



UNIVERSITY OF
PLYMOUTH
Advancing knowledge, transforming lives



ANNUAL REVIEW

2021

Welcome to the University of Plymouth's 2021 *Annual Review*



This publication reflects upon some of the defining developments and success stories of the past 12 months – a year in which, happily, we have been able to return to a more familiar way of doing things while making exciting progress towards our strategic goals.

We began the year amid the national lockdown which dictated that so many of our students would again have to learn remotely. By September, however, the University was abuzz with the new cohort and returning students, as well as our departing graduates who celebrated their accomplishments on Plymouth Hoe. The lifeblood of our academic community – peer-to-peer learning and support – was flowing once again.

Evidence of our progress is clear in the scale of development across our estate, as we strategically invest in our facilities, our student experience and our research. We are making remarkable progress, for example with the regeneration and repurposing of Intercity Place, transforming the iconic former Network Rail building into our new 'home for Health'. Our state-of-the-art new engineering and design facility, which will transform education and research in these fields, as well as the very character of the campus, is well under way. And, we opened a new Brain Research & Imaging Centre on our northern medical campus, bringing us even closer to our University Hospitals Plymouth NHS Trust.

Sustained improvement in national league tables has been highly satisfying, most notably this year climbing another 12 places to joint 41st in *The Guardian Good University Guide*. And in the *Times Higher Education* Impact Rankings, we were rated in the top 25 institutions globally, and first overall for marine impact. This is a remarkable achievement, and testament to our excellence in sustainability.

We can take huge pride in the impact upon our communities and the achievements we have shared with

our partners in the city, region and further afield. From freeports to the first National Marine Park, we are playing a key role in the advancement of a host of transformational projects for Plymouth and the region.

We were able to hold two major celebrations of our successes and progress this year: first, a special reception at Spencer House, St James's, London, to belatedly celebrate our third Queen's Anniversary Prize award, and second, a splendid civic dinner at The Box in Plymouth, attended by 120 business, local authority, Local Enterprise Partnership, and college partners, donors and honorary graduates. A chance to say 'thank you' to all those who support our research and education.

This publication is a tribute to the staff and students who make this University the institution that it is. Their passion, talent and willingness to go far beyond what is asked of them is what drives us forward.

Professor Judith Petts CBE
Vice-Chancellor

Contents

STRATEGY	4
RESEARCH AND INNOVATION	6
Marine	7
Sustainable Earth	12
Health and Care Research	15
Enterprise	18
Research Funding	20
EDUCATION AND STUDENT EXPERIENCE	22
Investing in the Campus and Student Experience	23
Education Success and Recognition	28
SOCIAL AND ECONOMIC IMPACT	31
INTERNATIONAL	40
AWARDS, SUCCESS AND APPOINTMENTS	42

Strategy

University 2030: A Future of Excellence charts the institution's development over the next decade to deliver on its mission of **advancing knowledge and transforming lives**. It builds upon the University's pre-eminence in marine and maritime research and education; and its admired, holistic approach to environmental sustainability across research, education and practice. The strategy sets two ambitious institutional goals to be realised by 2030: **to be a top 30 university in the UK, and top 250 in the world**.

During 2020–21 the University has underpinned *University 2030* with a **Strategic Implementation Plan**. This details the key activities that will make this vision a reality, and articulates the investment in staff, estate, emerging technologies and digital trends that it will require. It integrates the activity of our key underpinning strategies (International, Research and Innovation, Education and Student Experience) and our Digital Strategic Plan.



OUR STRATEGIC PRIORITIES

PRIORITY ONE: DELIVER EXCELLENT EDUCATION AND RESEARCH

Key activities delivered in implementing this priority during 2020–21 include:

- executing widespread curriculum reform across our Arts, Humanities and Business portfolio;
- refreshing our International Strategy and delivery plan to ensure alignment with our aspiration to be a comprehensive international university;
- expanding the disciplinary scope of our transnational education provision with our main strategic partners;
- developing our capacity for delivering high quality market insight data;
- launching with key city partners the Marine Research Plymouth consortium.





PRIORITY TWO: NURTURE OUTSTANDING STUDENTS AND STAFF

Key activities delivered in implementing this priority during 2020–21 include:

- developing a distinctive and comprehensive model of inter-professional learning across our healthcare disciplines;
- delivery of externally funded student and knowledge exchange projects and the successful relaunch of our student business incubator ‘The Formation Zone’ as ‘The Cube’;
- proactive strategic recruitment of researchers and teams to enhance critical mass in our leading research areas.



PRIORITY THREE: DRIVE GLOBAL CONNECTIVITY THAT MAKES A DIFFERENCE

Key activities delivered in implementing this priority during 2020–21 include:

- the continued drawdown of external funding to support research impact and knowledge exchange across a range of disciplines from e-health to the creative industries to marine tech;
- the launch in the city of The Box, an already-internationally recognised museum and gallery in which the University is a founding strategic partner;
- launch of a postgraduate research programme with Ocean University China;
- a wider mapping of current collaborative activity in the marine and maritime fields internationally to support strategic partnership development.



ENABLING PRIORITY: INVEST TO ENSURE A LEADING-EDGE, SUSTAINABLE UNIVERSITY

Key activities delivered in implementing this priority during 2020–21 include a refresh of our Campus Masterplan, the formulation of a Digital Strategic Plan, progress on three large-scale capital projects within these plans, and the launch of a program to replace our Student Record System.



Research and Innovation

7

MARINE

University and Royal Navy collaborate on marine autonomy research
Modelling how coasts will be impacted by storms and sea-level rise
Employing social science to track plastic dispersal
University leads call for decade of deep-sea research
Marine protected areas can boost fish populations by almost 400%
Marine Research Plymouth
Global microplastics research
Multi-million pound initiative advances the sustainable management of UK's marine resources

12

SUSTAINABLE EARTH

Scientists and students help unlock secrets of rare UK meteorite
Collaboration to focus on recycling of precious components in electric vehicle batteries
€2.5 million to develop sustainable soils from construction waste and by-products
Funding to research the mysterious process of 'seafloor spreading'
Researchers begin construction of unique living lab on campus

15

HEALTH AND CARE RESEARCH

Research breakthrough for meningioma diagnosis
Experimental antiviral proves effective in halting spread and damage of COVID-19
Common antidepressant should no longer be used to treat people with dementia
Research shows links between loot boxes and problem gaming
Cell adaptation in critically ill patients could be difference between life and death
New technology to aid medical research and discovery

18

ENTERPRISE

Marine e-charging living lab
Funding collaborative research and development
Developing autonomous technology to assess seagrass beds
Nurturing intellectual property
The Knowledge Exchange Framework



Marine

UNIVERSITY AND ROYAL NAVY COLLABORATE ON MARINE AUTONOMY RESEARCH

The University has entered into a strategic partnership with the Royal Navy to conduct research and advance understanding around the future potential of marine autonomy. The partnership will see academics in fields including autonomous marine vessels and maritime cyber security working closely with navy personnel on a range of innovative projects. These will include Project Hecla, established in 2018 to optimise the Navy's ability to collect and exploit hydrographic and oceanographic information. The University will work with the project team on ways to enhance its feeding back of vital survey information to the UK Hydrographic Office and the Royal Navy's highly skilled HM cadre. The partnership will also look at harnessing the capabilities of the University's unique Cyber-SHIP Lab.

“

The University is delighted to formalise our partnership with the Royal Navy in the crucial area of marine and maritime autonomy research and innovation. This will capitalise on our internationally leading position in this broad field, our nationally unique on-campus facilities, our partnerships in Plymouth and the wider South West in particular, and the significant demonstration and testing opportunities in Plymouth Sound.

Professor Judith Petts CBE,
Vice-Chancellor.

MODELLING HOW COASTS WILL BE IMPACTED BY STORMS AND SEA-LEVEL RISE

Coastal scientists have developed a simple algorithm-based model that accurately predicts how coastlines could be affected by storms and sea-level rise and – as a result – enable communities to identify the actions they might need to take in order to adapt. The Forecasting Coastal Evolution (ForCE) model, developed by a team in the Coastal Processes Research Group, is capable of predicting both the short-term impact of violent storm or storm sequences (over days to years), as well as predicting the much longer-term evolution of the coast due to forecasted rising sea levels (decades). And unlike previous simple models of its kind that attempt forecasts on similar timescales, ForCE also considers other key factors, like tidal, surge and global sea-level rise data, to assess how beaches might be impacted by predicted climate change.

“

Top-level coastal managers around the world have recognised a real need to assess the resilience of our coastlines in a climate of changing waves and sea level. However, until now they have not had the essential tools that are required to make this assessment. We hope that our work with the ForCE model will be a significant step towards providing this new and essential capability.

Dr Mark Davidson, Associate Professor in Coastal Processes.



EMPLOYING SOCIAL SCIENCE TO TRACK PLASTIC DISPERSAL

Scientists have revealed how buoyant plastic items can travel around six metres per minute and cross an ocean following an innovative project that combined social science and computer modelling. The University, working with the Lost at Sea Project, examined how a ship's container, lost overboard in the North Atlantic east of New York in January 2014, resulted in printer cartridges washing up across a wide range of territories, including Florida, northern Norway and the Azores. Published in the journal *Environmental Pollution*, the research showed that around 1,500 items were reported on social media, and the team used oceanographic modelling tools to show how they reached their final resting place.

“

Cargo spillages are not common, but estimates suggest there could be several thousand containers lost at sea every year. They can cause harm to the seabed but, once ruptured, their contents can have an impact both where they are lost and – as shown in this study – much more widely.

Dr Andrew Turner, Associate Professor in Environmental Sciences.

