Artificial Intelligence
UNIVERSITY OF SURREY

UNIVERSITY OF SURREY

JOIN THE SURREY INSTITUTE FOR PEOPLE-CENTRED AI

Applicant Information Pack

APPLY TODAY
WORK ON TOMORROW

ENTER

A WORLD OF COLLABORATION

I AM DELIGHTED TO ANNOUNCE THE LAUNCH OF 12 NEW ACADEMIC POSTS WHICH WILL PLAY A FUNDAMENTAL ROLE IN SHAPING THE NEWLY-FORMED SURREY INSTITUTE FOR PEOPLE-CENTRED ARTIFICIAL INTELLIGENCE.

With the power to change the way we live, work and socialise, AI is increasingly impacting almost every area of research – from healthcare to law and ethics. At Surrey our mission is to leverage the benefits of AI to bring a positive impact for society. This requires an open-minded cross-disciplinary approach which puts people at the heart of AI research and development.

The Surrey Institute for People-Centred AI responds to this need and marks the beginning of an exciting new way of working for the University and its researchers. Sitting outside our three Faculties, the Institute breaks the boundaries of traditional research to facilitate collaboration across the disciplines. Our aim is for the Pan-University Institute to become a gateway for external partnerships, as well as a hub for public and community engagement, with its academics empowered to pursue cross-disciplinary AI research projects of strategic importance to the UK and internationally.

Created as part of our long-term strategy to build a critical mass of research excellence in key areas to address global grand challenges, the new Pan-University Institute represents a significant step towards a future in which trustworthy, responsible and inclusive AI brings positive change for all. We are excited to be in a position to recruit the research leaders who will help to fulfil this vision.

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

RESEARCH

THAT CONNECTS

THE UNIVERSITY OF SURREY HAS A PROUD HISTORY OF COLLABORATION. THE CONNECTIONS WE MAKE ACROSS DISCIPLINES AND DEPARTMENTS, AND WITH OTHER INSTITUTIONS AND INDUSTRY, ENABLE US TO ACHIEVE RESEARCH BREAKTHROUGHS THAT MAKE A DIFFERENCE TO SOCIETY.

We live at a time of great change and uncertainty, when challenge and complexity are juxtaposed with opportunity. Many contemporary research challenges require approaches coming from different angles, disciplines, perspectives and cultures.

This kind of diversity of approach is second nature at Surrey. We have a strong focus on interdisciplinarity and a natural predisposition to openness and cooperation. Academics from across the fields of science, engineering, business, social sciences and the humanities regularly work together with exceptional outcomes.

Our research on artificial intelligence, for example, draws on knowledge from electrical and electronic engineering, computer science, business, law and health sciences. This work has led to Surrey being judged world leading in many different aspects of this rapidly developing technological field, with computer vision being just one example.

At Surrey our focus is on exploring global challenges with cross-cutting themes, such as sustainability, urban living and lifelong health. We work with partners in government and industry, nationally and internationally, to bring about innovations which will benefit society and the economy – from theoretical thinking through to fully commercialised technologies.

There are many examples of this across the University. We host the UK's largest research centre in 5G and 6G – which is developing the communications infrastructure that will underpin the way we communicate, work and live in the future – and are also home to the GCHQ-accredited Surrey Centre for Cyber Security. In 2017, three decades of ground-breaking research on the relationship between nutrition and health won us a coveted Queen's Anniversary Prize, while our newest School of Veterinary Science is already advancing research for the improvement of animal welfare, consistent with a broader 'one-health' agenda.

This research excellence is also at the heart of what we offer at Surrey in terms of teaching, adding real-world relevance and unique content to our undergraduate and masters courses, and enabling our PhD students to benefit from a world class research environment. We are proud to welcome high calibre young researchers to our community as they begin their academic careers, and even prouder to see them progressing.

SURREY INSTITUTE FOR

PEOPLE-CENTRED AI

THE PAN-UNIVERSITY AI INSTITUTE AT THE UNIVERSITY OF SURREY OFFERS A UNIQUE ENVIRONMENT WHERE VISIONARY ACADEMICS WILL HELP SHAPE THE FUTURE OF AI AS PART OF A COLLABORATIVE COMMUNITY OF CO-CREATORS.

Taking a different approach to much AI activity in the UK, the Institute puts the needs of individuals and society at the very heart of everything it does, driving research and enabling the design of AI technologies and systems which are ethical, responsible and inclusive.

The Surrey Institute for People-Centred AI brings together Surrey's core AI-related expertise in vision, speech and signal processing, computer science, and mathematics, with its domain expertise across engineering and the physical sciences, human and animal health, law and regulation, business, finance and the social sciences.

