

UNIVERSITY OF CONNECTICUT

Department of Marine Sciences Presents a Seminar By

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How different geochemical pools of mercury control future methylmercury levels in estuarine ecosystems

It has been estimated that 6.92 million of US women in childbearing age have mercury (Hg) levels of concern and Hg is today the most common reason for human-health related fish consumption advisories by the US EPA. In 2013, the first legally binding global treaty aiming to reduce anthropogenic emissions of Hg (the Minamata Convention) was finalized. Within what timeframe lower levels of Hg in fisheries could be expected from reduced anthropogenic emissions is however unclear. This uncertainty is mainly driven by the lack of quantitative data concerning the availability of different Hg geochemical pools (e.g. terrestrial, sediment and atmospheric inputs of inorganic Hg and MeHg) for methylation and bioaccumulation. Further, the availability of these different Hg pools in ecosystems impacted by climate change remains unclear. In this talk I will discuss these uncertainties and present data from large scale model ecosystems where we have i) quantified the availability of different Hg geochemical pools to MeHg to estuarine sediment and biota and ii) shown that climate induced terrestrial discharge may enhance methylmercury accumulation in estuarine biota.

Host: Rob Mason and Zofia Baumann Time & Date: 11:00 am, Friday, February 12, 2016 Place: Marine Sciences Building, Seminar Room 103

Please see this <u>page</u> for cancelations and additional seminar information, email <u>marinesciences@uconn.edu</u>, or call 860-405-9152 or 860-405-9151