

One Health: On animals, humans and the environment

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The One Health concept is a multidisciplinary and collaborative approach to address potential or existing health risks that originate at the animal-human-environment interface. One Health approaches recognize the interconnectedness of human health with animal health and the environment and address challenges from zoonotic infections and antimicrobial resistance to chemical exposures and occupational risks to animal workers. The One Health concept has also been applied to studies of the human, animal, and environmental microbiome, addressing the health implications of non-pathogenic microbial exposures.

Given the global trends towards intensification and expansion of livestock farms, increasing demands for animal-based food products, urbanization, biodiversity loss and other ecological impacts of climate change, the One Health approach will continue to be an important tool in environmental epidemiology.

This symposium will provide an overview of the One Health approach, how it can be applied to the environmental epidemiology field, and state-of-the-art presentations that highlight the variation of emerging exposures and related health risks. In line with the meeting theme, the symposium will address the One Health concept in relation to air pollution, water-related risks, and 'places' with special interest, e.g. the farm environment and the indoor environment.

This symposium will address history and future perspectives of One Health in the context of environmental epidemiology. Presenters will address the various sources of relevant environmental exposures, and current developments in methodology. The proposed presentation titles are directly connected with the conference theme.