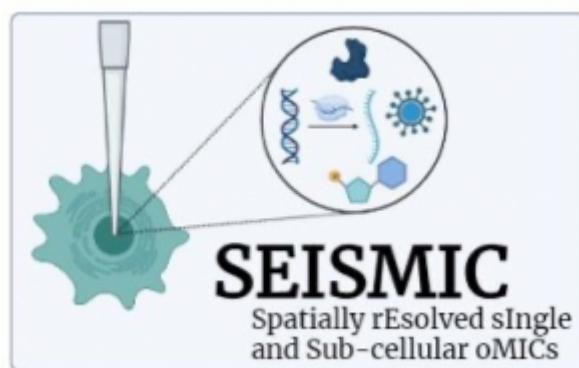




## Seismic change at Surrey University

16 May 2023



A new national research facility could significantly improve our understanding of infectious diseases, ageing and cancers, leading to novel treatments and vaccines.

The University of Surrey's SEISMIC facility will offer scientists access to technology that enables them to pick up single cells or even parts of cells and measure the spatial position of biomarkers like proteins, metabolites and lipids.

Funded by £2.8 million from the Biotechnology and Biological Sciences Research Council (BBSRC) and industry, SEISMIC uses an advanced type of microscope manufactured by Yokogawa Corporation.

Professor Melanie Bailey, Director of the SEISMIC facility at the University of Surrey, said:

"Thanks to SEISMIC, we've made a breakthrough in measuring lipids in individual mammalian cells. This new technology is a game changer because it allows scientists to measure important biomarkers while keeping track of where they are in the cell. This is important for understanding how healthy cells work and how infections or cancer can affect them."

"We're really excited about this because it will help us better understand how cells communicate with each other, and this knowledge could lead to new ways to fight diseases."

SEISMIC enables single-cell and sub-cellular analysis, which will help scientists understand what happens under defined conditions and how cells signal to each other.

Dr Dany Beste, Senior Lecturer in Microbial Metabolism at the University of Surrey, said:

"The new facility is free for academics working in BBSRC-funded areas and also available to scientists in industry. We are confident SEISMIC will enhance scientific training in single-cell work and overcome some of the challenges in this area."

SEISMIC is the University of Surrey's third national research facility with the Ion Beam Centre and the Environmental Flow Laboratory.

Prof Bailey said:

"The combination of SEISMIC, the proton beam facility and the Ion Beam Centre are a boon to Surrey's scientific and business communities and could allow us to understand the interaction between cancer cells and radiation in more detail. This has enormous potential and we are excited to welcome researchers to use our new facility."

Surrey University News.

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## A special Epsom school's future secured.

16 May 2023



The future of Kingswood House School on West Hill in Epsom has been secured after the planning brought by local developer Steve Curwen, was refused by Surrey County Council on 21 st March. The School's landlords have also confirmed in court proceedings pending with the School that they have no objection to the grant of a new lease to the School.

Kingswood House School has existed on its site for over 100 years and has within its 250 pupils, 172 with registered special educational needs (SEND) the highest number of any school in Surrey. The School has been awarded the status of "Asset of Community Value" in recognition of its contribution to the local community and has recently been graded "excellent" in an inspection undertaken by the Independent Schools Inspectorate.

The proposed planning application would have seen the 100 year old school replaced with a much smaller school of only 60 pupils for extreme special needs. The application was met with a very high level of local opposition culminating in 440 objections and a petition of 150 due in large part to a fear that it was a precursor to an application to build houses on the school playing field and indeed, across the whole site in the event that the proposed school did not proceed.

Related reports:

[Campaign to save special Epsom school builds](#)

[Battle for Epsom School continues....](#)

[Timeo Danaos et dona ferentes..?](#)

[Grayling stood up by developers....](#)



## Ultra-sound school kids

16 May 2023



Youngsters at **Ewell Grove Primary and Nursery School** have done it again. Back in the testing times of Covid during 2021, classes decided to organise their own entertainment programme to raise money for **Epsom Medical Equipment Fund** (EMEF), the charity launched in 1979 to help **Epsom General Hospital**.

