

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.

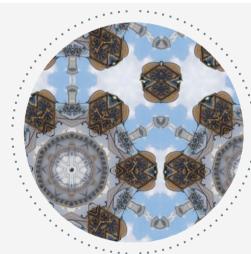
We also saw the first successful deployment of the RemoveDEBRIS satellite, a project we are leading with a consortium of space sector organisations. There's real energy, momentum and ambition to Surrey. It's always been part of us, and I'm excited to be able to share with you how we're taking that energy 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. Our extensive, well-established collaborations with industry and the National Health Service (NHS) continue to provide knowledge exchange with the commercial sector, clinical practice and the wider community.

The University plays a leading role in the Kent, Surrey and Sussex Academic Health Sciences Network forging greater collaboration between academic institutions, the NHS and industry to boost research, and innovation in health care.



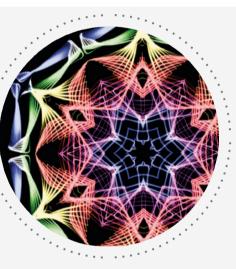
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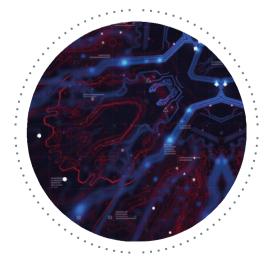
It starts with the active role we play in the community on our doorstep and our local networks. We have many collaborations with partner organisations including the Pirbright Institute, APHA, the Laboratory of the Government Chemist, the Quadram Institute, the Royal Surrey County Partnership Trust, Surrey and Sussex Health Partnership Trust...



OTHER WORLDS

The next generation of communications technology and data analytics, namely 5G, puts Surrey at the forefront of the connected health agenda. Our expertise, resource and infrastructure enable us to harness talent in the physiological and big data sciences to enable the development and evaluation of new e-health devices.





INTERNATIONAL

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



THE FUTURE

Our curious mindset and spirit of innovation mean we always determine what's to come.





OUR

community

We are proud to play a part in the rich life of Guildford and our surrounding area, and work hard to develop meaningful and mutually beneficial connections with our local community.

We partner with local organisations on an inspiring range of projects to celebrate what's great about Guildford, support residents and be a good neighbour in our community, building and developing close relationships. Responding to our annual Guildford Residents' Survey we worked with students to promote safety and reduce noise, introducing Night Street Marshalls, the #LetGuildfordSleep campaign and providing a regular night bus service.

We host the Pint of Science festival in Guildford pubs and support STEM through the Innovate Guildford Festival, as well as several volunteering and research projects that benefit local residents. As part of our wider support for our neighbours in the North West Guildford community, our ongoing work with Kings College has helped secure a 'Good' OFSTED rating for the school. We also created a community garden, which itself won an award at Guildford in Bloom, an event proudly sponsored by the University.

The University supports and promotes
Guildford's rich culture and is delighted to
see members of the public performing
alongside students in our University of
Surrey Community Orchestra.

We celebrate the people and places which make Guildford and Surrey such a special place to live, work and study. 2018 marked 60 years since the Surrey Hills was named an Area of Outstanding Beauty, and we enjoyed hosting a symposium to mark this event and celebrate the landscape that forms part of the unique character of the University.

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A NATURAL

partnership

The Students' Union (SU) is a vital part of the University of Surrey community. Representing students, the SU works with the University and our wider community on a broad range of activities.

I've been part of the University since 2010 and what a journey it's been! As Students' Union President, it's a real pleasure to be working now with my Union colleagues, our partners within the University, and our friends in the local community to create the changes students want to see and a better community for all.

For one, we have recently started our new 'Employable Me' campaign with the University and local businesses to help build our students' employability through extracurricular activity. Meanwhile, students have raised thousands of pounds through Raising And Giving activities for our chosen charities,

Meningitis Now and Guildford Action (2017-18), and Shooting Starchase and Oakleaf Enterprise (2018-19).

And, we also launched a new volunteering platform, surreyvolunteering.com, which recently passed 1,000 registered volunteers who are now out and about across Guildford working with a range of charity partners. Inclusion is a theme of my work as Union President this year. I want us to have a greater focus on supporting every section of our student community, and to develop our network with other Students' Unions in the south of England. By working in partnership, we can make a bigger difference for everyone!

