was that natural and synthetic hormone-mimicking chemicals are a serious challenge for protecting human and wildlife health,” he says. “But if we invest in research to screen out the problem chemicals, we can improve things, and the evidence is there with the recovery of aspens and otters.”

With a full teaching portfolio across undergraduate and postgraduate courses, including animal physiology and endocrinology, ethology, biology, ecotoxicology, and the use of aquatic animals in biomedical research, and a growing research presence through his lead of the Environment Food and Biotechnology Research Group, it is remarkable that Tom still finds time for his extensive external engagement work. But, through his involvement with the government’s Expert Committee on Pesticides, his chairing of the Ecotoxicology Working Group at the NC3Rs (which works to find alternative practices for animal use in research), and his membership of scientific advisory groups to the OECD, he is still working to bring people together, raise awareness of issues, and improve understanding of those environmental roots for human health.

“I was back at the farm in August, helping to bring in the harvest with my siblings, and I realised I was listening to those same birds in the meadow. The reflection. “And it made me think that, even though we have many environmental problems today, and some are very challenging and global, from what I’ve seen from the rivers and the sea – if we use science and technology, if we draw people together from different disciplines and the public – we can be optimistic for the future. We can make progress based on evidence and engagement.”
When Iraq invaded Kuwait in 1990, Haya was a psychology and sociology student at Bath University on a year’s placement in Jordan with the National Centre for Mental Health. What followed was an extraordinary experience: a ground-level view of the aftermath of a human crisis. By the time I got back to Jordan after those three weeks, I decided I didn’t want to be a psychologist, I wanted to be a researcher.

Working at the intersection of gender and development, entrepreneurship, and cultural memory, Haya has focused her research upon the plight of refugees in Jordan and, increasingly, other Middle Eastern countries. With Civil War in Syria and turmoil in Iraq displacing millions of people, it’s work that might seem topical and of the ‘now’, but is actually rooted in a 50-year history of refugees in Jordan.

“I’m interested in looking at how entrepreneurship can be a vehicle and catalyst for social development,” she says. “Under that, my main focus is on gender; people who need to be entrepreneurial to have some form of livelihood or addressing poverty alleviation. And it opens up all sorts of questions for governments and aid agencies. How do you manage refugees in such ways that it gives them hope? It is not simply about the food and the vouchers and the accommodation, but giving them the hope there is a future, a potential livelihood. If we don’t do that, things don’t work for refugees or the host community. We need to work with them as partners.”

That work first began for Haya when, having completed a masters degree in social science research methods at Bath, she moved to Jordan and set up her own research consultancy. Despite knowing very little about running a business, Haya was determined to be a very successful venture, and she won contracts with organisations such as the United States Agency for International Development and UNICEF. So in demand were their services that within two years Haya had progressed in the sector and was working as an interpreter for a Harvard study team.

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Over the last decade, Haya has continued her research, and collaboration with her doctoral supervisor Professor Sara Carter (Strathclyde University) and examiner Professor Susan Marlow (Nottingham University’s Women’s Network). She has secured nearly £2 million in research funding from the EU, UK and other funding bodies, and currently leads two research projects. The second project began in November 2016, and was awarded by the ESRC and the Arts and Humanities Research Council under the Global Challenges Research Fund programme involving colleagues from both the Business and Science and Engineering faculties), and is a two-year study that focuses on the resilience of Syrian male artisans displaced to Jordan. Both projects have interesting socio-political and cultural heritage implications.

Haya says: “It’s such a fascinating area, because there are social, cultural and political dimensions. Entrepreneurship can help the refugee artisans to develop genuine transferable business skills and individual and community resilience. Also, their micro-businesses are preserving heritage through the arts and crafts they produce – so the production process itself has far greater meaning than simply an economic benefit.”

Aside from these projects – which will also include the delivery of a social enterprise training programme to Jordanian mentors here in Plymouth, who in turn will roll it out among the refugee communities – Haya is also playing a leading role in the masters programmes in Entrepreneurship, and Entrepreneurship and International Development. She also leads the Responsible Entrepreneurship and Social Innovation Research Group, and co-chairs the University’s Women’s Network.

