

LOCAL NEWS AND EVENTS, FROM THE UNIVERSITY OF SURREY, TO YOU.

ADVANCING ARTIFICIAL INTELLIGENCE DRIVING DIGITAL HEALTH BOOSTING SOLAR POWER







**SAVING THE LIVES** OF ASIAN ELEPHANTS



NURTURING THE NATION'S NURSES FOR 40 YEARS

#### **OUR ROYAL APPOINTMENTS**



**BUILDING A BETTER FUTURE...** 

**OUR £60 MILLION CAMPAIGN** 



MAKING GAMING MORE SUSTAINABLE



# WELCOME

## **CONTENTS**





# WELCOME TO YOUR UNIVERSITY

Thanks for picking up this latest copy of *Your University*. This is our newspaper for the local community that aims to let you know what we're doing on campus, and how our research and other activities extend into Guildford and beyond.

In February, we launched an ambitious new global campaign, The Future Says Surrey. The campaign aims to raise £60 million in three years to help the University of Surrey continue making positive impacts on society through our cutting-edge research, including people-centred artificial intelligence (AI), sustainability and health. We'll also be able to further invest in our diverse student community, with new initiatives to widen participation in education through scholarships, bursaries and additional support for those facing hardship.

As we look at our community activities, highlights in this issue include **charity volunteering action** from our Students' Union, a **return to in-person events**, as well as the expansion of our **street marshals' scheme** in Guildford.

Readers can also hear from some of our students and academics, and learn about **access to justice** with our School of Law helping displaced young people.

We're celebrating **40 years of nursing** at Surrey, and focusing on the **impact artificial intelligence** is going to make as the technology moves forwards.

Don't forget to see the **upcoming events you can take part in**, and learn more about our campaign, The Future Says Surrey, which will make a difference around the globe and right here in Guildford.

Thanks for reading



**Public Engagement** 

Ross Kelway,

Manager

PUBLIC EVENTS & PERFORMANCES ARE BACK (PAGE 13)

# YOU CAN CONTACT US

We want to work with local residents like you to make our town even better! From language courses to sustainability projects, we'd love you to get involved and send us your ideas. publicengagement@surrey.ac.uk

0

surrey.ac.uk/community

@UniOfSurreyCPE

# LOCAL IMPACT

\_\_\_\_\_

# NEW £1M CLINICAL RESEARCH FACILITY TO BE BUILT

The National Institute for Health Research (NIHR) has awarded £1m to the University and Royal Surrey NHS Foundation Trust to form a new clinical research facility.

The state-of-the-art facility will be based at the University's Manor Park campus, adjacent to the hospital.

It will expand the shared medical research capabilities of the hospital and University, providing dedicated space, specialist equipment and skilled staff to support early-stage clinical research, including first-inhuman clinical trials.

Research studies are expected to cover a broad range of specialities including cancer, diabetes, endocrinology, ophthalmology, genetic rare diseases, neurology, immunology, digestive and liver diseases, artificial intelligence (AI), robotic surgery and nuclear medicine.

The NIHR facility will be jointly led by Co-Directors Dr Hana Hassanin from the University and Dr Stephen Barnett from the Royal Surrey NHS Foundation Trust, and Professor Aftab Ala, who has a clinical role at the hospital and a research role at the University, as Deputy Director.



## TELL US WHAT YOU THINK AND ENTER OUR CASH PRIZE DRAW

We're inviting everyone living in Guildford borough to take part in our Guildford Residents' Survey. Launched in 2015, we run this survey every year as a way for you to give us your ideas and feedback to improve the University's impact on our home town.

Join over 1,000 local residents and have your say. Your feedback will inform our local events and activities over the next year, helping us to give back to our community.

Everyone who completes the survey before 5pm on 26 June 2022 will be entered into our prize draw, to win one of three £100 cash prizes.

## **COMPLETE THE SURVEY** BY 26 JUNE 2022:

www.surrey.ac.uk/ guildfordsurvey2022

## **RE-USING AND RECYCLING FURNITURE** SURREY DONATES 179 ITEMS TO SIX LOCAL SCHOOLS

Last year, we collaborated with six schools in Surrey and North East Hampshire to donate and re-use furniture. Items donated included office chairs, electronic pianos, keyboards, filing cabinets and chemistry glassware, with the donation supporting the University's efforts to reduce waste and increase the re-use of items.

Thamasin Young, Higher Education Outreach Network (HEON) Partner Officer at the University, says: "This has been a great opportunity to provide support to our schools with challenging budgets, whilst also reducing unnecessary waste. Word is spreading and interest is coming in – this demonstrates a clear need."

Karen Gilbert, Partnership Manager for Wavell School, adds: "We were delighted to be offered the furniture and other items from the University of Surrey and took full advantage of their generous offer. Not only does it help to support our budget but their recycling initiative completely fits with our endeavours to be as sustainable as possible and demonstrates to our students that we put our ethos into practice."

More donation events will be planned in future to include more local schools.