The Pan-University Institute will be spearheaded by a group of academics with a passion for collaboration and co-creation, and a strong vision for people-centred AI. With this distinctive approach, the academic team will build on Surrey's excellent track record of collaboration with industry, the public sector, government and other relevant institutions to develop innovative ideas and foster new research directions.

PEOPLE-CENTRED AI

GRAND CHALLENGES

THE INSTITUTE'S RESEARCH AGENDA WILL CENTRE ON FIVE CROSS-CUTTING 'GRAND CHALLENGES' FOCUSED ON PEOPLE AND SOCIETY. THESE GRAND CHALLENGES LINK CLOSELY WITH THE AGENDAS OF UKRI, THE AI COUNCIL, SOCIETY 5.0, AND THE UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS, AND REFLECT THE UNIVERSITY OF SURREY'S AREAS OF EXCELLENCE IN AI AND DOMAIN EXPERTISE:

TRUSTWORTHY AND RESPONSIBLE AI

Ensuring fairness, inclusion and benefit to all members of society is central to future acceptance and adoption of AI technologies in areas from healthcare to education. Realising these trusted AI technologies requires cross-cutting collaboration in AI governance (law, regulation, ethics), AI technology (explainability, uncertainty, fairness/bias) and end-user application domains (health, business, entertainment). The Institute is focused on embedding responsible AI in the research, design, development and deployment of AI technologies.

AI FOR EDUCATION, INFORMATION AND ENTERTAINMENT

AI is transforming the way we learn, communicate and access information. It enables new forms of personalised education and media content, and life-enhancing entertainment technologies in the fields of audio, video and other creative applications. However, to ensure that these services can be accessed by all, they need to be based on responsible AI and – in our working lives – new AI skills training will be required to ensure a fair future jobs market. New approaches to life-long learning and the retraining of people for the AI enabled workplace, as well as training for AI leadership in business and the public sector, will be essential to realise responsible AI, corporate governance and the shaping of the future workplace.

AI FOR HEALTH AND WELLBEING

AI holds great promise for transforming almost every aspect of healthcare and health research, ranging from clinical trials to health economics. It has the potential to personalise healthcare monitoring, diagnosis and treatment for the individual in the community and at home. Realising the many possibilities of AI in the healthcare domain requires a close link between AI expertise, health expertise, key stakeholders and the public.

HUMAN-AI INTERACTION

Natural interaction between people and AI is essential for future AI-enabled systems across all domains. Building on Surrey's cross-disciplinary strength in AI for audio-visual machine perception of people, language translation, human perception and interaction design, there is a significant opportunity to lead future research in natural human-machine communication. This will underpin the realisation of assistive systems in healthcare and hospitality.

AI FOR SOCIETY

AI is disrupting business models and working practice with digital supply chains and new digital platforms, leading to new value creation. The challenge is to understand the macroscale societal impact of the AI transformation, and lead research and policy to ensure adoption of approaches which are inclusive and fair, and benefit society. The Institute's research will address the issues AI presents for data security, drawing on Surrey's DECaDE National Centre for Decentralised Digital Economy.

OUTREACH

WITH IMPACT

THE UNIVERSITY OF SURREY HAS AN OUTSTANDING TRACK RECORD IN DEVELOPING STRONG COLLABORATIVE PARTNERSHIPS WITH INDUSTRY, GOVERNMENT, PUBLIC SECTOR AND OTHER UNIVERSITIES, HELPING LOCAL BUSINESSES GROW AND THE SURREY REGION PROSPER.

The People-Centred AI Institute will bring together different academic disciplines to create new ways of thinking about AI and its application to real-world problems. The Institute does not propose to do this in isolation. It will leverage relationships with Government institutions and other universities, and build its partnerships across industry sectors such as healthcare, broadcast media, advanced engineering, law and education, to ensure that the Institute's research is focused on problems that matter, with clear economic and societal benefit, in the short and long term.

Outreach is a crucial part of the People-Centred AI Institute's philosophy, from hosting conferences that will build an international reputation for the team's unique cross-disciplinary approaches, to supporting local seminars that raise public and business awareness of the challenges and opportunities of using AI. The fast-moving world of AI has many stakeholders, from Government institutions to major industry AI labs, from citizens' rights groups to regional development agencies. The Institute's approach is to engage with these organisations to inform our strategy, our research and our teaching priorities, maximising the impact and longevity of the Institute's work.

The University of Surrey has a history of helping local businesses grow - for example, through the S100 Club, which has been successfully helping investors to connect with innovative fast growth early-stage companies and entrepreneurs in the Surrey and South East Region since 2007. The University's SETsquared enterprise partnership, a dynamic collaboration between five leading research-led UK universities, is ranked as the Global No. 1 Business Incubator, helping students, researchers and tech founders to create world-beating new companies. The AI Institute aims to provide further stimulus, bringing AI expertise and innovation to local companies and providing support for entrepreneurial researchers to establish successful companies through the use of AI.

