

Autumn 2016

News from The University of Surrey for Guildford residents



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Students on campus
1. 2016 2. 1960s

University celebrates first 50 years in Guildford

The University of Surrey is celebrating 50 years since it set up home on Stag Hill, Guildford.

The last five decades have seen the University and its associated institutions award more than 100,000 degrees and become established as a top-ten university in major national university league table rankings. The institution is currently fourth in the *Guardian University Guide 2017* and was named University of the Year by *The Times and Sunday Times Good University Guide 2016*.

Notable successes over the years include the University's creation of the Surrey Research Park in 1984, which is today one of the most successful science and technology parks in Europe. Based behind the Royal Surrey County Hospital, the Park hosts over 100 companies who employ around 4,000 people on site.

Another significant milestone came in 2010, when the University opened Surrey Sports Park, a £36m, state-of-the-art sporting facility used by students, local residents, schools and professional athletes.

Outstanding research achievements over the years have led to three prestigious Queen's Anniversary prizes for satellite engineering and communications (1997), ion beam applications and optoelectronic devices (2003) and the provision of safe water and sanitation (2011). The infrared laser diode, voted the fifth most important scientific discovery of all time because it made CD and DVD technology possible as well as fast broadband, was one of the groundbreaking inventions developed at Surrey.

Since the turn of the millennium, Surrey's campuses have been transformed through a £500m building and improvement programme. Additions include a new Library and Learning Centre, popular local arts venue, the Ivy Arts Centre, and an £80m development of student accommodation for the Manor Park campus.

New Vice-Chancellor joins Surrey

World-renowned academic and engineer, Professor G Q Max Lu, has taken up post as the fifth President and Vice-Chancellor at the University of Surrey.

The new Vice-Chancellor plans to build upon the University's strengths in research and learning to support the next phase of growth and vision of Surrey as a leading international university.

Professor Lu commented: "I am honoured to have the opportunity to lead such an exceptional organisation. The momentum behind Surrey is palpable, so I am looking forward to working with staff and students to grow the University's reputation as a truly international institution."

"Although the University of Surrey has earned its place as one of the top higher education establishments in the UK, there is huge scope to develop our reputation on a global scale."

Professor Lu joins Surrey after more than 20 years in senior roles at the University of Queensland, where he most recently held the position of Provost and Senior Vice-President. Named one of Australia's Top 100 Most Influential Engineers, Professor Lu is one of only 150 double highly cited academics in the world.



Professor G Q Max Lu
President and Vice-Chancellor



Meet our new Vice-Chancellor



Professor G Q Max Lu
President and Vice-Chancellor



For further information, visit:
surrey.ac.uk/MaxLu

World-renowned academic and engineer, Professor G Q Max Lu, tells *Your University* about his first impressions of Guildford

What have been your first impressions of Guildford?

Guildford is a beautiful, historic town and I really love it. It's in a nice location with attractive surroundings. The people here are very friendly and warm. It reminds me of Australia – the smaller towns around Brisbane have the same feeling of warmth.

How important is it to you that the University is part of the Guildford community?

It is very important. We are one of the biggest employers in town, so we make a huge contribution to the local community and economy and also take many students from Guildford and the region. Our reputation rests on how the community supports us and I hope people see us as their own university. Whilst the University already welcomes large numbers of visitors to our campus, we would like to do more. We are always looking for ways to engage better with the community and one way of doing this is to offer a warm welcome and more educational, cultural and sporting events.

The 50th anniversary of our move to Guildford is a great opportunity to celebrate the achievements of Surrey people, in terms of higher education and research. We can also showcase our capabilities and facilities and engender a broader understanding of the challenges and opportunities we have as a university in an ever-changing global environment in higher education.

What would you like to achieve in Guildford over the next ten years?

If we do all things right, I think we will be in the top 100 within ten years.

However, it's not just the ranking position that I'm interested in, but the substance of what's behind it; if we get all the right people, support our staff and engage properly, we will get there.

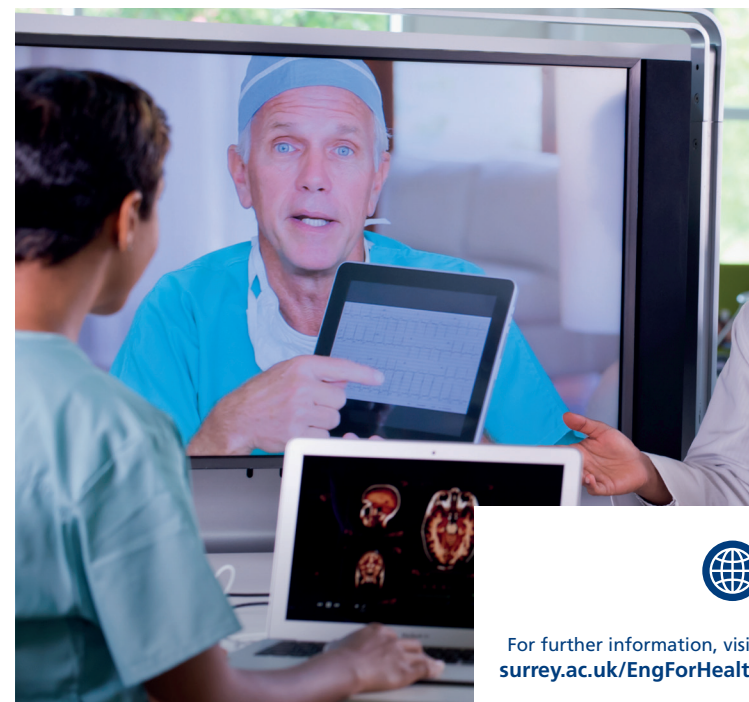
I would like to think that having enhanced the University's reputation further, Guildford residents would be proud to have one of the leading universities in the world in its community. I hope they are keen to support and engage with the University and recognise that our success also reflects well on the town.

What excites you about joining the University of Surrey?

Like any business, first and foremost, are the people who work in the organisation and support it. I have been very impressed with the talented staff who pursue excellence in their teaching and research.

The University must, first and foremost, offer teaching and research excellence, producing graduates who make a difference, but should also become the preferred partner for business and industry in the UK.

I am excited by the institutional ethos in the area of business, especially the international links and the University's track record in innovation. There is also strong interest in serving the community including our own alumni. I am very passionate about engaging with our broader stakeholders to help us grow the reputation of this University.



For further information, visit:
surrey.ac.uk/EngForHealth

New laboratory to engineer the future of healthcare

The University is set to open a state-of-the-art laboratory to address the challenges faced by an ageing population and the need for a more integrated approach to healthcare.

The £12m Engineering for Health Learning Laboratory, which has been part-funded by a £5 million grant from the Higher Education Funding Council for England, will train highly-skilled graduates to develop innovative healthcare technologies such as sensors for the remote monitoring of patients.

The laboratory is part of the University's Innovation for Health initiative which is focused on helping drive transformation into the way in which care is delivered in the future.

Building on the University's reputation in the fields of engineering, biosciences and computer science, the new Centre will educate students from different

disciplines together to pioneer technologies that will address the future needs of industry and society.

Vice-Chancellor, Professor G Q Max Lu, explained: "Due to increased demands on the healthcare system, the delivery of health and social care requires a more collaborative approach between GPs, hospitals, social services and patients, supported by new technology. Innovations such as remote monitoring in the home will transform the way disease is diagnosed and treated, while the use of Big Data will result in much more personalised models of care. Our new graduates will be well equipped to drive these innovations.

"Our Innovation for Health initiative aims to train the healthcare workforce of tomorrow and develop the technology that will transform the way we deliver health and social care in the future."

Free rooms for local charities

The University is offering local, registered charities free meeting rooms during evenings and weekends.

Rooms can be booked at Surrey Technology Centre, based on Surrey Research Park, on weekdays from 5:30pm to 9:00pm and between 10:00am and 4:00pm on Saturdays and Sundays. Free parking is also available.

For more information: n.beesly@surrey.ac.uk



Updates from the Vice-Chancellor's Office
[@uniofsurreyVC](https://twitter.com/uniofsurreyVC)



Helping local charities

Staff from the University have been swapping a day in the office for time in the community to support a number of local charities.

The University's Department for Marketing and Communications helped out at six charities including Surrey Wildlife Trust, Phyllis Tuckwell, Woking & Sam Beare hospices and St Luke's cancer unit at the Royal Surrey County Hospital, Guildford.

Activities included habitat management, refurbishing a play area and sorting bags of donated goods.

Other University departments ditched their desks for charitable causes including the finance team and the registry division.



Not your average day at the office
Members of the University's Marketing Department volunteer with
▲ Surrey Wildlife Trust and the
▲ Foundation Centre

University launches 50th celebrations

University launches local celebrations for golden anniversary

A programme of celebratory events will begin next month to mark 50 years since the signing of the University of Surrey's Royal Charter and the institution's move from London to Guildford.