# LISTENING TO STAFF IDEAS AT THE ROYAL SURREY

In January, the Royal Surrey County Hospital (RSCH), supported by the University, launched Bid for Better, a call to action for RSCH employees to make a small change with a big impact for staff and patients.

4

Thanks to funding from the Royal Surrey Charity, RSCH staff have been asked to submit project ideas worth £5,000-£30,000, on anything from events to equipment, and new apps to refurbishing patient areas.

Where projects align with the University's research or areas of expertise, we're supporting with co-funding, academic support and use of our facilities and equipment.

Examples of similar projects in other trusts include:

- FUN AND FITNESS, a community sports programme in Greenwich supporting adults with learning disabilities to increase their exercise and improve their physical and mental health
- HEALTHY IO, a project at Kings College Hospital Trust to improve the health of people living with diabetes, using a digital urine screening tool for early identification of chronic kidney disease.



Shortlisted ideas were presented to a panel in April, so watch this space for more news.

Rachel Hargreaves, Healthcare Partnerships Manager at Surrey, said, "We're delighted to support the hospital in this exciting initiative. Through co-designing and co-funding projects we are demonstrating our commitment to develop strategically aligned and mutually beneficial collaborations with our local hospital."

For more information on the Bid for Better scheme, visit www.royalsurrey.nhs.uk/bid-for-better





## EVENTS BOUNCE BACK AT SURREY

As restrictions eased across the country, the University opened back up for public events.

For the first time in nearly two years, the University of Surrey Orchestra welcomed talented local musicians back for their Community Orchestra Day.

The Guildford School of Acting also gave audiences a glimpse of future world-class acting talents in their autumn shows.

We hosted the Surrey Hills Area of Outstanding Natural Beauty Society to discuss "Our Climate and Biodiversity Emergency", with a lively debate from a panel of experts.

And the Guildford Society also ran an architecture lecture on "Multiple Housing – Best Practice for the Future".

Check out our upcoming events: www.surrey.ac.uk/events



With students back on campus, the Students' Union wasted no time in ramping up their activities for the local community and charity partners, really embodying their slogan, 'Do something GOOD, gain something GREAT'.

Despite the pandemic, student volunteering has continued apace with 13,555 hours logged by 115 students across 85 activities, including local charities Halow, Royal Surrey Country Hospital Trust, through to turtle conservation in Sri Lanka. Students can volunteer in every region of the UK and across the world, with 304 partner organisations working through our Surrey Volunteering platform (surreyvolunteering.com).

The annual Guildford Kelly's 10k charity run returned, with student volunteers marshalling the race.

Our student clubs and societies raised over £1,500 for local and national charities including Oakleaf, Rainbow Trust and the Alzheimer's Society.

## £17,696 Students' Union's charity fundraising total

This year, our Students' Union is organising a fundraising trek to scale Mount Kilimanjaro! 12 students will collectively fundraise upwards of £40k for WWF.

Students raised £5,659 for Movember



## IMPROVING AIR QUALITY IN GUILDFORD

An air pollution sensing unit provided by the University's Global Centre for Clean Air Research, has been installed at ZERO on Friary Street, run by Zero Carbon Guildford. It shows visitors real-time air pollution data there.

It shows the concentration of particulate matter – solid particles or liquid in the air, such as soot or smoke – which can be inhaled and cause health problems.

The team will add further sensors around Guildford town centre, with data being made available 24/7. By watching the figures, we'll be able to see the spike in particulate matter levels when motorbikes, buses or taxis pass, or when restaurant kitchens fire up at mealtimes.

Particulate matter pollution has a negative impact on both physical and mental health, and can be a problem in Guildford where traffic levels are high and the geography inhibits the dispersion of pollution. By measuring local pollution levels, the team hopes to better understand the scale of the problem and encourage everyone to help clean up Guildford's air.



## **NO.1 FOR GRADUATE EMPLOYMENT**

The University was recently awarded University of the Year for Graduate Employment in the Times/Sunday Times Good University Guide for 2022.

The award recognises our high performance in the employability of our graduates.

Graduate Outcomes data collected by the Higher Education Standards Agency (HESA) rates the University of Surrey's graduates as among the most employable in the UK, and second only to the University of Oxford in the South of England. This is as a result of consistent focus on preparing our students for employment, our successful work placement schemes, and the support provided by our Employability and Careers team. We even recently won the Best University Placement Service in the National Undergraduate Employability Awards for the third year in a row. In the summer of 2021, 50 new funded internships were introduced for our students, focused on under-represented groups to help boost their employment prospects when they graduate – and we're aiming to grow this scheme in the coming years.

Frances Gow, Head of Employability and Careers at Surrey, said: "We have a mission to develop talented and highly sought-after global students and graduates. We're delivering on that through career management skills and our awardwinning placement service and the creation of opportunities with local, national and international employers through relationships constantly built and nurtured by hundreds of colleagues."