AI@SURREY

AT THE UNIVERSITY OF SURREY, AI IMPACTS ALMOST EVERY AREA OF RESEARCH, FROM MEDICAL IMAGING TO LAW AND ETHICS. AI@SURREY IS AN INTERDISCIPLINARY NETWORK OF OVER 300 RESEARCHERS FROM ACROSS THE UNIVERSITY WHICH PROVIDES A HUB FOR ACADEMIC AND INDUSTRY RESEARCH COLLABORATION TO REALISE THE POTENTIAL OF AI FOR THE BENEFIT OF SOCIETY.

Spearheaded by the Centre for Vision, Speech and Signal Processing and Nature Inspired Computing and Engineering Group, AI@Surrey draws on the University's expertise in law, politics, sociology, languages, health sciences, future communication, space technology, and environment & sustainability.

Surrey has been conducting pioneering research in AI and machine perception for over 30 years, having initiated the new field of pattern recognition in the 1980s. Today the University's researchers are using audio-visual machine perception to enable systems which understand the world through sensory data, which is critical for robotics, healthcare, assisted living and human-machine interaction. They are creating AI architectures and algorithms which can learn models from huge volumes of real-world data, and developing robotics which think for themselves, leading the way to autonomous vehicles among many other applications.

The AI@Surrey research network is focused on improving lives. In healthcare, the University's research includes the development of new highly accurate medical imaging techniques which are opening the door to more personalised treatments for cancer patients. In the world of entertainment, the new concept of '3D audio' based on machine listening gives consumers the experience of 'being there' at a live concert or football match from the comfort of their living room.

While AI brings many benefits, it also poses challenges in areas such as ethics, law and regulation. Much of the research being undertaken by AI@Surrey focuses on mitigating the potentially negative impacts of AI, designing AI systems to make fair and interpretable decisions, and seeking answers to questions such as 'who is responsible for a crime committed by a machine' and 'can computers have rights?'

The philosophy of the AI@Surrey network is that while the ultimate goal of AI research may be complete autonomy, the most effective deployment of AI systems in the foreseeable future is likely to be in an assistive and collaborative mode, with AI supporting humans at work and at home.

Professor Adrian Hilton FREng, Director of CVSSP, said: **"AI@Surrey is bringing a people-centred approach to all aspects of our research with the aim of enabling a brighter future for individuals, industry and society."**

FIND OUT MORE ABOUT AI AT SURREY

JOIN US:

A COMMUNITY OF CO-CREATORS

WE ARE LOOKING FOR VISIONARY INDIVIDUALS WITH A STRONG INTERDISCIPLINARY ETHOS, AND A PASSION FOR COLLABORATION. THEY WILL SHARE A VISION TO SHAPE AI RESPONSIBLY FOR THE PUBLIC GOOD AND INSPIRE THE NEXT GENERATION OF AI SPECIALISTS.

12 NEW ROLES FOR EXCEPTIONAL AI RESEARCH LEADERS

LECTURER

SENIOR LECTURER

READER

The University is looking to recruit 12 new academics who will lead research and pan-University collaboration within the new People-Centred AI Institute. Successful applicants will be talented and enthusiastic individuals with interest and expertise in both core AI disciplines and the application areas identified on the following page, aligned with the people-centred AI grand challenges.

The appointments will be made at Lecturer, Senior Lecturer or Reader level. Job responsibilities and qualifications/experience required will vary according to level, but are broadly outlined below.

RESPONSIBILITIES

- Establishing and leading a research portfolio in line with the Institute's research strategy
- Developing innovative research proposals, identifying funding sources and submitting bids
- Publishing original research in appropriate journals
- Teaching at undergraduate and postgraduate level in relevant Schools/Departments
- Planning and delivering teaching and assessment activities
- Supervising research students and acting as a tutor for students during industrial placements
- Providing pastoral care as a personal tutor
- Continually updating knowledge and understanding in the field.

QUALIFICATIONS AND EXPERIENCE

- Normally a doctoral degree
- Strong research and publication track record
- Experience of multidisciplinary research and collaboration
- Proven ability in high quality teaching at undergraduate and postgraduate level.

The aim is to recruit individuals with AI and domain expertise, and a passion to shape AI for public good in each of the following areas:

- Law, ethics and regulation
- Trustworthy AI
- Education, entertainment and media personalisation
- Health data analytics
- Multimodal health monitoring and prediction
- Health economics
- Animal monitoring for health and welfare
- Natural language processing
- Future of work and human AI-interaction
- Process engineering for industry 4.0
- Clean air systems
- Fintech and the digital economy.