The installation ceremony of the University's inaugural Chancellor was held in Guildford Civic Hall in October 1966. On Saturday 22 October, exactly 50 years to the day, a procession on Guildford high street will commemorate the anniversary.

Robed students, staff, alumni and special guests will process from 10:30am along Guildford high street up to Holy Trinity Church. Stops along the route will include the Guildhall, where the procession will be joined by local Councillors, Mayors and Mayoresses from across the county.

A range of activities will take place along the high street throughout the day and special giveaways will be on offer for spectators.

Trudy Monk, Manager of the University's 50th anniversary celebrations, said: "The procession marks an important milestone in the University's history. We look forward to celebrating with those who have contributed to making the University's first 50 years in Guildford a success and have helped us create a positive impact worldwide."

"We would like to invite former staff, students and local residents to join us to celebrate this wonderful occasion."

The procession is the first of a series of events to celebrate the 50th anniversary. The University is set to host a family-friendly Open Day, the University of Surrey Wonder Festival, on Saturday 13 May 2017.

For further information, visit:
surrey.ac.uk/50thLocalEvents

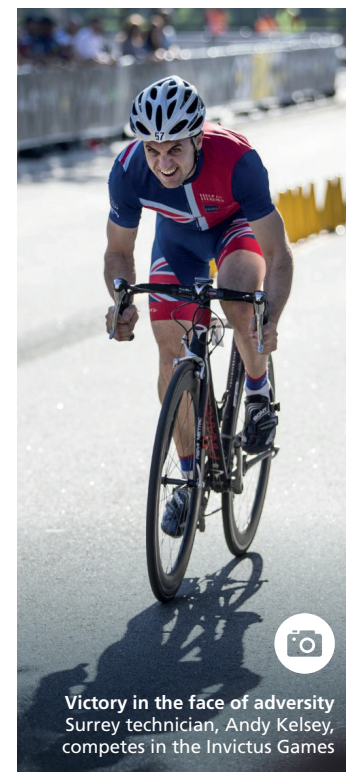
Gold for Surrey at the Invictus Games

A technician from the University's School of English and Languages scooped a gold medal at the second Invictus Games, held in Orlando earlier this year.

Andy Kelsey won the Time Trial cycling event after bringing home two silver medals from the first Invictus Games in 2014.

Andy served in the RAF as aircrew but was injured in the line of duty. Following his rehabilitation, he became a member of the Great Britain Cycling Team. He said: "The many hours spent training and the sacrifices I have made make winning gold particularly sweet. Having my family there to share the moment made it even more special."

The Invictus Games is an international, Paralympic-style, multi-sport event created by Prince Harry in 2014. The Games were created to challenge wounded, sick or injured service personnel to strive for sporting excellence and prove that they can achieve extraordinary things.



Victory in the face of adversity
Surrey technician, Andy Kelsey, competes in the Invictus Games

Talking therapy

The University of Surrey's Director of Wellbeing and psychotherapist, Rotimi Akinsete, will spend an evening of talking therapy with TV presenter and former Chairman of the Human Rights and Equality Commission, Trevor Phillips, and retired England footballer, Stan Collymore.

Taking the form of a counselling session, the evening will see Rotimi explore key life and career issues with Stan Collymore and Trevor Phillips emphasising mental health concerns.

The event is inspired by a project founded by Rotimi which focuses on psychotherapy and the identity politics of African and Caribbean men and boys. This project is supported by the University's Equality and Diversity agenda and its commitment to ending stigma around mental health.

The event takes place on Wednesday 12 October 2016, 7:30pm on the Stag Hill campus.

For more information, visit:
surrey.ac.uk/TalkingTherapy



The Surrey Scholar
Guildford high street



Community News



Science on tap in Guildford pubs

This spring, the University brought the global Pint of Science festival to Guildford's pubs.

Taking place in The Stoke Pub and Pizzeria and The Star Inn, local punters listened to engaging talks from the institution's academics about topics ranging from sleep to string theory.

Mathematics lecturer, Dr Jock McOrist, said: "Local people often want to visit our labs and theatres so it was great to take our lecturers and researchers to the people. All three nights sold out. We know there is an appetite for these events in Guildford because our academics are involved in similar gigs. This includes the brilliant Café Scientifique and the popular Bright Club comedy events."

For more information, visit:
pintofscience.co.uk

“Pint of Science was a fantastic, engaging event. Surrey researchers discussed their research in a very entertaining and accessible way, with lots of audience interaction. Next year don't miss it!”

Katy Kennedy
Attendee

Student society appeals for stem cell donors

A student society that helps to save the lives of people with blood cancer is appealing for Guildford residents to join the stem cell register.

Surrey Marrow's team of student volunteers hold events on the University campus and within the community to raise awareness of blood cancer and stem cell donation.

Since it was established in 2010, the society has recruited 1,223 people to join the stem cell register and raised vital funds for blood cancer charity, Anthony Nolan. The group's members also organise events to find stem cell matches for individuals in need.

Emily Curtis-Bennett, Secretary for the Surrey Marrow Committee 2015–16, said: "Signing up to the register is straightforward because you simply produce a saliva sample, which is collected in a tube. If you are ever found to be a match for someone with blood cancer, you will then be called upon to donate your bone marrow or stem cells. Less than half of the people needing a stem cell transplant in the UK can find a match which is why it's so important that people sign up."

"It also costs around £60 to add each new person to the register so a big part of our work is raising funds for Anthony Nolan. Everyone should have a second chance at life, and this charity gives people that chance."

For more information on Surrey Marrow's recruitment and fundraising campaigns, contact:
surrey@ukmarrow.org



Heroic work
Surrey Marrow fundraising on Guildford high street

University land considered for borough's new homes

Land owned by the University of Surrey has been included in Guildford Borough Council's Draft Local Plan as a potential location for new homes and employment space.

Blackwell Farm, situated behind Surrey Research Park, is featured alongside a number of local sites in the Council's latest Draft Local Plan (published April 2016). The planning document seeks to meet the housing, infrastructure and employment needs of the UK's increasing population.

Greg Melly, Senior Vice-President, Advancement and Partnerships, said: "Progressing Guildford's Local Plan to support the natural expansion of the borough is a really positive step that will go a long way towards delivering much-needed new homes and infrastructure for this area. There is a chronic shortage of local housing, particularly for families and young people, and we are pleased

that University-owned land has been included as part of the solution in the latest draft."

The University's proposals for a development named Blackwell Park include 1,800 new homes of all sizes, types, tenures and affordability. The plans also propose a new road to the west of Surrey Research Park - joining it through the Farnham Road to the A31 - a primary school and community hub, an expansion of Surrey Research Park, improved public transport, cycle paths and walking routes.

Mitigating against the environmental impact of new houses and infrastructure on what is now farming land is important to the University which intends to enhance a large percentage of Blackwell Farm's remaining natural assets.

The Area of Outstanding Beauty lying at the edge of the University's land

along the Hogs Back will be protected, removed from agricultural use and restored to woodland or chalk meadows. The existing woodlands and hedgerows will be improved and new ponds, ditches and wetland areas will be provided to create attractive features and sustainable drainage systems.

A key consideration for the University has been how the new neighbourhood can link up with adjoining communities and how it can support smart growth in Guildford.

Blackwell Farm is already located close to a key employment hub, where approximately 9,000 people work for organisations such as the Royal Surrey County Hospital, the University and over 100 companies based on Surrey Research Park. The University is planning Blackwell Park so that people working locally are able to live closer to their jobs.

Recycling scheme shows heart

Students and staff from the University have helped to raise over £400,000 for the British Heart Foundation (BHF) since 2012.

The University has run a large-scale annual campaign to recycle unwanted items left behind as students move out of their university accommodation.

Each year since 2012, the University has donated around 9,000 bags of unwanted clothes and electrical goods to help fund important life-saving work on cardiovascular disease by the BHF. The University and Guildford Borough Council partnered with the BHF to join the charity's campaign to fight for every heartbeat.

Making, investing and giving back



For further information, visit:
[surrey.ac.uk/
FinancialStatements](http://surrey.ac.uk/FinancialStatements)

As a key economic player in Guildford, the University and its Research Park generate significant funds and jobs for the town, region and country. *Your University* takes a look at how the institution is funded and how it measures its economic impact.

The University's new impact report measures and reflects upon changes brought about by developments at the University of Surrey, taking into account the institution's full economic, cultural and social impact.



Philanthropic support plays a crucial role in widening participation and in increasing our impact locally and internationally.

