



Director, Research Strategy

University of Surrey information pack





Building BRILLIANCE

At Surrey, every step counts, every little discovery.

The University of Surrey is continually developing to piece together a visionary future. Our collaborations touch on many different worlds, forming the bigger picture. They start with us, extend to our local community, to our whole world, to space, to other worlds of our imagination, and ultimately to the world of things yet to come. These worlds are ever-changing, as we seek instead of seeking broader and better solutions to all kinds of problems.

Enter a world

OF COLLABORATION

Surrey is made up of many talented individuals who make us a great institution. But working together, and connecting with external institutions, businesses and government make us even stronger.

Since the University's founding in the 1960s, and before that at Battersea College, our community has thrived on strong connections with the world outside our campus. This spirit of collaboration is evident across the University today at every level. It informs our teaching, adds value to our research and increases our impact – connecting people with ideas, students with opportunities and businesses with technology.

Collaboration begins with the connections we make in our community, supporting projects that make a difference locally, and extends to our global partnerships that are enabling transformative research in areas such as 5G, cancer treatment and sustainable tourism.

Around the globe and beyond, Surrey plays a significant role. We were one of only a few UK universities invited to take part in the GREAT Festival of Innovation in Hong Kong, a wonderful forum for collaboration and interdisciplinary discussion on technologies that will drive the UK's future economic growth. We also saw the first successful deployment of the RemoveDEBRIS satellite, a project we are leading with a consortium of space sector organisations.

There's real energy, momentum and ambition to Surrey. It's always been part of us, and I'm excited to be able to share with you how we're taking that energy forwards into the future.

These collaborations, and many others, are bringing improvements across a diverse range of fields, and new connections are propelling us in surprising directions. At Surrey, we are continuously redefining and joining together the many spheres that surround us – from real worlds to virtual ones, and from the worlds inside ourselves to those at the farthest reaches of our imagination.

Professor G Q Max Lu AO DL FAA FTSE President and Vice-Chancellor University of Surrey

Our worlds collaboration

Surrey is an interconnected network of intelligence, innovation and discovery - and the effects of the connections we make with the outside world can be felt locally, internationally and in worlds beyond our own.

SPACE

Our world-leading research is bringing the high frontier within the reach of more people, companies and countries.





LOCAL

It starts with the active role we play in the community on our doorstep.



OTHER WORLDS

We go above and beyond what we can see to explore the digital and virtual worlds we will increasingly inhabit.



INTERNATIONAL

We see opportunities rather than boundaries, making connections across the world in our quest for new discoveries.



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THE FUTURE

Our curious mindset and spirit of innovation means we always stay focused on what's to come.





Reaching

FAR AND WIDE

On the world stage, our reputation for innovation and collaboration is opening up remarkable opportunities to increase the UK's voice and impact.

A GREAT showcase

As a world authority on 5G communications and space, Surrey was asked by the Department for International Trade to be a partner in its GREAT Festival of Innovation, which took place in Hong Kong in March 2018.

The Festival – which was part of the UK government's GREAT Britain campaign – showcased the best of British innovation to over a thousand delegates from government, business, technology, education and the creative industries, and was launched with a keynote speech from Dr Liam Fox MP, Secretary of State for International Trade.

During the four-day event, discussions pushed the boundaries of how we will work, live, play and learn in the future, and highlighted the innovations which will enable future trade. Surrey's delegation of inspiring academics included Distinguished Professor of Space Engineering Sir Martin Sweeting who gave an insight into space innovation, Regius Professor Rahim Tafazolli, Director of the Institute of Communication Systems, who shared Surrey's transformative work in the field of autonomous vehicles, and Professor Adrian Hilton, Director of the Centre for Vision Speech and Signal Processing, who showcased the Centre's work in virtual reality. Students from Guildford School of Acting added a different flavour with a performance of popular songs from West End musicals.

UGPN comes to Surrey

In April last year, Surrey was honoured to host the University Global Partnership Network (UGPN) Annual Conference 2018, welcoming over a hundred researchers and staff from our fellow Network universities – São Paulo, North Carolina State and Wollongong – for three days of meetings, workshops and events.

Through global collaboration, the UGPN continues to propel forward innovative research in areas of global significance as diverse as plant survival in a changing climate, healthy brain ageing, and transformative digital literacy. With China's Beihang University confirmed as the next member to join UGPN, and North Carolina State University due to host the 2019 conference, the Network is now poised to broaden its remit and increase its impact even further through valuable global insights.