The academics appointed will themselves shape the Institute within strategic areas it encompasses, so while we are broadly looking for candidates to fill the areas of interest listed, we are open to applications from academics outside these topics who feel they have something unique to contribute in the field and to lead the next generation of research in **people-centred AI (PDF)**.

HOW TO APPLY

1. Applications are online via:
https://www.surrey.ac.uk/ai-institute-recruitment
Closing date for applications is 30 September 2021

2. During your online application you will need to

- Submit your CV and a 2-page statement
- The statement should address How you envisage to contribute to the Surrey Institute for People-Centred AI vision, leadership, research, innovation and training.
- Indicate the role/s* you are applying for (there are twelve area/specific roles and a generic one for all other areas of People-Centred AI)
- Indicate the level you are they applying for (Lecturer/Senior Lecturer/ Reader)

**If you are applying for more than one role/area - you are able to list all those that you would like to be considered for.*

3. The application process consists of 3 stages,
Stage 1: Online application (including CV and statement)
Stage 2: Selected candidates will be invited to submit a 3 minute video to support their application
Stage 3: Shortlisted candidates will be invited to a face-to-face interview.

Informal enquiries can be made to Professor Adrian Hilton by email **a.hilton@surrey.ac.uk**

EQUALITY, DIVERSITY AND INCLUSION

AT SURREY, WE ARE VERY PROUD OF THE DIVERSITY WITHIN OUR COMMUNITY AND ARE COMMITTED TO PROVIDING AN INCLUSIVE ENVIRONMENT THAT OFFERS EQUITABLE OPPORTUNITIES FOR ALL.

We strive for Surrey to be a place where everyone feels welcomed, valued and safe. Our vision to be a leading global university relies on our proven ability to attract the best people from the UK and internationally to work and study here; this can only be achieved when we work together to create a truly inclusive culture.

Our Equality, Diversity and Inclusion (EDI) Plan 2020-2025 lays out our aims to develop our inclusive and supportive culture, eliminate discrimination, harassment and victimisation, and advance equality of opportunities. Across the University of Surrey, we are working actively towards fulfilling our EDI Plan targets and encourage everyone to engage with and participate in its progress. To achieve culture change, we are working to embed EDI in all teaching and learning, research and partnerships, as well as supporting our professional services colleagues. This will enable a self-sustaining process that will support EDI in becoming 'second nature' for our community.

We are proud members of the Race Equality Charter and the Athena SWAN Charter for gender equality (holding University and departmental awards). We are also a Stonewall Diversity Champion and a committed Disability Confident employer. Our AccessAble app provides accessibility support to people who need it around our campus and we have thriving staff networks and equality groups that support our work in all our areas of equality (gender, race/ethnicity, LGBTQI+, disability and faith).

Athena SWAN Bronze Award

disability confident COMMITTED

Stonewall DIVERSITY CHAMPION

Race Equality Charter RACE CHARTER

CENTRE FOR VISION, SPEECH AND SIGNAL PROCESSING

THE CENTRE FOR VISION, SPEECH AND SIGNAL PROCESSING (CVSSP) AT THE UNIVERSITY OF SURREY BRINGS TOGETHER LEADING EXPERTISE IN AUDIO AND VISUAL AI, ENABLING GROUND BREAKING TECHNOLOGIES WHICH ARE USED IN HEALTHCARE, SECURITY, ENTERTAINMENT, ROBOTICS AND COMMUNICATIONS.

Ranked first in the UK, third in Europe and 11th in the world for computer vision AI research in 2020, CVSSP has been at the cutting edge of AI research for over 30 years. The Centre is home to 20 academic staff and over 150 researchers and has a track record of pioneering research leading to successful technology transfer with UK industry and spin-out companies. It has a grant portfolio of £29m with funding from EPSRC, Innovate UK, European Union, industry and charities.

The Centre is internationally unique in bringing together expertise in both audio and visual machine perception, with the central goal of creating machines that can see, hear and understand the world around them. Its research ranges from fundamental theory to real world applications, and encompasses audio, vision, machine learning, AI, medical imaging, signal processing and robotics.

The Centre's research has led to numerous breakthroughs including enabling 3D image capture techniques which have transformed post production in the film industry, machine learning which detects behaviour changes to improve dementia care at home, and medical imaging techniques that are enabling cancer treatments to be targeted at tumours more effectively.

The Centre leads a number of national flagship research programmes in AI for audio-visual machine perception, personalised media, face recognition, distributed ledger technology, and intelligent signal processing.

