Knowledge Transfer Partnerships

Biological Sciences

The Department of Biological Sciences provides world-leading research in a wide range of health-related areas and environmental challenges. Research is grouped into three centres: Biomedical Sciences, Plant Molecular Sciences and Ecology and Evolution.

Our researchers offer outstanding pre-clinical research to investigate health and disease conditions to improve human health from three perspectives. Firstly, our biomedical research groups use model systems to investigate the molecular basis of disease and to design new treatments. Our researchers use this approach to study genetic diseases, neurological and developmental disorders, and infectious diseases. Secondly, the department's scientists study crops and other plants to make them more useful and sustainable. Finally, we study the biosphere's effect on human health and well-being.

Research at the forefront of scientific discovery to improve quality of life

Top 30 UK Biological Sciences Department

(The Complete University Guide, 2024)

100% research impact is rated world-leading or internationally excellent

(Research Excellence Framework 2021)

Computer Science

The Department of Computer Science brings together world-leading researchers in algorithms and complexity, artificial intelligence, bioinformatics, distributed and global computing, machine learning, deep learning, robotics and software language engineering. The department has an international reputation for cutting-edge research and experience of industry.

The theories developed by our academic staff lead to the design and building of novel practical computing systems for medical imaging, disease diagnosis and health monitoring. In particular, our research has been deployed to tackle drug side-effect prediction, melanoma, leukaemia, neurological disorder, retinal and lung abnormality classification using microscopic, dermoscopic, X-ray and CT-scan images. Audio clips have also been used for heart and respiratory abnormality identification.

Tackling the opportunities and challenges of technology

Top 25 UK Computer Science Department

(The Complete University Guide, 2024)

95% research rated 4* or 3* world leading or internationally excellent

(Research Excellence Framework 2021)

ROYAL HOLLOWAY UNIVERSITY OF LONDON

Geography

The Department of Geography brings together world-class researchers in contemporary culture, the economy, sustainability and the environment to influence the world around us. Academics are addressing the impact of climate change as a force reshaping the terms of the global workplace, reordering social relationships, reducing productivity, and worsening worker health.

Work in the department aims to highlight what is missed by current framings. For example, the Hot Trends project shows how in the drive towards industrial decarbonisation, the everyday struggles of workers in global supply chains battling worsening economic and physical conditions have received little attention. Wellcome Trust (Oppressive Heat) and ERC Consolidator Scheme (Thermal Futures of Work), are directed towards generating novel data on the uneven impact of climate change on worker health around the world.

A centre of excellence for UK research

5th in the UK for research

(THE, REF Institutions ranked by subject, 2022)

1st in the UK for world-leading and internationally excellent research environment

(THE, REF Institutions ranked by subject, 2022)

Living Sustainably collaboration

Living Sustainably is a multi-disciplinary group of academics with expertise in creative approaches to challenge-led research around sustainable planetary futures. Researchers from the arts and humanities, science and the social sciences are working with partners on the question of how to live sustainably in an era that faces intersecting challenges from energy transition and food security to finding ways to ensure that communities around the world have the resources to enable their health, well-being and even survival.

Living Sustainably

Centre for Ecology, Evolution and Behaviour

Working on the 'Nature-based solutions for climate change at the landscape scale' project, we work with academic colleagues and policymakers to develop new ways to manage our natural environment to benefit the health of people and planet. Nature-based solutions provide a wide range of benefits; preventing biodiversity loss, improving our physical and mental health, sequestering carbon and increasing resilience to future climate change. We also work with companies, farmers and practitioners, developing innovative ways to improve food security and enhance the health of our farmed landscape.

Health Studies

The Health Studies Department's research strengths are focused on the transdisciplinary approaches that are needed to meet key Planetary Health challenges. 'Planetary Health' emphasises the interconnection of human health and the environment, highlighting that humans cannot be healthy if the environment they live in is unhealthy. Our research address this through ongoing projects in Kenya, Turkey, India, Italy and Nepal covering a broad range of topics including micronutrient deficiencies in children; antimicrobial resistance spread through the animal food chain; risk mapping climate change and infectious disease; sustainable food systems; agroecology and nature based solutions for climate change. We work particularly closely with the Eastern African Hub of the Planetary Health Alliance, with whom we currently run a UK-Kenya-LMIC Network on Antimicrobial Resistance in Food Fishes funded by the Academy of Medical Sciences/GCRF. We co-lead an MSc course with the Royal Botanic Gardens Kew, collaborate with many academic and commercial partners as well as practitioners, and we are a member of the Crop Health and Protection network.

Find out more

We encourage business leaders to discuss the benefits of aligning with latest research and technologies and to explore the potential for creating new knowledge transfer programme collaborations with us.

royalholloway.ac.uk/knowledge-transfer

or contact the KTP Office: ktp@rhul.ac.uk

Royal Holloway, University of London
Egham, Surrey, TW20 0EX
royalholloway.ac.uk

ROYAL HOLLOWAY UNIVERSITY OF LONDON

8984 07/23