UNIVERSITY LEADS CALL FOR DECADE OF DEEP-SEA RESEARCH

Researchers from the University have led an international team of scientists, spanning 45 institutions in 17 countries, to call for a dedicated decade of research to ensure better understanding of the deep seas. Coinciding with the UN Decade of Ocean Science for Sustainable Development, the group developed a detailed blueprint – named Challenger 150 and published across two research papers – of what they believe is needed and how it can be achieved. Challenger 150 will generate new geological, physical, biogeochemical and biological data through a global cooperative of science and innovation, including the application of new technology. These data will be used to understand how changes in the deep sea impact the wider ocean and life on the planet, which in turn will support decision-making on issues such as mining, fishing, conservation and laying fibre-optic cables.

“

The deep seas and seabed are increasingly being used by society, and they are seen as a potential future asset for the resources they possess. But managing these resources sustainably requires that we first understand deep-sea ecosystems and their role in our planet, its people and its atmosphere. Our vision is for a ten-year programme of science and discovery that is global in scale and targeted towards proving the science to inform decisions around deep-ocean use.

Kerry Howell, Professor of Deep-Sea Ecology and Lead Author of the research publications.



MARINE PROTECTED AREAS CAN BOOST FISH POPULATIONS BY ALMOST 400%

Protecting areas of the ocean and coastlines with 'whole site' Marine Protected Area (MPA) status can result in four-fold increases in the abundance and diversity of fish populations. Researchers from the University have been monitoring the impact of the Lyme Bay MPA since it was designated in 2008 – and published their findings in September, in the *Journal of Applied Ecology*. They found the number of different fish species inside the controlled zone is now more than four times (430%) greater than found outside the MPA's boundaries. In terms of overall abundance, there are 370% more fish to be found within the MPA than in similar areas outside it, where bottom-towed fishing is still permitted. The following month, HRH The Princess Royal met some of the academics responsible for the study when she joined them on board *RV Falcon Spirit* as part of her visit to learn more about Plymouth's seafood industry and efforts to protect the marine environment.

“

Globally, the implementation of MPAs has increased rapidly over the last 25 years. They are a key element of international plans to protect and preserve the ocean. However, as things stand, only 7.9% of the world's ocean is covered by such protection. Our ongoing work in Lyme Bay has shown the positive effects of addressing that, and in the face of the global climate and biodiversity crises, the need to do so has never been more pressing.

Dr Emma Sheehan, Associate Professor of Marine Ecology (Research).

MARINE RESEARCH PLYMOUTH

The University's reputation for marine science research is world leading – as evidenced by the 2021 *Times Higher Education* University Impact Rankings and two Queen's Anniversary Prize awards in the past decade. Now, thanks to a new strategic partnership, it has helped to ensure that the city of Plymouth has further strengthened its position as an international centre of excellence for marine research. Joining forces with two of the other world-leading research institutions – the Marine Biological Association and Plymouth Marine Laboratory – the partnership have launched Marine Research Plymouth to promote greater collaboration on major projects and ventures. With funding and support from the Natural Environment Research Council, the new partnership will encourage joint investment in research appointments, and support the sharing of capabilities, equipment and facilities.

“

World-leading science that ensures the health and sustainability of marine environments is dependent on collaboration. The University collaborates across the UK and globally, and its leadership in marine science has long been recognised. I am delighted that Marine Research Plymouth builds on our immensely strong local partnerships to showcase and position Plymouth – Britain's Ocean City – as a centre of global leadership, opportunity and impact in the marine and ocean sciences that are so vital to our planet.

Professor Judith Petts CBE, Vice-Chancellor.



GLOBAL MICROPLASTICS RESEARCH

The issue of microplastic pollution in the waterways of the world was the focus of a number of high-impact research papers. Research Fellow and National Geographic Explorer Dr Imogen Napper led one study that revealed that the Ganges River could be responsible for up to three billion microplastic particles entering the Bay of Bengal every day. Published in *Environmental Pollution*, this was the first investigation of microplastic abundance, characteristics and seasonal variation along the river and was based on samples collected by an international team of scientists as part of the National Geographic Society's Sea to Source: Ganges expedition.

Dr Napper was also the lead author of another significant piece of work, published in *Science of the Total Environment*, that investigated whether the hauling of rope on maritime vessels could be a major source of microplastic fragments entering the water. During the first study of its kind, the team in the International Marine Litter Research Unit conducted field and laboratory tests and found that rope could release between 20 and 760 fragments per metre hauled, depending upon its age. Another study found that flakes of paint could be the second most abundant form of microplastic particles in the ocean. Dr Andrew Turner, working with colleagues in the Marine Biological Association, found that there was an average of 0.01 paint flakes per cubic metre of seawater in samples taken from the North Atlantic.

And finally, University academics played a key role in the production of the first holistic assessment of marine and land-based pollution in the southern Caribbean. Analysing samples collected in 2019 by the all-female round-the-world sailing mission led by eXXpedition, academics identified 18 different polymers in the waters. Detailed ocean modelling and an assessment of regional policies helped the team to identify some of the environmental and human factors behind their distribution. Again, the research was published in *Science of the Total Environment*.





MULTI-MILLION POUND INITIATIVE ADVANCES THE SUSTAINABLE MANAGEMENT OF UK'S MARINE RESOURCES

The University is to lead an innovative new doctoral training project focused on the sustainable management of marine resources. The Centre for Doctoral Training in Sustainable Management of UK Marine Resources (SuMMeR CDT) has been supported by £2.2 million in funding from the Natural Environment Research Council and will train almost 50 interdisciplinary PhD students over the next seven years. The SuMMeR CDT includes coordinating partners Plymouth Marine Laboratory and the Marine Biological Association, along with the Universities of Exeter, Bangor and Heriot-Watt, as well as many more collaborative partners. Together they will cover existing and emerging topics of local, national and global importance, from enabling biodiversity gains and delivering net zero, to enhancing coastal protection and supporting coastal communities.

“

As global populations continue to rise, a huge range of increasing demands are being placed on our coasts and seas. People are turning more to the ocean as a potential source of food and energy, and to support human health and wellbeing. However, there is a delicate balance to be struck so that we harness the power of the ocean without affecting its contribution to the health of societies and the planet as a whole. That can only be achieved by looking at the issues from all angles, and the students and collaborations involved in the SuMMeR CDT will play a crucial role in driving that approach forward.

Melanie Austen, Professor of Ocean Society and Director of the SuMMeR CDT.



Sustainable Earth

SCIENTISTS AND STUDENTS HELP UNLOCK SECRETS OF RARE UK METEORITE

Scientists from the University have helped to uncover the secrets of a rare meteorite which could possibly reveal the origins of oceans and life on Earth. Research carried out on the Winchcombe meteorite, which fell in and around the Gloucestershire town in early 2021, has estimated the space rock dates to the beginning of the solar system, 4.5 billion years ago. Since the discovery, UK planetary scientists – including Dr Natasha Stephen and colleagues in the University's Plymouth Electron Microscopy Centre (PEMC) – have been determining its mineralogy and chemistry to better understand how the solar system formed. They have found the meteorite is a carbonaceous chondrite – a stony material, rich in water and organic matter, which has retained its chemistry from the formation of the solar system.

“

It's the first time we've had a British meteorite in the lab. The small planetary geology group we have here are all helping, thanks to Science and Technology Facilities Council funding, so it's been a fantastic catalyst for a new study bringing together academics, technicians and students.

Dr Natasha Stephen, Lecturer in Advanced Analysis (Earth and Planetary Sciences), and Director of PEMC.

COLLABORATION TO FOCUS ON RECYCLING OF PRECIOUS COMPONENTS IN ELECTRIC VEHICLE BATTERIES

A new University-industry collaboration has been launched to develop and refine a new approach to recycling precious metals contained within electric vehicle batteries. The process has been pioneered by UK-based critical metals specialist Altium Metals Ltd and is being validated and optimised under a research programme with the University. It sees end-of-life lithium-ion EV batteries recycled through the extraction and recovery of the lithium, cobalt, nickel and manganese components. The spent cathode material is leached in acid, with the resulting metals and lithium separated by selective precipitation and the graphite extracted as a purified solid. The final product is a chemical combination of metals and lithium which can be sold direct to battery manufacturers, compared to pure metals which require further processing.

“

To achieve UK net zero carbon emissions within the automotive and chemical manufacturing sectors, development of truly circular manufacturing practices is key. Our novel process looks to minimise reliance on imported battery-critical raw materials from overseas, ensuring future production and energy security, as we transition towards an electric vehicle-dominant transport sector.

Dr Lee Durndell, Lecturer in Chemistry.



€2.5 MILLION TO DEVELOP SUSTAINABLE SOILS FROM CONSTRUCTION WASTE AND BY-PRODUCTS

Waste from the construction industry and dredged sediments could provide a safe and sustainable source of healthy soils thanks to a new cross-Channel research project. The €2.5 million ReCon Soil project, supported by €1.8 million from the European Regional Development Fund via the Interreg France (Channel) England programme, is being led by researchers with extensive experience in the development of reconstructed soils and the wider physical and social impacts of soil erosion and degradation. Working with a variety of partners, they will develop and roll out at least three new soil recipes made from locally sourced construction waste, dredged sediments and agricultural by-products. These will be thoroughly investigated in laboratories, and then further assessed in the field at sites in the UK and France, to monitor their effectiveness and potential environmental impact.

“

Human intervention to sustain and improve soil was an ancient practice in the Amazon Basin and reconstructed soils can unquestionably be part of future solutions to soil health and climate mitigation. This project offers the exciting prospect of focusing the scientific and practical expertise of the project team to develop healthy soils and enable this process to be rolled out in the UK, France and beyond.

Mark Fitzsimons, Associate Professor of Environmental Chemistry and the project's Principal Investigator.

