



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

Wednesday 14 September

### Opening address

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09:00 Welcome:

Bart Bosveld (SETAC Europe, Belgium)  
Peter Kille (EOS Director / Cardiff University, UK)  
Leda Mirbahai (co-chair Scientific Committee / University of Birmingham, UK)  
Jana Asselman (Local Organizer / Ghent University, Belgium)

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

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

09:05 Session intro (co-chairs)

09:10 30 | **Keynote speaker:** Epigenetics in (Eco-)Toxicology - Juliette Legler (Brunel University London, UK)

09:40 31 | **Keynote speaker:** Joe Shaw (University of Indiana, USA)

10:10 Poster flash talks, sessions 4 - 6 (chaired by Peter Kille (Cardiff University, UK))

10:30 *Coffee break and posters*

11:10 32 | **Keynote speaker:** Epigenetics technologies in ecology and (eco)toxicology - Ben Brown (Lawrence Berkeley National Laboratory, USA)

11:40 33 | Technologies to study epigenetic traits in humans and environmental species - Emilia Danilowicz-Luebert (Diagenode s.a., Belgium)

12:00 34 | Towards a Generalised Method for Environmental Epigenetics: Global and Differential Genome-Wide Epigenetic Signatures in an Earthworm Exposed to a Multi-stressor Environment - Oliver Rimington (Cardiff University, UK)

12:20 35 | Environmental heat stress induces epigenetic inheritance of robustness in Artemia model - Parisa Norouzitallab (Laboratory of Aquaculture & Artemia Reference Center, Ghent University, Belgium)

12:40 36 | Is inbreeding and inbreeding depression associated with epigenetic regulation? A case study in Daphnia magna - Mieke Jansen (KULeuven, Belgium)

13:00 Session 4 poster spotlights: P20, P21

13:10 Session 4 wrap-up (co-chairs)

13:15 *Lunch and posters*

## Session 5: Transgenerational and epigenetic effects of chemicals

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

- 14:20 Session intro (co-chairs)
- 14:25 37 | **Keynote speaker:** Mechanisms underlying epigenetic effects of endocrine disruptive chemicals - Joëlle Rüegg (Swedish Toxicology Science Research Center Swetox, Sweden)
- 14:55 38 | Exposure to copper during embryogenesis caused increased tolerance in subsequent generations, in the three-spined stickleback - Lauren Laing (University of Exeter, UK)
- 15:15 39 | DNA methylation in the model organism *Daphnia magna* - Camila Gonçalves Athanásio (School of Biosciences, University of Birmingham, UK)
- 15:35 40 | Differences between generations in the response to gamma irradiation in *Arabidopsis thaliana* - Jorden van de Walle (Belgian Nuclear Research Centre SCK•CEN, Belgium)
- 15:55 41 | The role of DNA methylation in AHR-mediated toxicity of PAHs in chicken embryo - Jessica A. Head (McGill University, Canada)
- 16:15 *Coffee break and posters*
- 16:55 42 | **Keynote speaker:** Intergenerational metabolic reprogramming in flies - Adelheid Lempradl (Max Planck Institute of Immunobiology and Epigenetics, Germany)
- 17:25 43 | Effects of low dose gamma irradiation on histone modifications during zebrafish embryogenesis - Leif Christopher Lindeman (Norwegian University of Life Sciences, Norway)
- 17:45 44 | Differential DNA Methylation in F2 Generation Testicular Cells Caused by Embryonic Exposure to Bisphenol A at F0 Generation - Ramji K. Bhandari (Department of Biology, University of North Carolina at Greensboro, USA)
- 18:05 Session 5 poster spotlights: P27, P28, P29
- 18:20 Session 5 wrap-up (co-chairs)

## Socials

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- 18:25 *Poster social (until 19:15)*
- 20:00 *Conference dinner (Foyer NT Gent) (pre-registration required, onsite registration is NOT possible)*