# **ROTECTING GUILDFORD'S STREETS**

Our street marshal service sets out to minimise late-night noise and anti-social behaviour and improve student safety on Guildford's streets. After several successful years running this scheme, we're delighted to be improving the Street Marshal service along our neighbouring roads.

Funded by the University, the Students' Union and purpose-built accommodation provider Scape, our Street Marshals operate between 10.30pm-3.30am on Guildford's popular student nights, with an increased service during peak-times such as Freshers' Week. These patrols were boosted in 2021 with the help of additional funding. We were able to deliver the service seven nights a week across three areas of Guildford with high student traffic after dark. And during the weeks leading up to the Christmas period – it was four nights a week across four areas of Guildford.

We are now aiming to work with additional funding partners to further boost our Street Marshal service from September 2022.



5





## WELLBEING IN SOUTHWAY AREA OF GUILDFORD

A growing group of researchers at the University are looking at ways to improve wellbeing for local residents in relation to the areas they live in. Focusing on the Southway area, they have investigated how people feel about the place. They have already identified some small changes that could make a difference to people's lives.

The team are working with the North West Guildford community to understand their priorities, and create new solutions together that can enhance Southway. They will host a community world café event in April.

The aim is for residents, council and researchers to work together to design activities in Southway that enhance the physical and social environment, and ultimately improve quality of life in the area. Ideas include revitalising community green spaces, creating a bug hotel and using air quality sensors in the area. The University will use these as opportunities to develop connections and relationships within the community.

If you would like to join us in this creative project, please contact **Dr. Kit Tapson (k.tapson@surrey.ac.uk).** 



# LIVING NEXT DOOR TO STUDENTS

We're working closely with local residents, Guildford Borough Councillors, police and a letting agent to improve living alongside students.

Sometimes the differences of lifestyles between students and residents can fall out of balance. We encourage students to be respectful and quiet, but it's important that we listen to and get feedback from our neighbours.

After a group of long-term neighbours got in touch, our Public Engagement team helped set up a residents' group for the areas of Lynwood, Sandlewood and Hollow Close. Neighbours have been invited to several community meetings with councillors, Surrey Police and a local lettings agent, allowing everyone to air feedback, concerns and ideas to reduce the impact and levels of student noise in the area.

We're working closely with our student residents and taking direct action to support our community, showing the importance of open communication.



The University is partnering with SSE Energy Solutions to dramatically increase the amount of renewable energy we make on campus from 0.1% to 20% of total annual demand.

To reach 'net-zero', the amount of greenhouse gas produced and the amount removed from the atmosphere (e.g. through trees) must balance out.

The new partnership will see SSE design, build, operate and maintain a new solar facility.

Professor Max Lu, President and Vice-Chancellor of the University, said: "This partnership is a landmark moment for the University of Surrey as it underpins our ambition to achieve our Net-Zero carbon target by 2030 and affirms our commitment to being one of the most sustainable universities in the sector."

6

# LEARNING ABOUT LAW

During the summer of 2021, Surrey's School of Law ran several inspiring events in close connection with the Guildford community.

#### LAWYERS AGAINST POVERTY

One such event was the Access to Justice Clinic's, Lawyers Against Poverty: Legal Confidence session, delivered by Dr Tehmina Khan and Liz Williams.

The workshop was set up to work with displaced young people (such as refugees, those seeking asylum, and victims of trafficking) to increase their understanding of crime, legal process, and law enforcement in the UK.

#### **HOW TO START A BUSINESS**

Eight lawyers from Guildford law firm Stevens & Bolton provided expert legal guidance at a clinic for student entrepreneurs, covering:

- Setting up a business
- Shareholder arrangements and corporate structure
- Human resources and employment
- Fundraising and finance
- Commercial contracts and conditions of sale
- Intellectual property and IT
- Acquisition and disposal of business.

Head of School, Professor Donnelly-Lazarov said: "We were delighted to take part in these important events. We were hugely impressed with the outstanding attitude, engagement, enthusiasm, and participation of those who attended."



L-R: Teaching Fellow, Dr Tehmina Khan, High Sheriff of Surrey, Dr. Julie Llewelyn, Director of Clinical Legal Education, Liz Williams, Big Leaf Co-founder, Kayte Cable



# WORLD-FAMOUS JAZZ ARTISTS HOST MUSIC MASTERCLASS

Grammy award-winning saxophonist Tim Garland and pianist Jason Rebello held a jazz masterclass with students and members of the public. The session took place before a stunning evening performance of their new concert 'Duology'.

Both artists have had illustrious careers; Rebello working for many years with Sting, Jeff Beck and Wayne Shorter. And Garland famously worked with Chick Corea and has produced over 20 albums of his own.

Students studying the Music BMus course on piano, bass guitar and percussion were encouraged to improvise under Jason's expert critique and guidance, and members of the public had the opportunity to ask questions and get involved. Jason discussed the importance of listening, dialogue, risk-taking and technical preparation in improvisation, sharing his passion for music-making.