FUNDING TO RESEARCH THE MYSTERIOUS PROCESS OF 'SEAFLOOR SPREADING'

Geology researchers have secured a grant of more than £650,000 to conduct research into the mysterious volcanic activity that shapes the planet's oceanic crust. The process, known as seafloor spreading, sees magma move and solidify, adding millions of kilos of new material to the Earth's crust every second. What controls the magma's migration is not understood – but thanks to the funding from the Natural Environment Research Council, the team at Plymouth will study an ancient section of seafloor now exposed on land in the Oman mountains and use a combination of analytical methods to determine the pathways followed by magma.

“

The formation of new oceanic crust represents the largest magmatic system on Earth and involves the cooling and solidification of magma along the 70,000 km global network of seafloor spreading axes. Since the rocks of the deep oceans are inaccessible, scientists have largely had to employ geophysical experiments to investigate the sub-seafloor. This project offers us exciting opportunities to read the rock record of these magma processes in unprecedented detail to create a comprehensive picture of one of the building blocks of our planet.

Antony Morris, Professor of Geophysics and Geodynamics.

RESEARCHERS BEGIN CONSTRUCTION OF UNIQUE LIVING LAB ON CAMPUS

Construction has begun on a new building on the University campus made from a development of the centuries-old building material, cob. The single-storey building is to be a classroom and laboratory with researchers monitoring the performance of the new walling material, as well as demonstrating it to future building designers, contractors, housing associations and interested stakeholders. The construction is the latest phase of the award-winning Interreg VA France (Channel) England-funded CobBauge project, which is investigating whether an optimised version of cob can become a sustainable solution for a new generation of energy-efficient housing. Cob has a low embodied energy and is viewed by many as supporting the move to a net zero future.

“

This is the start of an exciting new applied research phase for CobBauge, where we have an opportunity to put into practice the exciting findings from the laboratory. We will create a living lab and demonstration site that will become the centre of attention for a wide range of people – from construction professionals to built environment students.

Steve Goodhew, Professor of Environmental Building and the project's Principal Investigator.



Health and Care Research

RESEARCH BREAKTHROUGH FOR MENINGIOMA DIAGNOSIS

A simple blood test could reduce the need for intrusive surgery when determining the best course of treatment for patients with a specific type of brain tumour. Researchers at the Brain Tumour Research Centre of Excellence have discovered a biomarker (Fibulin-2) that helps to distinguish whether meningioma – the most common form of adult primary brain tumour – is grade I or grade II. The grading is significant because lower-grade tumours can sometimes remain dormant for long periods, not requiring high risk surgery or harsh treatments. In total, 70–85% of meningioma cases are lower grade so, if the blood test – or liquid biopsy – is carried out, these patients may well be spared surgery or radiotherapy.

“

The identification of FBLN2 as a biomarker for meningioma has significant potential to improve the diagnosis, treatment, prognosis and follow-up of meningiomas.

Professor Oliver Hanemann,
Head of the Brain Tumour Research Centre of Excellence.



EXPERIMENTAL ANTIVIRAL PROVES EFFECTIVE IN HALTING SPREAD AND DAMAGE OF COVID-19

An experimental antiviral drug developed by scientists has been shown to significantly reduce both the levels and the impact of the virus that causes COVID-19. The team at the US National Institutes of Health (NIH), working with Dr Michael Jarvis from the University, has found that MK-4482 was effective when provided up to 12 hours before or 12 hours after infection with SARS-CoV-2. In a study published in *Nature Communications*, the researchers say treatment with MK-4482 – which was first developed to tackle influenza – could potentially mitigate high-risk exposure to SARS-CoV-2 and might be used to treat established SARS-CoV-2 infection alone or in combination with other agents. The drug is currently undergoing human clinical trials, but researchers say its ability to be provided orally could offer a significant advance on existing antivirals being used to treat COVID-19.

“

This is an exciting result that identifies MK-4482 as an additional antiviral against SARS-CoV-2. If the final human data show a similar antiviral effect, our preclinical animal data suggests it may be suitable for use as an orally administered pill following exposure to the virus, similar to the way we use Tamiflu for influenza. I think this additional control measure could prove to be really useful in the current pandemic.

Dr Michael Jarvis, Associate Professor in Virology and Immunology.

COMMON ANTIDEPRESSANT SHOULD NO LONGER BE USED TO TREAT PEOPLE WITH DEMENTIA

A University-led study has found that a drug used to treat agitation in people with dementia is no more effective than a placebo – and might even increase mortality. The research, published in *The Lancet*, showed that the antidepressant mirtazapine – routinely prescribed after non-drug patient-centred care has not worked – offered no improvement in agitation for people with dementia. Funded by the National Institute for Health Research (NIHR), the study recruited 204 people with probable or possible Alzheimer's disease from 20 sites around the UK.

“

Dementia affects 46 million people worldwide – a figure set to double over the next 20 years. Poor life quality is driven by problems like agitation and we need to find ways to help those affected. This study shows that a common way of managing symptoms is not helpful – and could even be detrimental. It's really important that these results are taken into account and mirtazapine is no longer used to treat agitation in people with dementia.

Professor Sube Banerjee,
Executive Dean of the Faculty of Health, and Research Lead.

RESEARCH SHOWS LINKS BETWEEN LOOT BOXES AND PROBLEM GAMING

The rise of loot boxes – purchasable video game features that offer randomised rewards – has resulted in the creation of a UK market estimated to be worth around £700 million. But their use has prompted considerable public debate, and now research by academics at Plymouth and Wolverhampton has shown that they are structurally and psychologically akin to gambling. Their study, commissioned by GambleAware and published in the journal *Addictive Behaviours* found that 93% of children in the UK play video games, and that up to 40% of these have opened loot boxes. And an analysis of 7,771 loot box purchasers found that around 5% of them generate around half of industry loot box revenues. A third of these gamers were found to fall into the 'problem gambler' category (PGSI 8+), establishing a significant correlation between loot box expenditure and problem gambling scores.



“

Our work has established that engagement with loot boxes is associated with problem gambling behaviours, with players encouraged to purchase through psychological techniques such as 'fear of missing out'. We have also demonstrated that at-risk individuals, such as problem gamblers, gamers and young people, make disproportionate contributions to loot box revenues. We have made a number of policy suggestions to better manage these risks to vulnerable people, although broader consumer protections may also be required.

Dr James Close, Senior Research Fellow in Biomedical and Health Informatics.

CELL ADAPTATION IN CRITICALLY ILL PATIENTS COULD BE DIFFERENCE BETWEEN LIFE AND DEATH

Creating the best conditions for cells to make energy and survive critical illness is a challenge little understood in modern medicine. But a study led by scientists at the University, in collaboration with University College London and the Universities of Cambridge and Southampton, has revealed early signs that cells in some critically ill patients actually adapt to their conditions by producing energy more efficiently. The research, published in the journal *Redox Biology*, took muscle and blood samples over 7 days from 21 critically ill patients in intensive care, and 12 healthy people, comparing cell behaviour. The study showed that all of the critically ill patients produced energy more efficiently than healthy people, in a pattern of changes that has previously been identified in cells adapting to low oxygen levels. There were also differences in the ways cells produced energy in the patients who survived, compared to those who died.

“

When a body is going through trauma, there's the temptation to think we need to give more oxygen or stimulate cells to survive. However, this research suggests that some cells can actually adapt to the conditions they're in. If we can unravel the cellular and molecular foundation of human resilience, we can enable the development of more effective life-support strategies.

Dr Helen McKenna, National Institute for Health Research Academic Clinical Fellow and Lead Author.

NEW TECHNOLOGY TO AID MEDICAL RESEARCH AND DISCOVERY

Biomedical science research at the University has received a significant boost following the procurement of a new state-of-the-art mass spectrometer – part-funded by a capital grant from the prestigious Wolfson Foundation. Used in proteomics – the in-depth study of proteins – the machine will enable researchers to analyse samples up to ten times faster than their current technology permits, meaning accelerated results and potentially faster rollout of treatments. The versatility of the new model of mass spectrometer will also result in a wider range of research applications, increasing the potential for local, national and international collaboration.

“

The advanced technology of the new mass spectrometer will substantially improve our ability to craft a global view of the processes underlying healthy and diseased cellular processes at the protein level. The work that we do in this area already has huge real-world implications and this new investment will speed translation of research into action. We're incredibly grateful to the Wolfson Foundation for their funding and for recognising how much impact this piece of equipment will have on the work taking place here.

Professor Sube Banerjee, Executive Dean of the Faculty of Health.

Enterprise

MARINE E-CHARGING LIVING LAB

Plymouth is to become the first city in the UK to install a network of shore-side charging facilities for its expanding fleet of electric maritime vessels, thanks to a project led by the University. Plymouth's Marine e-Charging Living Lab (MeLL) has received more than £570,000 as part of the Clean Maritime Demonstration Competition, funded by the Department for Transport and delivered in partnership with Innovate UK, and will use this to develop a network of charging facilities around Plymouth Sound, offering multiple, flexible sites and responding to the Maritime 2050 route map for maritime net zero. Before March 2022, it will identify suitable locations for charging facilities that can be easily linked to the National Grid while meeting both consumer and commercial demand. It will also develop and deploy an array of sensor technologies that can assess the environmental and operational impacts of e-charging.

“

This project has the potential to showcase Plymouth as a trailblazer in clean maritime innovation. It builds on our existing partnerships and shows that there is a concerted effort to make positive and lasting changes that will benefit both our city and the environment as a whole.

Professor Will Blake, Director of the Sustainable Earth Institute.