This was the start needed to launch an appeal for the GE Ultrasound Scanner required by the Labour Ward theatre in Maternity at Epsom. With their parents backing them, they succeeded in raising nearly £1,000.

Last year they decided to repeat the feat - this time they brought a magnificent £1,132 which started the appeal off with a flying start.

This week the school was invited to present the GE Ultrasound scanner to **Dr. Dickson Osagie**. The school set the children a project to decide who would represent the school. There were eight lucky winners who visited the hospital with headteacher **Mrs Kate Keane**. "They were excited to learn the function of the Ultrasound scanner and how it works," said Mrs Keane.

Dr Osagie added "We were very lucky to have an ultrasound donated to us by EMEF. It is a £27,500 piece of equipment. The Labour Ward theatre did not have its own dedicated ultrasound for the anaesthetic team to use. Donating this machine has gone a long way in improving the care we give to pregnant women in the hospital as it will help us to be able to put in difficult cannulas, also when epidural for pain relief is difficult to perform, the ultrasound helps make this easier."

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## Excellence on ageing

16 May 2023



Between the two censuses of 2011 and 2021 the over 65 population of Epsom and Ewell increased by 16.1% to a total of about 14,670. About 18% of the total Borough population of about 81,000. As of 2021, Epsom and Ewell is the 12th most densely populated of the South East's 64 local authority areas, with around 17 people living on each football pitch-sized area of land. Surrey University is doing something about ageism.

Combatting ageism and promoting the interests of older people through scientific research is crucial, particularly as a response to the discriminatory treatment they faced during the pandemic, according to the Director of the University of Surrey's new Centre of Excellence on Ageing.

The University of Surrey's new centre is in partnership with the Global Initiative on Ageing (GIA), which operates under the auspices of the United Nations. The Centre was formally launched on 26 April 2023, with the University hosting a formal dinner that brings together notable scholars and stakeholders focused on ageing. This was followed by a one-day showcase on 27 April, celebrating Surrey's work in areas such as ageing and work, artificial intelligence and ageing, sleep patterns, nutrition, and generational shifts in ageing.

Professor **Max Lu**, President and Vice-Chancellor of the University of Surrey, said:

"The Surrey community is deeply passionate about improving the standard of wellbeing for our elderly population - this is evidenced in our internationally-recognised research activities in areas such as improving the quality of sleep of individuals living with dementia, improving inclusion of the elderly population in the tourism and hospitality sector, and investigating the mechanisms underlying osteoarthritis and finding ways to treat it."

"The new Centre of Excellence for Ageing will serve to amplify these efforts, allowing us to understand more and provide genuine solutions that help to enrich the lives of our elderly relatives, friends, and fellow citizens while safeguarding their rights."

More than 1.1 billion people worldwide are over 65 years of age; by 2050, the global population will be more than 2.1 billion.

GIA's mission is to support the goals laid out within the UN Decade of Healthy Ageing, and the Sustainable Development Goals (SDGs), by improving the overall standard of living, participation and inclusion of the world's ageing population. One of GIA's key implementing partners is the UN's Institute for Training and Research, UNITAR, which is dedicated to training and capacity building on a whole range of policy-based areas.

Professor **Paul A. Townsend**, the inaugural Director of the Centre of Excellence on Ageing and Pro-Vice-Chancellor and Executive Dean of the Faculty of Health and Medical Sciences at the University of Surrey, said:

"I am incredibly proud to be part of our new Centre of Excellence on Ageing, which is a critical part of a global movement that recognises the need for a better understanding of the life course and ageing. We will focus on processes ranging from preconception through to appreciating the treatment of our elderly population. The pandemic disproportionately affected our seniors, leaving them to face discrimination and a lack of sympathy, with many left in care homes unable to see their families. This new Centre is dedicated to helping older people to benefit from the latest research and greatest advances in science today. They should receive the respect, care and quality of life that they deserve."