The evening concert featured Garland on tenor, soprano and sopranino saxophone and bass clarinet, with Rebello on piano and celeste. 'Duology' features brand-new compositions from both artists and stunning renditions of material that they have known and shared over 30 years of friendship and collaboration.

## SURREY WELCOMES NEW DISTINGUISHED WRITER IN RESIDENCE

The School of Literature and Languages welcomes award-winning novelist Neel Mukherjee as our new Distinguished Writer in Residence.

Neel has written three novels, A Life Apart (2010), The Lives of Others (2014), and A State of Freedom (2017).

His book for the Cahier Series, Avian, was published in 2020.

He's won multiple accolades, including an Encore Award from the Royal Society of Literature for the best second novel, The Lives of Others. And he was shortlisted for the 2014 Man Booker Prize and elected a Fellow of the Royal Society of Literature in 2017. "Neel's appointment as our new Distinguished Writer in Residence continues our School's commitment to enriching our students' developing skills in creative writing by giving them the chance to work with such an internationally acclaimed figure."

Professor Bran Nicol, Interim Executive Dean of the Faculty of Arts and Social Sciences

@Nikki Tucker



# ACADEMIC FOCUS

Adrian Hilton

We've already pioneered the world's first AI capable of live sign language translation

# PUTTING PEOPLE AT THE HEART OF AI

Artificial intelligence (AI) has the potential to solve big global challenges. Our new Institute for People-Centred AI puts the needs of individuals and society first...

Machine learning systems that acted independently of human control were once a sci-fi dream. Advances in Al, however, mean these are now a reality in finance, media, manufacturing, warehouses, drones and autonomous vehicles. But adapting and adopting this new technology is not without its issues.

At Surrey, we're working to ensure people embrace this powerful tool, by understanding that AI should supplement human capability, empowering people to live and work to the best of their abilities, while enriching quality of life.

"One of the defining characteristics of our research is that it's grounded in real-world problems," says Professor Adrian Hilton, founding Director of our new Institute. "For years, the focus has been on learning how to build Al effectively and to engineer tools for specific purposes. "It's time we turn the tables and lead AI research from the human perspective, rather than a purely technological one."

The Institute brings together experts from disciplines across our faculties of social, health and engineering sciences.

The University also has a proud track record of working with partners in industry, government and the public sector to achieve research breakthroughs that make a difference to society. In humanmachine interaction, for example, we've already pioneered the world's first AI capable of live sign language translation.

"Together, we can make AI work with people to ensure it's inclusive, transparent, ethical and safe, benefiting everyone in society," says Adrian. "This is what a fairer future will need."

Melaine Coward

# PROFESSOR MELAINE COWARD APPOINTED AS NEW DEPUTY DEAN

Since qualifying as a registered nurse, Melaine's worked in London teaching hospitals and a specialist cancer hospital.

She joined the University of Surrey in 2001 and is currently the Head of School for Health Sciences, teaching about health care management and reflection in practice.

As Deputy Dean for the Faculty of Health and Medical Sciences, Melaine will be involved in innovative projects and working with a network of healthcare partners.

Melaine said: "I am delighted to be able to support the Faculty in leading projects. This role will really help us deliver the exciting plans and vision to keep the Faculty progressing." Since qualifying as a registered nurse, Melaine's worked in London teaching hospitals and a specialist cancer hospital.

# ROYAL APPOINTMENTS

# LOOKING FORWARD...

HRH The Duke of Kent visited campus in February to officially launch our first international fundraising campaign, The Future Says Surrey. He also planted a tree near our lake to celebrate 45 years in his role as Chancellor of the University – and to mark the Platinum Jubilee of Her Majesty The Queen.







9

# LOOKING BACK...

Alongside our long-standing relationship with HRH The Duke of Kent, the University was also honoured to receive another memorable royal visit in 2015. This was when Her Majesty The Queen and His Royal Highness, The Duke of Edinburgh, toured our £45 million School of Veterinary Medicine. The royal couple chatted to students undertaking equine examinations and met Professor Noel Fitzpatrick, before unveiling a plaque to mark the opening of the new teaching facilities.





# RESEARCH NEWS



## **FIGHTING FAKE NEWS**

A £70,000 grant from the British Academy Covid Recovery Grants will fund a project called **Fighting fake news: online disinformation in COVID times.** 

The project will look at how three organisations are fighting Covid and vaccination disinformation spread online. This international project comprises researchers from universities in France, Italy and the UK (led by Dr Itziar Castello at Surrey Business School).

Dr Castello says: Fake news intensifies existential threats posed to societies, recently demonstrated by the anti-vaccination movements. Using social media analysis, this research identifies discourses adopted by anti-vaccination campaigns and the most effective counter-campaigns to fight online harm and reduce vaccine hesitancy in Italy, France and Ireland.

"We hope to translate the findings into strategies for policymakers and NGOs to more effectively reduce vaccine hesitancy."



