

**University of Vienna's Doctoral Programme (DK)
"Microbial Nitrogen Cycling – From Single Cells to
Ecosystems"**



cordially invites to an

Open Lecture



Lisa Stein

Professor of Biological Sciences, University of Alberta, Canada

"NO way to Nitrous Oxide Production by Ammonia-Oxidizers"

Nitrous oxide is a critical greenhouse gas that continues to increase in the atmosphere, yet the microbial pathways and processes that control its production are still largely uncharacterized. Aside from heterotrophic denitrifiers, ammonia-oxidizing bacteria and Thaumarchaea are implicated as major producers of N_2O . Our comparative studies of ammonia-oxidizing bacteria and Thaumarchaea revealed several interesting insights to N_2O production including essential and non-essential enzymology, metabolic intermediates, and interactions between biotic and abiotic processes. This work places NO as a key molecule that ammonia-oxidizers produce and use in a surprising variety of physiological contexts to ultimately produce N_2O .

29 June 2016, 2:40p.m.

Location: KLI Klosterneuburg, Martinstraße 12,

3400 Klosterneuburg

Host: Christa Schleper, Department of Ecogenomics and Systems Biology, University of Vienna



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