



QUICK-FIRE RESEARCH TALKS

Location: Lecture Theatre D

Saturday: 3.15pm – 5pm

Space4Nature: Using High-Resolution Satellite Data for Nature Recovery

Time: 3.15pm – 3.35pm | Speaker: Dr Ana Andries, Lecturer in Remote Sensing and GIS

Discover how cutting-edge technology is supporting nature recovery efforts in Surrey through the Space4Nature project. This session will explore how very high-resolution satellite imagery, combined with citizen science and ecological survey data, is being used to map and monitor important habitats such as chalk grasslands and heathlands. You'll learn how machine learning techniques are applied to predict habitat distribution and change, and how this work is contributing to the development of an open-access conservation planning tool. The presentation will also highlight recent milestones, including features at COP28 and COP16, and the project's recognition with the Geovation Innovation Award.

Healthy Timing: Resetting Our Daily Rhythms for Better Living

Time: 3.35pm – 3.55pm | Speaker: Dr Daan would Van der Veen, Senior Lecturer in Sleep and Chronobiology & Section Lead for Chronobiology

Getting enough daylight and eating meals at regular times is essential for public health as they are crucial for synchronising our daily biological (circadian) rhythms. These rhythms regulate sleep, mood, metabolism, and overall wellbeing. Unlike our ancestors, whose rhythms stayed well synchronised thanks to spending much of their time outdoors and eating in line with natural cycles, modern lifestyles often disrupt this balance. Urban design, social demands, long work hours, and especially shift work, often push light exposure and meals into the evening and night, disrupting the body's natural timing.

Dr Van der Veen will share research from the University of Surrey's Chronobiology team showing that light exposure and meal timing are key modifiable risk factors for sleep and metabolic disorders such as obesity and diabetes, which carry substantial personal and healthcare costs. He will illustrate Surrey's impact in this area by introducing their innovative intervention of self-administered, blue-enriched light supplementation in older adults as a simple, cost-effective and non-drug intervention to improve sleep, mood, and health.



The Power of Movement: Enhancing Cancer Outcomes Through Exercise

Time: 3.55pm – 4.15pm | Speaker: Dr David Bartlett, Senior Lecturer of Exercise Immunology

In this talk, Dr Bartlett will introduce how exercise training influences the immune system and mobilises cells to preferentially attack cancer. He will discuss ongoing work in people with oesophageal cancer undergoing chemotherapy before surgery, and how the exercise causes changes to tumours that will improve patient outcomes.

Is Vitamin D the Sunshine Superstar or Still Just Media Hype? Current Controversies, Future Perspectives & Surrey's Contributions

**Time: 4.15pm – 4:35pm | Speaker: Prof Sue Lanham-New,
Head of the Department of Nutritional Sciences**

This session explores the science, policy, and public health implications surrounding vitamin D. Why are so many people in the UK deficient in this essential nutrient, and what impact does it have on our health - from bone and muscle strength to immune function, diabetes risk, heart health, respiratory infections, and even mental wellbeing? You'll hear the latest on government recommendations for vitamin D intake, safe upper limits, and the importance of getting the balance right. The talk will also highlight how the University of Surrey's Vitamin D Research Group is influencing national policy and contributing to the development of a new report to the Secretary of State on vitamin D fortification. Join us to unpack the evidence behind the headlines and consider what the future holds for this much-debated "sunshine vitamin."