Dr Alex Harden, Students' Union President 2018-19



INTRODUCING FHMS



The Faculty of Health and Medical Sciences (FHMS) is one of the University of Surrey's three faculties. FHMS is home to four Schools with world-leading facilities for research in the Schools of Biosciences and Medicine, the School of Health Sciences, the School of Psychology and the School of Veterinary Medicine. All four contribute to the research profile of the Faculty.

The School of Biosciences and Medicine:

aims to optimise human and animal health for the benefit of society, in the face of global challenges such as ageing populations, disease burden, food security and climate change. Our expertise is focused in terms of critical mass of world leading experts working in four broad areas: biochemical sciences, microbial sciences, nutritional sciences and clinical and experimental medicine. Our research capability is supported by superb facilities and a centrally-funded skilled technical team. It extends from molecular analyses at the bench, through in vitro small animal studies, first in human clinical trials and 'second translation' research in the community.

In chronobiology and sleep research we exploit fabulous molecular biology and *in vivo* facilities to study circadian rhythmicity, including the effects of light and sleep and this work is complemented beautifully by work on humans thanks to our state-of-the-art residential clinical facilities.

Basic and clinical translational research in the School is also undertaken in clinical medicine, cardiovascular science, immunology, oncology and multi-omics, the latter having considerable big data analytical capability. This research is further enabled by our accredited clinical trials unit and clinical research facility, the latter with first in human capability. Complementing these are our Surrey Health Economics Centre (SHEC) and we host the NIHR-funded South East Research Design Service.

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Our bacteriologists cover a broad spectrum of pathogens and represent the largest grouping of investigators in Tuberculosis research in the UK.

Our virology research emphasises virus exploitation and interaction with cellular processes including translation, protein processing and innate immune responses. These infection biology studies are enabled by inhouse containment level 3 facilities and complemented by systems biology research expertise.

In nutritional sciences, our research benefits from the clinical facilities described above and includes molecular nutrition and micronutrients, metabolic medicine and macronutrients and sports and exercises sciences.





In the **School of Psychology**, the research it carries out, the interventions it develops, and the teaching and training staff deliver benefit individual and societal development and wellbeing. The School has a strong track record of innovation in Psychology, from the discovery of the McGurk effect, to the first Centre for Environmental Psychology, the shaping of cross-European approaches to food labelling, changing educational approaches to national identity, and the ongoing development of mobile neuro-assessment.

Being at the forefront of the development of research and of innovations, the School is directly contributing to the wider Faculty themes of One-Health and the University cross-cutting themes of Lifelong Health. Disciplinary research expertise lies in:

- Releasing the lifelong potential of the Brain- ageing/dementia; neuro-development disorders and computer interfaces;
- Addressing inequalities in life-course health and wellbeing- obesity, diabetes, stress, nutrition, food safety, sexual health;
- Helping to embrace changing society, environments and communities- community intervention, mental health, environmental and social contexts, culture, language and science; identity, diversity and prejudice;
- Intervening to create fulfilled, healthy and creative lives sport and exercise, improving parenting and caring, psychological therapies;
- Informing and influencing policy and practice food labelling and NICE guidelines, European environmental policy and national identities, UK policies on early intervention, public understanding of science.

The **School of Health Sciences** undertakes education and research to deliver the most dynamic, effective and caring healthcare professional in a School that places innovation, research and passion at the heart of everything it does.

Our research is informed by our recognised leadership in three cross-cutting themes: Ethics in care; Digital Health and Workforce Organisation and Wellbeing. These themes run through clusters of professional and research expertise such as cancer care, long term conditions and ageing, maternal and child and family wellbeing. For example, researchers working on cancer care represent one of the largest grouping of health science researchers working across the life span and disease course - from diagnosis to survivorship and palliative care, including supportive technologies and training to facilitate self-management (Digital Health).

Our Digital Health research is focused on remote patient monitoring, chiefly in cancer and dementia care, application of internet of things in healthcare, digital solutions for diabetes, and analysis of big data. We collaborate with engineering commercial partners and citizens to create health technologies that are accessible for patients and families and that are proven to improve health and social care outcomes.

Researchers working on long term conditions and ageing focus on workforce development, service users and health across the lifespan in a number of areas including diabetes, dementia, depression, cancer and people with multiple long-term conditions. For example, the Technology Integrated Health Management (TIHM) for dementia is a collaborative project involving researchers from Surrey, the NHS, Alzheimer's Society and others, that is aimed at developing smart devices which are connected via an Internet of Things to help people with dementia to live in their own homes for longer.