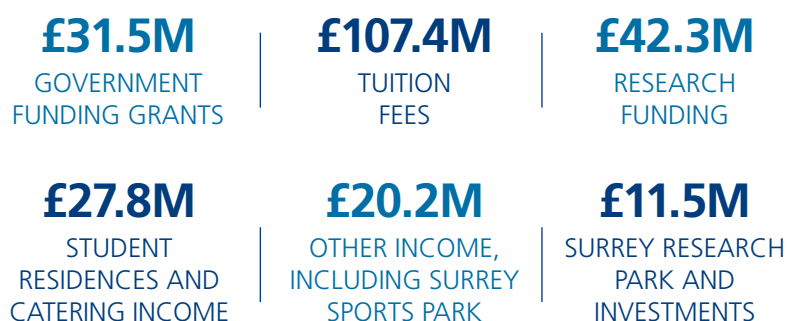


Professor G Q Max Lu
President and
Vice-Chancellor

How the University is funded

The University's income is generated from a variety of sources including student tuition fees, research funding, government funding grants and income from revenue producing assets such as Surrey Research Park.

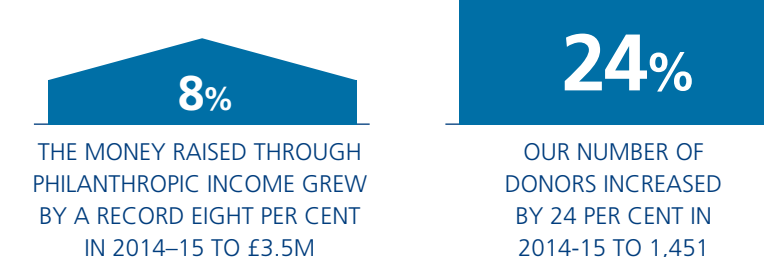
2014-15 saw the University of Surrey achieve its highest ever undergraduate intake, with tuition fee income exceeding £100m for the first time. Research income also reached record levels.



The role of philanthropic income

Philanthropic income plays a crucial role in increasing our impact locally and internationally.

The generosity of our donors has a direct impact on a range of priority areas, including supporting students in hardship, developing academic posts and progressing our research activities.



Impact through capital investment

Capital investments make a significant impact at Surrey and enable us to grow as a top ranking institution.

We are continuing to invest in new buildings, equipment and other campus improvements to increase our capacity for research and teaching and to ensure that we provide the facilities needed to deliver a first-class student experience.

In 2015, we opened our new £45m School of Veterinary Medicine on the University's Manor Park campus and the £10m 5G Innovation Centre (5GIC) on the Stag Hill campus. Other major capital developments since 2000 include:



Student contribution

Our students have an impact on the economy in a number of ways. Without students, some of our local businesses would not have the additional labour they require. In addition, our student volunteers provide a valuable resource and support for local organisations.

BiGGAR Economics estimates that through student expenditure, part-time work and volunteering, our student population supported economic activity in 2014-15 to the value of £135 million GVA.



Our economic impact

The independent consultants, BiGGAR Economics, have carried out three annual economic impact studies for the University. Economic impact was assessed using two measures: Gross Value Added (GVA) which analyses the monetary contribution that the University adds to the economy through its operations; and employment measured in terms of jobs supported.

BiGGAR Economics considered a variety of contributions including the core activities of the University, student expenditure and part-time work, knowledge transfer and commercialisation, enterprise and innovation activities, Surrey Research Park, Surrey Sports Park and productivity improvements.



Reinvestment of University surplus

The University is a not-for-profit organisation with charitable status. All surpluses are reinvested back into the University to improve the physical estate, to develop our academic activities and to enhance the services we provide to students, staff and the local community.

£3.7M
SURPLUS FOR
REINVESTMENT
2014-15

Student News



Sir David Varney, first Students' Union President and Mustie Smith, President in the Union's 50th year

Flying the Union flag

The Students' Union (SU) at the University has been a constant for the 100,000 students who have passed through Surrey's doors. Here *Your University* talks to Sir David Varney, first SU President in 1966, and Mustie Smith, President in the Union's 50th year, about student issues and being part of the Guildford community.

What was/is your relationship like with the Guildford community?

David: In 1966, we had to win the hearts and minds of local people. They were very concerned about drink, drugs and sex and thought we would be fully paid-up members of rock 'n' roll, living a life of indolence! However the *Surrey Advertiser* was a supporter, which helped, and I think we showed the community that we were very different to their initial worries. We were all very excited to be joining a new institution and the opportunities this gave us to do things in a different way from the Battersea Polytechnic Institute, which evolved to become the University of Surrey in 1966.

Mustie: I think our relationship with the local community has become stronger with the introduction of the Union's Community Zone and we do a lot of positive things. We have seen a rise in the number of Surrey students volunteering for schemes, varying from teaching in schools to helping at sports events. We have also raised money for local charities.

We've been very encouraged that the leader of Guildford Borough Council has created a new portfolio for the Students' Union so that we have a forum in which to raise issues of concern, such as safety and housing. It's important to remember that students are residents of Guildford too, and their voices should be heard.

What local issues were/are students most concerned about?

David: Getting good quality accommodation in Guildford was a worry. I spent a lot of time talking to particular groups in the town, such as the Women's Institute, explaining students' needs and encouraging those who had children away at other universities to consider providing accommodation for Surrey students. It was also a time of student unrest, particularly in America and France. Indeed, when the SU was built, it was designed to sustain student sit-ins with its own water and power supply. However, during my time we only had a one-day strike protesting against the discriminatory fees for overseas students.

Mustie: Accommodation and housing are pretty high on the agenda. The demand for housing outstrips the supply in Guildford and students can find themselves in a bidding war. In some cases rent has gone up from £500 to £900 a month which the majority of students can't afford. Infrastructure in Guildford on and off campus is a key factor in this situation and we are working with the Council and the University to find solutions.



For the latest news and information:
ussu.co.uk



Introducing your new VP Community

On an annual basis, the Students' Union elects a team of student officers to lead the organisation for the academic year ahead. The Vice President (VP) Community is tasked with developing and strengthening the bond between students and local residents.

Your VP Community for 2016-17 is Saskia Cochrane, a final-year Dance student, who is passionate about community relations. Saskia said: "I'm looking forward to continuing the work that has been done this year to improve the perception of students amongst Guildford residents. I'm really keen to show the community of Guildford a side of Surrey students that they don't always get to see."

One weekend, one community

In May, the University of Surrey Students' Union hosted Free Fest, a family-friendly celebration of music, film and art beside the University lake.

Students, staff and local residents came together to enjoy a diverse programme of entertainment including live music from local performers, energetic games in the fun-zone and a special outdoor cinema screening of *Star Wars: Episode VII The Force Awakens*.

Local resident, Julian Cooper, said: "It was great to have an opportunity to enjoy such a fabulous event for free, from fire eaters and stilt walkers to performances by talented musicians. I am personally very proud of the University campus and what it contributes to our society."



Relaxing at Free Fest
A diverse programme of entertainment on campus

Union launches scheme to boost community relations

Over the Summer, the Students' Union launched its Community Reps scheme to improve communication between students and local residents.

Student representatives living in residential areas off campus were assigned to six Guildford neighbourhoods including Onslow Village, the town centre, Stoughton and Bellfields, Westborough and Park Barn.

The initiative, spearheaded by second year student and member of the Union's Community Zone, Maisie Ross, follows a series of successful meetings with Guildford Borough Council's team of

community wardens and the heads of local residents' associations such as Ashenden Estate, Park Barn and Westborough.

The Community Reps act as an arm of communication between students living off campus and the Union's Community Zone, helping them deal with problems arising in their local area.

Maisie said: "I have met with many residents who are always very welcoming and enjoy having student representatives at their meetings."

For more information, contact Saskia Cochrane:
ussu.vpcommunity@surrey.ac.uk

Guildford's student neighbours

Since the University of Surrey moved to Guildford 50 years ago, many of our students have enjoyed spending part of their university experience living within neighbourhoods in and around the town as well as in campus accommodation. Many will go on to stay in the area after they graduate, with nine per cent of our alumni living in a GU postcode and 28 per cent living in the South East. *Your University* spoke to James Newby, Director of Business Services at the University, about what this means for the town.



▲ Students relaxing
Heart + Soul

How much of a role do you think Guildford plays in attracting students?

A University's location is incredibly important to prospective students and you will see many potential applicants and their families spending time in Guildford on our annual Open Days.

It is common for our students to appreciate the town's characterful high street with excellent shopping, leisure and social facilities, its proximity to Surrey's countryside and strong links to the capital, airports and other major destinations. International students and their families are often attracted to Guildford because they perceive it as safer than other UK destinations.

How many students live on the University campus?

We have over 5,000 students living on our campuses. This includes the main Stag Hill campus, located next to Guildford Cathedral, our Manor Park campus, opposite the Royal Surrey County Hospital, and our Hazel Farm halls of residence, two miles north of our main campus. Around half of students who need accommodation in Guildford live on campus. This puts us in the top five per cent of universities across the UK for providing our own accommodation.

