



Newsletter

Autumn 2022



News and Updates

Welcome to the ECORISC Autumn Newsletter!

The last 6 months for the ECORISC Team have been busy! 14 students took part in our Summer Scholarship Training Scheme, cohort one students travelled to the Peak District to complete their 1st Challenge Event and we welcomed 16 new students onto cohort 2 of the programme.

We are now recruiting for our 3rd and final cohort of students. We currently have 21 PhD projects available. More details can be found on our [PhD Studentships in Environmental Pollution Science web page](#).

Student Cohort 2

We're delighted to introduce our new cohort of students who have joined the ECORISC team. The students, their projects and partners are detailed below. More details of all students and their projects can be found on the [ECORSIC web page](#).

Cardiff University

Nicholas Porter: Sustainable Oil Palm farming in Borneo: Uptake and effects of heavy metals and pesticides in the wildlife of the Oil palm plantation affected landscape of the Lower Kinabatangan floodplain; JNCC

Holly Hulme: Synthetic chemicals in terrestrial and freshwater biota: drivers and consequences of landscape scale variation; Syngenta

Tyler Cuddy: Small carnivore ecology and the impact of heavy metals in the environment; JNCC

Owen Trimming: Advancing in vitro fish models for assessing environmental pharmaceutical risk: Integrating spatial-temporal kinetics of pharmaceutical uptake, biotransformation, metabolism, and effect; Astrazeneca

Ivy Wanjiku Ng'iru: Moths in the margins: developing and testing tools to determine the protection provided by agricultural field margins; RSPB

Lancaster University

Olasunkanmi Dosunmu: Analysis of how the regulatory landscape can support the transition to safer and sustainable chemical alternatives; Wood

Rafail Georgiou: The release and fate of organofluoro 'forever chemicals' from wastewater treatment works; Environment Agency

University of Exeter

Rohan Joglekar: Chemical Exposomes of UK Estuarine Wading Birds and Potential Impacts on their Migration Fitness; JNCC

Francesca Molinari: Using ecophysiology to better predict the uptake of chemicals into fish; AstraZeneca

Judith Mugambi: Understanding the impact of chemical pollutants on freshwater ecosystem services; Environment Agency

Georgina Savage: Rapid assessment of pollution in the Galapagos archipelago; Defra/Galapagos Conservation Trust

The University of Sheffield

Emily Durant: The risk of soil contaminants on above- and below-ground urban ecosystems; Fera

Rachael Haw: Insect population responses to air pollution; JNCC

The University of York

Angel Ceballos-Ramirez: From water fleas to elephants: Multispecies Extrapolation of Pesticide Toxicity using high-throughput testing methods and Dynamic Energy Budgeting; Bayer

Isabel Navarro Law: Mesocosm experiments to integrate landscape-scale factors into future directions for pesticide risk assessment; Fera

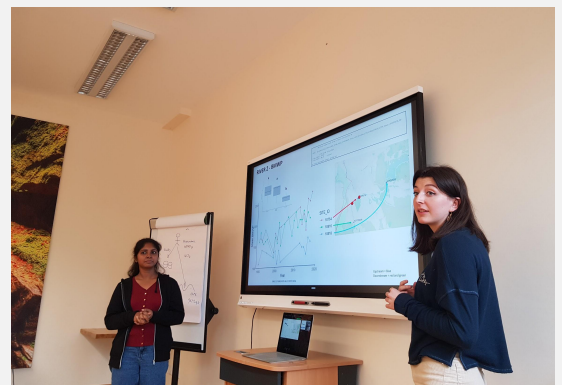
George Pullin: Occurrence and Ecological Impacts of Pharmaceuticals in the World's Estuaries; Cefas

Year 1 Challenge Event



At the end of September, cohort 1 travelled to the Peak District for the first ECORISC Challenge Event. The event involved a data analysis challenge that was facilitated by a team from the Rivers Trust. The ECORISC students worked in small teams that pulled together data from different sources to answer questions around the impacts of combined sewer overflows on freshwater quality.

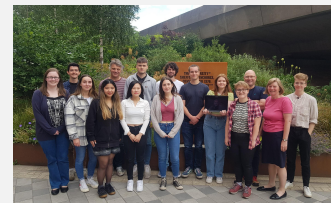
The teams worked on a range of issues including: the impact of microbial pollution from CSOs on freshwater bathing sites; emissions of micropollutants from CSOs; and the impacts of nutrient emissions from CSOs on river ecology. The group also managed to fit in a walk to Ludd's Church and the Roaches and stopped off at the Wincle Brewery to sample the local beer.





Summer Scholarship Training Scheme

With NERC flexible funding aimed at addressing diversity, equity and inclusion challenges within environmental science community the ECORISC Team developed and delivered a summer school aimed at undergraduate and masters students from underrepresented backgrounds.



Fourteen students joined the programme in July which began with a face-to-face induction event which involved activities aimed at identifying some of the current challenges around chemicals in the environment (including microplastics, endocrine disruptors, antibiotics, pharmaceuticals and forever chemicals) and discussing the technical and non-technical skills needed to tackle these issues.



Over 6 weeks students took part in a training programme based at one of the ECORISC institutions. Each programme was designed to expose students to the PhD experience, covering a range of methods and skills needed to deliver an independent research project.

Alongside this students were invited to weekly online talks. Members the environmental pollution community from underrepresented backgrounds gave talks about their career journeys and their scientific work. Speakers included academics, postdoctoral researchers, and those who work in industry or the regulatory environment.

The summer school concluded with a 2 day residential event which provided students with the skills in applying for a PhD (or a role outside academia). This included presentations from other NERC funded CDTs and DTPs; reviewing best practice in writing written applications; a mock interview and presentation and preparing a PhD proposal based on the skills learnt over the course of the programme.

The programme was very well received and feedback was positive, with all students recommending this type of programme to other students considering PhD study. Pre and post surveys showed a significant increase in student understanding of what a PhD programme entails, how CDTs operate, funding opportunities, the application process and of career prospects with a PhD in environmental pollution science.



“As a geographer with passion for biology and the environment I jumped at the opportunity presented by the ECORISC summer scholarship training scheme to enhance my knowledge of environmental chemistry, risk science and ecotoxicology. Upon the scholarship, I was able to work alongside a range of projects. An opportunity that gave me the ability to enhance my networking skills, which I found particularly rewarding. From PCR gel electrophoresis to DNA histology, I was able to work alongside academics, learning the methodology taken in their published papers and collaborate with the ongoing and exciting research of postdoctoral researchers and PhD students. The ECORISC training programme has not only enhanced a range of my functional, self-management and knowledge-based skills but also dramatically boosted my confidence”
Felix Pym - Summer School Scholar

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