The **School of Veterinary Medicine** has created a vet school that is different.

Just over five years ago we welcomed a very special group of students – our first cohort of undergraduate students to our School of Veterinary Medicine - who successfully graduated in July 2019. The School houses lecture theatres, biomechanics laboratories, a Veterinary Clinical Skills Centre and one of Europe's largest and most sophisticated high containment veterinary pathology centres. Whilst embracing the traditional values of professionalism, scientific curiosity and clinical excellence, it has broad horizons.

With a strong One Health focus, our expertise in veterinary pathology & digital pathology, microbiology, parasitology, immunology, antimicrobial resistance, endocrinology, metagenomics & microbiome, nutrition, neurobiology, oncology & neurology, and physiology is complemented by epidemiology and the appropriate use of innovative technology through vHive. The Veterinary Health Innovation Engine (vHive) is a unique partnership between the University of Surrey and Zoetis Centre for Digital Innovation, supported by a co-investment of £8.5 million in resources dedicated to the development and adoption of new digital technologies in animal health. Veterinary researchers are also involved in the development of novel alternatives to antibiotics (zoonotic diseases), vaccine development and improved practices through food production and management of biosecurity on farms. Close links with our veterinary partners, Pirbright and the Royal Surrey County hospital facilitate research projects to understand the pathogenesis of diabetes, neoplastic disease and neurological diseases in animals and humans.

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Our fully distributed model of education

- working with practices to provide clinical training
- is the first of its kind in the UK. Our partners are critical to the delivery of this novel model and ensure our students develop the knowledge, skills and attributes required for life as veterinary graduates.

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Dr Mike Cathcart Director of Clinical Education School of Veterinary Medicine



FHMS

CORE FACILITIES

Our research capabilities are enabled and enhanced by focused, well-resourced facilities that are supported by a centrally-funded research technical team of 60 technicians

The clinical research facility (CRF) is a core human research resource which is Medicines and Healthcare products Regulatory Agency (MHRA) accredited for first in human Phase I studies.

Our Clinical Trials Unit (CTU) is UK Clinical Research Collaboration (UKCRC) accredited and covers all aspects of trial design, set-up, trial conduct, data management, data analysis and reporting from single-site to global multicentre trials.

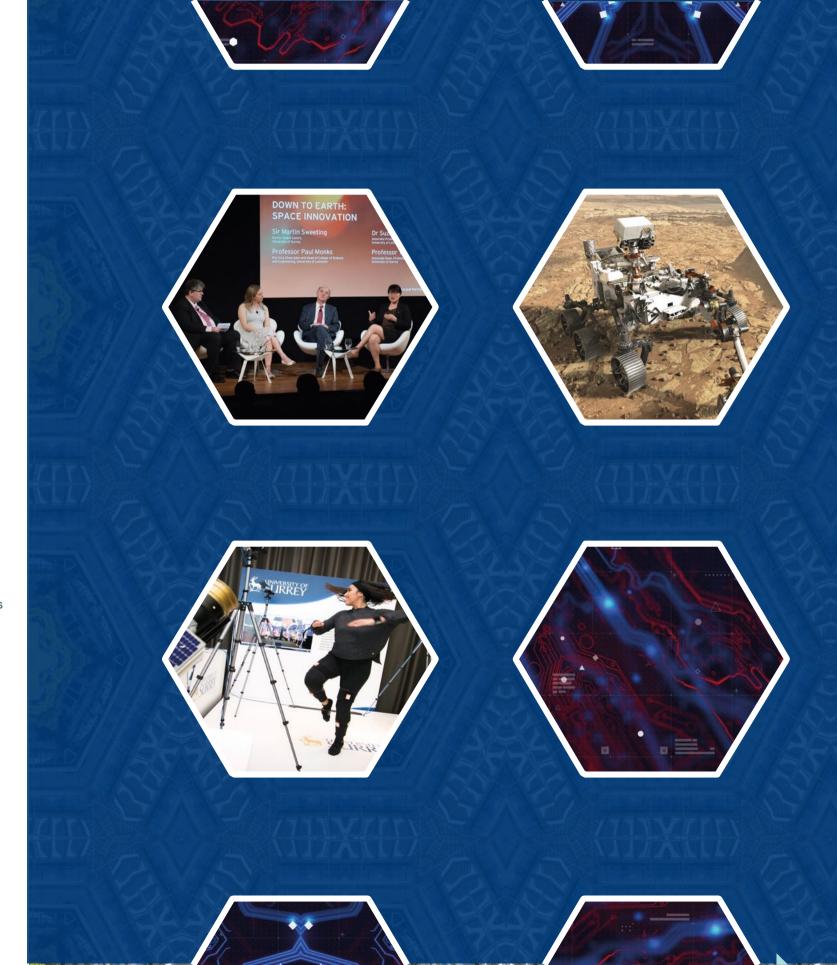
The Surrey Sleep Research Centre (SSRC) is home to forward-thinking multidisciplinary approaches to sleep research and offers a wide range of state-of-the-art equipment to monitor, record and analyse sleep patterns and sleep disorders. Facilities include individual sleep laboratory bedrooms and a hospital ward environment with infrared CCTV monitoring.