**Silvia Neira**, Vice President of GIA, said:

"We are thrilled to announce the launch of the Centre of Excellence on Ageing at the University of Surrey. This new initiative will build on the incredible work of the GIA Foundation, expanding our capacity to research and engage with the many intersections of ageing and longevity."



## Surrey Prof. gets £2M for AI driven clean energy

16 May 2023



The University of Surrey's Professor **Jin Xuan** has won a prestigious Open Fellowship from the **Engineering and Physical Sciences Research Council (EPSRC)** to develop the next generation of clean energy devices using advanced artificial intelligence.

As well as using electrochemical technology to explore established applications like green hydrogen production and CO<sub>2</sub> reduction, Prof Xuan will also develop future technologies, with a particular focus on cleaner, greener fertilisers.

Prof Xuan said:

"Manufacturing fertiliser to help crops grow is hugely carbon intensive, but if we can achieve a breakthrough on the difficult electrochemical reduction of nitrogen to generate ammonia, we could make significant steps to address this."

"The answer lies in artificial intelligence to design the complex electrochemical devices, but many existing algorithms in this area don't offer explanations for how the AI comes to its conclusions. The relation between the inputs and outputs is a mystery, but I plan to open the 'black box' to find results which are reliable, explainable and transferable."

The five-year fellowship will enable Prof Xuan to develop Explainable Artificial Intelligence tools and models which lead to an automated loop of materials design, manufacturing and testing of electrochemical devices. Prof Xuan will work with industrial partners from Siemens PSE, Intelligent Energy and Johnson Matthey.

Prof Xuan said:

"My ambitions for this research are huge and can only be achieved with long-term support like this. The flexibility offered to me through this fellowship will enable me to shape my research as findings emerge, following the solutions which reveal themselves through my work, in partnership with other academics and industry. I'm extremely grateful to the EPSRC for this support."

President and Vice-Chancellor of the University of Surrey, Professor **Max Lu**, said:

"Jin exemplifies Surrey's values of inspiration and innovation. He is ambitious about solving global challenges, working collaboratively with interdisciplinary researchers and innovators. We're very proud of him for winning this fellowship."

## We can help your school reunite.

16 May 2023



Follow the example of a 50 year reunion for Ewell County Secondary School reported here. Epsom and Ewell Times can help your school reunion by putting the word out in these pages.

Former pupils of **Ewell County Secondary School** gathered at **The Station** pub in **Stoneleigh** on Saturday to reminisce and celebrate fifty years or more since they left and entered the working world.



The poster for the event borrowed from the **Rolling Stones** back catalogue to stress: "This Could Be The Last Time" and over a hundred schoolmates took heed and presented themselves for register. The reunion was aimed at those pupils that left the old schools then situated in Ruxley Lane and Danetree Road between 1971 and 1976. Organised by Ray and Bob Baxter, Tony Jones, Dave Reynolds, Martin Knight, Kevan McIlroy and Kevin Merchant the event was a huge success with only minimal corporal punishment and detentions administered. Friendships that were interrupted by leaving school and moving away in some cases were resumed after fifty years. Bob Baxter commented: "It was wonderful to lean our walking sticks against the wall, kick our zimmer frames away and boogie to T. Rex, Slade and The Rubettes again." By popular demand another reunion is being planned for 2025.

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## Surrey academic wins 'Woman in Innovation' award for tackling bias against neurodivergent people

16 May 2023



On International Women's Day **Surrey University** announce a prize winner among its female academics.

Online technologies to help neurodivergent people successfully enter the workforce are being developed at the University of Surrey, led by **Dr Alison Callwood**, in a project that has seen her win one of Innovate UK's 'Women in Innovation' awards.

The *Generating Neurodiverse Inclusion Selection (GENIUS)* project will explore what communication methods and personalisation options could be used to optimise access and performance in online interviews and assessments for those with neurodiverse conditions such as autism, ADHD, and dyslexia.