Does the University plan to build any more accommodation?

Yes. We have applied for planning permission to build a further 1,150 bed spaces on our Manor Park campus which we aim to deliver in 2018 and 2019. This is likely to cost around £70m. Since 2004, when the University was granted permission to build on its land at Manor Farm, 1,820 bedrooms have been built at a cost of approximately £80m. We expect another 1,000 units of accommodation to be built early in the next decade depending on funds, demand and government policy.

How popular is student accommodation on campus?

Campus accommodation is very popular with first year and international students but less popular with students studying in the later years of their programmes. We plan to house all new undergraduates on campus and we find that students often want to move into the private sector for their second and third years. It is usual for our students to want to spend part of their university experience living within a community setting, for example, sharing homes with friends.



◀ James Newby
Director of Business Services

How are students supported to settle into the community?

The Students' Union sends a Welcome Home pack to all students living off campus, covering things like refuse collection and being neighbourly as well as helpful local contacts. Other Union campaigns include the Know Your Neighbour initiative and the Community Reps Scheme (page 6).

Students in general can sometimes be perceived as less than ideal neighbours. Is that fair?

It would be unfair to pre-judge individual households according to a general stereotype and we always suggest that residents introduce themselves to new student neighbours. New student households might need help understanding arrangements for refuse collection or car parking and residents should also let student neighbours know if they have any particular needs they should be aware of such as young children requiring quiet evenings. When approached as friendly and welcome neighbours, students will almost always respond accordingly. If misunderstandings do then arise, they will be much easier to deal with.

How many University of Surrey students live in Guildford?

The University has about 14,000 full-time equivalent students and we estimate that around 10,700 require accommodation in Guildford as a result of their studies. There are a number of reasons why our entire student population does not require local accommodation. For example, many will be away completing industry placement years, others will be commuting and some already live locally.

As students don't pay council tax, is the local authority missing out on valuable income?

Students in the UK don't pay council tax directly but the local authority doesn't miss out as a block grant from central government is calculated to reimburse any revenue loss. The student exemption from council tax exists because they cannot claim typical in work benefits that other council tax payers enjoy.

There are a number of higher education institutions here in Guildford, however, any repeat issues with a home known to be occupied by residents studying at the University of Surrey, should be reported to our accommodation team: accommodation-enq@surrey.ac.uk

For anti-social behaviour complaints, residents should call the standard non-emergency number for Surrey Police: 101

What do students bring to the local area?

Lots! Students contribute in so many ways: economically, they spend money in local shops and provide an important source of temporary and casual work for businesses. Their transport requirements justify the University's substantial financial investment in bus services which also benefit local people.

More importantly, students believe passionately in charitable and social causes so provide thousands of hours of voluntary work and other forms of support for good causes. For example, student-run societies have recently campaigned for charities such as Guildford Food Bank, the Salvation Army, the British Heart Foundation and Sport Relief.

50th anniversary

125 years of heritage 50 years in Guildford



Join the conversation
October 2016
#Surrey50

1891

The forerunner of the University, Battersea Polytechnic Institute, is founded.

1894

First classes are held at Battersea Polytechnic.



1934

The Students' Union is established.

1957

Battersea Polytechnic is renamed Battersea College of Technology.

1966

Battersea College of Technology becomes the University of Surrey.

1966

Construction begins on the University's new campus in Guildford.



1968

Students arrive on the new University campus for the first time.

1970

The final departments transfer from Battersea to Guildford.

1971

Daphne Jackson becomes the UK's first female Professor of Physics.

1981

NASA launches UoSAT-1, the University's first small satellite.



1982

The iconic Geodesic Dome becomes a key landmark when it is presented to the University.

1985

Surrey Research Park's first tenants take up residence.

1985

Professor Alf Adams invents the strained-layer quantum-well laser, since used in billions of optical electronic devices such as CDs, DVD players and barcode readers.

1988

Performing Arts and Technology Studios (PATS) open, home to the Music and Sound Recording (Tonmeister) degree.

1995

European Institute of Health and Medical Sciences is established, now called the School of Health Sciences.

1998

HM The Queen opens the Surrey Space Centre.

2006

Surrey launches a joint academic institution in partnership with Dongbei University of Finance and Economics (DUFE) in Dalian, China.

2008

Guildford School of Acting (GSA) merges with Surrey.

2009

The University announces the sale of Surrey Satellite Technology Ltd to EADS Astrium (now Airbus Defence and Space) in the largest ever cash spin-out deal from a British university.



2010

Surrey Sports Park opens.

2011

Surrey is awarded a third Queen's Anniversary Prize for research into sanitation and safe water.

2011

HRH The Duke of Kent opens the Ivy Arts Centre.

2015

HRH The Duke of Kent visits in September to open the 5G Innovation Centre (5GIC).



2015

HM The Queen returns in October to open the new School of Veterinary Medicine.

2015

Surrey ranks in the top ten of all major national league tables and is awarded *The Times* and *Sunday Times* University of the Year.

2016

The 50th Anniversary of the University's move to Guildford.



Five Wonderful Things

Inventor of the Mini

Sir Alexander Issigonis, who studied Engineering at Surrey's predecessor institution, Battersea Polytechnic, is best known as the creator of the Mini. The iconic Mini became one of the most popular cars ever produced.

Winnie the Pooh illustrator

E.H. Shepard, the illustrator of *Winnie the Pooh* and *Wind in the Willows*, had life-long connections to Surrey, and Guildford in particular, donating his archive to the University. This includes sketches, personal papers, diaries, photographs, manuscripts, correspondence and original art work.

Local residents can explore over 60 collections of archives and rare books held by the University's Archives and Special Collections Department. Our research room is open Tuesday to Thursday from 10:00am to 12:30pm and 1:30pm to 4:00pm. To book an appointment, email:

archives@surrey.ac.uk

First female Professor of Physics

In 1971, Professor Daphne Jackson became Britain's first female Professor of Physics when she was appointed by the University of Surrey. She rose to become the Dean of the University and was President of the Women's Engineering Society. Following her death, the Daphne Jackson Trust was launched.

Award-winning discovery

Professor Alf Adams invented the strained-layer quantum-well laser which is used in billions of optoelectronic applications including optical fibre communications. He was awarded the Duddell Medal and Prize by the Institute of Physics in 1995 and the Rank Prize for Optoelectronics in 2014. He was elected a Fellow of the Royal Society in 1996.

University of the Year

In recent years, Surrey has established itself as a top-ten university in major national league table rankings. We have also been named University of the Year and University of the Year for Student Experience by *The Times* and *Sunday Times Good University Guide* 2016.

Meet some of our notable alumni

The University has more than 100,000 graduates across the world who make a valuable contribution to international research, industry and the arts. They include leaders in a range of fields, from entrepreneurs and policy-makers to CEOs and Oscar award winners. *Your University* takes a look at notable alumni from across the years.


surrey.ac.uk/AlumniNews

facebook.com/surreyalumni

[@SurreyAlumni](https://twitter.com/SurreyAlumni)


Ameenah Gurib-Fakim

An internationally-renowned scientist and biologist, Mrs Gurib-Fakim was elected the first female president of Mauritius in 2015. She graduated with a degree in chemistry in 1983, worked as an academic and rose to become Pro Vice-Chancellor of the University of Mauritius. She set up her own company, CIDP Research & Innovation, in 2010, dedicated to researching the medical and nutritive qualities of the indigenous plants of Mauritius.



Chris Benstead

Chris graduated from the highly-regarded Music and Sound Recording programme in 2004 and has since achieved considerable success in the film industry. He won an Oscar at the 2014 Academy Awards for his role as music editor and sound re-recording mixer for *Gravity*, along with the BAFTA for best sound. Chris has collaborated with some of the best-known directors, including Sir Ridley Scott and Sir Kenneth Branagh.



Claudia Hammond

Claudia is an award-winning broadcaster, writer and psychology lecturer who left Surrey in 1994 with an MSc in Health Psychology. She is the presenter of *All in the Mind* and *Mind Changers* on BBC Radio 4 and *Health Check* on BBC World Service Radio and BBC World News TV. She is a columnist for bbc.co.uk and regularly appears on *Impact* on BBC World News to discuss research in psychology.



Jim O'Neill, Baron O'Neill of Gatley

Former chairman of Goldman Sachs Asset Management and current government minister, Jim O'Neill, graduated with a PhD in Economics. He is best known for coining BRIC, the acronym that stands for Brazil, Russia, India, and China - deemed to be major emerging economies on the global stage. In 2014, he was appointed as head of an international commission to investigate global antimicrobial resistance.



Dame Linda Dobbs

Dame Linda, who studied Russian and Law at Surrey in the 1970s, made legal history in 2004 when she became Britain's first non-white High Court judge. She has featured regularly in the Power 100 List of Influential Black Britons. In 2013, Dame Linda stepped down from the Bench to pursue her various interests, including the training of judges and lawyers internationally (in particular in the Caribbean and Africa), and commercial mediation.