Our Digital Health Technology Accelerator is part of a multi-partner enterprise to enable innovation and implementation of digital devices and ways of working to improve patient and care and enable individuals to live in their homes independently and for longer as they age.

Building on our existing reputation in biosciences, the University invested £7.5m in 2018 to build a biomedical research facility in which to conduct animal studies for research in areas such as cancer, sleep, circadian rhythm, ageing and infectious disease. The facility comprises a holding space for small animals (mice, rats, guinea pigs, rabbits and hamsters), along with dedicated procedural space for work at Biosafety Containment Level 2 as well as surgical, sleep and circadian rhythm suites.

Infection research is enabled by two separate containment level 3 suites on site. Bioinformatics capability is provided by an academic-led facility with dedicated research officers providing advice in experimental design and costing for research proposals, and a range of skills in data sourcing, wrangling, processing, and analysis.

Aside from standard laboratory facilities, our dedicated, technician-supported research facilities include: automated quantitative pathology imaging; automated immunohistochemistry; confocal microscopy, including live cell; mass spectrometery; bioreactors; Illumina MiniSeq; flow cytometry, including cell sorting in containment level 2; Microencapsulator facilitating innovative single cell RNAseq; animal gait analysis; human movement analysis including gait.



Our research focus falls principally under the University theme tackling the Global Grand Challenge of Lifelong Health. This focus is underpinned by pillars of research excellence in:

- Chronobiology and Sleep
- Infection and Immunity
- Nutrition and Food Security
- Healthy ageing and supporting long term conditions
- Understanding Relationships with Social and Physical Environments
- Digital Health and Data Science



Our vision for FHMS research...





is to be internationally recognised for delivering high quality research, innovation and impact, resulting in sustainable benefit for the health and wellbeing of humans and animals and the global environment. We are internationally known as a partner of choice and exemplary for developing postgraduate and early career researchers. Our mission is to improve the health and wellbeing of humans and animals and their environments through new knowledge and its application to the design, development and delivery of responsible innovation and impact.

We are growing our reputation as the place for the next generation of researchers and innovators to develop the confidence and skills they need to launch their careers. To echo the University's Strategy, we will not only support our researchers for today but also prepare them for success tomorrow. Key doctoral training partnerships include the Leverhulme Quantum Biology Doctoral Training Centre; the FoodBioSystems Doctoral Training Partnership and the Applied Research Collaboration Kent, Surrey and Sussex.

Our research is driven by an understanding of the importance of collaboration and co-creation with colleagues and with those individuals, groups and organisations beyond our Faculty and University who have an interest in our work, and with those who have an interest in their work. We use these interactions to shape what research we do, as well as how it is conducted, disseminated and used; through such knowledge exchange and stakeholder involvement we will foster innovation for the widest possible benefit. It is the varied disciplinary knowledge, networks, life experiences and skills of our research and innovation community that will enable us to achieve our mission.

LET'S TALK

Professor/Reader of Health Economics, Surrey Health Economics Centre (SHEC)

BACKGROUND

As a result of our new strategic plan and future vision, the School of Biosciences and Medicine in the Faculty of Health and Medical Sciences is recruiting an exceptional person to a lead role in Health Economics to continue to add to the successes at School, Faculty and University level and to work closely with academics and health professionals across Kent, Surrey and Sussex and beyond in contributing to excellence in applied research in health.

