



18th International Symposium on Microbial Ecology Lausanne, Switzerland, 14-19 August 2022

SUMMARY

After 4 years of absence, ISME18 could finally take place! There were many postponements and discussions before the decision to postpone Cape Town and go to Lausanne in Switzerland in 2022 instead was finally made. Fortunately, the Swiss LOC and the convention center were able to have everything in place in a much shorter time frame than normally, to give you that familiar ISME symposium feeling again. From 14 to 19 August 2022, over 2000 attendees came together to attend the 18th International Symposium on Microbial Ecology.

There were presentations from our keynote speakers, Philipp Engel, Emma Slack, Ken Takai, Thijs Ettema, Dianne Newman, Laura Eme, Tiedje Award winner Ken Neelson and Young Investigator Award winner Kelly Wrighton, and over 100 presentations from invited speakers. Furthermore, we were really pleased to notice such an interest for our meeting after the interrupted years, and receive so many abstracts, from which we could select oral presentations, poster pitches, and poster presentations.

We hope you have had a lovely time, and that you truly enjoyed seeing each other again after such a long time. We appreciated your kind responses and your feedback in our survey on the meeting, and will make sure that we will consider your feedback when planning for our next meeting.

ISME is grateful for a successful meeting, and would like to thank all delegates, speakers, sponsors, exhibitors and volunteers for their contribution. We hope to see you in Cape Town!



FACTS AND FIGURES

Abstracts/papers received	2411
Invited Presentations	101
Keynote Presentations	8
Round Table Sessions	8
Contributed Papers selected for Oral presentation	212
Contributed Papers selected for Poster and Poster Pitch presentation	175
Contributed Papers selected for Poster presentation	1495
Number of Registrations	2138
Number of Attendees	2086

SCIENTIFIC AWARDS

The Jim Tiedje Award: This is presented to an exalted microbial ecologist who is recognized for his or her Outstanding Lifetime contribution to the field of microbial ecology. Past winners of this award include Michael Wagner (2018), Sallie W. Chisholm (2016), Nancy Moran (2014), Stephen Giovannoni (2012), Bo Barker Jørgensen (2010), Norman Pace (2008), Gijs Kuenen (2006) and Farooq Azam (2004). The 2022 awardee is **Ken Nealson**, University of Southern California, United States, who presented his award lecture on the evening of Thursday 18 August 2022.

The ISME Young Investigator Award: This award recognizes early career microbial ecologists who have made significant contributions to this field. Past winners of this award include Catherine Lozupone (2018), Gene Tyson (2016), Ruth Ley (2014), Victoria Orphan (2012), Marc Strous (2010), Forest Rohwer (2008), Phil Hugenholtz (2006) and Ian Head (2004). The recipient of the 2022 award is **Kelly Wrighton**, Colorado State University, United States, who concluded the symposium with her lecture.

ISME-IWA Bio Cluster Award: ISME and the IWA have collaborated since 2016 to offer these awards recognizing and rewarding interdisciplinary research of unusual merit in the interface of microbial ecology and water/wastewater treatment. 2020 Award Winner, **Tom Curtis**, Newcastle University, United Kingdom, and 2020 Rising Star Award winner **Fangqiong Ling**, Washington University, United States had wait for this year to be recognized at ISME18. The 2022 winners, **Jizhong Zhou**, Oklahoma State University, United States and **Christopher Lawson**, Toronto University, Canada, will have received their Awards at the IWA Conference in Copenhagen this year.

ISME Student Poster Award: This is reserved for students, or graduates within two years of graduation as long as they are the first author on a submitted poster presentation. The ISME18 recipients are:

- **Manuel Ares Arroyo**, Institut Pasteur, France
“*E pur si muove!* In trans conjugation as a major player in the spread of antimicrobial resistance”
 - **Pamela Ferretti**, EMBL, Germany
“*C. difficile* is overdiagnosed in adults and a commensal in infants”
-



- **Joo-Han Gwak**, Chungbuk National University, South Korea
“Thiotrophy and methanotrophy in a single bacterium”
- **Eveliina Hanski**, University of Oxford, United Kingdom
“Conserved gut microbiome assembly patterns across laboratory and wild mice”
- **Konstanze Hild**, Helmholtz Centre for Environmental Research, Germany
“Fungal volatile compounds trigger prophage induction”
- **Mary Hannah Swaney**, University of Wisconsin-Madison, United States
“Investigating cobamides as a driver of skin microbiome community dynamics”
- **Lisa Thönen**, University of Bern, Switzerland
“Maize root bacteria metabolize host secondary metabolites”
- **Patricia Tran**, University of Wisconsin-Madison, United States
“Paired genomics of viral and bacterial communities shed light on interactions and biogeochemical cycling in anoxic lakes”
- **Ryota Wagatsuma**, Waseda University, Japan
“Single-viral genomics to reveal phage microdiversity in river water”

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 2022 award was presented to **Pieter Blom**, Radboud University, the Netherlands.