Building A 5G FUTURE

This year, our 5G Innovation Centre began to unveil the next generation of mobile communication technologies That will transform the way we live. As we took the lead in a new £16m testbed hub partnership, demonstrated Europe's first autonomous car, and launched the world's first 5G digital gaming initiative, the '5G city of the future' moved ever closer to reality.



A NEW Space

Nowhere is our collaboration as far reaching as in space. Through our innovative thinking and entrepreneurial spirit, we are pushing the frontiers of space in new and surprising ways.



Together with our partners, we are best placed to bridge the gap between 'old space' and 'new space', leading and supporting collaborations with industry, and giving the UK space sector the cutting edge that will allow it to meet ambitious growth objectives.

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Professor Guglielmo Aglietti Director of Surrey Space Centre

When a large net closed in on a piece of space debris miles above the Earth in September 2018 and a harpoon launched from the same Surrey satellite in February 2019, spearing a simulated satellite panel, these were landmark moments in the race to make space safer.

These experiments were the culmination of a Surrey-led collaboration with a consortium of

leading space companies and research institutions. The EU-funded RemoveDEBRIS satellite, which was five years in development and testing, had achieved the first demonstration in human history of active debris removal technology.

This is just one example of how the University has been connecting businesses, technology and ideas in the field of space for almost 40 years. From its inception, Surrey Space Centre changed the economics of the space industry by creating satellites based on commercial off-the-shelf components. Its spin-out company, Surrey Satellite Technology Limited, has gone on to become the world's leading manufacturer of commercial micro-satellites.

Since then we have continually collaborated with partners of all sizes

to bring about innovative solutions that have a real impact on people's lives. For example, our strategic partnership with the National Physical Laboratory is maximising the potential of Earth observation in sectors such as farming and future transport.

Today, the University is part of the government's mission for the UK space sector to account for 10 per cent of the £400 billion space market

by 2030. In April 2018, Surrey joined together with the Universities of Leicester, Southampton, Edinburgh and the Open University to form the Space Research and Innovation Network for Technology (SPRINT), funded by a take over £4.8 million grant from Research England.

Through the SPRINT project, Surrey is again helping to revolutionise the space industry. In a sector traditionally dominated by institutional players, Surrey will give small and mediumsized companies unprecedented access to its expertise, facilities and world-class research, enabling innovative technologies which will bring broad benefits for society and our economy.



Game Changer

Our research doesn't end with the real world: we are forging technologies which are creating ever more realistic virtual experiences, taking users on journeys into realms beyond their imagination.

Surrey's Centre for Vision, Speech and Signal Processing (CVSSP) not only pioneers the ground breaking technologies which are powering futuristic video games and films, it is also playing a pivotal role in promoting the digital media industry itself.

Guildford is a leading hub for the games sector, with companies such as Electronic Arts, Supermassive Games and Figment Productions all based nearby. In a bid to promote collaboration in the local games community and develop future talent, four years ago academics from CVSSP and Surrey's Digital Media Arts programme joined together to launch the G3 (Galvanising Guildford Games) Future conference. Last year's G3 conference, which took place in July in the 5G Innovation Centre, was the most successful yet, with a record 160 delegates discussing the impact and potential of immersive virtual reality (VR) and audio.

Industry collaboration has always been at the heart of what CVSSP does, and continues to shape its research. Having worked with the BBC for many years, in 2018 the Centre and the Corporation joined forces for a five-year Data Science Research Partnership. The aim of this partnership is to use CVSSP's expertise in artificial intelligence (AI) for understanding audio and visual media to create a more personal BBC that can inform, educate and entertain its audience in new ways.

Meanwhile, the Centre's collaborations with innovative small and medium-sized businesses is transforming the way we experience film and video games. Its alliance with Figment Productions and Foundry has led to the development of the visionary 'ALIVE' system which captures an actor's performance so that it can be viewed on a VR headset – enabling the user to step into a scene and become part of the action as never before.

THE QUEEN'S ANNIVERSARY PRIZES For Higher and Further Education 2017





Surrey's research extends well beyond the frontiers of engineering. A phenomenal body of work exploring the links between food, nutrition and health has been recognised with a Queen's Anniversary Prize for Higher and Further Education.

The award was announced at a special ceremony at James's Palace at the end of November 2017. The Queen's Anniversary Prize is the highest honour that an academic institution can win, and is awarded every two years by HM The Queen to acknowledge world-leading research and teaching.

Surrey's award recognises half a century of pioneering research in cardiovascular disease, obesity, diabetes, osteoporosis, vitamin D, iodine and food labelling. Led by our Department of Nutritional Science, and the Food, Consumer Behaviour and Health (FCBH) research centre, the work has not only brought about major changes in government policy, but has also helped transform consumer perception through media and public engagement activities.

