Research output

**Microplastic accumulation in a Zostera marina L. bed at Deerness Sound, Orkney, Scotland**

**Importance of Surface Coating to Accumulation Dynamics and Acute Toxicity of Copper Nanomaterials and Dissolved Copper in Daphnia magna**

**From DNA to ecological performance: Effects of anthropogenic noise on a reef-building mussel**

**Climate Change: Implications for Ecotoxicological Environmental Impact Assessment**

**Microplastic contamination of intertidal sediments of Scapa Flow, Orkney: a first assessment**

**Natural marine bacteria as model organisms for the hazard-assessment of consumer products containing silver nanoparticles**

**Neutral Red cytotoxicity assays for assessing in vivo carbon nanotube ecotoxicity in mussels – Comparing microscope and microplate methods**

**Review of existing knowledge – emerging contaminant: Focus on nanomaterials and microplastics in the aquatic environment**

**Shifts in the metabolic function of a benthic estuarine microbial community following a single pulse exposure to silver nanoparticles**

**Fish Ecotoxicology in a Changing World: do we Need New Biomarker Endpoints in Light of Climate Change?**
A unified framework for nanosafety is needed

ITS-NANO - Prioritising nanosafety research to develop a stakeholder driven intelligent testing strategy

Potentiating toxicological interaction of single-walled carbon nanotubes with dissolved metals: Potentiating toxicological interaction of SWCNTs with metals

Homeostasis and toxicology of non-essential metals

Fluctuating estuarine conditions are not confounding factors for the Comet assay assessment of DNA damage in the mussel Mytilus edulis

Organothins and hydromineral homeostasis in aquatic animals

Maintenance of bivalve hemocytes for the purpose of delayed DNA strand break assessment using the Comet assay
Hartl, M. G. J., Grigson, S. J. W. & Sinet, E., Jan 2010, In : Environmental and Molecular Mutagenesis. 51, 1, p. 64-68 5 p.

Effects of contaminated sediment from Cork Harbour, Ireland on the cytochrome P450 system of turbot

Putting the sodium dominance index to the test as a measure of acid sensitivity across diverse geological conditions and with reference to the influence of plantation forests

Hepatic biomarkers of sediment-associated pollution in juvenile turbot, Scophthalmus maximus L.

The role of ecotoxicology in environmental impact assessment - a new European perspective

A two-species biomarker model for the assessment of sediment toxicity in the marine and estuarine environment

A test battery approach for the ecotoxicological evaluation of estuarine sediments
Identification of a multixenobiotic resistance mechanism in primary cultured epidermal cells from *Oncorhynchus mykiss* and the effects of environmental complex mixtures on its activity

Assessing the potential of fish cell lines as tools for the cytotoxicity testing of estuarine sediment aqueous elutriates

An assessment of the pollutant status of surficial sediment in Cork Harbour in the South East of Ireland with particular reference to polycyclic aromatic hydrocarbons

Implications of seasonal priming and reproductive activity on the interpretation of Comet assay data derived from the clam, *Tapes semidecussatus* Reeves 1864, exposed to contaminated sediments

Genotoxicity of field-collected inter-tidal sediments from Cork Harbor, Ireland, to juvenile turbot (*Scophthalmus maximus* L.) as measured by the Comet assay

Variability of heat shock proteins and glutathione S-transferase in gill and digestive gland of blue mussel, *Mytilus edulis*

Detecting genotoxicity using the Comet assay following chronic exposure of Manila clam *Tapes semidecussatus* to polluted estuarine sediments

Sediment-associated tri-n-butyltin chloride and its effects on osmoregulation of freshwater-adapted 0-group European flounder, *Platichthys flesus* (L.)

The effects of sediment-associated triorganotin compounds on the gills of the European flounder, *Platichthys flesus* (L.)

Environmental levels of sediment-associated tri-n-butyltin chloride (TBTCI) and ionic regulation in flounders during seawater adaptation

Organotin and osmoregulation: quantifying the effects of environmental concentrations of sediment-associated TBT and TPhT on the freshwater-adapted European flounder, *Platichthys flesus* (L.)