FUNDING COLLABORATIVE RESEARCH AND DEVELOPMENT

Ten new research collaborations with industry have been awarded a share of £200,000 to fund innovative new projects across science, engineering and health. The Research and Development Solutions Fund was created to stimulate industrial collaborations and knowledge transfer opportunities between researchers and businesses and provide ongoing support to the local economy during the pandemic. The fund, delivered in partnership between the University's Research and Innovation directorate and Thomas Westcott Chartered Accountants, has also been a catalyst for enabling businesses to gain even greater access to the University's facilities such as the COAST Laboratory, the Plymouth Electron Microscopy Centre and the Digital Fabrication Laboratory. Successful projects have ranged from tackling sediment erosion to investigating the antimicrobial properties of 'essential oils'.

“

The response over the first two rounds of funding was exceptional – we received a wealth of innovative applications from across different disciplines and industrial sectors, and that shows the sheer appetite for research and development. Bringing together businesses with world-class research and facilities is one of the ways we can help underpin a high-growth, high-skilled economy.

Adrian Dawson, Director of Research and Innovation.



DEVELOPING AUTONOMOUS TECHNOLOGY TO ASSESS SEAGRASS BEDS

A pioneering collaboration between the University and a Devon-based technology business has been launched to assess the threats posed to vital seagrass beds. HydroSurv Unmanned Survey (UK) Ltd has joined with researchers from the Marine Institute to study the impact of human activity and climate change on the health of the ecologically and economically important beds. Funded by a grant of more than £266,000 from Innovate UK's Smart Grants programme, the project will use autonomous vessels equipped with cutting-edge acoustic sensors to provide a new and comprehensive means of mapping seagrass beds. The project, which will include more than 40 days of on-water validation and testing, builds on existing work by HydroSurv and the University, facilitated through the Marine Business Technology Centre.

“

This is a really exciting collaboration combining our expertise in data analytics and knowledge of the marine environment with the HydroSurv's technical innovations in marine autonomy. There has long been a need for cost effective and robust monitoring of seagrass habitats. This project aims to address this need and demonstrate efficacy with a broad range of national stakeholders.

Dr Tim Scott, Associate Professor of Ocean Exploration.

NURTURING INTELLECTUAL PROPERTY

The University has a number of high-tech spinout companies that are supported by its intellectual property partner, Frontier IP. This year, Fieldwork Robotics, an agri-tech firm incorporating the work of Dr Martin Stoelen, raised £675,000 through an equity fundraising from existing and new investors. The proceeds will be used to support development of the company's flexible agricultural robot technology for harvesting soft fruit and vegetables. In particular, the funding will be used to accelerate the scale-up of a raspberry harvesting robot to bring it to market and embark on the development of a cauliflower harvesting robot in collaboration with Bonduelle, one of the world's largest vegetable producers.

Meanwhile, Pulsiv, which incorporates the innovative power conversion research and development expertise of Dr Zaki Ahmed, completed a second tranche of its equity funding round, raising a further £620,000, to bring the total of new money raised to £1.5 million. With a further £500,000 in loans converted as part of the UK government's Future Fund scheme, the total amount raised is £2 million. Pulsiv, and a third spinout, The Vaccine Group, both also announced a number of senior appointments during the year to strengthen their leadership.

THE KNOWLEDGE EXCHANGE FRAMEWORK

In 2021, the UK Research and Innovation Knowledge Exchange Framework (KEF) released its inaugural results and a set of interactive dashboards to enable higher education institutions (HEIs) to better understand and improve their performance in this field, as well as provide businesses and other users with more information to help them access world-class knowledge and expertise. The KEF groups universities of similar profiles to enable meaningful benchmarking, with Plymouth placed in a cluster of large universities that are typified by elements such as a broad discipline portfolio, generating a level of world-leading research across all areas, and significant research funding by government bodies (Cluster E). In two of the seven KEF perspectives, Plymouth achieved notable rankings:

- Local Growth and Regeneration, where the University is in the top 10% of all HEIs
- IP and Commercialisation, where the University is in the top 20%.

In the other perspectives, Plymouth achieved just above or below the average for Cluster E.

Research Funding

During the 2020–21 academic year, the University received £16.7 million in research income, with new awards and grants totalling £16.6 million. Here are some of the key awards in excess of £100,000.

PRINCIPAL LEAD	SPONSOR	DESCRIPTION	AWARD VALUE
Richard Byng	NHS National Institute for Health Research	The National Institute of Health Research Applied Research Collaboration (PenARC) for the South West Peninsula	£2,160,000
Deborah Greaves	European Regional Development Fund	FLOW (Floating Offshore Wind) Accelerator with WaveHub	£1,349,000
Zoe Mildon	Natural Environment Research Council	Quake4D: building physics-based, geologically rich models for investigating earthquake interaction and seismic hazard	£1,135,064
Richard Thompson	Natural Environment Research Council	BIO-PLASTIC-RISK: assessing how bioplastics break down and whether they affect terrestrial and marine species	£1,082,437
Martyn Hann	Engineering and Physical Sciences Research Council	EPSRC Strategic Equipment Call: COAST Floating Offshore Wind Turbine Testing Capability	£1,066,834
Ray Jones	Economic and Social Research Council	Connectivity and Digital Design for Promoting Health and Wellbeing Across Generations, Places and Spaces	£759,538
Emma Sheehan	Interreg	FISH INTEL: employing innovative underwater acoustic tracking technology to identify the environmental conditions a range of important marine species need in order to thrive	£745,395
Deborah Greaves	Engineering and Physical Sciences Research Council	Flexible Responsive Systems in Wave Energy (FlexWave): improving the design, manufacture and survivability of flexible wave energy converters	£673,385
Nicola Brennan and Helen Lloyd	NHS National Institute for Health Research	Optimising the delivery of remediation programmes for doctors: a participatory co-design and realist evaluation approach	£675,970
Melanie Austen	Natural Environment Research Council	GCRF Blue Communities: supporting the development, implementation and ongoing management of initiatives that promote the sustainable use of marine resources	£672,311
Richard Thompson	Natural Environment Research Council	Reducing the Impacts of Plastic Waste in Developing Countries (GCRF Plastics): a systems analysis approach to reducing plastic waste in Indonesian societies (PISCES)	£632,260
Antony Morris	Natural Environment Research Council	The 3D anatomy of magma transport at fast spreading ocean ridges	£613,685
Mark Fitzsimons	European Regional Development Fund	ReCon Soil: developing sustainable soils from construction waste and by-products	£605,000
Philip Hosegood	Garfield Weston Foundation	Continued funding for ongoing research on oceanographic drivers for ecosystem variability in the Indian Ocean	£500,000
Camille Carroll	Safra Foundation	Accelerating Clinical Treatments for Parkinson's Disease: a multi-arm multi-stage clinical trial platform (ACT-PD)	£374,022
Oliver Hanemann	Brain Tumour Research	Ongoing research into low-grade brain tumours	£350,000

PRINCIPAL LEAD	SPONSOR	DESCRIPTION	AWARD VALUE
Richard Thompson	Natural Environment Research Council	Lost at Sea – where are all the tyre particles? (TYRE-LOSS): tyre particle concentrations at their points of entry to the marine environment and their subsequent transport in the water column	£328,154
Paul Simpson	Economic and Social Research Council	Post-Terror Atmospheres in European Cities: international comparison of how counter-terrorism and urban security change the everyday experiences of residents across cities in Europe	£277,334
Richard Byng	University Hospitals Plymouth NHS Trust	Community Mental Health Framework Pilot Evaluation: testing potential models of delivery of community mental health services	£269,578
Yeaw Chu Lee	Interreg	EUROSWAC – Research and impact demonstrator: sustainable energy storage/heat transfer and impact of warm water reject	£257,094
Irene Manzella	Natural Environment Research Council	Smart sensing of moving landscapes and their defences	£254,891
Jennifer Freeman	NHS National Institute for Health Research	Management of chronic pelvic girdle pain following pregnancy: a randomised controlled feasibility trial	£219,353
Melanie Austen	Natural Environment Research Council	South West Partnership for Environmental and Economic Prosperity (SWEEP): delivering economic and community benefits to the South West, while protecting and enhancing the area's natural resources	£195,034
Raphael Stuhlmeier	Engineering and Physical Sciences Research Council	SWIM: stochastic wave modelling for inhomogeneous sea-states	£166,508
Steven Goodhew	Centre for Research into Energy Demand Solutions	Defect Visualisation via Thermography (DeViz): investigating whether the energy performance of new and renovated buildings can be improved with thermal imaging cameras as a core component of the construction process	£156,651
Kerryn Husk	Medical Research Council	Intervention development for community-based self-referred social prescribing	£145,322
Abigail McQuatters-Gollop	European Maritime and Fisheries Fund	NEA PANACEA (North East Atlantic project on biodiversity and eutrophication assessment integration and creation of effective measures): bringing together biodiversity datasets to identify trophic links and drivers of change	£127,088
Julian Elston	Torbay and South Devon NHS Foundation Trust	The feasibility and impact of a voluntary peer health and wellbeing coaching service for outpatients with chronic long-term conditions with low activation (chronic pain, multiple sclerosis and rheumatoid arthritis)	£111,555
Eduardo Miranda	Engineering and Physical Sciences Research Council	QCS Hub: Quantum Computing and Music project developing QuTune, a bespoke QC programming toolbox for musicians	£101,051

Interreg – EU interregional cooperation projects; Safra – Edmond J Safra Philanthropic Foundation

Education and Student Experience

23 INVESTING IN THE CAMPUS AND STUDENT EXPERIENCE

Intercity Place: a new home for the next generation of health professionals

Careers Service offers new curriculum support

Remote patient consultations: a first in south-west medical teaching

School of Society and Culture

Technology enhanced learning

Leading innovation in education for sustainable development

Integrated health and social care education

New postgraduate programme

28 EDUCATION SUCCESS AND RECOGNITION

Award for postgraduates' mental health toolkit

Recognition for graduate recruitment and mentoring

MSc in cyber security recognised by the National Cyber Security Centre

Education success and recognition

Honorary graduates 2021



Investing in the Campus and Student Experience



INTERCITY PLACE: A NEW HOME FOR THE NEXT GENERATION OF HEALTH PROFESSIONALS

The transformation of an iconic city railway station building into a new facility that will help educate the next generation of health professionals is under way – and ahead of schedule. The University and appointed contractor Kier have carried out enabling works at the 11-storey Intercity House – now renamed Intercity Place – including the removal of fixtures and fittings, to be replaced with specialist equipment for the training of nurses, midwives, paramedics, physiotherapists and other allied health professionals. Refurbishment and reuse of the existing building will reduce the carbon impact and is highly sustainable, and facade enhancement will support a sustainable heating, cooling and ventilation strategy. The project will be finished well in advance of the 2023–24 academic year. Therefore, new students arriving in 2022 will train in its facilities during their studies.