Nima Abu-Wardeh

Nima is an award-winning journalist, thought leader and columnist who left Surrey with an MSc in Biomedical Engineering in 1990. She regularly chairs global and regional events working with the UN, governments and industry. Believing that financial empowerment means choice, Nima created the UAE Saves Week and cashy.me, a personal finance social media platform. She formerly presented BBC World's *Middle East Business Report*.



Robert Earl

Recognised as a leading figure in the hospitality and food and beverage industries, Hotel and Catering Management graduate Robert Earl is the founder and CEO of Planet Hollywood International and owner of the Buca di Beppo and Earl of Sandwich chains. His contributions to the restaurant industry have been acknowledged through many awards and he was cited by *TIME* magazine as 'one of the most influential people in America'.



Professor Sir Martin Sweeting

Professor Sir Martin Sweeting OBE is the founder and executive chairman of Surrey Satellite Technology Ltd (SSTL), a spin-off company from the University. He graduated from Surrey with a degree in Electronics and PhD in Radio Engineering. He chairs the University's Surrey Space Centre, which acts as the research laboratory for SSTL, and pioneered the use of commercial technologies in space and the use of small, low-cost satellites.

We believe that education should be about transforming lives and making a lasting contribution to society. To discover more about how you can support us, email: development@surrey.ac.uk or visit: surrey.ac.uk/AlumniGiving

Research

The University of Surrey is an ambitious, research-led organisation, committed to research excellence and to its application for the benefit of society.

By 2022, the University of Surrey aims to be a top 20 university in the UK and a top 150 university in the world for international research.

Your University takes a look at some of the research to come out of the institution's three faculties in recent months.



surrey.ac.uk/ResearchNews



Every breath we take

Exposure to urban air pollution causes significant health problems such as cardiovascular and respiratory diseases in city dwellers.

These problems could be better addressed by using low-cost air pollution sensors in urban areas, according to research published by University of Surrey reader, Dr Prashant Kumar.

An expert in the field of conventional and emerging air pollutants, Dr Kumar has published the most comprehensive review yet of research into low-cost sensors for air pollution monitoring.

Air pollution is generally monitored through static monitoring sites, but the high cost of building and maintaining these stations means they cannot be used to capture spatial data and identify pollution hotspots – information that is crucial for the development of real-time strategies for effective exposure control.

Dr Kumar's review, published in high profile journal, *Environment International*, highlights that advanced sensing and wireless technology has radically changed the conventional approach. This has made it possible to deploy several air pollution sensors in an urban area to capture the pollution hotspots in real-time.

Dr Kumar has examined the potential challenges presented by these low-cost air pollution sensors in terms of their manufacture, deployment and how the data they produce can be interpreted and disseminated. His review highlights recommendations to overcome these issues and points to future direction for research.

Dr Kumar said: "It is hugely satisfying to see the efforts put into this work have paid off. I hope that the scientific community and policy makers will find this piece of research useful in assessing the pros and cons, and the importance, of low-cost sensing for air pollution management in cities."

Surrey student wins NASA challenge

University of Surrey student, James Lynn, has won the global NASA Space Apps Challenge 2016. James's project, *Canaria*, won the Best Use of Hardware award. This global prize celebrates the creation of mobile apps and technologies that aid space exploration and help improve life on earth.

James, who is studying Electronic Engineering with Space Systems MEng, was part of a team which created a 3-D printed ergonomic earpiece designed as a lifeline for the wearer, simultaneously monitoring heart rate, blood oxygen and atmospheric carbon dioxide levels. Named after the canaries, used by nineteenth-century miners as a warning system for toxic levels of dangerous gases in the mines, the innovative system has an audible danger threshold alarm to alert the wearer.

Canaria was inspired by the current limitations of wearable space technologies. Cumbersome clothing not only has the problem of interfering with daily movements, but is also susceptible to solar radiation when microchips are incorporated into fabrics. When James and his colleagues researched the lives of astronauts, it became clear that there was one area of the body that had been ignored by designers: that imperceptibly small space behind the concha of the ear and the neck.

James said: "The Space Apps Challenge is a unique opportunity to collaborate with a wide range of individuals on a project and I'm thrilled that our work has been rewarded by NASA."

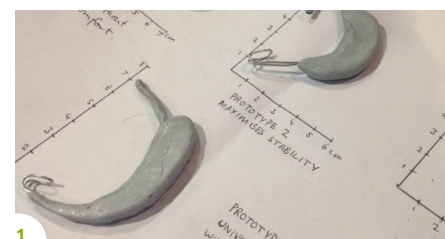
Professor G Q Max Lu, President and Vice-Chancellor of the University of Surrey, added: "Winning this prize is a great personal achievement and I would like to extend my warmest congratulations to James. Research and innovation is a focus for our undergraduate programmes and the University actively encourages its students to push the boundaries of what is possible."

"The award reflects the high calibre of our students here at the University of Surrey, which has been consistently ranked in the top ten within the national league tables. Indeed, the latest *Guardian* league table ranks Surrey as the fourth best university in the UK."

"The winning entry by James also epitomises the outstanding research capability in digital technologies such as satellite and 5G telecommunications."

The NASA Space Apps Challenge is a global hackathon with over 163 events being held across the world over a 72-hour period with around 15,000 contestants competing to try to come up with the most innovative solutions to the problems set.

For more information, visit:
canaria.co.uk



Innovative wearable technology
1. Wire and plasticine prototype
2. 3D Computer Aided Design (CAD) rendering of the final earpiece casing

Timing exercise to aid weight loss

Research at Surrey's Faculty of Health and Medical Sciences reveals that timing when we exercise and eat can affect how our bodies burn fat.

Dr Adam Collins, Programme Director for BSc and MSc Nutrition at the University of Surrey, has discovered that the amount of fat we burn changes based on whether we eat before or after exercise – and this is different for men and women.

Dr Collins' original research suggests that females may benefit from consuming food prior to exercise and avoid eating during

recovery, whereas males may benefit from waiting until after recovering from sport to consume food.

In order to see whether this could be significant in the real world, BBC2's *Trust Me I'm a Doctor* teamed up with Dr Collins and his research group to recruit 30 volunteers to take part in another experiment.

Thirteen men and 17 women who did not normally do much exercise were selected to take part in three exercise classes a week for four weeks. All had a drink before and after each class, however, one of these drinks was

a placebo containing no calories whilst the other was a calorie-controlled hit of carbohydrates. No one knew who was taking which drink when. At the beginning and end of the experiment, researchers tested how much fat they were burning while at rest, as well as other measures such as weight, waist circumference, blood sugar and fat levels.

The results

While the women burned slightly more fat at the end of the experiment, those who were consuming carbohydrates before their exercise were burning more.

Meanwhile, the men were burning slightly less fat at the end of the experiment, but those who were consuming carbohydrates after their exercise were better off. There were no significant differences in their weights or waist circumference, but their blood sugar levels changed in the same way as their fat burning.

The conclusion

Men and women burn fat and carbohydrates in different ways. It is better for men to eat after exercising if they want to burn fat because, after exercise, men use that

carbohydrate to replace the carbohydrate in their muscles rather than burn it for fuel and will continue to burn fat instead.

For women, the results show that eating before they exercise is better if they want to burn fat. Women's bodies tend to burn fat more easily than men's, and are not fuelled so much by carbohydrates. Moreover, women are much better at conserving carbohydrates during exercise. When women eat carbohydrates soon after exercise, this is effectively overloading them with fuel, interfering with their body's ability to burn fat.



Life-saving innovation ►
Dr Shakardokht Jafari (left)



Vital backing for new cancer treatment

Former University of Surrey Medical Physics PhD student, Shakardokht Jafari, has developed a device as part of her research project to provide a more accurate measurement of radiation doses to cancer patients.

Dr Jafari's research led to the ability to target the treatment of tumours rather than healthy cells.

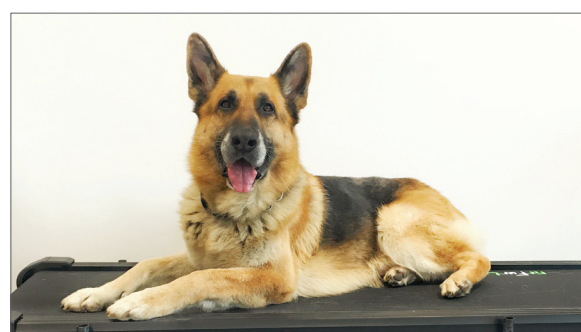
This research focused on finding an alternative to commonly-used dosimeters, overcoming both their high cost and technological limitations. A dosimeter is a device that measures exposure to ionizing radiation. It has two main uses: for human radiation protection and for measurement of dose in medical and industrial processes.

