

Main prize

Laudatio

Dr. Kristina Rehberger

Aquatic ecosystems are considered at risk around the globe, in part because of chemical pollution.

Dr. Rehberger's work¹ at the Institute for Fish and Wildlife Health illustrates the strength of interdisciplinary, multifactorial approaches for the assessment of aquatic pollution.

Her research lays out how *ethinylestradiol* – the active ingredient in the pill – subtly and diversely impacts fish at environmentally relevant concentrations: The chemical alters the reproductive and immune systems of trout. When exposed to the chemical as well as parasites at the same time, the fish also grow fatigued more quickly. In this way, *ethinylestradiol* interferes with the health of the fish in three areas, namely, reproduction, defence against disease, and energy balance.

Dr. Rehberger's work thus points the way for systemic approaches in, for example, risk assessment and threshold setting, which are indispensable for sustainable prevention of environmental problems.

¹"Long-term exposure to low 17 α -ethinylestradiol (EE2) concentrations disrupts both the reproductive and the immune system of juvenile rainbow trout, *Oncorhynchus mykiss*"

Biography

- 1987: Born in Heidelberg, Germany
- 2007–2010: Bachelor of Science in Biology, Ruprecht-Karls-University, Heidelberg, Germany
- 2010–2013: Master of Science in Molecular Biosciences, Ruprecht-Karls-University, Heidelberg, Germany
- 2014–2018: Dissertation (Doctorate of Science) with a focus on aquatic eco-toxicology, Institute for Fish and Wildlife Health, University of Bern
- 2018–2020: Postdoc, Institute for Fish and Wildlife Health, University of Bern
- Since 2020: Research associate / specialist in aquatic ecology Office for Water and Waste of the Canton of Bern

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