“

This is an important development for both the University and the city, and it is exciting to see it really taking shape. The University is already the largest provider of healthcare training in the South West, and this will dramatically enhance the education and experience we can offer students across the Faculty of Health. It will ensure we can continue to meet the demand for frontline hospital and healthcare workers in Plymouth, the wider South West and beyond.

Professor Judith Petts CBE,
Vice-Chancellor.





CAREERS SERVICE OFFERS NEW CURRICULUM SUPPORT

The Careers Service has embarked on a major programme of curriculum support with a number of subjects, ensuring careers education is now fully and systematically embedded across programmes and that it complements 'on-demand' central services. This curriculum support included a new one-day 'Enhance Your Future' development programme for first years, with overwhelmingly positive feedback from students. The programme was designed to ensure students engage with career thinking and action planning from an early stage of their University experience, allowing sufficient time for them to acquire the relevant skills, experience and networks to ensure they are competitively placed to compete for the best graduate jobs.

REMOTE PATIENT CONSULTATIONS: A FIRST IN SOUTH-WEST MEDICAL TEACHING

In a first for medical teaching in the South West, the University has begun to use new technology that enables students to see patient consultations remotely. The Microsoft HoloLens involves a consultant wearing a headlight-like device while conducting a consultation at the University Hospitals Plymouth NHS Trust (UHPNHST), with students watching and interacting from screens in the University's new expanded teaching space in Plymouth Science Park. Professor Hisham Khalil was the first to trial the technology. Students were able to interact with Hisham and the patient in real time and benefit from the additional features of the HoloLens such as graphics and data being shown simultaneously onscreen.

“

At Plymouth, we're known for the amount and quality of clinical exposure we give to our students, and COVID-19 has posed significant challenges. But thanks to this new technology, students can talk to the patient and me, and can see everything we're doing throughout the appointment. It's a fantastic piece of equipment and enables us to deliver excellent experiences while ensuring everyone remains safe.

Professor Hisham Khalil, Ear, Nose and Throat Consultant at University Hospitals Plymouth NHS Trust, and Head of the Peninsula Medical School.

SCHOOL OF SOCIETY AND CULTURE

A commitment to hands-on learning and the flexibility for students to swap modules from across 17 disciplines are two of the defining characteristics of the new School of Society and Culture, which launched in October. Bringing together the former Schools of Humanities and Performing Arts, and Law, Criminology and Government, the new school is using partnerships with major organisations such as The Box, Theatre Royal Plymouth and HMP Exeter to create practical learning opportunities for its students. And from their second year onwards, students will have the option to swap in modules from across law, performing arts, social science, and history and the humanities, enabling them to personalise their degrees.

“

By focusing on the impact our disciplines can have in the real world – and giving students genuine experience of putting this into practice – we are supporting the next generation of change-makers and showing the value of these critical subjects to society.

Professor Annika Bautz, Head of the School of Society and Culture.



TECHNOLOGY ENHANCED LEARNING

The University has unveiled its digital vision for 2030 and some of the guiding principles surrounding the provision of 'blended learning'. The Digital Strategic Plan (2021–25) sets out a goal for the University to be recognised for its digital provision on a global stage, offering solutions that are 'high performing, flexible and scalable to enable the institution to adapt quickly and thrive in a constantly changing landscape', and which 'empower its students and staff to make a difference'. Education and the Student Experience are significant foci, from the implementation of edgeless learning spaces, to improving accessibility and inclusion in order to overcome those barriers that reduce engagement with digital services. Alongside this, the University also released its Blended Learning Principles 2021–22, which were developed in consultation with staff and students. The principles are designed to harness the key positive experiences across areas including curriculum design, independent learning, assessment, academic community, and digital literacy and support, while mitigating the challenges. It also establishes some overarching principles, such as the need to develop activities designed to stimulate, engage and support students, in an inclusive academic community, regardless of whether they are delivered in person or online.

LEADING INNOVATION IN EDUCATION FOR SUSTAINABLE DEVELOPMENT

The University's Centre for Sustainable Futures (CSF) has an international reputation for leading and facilitating innovative approaches to curriculum development. This year, CSF made a significant contribution to the writing of revised guidance on Education for Sustainable Development by the Quality Assurance Agency for Higher Education and Advance HE. Published in March 2021, the guidance made particular reference to the University's approach to developing 'future fit' students who can be civic change leaders through engagement with an active, participatory and interdisciplinary pedagogy. This applied learning approach uses the campus and the Sustainability Hub as a space for student innovation, co-creation and research. At the same time, community partnership working across the city of Plymouth and the local area offers place-based learning opportunities where our students are engaged with education as sustainability. This can be seen, for example, through the development of the Low Carbon Devon Internship Programme, funded through the European Regional Development Fund, which offers short-term paid internship opportunities to students and recent graduates to work on carbon reduction projects with locally-based enterprises.



INTEGRATED HEALTH AND SOCIAL CARE EDUCATION

A new centre has been launched to enable students on health and social care courses to learn with and from each other. The Plymouth Integrative Health and Social Care Education Centre (PIHC) brings together courses, staff and students from every school in the Faculty of Health – Nursing and Midwifery, Health Professions, Biomedical Sciences, Dentistry, Medicine and Psychology. Students will have the opportunity to undertake interprofessional learning with a focus upon instilling strong teamworking ethic.

“

The best health and social care happens when doctors, dentists, nurses, health professionals, social workers, psychologists and more all work well together. PIHC will make that more likely by giving students greater opportunities to learn with and from each other.

Dr Phil Gee, Director of PIHC.

NEW POSTGRADUATE PROGRAMME

A new postgraduate programme has been launched to better train dentists in treating tooth pain. The MSc Endodontics will focus on the causes, diagnosis, prevention and treatment of diseases and injuries associated with tooth dental pulp. MSc Endodontics joins the four existing postgraduate programmes run in the University's Peninsula Dental School: MSc Restorative Dentistry, MSc Oral Surgery, MSc Periodontology and the Faculty of General Dental Practice (FGDP) Articulation Route.

Education Success and Recognition

AWARD FOR POSTGRADUATES' MENTAL HEALTH TOOLKIT

A tool to help postgraduates thrive in their studies while prioritising their mental health has been recognised with a national award. The Researcher Toolkit, designed and piloted at the University, won the FindAUniversity Award for the best Postgrad Wellbeing Initiative. The project, funded by the Office for Students, was created to help postgraduate researchers, who are at particular risk of experiencing mental ill health. The toolkit comprises five Researcher Development workshops which cover key research skills and tips – but repackage them within overarching messages about wellbeing, work–life balance, good working practice, and self-care. The workshops can be delivered in person or online and are always delivered by a postgraduate researcher to benefit from peer-to-peer support.

“

We wanted to create something that could make a genuine difference to people and be used across the UK. Mental health is a really important issue for students, and postgraduate research students are a particularly unique and diverse group, who might experience stigma in accessing support. We wanted to take a preventative approach and create something that would help to build a sense of community and to foster positive research culture.

Dr Sophie Homer, Lecturer in Psychology, who led the toolkit's creation following her own PhD.



RECOGNITION FOR GRADUATE RECRUITMENT AND MENTORING

The long-standing collaboration between the University and Babcock was recognised with a national accolade for helping students and graduates excel in their careers. Babcock won the Excellence in Careers and Employability Service Engagement award, after being nominated by the University, at the TARGET jobs National Graduate Recruitment Awards 2021. These recognise the best practices among recruiters nationwide, as well as the programmes that help nurture the UK's brightest talent. Babcock has long-standing links with the University, such as being the long-term sponsor and designer of the University's FLUX competition, where students compete in teams to find a solution to a business challenge. And it has recently developed a bespoke mentoring programme to connect students from widening participation backgrounds with industry professionals, with the aim of boosting confidence, networks and industry insight.

“

We are delighted that Babcock has been recognised for its efforts nationally in the world of university–employer partnerships and graduate recruitment. It is thoroughly deserved and shows the depth and breadth of our relationship and how we are working together for mutual benefit.

Steve Gaskin, Head of Student Careers.

MSc IN CYBER SECURITY RECOGNISED BY THE NATIONAL CYBER SECURITY CENTRE

The University's MSc Cyber Security degree has been formally recognised by the National Cyber Security Centre (NCSC). The programme, run by the School of Engineering, Computing and Mathematics, has been awarded NCSC provisional certification. The accolade acknowledges the academic content of the programme, which has been fully refreshed in recent years, and the expertise and facilities which students can access in the course of their studies. The University has been at the forefront of cyber security research for almost four decades, with its current work in the field being spearheaded by the Centre for Cyber Security, Communications and Network Research (CSCAN).

