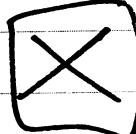


Peter Bottomley - Looking at microbial ecology
via two distinct paradigms: individual
bacteria's genomes and soil microbial communities

Microbiology community - frequently people work on
one side or other. He is going to talk about
both.

① Venter failed to sequence soil community? 

② Intro to microw. ecol.
- lots of bacteria in soil
- fungi - commonly ignored

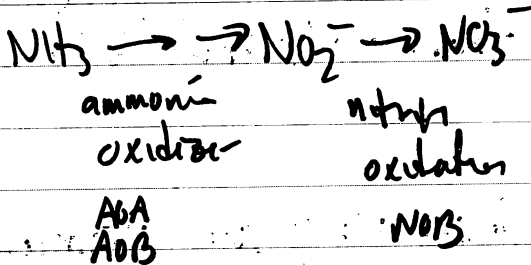
③ His system: experimental tree plantations
- different mixes of Douglas fir + red alder
- two different sites
- interested in this in particular - in relation to N₂

"You can taste this kind of acidity on your tongue!"

④ Uses Ab to KO fungi or bacteria
Then looks at N uptake

9.00 A gene copy #

Genomes + Nitrication



Nitrobacter-related to Bradyrhizobium

(Dissys 16S)

Compared three genomes

N. hamburgensis; *N. winogradskyi*; *N. sp.*

Many microbes prefer D-isomers

Prophage: "It's like looking at craters on the moon"

"It cleans the diaper of the ammonia oxidase"