The biometry of gills of 0-group European flounder
Reduced blood osmolality in freshwater-adapted European O-group flounder, *Platichthys flesus* (L.), exposed to environmental levels of sediment-associated tributyl- and triphenyltin

An in-situ study on the influence of ascidian suspension feeding on the subtidal nepheloid layer in the northern Adriatic Sea

Influence of chronic exposure to silver and mercury in the field on the bioaccumulation potential of the bivalve *Macoma balthica*

Roles and Responsibilities
Lecturer in Marine Biology
Programme Director for the Life Sciences Marine an Environmental taught MSc cluster
MSc in Marine Resource Development & Protection
MSc in Marine Biodiversity & Biotechnology
MSc in Climate Change: Managing the Marine Environment
MRes Environmental Analysis & Assessment
Past President of the Physiology Section of the American Fisheries Society

Projects
2013: £24,000 NERC FENAC
2012: £30,000 CREW Centre of Expertise for Waters
2011: £80,000 FP7-NMP-2011-CSA, NMP.211.1.3-3.ITS-NANO
2010: £30,000 MASTS Prize studentship PhD proposal
2010: £60,000 Heriot-Watt Environment and Climate Change Theme PhD proposal
2010: £68,000 The Royal Embassy of Saudi Arabia Cultural Bureau in the UK and Ireland
2009: £51,000 The Royal Embassy of Saudi Arabia Cultural Bureau in the UK and Ireland
2008: £1,000 Edinburgh Convention Bureau travel award
2006: £1,000 USEPA travel grant
1999: Richard Newitt Prize (University of Southampton, travel grant).
1997 University of Southampton research studentship.
1994: Travel grant for short-term scientific work abroad (University of Vienna).

Editorial Boards
Journal of Fisheries Science (fisheriesscience.com)

Grant committees & advisory boards
Member of the Peer Review Panel for the Swedish Research Council FORMAS – Evaluation Panel: Marine Litter and Pollution
Member of the Peer Review Panel for the Swedish Research Council FORMAS – Evaluation Panel: Environmental Pollution
Member of the Peer Review Panel for proposals submitted to the National Priorities Research Program (NPRP). The NPRP is the largest grant funding activity of the Qatar National Research Fund (QNRF).
Reviewer for The Leverhulme Trust research applications.
Reviewer for Natural Sciences and Engineering Research Council of Canada (NSERC) research applications.

Professional and Learned Societies
American Fisheries Society
Fisheries Society of the British Isles
Society of Environmental Toxicology & Chemistry (SETAC)
Invited presentations

19 February, 2010. Scottish Toxicology Interest Group Meeting, Napier University Edinburgh. Title: Biomarkers in marine ecotoxicology


06–10 April 2005, international conference "Biomarkers, risk and environmental assessment" – CroWat final Conference, Cavtat, Croatia. Title: Biomarkers of sediment-associated pollution - constraints and strategies.

22 November 2002, Department of Biology, Memorial University of New Foundland, Canada: Title: Ionic and osmoregulation in fish - constraints and strategies.

21 November 2002, Ocean Sciences Centre, Memorial University of New Foundland, Canada: Title: Sediment-associated pollutants and hydromineral regulation of benthic fish.

Conference and Meeting Organization

Local Organizing Committee Chair and Co-organiser of a symposium, "Fish in a toxic world: Biomarkers and impacts of exposure" at the American Fisheries Scociety, Physiology Section’s 10th International Conference on the Biology of Fish. 3-7 August 2014, Edinburgh.

Scientific Programme Chair and Co-organiser of a symposium, "Fish in a toxic world: Biomarkers and impacts of exposure" at the American Fisheries Scociety, Physiology Section’s 10th International Conference on the Biology of Fish. 15-19 July 2012, Madison, Wisconsin.


Co-organiser of a symposium, "Fish in a toxic world: Biomarkers and impacts of exposure" at the American Fisheries Scociety, Physiology Section’s 9th International Conference on the Biology of Fish. 5-9 July 2010, Barcelona, Spain.


Organiser of a symposium: "Ecotoxicological biomarkers in fish" at the American Fisheries Society, Physiology Chapter’s Conference, 18–26 July 2006, St. John’s, New Foundland. Visit the Fish Biology Congress website.