The Centre is focused on training the AI scientists of the future. It is currently home to 90 PhD students and has recently launched an MSc in AI to complement its existing MSc in Computer Vision, Robotics and Machine Learning – the only programme of its kind in Europe.

The Centre has excellent research facilities including a unique multi-camera UltraHD audio-visual studio, and hosts an AI compute cluster comprising 150 high-performance GPUs and 1PB storage.

FACULTY OF ENGINEERING AND PHYSICAL SCIENCES

THE FACULTY OF ENGINEERING AND PHYSICAL SCIENCES (FEPS) COVERS THE CORE ENGINEERING DISCIPLINES OF AERONAUTICAL ENGINEERING, CIVIL ENGINEERING, CHEMICAL ENGINEERING, ELECTRICAL AND ELECTRONIC ENGINEERING AND MECHANICAL ENGINEERING, ALONGSIDE THE SPECIFIC DISCIPLINES OF CHEMISTRY, COMPUTER SCIENCE, MATHEMATICS AND PHYSICS.

The Faculty's electrical and electronic engineering courses are ranked number six and chemistry courses are ranked in the top ten in the Guardian University Guide 2021, and materials technology courses are ranked top three in the Complete University Guide 2021, amongst others.

The Faculty has strong partnerships with industry, and an excellent track record of research which leads to successful commercialisation. Through consistent investment stemming from a deep commitment to develop world-class, sustainable research programmes, the Faculty has built up an impressive infrastructure to support all its activities. The interdisciplinary nature of much of the work provides opportunities to cross boundaries and enables students to access exceptional facilities.

THE FACULTY IS MADE UP OF THREE SCHOOLS: THE SCHOOL OF COMPUTER SCIENCE AND ELECTRONIC ENGINEERING (COMPRISING THE DEPARTMENTS OF COMPUTER SCIENCE AND ELECTRICAL AND ELECTRONIC ENGINEERING); THE SCHOOL OF CHEMISTRY AND CHEMICAL ENGINEERING (COMPRISING THE DEPARTMENTS OF CHEMISTRY AND CHEMICAL AND PROCESS ENGINEERING); AND THE SCHOOL OF MECHANICAL ENGINEERING SCIENCES, ALONG WITH FOUR OTHER DEPARTMENTS/CENTRES.

The **Department of Computer Science** undertakes highly regarded research in cybersecurity and nature-inspired computing, and offers courses which provide students with the skills they need to become an IT professional, whether as a software engineer, project manager, consultant or in support.

The **Department of Electrical and Electronic Engineering** has been ranked one of the best in the UK for many years. It is home to leading research centres including the Advanced Technology Institute, the Centre for Vision, Speech and Signal Processing, the Institute for Communication Systems, and Surrey Space Centre.

The **Department of Chemistry** enjoys an outstanding reputation for the quality of its teaching, student employability and research. Its core research covers areas such as materials chemistry and energy, medicinal chemistry and molecular engineering.

The **Department of Chemical and Process Engineering** is the longest standing continuing provider of chemical engineering programmes in England, and today offers cutting-edge courses which benefit from a fully operational process plant. Research covers digital and process innovation, energy and materials, and water processing technology.

The **School of Mechanical Engineering Sciences** offers industry-standard facilities including a state-of-the-art Design Centre and environmental wind tunnel. It encompasses mechanical, automotive, aerospace and biomedical engineering, and researches topics ranging from fluid dynamics to functional nanomaterials.

The **Department of Civil and Environmental Engineering** brings together internationally leading staff, exceptional students and modern facilities. Its research focuses on the delivery of sustainable infrastructure in the widest of contexts, ranging from optimising the management of large-scale complex networks to monitoring air and water quality.

The **Department of Physics** works across the disciplines and connects pure science with technology. It undertakes world-leading research in five key areas: astrophysics, nuclear physics, photonics and quantum sciences, radiation and medical physics, and soft matter.

The **Department of Mathematics** is home to one of the largest research groups on nonlinear mathematics. Focused on both pure and applied areas of mathematics, its research covers topics such as quantum field theory, string theory, fluid dynamics and mathematical biology.

The **Centre for Environment and Sustainability** is an internationally-acclaimed centre on sustainable development. It applies inter-disciplinary approaches to the analysis of complex systems, integrating expertise from engineering and the physical and social sciences to develop action-oriented, policy relevant responses to long-term environmental and social issues.

FACULTY OF HEALTH AND MEDICAL SCIENCES

THE FACULTY OF HEALTH AND MEDICAL SCIENCES (FHMS) IS HOME TO TALENTED STAFF AND ALMOST 4,700 STUDENTS ACROSS ITS SCHOOLS OF BIOSCIENCES AND MEDICINE, HEALTH SCIENCES, PSYCHOLOGY AND VETERINARY MEDICINE.