Using research into optical fibres in dosimetry by University of Surrey Professor, David Bradley, Dr Jafari considered other forms of glass-based material that are robust and offer good spatial resolution in three dimensions, rather than using glass fibres. She found that all types of glass material have radiation dosimetric properties.

Jewellery glass beads have very high dosimetric performance because physical parameters that affect their beauty (e.g. size and light reflection) control their dosimetric characteristics. Furthermore, the mass production of glass beads by jewellery manufacturers makes them particularly affordable and Dr Jafari found they offer a far better performance.

The Medical Physics graduate was inspired to develop the device after watching her father die from cancer. She said: "When I was a child, I used to make necklaces using glass beads to earn a little money. This gave me the initial idea of using these cheap beads as (thermoluminescent) dosimeters."

Dr Jafari has been awarded financial backing and support from the government's UK Trade and Investment Department. Her company, True-Invivo, which she co-founded with a colleague, Shabnam Jamshid, has been chosen as one of 24 start-up companies by the Sirius Programme which supports some of the world's most promising international graduate entrepreneurs.



Kennel Club funds biomechanical research

A collaboration between the University of Surrey and the Kennel Club aims to investigate how German Shepherds stand and move, potentially revealing information that could benefit all dogs.

Academics in Surrey's School of Veterinary Medicine and Centre for Biomedical Engineering have been awarded a two-year grant from The Kennel Club Charitable Trust to assess the relationship between the conformation (body shape) and gait (how they move) of German Shepherd dogs and their health and welfare.

Within the German Shepherd breed there are different conformations – sometimes colloquially known as English or Germanic types – which may show different gait characteristics and could be linked to specific musculoskeletal health or welfare concerns. Understanding this correlation, if it exists, could provide the evidence needed to shape breeding strategies and improve the health of numerous dog breeds.

Dr Constanza Gomez Alvarez, Head of the University's Veterinary Biomechanics Laboratory, Dr Aliah Shaheen, Lecturer in Human Movement Science, and Dr. Alex Humphries, Research Fellow in

Animal Biomechanics, will lead the research, which is being conducted in the University's new Animal Biomechanics Laboratory.

The researchers will use a special motion capture system that incorporates the latest infrared cameras to capture and analyse 3D movement of the dogs. They will also investigate the animals' gait using a high-resolution foot pressure analysis mat. These advanced systems will give a picture of how animals move and stand, providing quantitative measures of their biomechanics.

Dr Gomez Alvarez explained: "We expect to identify if there is a relationship between different conformations within this one breed; the way the animal moves and its weight distribution over four limbs."

"At the end of the study we will investigate whether there is any correlation between these parameters and health issues. This could lead to additional research investigating whether there is any welfare implication or concern."

What's on


surrey.ac.uk/ArtsEvents

The Annual Architecture Lecture 2016 – Wed 9 November, 7:00pm

The Guildford Society and the University of Surrey come together every year to present The Annual Architecture Lecture. This year's guest speaker is internationally-renowned architect, Robert Adam of ADAM Architecture, who will present *The way we are going to be: Research into social trends of the upcoming generation*.

Venue: Rik Medlik Lecture Theatre, Stag Hill campus

Tickets: Free. Call our Box Office on 01483 686 876

Morag Morris Poetry Lecture – Taking place in October/November

The Morag Morris Poetry Lecture Series began in 1974 and is well known for welcoming leading contemporary poets to campus, such as Stephen Spender, Seamus Heaney, J.H. Prynne, Iain Sinclair and Barbara Hardy.

Venue: Stag Hill Campus

Tickets: £4 or £2 con. For more information: FASSevents@surrey.ac.uk

Jazz Weekend – Fri 21–Sun 23 October

Celebrate the music and legacy of jazz giants, Miles Davis and John Coltrane, with Professors Ingrid Monson, Tony Whyton and expert speakers and performers from across the world. Performances to include a Coltrane Tribute from Gary Crosby Quartet (Friday) and *1959: The Year that Shaped Jazz* from Ronnie Scott's All Stars (Saturday).

Venue: Ivy Arts Centre, Stag Hill campus

Tickets: £15 per performance, £13 con or £2 students/U18
Call our Box Office on 01483 686 876

Weekly Lunchtime Music Recitals – Every Wed (during term), 1:10pm

Find out why our music programmes are ranked number one in the UK by the *Guardian University Guide 2017* as our talented students perform a range of styles from Bach to Hendrix.

Venue: The Performing Arts and Technology Studios, Stag Hill campus

Tickets: Free. For more information: FASSevents@surrey.ac.uk

Architecture and Sculpture Walk 2016 – Sun 2 October, 3:00pm

Find out more about the University's collection of sculptures which can be found across our beautiful campus. Enjoy the autumn colours and hear more about the architecture that is changing the campus landscape.

Venue: Meet at the Alan Turing sculpture on the main piazza of the Stag Hill campus

Tickets: Free

Action Hero present Wrecking Ball – Thu 13 October, 7:00pm

Wrecking Ball tells the story of a male photographer and a female celebrity. The piece playfully manipulates theatrical conventions and narrative expectations, revealing the seductive power of make-believe and the subtle abuses of power that dictate our relationships. Lines between truth and fiction, and consent and coercion, blur until they are destroyed.

Venue: Ivy Arts Centre

Tickets: £10, £8 con or £2 students/U18
Call our Box Office on 01483 686 876

School of Acting puts Guildford on the global stage



GSA production
Our House

Established in 1935 and merged with the University of Surrey in 2008, Guildford School of Acting (GSA) is internationally recognised as being one of the top drama schools specialising in training for the theatre, cinema and television.

Along with a host of other well-known names throughout the entertainment industry, some of our past students include the international musical theatre star, Michael Ball; twice Oscar-nominated actress, Brenda Blethyn OBE; BAFTA award-winner, Bill Nighy; actress Celia

Imrie and children's television presenter Justin Fletcher CBE, otherwise known as Mr Tumble.

GSA offers undergraduate courses in Acting, Musical Theatre, Actor Musician and Performance Technologies and Production. Postgraduate programmes include Acting, Musical Theatre and Creative Practices and Direction.

Graduate students from GSA can be found in nearly every West End musical, on Broadway, in the Royal Shakespeare Company and others touring both in the UK and abroad with many appearing on television and in films.

Many GSA performances take place in the Ivy Arts Centre, a state-of-the-art theatre and studio space located on the University's Stag Hill campus. GSA students also perform in venues around the town including the Yvonne Arnaud, the Mill, the Electric Theatre, Guildford Cathedral and a number of local churches.

Get involved!

All GSA productions are open to the public and whether you enjoy musicals, drama, comedy or just love theatre, there is something for you.

The GSA offers a flourishing Saturday School for children (aged five plus) and adults of all ages. The Easter and Summer Schools are open to all - no audition required - and offer a taste of training for the profession and a chance to improve your skills in acting, dance and singing.

The GSA Singers is a company of performers from the second year Musical Theatre and Acting programmes formed specifically to provide entertainment for business functions, private parties, weddings, fundraising events and concerts.

Coming up this autumn

GSA will bring a season of plays to the Ivy Arts Centre this autumn. Expect some exciting and different work from our Acting students as they perform works by a range of playwrights, including:

- *Girls Like That* by Evan Placey, directed by Justin Audibert
- *Love and Money* by Dennis Kelly, directed by Marieke Audsley
- *Buckets* by Adam Barnard, directed by Sophie Lifschutz
- *Come Out Eli* by Alecky Blythe, directed by Trevor Rawlins

For more information, visit:
gsauk.org/GetInvolved



facebook.com/gsauk



[@The_GSA](https://twitter.com/The_GSA)



GSA production
Grapes of Wrath

A day in the life of a midwifery student

The University of Surrey is proud to be ranked third in the UK by the *Guardian* for its midwifery programmes.

Our midwifery programmes involve 50 per cent theory and 50 per cent practice, which students gain from hands-on placements within a range of excellent healthcare providers across Surrey and Sussex.

Kayley Skipworth, a 23-year-old first-year midwifery student, logs a typical shift as a trainee midwife on the postnatal ward at St Peter's Hospital in Chertsey.

5.30am Wake up – not pleasant at all!

6.40am Leave the house.

7.15am Arrive on the postnatal ward and receive a handover from the night midwives.

7.40am Meet my mentor and greet our patients - twelve women and their babies (24 to 48 hours old).

8.05am Speak to our first mother, a first-time mum who had a ventouse (suction cap) delivery in the early hours and is now ready to go home with her baby. First job of the day - putting my training into practice and taking my first ever bloods.

8.40am See our second mum of the day - a first-time mother whose baby was born in the early hours but has jaundice so needs phototherapy. Phototherapy uses

UV light to break down the yellow pigment in the blood. Some babies have trouble breaking down this pigment as their livers are so tiny and immature. Mother is checked and her medication given.