“

With cyber security playing a critical role in the protection, operation and ultimate growth of UK Plc and the global economy, it is essential that there are suitably well-qualified graduates. It is therefore important that there are educational programmes that can deliver highly skilled and well qualified graduates to meet that demand. The NCSC certification provides a strong basis for both applicants and employers to recognise the quality and focus of the learning provided.

Nathan Clarke, Professor of Cyber Security and Digital Forensics.

EDUCATION SUCCESS AND RECOGNITION

The University has a proud pedigree of external recognition for its teaching culture – particularly in relation to National Teaching Fellowships (NTFs) by Advance HE. This trend was continued in 2021 with the award of an NTF to Dr Pollyanna Magne, a Lecturer in Clinical Education and the Programme Lead for MSc Global Health. Pollyanna received the accolade for a sustained track record of impact on teaching and learning in higher education at a local, national and international level. Following an early career as a secondary school teacher, Pollyanna started at the University in 2001, as a Widening Participation Officer, helping pupils from disadvantaged backgrounds to realise their potential in higher education, and leading the national mentoring programme. She then joined the Learning Development Team, enabling students to develop their academic skills, and in 2007, became an Associate Professor in Educational Development and the Programme Director of the University's Postgraduate Certificate in Academic Practice. Pollyanna's award follows two other NTFs in late 2020, awarded to Dr Cathy Coehlo, Associate Professor in Clinical Dental Education, and Dr Lucy Spowart, Associate Professor in Postgraduate Education.



HONORARY GRADUATES 2021

PROFESSOR SIR CHRIS WHITTY RECEIVES HONORARY DOCTORATE AT GRADUATION 2021

England's Chief Medical Officer Professor Sir Chris Whitty joined graduating students on Plymouth Hoe when he was awarded an Honorary Doctorate of Medicine in recognition of his support for the University's medical science research community. Sir Chris, Chief Medical Adviser to the UK government and head of the public health profession, was presented with the doctorate by the University's Chancellor, The Lord Jonathan Kestenbaum, in the ceremony for the School of Biomedical Sciences and the Peninsula Medical School.

“

It was an honour to receive a degree with University of Plymouth students graduating in medicine and health sciences, many of whom have been working to combat COVID-19 as well as completing their studies. This generation of students have had a particularly hard last two years and have responded remarkably. It was also an opportunity to celebrate the great medical research the University conducts which will improve health in the future.

Professor Sir Chris Whitty.

AMONG THE OTHER LEADING PUBLIC FIGURES TO BE RECOGNISED THIS YEAR WERE:

- Vice Admiral Keith Blount, Commander of NATO's Allied Maritime Command, who was awarded an Honorary Doctorate of Business
- eminent Scottish zoologist Professor Sir Ian Lamont Boyd FRSB FRSE, who was awarded an Honorary Doctorate of Science
- Charles Courtenay, the 19th Earl of Devon, who received an Honorary Doctorate of Arts for his contribution to culture in the region and his support of the University's history and heritage research community
- multiple Emmy-nominated oceanographer Philippe Pierre Cousteau, who was awarded an Honorary Doctorate of Science for his work with the University's Marine Institute
- Lord Terence Etherton, formerly one of the most senior lawyers in the country, who held the positions of Master of the Rolls, Head of Civil Justice and Chancellor of the High Court, who was presented with an Honorary Doctorate of Laws
- Rear Admiral Nigel Guild FREng, a former Controller of the Royal Navy, who was awarded an Honorary Doctorate of Engineering
- Professor Richard Ibbetson, one of the most respected dental education experts in the country, who was presented with an Honorary Doctorate of Dentistry for his long standing support of the Peninsula Dental School
- Julia Elizabeth King, Baroness Brown of Cambridge DBE FRS FRAeS, revered British engineer and crossbench member of the House of Lords and the present Chair of the Carbon Trust, who was awarded an Honorary Doctorate of Engineering
- the Rt Revd and Rt Hon Dame Sarah Mullally DBE, the Bishop of London and former Chief Nursing Officer for England, who was presented with an Honorary Doctorate of Health.

Social and Economic Impact

The University contributes almost £820 million to the UK economy and nearly 9,500 jobs according to its latest social and economic impact assessment. Staff contribute 255,000 hours of pro bono public engagement, and students 27,000 hours of volunteering as part of a profound contribution to social cohesion and community engagement. The figures, gathered by Viewforth Consulting, following on from their 2018 report, are even more impressive considering the impact of the pandemic.

Analysing figures from the 2019–20 academic year, on a national level:

- the University generated **£819 million** of output, both directly and through secondary effects and student personal expenditure
- it generated **9,474 full-time equivalent** jobs in the UK as a result of the University's activities, including through the personal expenditure of students and international visitors
- in terms of GVA (Gross Value Added or contribution to UK Gross Domestic Production (GDP)), the University made a total contribution to UK GDP of more than **£444 million** and contributed **£52.9 million** of export earnings.

At a regional level, the University contributed **£772 million** in output to the South West economy, created a total of **9,018 jobs** (equivalent to 0.3% of the total South West workforce) and contributed **£421 million** of GVA.

One of the standout findings from the report was that *"The University has strengthened and extended its broader community ties and is actively embedding the concept of community and civic engagement across all aspects of its teaching and research, as well as in its management and day to day operations"*. This civic impact is evidenced in a variety of metrics, including the following:

- Nearly **5,800 patients** were treated at the four centres operated by the Peninsula Dental Social Enterprise, across **just under 20,000 appointments**, with a socially modified economic value of more than **£1.1 million**, with a quality of life gain estimated at a minimum of **£2.9 million**. These figures would likely have been 25% higher but for appointments lost owing to the pandemic.
- Plymouth students devote around **19,000 hours per year** to working in the Plymouth Law Clinic – where people can obtain free legal aid in what is an infamous 'legal aid desert'. This work has an economic value of **£708,000** and a socially modified economic value of nearly **£1.2 million**.
- The University was among the top five providers of consultancy services to external organisations, and 22nd for provision of those services to SMEs.
- The University's public arts programme generated a value of around **£517 million**.

“

Plymouth's approach has been to de facto abolish the concept of engagement as 'third' leg activity altogether and to embed active engagement and knowledge exchange into every part of its work, making it integral to the University's operations. This is a pioneering approach but one which is generating significant benefit to the University in strengthening its teaching and research portfolio and its reputational standing while at the same time maximising the benefits – both economic and social – to the surrounding community.

Viewforth Consulting.

THE G7 IN CORNWALL

The hosting of the G7 Summit in Carbis Bay, Cornwall, prompted significant University activity to showcase its expertise in many key areas of international interest. Through the Plymouth Perspectives campaign, some of our world-leading researchers shared their expert analysis on exactly what the G7 should examine, including the very real global health threat in the form of antimicrobial resistance; sustainable action needed on land and sea to address the climate change crisis; tackling education inequality; and driving global corporation taxes and investment into natural disaster infrastructure. In addition, seven thought leadership pieces were published by *The New Statesman*, and academics conducted extensive interviews in the international, national and regional media. Starting on World Oceans Day, three days before the summit, the University was a partner in a project that launched seven scientific monitoring devices into the sea – one for each G7 nation – to enhance understanding of how plastic pollution behaves in the marine environment. The University's expertise in agri-tech and robotics was showcased as part of an exhibition in Falmouth, demonstrating how the South West is driving ingenuity and innovation across the agriculture, robotics and sustainability sectors.

FUNDING SECURED FOR PIONEERING NATIONAL MARINE PARK

The UK's first National Marine Park has been awarded £9.5 million from the National Lottery Heritage Fund to make its vision of a park in the sea a reality. The bid, led by Plymouth City Council, with support from the University and people and organisations across the city and surrounding Plymouth Sound, was successful in its application to the Heritage Horizon Awards. The Marine Park will look to improve the physical and social infrastructure surrounding the Sound and use technology to engage people with it. There will be a two-year development period, before chosen ideas will be taken forward over a five-year delivery plan. Among those ideas being considered are innovation labs, a marine observation post, a 'hidden treasures of the Sound' project, and the development of digital park apps.

“

For well over a century, the remarkable natural resource of Plymouth Sound has attracted marine scientists from all over the world. What is particularly exciting about this funding is that it will allow us to work together across the city to develop projects that connect the land and sea as a system and convey that sense of wonder to a wider audience, particularly those who live in the city.

Professor Richard Thompson OBE FRS, Director of the Marine Institute.



COP26

The University was granted UN Observer Status for the UN's Climate Conference, COP26, and sent representatives including the Vice-Chancellor, Professor Judith Petts CBE, Professor Richard Thompson OBE FRS and Professor Deborah Greaves OBE FREng. Areas of University expertise, including offshore renewables, soil erosion, marine microplastic pollution and climate change communication, were the focus of exhibition stands in the COP26 Green Zone, and marine scientist Professor Jason Hall-Spencer was a panellist on an Intergovernmental Panel on Climate Change session. One of the University's spinout companies, Smart Applications Management, was commissioned to supply every conference delegate with a single card to enable them to use public transport, in a carbon-saving initiative – a UK first.

Like its support for G7, the University produced a significant array of thought leadership content for policymakers and the media. This was headed by the Vice-Chancellor, who played a lead role in developing a new set of climate commitments, endorsed by 140 UK universities, through her role as Chair of the Universities UK (UUK) Climate Task and Finish Group. Published by UUK, the commitments support government aims to cut carbon emissions by 78% by 2035 and include a pledge to champion the UN Sustainable Development Goals Accord. It called on the government to match-fund a series of COP26 scholarships and recognise and safeguard the role of universities in climate action. As part of the communication of these commitments, the Vice-Chancellor wrote an opinion piece that was published nationally. COP26 was also used as the launchpad for the University's campaign on 'systems thinking', which included five thought leadership pieces, advertorial in national newspapers and advertising at Glasgow Airport.

