



12th International Symposium on Microbial Ecology

Microbial Diversity: Sustaining the Blue Planet

Cairns, Australia, August 17-22, 2008

SUMMARY OF SCIENTIFIC PROGRAM

Over 1500 Microbial Ecologists descended on the picturesque city of Cairns in Far North Queensland, Australia, in August 2008 for ISME12 – Microbial Diversity: Sustaining the Blue Planet. The program started off with a bang, with Emeritus Professor Kevin Marshall reminding us of the impact microbial ecology can make in the sustaining our earth. Following our first keynote presentation by Bo Barker Jørgensen, the traditional owners of the region welcomed and entertained us as we caught up with old friends and made new ones.

What followed was an outstanding week of excellent science, new technologies, exciting discoveries and a look into the future of the field. ISME12 nicely showed the immense progress that has been made in Microbial Ecology. Since the 1980s a wide array of molecular tools became available for application in microbial ecology and a vast, undiscovered, world of microbes was detected in every ecosystem on this globe, the science of microbial ecology has been stepping up constantly. More recently genomic approaches has been introduced into microbial ecology enabling in-depth analyses of the functioning of all, including unculturable, microbes in their natural environment and allowing for mining the hidden microbial world. The symposium presented a clear and convincing illustration of the maturity of the diverse applications of genomics and post-genomic approaches. New areas, such as single cell microbiology, the microbial world of the deep soil and the human microbiome were addressed together with great progress in existing areas such as microbial interactions, global change, and environmental biotechnology.

The city of Cairns and the Convention Centre were exceptional hosts and the delegates took advantage of environmental significance of the region by diving, trekking, sailing, golfing, and soaking in the culture. Overall, the International Society for Microbial Ecology was very pleased with the symposium outcome and are confident for the future of the society and the field.

Abstracts/papers received	1468
Keynote and VIP Presentations	8
Bird's Eye View Presenters	2
Invited Presentations	92
Round Table Sessions	7
Contributed Papers selected for Oral presentation	184
Contributed Papers selected for Poster presentation	1278

SCIENTIFIC AWARDS

The Jim Tiedje Award: This is presented by the ISME to an exalted microbial ecologist who is recognized for their Outstanding Lifetime contribution to the field of microbial ecology. Past winners of this award include Gijs Kuenen (2006) and Farooq Azam (2004). The 2008 awardee is **Norman Pace**, Department of Molecular, Cellular and Developmental Biology, University of Colorado, Boulder, USA, who will present his award lecture on the evening of Tuesday, August 19, 2008.

The ISME Young Investigators Award: This award recognises early career microbial ecologists who have made significant contributions to this field. Past winners of this award include Ian Head (2004) and Phil Hugenholtz (2006). The recipient of the 2008 award is **Forest Rohwer**, San Diego State University, San Diego, USA.

ISME Student Poster Award: This is reserved for students as long as they are the first author on a submitted poster presentation. The ISME12 recipients are:

- **Danny Ionescu** (Hebrew University of Jerusalem, Israel), "Small Non Coding RNAs are Involved in the Response to Nitrogen Depletion in the Filamentous Cyanobacterium *Anabaena* PCC 7120"
- **Yutaka Yawata** (University of Tsukuba, Japan), "Development of a Novel Biofilm Continuous Culture Method for Simultaneous Assessment of Architecture and Gaseous Metabolite Production"
- **Claire Thompson** (The University of Sydney, Australia), "The *Bacteroides* Group has Distinct Community Dynamics During Development of the Gut Microbiota in Neonatal Pigs"
- **Ariane Peralta** (University of Illinois at Urbana-Champaign, Urbana, USA), "A Microbial Community Ecology Approach to Wetland Mitigation Assessment"
- **Jana Sitte** (Friedrich Schiller University Germany), "Heavy Metal Tolerant Sulfate-Reducing Prokaryotes in a Gleyic Creek Soil at the Former Uranium Mining District Ronneburg"
- **Simon McIlroy** (Biotechnology Research Centre, Bendigo, Australia), "Long Term Influence of pH on the Microbial Community of a Lab-Scale SBR EBPR System"
- **Karina Sbisá** (Flinders University, Adelaide, Australia), "Analysis of the *Vibrio Natriegens* Genome- The Search for DNA Repair Promoters"
- **Annika Gillis** (Universidad Simon Bolivar, Biología Celular, Caracas, Venezuela), "Bacterial Communication Detection in Bacterial Diseases of Banana Plants (*MUSA* AAB) and Bell Peppers (*Capsicum Annuum* L),"
- **Daniel Herlemann** (Max Planck Institute for Terrestrial Microbiology, Marburg, Germany), "First Cultured Representative of the Candidate Phylum Termite Group I: A Genomic Analysis"