While conducting this vital research, Surrey has also educated over 3,000 future practitioners. We were the first university in the UK to teach dietetics and nutrition together, and today are ranked number two and three for food science in the country by The Times and The Sunday Times Good University Guide 2019 and the Complete University Guide 2019 respectively.

Professor Susan Lanham-New, who has been Head of the Department of Nutritional Sciences since 2010, has played a vital part in establishing Surrey as a centre of excellence in this field. Professor Lanham-New said: "The fact that the judging panel described Surrey's work in nutritional sciences as 'exemplary' gives us a huge tick that our last 50 years of effort have really made a difference. This prestigious award is down to the passion and hard work of dedicated staff over many years, and the vision of inspiring academics such as Professor D Joe Millward, who first put Surrey on the map in this area."

The Department of Nutritional Sciences and the FCBH centre's research continues, and will no doubt discover more in the years to come.



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Surrey's research has:

• Dispelled the myth that dietary cholesterol increases blood cholesterol, which has resulted in removing restrictions on egg consumption

• Improved our understanding of the impact of vitamin D on bone health, in particular with research into ethnic populations

• Led to changes in policy for military training and nutrition provision, through our work with the Institute of Naval Medicine in Gosport

 Prompted reformulation of pregnancy supplements by demonstrating the link between iodine deficiency in pregnant women and lower IQ and reading ability in their children.



PROFESSOR SUSAN LANHAM-NEW

"Winning the Queen's Anniversary Prize gives us great credibility in the field of nutritional sciences specifically, but also in science generally. We will continue to push forward to ensure that this opens up further opportunities for collaboration with partners both nationally and internationally."



Our Research Strategy and Innovation Strategy is integrated into one framework, recognising that one flows seamlessly from the other. By Innovation, we imply broadly all societal benefit that accrues from our research – not only its monetisation, as important as that is.

How we reach our strategic goals is intended to be adaptive and open to change, reflecting our pragmatism and agility. Our strategy, which recognises the critical place of research and innovation in the modern university, will see Surrey accelerate its journey towards being a truly great global university.



International rankings: ARWU, QS, THE



Academic Ranking of World Universities (ARWU) QS World University Rankings (THE) World Rankings

Researcher demographics

	Women		Men	
	Total FTE	% of FTE	Total FTE	% of FTE
Academic, teaching and research				
United Kingdom	127	37%	215	63%
EU	58	36%	101	64%
International	31	31%	70	69%
Research only				
United Kingdom	60	44%	76	56%
EU	22	33%	45	67%
International	32	25%	98	75%
Geographical demographics				
United Kingdom	187	39%	291	61%
EU	80	35%	146	65%
International	63	27%	168	73%
935	330	35%	605	65%
Grand total Total FTE	Total FTE	% of FTE	Total FTE	% of FTE

Source: PGR Live, correct as at 06/03/2019

Postgraduate researcher (PGR) landscape







Absolute numbers

PGR per academic³





Gender¹



Region¹ 0 Home 21% ۲ 55% EU 24% International

AdvanceHE Postgraduate				
Research Experience Survey 2018				



1. Source: PGR Live, correct as at Mar 2019 2. Source: R62, correct as at Jan 2019 3. Source: H20, correct as at Feb 2019

Research and innovation income



1. Includes QR income 2. Includes HEIF income



Note: these figures are also included in the overall chart

Industry funded research and innovation income

Innovation performance



Start-ups and spin-offs per £10m research income

Surrey Research Park and incubation 2019

The Park hosts SETsquared Surrey in the Surrey Technology Centre.





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LET'S TALK

Director, Research Strategy

BACKGROUND

The University's Research and Innovation portfolio is led by the Vice-Provost, Research and Innovation. The portfolio is divided into five strands, each with its own director: Research Strategy Directorate, Innovation Strategy Directorate, Research and Innovation Services, the Doctoral College and the Surrey Research Park.

The University published its corporate strategy, The Surrey Advantage, in late 2017 which sets out our plan to be a leading global university, committed to research and teaching excellence, and renowned for outstanding quality and impact of our graduates and research, as well as our collective contributions to society.

Our strategic priorities will be delivered through seven interconnected sets of objectives – education, student experience, research, impact and innovation, regional and global engagement, people and culture, and finance, infrastructure and digital.