“It’s been an interesting journey – not all of it planned!” she reflects. “But looking back, so much was influenced by that visit to Iraq. That was where I first saw the people who would become the refugees of tomorrow.”
As close encounters with nature go, it takes some beating. A distressed manta ray, three metres in wingspan, approaches a lone diver. Fishing line binds its mouth and gills, cutting like a ligature. The stricken ray allows the diver to remove the line before it wheels away and disappears into the blue. Two days later, at the same spot, the diver is back, this time with a group, and all are watching manta rays feeding in a gyring whirl. Suddenly, one of the rays breaks away and swims towards them, before it circles repeatedly above the diver’s head. It suddenly becomes clear that it is the very same injured manta ray.

With memories such as these, is it any wonder that marine biologist and University alumnus Guy Stevens has devoted his career to researching, studying and helping to conserve these iconic creatures? “There’s a tendency to anthropomorphise these things but there was no doubt that that manta ray sought me out for help,” says Guy, Founder and Chief Executive of the global charity The Manta Trust, recalling their meeting in the Indian Ocean several years ago. “That in itself is quite remarkable. But for the same animal to pick me out from a group of divers was amazing. How did it know and what was it trying to say?” Such questions have been a feature of Guy’s work ever since he first encountered the creatures in 2003 when, having graduated from his Plymouth degree, he landed the diving qualification, which is limited to working for companies that there was more than just glass separating him from the marine environment, and his early career was limited to working for companies in the ornamental fish trade.

Guy secured a couple of vocational qualifications at local colleges, but realised that he needed a degree if he was ever going to break through to the career he craved, and after speaking with an admissions tutor at the University, he was given a chance to prove himself on the degree for Marine Biology and Coastal Ecology. “It was a steep learning curve to suddenly be in full-time academia, but I loved the practical stuff,” he says. “In my final year, I went with some other students to the university in Grenada to do a study of the symbiosis of cleaner fish and their clients on the tropical reef – it was an amazing experience.”

It was this willingness to head overseas to undertake project work, combined with experience volunteering at the National Marine Aquarium, and his PADI Dive Master qualification, which made Guy the ideal candidate when the role at the Four Seasons arose – and the rest is his story.

His conservation work has now featured in more than a dozen TV documentaries for the likes of the BBC, ITV, National Geographic, and Australia’s 60 Minutes programme. And he has also become involved with scientific research off the Chagos Islands, funded by the Bertarelli Foundation, and which has seen him reunited in a virtual sense at least, with his former course leader, Professor Martin Attrill, now Director of the Marine Institute.

With a new book set to be published thanks to the support of the Save Our Seas Foundation – Manta Rays: The Secret Life of Devil Rays, completed in partnership with another Plymouth graduate, National Geographic photographer Thomas Peschak (“the greatest underwater photographer in the world today”) – Guy is hoping to share some of those remarkable encounters beneath the waves with a new audience. “You get a true sense of connection with these majestic rays,” he says, “and that is what drives me on every day in my work to conserve them.”
CLARE NASIR: FROM MATHEMATICS TO METEOROLOGY

Clare Nasir is one of meteorology’s most recognisable faces, having fronted GMTV and ITN broadcasts for many years. A Plymouth graduate in Mathematics, and at masters-level in Applied Marine Sciences, she has recently returned to the Met Office, where she began her career in the early 90s. She is a filmmaker and author, and still presents the weather daily on Channel 5. In November, she returned to the University to speak at the Postgraduate Open Evening – and sat down with CONNECT for a trip down memory lane.

Q When did you first become interested in the sciences?

Probably when I was at primary school. I loved maths and geography, and I’ve always wanted to study them – and still do. You are as interested in the sciences, especially in those early years, and so when I came to Plymouth to study maths I pretty much ‘struck gold’.

Q What attracted you to the University at that time?

I wanted to study fluid dynamics, and so I needed a really strong department in that field. I was able to combine my love of the natural processes with mathematics as a language. I specialised in applied maths and my degree was the mathematics of the upper atmosphere, and I then went on to do a masters in oceanography – and the mathematics of – and that was a perfect set up to study maths but with a discipline attached.