9.00am CTG monitoring of a lady who is expecting twins. CTG monitoring measures the baby's heart rate and the rate of contractions if present; a printed continuous graph shows the heart beats over a set number of minutes. First experience palpating an abdomen with twins.

9.20am A second lot of blood needs taking. This mother has suffered an early rupture of membrane i.e. her waters broke early and she needs a full blood count.

10.00am Back to the twins to check CTG machines. The CTG traces are normal with the graph showing the babies' heart rates over a certain number of minutes with no decelerations.

10.10am Write notes and check patient board. More patients are being transferred from the labour ward and I make sure the rooms are clean and ready.

10.40am A lady is transferred from the labour ward - second baby, breastfeeding and VBAC delivery. VBAC stands for Vaginal Birth After a previous C-section.

Midday Check medications – mostly painkillers.

13.00pm Three women and their babies are checked and discharged. I complete discharge papers and go through the discharge summary with them.

14.00pm Lunch.

15.00pm Overall sweep of patients to check how they are getting on - check feeding charts and continue baby checks.

16.20pm Time for the after lunch four hourly obs (observations) to be taken – temperature, respiration rate, heart rate and blood pressure.

17.30pm Assist with a drug round which covers the whole postnatal ward.

19.00pm Final checks of all mothers and babies before the night staff arrive.

19.30pm Handover.

20.00pm Home time.

20.40pm Tea and early bed after a busy day.



I delivered my first baby in February, which was fascinating and eye opening. I had the privilege of being the first person to hold the baby.

I feel so blessed to be involved in bringing new life into the world; seeing my name as the student midwife who delivered the baby was a feeling I can't describe - it made me realise that this is the career for me.



Kayley Skipworth
First-year midwifery student



For more information, visit:
surrey.ac.uk/MidwifeDiary



Mindful eating, mindless exercise

If you want to enjoy a healthier lifestyle this autumn, Professor Jane Ogden offers her top ten tips for mindful eating and mindless exercise.

- 1 Buy foods that are good for you and that you'd like to eat more of and keep those you don't want to eat out of the house. But don't demonise them or they will seem irresistible.
- 2 Eating well is about when, where, why and how food is consumed. Eat at a table not on the go.
- 3 Buy ingredients and cook simple meals from scratch: fruit, veg, salad, basics such as rice, pasta, brown bread, fish and meat.

- 4 Write a list for the week and avoid the biscuit/cake aisles when shopping.
- 5 Never say 'diet' to children, family or friends and use positive language around healthy foods. Do say to children: 'This is tasty and crunchy'.
- 6 Portion sizes – if you're worried you'll overeat, don't cook so much. Put leftovers in the fridge or freezer. Eat from smaller plates.
- 7 Plan a time to eat so that when you are hungry you know when food is due. If you crave chocolate or sweet foods, wait three minutes and get distracted. Chat to a friend or go for a walk.



- 8 Teach others to use exercise, not food, to manage their emotions. Send children into the garden with a ball when they are cross.
- 9 Be active every day. Use stairs, escalators, walk to work, pop round the corridors rather than email.
- 10 Enjoy a run or join a netball or football team. Guildford has a weekly park run, Nordic walking, netball, touch rugby and even walking football. Make the most of our local parks and leisure facilities.

Jane Ogden is Professor of Health Psychology at the University of Surrey. Her book, *The Good Parenting Food Guide*, is out now and is available in Waterstones, Guildford (Wiley Blackwell, £14.99).



@Jane10gden

The power of partnerships

The University has a reputation for strong engagement with industry and building long-standing partnerships with external companies, from major multinationals to small start-ups. Through these close collaborations, ground-breaking research conducted at the University – in areas as diverse as mobile communications, radiotherapy and sustainable tourism – is translated into real world solutions which could benefit us all in the future. Here we highlight just a few of the partnerships Surrey has formed with large companies and the amazing results they are reaping.

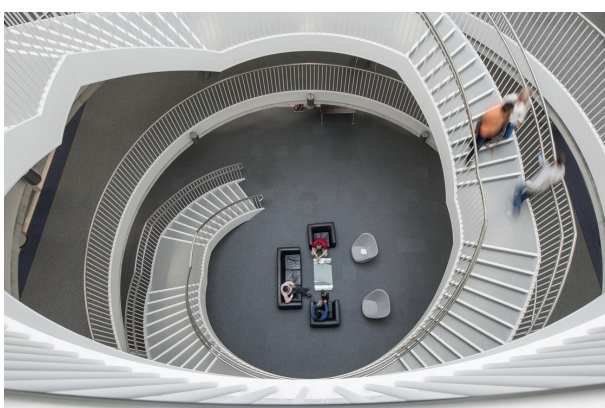


surrey.ac.uk/BusinessNews



National Physical Laboratory (NPL)

2015 saw an exciting new phase in Surrey's relationship with NPL as, having worked closely for many years, the two entered a formal strategic partnership along with the University of Strathclyde and the Department for Business, Innovation and Skills (BIS). The UK's national measurement institute, NPL, develops and applies the most accurate measurement methods in areas such as satellite technology, mobile communications, healthcare and advanced manufacturing. The University's internationally-leading research and state-of-the-art facilities in each of these fields means that the Surrey-NPL partnership is perfectly placed to address some of the biggest scientific challenges we face today.



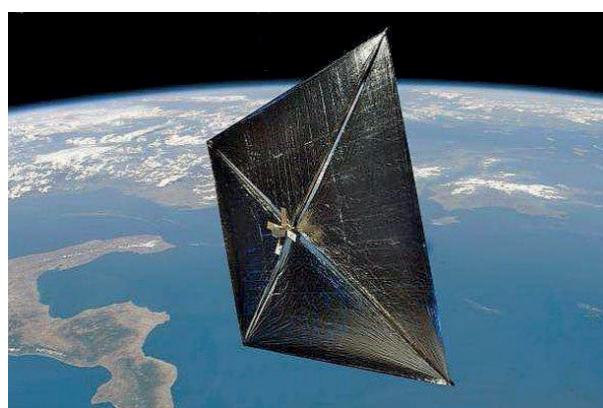
Huawei

In the future, mobile access to the internet will be fundamental to the way we live and do business. The University is partnering with a number of major players in the communications sector to lead research into 5G, the next generation mobile network. One of the founding members of Surrey's 5G Innovation Centre, Huawei has brought its invaluable on-the-ground expertise to help create the world's leading independent research testbed – a 4km square, self-contained mobile network which allows businesses and academics to trial 5G technologies. Huawei's partnership with Surrey will open the door to new applications with global impact in fields such as mobile healthcare, gaming, smart transport and intelligent cities.



Rolls-Royce Plc

Since 2003, the University has worked in close partnership with aircraft engine manufacturer Rolls-Royce Plc to drive research aimed at optimising the design of turbomachinery used in its engines. Surrey hosts the University Technology Centre in Thermo-Fluid Systems which is one of Rolls-Royce's global network of research centres, each addressing a key engineering technology. Headed up by two professors with over 50 years' combined experience in this field of research, along with 14 researchers, the Centre develops advanced computer modelling techniques to predict how engines will perform, particularly in terms of temperature, providing vital knowledge for future aircraft engine design.



Airbus Defence and Space

A world-leader in the space industry, Airbus Defence and Space (formerly Astrium) has been a Surrey partner since 2009, when the University sold Surrey Satellite Technology Ltd (SSTL) to Airbus. Through the Surrey Space Centre, the University works closely with Airbus to conduct research which addresses real industrial needs in space and aerospace. Recently this has included developing CubeSail – a tiny satellite which unfurls to a large solar sail and can be used to control a spacecraft or deorbit it safely at the end of a mission, and QCT (Quad Confinement Thruster) – an innovative electric propulsion system which could potentially lower the cost of launching a satellite into space.