# FUNDING AWARDED TO SUPPORT VITAL RESEARCH INTO END-OF-LIFE CARE

The National Institute for Health Research has awarded the University of Surrey £1.1 million to assess the effects of giving patients fluids via a drip in the last days of life.

The trial will assess the overall effectiveness and cost-effectiveness of clinically assisted hydration in reducing the frequency of delirium and its effect on the frequency of pain and other symptoms such as shortness of breath, nausea and vomiting.

This landmark study aims to improve the treatment of patients receiving end-of-life care. Managed by Surrey Clinical Trials Unit, the trial will be the largest ever performed and will involve 1,600 patients in 80 hospices and hospitals across the UK.

The research team previously completed a successful pilot study, which included 200 cancer patients from hospices and hospitals in England and Wales, between 2015 and 2016.

## TAEKWONDO: IMPROVING CHILDREN'S SELF-CONTROL

Researchers at Surrey have found that primary school pupils who were taught taekwondo improved their self-regulation and showed reduced signs of aggression towards others.

Researchers from the University studied 240 students aged 7-11 years across a period of 11 weeks. The results indicate that short standard taekwondo courses were well-received by pupils and led to higher levels of value placed on self-control.

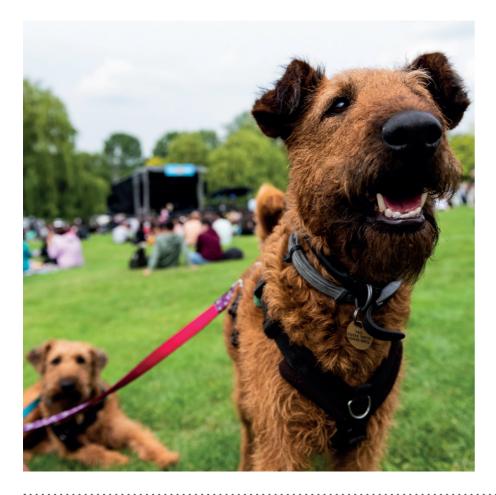


# COURT OF THE FUTURE

Surrey's School of Law has opened up open a new 'Court of the Future'. This facility gives the University a unique opportunity to predict the impact of proposed changes to legal practice, as the delivery of justice increasingly becomes an online activity.

As a result of the Covid-19 pandemic, courts were forced to rapidly move to online sittings. In June 2020, the Lord Chief Justice suggested this would not be a passing trend.

# RESEARCH NEWS



# IMPROVING THE LIVES OF ANIMALS, PEOPLE AND THE ENVIRONMENT

Tackling animal-to-human virus transmission, antimicrobial resistance, sustainable food supply and pet welfare, are all in the scope of the new Animal Health Innovation Network.

The University of Surrey is partnering with organisations across Surrey and Hampshire to establish a network that will help drive sustainable solutions in human, animal and environmental health.

According to Grand View Research, the animal health industry is currently valued at £36 billion globally and is estimated to reach £78 billion by 2028. The Animal Health Innovation Network will address crucial global health issues, such as viruses that jump from animals to humans, antimicrobial resistance (microorganisms which are resistant to antibiotics), and making sure our food supply is more sustainable.

For more information visit https://animalhealthinnovation.net/

Photo Concepts / Getty In

## THE VITAMIN D FINDINGS MAKING US ALL HEALTHIER

You're probably getting more vitamin D than you used to, thanks to Surrey research. Leading food manufacturers now fortify food with it, as a direct result of Surrey's Professor Sue Lanham-New's globally recognised research into the health consequences of vitamin D deficiency.

That kind of real-world impact is what drives the Research Excellence Framework – a national government exercise to measure where university research is having the most effect.

Industry research collaborations on next generation electric vehicles, and research to deploy green infrastructure to reduce the harmful impact of vehicle pollution, are just some of the other examples that went into Surrey's Research Excellence submissions.

For more information, visit https://www.surrey.ac.uk/ref2021



## PUZZLES + BLOCKS = BETTER MATHEMATICS SKILLS

New research has found that spatial training with blocks and puzzles could improve young people's mathematics skills.

A research team at Surrey found that a sustained focus on spatial reasoning training in those aged 3-19 years of age could help the UK fill the skills gap found in the science, technology, engineering and mathematics (STEM) industries.

Spatial reasoning is defined as a person's ability to think about shapes and space in two and three dimensions, and previous research has shown that spatial reasoning is crucial for daily living, for example, navigating to work, filling the dishwasher, and putting on your shoes.

The study found that teaching spatial skills in-person – particularly with the use of blocks, puzzles and other physical manipulatives – is highly effective at improving mathematical performance. Dr Katie Gilligan-Lee, co-author of the study and Lecturer in Developmental Psychology at the University of Surrey, said:

"Our research confirms that when children learn the relationship between space and shapes through tangible physical tools such as puzzles, their mathematics performance improves. This is critical information for us all, particularly parents, teachers and decision-makers, at a time when the UK is lagging behind its international competitors when it comes to STEM skills."