The Bill Costerton Award: In honour of Bill Costerton, the award is granted to the author of the poster that best involves new theories in microbial ecology and wider inter-disciplinary significance. The award was presented to **Madeleine Gundersen**, NTNU, Norway.

The Tom Brock Awards acknowledge the accomplishments and promise of outstanding postdoctoral research associates on the basis of the presentations that they make at the ISME Symposium. The awards were granted to **Glen D’souza**, ETH Zurich and Eawag, Switzerland for his presentation with the title “Nutrient complexity regulates collective behaviours and organic matter degradation in marine bacterial populations”, and **Aura Raulo**, University of Oxford, United Kingdom for her presentation entitled “Social and environmental transmission spread distinct sets of gut microbes in wild mice”.

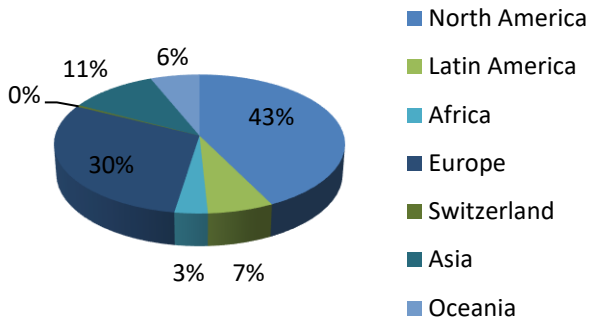
Travel Awards

ISME made funds available for travel awards for approximately 80 young scientists. The grants were:

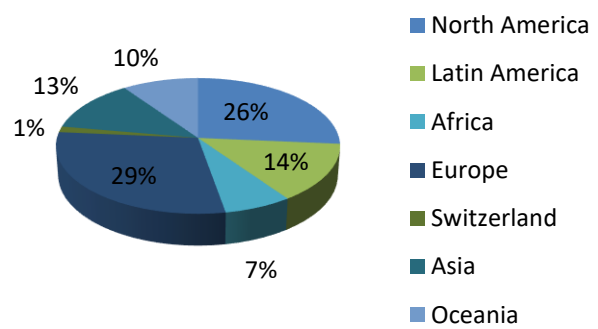
- Switzerland € 100
- Rest of Europe € 300
- Rest of the World € 800

We received a total of 280 submissions and were able to grant 72 ISME Travel Awards.

Applicants Travel Awards



Distribution Travel Awards



FACTS ON REGISTRATION AND ATTENDANCE

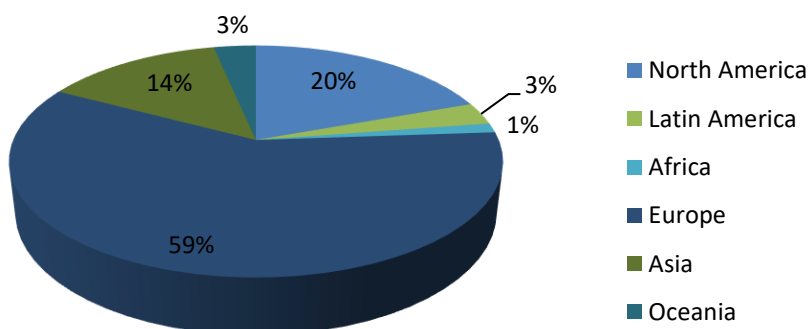
Total Number of Registered Delegates: 2138

Total Number of Attendees: 2060, from 53 Countries

Total Number of Attendees including Exhibitors and Accompanying Persons: 2087

Breakdown of Attendees per Region:

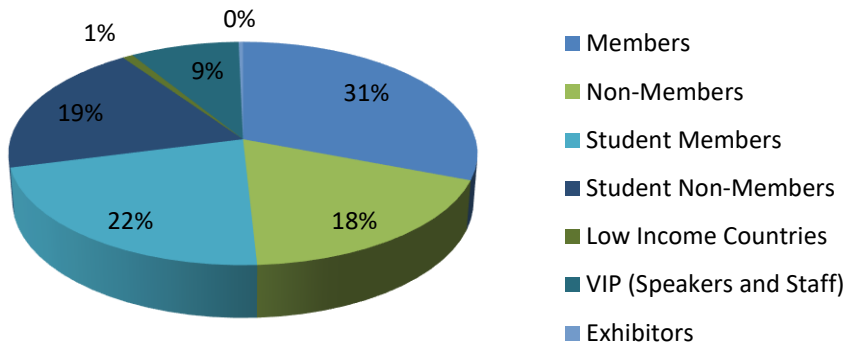
Attendees ISME18





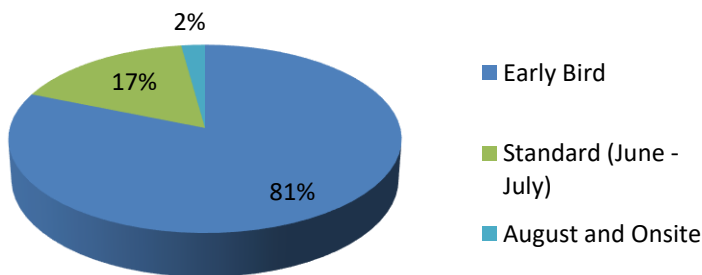
Breakdown of Registration per Category:

Registration Category



Breakdown of Registration per Period:

Registration





POSTERS

Total number of Posters: 1670

Session No.	Session Title	Number of Posters
	<i>Monday 15 August</i>	
PS01	Marine microbial ecology	194
PS02	Microbial ecology of viruses and phages	71
PS03	Plant microbial ecology	101
PS04	Early Career Researchers Session: Scaling our frame of reference: microbial ecology across space, time and phylogeny	15
PS05	A theoretical perspective on microbiome dynamics	10
PS06	Global biogeochemical cycles	42
PS07	Newly discovered branches of the tree of life	12
PS08	Ecological drivers of microbes in foods	21
PS25	Microbial ecology of antimicrobial resistance	91
	<i>Tuesday 16 August</i>	
PS09	Evolution of microbial communities	50
PS10	Computational and experimental approaches in microbial ecology - from bulk community to single-cell approaches	81
PS11	Metabolic interactions in microbiomes	50
PS12	Translational microbial ecology and One Health	19
PS13	Engineering microbial communities	57
PS14	Spatial organisation of microbial communities	25
PS15	Computational models to understand microbial ecology	42
PS24	Freshwater microbial community dynamics and ecosystem functions	105
PS26	Extreme environment microbial ecology	82
PS27	Warfare and cooperation in fungal interactions with other biota	8
PS29	Microbes in a changing world: resilience, responsiveness and resources	36
	<i>Thursday 18 August</i>	
PS16	Soil microbial ecology	205
PS17	Microbial ecology of the built environment	65
PS18	Host-microbe associations across the animal Tree of Life and beyond	100
PS19	Molecular aspects of microbes-microbes - microbes-host interactions	42
PS20	Controlling microbiome composition, one strain at a time	7
PS21	Deep subsurface microbial ecology	50
PS22	Synthetic biology in microbial ecology	17
PS23	Drivers of microbial invasion success	9
PS28	Microscale and biophysical interactions in microbial ecosystems	17
PS30	Microbial chemical interactions and communication	23
PS31	Microbiomes and us: integrative research across the globe	23

VENUE

ISME18 took place in Lausanne, Switzerland, at the SwissTech Convention Centre, on the EPFL Campus.



SOCIAL EVENTS

ISME Social Gathering – MAD Club and Jardin du Pam

Attendance for the social gathering was included in the registration fee, allowing all delegates to attend
Number of Attendees: 2000

LIST OF SPONSORS

ISME is immensely grateful for its sponsors and exhibitors

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ISME is supported by a grant from the Simons Foundation

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Sabine van Wegen, the Netherlands (Event Coordinator)
Lydia Zwart, the Netherlands (Office and Events Assistant)

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Financial Summary*

INCOME

In Euro €

Registration Fees:	€ 1,150,000
Exhibition income:	€ 22,000
Sponsorship totals:	€ 320,000

Total Income: € 1,470,000

EXPENDITURE**

Venue	€ 350,000
Catering	€ 325,000
Technical Arrangements	€ 150,000
Exhibition and Poster Services	€ 45,000
Social Events	€ 230,000
Invited Speaker and Committee Expenses	€ 100,000
Software	€ 55,000
Miscellaneous	€ 25,000
Promotion	€ 5,000
Materials	€ 35,000
Secretariat and Management Costs	€ 150,000
Total Expenditure:	€ 1,470,000

*Approx.

** includes VAT.