Q Why did you choose to do a masters at that time?

The masters was actually a step towards a PhD, so it was a no-brainer at the time. I had a high maths grade and there was NERC funding for a masters so I applied and got the only place. I had a lot of support from my professor at the time, Phil Dyke, and I was going to carry on to the PhD, but it was money that stopped me going further. So I set my goals on joining another scientific institution – and that was the Met Office. The odds were somewhat like 1 in 800, but because of my maths degree here, my masters, and my thesis in both, it pretty much pushed me to the top of the list.

Q What are some of your most treasured memories of being here?

I really loved the lectures and the diversity – I could have chosen to have gone down other routes such as computing. I loved the teachers and tutors and found them to be really accessible, and that helped to cement the knowledge you got from the lectures. I loved the campus even in the late 80s/early 90s, because everything was within walking distance. And I love Plymouth as a city; the backdrop is absolutely beautiful. So from my point of view it was a wonderful place to be and I never wanted to leave. You sensed there was magic going on, and to this day some of my best memories are from here.

Q When you went into the Met Office, did you have any idea that you were going to be in front of the camera?

Yes. I had to do a screen test as well as the scientific interview, and I’ve always enjoyed talking about the weather. Even when I was an undergraduate, I was teaching maths to psychologists, so I’ve always felt I can communicate difficult subjects in a way that people understand. With broadcasting, you have to be able to bring the subject down from the technical level, so perhaps I was always better suited to that than being a PhD student!

Q What does an average day look like for you?

The day starts for all of us with a briefing from the Chief Scientist about the weather, and we then go off and make films. So, for example, there has been a lot of warming along the eastern side of Scotland recently, something known as the Foehn effect, so we filmed a piece to explain that. We do the broadcast for Channel 5 from the studio, and that then gets sent to London. I media train forecasters, so that they can bring out their ‘stories’ editorially rather than getting tied up in the jargon. And we do a lot of social media alongside it.

Q Is that your key message to the postgraduate audience tonight?

There are two core messages, really. The first one is that you have to aim big and be bold. And secondly, you work your arse off. There is no getting away from that. You can’t be complacent in this environment because there is too much competition and too many clever people out there.

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Q You must be passionate about people going into science – and women in science as well?!

Yes. I do a lot of talks to schools, and write books for kids on weather. I go in and try to ignite their interest in and passion for the weather. I think at that age, they simply don’t see any gender barriers. When I was at university, we had a ratio of something like one girl to every nine boys – and our degree was genuinely hard. Lots of students dropped out. I come from a mixed heritage and a poor background, so for me, it really was about staying focused and working hard.

Q Do you follow research trends or particular scientists?

I tap into good science all of the time because there are always stories there. I steer clear of making scientific comment on climate research, and when I do films, I bring in experts because there are so many great scientists out there. I’m in an amazing position because I have some of the greatest minds working alongside me and giving me advice as to what is going on.

Q And finally, how does it feel to be back at your alma mater today?

It’s brilliant. I’m going clubbing later – Union Street beckons!

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GRADUATING STUDENT WINS SOUP EVENT

It was a double celebration for one budding entrepreneur this year as they picked up their degree on the same day that their business graduated with honours as well.

Josh Playle was awarded a package of grant funding and business support to develop his new digital startup, Conclient Ltd, after winning the fifth Soup event organised by GAIN (the Growth Acceleration Investment Network) at the University.

He then had to rush from the event, being held in the Graduation Marquee, to the robing room so that he could get ready for his ceremony in Mechanical Engineering, just minutes later.

“It didn’t sink in that I’d won until after my graduation, as I was so preoccupied with not wanting to miss the ceremony, but I’m really happy,” said Josh. “The money we’ve won will be a great help for us and go entirely to paying for advertising and marketing costs to promote the new website.

Our overheads are at an absolute minimum so this will really help. The access to business support and networks will really help us get going as well and be an ongoing morale booster for the team, so I’m very grateful.”

