

1. Climate Change Effects on Pelagic Methylmercury Transfer

We invite master students and interns to apply this project work to investigate climate change effects (increase of temperature and “browning”) on methylmercury bioaccumulation in pelagic consumers in oligotrophic waters.

Increasing temperature and browning of lake water in Scandinavia have been noticed for many years, but few have addressed the possible outcome for mercury biogeochemistry cycles. This is of great importance as freshwater mercury bioaccumulation in fish from oligotrophic freshwaters is alarmingly high, particularly in Sweden, and likely to change under environment regime shifts. A mesocosm experiment is being planned for this research project in collaboration with the limnological research station in the Austrian Alps run by WasserCluster Lunz (<http://www.wasserkluster-lunz.ac.at/index.php/en/>). Students will be involved in the mesocosm experiment itself, and then address at least one key scientific question from the controlled phytoplankton and zooplankton communities. The specific scientific questions will be how increased temperature, with or without increased dissolved organic matter, and the interaction of both would influence mercury bioaccumulation. The mesocosm experiment will last from May to July and further lab work on sample analysis will be finishing no later than the end of August 2018.

Master students / interns that are interested in the research topic are welcome to contact us for further details. And for those who are registered at universities within EU countries outside of Austria may apply for a Youth Mobility Erasmus+ scholarship <https://www.mucf.se/ansokan-inom-erasmus> (in Swedish), or <https://webgate.ec.europa.eu/web-eforms/> (English) for this project work before 15 Feb 2018.

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