To achieve our ambitions in respect of research, we recognise that we need to nurture and grow our talented and dedicated researchers whose practice is founded on a values-based culture of excellence. We need academics who can conduct research at the leading edge, who are forward-thinking, who provide an exceptional experience for our research students and partners, and who value and generate innovation outcomes. They are the agents for our corporate strategy, culminating in the premium that each and every student or partner gains by choosing us as the place to undertake postgraduate research or to collaborate. The University's Research and Innovation Strategy aims to achieve the following:

Provide excellent infrastructure and support to attract
and retain world-class academic staff

 Provide an environment that attracts and supports high-quality postgraduate researchers, with first-class training, supervision and facilities

 Support nationally and internationally important Research Themes, in particular: lifelong health and wellbeing; digital innovation; innovation for health; urban living; sustainability; and space and aerospace

 Work closely with other UK and international universities and businesses, forming collaborations to achieve greater momentum, higher profile and impact.

The Directorate will focus on the delivery of the Research Strategy through the development of the University's strategic research priorities and through co-ordinating the development of research assets and infrastructure. Working to common objectives agreed with the Innovation Strategy Directorate, the Research Strategy Directorate will be responsible for developing strategic relationships with industry and other organisations in the research and innovation value chain and, building on those relationships, developing wider sector-focused strategies.



THE ROLE

This is a senior leadership role responsible for the Research Strategy Directorate. Within the Vice-Provost, Research and Innovation's portfolio, the post holder is responsible for leading the strategic development and operation of the University's research programme, including the development and maintenance of its strategic partnerships and collaborations.

The postholder will represent the University externally, as a key member of the Research and Innovation leadership team. The role focuses on the support and management of the strategic aspects of the research portfolio, including research strategy, Research Themes, research infrastructure and large funding bids. The role also includes wider duties within the portfolio in supporting research in general, innovation and knowledge exchange.

The postholder will work closely with the Director, Innovation Strategy, whose role is to lead on the University's innovation programme. The postholder will also work closely with the Director, Doctoral College and Director, Research and Innovation Services, in a tight-knit collegial team.

KEY RESPONSIBILITIES

As a key leader within the Vice-Provost, Research and Innovation's team, share responsibility for driving Surrey's research and innovation agenda to grow our scale, quality and distinctive capabilities in research, its impact and innovation.

- Contribute to and support the ongoing review and development of the Surrey Research and Innovation Strategy and its implementation, with a strong focus on the research aspects of the strategy.
- Support the associated collaborative, critical mass, and USP strategies, including Research Themes, institutes and centres, in support of the overall Research and Innovation Strategy.
- Help identify, nurture and realise large research and innovation funding bids and consortia.

 Develop and maintain a portfolio of strategic relationships with funders research and innovation "enduser" organisations, as well as collaborative research providers and business stakeholders. This portfolio includes businesses, universities, and public bodies engaged in supporting, funding and performing research.

 Work closely with the Director, Innovation Strategy, recognising that Research and Innovation represent a continuum of activities and outcomes, to ensure maximum impact of Surrey's research and innovation effort.

AN EXCEPTIONAL CANDIDATE

The successful candidate will be a strategic research leader who is motivated and capable of delivering Surrey's ambitious strategic research agenda whilst practicing and disseminating our values to improve our research culture.

Qualifications and professional memberships

Professionally qualified with a relevant degree/postgraduate qualification; relevant managerial/leadership experience in research and proven success

Or

Extensive strategic management and leadership experience in research, demonstrating professional development through involvement in a series of progressively more demanding and influential roles.

Experience and knowledge

- Senior management leadership experience within a large, complex organisation. Experience of working in higher education is highly desirable
- Experience of leading and managing teams in operational delivery
- Excellent organisational management skills along with the ability to implement policy and procedure effectively at all levels
- Demonstrable people management skills in respect of influencing, managing and developing teams
- Strong financial management skills within a devolved context (e.g. financial governance, budgetary control, investment appraisal, resource management, business planning, marketing, operational processes and risk management)
- Analytical and decision-making skills with the ability to prioritise and communicate to staff key objectives in order to achieve organisational goals

- Thorough knowledge and understanding of the work practices, processes and procedures relevant to the role which may include broader sector/commercial awareness
- A proactive approach with the ability to use initiative in dealing with issues as well as a flexible approach to work, ability to multi-task and satisfy the needs of different user groups

• Experience of leading, managing and delivering change.

Personal qualities

- Strong leadership with the ability to develop strategies for achieving the vision for the business area
- Ability to provide professional management and planning for a dispersed Universitywide team
- Able to communicate expectations and to inspire individuals to give their best to achieve the desired results
- Generation of new ideas and ability to flex approach to differing needs of concurrent work streams

• Remain resilient while working under adverse or conflicting demands.

How to apply

For further details including the job description, person specification and how to apply, please see candidates.perrettlaver.com/vacancies quoting reference number 4288.



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