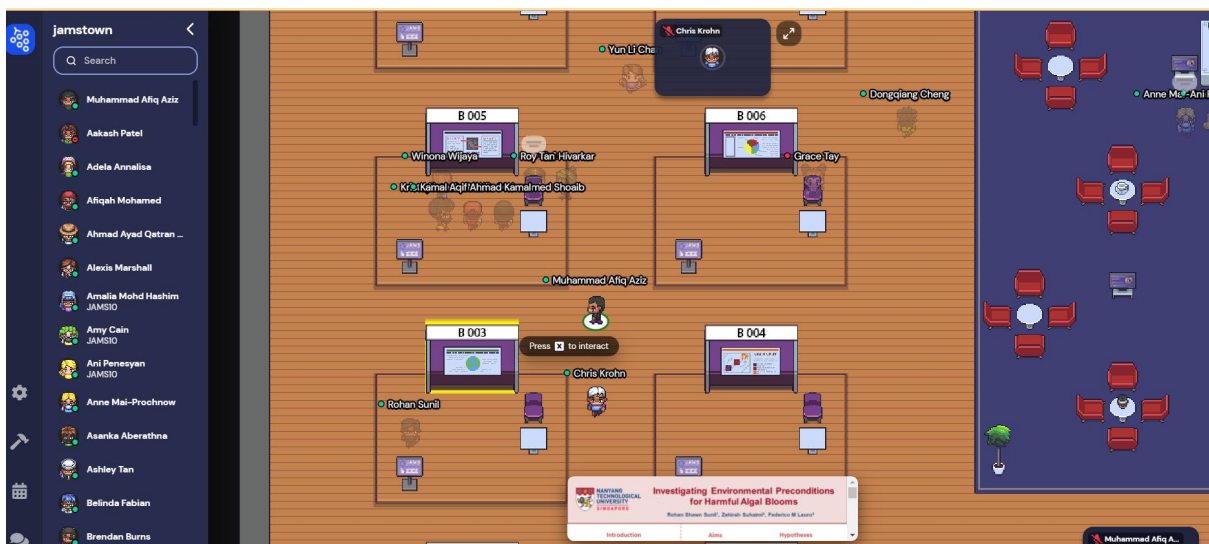


JAMS10 report

The Joint Academic Microbiology Seminars 10th Annual Symposium (JAMS10) was held on August 23rd and 24th, 2021 with ISME as a Silver sponsor. The virtual event was co-organised by JAMS nodes from Sydney, Kuala Lumpur and Singapore, and attended by over 400 participants from around the world mostly focused on the Asia Pacific region. Highlights included talks by a cohort of international microbiologists who shared their latest insights and discoveries on a wide range of topics, including antibiotics, biofilms, extremophiles, nitrification, SARS-CoV-2, and philosophies in microbial ecology research. Panel sessions covered two interesting topics: the origin and purpose of JAMS by its co-founders and exploring industry as an alternative career option to academia. Participants gathered at a highly interactive virtual space called 'JAMS Town', where talks, poster presentations and trade displays giving an in-person experience. JAMS10 ended with a prize-giving ceremony, awarding students and early career researchers with the best poster presentation. Despite the challenging year, JAMS10 was a resounding success all thanks to the involvement and participation by a diverse group of microbiologists.





DTU

Holomycin is produced by enzymes from a BGC – similar to BGCs in other bacteria

Photobacterium galathea 52753
Yersinia ruckeri ATCC29473
Streptomyces clavuligerus ATCC27064

Legend:
 ■ Core gene ■ Oxidative gene ■ Transporter gene
 ■ Resistance gene ■ Regulatory gene ■ Gene with unknown function

HGT

Gram-positive, filamentous soil bacteria Gram-negative, single-cell, marine bacteria

Zhang et al. 2021 AEM

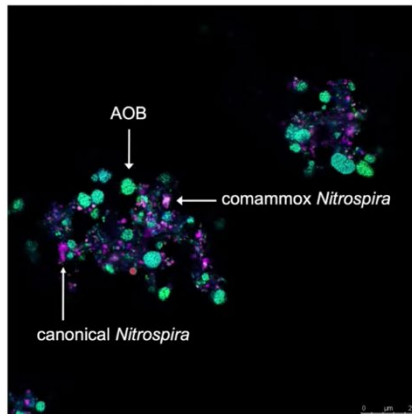
JAMS 10
 CELEBRATING 10th ANNIVERSARY
 Joint Academic Microbiology Societies
 MINIMA MAXIMA SUNT

LONE GRAM
 TECHNICAL UNIVERSITY OF DENMARK
 DENMARK

TALK TITLE: WHY DO BACTERIA PRODUCE ANTIBIOTICS?

Next ► Scientific vs. technical challenges in microbial ecology: a question of approach
 James Prosser
 University of Aberdeen
 United Kingdom

Linking function (AMO labeling) and identity (FISH)



AMO
 Nitrospira
 all bacteria



SEBASTIAN LÜCKER
 RADBOUD UNIVERSITY NIJMEGEN
 NETHERLANDS

TALK TITLE: MOLECULAR
 IDENTIFICATION AND
 CHARACTERISATION OF
 NOVEL NITRIFYING
 MICROORGANISMS

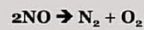
Characterization of *Methylomirabilis* bacteria



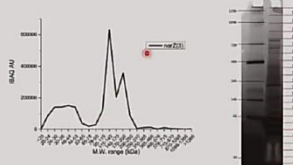
nirS $\text{NO}_2^- \rightarrow \text{NO}$
 $K_s (\text{NO}_2^-)$ 7 μM

pmoCAB $\text{CH}_4 + \text{O}_2 \rightarrow \text{CH}_3\text{OH}$
 $K_s (\text{CH}_4)$ 2 μM

Novel NO dismutase ?



Membrane proteome *M.oxyfera*



Putative NOD migrates dominantly at monomer size (~90 kDa) and ~50% at dimer size (~180 kDa)



MIKE JETTEN
 RADBOUD UNIVERSITY NIJMEGEN
 NETHERLANDS

TALK TITLE: NEW MICROBIAL
 NITROGEN AND METHANE
 CYCLE ANAEROBES FOR A
 BETTER HEALTH AND
 ENVIRONMENT