Dr Alison Callwood, GENIUS project lead and Senior Lecturer in Integrated Care at the University of Surrey, said:

"Approximately 15 to 20 per cent of the UK population is neurodivergent. The unfairness they experience in the recruitment field is unjustified. Tackling this issue will not only improve the working lives of neurodivergent people by unlocking the valuable contribution they can make, but it will also boost the economy by helping address the rising number of unfilled positions in the workforce."

"I am delighted to receive this award which includes a £50,000 grant. The support it offers is invaluable to this project."

This project will build on previous work by Dr Callwood who has developed the successful interview tool *SAMMI* which reduces bias and provides robust, reliable, and cost-efficient interviews and assessments for employers.

Helping to further the project, the funding awarded to Dr Callwood will give her access to tailored business coaching, mentoring and a wide range of networking and training opportunities designed to help grow this innovative project.

Professor Paul Townsend, Pro-Vice-Chancellor and Executive Dean of the Faculty of Health and Medical Sciences, said:

"Congratulations to Alison on winning this award. Being one of only 50 recipients of this prize, shows the strength of her project and her hard work and dedication in this field. Her skills and the diversity of her career are valued greatly here at Surrey, and I am proud to have her in our team."

Indro Mukerjee, CEO, Innovate UK, the United Kingdom's innovation agency,

"We are proud to support this group of trailblazing women who are changing the world through the power of their ideas. Their innovations underpin solutions inspired by societal and environment challenges, as well as their own lived experiences. I hope their stories will encourage and inspire others to follow their lead."

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## Financial literacy for young in Epsom and Ewell

16 May 2023



**Citizens Advice Epsom & Ewell** (CAEE) has successfully delivered the first Financial Literacy Course to **Epsom & Ewell High School** (EEHS) to over 100 year 12 students. The course helps young people understand about money, loans, credit, how to stay out of debt and even how to save.

Every year, CAEE sees many people with serious and complex debt problems. It believes prevention is better than cure so are keen to deliver financial literacy training to as many young people as possible across the borough.

The six week course held last term was funded by Surrey County Councillors **Steven McCormick** and **Bernie Muir** together with **Alex Coley**, trustee of local charity **The Ruxley Foundation** and funding from the **Aviva Community Fund**.

Photo: James Newman, Headteacher; Marian Anghileri, Money Adviser CAEE; Cllr Alex Coley, Chair of Trustees of The Ruxley Foundation (funder); Cllr Steve McCormick (funder); Cllr Bernie Muir (funder); Rt Hon Chris Grayling MP; Louise Curd, Publicity & Fundraising Manager CAEE; Hilary Egan, Head of Sixth Form, EEHS.

**Hannah Cobbold**, Assistant Headteacher of EEHS said: "This financial literacy project has not only provided the students at EEHS the skills they need to be financially aware in the future, but also an understanding of the importance of being financially literate. We were extremely impressed with the time and energy that Citizens Advice put in to collaborating with the school to create a scheme of work which was student friendly and also informative."

A celebratory assembly was held to conclude the course where each student received a certificate and a contact card to enable easy contact to Citizens Advice in case of future money worries.

One EEHS student said: "On behalf of the sixth form and as a student here I want to give our gratitude towards the council for including us within this supportive pilot scheme. From this programme we've all been able to take away something positive; specific to each of us which we can implement into university and many other aspects in our future; whether that be learning about tax, loans, mortgages, credit cards; being scam aware and much more!"

"The sessions are one we'll never forget; as we've all taken the first step to become our own money managers and we know that if we ever need; no matter the severity; we can turn towards Citizens Advice. Thanks again for all your support."

**Lisa Davis**, CEO of CAEE said: "We are grateful to Epsom & Ewell High School and all the funders for enabling us to deliver this pilot project and look forward to continuing our work with EEHS to similarly support future students. Its success means that we can work towards securing funding to roll out this important messaging about managing finances to other schools in the borough in order to reach as many of our young people as possible".

