

Report

NZMEC 2016

New Zealand Microbial Ecology Consortium Symposium v4.0
18-19 February, 2016
University of Auckland

The New Zealand Microbial Ecology Consortium is a special interest group of the New Zealand Microbiological Society, with the purpose of fostering and sharing new knowledge in microbial ecology research, and encouraging research collaborations. We hold a biennial symposium at the University of Auckland to facilitate these interactions and invite a range of international, national and early career researchers to present their work.

At these symposia, we aim to attract a broad mix of topics for presentation and ensure that over half of the presenters are early career researchers. We do not charge registration or membership fees to attend, instead relying on generous sponsorship from organisations and societies such as ISME to assist in sponsoring plenary speakers to attend. The format of NZMEC symposia varies from year-to-year and has in the past included workshops on the use of statistics in microbial ecology research, application of Next Generation Sequencing and oral presentations. International plenary speakers in the past have included Gene Tyson, Phil Hugenholtz, Jim Prosser, Jill Banfield and Noah Fierer.

This year, NZMEC v4.0 was held over two days and focussed on oral presentations on a broad range of topics. We had 103 attendees including representatives from all NZ universities and the majority of governmental research agencies (known as Crown Research Institutes, or CRIs) and also a contingent of Australian researchers from a variety of institutions. As always, we aimed for a good mix of plenary international speakers (4), New Zealand Principal Investigators (7) and Early Career Researchers (13), as well as ensuring an equitable gender balance (14:12 female: male presenter split).

ISME sponsored the second session of the conference, and specifically sponsored the attendance of one of our two New Zealand Plenary speakers, Professor Ian Dickie from Lincoln University in Christchurch. Ian is a professor of invasion ecology with a primary interest in fungal interactions in ecosystem



processes. His talk covered research that linked fungal communities to major gradients of ecosystem change and included research into the use of environmental DNA to examine how fungal communities respond to gradients of land-use intensification, the response of arbuscular mycorrhizal fungi and oomycete communities to 120,000 years of soil development at Franz Josef Glacier, and how the introduction of exotic plants into NZ has influenced ectomycorrhizal fungal



communities. The talk was well received and prompted broad discussions, particularly on soil sampling and statistics. This session also included research presented by Xochitl Morgan (on microbial biogeographic relationships in the rhesus macaque gut), Maria Monteiro (on environmental factors influencing nitrification in Antarctica soils) and Sarah Knight (on *Saccharomyces cerevisiae* sporulation strategies).

Other plenary speakers presenting their research at the symposium were:

- Ed DeLong (University of Hawai'i);
- Nicole Webster (Australian Institute of Marine Science);
- Catherine Lozupone (University of Colorado – Denver);
- Steve Pointing (Auckland University of Technology); and
- Jennifer Martiny, (University of California – Irvine).

A copy of the Symposium programme is appended to this report.

The Symposium was a great success. There was much discussion throughout the event, and the organisers have since had very good feedback from attendees and presenters. The ongoing success of the NZMEC symposia demonstrates the vibrant and broad microbial ecology researcher community in New Zealand.

PROGRAMME – DAY 1

Thursday 18th February:

09:00 – 09:10 **Introduction – Matt Stott & Mike Taylor**

Session 1

09:10 – 10:00 **Chair: Craig Cary, University of Waikato**
Plenary: Ed DeLong, University of Hawaii *

10:00 – 10:30 NZ Invited: Gavin Lear, University of Auckland

10:30 – 10:45 ECR #1: Christina Straub, Massey University

10:45 – 11:00 ECR #2: Mike Hoggard, University of Auckland

11:00 – 11:30 **Morning tea** (provided)

Session 2

11:30 – 11:45 **Chair: Matt Stott, GNS Science ****
ECR #3: Maria Monteiro, University of Waikato

11:45 – 12:00 ECR #4: Sarah Knight, University of Auckland

12:00 – 12:50 Plenary: Ian Dickie, Lincoln University

12:50 – 13:20 NZ Invited: Xochitl Morgan, University of Otago

13:20 – 14:30 **Lunch** (provided)

Session 3: ANZAC session. Chair: Mike Taylor, University of Auckland

14:30 – 14:45 Alexis Marshall, La Trobe University

14:45 – 15:00 Chris Greening, Monash University

15:00 – 15:15 Megan Huggett, Edith Cowan University

15:15 – 15:30 Suhelen Egan, University of New South Wales

15:30 – 15:45 Michael Strack, Macquarie University

15:45 – 16:00 Toni Cox, University of Melbourne

16:00 – 16:15 Oonagh Bodin, La Trobe University

16:15 – 17:05 Plenary: Nicole Webster, Australian Institute of Marine Science

* Ed DeLong's attendance is sponsored by the School of Biological Sciences, University of Auckland.

** This session is sponsored by the International Society for Microbial Ecology (ISME).