Josh was chosen from four pitches, all from new or growing digital businesses, with his vision for a site that brings together engineering consultants and clients. He won a grant of £750, as well as a package of business support from GAIN, Devon Chamber of Commerce, City College Plymouth, and the Formation Zone and the Futures Entrepreneurship Centre at the University.

Soup events were pioneered in America, and see four entrepreneurs spend four minutes trying to impress an audience with their enthusiasm in a bid to win funding to help them take their ideas to the next level. The audience listens to the pitches over a bowl of soup, and at the end, each votes for their favourite by laying the empty bowl next to one of the contestants.

GAIN has brought the practice to the South West, and has enjoyed significant backing from the business community over the first five events held.

Richard Adams, Corporate Projects Manager for the University, said: “Soup has proved to be an enormously popular business crowdfunding event for the South West so far, mimicking the success the events have enjoyed worldwide, and it’s fantastic to see so many entrepreneurs in the region being able to access the tangible business support they need, as well as enjoying the positive experience of directly pitching their ideas to local business experts.”

CHALLENGER FELLOWSHIP FOR MARINE SCIENTIST

Dr Nick Higgs, Deputy Director of the Marine Institute, has been recognised for his research work with the award of a prestigious Challenger Fellowship. Bestowed by the Challenger Society for Marine Science, the fellowship is handed out to just three early career scientists on a biennial basis.

Nick received the award in Liverpool at the society’s conference. He said: “As an early career scientist, it is a real honour to know that your peers and seniors value your work. I have been bringing together other researchers in my field to establish an annual meeting for deep-sea biologists within the society, the first time that the UK researchers in this area had met together as a group. So I think the award was as much in recognition of this service to the marine science community as it was my own scientific achievement and promise.”

In the same month, Nick was also recognised by the International Deep-Sea Biology Society for a paper written with Professor Martin Ainley. The society named the paper – Biases in biodiversity: wide-ranging species are discovered first in the deep sea – as their landmark paper for 2015. In the work, Nick and Martin conducted a novel meta-analysis on all deep-sea species records found in the Ocean Biogeographic Information System. Their conclusion was that species richness is probably being underestimated in the deep oceans because the discovery of new species is biased towards those that are easily found.

PRESTIGIOUS APPOINTMENT FOR FUNDING EXPERT

One of the University’s most respected public sector researchers and commentators has been appointed a Non-Executive Director of NICE (the National Institute for Health and Care Excellence).

Professor Sheena Asthana will bring more than 20 years’ experience in health policy and health services research to the role, which supports the organisation’s work by providing national guidance and advice to improve health and social care.

Sheena, who has been an applicant on more than £5 million of funded research projects, has specialised in four broad areas: NHS resource allocation, healthcare equity, health inequalities and evidence-based public health, and health services evaluation. She has also been involved in research examining education and equity in the UK, local government resource allocation and national funding formulae, such as those used for healthcare provision and policing.

“NICE has a broad remit across health policy and guidance, and I am delighted to have been appointed as a Non-Executive Director,” Sheena said. “From medical technology and digital products, to guidance on treatments and how to manage conditions, its work and the potential effects of that are huge. But this is also a time of great change for the NHS as a whole, and it is a real honour to be given the opportunity to use my expertise to guide all those who are being impacted by that.”

NICE was originally set up in 1999, becoming a Non Departmental Public Body (NDPB) in 2013, and its role is to improve outcomes for people using the NHS and other public health and social care services. It does this by producing evidence-based guidance and advice for practitioners, developing quality standards and performance metrics and providing a range of information services for commissioners, practitioners and managers across the spectrum.
GOLDEN SUCCESS AT THE GREEN GOWNS

It was success at the double for the University in November as it secured two national prizes in recognition of the quality of its sustainability reporting and the achievements that represents.

For a fifth time in the past six years, it won a Green Gown, the education sector’s blue ribbon event, for its Sustainability Report, a biennial exercise in which the University reveals how it is performing across a number of sustainability measures, and shares this externally with stakeholders.