“

There is no simple solution to the climate crisis, with every sector of the economy facing a different set of challenges. Universities are some of the most effective weapons in the UK's climate and environmental armoury. Our research and expertise are behind the deep understanding of climate change as well as the technological advances driving decarbonisation and building resilience. We are also equipping graduates with the skills and determination we need to respond to the climate crisis, generating the leaders of tomorrow to deliver public and environmental good.

Professor Judith Petts CBE, Vice-Chancellor.

HEALTH IN COASTAL COMMUNITIES

Researchers contributed to the Chief Medical Officer's Annual Report highlighting the many and varied health challenges facing the UK's coastal communities. Professor of Health Policy Sheena Asthana and Senior Research Fellow Dr Alex Gibson analysed the burden of disease and health service data at a granular level to present compelling evidence that coastal communities experience a significantly higher burden of disease than their non-coastal counterparts. Professor Sir Chris Whitty's flagship report calls for a cross-government national strategy to improve the health and wellbeing of coastal communities. Cementing its reputation in this field, the University also launched its interdisciplinary Centre for Coastal Communities, bringing together research expertise from across health, government, crime, tourism and sustainability.

“

Coastal communities have received little attention in the health literature, perhaps because our mental maps tend to associate socio-economic deprivation and health inequalities with inner cities. Our research shows that coastal communities experience a significantly higher burden of disease than their non-coastal counterparts, with particularly worrying trends in public health-related outcomes for children and young people.

Professor Sheena Asthana, Director of the Plymouth Institute of Health and Care Research, and Co-Lead for the Centre for Coastal Communities.

THE BRAIN RESEARCH & IMAGING CENTRE

A new centre that transforms the University's ability to conduct research in the fields of neuroscience and cognition commenced operation in 2021. The Brain Research & Imaging Centre (BRIC) is the most advanced multi-modal brain imaging facility in the region, with seven cutting-edge human research laboratories, including an MRI suite with the most advanced 3-Tesla scanner available. The project was delivered in partnership with University Hospitals Plymouth NHS Trust and DDRC Healthcare, and will see patients provided with access to the MRI scanner to improve care.

“

A diverse range of internationally excellent researchers in the field of neuroscience underpins the University's strong track record in brain research. We ask important questions that draw upon expertise from the single molecule to the whole human, explore the basic mechanisms of cognition and behaviour, and apply advanced computational methods to improve our understanding of the brain in health and disease.

Stephen Hall, Professor of Human Neuroimaging, and Director of the Brain Research & Imaging Centre.



CREATIVE AND CULTURAL LEADERSHIP IN THE SOUTH WEST

The University, through its Knowledge Exchange initiative, The Bridge, has launched two programmes aimed at fostering collaboration across the creative and cultural sector and supporting the development of future leaders within them. In Cornwall, the Cultivator Creative and Cultural Leadership Development Programme, delivered by Golant Innovation in partnership with Mandy Berry and funded by the European Structural and Investment Fund and Arts Council England, is pitched at creative and cultural freelancers, SMEs and organisations, who are funded to attend an 8- to 12-month programme of workshops, peer-led activity, coaching and mentoring, and action research. The second programme, the Plymouth-based iLEAD, is being delivered by Nous Group in partnership with Plymouth's iMayflower team and is funded by the Department for Culture, Media and Skills and Arts Council England. A key aspect of iLEAD are the challenge projects, which task the cohort with collaborating in groups to explore, develop and test an idea that responds to one of three strategic themes: creative placemaking, immersive futures, and sustainability.

“

The investment in these concurrent programmes is a fantastic reflection of the ambition surrounding leadership development in the creative economy of the South West and the ability to collaborate across sectors to maximise strengths and opportunities.

Professor Chris Bennewith,
Interim Executive Dean of the
Faculty of Arts, Humanities
and Business.

REDUCING COVID-19 ANXIETY FOR SCHOOL PUPILS

Dental students have helped young people with additional needs to practise self-care and coping strategies to deal with anxiety around COVID-19. Delivering breathing exercises and a special workbook, students on the BDS Dentistry course worked with year 8 children at Brook Green Centre for Learning in Plymouth as part of their interprofessional engagement module. The module, run every year in conjunction with Peninsula Dental Social Enterprise (PDSE), sees second-year students on the BDS Dentistry and BSc (Hons) Dental Therapy and Hygiene courses work with organisations across Plymouth to deliver oral health interventions. It was run online for the first time this year on account of the pandemic.

“

The past 12 months have been a difficult time for all and have created new challenges in the way in which we live. This in turn has created new anxieties and barriers to healthcare and for some has made day-to-day living a scary and strange place. The students wanted to help address some of these new issues in a class of children with a range of complex and additional needs but also give a general health and wellbeing message with a dental twist.

Jemma Facenfield, PDSE dentist.



MANAGING POST-COVID SYMPTOMS THROUGH NUTRITION

A partnership between the University and the British Dietetics Association has resulted in a new 'one stop shop' being launched to help people manage post-COVID symptoms through nutritional care. The Nutrition and COVID-19 recovery knowledge hub is aimed at health professionals and the general public alike, enabling people with ongoing difficulties to find evidence-based nutritional resources, advice on symptoms and answers to common questions online. The only resource of its kind in the country, the hub asks people about their current diet, offers assistance on understanding evidence, and signposts to relevant, reliable and research-informed content to help. The project was also supported by Bournemouth University, NHS Greater Glasgow and Clyde, and Imperial College London.

“

Eating the right diet is crucial to keep well physically and mentally, and a key part of recovery from COVID-19 is to make sure your diet is healthy. This hub will guide the general public, and health professionals caring for those with post-COVID symptoms, on what might help them to manage their condition.

Mary Hickson, Professor in Dietetics.





IGNITE FESTIVAL OF CREATIVITY

A joint project between the University and Plymouth College of Art transformed the city into a giant gallery to showcase the work of its graduating students. From buses to buildings to big screens, the IGNITE Festival of Creativity radically reimagined the traditional graduate arts degree show, using locations around the city to celebrate the work of painters, film-makers, sculptors, designers and craft-makers, among many other disciplines. With the support of major organisations, including Plymouth Citybus, the City Centre Company, Drake Circus and the Real Ideas Organisation, the festival ran for more than six weeks and was seen by tens of thousands of people. It also featured an online portal – IGNITE Futures – designed to bring together more than 400 registered students with businesses and community groups. Thanks to the portal, a number of commercial opportunities were created and several graduate jobs filled, and its impact was recognised by *Times Higher Education*, which shortlisted the project in the 2021 THE Awards for Technological or Digital Innovation of the Year.

“

To be shortlisted by the THE Awards is outstanding recognition of the innovative and collaborative spirit that has driven the creation of the IGNITE Futures platform. It has transformed the very nature of the traditional arts degree show and created an interactive portal that connects our creative industries with new and emerging talent.

Professor Chris Bennewith,
Interim Executive Dean,
Faculty of Arts, Humanities
and Business.



SOCIOECONOMIC REGENERATION

A £7.6 million immersive technology hub launched in Plymouth with the input of researchers at the University has placed the city and the region “firmly on the cultural and technological map”, according to the chair of Arts Council England. Sir Nicholas Serota said the “world class space” would have “local people at its heart” as it prepared to welcome its first visitors. Developed by the Real Ideas Organisation, in partnership with Plymouth City Council and the University’s Institute of Digital Art and Technology (i-DAT), the Market Hall in Devonport creates new space for digital and technology experts, and contains an immersive dome designed to show 360-degree films.

“

The Market Hall will be transformative for Plymouth and its status as an emerging hub for immersive and creative digital technology. The University can reflect with a genuine pride that this landmark, and beautiful, development builds upon more than a decade of work at the Immersive Vision Theatre on campus, and our co-founding of the Fulldome UK, which supports artists and researchers working in the field of immersive dome environments.

Professor Mike Phillips,
Director of Research at i-DAT.

HOME-SCHOOL SCIENCE LESSONS

A science education expert earned widespread recognition – and parental praise – after launching a series of online science lessons for home-schoolers. Kelly Davis worked with technicians Nico Bray and Richard Ralls to film a series of 5- to 10-minute videos, and uploaded them to YouTube under the banner of Kelly’s Kitchen Science. She produced extra resources for parents to help them to extend the learning, and even produced a bespoke experiment that was broadcast on regional BBC Radio and online.

“

Schools have done a remarkable job to support pupils during lockdown. In many cases, however, that did mean that children had to increase their amount of screen time and undertake more worksheet-based exercises. Through these videos, I wanted to help people to step away from that for a short time and have some fun with their children.

Kelly Davis, Lecturer in Science Education and Programme Lead in Primary-level initial teacher training within the University’s Plymouth Institute of Education.



International

INTERNATIONAL

In March 2021, the University formalised its International Strategy, based upon five complementary and mutually reinforcing ambitions:

1. **A thriving international student body**

This establishes a commitment to growing the number of international students who will be working in a diverse range of modes and settings in Plymouth and around the world. Supporting this are several aims: the creation of a vibrant international student population in the city, including through an institutional summer school; a distinctive transnational education identity, including the establishment of several new strategic partnerships; and establishing and growing online postgraduate taught degrees and continued professional development.

2. **Research and knowledge exchange that is characterised by networks, partnerships and collaborations that span the globe**

Ambition 2 seeks to further ensure that the University's research community is able to engage to solve global challenges. This will involve building high quality and mutually beneficial international research partnerships aligned to our research institutes; conducting research and innovation that maximise impact in addressing challenges articulated by the

UN Sustainable Development Goals; attracting the best global researchers and seeking partner support for doctoral studentships; and developing knowledge exchange collaborations with overseas industry, governments and charities.