# RESEARCH NEWS



## **WORLD-FIRST STUDY** BEGINS AT CHESTER ZOO

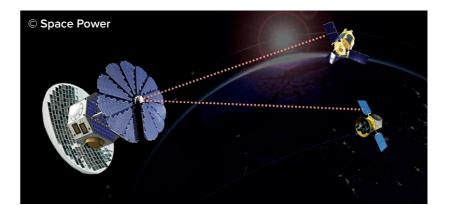
The study of a new vaccine brings hope for tackling a deadly virus that's threatening endangered Asian elephants.

Scientists from the University of Surrey and Chester Zoo have developed a new vaccine for Asian elephants that aims to fight the deadly virus known as elephant endotheliotropic herpesvirus (EEHV). EEHV is a major threat to the long-term survival of the Asian elephant, of which fewer than 50,000 remain.

Elephant care experts at Chester Zoo are now leading the first vaccine pilot study, supported by a host of other major conservation zoos in the UK and Ireland, including Dublin Zoo, Whipsnade Zoo, Blackpool Zoo and Woburn Safari Park.

It is the first vaccine of its kind ever to enter a pilot study with elephants.

Without the expertise and opportunities for close contact offered by zoos caring for Asian elephants, experts say it would be 'almost impossible' to develop a vaccine, which, if successful, could help to prevent their extinction.



## SURREY RESEARCHERS TO REVOLUTIONISE SATELLITE POWER USING LASER BEAMING

The University of Surrey and Space Power are tackling the problem of powering satellites in Low Earth Orbit (LEO) when they cannot see the sun.

The team will develop new technology which uses lasers to beam solar power from satellites illuminated by the sun, to small satellites orbiting closer to Earth during an eclipse. The wireless, laser-based power beaming prototype will be the first developed outside of governmental organisations and is aiming for commercialisation by 2025.

Without new power technologies like this, which will enable small satellites to function all the time, more satellites are needed, which results in more costs, launch emissions and space debris. As humanity finds more ambitious and useful tasks for small

.....

satellites, the problem grows.

Now, the team will investigate and verify the efficiency of laser-based power beaming, develop the new technology, and obtain data to enable them to design a prototype for small satellites in space.

Stephen Sweeney, Professor of Physics, said: "The University of Surrey has a long track record in photonics and space research and brings unique expertise in both high power lasers and photovoltaics technologies. We have many years of experience in optical wireless power and are delighted to work with Space Power to help develop such technologies."



## SEEING ART IN BIOLOGY

Award-winning BioArtist Anna Dumitriu will join the University as its first Artist in Residence. Anna will work closely with the Faculty of Health and Medical Sciences to produce a new body of artworks that will increase public awareness of the ongoing 'One Health, One Medicine' research being undertaken at Surrey.

BioArt is an emerging area of artistic practice that brings together art and science. It explores the relationship between humans, science and ethics. BioArtists work with tissue, bacteria or other living organisms and also study life processes.

The work will be showcased in summer 2022 and will leave a legacy to be used as a highly novel teaching resource for students.

The residency has been made possible thanks to a successful Institute for Advanced Studies fellowship application by Anna and her host at the University, Professor Mark Chambers. Mark Chambers commented: "Anna produces highly engaging and thoughtprovoking art that explores both historical and modern perspectives on science and technology of particular relevance to our research at the University on infectious diseases. We look forward to working with Anna during her time with us and seeing how she explores and interprets the important work we do here."

# WHAT'S ON



#### THE SURREY INAUGURALS **LECTURE SERIES**



Our Inaugural Lectures provide an exciting opportunity to officially recognise and celebrate our recently appointed professors; offering a platform to share their research, engage in conversation and inspire a broad audience. For further details, visit: www.surrey.ac.uk/surrey-inaugurals-lecture-series

#### **SUMMER SEASON PERFORMANCES FROM OUR GUILDFORD SCHOOL OF ACTING**

Further details will be added here: gsauk.org/events

## MAY

JUNE

Performance:

THE WIND

**& THE WILLOWS** 

4th, Monday 6th,

**Tuesday 7th and** 

2022 at 7.30pm

Friday 3rd, Saturday

Wednesday 8th June

Performance: SCRATCH SEASON

Beginning week commencing 23rd May 2022. Date to be confirmed.

#### ΜΔΥ Performance:

13

Thursday 26th, Friday 27th and Saturday 28th May 2022 at 7.30pm Saturday 28th May 2022 at 2.30pm

# JUNE

#### Performance: **AS YOU LIKE IT**

Thursday 9th, Friday 10th and Saturday 11th June 2022 at 7.30pm Saturday 11th June 2022 at 2.30pm



JUNE

Performance:

WINDOWS

Thursday 2nd,

Friday 3rd and

Saturday 4th

June 2022 at

7.30pm Saturday

4th June 2022 at

#### JUNF Performance:

#### AMOUR!

Thursday 9th, Friday 10th and Saturday 11th June 2022 at 7.30pm Saturdav 11th June 2022 at 2.30pm



**ADAMS-SWEETING:** DYSLEXIA, RHYTHM, MAY LANGUAGE AND THE DEVELOPING RRAIN

Join us as Usha Goswami, researcher and professor of Cognitive Developmental Neuroscience at the University of Cambridge, delivers the next lecture of this fascinating series.

