



WETLANDS IN A COMPLEX WORLD

JUNE 3-8, 2012
ORLANDO FLORIDA, USA

Session 54:
Linkages –Microbial Communities and Biogeochemistry

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nutrient cycling /CH₄ emission

Ecosystem functioning

Processes
Multifunctionality



SIP probing of lipids, proteins, RNA, DNA
ChipSip, NanoSIMS

Functional Biodiversity

Ecological theory
Experimental design
Method development
(Omics; cultivation;
micro-analyses; isotopes)
Predictive Modeling

"Blackbox"

Community
traits

Population
traits

Cell traits



High-throughput OMICS"

Single-cell techniques
Cultivation
Omics
Metabolic Modeling

Molecules



Jessica Moon (Penn State University)
**Nitrogen Cycling in Headwater Wetlands across
Condition Gradients in Pennsylvania and Ohio**

Riks Laanbroek (Netherlands Institute of Ecology, Wageningen, Netherlands)
**The Effect of Hydrology on the Distribution of Ammonia- Oxidizing
Betaproteobacteria in Impounded Black Mangroves (Avicennia Germinans).**

Bram Mulling (University of Amsterdam, Netherlands)
**Microbial Community Changes During Residence of Treated Wastewater in a
Constructed Wetland**

Pieter van der Meer (University of Leuven, Belgium)
**Microbial Degradation of Pesticides in Wetlands:
Effects of Season Bound Changes.**