3. **Education characterised by globalised student experience**

Plymouth students will experience an education that broadens their knowledge, abilities and awareness as global citizens to the benefit of both their intellectual and personal growth. This means that their learning will be global in outlook, underpinned by an increased number of international exchanges.

4. **Global Plymouth community**

Ambition 4 envisages a welcoming and inclusive Plymouth community where staff, students and alumni flourish, succeed and take pride in the University wherever they have engaged with it. This is supported by four aims, namely: creating an inclusive and welcoming international student experience; increasing the diversity of our international staff community; developing a large and engaged international alumni network; and improving the global visibility of the University to past, current and future students, staff and stakeholders.

5. **International activity that focuses on and promotes sustainable practice**

Ambition 5 states that the University's engagement with the world should address the challenges of social and economic sustainability. The institution has a responsibility and a leadership role to play in sustainable development, and this will be manifested in a variety of ways – from programmes embracing education for sustainable development, to our research relating to marine conservation, and to health, wellbeing and sustainability.





SUPPORTING INTERNATIONAL ACADEMIC PARTNERS

The University has academic partners in Sri Lanka, Greece, Switzerland, Hong Kong and Malaysia, and is working with them to develop a leading transnational education offering. For example, in 2021, we have worked to approve a BSc (Hons) Nursing top-up with our long-standing partner, the National School of Business Management (NSBM) in Sri Lanka, who now have over 2,100 students studying University of Plymouth degrees in Sri Lanka. This complements our existing offer of degrees in business, computing, design and quantity surveying. NSBM becomes the first of our international partners to offer Nursing and the University is looking to expand the health portfolio with new degrees in Psychology, Public Health and Nutrition, Biomedical Sciences, and Physiotherapy and Exercise over the course of the 2021/22 academic year.

In Malaysia meanwhile, the University has worked with Peninsula College to launch its new 'Ship Campus', which is now offering courses including maritime business, accountancy and business. The range of programmes on offer is set to increase over the next few years to include digital design engineering, game arts, tourism, engineering and computing. A range of postgraduate opportunities will also focus on supporting part-time provision within Malaysia designed to support professionals within the area of supply chain and logistics and associated specialist sectors.

Awards, Success and Appointments

UNIVERSITY AMONG THE GLOBAL ELITE FOR SUSTAINABLE DEVELOPMENT EXCELLENCE

In its first-ever appearance in the *Times Higher Education* Impact Rankings, the University was named as one of the top 25 institutions globally – and first for marine. The rankings – the only global performance tables that assess universities against the UN Sustainable Development Goals (SDGs) – ranked Plymouth 23rd out of more than 1,100 universities, reinforcing its reputation for world-leading and award-winning sustainability research and teaching. It also achieved considerable worldwide success in a number of individual tables linked to specific SDGs:

- 1st globally in relation to SDG 14: Life Below Water, recognising the quality of the University's marine research and teaching as well as its efforts to reduce the impact of campus activities on the marine environment
- 9th worldwide in relation to SDG 17: Partnerships for the Goals, for its efforts to support the SDGs through collaboration with other countries, the promotion of best practices and the publication of data
- 19th in the world in SDG 2: Zero Hunger, recognising its research on hunger, its teaching on food sustainability and its commitment to tackle food waste and address hunger among students and local communities
- In the top 50 globally for its work linked to SDG 7: Affordable and Clean Energy, and SDG 11: Sustainable Cities and Communities.

“

This is an outstanding achievement and a ringing endorsement of our excellence in all aspects of sustainability. It celebrates decades of building on our core strengths, investing in research teams and facilities and, in particular, it reinforces our leadership in all things marine and rightfully positions us at the global forefront of this field. It acknowledges our long-standing partnerships with industry and academia, and our long-standing commitment to use our own sustainability practices to inspire change on a local, regional and international scale.

Professor Judith Petts CBE,
Vice-Chancellor.



PLYMOUTH RISING IN NATIONAL LEAGUE TABLES

The University improved its position in every major national higher education league table during the course of the year. *The Guardian University Guide* saw Plymouth climb 12 places to joint 41st – its highest ever position and the fifth straight year of improvement. In the *Complete University Guide*, the University improved its overall rank for a second year running, from 71st to 69th, with more than 50% of its subjects rising up their individual tables as well. And there was a one place rise in *The Times* and *Sunday Times Good University Guide* to 58th.



ACADEMIC PROMOTIONS 2021

PROFESSORS

Jeremy Goslin, Professor of Experimental Psychology, Faculty of Health, School of Psychology

Sally Hanks, Professor of Clinical Education, Faculty of Health, Peninsula Dental School

Zoë James, Professor of Criminology, Faculty of Arts, Humanities and Business, School of Culture and Society

Antonio Rago, Professor of Theoretical Physics, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

Robert Witton, Professor of Community Dentistry, Faculty of Health, Peninsula Dental School

ASSOCIATE PROFESSORS

Darren Aoki, Associate Professor of World History and Oral History, Faculty of Arts, Humanities and Business, School of Culture and Society

Louise Belfield, Associate Professor of Biomedical and Oral Health Sciences (Education), Faculty of Health, Peninsula Dental School

Zoe Brookes, Associate Professor of Dental Education and Research, Faculty of Health, Peninsula Dental School

Rachel Carter, Associate Professor (Education), Faculty of Health, School of Nursing and Midwifery

Wendy Clyne, Associate Professor of Applied Psychology (Research), Faculty of Health, Peninsula Medical School

Gyorgy Fejer, Associate Professor of Infection and Immunity, Faculty of Health, School of Biomedical Sciences

Louise Firth, Associate Professor of Marine Ecology, Faculty of Science and Engineering, School of Biological and Marine Sciences

Mario Gianni, Associate Professor of Robotics, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

Martyn Hann, Associate Professor of Coastal and Offshore Renewable Energy Engineering, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

Kerryn Husk, Associate Professor of Health Services (Research), Faculty of Health, Peninsula Medical School

Caroline Jamison, Associate Professor of Nursing (Education), Faculty of Health, School of Nursing and Midwifery

Kris Jeremy, Associate Professor of Biochemistry (Education), Faculty of Health, School of Biomedical Sciences

Peter Jones, Associate Professor, Faculty of Health, School of Psychology

Asiya Khan, Associate Professor of Multimedia Communication and Intelligent Control, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

George Littlejohn, Associate Professor of Plant and Fungal Biology, Faculty of Science and Engineering, School of Biological and Marine Sciences

Irene Manzella, Associate Professor of Engineering Geology and Geohazards, Faculty of Science and Engineering, School of Geography, Earth and Environmental Sciences

Lucy Obolensky, Associate Professor of Global Health and Remote Medicine, Faculty of Health, Peninsula Medical School

Marco Palomino, Associate Professor of Big Data and Information Systems, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

Joanne Paton, Associate Professor of Podiatry, Faculty of Health, School of Health Professions

Gunnar Schmidtman, Associate Professor of Optometry and Vision Science, Faculty of Health, School of Health Professions

Michael Thom, Associate Professor of Zoology, Faculty of Science and Engineering, School of Biological and Marine Sciences (Posthumous Award)

Yi Wang, Associate Professor of Management and Business Decision Making, Faculty of Arts, Humanities and Business, Plymouth Business School

SENIOR RESEARCH FELLOWS

Edward Ransley, Senior Research Fellow, Faculty of Science and Engineering, School of Engineering, Computing and Mathematics

Dawn Swancutt, Senior Research Fellow, Faculty of Health, Peninsula Medical School

Jessie Woodbridge, Senior Research Fellow, Faculty of Science and Engineering, School of Geography, Earth and Environmental Sciences



STAFF HONOURS

This year saw many prestigious awards and honours conferred on members of the University's academic community. They included the following:

- 1 **Professor Ray Jones** was awarded an MBE in the Queen's Birthday Honours List for services to digital health and social care.
- 2 **Professor Bridie Kent** was named a Fellow of the Royal College of Nursing.
- 3 **Professor Matthew Cramp**, Consultant Hepatologist at University Hospitals Plymouth NHS Trust and Chair in Hepatology at the University, won an Excellence in Transplantation Award as part of the 2021 UK Awards for Excellence in Organ and Tissue Donation and Transplantation.
- 4 **Dr Camille Carroll**, Associate Professor in Neurology, won the Tom Isaacs Award, given by Cure Parkinson's and the Van Andel Institute.
- 5 **Professor Alison Raby**, Head of the COAST Engineering Research Group, was named by the Women's Engineering Society as a recipient of its Top 50 Women in Engineering: Engineering Heroes awards.
- 6 **Dr Louis Halewood** was named as the joint winner of the 2020 Sir Julian Corbett Prize in Modern Naval History, chosen by the Institute of Historical Research.
- 7 **Professor Robert Witton**, Director of Community-based Dentistry and Chief Executive of Peninsula Dental Social Enterprise (PDSE), was awarded an Honorary Fellowship of the Faculty for Homeless and Inclusion Health.
- 8 **Professor Katharine Willis** was appointed an Expert (Specialist) by the Design Council.
- 9 **Dr Rich Boden** has been elected Trustee and Council Member of the Linnean Society of London, the world's oldest active biology society.

Professor Michael Punt has been appointed as Chair of the Austrian Science Fund (FWF) PEEK Board.





UNIVERSITY OF PLYMOUTH

Advancing knowledge, transforming lives

University of Plymouth
Drake Circus
Plymouth
Devon PL4 8AA
United Kingdom

The University is committed to the promotion of equality and diversity. If you require this publication in an alternative format, please contact us on +44 (0)1752 588000.