

22nd December 2021

Dear AMS Community,

It is the end of what has seemed like both a very long and a very short 2021. I'm sure we're all quite relieved to reach this milestone and at the same time somewhat apprehensive as to what 2022 might bring. There have been cancellations & postponements of meetings and conferences, and a general move to a virtual format for everything, which has both increased access and reduced our face-to-face networking opportunities. You can rest assured, however, that mycological news, content and events will continue to be forthcoming into 2022! We have some exciting plans for the new year, some of which will be detailed below, and others which will be advertised in the coming months.

Importantly two positions have opened up on the Council! Our Treasurer role is vacant, and we are looking for a student representative from New Zealand. If you are, or know of, someone who will fit the bill, please get in touch! We are also very excited to introduce our new Secretary, Dr Johanna Wong! You can read more about her below.

In the meantime, however you prefer to celebrate, I hope you all have a safe, fun and restful end of the year.

Warm regards, Tracey Steinrucken

Australasian Mycological Society President

Website: https://www.australasianmycologicalsociety.com/

Facebook: AMSstudents and Twitter: @ausmycsoc

News from the AMS Council

2021 AMS AGM

The 2021 AMS AGM was held on 27th October. The minutes, President's and Treasurer's report can be found on our webpage. Several outcomes of the AGM are highlighted here:

- The roles of President (Tracey Steinrucken), Vice-President (Bevan Weir), Councillors (Anna Hopkins and Jonathan Plett) and Student Representative for Australia (Christina Stephenson) were nominated to continue and supported by the attendees
- Adam Frew (Treasurer), Laszlo Irinyi (Secretary) and New Zealand Student Representatives (Hannah McCarthy and Ellie Bradley) have stepped down from the council and we now seek a new Treasurer
- Our social media reach has continued to expand, with our Facebook page reaching 1700 members and Twitter over 860 members
- An additional Research Grant is to be awarded in 2022 in collaboration with fungimap and with the intention of promoting Citizen Science. More information to be distributed soon
- Tom May presented the work of the Fungal Conservation Subcommittee and his work with Taxonomy Australia. Tom also introduced the term "funga" to be used alongside terms "flora and fauna".

MEMBERSHIP RENEWAL

After a very quiet two years of COVID we are hoping to increase our membership base once again!

Memberships can be renewed <u>here</u> and are based on a calendar year. We have discounts available for students, concession holders, and laboratory memberships. You'll benefit by being eligible to apply for our research and training grants, get discounted attendance at our annual meeting, and this year we're offering the first 50 membership renewals or new subscriptions for 2022 a gift – more information soon!

Unsure if your membership is due? Please get in touch with us to find out!

SUSTAINING MEMBERS

The Society would like to thank Elaine Davison for her support as a 2022 Sustaining Member.

WELCOME TO OUR NEW SECRETARY: DR JOHANNA WONG



Johanna is a molecular biologist with a research focus on molecular plant-microbial interactions. She completed her BSc in Biology and MPhil in Molecular Biotechnology at the Chinese University of Hong Kong before moving to Australia in 2016 for her PhD at the Hawkesbury Institute for the Environment at Western Sydney University. In her PhD study, she aimed to gain an understanding of the below-ground molecular signalling between eucalypt roots and soil fungi using molecular and bioinformatic techniques. Her studies involved soil fungi of different lifestyles such as the mutualistic

ectomycorrhizal fungus *Pisolithus microcarpus* and the pathogenic fungus *Armillaria luteobubalina*. She compared the different molecular signals that enable mutualistic ectomycorrhizal symbiosis from those that trigger defence responses. She also explored small RNA crosstalk involved in tree-fungal symbiosis.

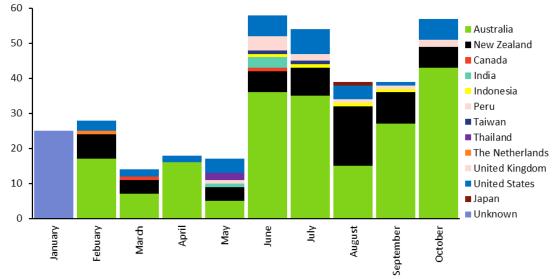
After completing her PhD, she worked as a research associate at the University of Technology Sydney and was involved in the development of metagenomic workflows for antimicrobial resistance detection. In November 2020 she joined the plant biosecurity team in the Department of Primary Industries NSW. Her current role focuses on the development and optimization of molecular diagnostic assays for exotic and endemic plant pathogens that pose a threat to the Australian agroforestry industry.

AMS Virtual Seminar Series 2021

We had an extremely successful Virtual Seminar Series this year, with 12 exceptional presenters drawing an international audience from 12 countries around the world. Thank-you to all our speakers and to all of you who attended.

We also had wonderful presentations by two of our Research Grant Award winners, Elaine Davison and Rebecca Webb who spoke to us about how funding from their 2020 Research Grant helped their research. Thank-you Bec and Elaine.