Focused in a 'One Health, One Medicine' vision, the Faculty's research aims 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. The Faculty's research is driven by an understanding of the importance of collaboration and co-creation both with colleagues and with external groups and organisations: through this knowledge exchange and interaction, it fosters innovation for the widest possible translational benefit. Tackling the Global Grand Challenge of Lifelong Health, the Faculty's research focus encompasses:

- 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

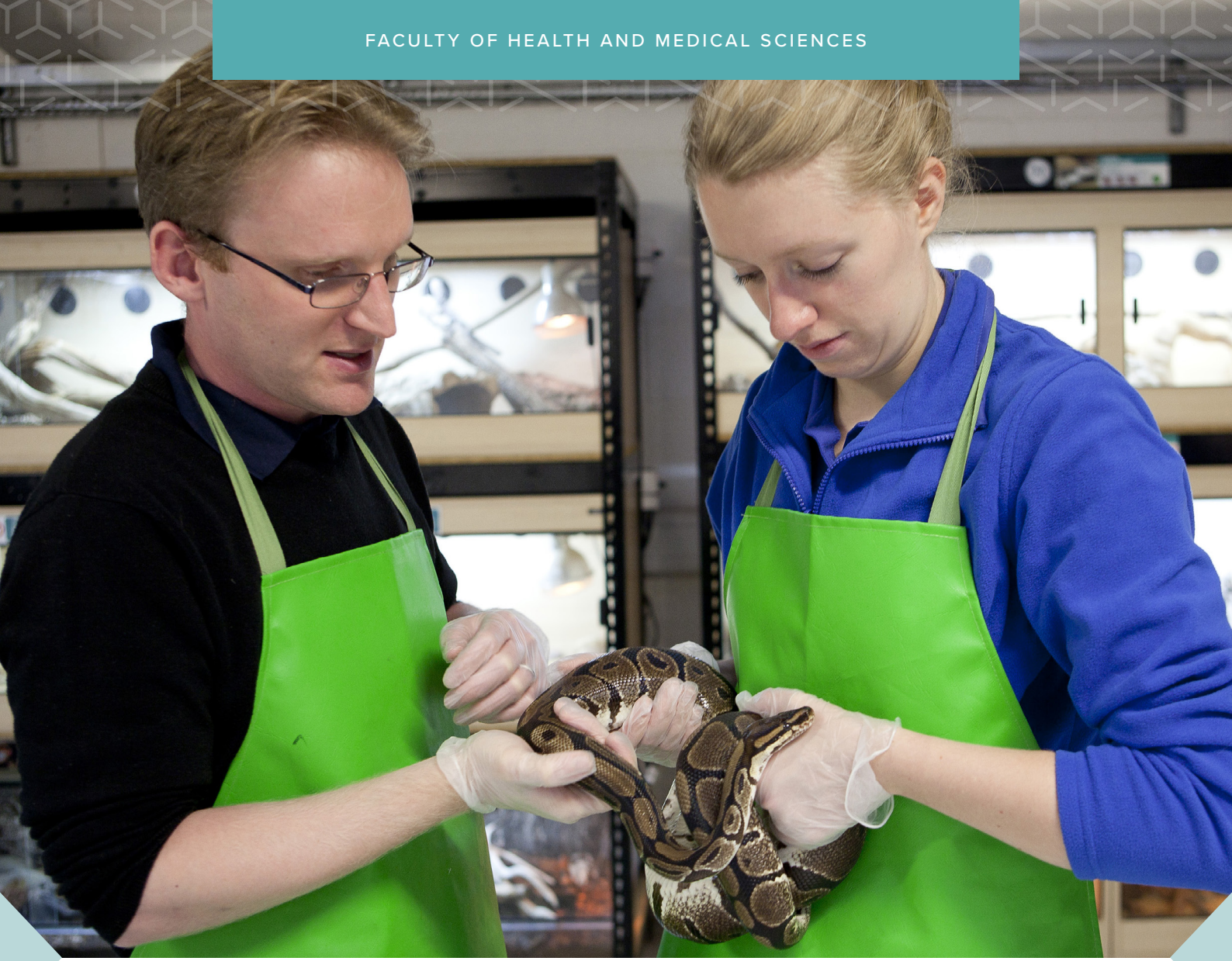
Supporting the next generation of researchers and innovators is an important part of the Faculty's role. Key doctoral training partnerships include the Leverhulme Quantum Biology Doctoral Training Centre; the FoodBioSystems Doctoral Training Partnership; and the Applied Research Collaboration Kent, Surrey and Sussex and the Academic Health Sciences Network, along with strategic industrial-policy alliances with key translational biosystem-focused stakeholders including NPL, NML and Waters.