Any schools or individuals interested in supporting or delivering the project can contact CAEE via its website [www.caee.org.uk](http://www.caee.org.uk)

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## Surrey University levelling up

16 May 2023



Vocationally minded local students get a boost as the University of Surrey is set to accept T Levels. A more diverse pool of students will be able to enjoy access to a world-class education at the University of Surrey, as it announces that it will now accept the rigorous new vocational T Level qualifications for selected programmes.

The move follows a joint task group with Farnborough College of Technology (FCoT), providing the T Level provider perspective. Starting in the 2023/24 academic year, several undergraduate programmes across Chemistry, Nursing and Midwifery, and Bioscience programmes will accept T Levels.

Photo: Surrey University campus. cc Tanya Hart

Professor **Osama Khan**, Pro-Vice-Chancellor, Academic from the University of Surrey, said: The University of Surrey has always been a leader in employability - with its graduates being amongst the most employable in the UK. Embracing the continued revolution in vocational qualifications is a natural move for us as we continue to marry the very best in teaching and learning with the strongest possible links with employers and industry.

T Levels are new 2-year courses which are taken after GCSEs and are broadly equivalent in size to 3 A Levels. Launched in September 2020, these courses have been developed in collaboration with employers and education providers so that the content meets the needs of industry and prepares students for entry into skilled employment, an apprenticeship or related technical study through further or higher education.

T Levels offer students practical and knowledge-based learning at a school or college and on-the-job experience through an industry placement of at least 315 hours - approximately 45 days. The courses are available at selected colleges, schools and other providers across England.

A University of Surrey student arriving with us through the T Level route and completing an industrial placement as part of their studies with us will graduate with years of experience in the workplace - setting them up for a flying start to a successful career.

**Virginia Barrett**, Principal CEO at Farnborough College of Technology, said: "The University of Surrey has been working with us to understand these new, employer-led qualifications, and we are pleased to see that they will now enable many of our T Level students to progress onto their degree programmes. Our T Level students are frequently among the most driven and career-focused at our Ofsted Outstanding college. The T Levels we offer have been introduced to match the local jobs market, so we are confident that the combined offer of studying locally at FCoT and the University of Surrey will be a great benefit to both students and their future employers.

"Also, our own University Centre at Farnborough offers learners from all T Level programmes a progression route into higher education, including a range of accelerated degrees, higher national qualifications, and higher-level apprenticeships, all taught on-site at Farnborough. I invite all those considering their post-16 options to visit our next Open Event to explore their T Level options with us, safe in the knowledge that these can lead to fantastic opportunities within higher education, employment, and apprenticeships."

T Levels are an alternative to A levels, BTEC, apprenticeships and other post-16 courses.



To explore FCoT's range of T Levels, visit [www.farn-ct.ac.uk/t-levels](http://www.farn-ct.ac.uk/t-levels).

## Epsom students put Xmas style in Centre

16 May 2023



Fashion Imaging & Styling students studying at **Epsom's University for the Creative Arts** (UCA) have created a festive window display for the town's Ashley shopping Centre.

The local students created work that interpreted the festive season through cutting-edge fashion styling and eye-catching photography.

Their work was inspired by colour themes, seasonal climate, festive paraphernalia, and clothing - from wearing a wrapping paper design, referencing traditional tartans, or joining the ski elite.

*"Collaborating with local shops and retail allows us to play an active part in the Epsom community. It will give residents the chance to view and share in the creative journey of our young creatives," said Martin Sparkes, a senior lecturer at UCA Epsom.*

**The Ashley Centre's Manager added:** *"The Ashley centre is the heart of the town of Epsom for retail, and it is important that we work closely with the community. So, we are delighted to be able to collaborate with these talented students by giving them the opportunity to showcase their talent, as well as learn more about the retail industry from the shopping centre."*

The window installation will be up until the end of January 2023.