The D.C. White Award: David C. White's vision was to honour and respect the power of quantitative analytical chemistry to microbial ecology. Thus, this award is presented to the most innovative poster at the ISME Symposia. The inaugural 2008 award was presented to **Yutaka Yawata** (University of Tsukuba, Japan)

Travel Awards

ISME made funds available for travel awards for a minimum of 30 young scientists. The grants were:

- Australia and New Zealand Residents €200 (US\$ 280)
- Asia and Pacific residents €400 (US\$ 570)
- Rest of the World €650 (US\$ 920)

In addition, with the donation of The European Science Foundation Standing Committee for Life, Earth and Environmental Sciences (LESC), we were able to offer 5 grants of €1,000 to the top 5 European submissions to the travel award scheme.

We received a total of 214 submissions. And were able to award 49 ISME Travel Awards and 5 ESF Awards.

ESF Grants:

Petter Thureborn (Södertörn University College, Sweden), "Poster: Functional Metagenomics of Baltic Sea Sediment; Mining and Mutagenesis of Novel Low-Temperature-Active Lipolytic Enzymes".

Etienne Yergeau (Netherlands Institute of Ecology (NIOO-KNAW), The Netherlands), "Presentation: Rapid, environment-specific changes in Antarctic soil microbial communities following artificial warming".

Laura Acuna Alvarez (University of Essex, United Kingdom), "Poster: Isoprene degradation in marine and estuarine environments".

Robin Tecon (University of Lausanne, Switzerland), "Poster: Double-Tagged Fluorescent Bacterial Biosensor for the Study of PAH Bioavailability".

Erwan Roussel (Université de Bretagne Occidentale, CNRS, France), "Poster: Archaeal Communities Associated to Deep Marine Sediments: From the Surface to a Deep Hot Biosphere".

ISME Travel Grants:

Phillip B Pope	Australia	Petia Kovatcheva-Datchary	The Netherlands
Regina Lamendella	USA	Bjorn Heijstra	New Zealand
Min Li	China	Florent Angly	USA

Ilya V. Kublanov	Russia	Janosch Klebensberger	Australia
Singe Hoegslund	Denmark	Michael Wollenberg	USA
Susanne Schmitt	New Zealand	Rodrigo G. Taketani	Brazil
Victoria Parisi	USA	Olivia Kelly	Ireland
Moola Mutondo	South Africa	Daniele De Corte	The Netherlands
Laura Alonso Saez	Sweden	Tristrom Winsley	Australia
Ken McGrath	Australia	Ashley Shade	USA
Jake Bailey	USA	Veronica Morgante	Chile
Sergey Gavrilov	Russia	Ann-Kathrin Liliensiek	Ireland
Michael Pester	Austria	Kheng Tan	Australia
Jennifer Carson	Australia	Kevin Vogel	USA
Melanie C. Melendrez	USA	Nuraan Khan	South Africa
Danilo PÉrez-Pantoja	Chile	Neslihan Tas	The Netherlands
Roland Hatzenpichler	Austria	Rolf Nilsson	Australia
Yuna Seo	Japan	Erin A. Gontang	USA
Sandy Buerger	USA	Beatriz Monica Perez-Ibarra	Mexico
Susanna Lynn Whitfield	Guam	Claire Louise Thompson	Australia
Alexandre Barretto de Menezes	UK	Jaejin Lee	Korea
Sharyn Gaskin	Australia	Federico M. Lauro	Australia
Amber Hartman	USA	Katharina Koch	Germany
Mario Josue Anguilar Mendez	Mexico	Melissa Kaye Corbett	Australia
Richard Johnson	UK		

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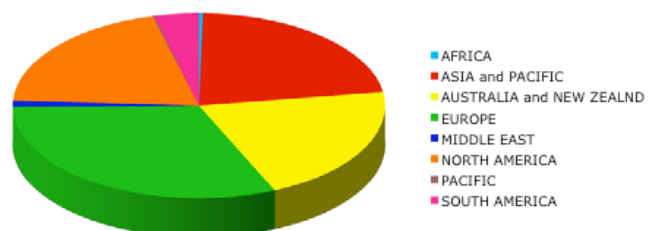
Robert Seviour (VIC, Australia)

Lindsay Sly (QLD, Australia)

Hatch Stokes (NSW, Australia)

Sue Turner (New Zealand)

Total Number of Delegates: 1584, from 54 Countries
Breakdown of Delegates per Region:





The International Society for Microbial Ecology

SYMPOSIUM FINAL REPORT

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