Throughout my career I have focused on sediment, soil and water ecotoxicology using holistic approaches, from gene to population, to achieve a mechanistic understanding of sub-lethal effects. On the course of my career, I have been gradually migrating from classical hazard characterization approaches to mode-of-action and mechanistic perspective. My goal is to use holistic approaches (from gene to population) to unravel (un-expected) effects of contaminants attempting a mechanistic understanding of effects, following the Adverse Outcome Framework. I have recently joined Unilever’s Safety and Environmental Assurance Centre in the UK, where I am planning to develop and use mechanistic-based methods to improve Environmental Safety decisions for Risk Assessment.