For further details and to register, please visit: www.surrey.ac.uk/asevents



SURREY 14 SHOWCASE JUNE

3pm to 5pm. Come and discover more about the fantastic research taking place at the University through a series of talks and demos. There will also be live performances from our students, and street food stalls.

#### Visit surrey.ac.uk/events

to find out more and book a place.



()4-()5 JUNE

JULY

facilities!

From as little as

JUBILEE FREEFEST

Midday until 8pm. The University opens its doors for a weekend of fun and music hosted by our Students' Union. Bring your own picnic for live music, outdoor cinema, familyfriendly entertainment, food and drink stalls. Full programme to be released soon.

Details at www.surrey.ac.uk/events



#### **BRIGHT CLUB DOES** GUILDFORD FRINGE **FESTIVAL**

Bright Club blends comedy, music, art, research, science, performance... and anything else that can happen on a stage.

The first rule of Bright Club is that you tell all your friends about Bright Club!

Join researchers and academics from the University of Surrey as they delve into their laboratories to brew up comedy gold.

Tickets: guildfordfringefestival.com

- PUBLIC MEMBERSH
- 120 station gym
- Over 100 weekly classes • Olympic sized pool
- Climbing & Bouldering
- Squash Court bookings
- Tennis Courts bookings
- Sauna access

More Info :

https://www.surreysportspark.co.uk sales@surreysportspark.co.uk



# STUDENT SPOTLIGHT

## VET STUDENT FREDDIE DICKS PUBLISHES HER RESEARCH AND CYCLES FOR CANCER

During her third year studying Veterinary Medicine and Science, Freddie Dicks wrote her research project and gained publication in the journal Vaccines. The research looked at vaccination as a control tool in Bovine Tuberculosis and how social media monitoring could be used to assess public response to government policy development and implementation.

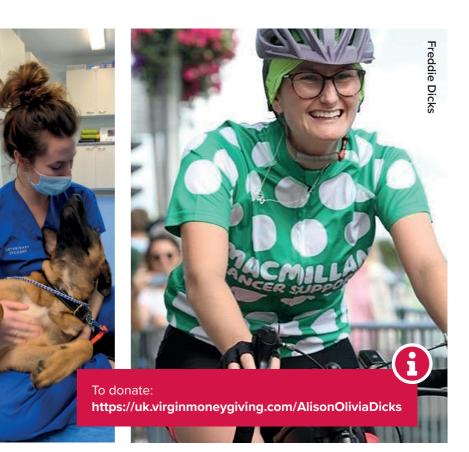
4

She said the highlight from the research process was "to form such a collaborative effort with both Mark Chambers, my professor and supervisor, and the team from the London School of Hygiene and Tropical Medicine. I'm really proud

of these collaborations and have made friends for life."

In her spare time, Freddie fundraises for Macmillan Cancer Support in memory of her late mother, Alison. In August 2021, Freddie cycled 66.6 miles around Loch Ness and raised over £4,000 for Macmillan Cancer Support. She's planning to continue fundraising by participating in the March plank challenge. https://uk.virginmoneygiving.com/ AlisonOliviaDicks

Freddie is currently carrying out several final-year rotations up and down the country as part of her final year of Veterinary Medicine at Surrey.



## **HELPING THE GAMING INDUSTRY GO GREEN**

the carbon footprint and environmental impact of the gaming industry...

#### Tell us about your research...

I'm based at Sony Interactive Entertainment and my doctoral studies primarily focus on the PS4. I'm following in the footsteps of other students from the University's Centre for **Environment and Sustainability** who've worked at Sony. My aim is to investigate areas that haven't been addressed yet.

#### Tell us more...

When you sit down to play a game, you turn your console on and you put your disc in or download a game, and start playing. There's often little afterthought on the impacts of playing games. Investigating this involves looking at the cradle-to-grave

# Lynsey Thompson discusses her research examining

story of how an item got here, how it interacts with everything else and how it ends.

#### Can you give us an example?

One element is the use phase, which is what happens when you play the console. That includes electricity and power consumption of the console and allied TV or monitors. If you're streaming Netflix or downloading a game, you use servers and broadband. At the end of life, you have the option of repairing it - or binning it and buying a new one.

#### Are you a big gamer?

I'm a huge fan of Genshin Impact, but I'm terrible at first-person shooters. I end up getting killed a lot!



.....

Joshua Edwards is a final-year nursing student with a passion for helping others. As President of the Nursing Society, Joshua is a champion of wellbeing and helps students flourish in their studies.

#### Why did you choose to study at Surrey?

Surrey offers so much support and such beautiful facilities. It was an easy choice to make!

