SETAC / iEOS - Joint Focused Topic Meeting on Environmental and (eco)toxicological Omics and Epigenetics: Science, Technology and Regulatory Applications

Poster presentations

NOTE: all poster sessions run from Monday 12 September to Thursday 15 September.

Session 1: Microbial genomics and metagenomics

Co-chairs: Umer Zeeshan Ijaz (University of Glasgow, UK) & Claire Evans (National Oceanography Center, UK)

P01 | Changes in the Caulerpa microbiome due to abiotic stresses - Kathryn L. Morrissey (Phycology Research Group, Ghent University, Belgium)

P02 | An association between a neogregarine parasite and the microbial community of bumblebees - Anneleen Parmentier (Ghent University, Belgium)

P03 | Temporal dynamics of bacterial colonization of plastic debris in the North Sea - Caroline De Tender (ILVO, Belgium)

P04 | The microbiome of sympatric cryptic nematode species reflects resource differentiation which alters by ecological interactions - Nele De Meester (Marine Biology lab, Ghent University, Belgium)

Session 2: Evolutionary and ecological omics

Co-chairs: Oliver Windram (Imperial College London, UK) & Jana Asselman (Ghent University, Belgium)

P05 | Earthworm adaption to volcanic stressors - Iain Perry (Cardiff University, UK)

P06 | Transcriptional Rewiring: Synthetic and Evolutionary Processes Governing Plant Environmental Responses - Oliver Windram (Imperial College London, UK)

Session 3: (Eco)toxicological omics

Co-chairs: Philipp Antczak (University of Liverpool, UK) & Karel De Schamphelaere (Ghent University, Belgium)

P07 | Toxicogenomics of the flame retardant tris (2-butoxyethyl) phosphate (TBEP) in HepG2 cells - Boris Krivoshiev (Systemic Physiological & Ecotoxicological Research, Belgium)

P08 | Protein differential expression and biochemical effects of pesticide exposure in the midge Chironomus riparius - Sara Calçada Novais (MARE - Marine and Environmental Sciences Centre, ESTM, Polytechnic Institute of Leiria, Portugal)

P09 | Coupling Transcriptomics with in vitro Multi-Cellular Co-Culture Assays Provides Systemic Toxicity Screening Representative of in vivo Effects - Kurt A. Gust (US Army, Engineer Research and Development Center, USA)

P10 | Transcriptional responses and prediction of metabolic changes in marine medaka fish (Oryzias javanicus) to acute exposure to endocrine disrupting chemicals - Seungshic Yum (Korea Institute of Ocean Science and Technology, Republic of Korea)

P11 | Developing an enhanced experimental workflow for maximising the use of 'omics data within the Adverse Outcome Pathway framework - Mark R. Viant (University of Birmingham, UK)

P12 | Metabolomic Response of Gilt-headed Sea Bream Following Sub-chronic Exposure to Amitriptyline at Environmentally Relevant Concentrations - Haizea Ziarrusta (Department of Analytical Chemistry, University of the Basque Country (UPV/EHU), Spain)

P13 | Development and validation of a multi-matrix Targeted/Non-targeted Metabolomics Method - Anton Ribbenstedt (Department of Environmental Science and Analytical Chemistry, Stockholm University, Sweden)

P14 | Are microRNAs involved in regulating the oxidative stress response in Oryza sativa to gamma radiation? - Jackline Kariuki (Centre for Environmental Sciences, Hasselt University, Belgium)

P15 | RNAseq analysis reveals that chronic gamma radiation affects the developmental biology during embryogenesis in Atlantic salmon - Dag Anders Brede (CERAD, Center for Environmental Radioactivity, NMBU, Norway)

P16 | Transcriptional and epigenetic responses to bisphenol A in breeding zebrafish - Hannah Littler (University of Exeter, Biosciences Department, UK)

P17 | Predictive potential of molecular biomarkers of endocrine disruption in the freshwater gastropod Lymnaea stagnalis: transcriptomic and proteomic responses vs reproductive output - Marie-Agnès Coutellec (Ecology and Ecosystem Health INRA, Agrocampus Ouest, France)