Following on from this, the University triumphed in the Sustainability Reporting (Public Sector) category of the Building Public Trust in Corporate Reporting Awards (BPTA), presented by PricewaterhouseCoopers and the National Audit Office.

Dr Samantha Price, Sustainability Manager, picked up both awards and said that they were in recognition of the honesty and openness that the University reported its progress through the report.

“It is great that the University has won these accolades and they reinforce what makes this report important,” she said. “This is no attempt to ‘greenwash’ how we’re performing, which was a comment from the judges about some of the reporting that exists in the industry. Instead, it presents a clear assessment of our progress against recognised sustainability metrics and demonstrates our genuine commitment to be a leader.”

The Green Gown, awarded by the Environmental Association for Universities and Colleges, was a fifth for Plymouth in just six years, following successes in 2011, for the University’s continuous improvement approach, and three in 2014 for enterprise, courses and food and drink.

Its success at the BPTAs, on the other hand, was the first time that any academic institution had won the award, with Plymouth ranking alongside fellow winners on the night including Unilever and Marks and Spencer Group. In addition to reflecting the success of the Sustainability Report, it also echoed the University’s commitment to sustainable development and how that is factored into core business strategies, as well as evidence the organisation understands the material issues and impacts of embedding sustainable practices.

The 2016 Sustainability Report is the fourth to be released by the University, but the first to be based upon the Global Reporting Initiative, an internationally recognised framework for sustainability disclosure.

TEACHING EXCELLENCE RECOGNISED BY THE HIGHER EDUCATION ACADEMY

The University’s remarkable record of success in the Higher Education Academy’s National Teaching Excellence Awards has been continued in 2016/17 with another two new fellowships awarded.

Professor Hilary Neve and Dr Jennie Winter became the 22nd and 23rd National Teaching Fellows (NTFs) in the University’s history – and the eighth in just five years – in recognition of their innovation in teaching and learning.

Hilary, Professor of Medical Education in the Plymouth University Peninsula Schools of Medicine and Dentistry (PU PSMD), has championed the development of small group learning activities in the faculty, particularly as a setting for students to reflect upon and make sense of their clinical experiences. She has also led major redesigns of the professionalism and Problem Based Learning (PBL) programmes and undertaken pioneering audio-diary research exploring threshold concepts within medical education.

Jennie, Associate Professor in Academic Development, has worked to raise awareness and change practice in a range of inclusivity issues in higher education including unconscious bias, internationalisation, widening participation, mature students and the progression between college based and higher education.

Hilary and Jennie will be presented with their awards at the National Teaching Fellowship dinner in January 2017, at which a third academic, Dr Cathy Coelho, Senior Lecturer and year 4 Lead in PU PSMD, will find out if her team has won the Collaborative Award for Teaching Excellence. Cathy has led a team of fellow educators and academics, and dental hygiene and therapy students, on a project which is an exemplar of the unique relationship between the Dental School and the local community, and how that relationship results in innovations in dental teaching.

The partnership saw the development of a unique communication aid for stroke survivors with aphasia, for use in dental settings. The team comprised five dental therapy and hygiene students, four academic staff, a Stroke Association speech and language therapist and eight stroke survivors with aphasia, who met at the support group Chatterbox.

Professor Pauline Kneale, Pro Vice-Chancellor of Teaching and Learning at Plymouth University, said: “My congratulations go to my colleagues who have won and been shortlisted for these important and influential higher education awards. Their success reflects the emphasis we place as a University on the highest standards of teaching, and to the investment and commitment we make to ensuring that our teaching colleagues can develop and thrive.”

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CONNECT | RESEARCH GRANTS, AWARDS AND DEVELOPMENTS AROUND THE CAMPUS

CONNECT | ISSUE 16
Visitors to the world-famous Christmas at Kew celebrations this year were treated to a mile-long trail of visual art – with the work of one Plymouth academic ‘blossoming’ among it. Professor Chris Bennewith, the new Head of the School of Art, Design and Architecture, played a lead role in Bloom, an installation of 1,000 swaying ‘flowers’ with each head delicately flickering and changing colour. It comes through his involvement with international art and design collective Squidsoup.