THE FACULTY COMPRISES FOUR SYNERGISTIC, DIGITALLY FOCUSED AND ENABLED SCHOOLS:

Our **School of Health Sciences'** vision is to be a world-class centre for healthcare research where dynamic academics and clinicians conduct ground-breaking research that addresses global health care priorities and generates evidence to underpin effective, compassionate and integrated health care. We undertake pure and applied research based around research themes of digital health, workforce organisation and wellbeing; and focused research clusters in cancer care, long-term conditions and ageing, and maternal, child and family health.

Consisting of the Department of Psychological Interventions and the Department of Psychological Sciences, **the School of Psychology** has a long-standing reputation for its vibrant and supportive research and teaching environment. Psychology at Surrey has a strong track record of innovation in psychology and we are immensely proud of where we have come from; from the discovery of the McGurk effect, being a pioneer in environmental psychology, our Clinical Doctorates, the shaping of cross-European approaches to food labelling, to changing educational approaches to national identity. Looking forward, the future of psychology at Surrey is supported by ongoing investment across our people and infrastructure; we recently opened our 6-room extended reality (XRL) simulation space and two observation suites allowing eye-tracking, EEG, tDCS/tACS, electrophysiology and actigraphy.

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 in areas including chronobiology, sleep, immunology and infection, virology, nutrition and cancer amongst others 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.



The School of Veterinary Medicine has created a vet school that is different. While 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 and digital pathology, microbiology, parasitology, immunology, antimicrobial resistance, endocrinology, metagenomics, microbiomes, nutrition, neurobiology, oncology, neurology, musculoskeletal biology and physiology is complemented by epidemiology and the appropriate use of innovative technology through vHive (our Veterinary Health Innovation Engine - **vHive**). Veterinary researchers are also involved in the development of novel alternatives to antibiotics, understanding the pathogenesis and control of zoonotic diseases, vaccine development and improved practices through food production and management of biosecurity on farms. Close links with our veterinary partners and the Royal Surrey County Hospital, the Pirbright Institute, the APHA, the VMD, the BSPS and KSS AHSN also facilitate research and knowledge exchange to understand the pathogenesis of infectious diseases, diabetes, neoplastic disease and neurological diseases in animals and humans.

FHMS facilities

The Faculty's world-class research, learning and teaching capabilities are enabled and enhanced by state-of-the-art facilities and equipment, supported by a centrally-funded research technical team of 60 technicians. Its recently refurbished Clinical Research Building (CRB, formerly Surrey Clinical Research Centre) is home to a number of synergistic units committed to excellence in clinical research and digital health innovation including in sleep/wake research. Each unit has access to state-of-the-art facilities and a core team of skilled staff/researchers. The building houses three core facilities hosted by the University:

Veterinary Pathology Centre: Located in the South East of England, our Veterinary Pathology Centre is one of the largest and most sophisticated of its kind in Europe, offering high-containment *post-mortem* examination facilities.

The Centre is staffed by a team of highly skilled, board-certified veterinary pathologists, veterinary investigation officers and technicians, with expertise in farm animal, equine, exotic, small animal and research pathology.

Pathology Services are offered to vets-in-practice and the wider veterinary and scientific community and include *post-mortem* examinations across a wide range of species, diagnostic histopathology, research pathology and farm animal disease surveillance.

Surrey Clinical Research Facility: A core human research resource recognised as a centre for the delivery of clinical trials and studies involving participants, particularly early phase studies such as phase 1, First in Human (FIH) and phase 2a (proof of concept).

Surrey Sleep Research Centre: Home to forward-thinking multidisciplinary approaches to pre-clinical and clinical sleep research, using a wide range of state-of-the-art equipment to monitor, record and analyse sleep patterns and sleep disorders.

UK Dementia Research Institute (DRI) Living Lab: In partnership with Imperial College, the living lab is a high-spec home environment created within the Sleep Centre to harness recent advances in artificial intelligence, engineering, robotics and sleep science to create new technologies that will deliver the highest quality dementia care in the home.

The Health Technology Accelerator: a flexible high-tech environment for innovation and networking between innovators, SMEs, clinicians and academic researchers in fulfilment of a digital health agenda. The Health Technology Accelerator is a partnership between University of Surrey, Surrey and Borders NHS Trust and the Applied Health Sciences Network funded by Enterprise M3. The synergy between these functions is further enhanced by the co-location in the building of **Surrey Clinical Trials Unit**, a fully registered academic CTU with the experience, expertise and infrastructure to develop, organise and manage high quality, multi-centre, randomised controlled trials through a core team of project managers, data systems staff and statisticians.