P18 | 1H-NMR metabolomic study of mussels exposed to a controlled mixture of hydrophobic organic microcontaminants - Maitane Olivares (Deptartment Analytical Chemistry, University of the Basque Country (UPV/EHU), Spain / Plentzia Marine Station (PiE-UPV/EHU), Spain)

P19 | Transcriptomic alterations in zebrafish larvae exposed to obesogens - Rubén Francisco Martínez López (Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Environmental toxicology department, Spain)

Session 4: Epigenetics in ecology and (eco)toxicology: science and technology

Co-chairs: Peter Kille (Cardiff University, UK) & Jana Asselman (Ghent University, Belgium)

P20 | Reprogramming of the epigenome in the self-fertilizing mangrove rivulus, Kryptolebias marmoratus, and the effects of environmental stressors - Alexandre Fellous (Laboratory of Evolutionary and Adaptive Physiology, University of Namur, Belgium)

P21 | Impacts of fine particle mine tailings on early life stages of cod - Helena C. Reinardy (Department of Arctic Technology, University Centre in Svalbard, Norway)

P22 | Effects on DNA Methylation Pattern in the Freshwater Snail Physa acuta (Gastropoda, Pulmonata) and Chironomus riparius (Dipteran) after the exposure to Vinclozolin - Mónica Aquilino (Grupo de Biología y Toxicología Ambiental, Facultad de Ciencias, UNED, Spain)

P23 | Changes in DNA methylation in response to cyanobacteria in the model crustacean Daphnia - Jana Asselman (Laboratory for Environmental Toxicology and Aquatic Ecology (GhEnToxLab), Ghent University, Belgium)

P24 | Effects of salinity during the development of mangrove rivulus (Kryptolebias marmoratus) : anchoring behavioural traits to DNA methylation and protein expression profiles in adult brain -

Alessandra Carion (Laboratory of Evolutionary and Adaptive Physiology, University of Namur, Belgium)

P25 | Use of LUminometric Methylation Assay (LUMA) to measure global DNA methylation in ecological organisms - Jessica A. Head (McGill University, Canada)

P26 | Epigenetic signatures as sensitive tool in soil ecotoxicology: alterations and relation to biomarker response in heavy metal stressed earthworms - Maja Šrut (Department of Ecophysiology, Institute of Zoology, University of Innsbruck, Austria / Division of Zoology, Department of Biology, Faculty of Science, University of Zagreb, Croatia)

Session 5: Transgenerational and epigenetic effects of chemicals

Co-chairs: Leda Mirbahai (University of Birmingham, UK) & Michael Eckerstorfer (Environment Agency, Austria)

P27 | Does prior exposure to heavy metals protect future generations of plants to metal stress? - Eline Saenen (Belgian Nuclear Research Centre (SCK•CEN), Belgium)

P28 | Implications of DNA methylation in the response of early-life stage zebrafish after TCS exposure - Elodie Falisse (Laboratory of Evolutionary and Adaptive Physiology, University of Namur, Belgium)

P29 | Multigenerational exposure to silver ions and silver nanoparticles reveals heightened sensitivity and epigenetic memory in Caenorhabditis elegans - Carolin L. Schultz (Centre for Ecology and Hydrology, UK)

P30 | Behavioral and transcriptional effects of bisphenol A in zebrafish embryos - Pal A. Olsvik (National Institute of Nutrition and Seafood Research (NIFES), Norway)

P31 | Cross-generational epigenetic effects of diet restriction in Daphnia magna - Jack Hearn (University of Edinburgh, UK)

P32 | Metabolomic, transcriptomic, and epigenetic effects of BPA exposure during the early zebrafish development - Laia Navarro-Martin (Institute of Environmental Assessment and Water Research (IDÆA-CSIC), Spain)

P33 | Impacts of Environmental chemicals on epigenetic modulation in Ecotoxicity model species - Nivedita Chatterjee (University of Seoul, South Korea)

Session 6: Epigenetics in risk assessment: academia, industry and regulator perspective

Co-chairs: Dave Spurgeon (Centre for Ecology and Hydrology, UK) & Stuart Marshall (Unilever, UK)

P34 | Cadmium hepatotoxicity: an epigenetic gastropod-based approach - Dragos V. Nica (Victor Babes University of Medicine and Pharmacy, Romania)