#### How has the Nursing Society contributed to your Surrey experience?

It's made every aspect of my university experience better. It's provided so many

learning opportunities and lots of support. I've also made some incredible friendships.

#### What's been your best moment so far?

Last year, we ran a session for first-year students that prepared them for their clinical placements. The support we offered really helped to build their confidence.

Soon we're running our most ambitious event yet – a wellbeing day for third-year students with lots of special guests. I couldn't be more excited!

#### Do you have plans for after graduation?

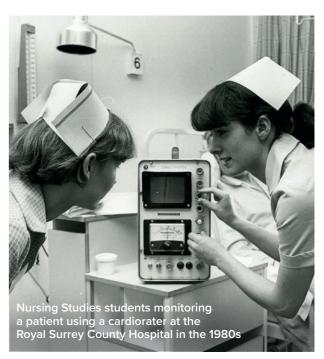
I've been offered a position in the Acute Medical Unit at Frimley Park Hospital, which is a dream come true.

# CELEBRATING OUR NURSES



# BISS NURSING STUDY

University of Surrey badge for students receiving a BSc in Nursing Studies in the 1980s



# SURREY CELEBRATES 40 YEARS OF NURSING DEGREES

In June 1982, the University of Surrey celebrated the graduation of its first ever cohort of BSc Nursing graduates, as one of only a handful of universities offering a Nursing degree at the time.

The opening of a BSc Nursing degree in 1978 marked a change in the education of nurses and the general professionalisation of the sector. Around 20 applicants were accepted onto the four-year course, which combined clinical and practical aspects of nursing, along with the scientific study of medical subjects and human biology. The degree coincided with the move of the Royal Surrey County Hospital from its Victorian building on Farnham Road, to its current site, offering our students placement opportunities in a brandnew medical facility.

40 years on, we'll be marking this amazing milestone. Since then, we've grown from just 20 students to a yearly cohort of around 250 Adult, Child and Mental Health Nursing specialists, along with 100 Midwives and over 50 Paramedic Science students. We will also be highlighting how technology has advanced healthcare education over the years, exemplified in the opening of our world-class Clinical Simulation Centre in 2020.



Professor Emma Ream, Director of Health Sciences Research said: "40 years ago, our staff and students were complete trailblazers, recognising quite rightly that nurses need a degree level education in order to deliver as high as possible quality of patient care. We're delighted to be able to continue to deliver and prepare nurses for the demands of working for the NHS today."

Professor Melaine Coward, Head of the School of Health Sciences said: "Nursing has changed dramatically since it started at the University of Surrey. I'm incredibly proud that we've continued to support the profession whilst also maintaining high quality in all that we do. Our graduates are exceptional and ready to join the workforce of the future."

A full programme of events will be available soon. For more information about our Nursing degrees and to view some wonderful films from students and staff, visit surrey.ac.uk/subjects /health-sciences-nursing -and-midwifery

# THE FUTURE



16

## OUR £60 MILLION FUNDRAISING CAMPAIGN

A new-look double-decker bus helped ensure everyone was onboard when HRH The Duke of Kent launched our first international fundraising campaign. Patrick Degg, our Vice-President (External Engagement), tells us more...

#### Tell us about the new campaign...

The Future Says Surrey is our first international fundraising campaign, designed to secure financial and other support to transform our research and help our students. The goal: to raise £60 million over the next three years.

## Why does the University need to fundraise?

Securing additional support will allow us to develop innovations at greater pace and scale. This means we can bring technologies to market more quickly that create jobs, grow industries and benefit society at large.

#### Can you give an example of this?

In terms of accelerating our research, we're focusing on three key areas where we have established excellence. Artificial intelligence (AI) is a sector where we have internationally acclaimed expertise. Innovation here is vital for future UK economic growth. In sustainability, we're getting cleaner air into cities across the world, and creating the next generation of solar energy capture and storage devices. In health, we're pioneering advances in cancer and dementia care, and investigating the links between animals and humans. The latter could well help us prevent the next pandemic.

We're getting cleaner air into cities across the world

#### Al, sustainability, health... Where do students fit into this?

Right at the heart of it. We'll improve teaching facilities, support employability opportunities and help those experiencing unexpected financial difficulties. We also want to attract the brightest minds to Surrey by offering more scholarships to those from diverse backgrounds.

#### Finally, tell us about the bus...

It's a double-decker decorated in The Future Says Surrey livery. Its route includes Guildford town centre and our campus. It's covered in facts about how the University of Surrey has contributed to the world. For example, Surrey's Professor Alf Adams helped make the digital world we live in possible. His innovative semiconductor laser is used to power the high-speed internet. A successful campaign will help us deliver more exciting innovations to solve tomorrow's challenges today.



The Future Says what's coming next?

We're pioneering advances in cancer and dementia care

Undergraduate Operating Department Practice students setting up equipment in our Simulation Suite



For over 50 years, the University of Surrey has been making the future a reality.

Join our £60m campaign to transform research, support students and do even more.

TheFutureSays**Surrey**<sup>®</sup>