FACULTY OF ARTS AND SOCIAL SCIENCES

THE FACULTY OF ARTS AND SOCIAL SCIENCES (FASS) BRINGS TOGETHER SCHOLARS AND STUDENTS FROM ACROSS AN EXTRAORDINARY RANGE OF ACADEMIC DISCIPLINES IN A LEARNING COMMUNITY THAT IS DEDICATED TO THE DISCOVERY AND ENRICHMENT OF THE ARTS, HUMANITIES AND SOCIAL SCIENCES. THE FACULTY IS A COMMUNITY OF ARTISTS, ENTREPRENEURS, SCHOLARS AND PRACTITIONERS WORKING ON THE PLEASURES AND CHALLENGES OF CURRENT TIMES.

The Faculty provides internationally recognised undergraduate and postgraduate degrees and, each year, welcomes more than 7,000 bright, dedicated students onto its degree programmes. It delivers an exceptional student experience and quality teaching, as demonstrated in its ongoing success in national league tables (ranking in the top 10 for five subject areas in the Complete University Guide 2021)

The Faculty has a vibrant and diverse research community, and academics and researchers work with a wide range of external organisations – from government bodies to international businesses. While each discipline has distinct methodological approaches, there is a shared passion for studying ideas and practices relating to all aspects of human life and experiences. Research aims to contribute to the theoretical advancement in the state of knowledge in the arts, humanities and social sciences, while achieving real-world effects by focusing on current global societal challenges and the cultural and socio-economic aspects at the core of large-scale human problems.

The Faculty is leading research in fields such as morphology, the digital economy, sustainable tourism, translation, and social simulation. Recent research projects have focused on the legal, social and ethical implications of AI technologies such as driverless cars; the development of spatial audio and psychoacoustic engineering in creative digital media; the effect of digital innovation on the arts, literature and education; and exploring what it means to work and live sustainably.

THE FACULTY IS MADE UP OF NINE SCHOOLS AND DEPARTMENTS AND IS ALSO HOME TO THE UNIVERSITY'S OVERSEAS CAMPUS IN DALIAN, CHINA, THE SURREY INTERNATIONAL INSTITUTE, WHICH OFFERS DUAL DEGREE PROGRAMMES WITH THE DONGBEI UNIVERSITY OF FINANCE AND ECONOMICS.

Surrey Business School (SBS) delivers high-quality and relevant teaching and research that will have a positive and lasting impact in business and society. It specialises in the study of digital advances, leadership, organisational behaviours and sustainable enterprise, and offers both full-time and part-time MBAs. SBS proactively leverages its business connections to ensure that its research is relevant and supports economic growth and innovation.

The **School of Hospitality and Tourism Management** is ranked 1st in the UK and 3rd in the world for hospitality and tourism management in the Academic Ranking of World Universities 2021. It offers stimulating, industry-relevant programmes in hospitality, tourism and events management. Its research activities are grouped into three groups: sustainability and wellbeing, competitiveness, and digital transformation.

The **School of Law** works on fundamental problems in law, justice and society across public, private and international law as well as law's application to healthcare, criminal justice, security, environment and many other areas. The School provides students with a strong legal education and the guidance to apply their legal understanding in a practical context, and produces research that will make a difference in the real world.

The **School of Economics** has a strong international reputation for research in macroeconomics, microeconomic theory, and other areas. This research excellence is embedded within the School's successful teaching programmes. Many academics within the School are economic advisers to world-renowned organisations.

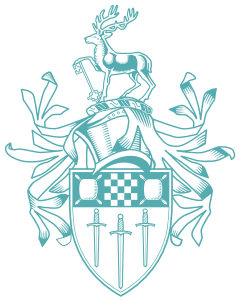
The **School of Literature and Languages** combines the academic disciplines of English literature, creative writing, modern languages, linguistics, intercultural communications, and translation studies. The School is home to two internationally renowned research centres: The Surrey Morphology Group and the Centre for Translation Studies.

The **Department of Music and Media** is an industry and research-led department, focused on academic inquiry, business engagement and knowledge generation in music and contemporary media. It incorporates research and teaching programmes which include the world-renowned Tonmeister programme in Sound Recording.

The **Department of Sociology** covers the areas of sociology, criminology and media and communications. It is widely recognised for its field-defining and conceptually driven empirical research and its pioneering quantitative and qualitative methods work. It has extensive collaborations and a record of success in securing a diverse portfolio of research income.

The **Department of Politics** is a thriving space for study, research and public engagement with a strong focus on applied politics. Its research is organised around two research centres: the Centre for International Intervention and the Centre for Britain and Europe, which was awarded the prestigious Jean Monnet Centre of Excellence from the European Union for 2020-23.

Guildford School of Acting is a leading performing arts conservatoire, providing exceptional acting, musical theatre, and production conservatoire training.



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