This is an exciting opportunity for a health economist with substantive experience in applying an economic perspective to issues in the health and social care arena. The role will be based within the Department of Clinical and Experimental Medicine, part of the School of Biosciences and Medicine.

This new post will lead in the development and delivery of an innovative research programme and will be responsible for identifying sources of funding, submitting funding bids, undertaking high quality research and publishing in appropriate journals, thereby supporting the University research strategy.

Surrey Health Economics Centre (SHEC) undertakes collaborative interdisciplinary research in health economics and health service delivery. It was established in 2012 to undertake applied research in the health, medicine and social care fields. Since its inception it has been directed by Professor Heather Gage who is now seeking to reduce her leadership role within the Centre.

SHEC supports applied research in the health, medicine and social care fields, and has strong relationships with a large number of academic, NHS and private sector partners across the UK and internationally. Much of SHEC's research focuses on practical issues, and on advising and influencing public policy.

The Centre has attracted multiple research grants for evaluative studies from NIHR, European, charity and industry funders. Members of SHEC work closely with other researchers in the Department of Clinical and Experimental Medicine, Surrey Clinical Trials Unit, School of Health Sciences, the School of Economics and the wider University. Health economics advice is provided to the health and social care professionals and academics in Kent, Surrey and Sussex through the NIHR Research Design Service SE.



WHAT DOES THE ROLE OFFER YOU?

If you are the successful candidate, you will become a major contributor to the success of the University's ambitions, driving forward our existing strengths at the Surrey Health Economics Centre. On joining Surrey, you will move into the prestigious role of the Director of SHEC leading its strategic development and management. In this role, you will develop and lead a team of internationally recognised researchers and contribute to the delivery of health and social care economics theme within the NIHR Research Design Service-SE and the recently established NIHR Applied Research Collaboration (ARC) for Kent, Surrey and Sussex.

Besides a vibrant and forward-thinking working environment on a leafy campus close to London, we offer world-class leisure facilities within view of your office and access to a variety of academic and professional development opportunities to help you fulfil your potential.

KEY RESPONSABILITIES

- To be a world leading academic with the demonstrated leadership to drive the research directions, impact and sustainability of Health Economics at Surrey by securing continuous extramural research funding so as to undertake and publish research of the highest standards in health economics and related disciplines.
- Building relationships with NHS and social care providers, industrial partners and other academic institutions in the UK and abroad.
- Contributing to innovative teaching and curriculum development at both undergraduate and PG levels.
- Providing leadership, mentorship and management of academic colleagues to achieve recognition of world leading research activity.
- To provide leadership in the national and international recruitment and training of postgraduate students and the development of international collaborations.
- Contributing to wider applied and transitional health research opportunities where appropriate; examples include sleep, circadian rhythm, infectious disease, oncology, nutrition, mental health and digital health.

QUALIFICATIONS & EXPERIENCE

- A sustained record of securing significant research funding along with an exceptional and continuing publication profile.
- Evidence of supervising PhD students through to completion as principal supervisor.
- A strong interest and track record in converting research into societal impact
- Proven leadership in knowledge transfer activities, the creation, development and dissemination of knowledge to the local, regional, national or international communities
- A network developed from your excellent communication and interpersonal skills
- A higher research degree (PhD) or equivalent experience in health economics or related discipline.

We acknowledge, understand and embrace diversity and the School of Biosciences and Medicine is proud to be the recipient of the Equality Challenge Unit Athena SWAN Silver award.

AN EXCEPTIONAL CANDIDATE

The successful candidate will be an exceptional research leader who can grow and sustain a collegial and productive research environment.

Personal Qualities

If you wish to join us in this role, you will be a dynamic, forward-thinking leader and team player with a 'can do' attitude and a desire to achieve personally. In your new role, you will be ready to build on your outstanding track record of achievement in scholarship and research and able to inspire others with your clear strategy to attract and secure research funding. For further details of role criteria at Reader and Professorial level respectively, please refer to the relevant Academic Role Profile

How to Apply:

Informal enquiries can be made to the Head of Department, Prof Simon Skene, by email (via e.frost-bridges@surrey.ac.uk). When completing the online application form, please ensure that you include (i) a cover letter, (ii) your CV; (iii) a supporting three-page statement outlining your past accomplishments and detailing your intended five-year research programme.

The closing date for applications is 14th April 2020. Interviews will be held on 1st May 2020 in Guildford at the University of Surrey.

