

Session 5: Epigenetics in ecology and (eco)toxicology: science and technology

Epigenetic factors are a set of chemical changes to an organism's genome that modify gene expression but do not change the DNA sequence itself. They are malleable and responsive to external factors. In this session we will focus on:

- 1) Current technologies for epigenetic research and their application in ecotoxicology,
- 2) The challenges associated with applying currently available technologies and software designed for mammalian species to environmentally relevant species,
- 3) How natural variation in the epigenetic profiles of different species alters their responses to environmental stressors, and,
- 4) The role of epigenetic mechanisms in population evolution and adaptation to changing environments.