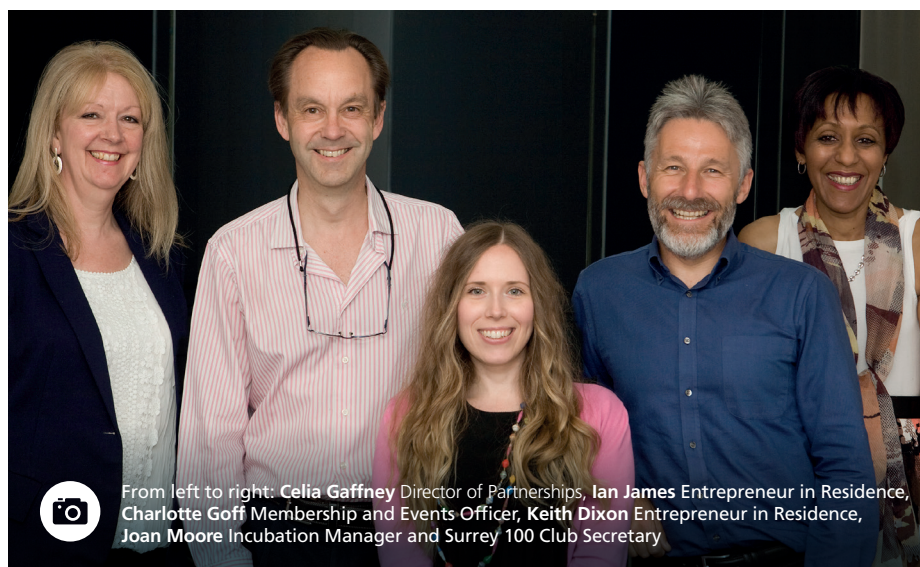
Zoetis

Digital technologies such as wearables, apps, sensors and satellites promise to transform the way information is captured for animal owners and their vets, potentially improving animal health and enabling the earlier identification of problems. In April 2016, the University and Zoetis (the world's leading animal health company) jointly announced the launch of an innovative multi-disciplinary centre – vHive (Veterinary Health Innovation Engine) – which will drive new research, education and business opportunities offered by these new technologies. The Centre brings together expertise within the University's Centre for Digital Economy, 5G Innovation Centre and School of Veterinary Medicine, and the global expertise of Zoetis.



IBM

Surrey's Centre for the Digital Economy (CoDE) aims to enable companies to benefit from the many opportunities offered by digital technology, which is revolutionising the way we do business across almost every sector. As part of this work, CoDE has a growing relationship with IBM, collaborating with the global IT company on two major research projects focused on mobile telecommunications innovation, and trust and privacy for online consumers. CoDE and IBM also have regular knowledge-sharing events, including workshops with IBM's Emerging Technology Team at IBM Hursley and an event hosted by Surrey for 70 of IBM's top technical talent in the UK.



Giving tech start-ups a helping hand

The University of Surrey's SETsquared incubation centre gives the region's high-tech start-ups the vital support they need to get going in a dynamic environment where ideas flow. *Your University* caught up with Celia Gaffney, Director of Partnerships at the University of Surrey, to find out more.

Why was the SETsquared incubation centre set up?

We are one of five universities (including Bath, Bristol, Southampton and Exeter) which formed the SETsquared partnership in 2002, with the aim of incubating new businesses, helping to commercialise research and giving students a better entrepreneurial experience. Ranked as the global number one business incubator in the University Business Incubator (UBI) Index, SETsquared has directly supported more than 1,000 companies, helping them raise over £1 billion since its inception.

How do you support businesses in the incubation centre at Surrey?

SETsquared Surrey creates a safe environment for technology start-ups to grow. Most importantly, new ventures have access to our experienced in-house Entrepreneurs in Residence who share their knowledge, experiences and networks.

Some companies take a desk within the incubator which gives them office facilities with minimal set-up issues. All our members, both residential and non-residential, have access to services such as free clinic sessions offered by HR, intellectual property, financial and legal companies; a mentoring programme; and help finding funding or linking with corporates.

What kind of businesses have you helped and where are they now?

We are keen to support any technology-based start-up company that meets our criteria. Two examples are iGeolise (profiled on this page) and IKinema, a company

aimed at improving the quality and reducing the cost of animation.

Originally a spin-out from the Surrey Space Centre, IKinema has gone on to become a major player in the animation industry, working with companies like 20th Century Fox, Disney and DreamWorks Animation.

Where does the Surrey 100 Angel Investment Club fit in?

The Club's remit is to connect innovative early-stage companies seeking investment to our Angel investor network. The carefully selected ventures deliver their investor ready pitches to Club members at the regular events we host.

Since 2007, companies have successfully secured over £50 million in funding, nearly £7 million directly from our network, after they presented at our events.

What are some of the challenges facing start-ups today?

We often see young companies with great ideas, solutions or products but a lack of certainty about their market. Our Entrepreneurs in Residence help these companies to plan their business strategy.

We hear from businesses that have a problem accessing funding quickly and easily – something that's absolutely crucial for start-ups. We can help by pointing businesses in the right direction for funding – whether through a particular government grant or by pitching at the Surrey 100 Club.

To find out more, visit: setsquared.co.uk
surrey100club.co.uk



Satellite success

Located on Surrey Research Park, Surrey Satellite Technology Ltd (SSTL) has grown from a small University spin-out company to become the world's premier provider of operational and commercial satellite programmes.

Professor Sir Martin Sweeting OBE founded SSTL in 1985 to enable the building of two small experimental microsatellites; since then the company has launched 47 small satellites and now employs 500 staff. Acquired by Airbus Defence and Space in 2009, SSTL continues to work closely with the University's Surrey Space Centre to deliver innovations in areas such as space debris and earth observation.

Relief from varicose veins

The University is proud to have close research links with The Whiteley Clinic, a private medical facility which is leading the way in the treatment of varicose veins and other venous conditions, pioneering the use of pin-hole surgery among other innovations. The Clinic has sponsored research in the University's Department of Psychology, School of Veterinary Medicine and School of Biosciences and Medicine, and is actively working with Surrey to turn this research into commercial products.

Company founder, Professor Mark Whiteley, who is also a Visiting Professor at Surrey, said: "Working with the University of Surrey has increased the depth of our research, allowing us to understand venous diseases and their treatments far more deeply than we have ever done before. This knowledge has led us to develop better and more effective treatment strategies for our patients, leading to real improvements in patient outcomes."

Time, not distance

iGeolise started life in Surrey Incubation, having grown out of the garage loft space where founders Charlie Davies and Peter Lilley started the company. The pair have created TravelTime, a unique way to search location-specific information on the internet – by time spent travelling rather than distance – giving users much more meaningful data and returning results in under 0.8 seconds. The platform is revolutionising the property and job search markets, with major players including Zoopla and Jobsite already using it. iGeolise has been awarded two patents for its unique technology, and the growing company has now moved into larger offices in London.



iGeolise founders
Peter Lilley (left) and Charlie Davies (right)

Welcome from Surrey Sports Park

Sport 

Join us at Surrey Sports Park this autumn

As we leave behind us memories of another incredible summer of sport, there really is no reason not to follow in the footsteps of the world's greatest athletes. Whether it was Euro 2016, Wimbledon, the Olympic Games or the Paralympic Games that captured your imagination, join us at Surrey Sports Park and get your own health and fitness goals on track.

Our state-of-the-art facility can offer you and your family an Olympic-sized swimming pool, a 1,000-seat arena, a 120-station gym, outdoor sports space and pitches, a climbing wall, squash courts and exercise studios.

As well as catering for fitness professionals and gym fanatics, we have something for all ages. Our Tiny Tots activities encourage children as young as six-months-old to get active in a fun and friendly environment, while mothers and mums-to-be can join our pre and postnatal programme in conjunction with TeamMama.

For those wanting a more gentle exercise regime, our weekly, low intensity walking basketball sessions are perfect for staying active without breaking into a heavy sweat.

For more information, visit:
surreysportspark.co.uk



Keeping fit at Surrey Sports Park

1. 50m swimming pool 2. squash courts 3. Surrey Summit



1.



2.



3.



@Surreysportspark



facebook.com/surreysportspark



C3



C4

Free coaching for Surrey Schools

Schoolchildren across Surrey are enjoying professional sports coaching thanks to Surrey Sports Park-based clubs, Surrey Storm (netball) and Surrey Scorchers (basketball).

More than 1,000 children from across London and the South East have visited the Sports Park for netball and basketball camps run by the two clubs.

Popular roadshows have also been taken into schools around the region to give children the chance to enjoy free coaching sessions.

A record number of schools have watched both teams in action, with discounted tickets inspiring young people to hit the court and athletes attending PE lessons and after-school clubs.

Surrey Sports Park Franchise Director, Gavin Baker, said: "Community engagement is really key for us, whether that is getting people to watch live sport, welcoming juniors to our camps and clubs or getting out there at venues all over the South East.

"Our players and coaches love uncovering hidden talents or simply getting kids active on a regular basis."

For more information on the latest camps and sessions, visit:
surreystormnetball.co.uk and
surreyscorchers.co.uk

Surrey Sports Park in numbers

2nd

GOOD SPORTS FACILITIES
THE TIMES HIGHER EDUCATION
STUDENT EXPERIENCE SURVEY 2015

5,747

THE NUMBER OF
SCHOOLCHILDREN WHO
PARTICIPATED IN SURREY
SPORTS PARK ACTIVITIES
IN 2014-15

5M

THE NUMBER OF VISITORS
TO SURREY SPORTS PARK
BETWEEN 2010 AND 2015

£36M

THE AMOUNT OF
MONEY INVESTED BY
THE UNIVERSITY TO
BUILD SURREY
SPORTS PARK

102

THE NUMBER OF SCHOOLS
THE PARK WORKED WITH
IN 2014-15