

Research groups

Professor Kevin Chipman's (</staff/profiles/biosciences/chipman-kevin.aspx>) research focuses on mechanistic cellular and genetic toxicology, toxicogenomics and nanotoxicology in relation to both human health and the health of organisms in the aquatic environment.

Dr Nik Hodges' (</staff/profiles/biosciences/hodges-nik.aspx>) research group studies the mechanisms of genetic toxicity, in particular oxidative stress and adaptive changes in gene expression.

Dr Frank Michelangeli's (</staff/profiles/biosciences/michelangeli-francesco.aspx>) key research interest is how environmental pollutants alter cell signalling processes.

Professor Mark Viant's (</staff/profiles/biosciences/viant-mark.aspx>) uses metabolomics and computational biology to study the toxicity of pollutants and nanomaterials to aquatic organisms, with the goal to develop novel approaches to measure environmental health.

Professor John Colbourne's (</staff/profiles/biosciences/colbourne-john.aspx>) interests encompass evolutionary ecology, molecular biology, systematics and functional genomics, with an overarching goal to connect gene expression and genome structure with individual fitness and population-level responses to environmental challenges.

Dr Warwick (Rick) Dunn's (<http://www.birmingham.ac.uk/schools/biosciences/staff/profile.aspx?Referenceld=53168&Name=dr-warwick-dunn>) research group focuses on developing innovative chromatography, mass spectrometry, sample collection and computational resources and their application in the study of the complex role of metabolites in human ageing and diseases.

Dr Scott Hayward's (</staff/profiles/biosciences/hayward-scott.aspx>) group uses a systems biology approach to investigate the molecular and physiological mechanisms underpinning insect responses to changing environments and stress, as well as their broader ecology.

Dr Luisa Orsini's (<http://www.birmingham.ac.uk/schools/biosciences/staff/profile.aspx?Referenceld=63090&Name=dr-luisa-orsini>) research interest is understanding how natural populations adapt and evolve in response to environmental changes.

Professor Jeff Bale's (</staff/profiles/biosciences/bale-jeff.aspx>) research lab specializes in the effects of climate change on insect overwintering and pest outbreaks.

Dr Jim Reynolds' (</staff/profiles/biosciences/reynolds-jim.aspx>) research group studies the behavioural and ecological responses of terrestrial and marine birds to changes in food availability during both breeding and non-breeding phases of the annual cycle.

Dr Susannah Thorpe's (</staff/profiles/biosciences/thorpe-susannah.aspx>) research group combines studies of functional morphology, biomechanics and behaviour to understand how animals interact with complex habitats and the consequences of this for their evolution.

Dr Jackie Chappell's (</staff/profiles/biosciences/chappell-jackie.aspx>) research group studies the way in which animals use the flexibility provided by their cognitive abilities to adapt to rapid changes in the environment, and how ancestral selection pressures have shaped the evolution of intelligence.

Dr Roland Brandstaetter (</staff/profiles/biosciences/brandstaetter-roland.aspx>) investigates comparative vertebrate chronobiology including the mechanisms and functions of biological clocks.

Professor Pat Butler (</staff/profiles/biosciences/butler-pat.aspx>) studies the physiology of exercise and field energetics of vertebrates by deploying electronic data storage and tracking devices in wild animals.

Professor Malcolm Press (</staff/profiles/university/malcolm-press.aspx>) specialises in studying the physical and biological interactions between plants and their environment