Check out the impressive level of global attendance at our Virtual Seminar Series 2021:



Drawing from the success of 2021 and the feedback we receive every month from attendees, we have decided to continue the delivery of this series and are now putting out the call to all of you! Our seminars occur generally on the last Wednesday of the month at 12:00pm AEST. Talks are 30 minutes long and are followed by 15 minutes of questions from the audience. Please write to Tracey Steinrucken (ausmycsoc.president@gmail.com) if you're interested in presenting. It's a great way to get your research out there!

Luckily, we already have one great speaker lined up for Thursday 27th January at 12:00pm AEST:



Dr Jonathan Plett

Hawkesbury Institute for the Environment at Western Sydney University

"Ecological Mergers: exploring how ectomycorrhizal fungi use secreted signals to negotiate host colonization"

The merger that occurs between plants and mutualistic fungi is negotiated by a complex series of communications, where the vocabulary of the exchange is populated by a range of chemicals and proteins. In the interaction between plants and microbes we can identify hundreds of communication signals using multi-omic approaches. What these lists do not tell us, however, is the function or specificity of these signals within a specific symbiotic interaction. This

gap in our knowledge can be addressed by studying the mechanistic activity of these molecules and the context within which they operate. In this talk, I will cover our work into identifying the proteomic, nucleic acid, and metabolomic signals used by mutualistic fungi during the interaction with their host plant. I will specifically focus on one of our main model systems: the mutualistic symbiosis between *Pisolithus* and *Eucalyptus* and will discuss some of our current theories upon how minor changes in this molecular dialogue impacts the ultimate fate of the interaction

To register your attendance directly via Zoom, please Register here.

SPECIAL ANNOUNCEMENT

Earlier this year, AMS joined up with the Queensland Branch of the Australasian Plant Pathology Society to put in a bid to host the International Mycological Congress for 2028 on the Gold Coast in Queensland.

The bid team consisted Andrew Geering, André Drenth, Tracey Steinrucken and Robert Magarey.

We were up against some incredible competing bids from other exciting destinations around the world but the International Mycological Association have now informed us that ours was the successful bid!

This event will bring around 1000 attendees from all over the world to our shores in August 2028! It will be hosted at the Gold Coast Convention and Exhibition Centre where there is a wide range of accommodation, dining and activity options. There are already several exciting technical tours planned and our aim is to make this conference family friendly, offering childcare options and family activities to all attendees. AMS will also be hosting a satellite meeting alongside IMC28. It's still early, but we'll continue to be involved in the planning of this event so stay tuned for more information as we get closer to 2028!

Upcoming Mycology Events – Announcements and Changes

POSTPONED: Asian Mycology Congress AMC 2021



Organisers: BIOTEC, the Faculty of Science, Prince of Songkla University, School of Science, Walailak University, Thailand Mycological Association, Thai Medical Mycology Forum August 2022 | Website | Pathum Thani, Thailand & Online

It has been more than a decade since the AMC was held in Thailand and we are delighted to host this conference in

Pathum Thani. The theme of the congress is Asian Mycology in the 21st century: the new generation, and we will focus on the young generation of mycologists who will be at the forefront of Mycology in the future. The congress will cover a wide range of topics from basic science (taxonomy, ecology, pathology) to the applied aspects (biological control, biotechnology, genomics, metabolomics).

CHANGED LOCATION: 18th International Symposium on Microbial Ecology



Organisers: International Society for Microbial Ecology 14-19 August, 2022 | Website | Lausanne, Switzerland

ISME18 is the 18th edition of our non-profit symposium which takes place every two years. The conference is the front runner in the field of microbial ecology, with an

average of around 1,750 international scientists that attend the conference.

POSTPONED: 2021 Australian Biosecurity Symposium



Organisers: The Biosecurity Collective

New Dates: 3-5 May 2022 | Website | Gold Coast, Queensland

Animal Health Australia, the Invasive Species Council, the Centre for Invasive Species Solutions and Plant Health Australia are excited to host the 2021 Australian Biosecurity Symposium. This will once again focus on biosecurity prevention and provide the opportunity to share research and innovation, explore outside-of-the-box thinking and exchange knowledge

and ideas across the biosecurity collective – agriculture (animals and plants), pest animals, weeds, wildlife, aquatics, humans, and the environment. This year's theme is 'a decade of biosecurity: turning a moment into a movement.'



IMC12

Given the alarming development of the pandemic in various regions of the world, and subsequent travel restrictions, the International Mycological Association has made the difficult decision to postpone the IMC12. The COVID-19 pandemic has had negative consequences for planning the upcoming IMC, and will still restrict international travel for some time to come. One of the main aims of IMC meetings is to engage the youth, facilitate face-to-face meetings, and hands-on workshops in mycology. To this end, we have decided to postpone IMC12 to July 2024. The IMC12 meeting has to occur before the International Botanical Congress, which has since also been postponed to later in July 2024, and relocated from Brazil to Madrid, Spain.

If you have anything you'd like to contribute to the next edition, or if you would like to have your research or event featured, please contact Johanna Wong (johanna.wong@dpi.nsw.gov.au) or Tracey Steinrucken (johanna.wong.gov.au) or Tracey Steinrucken (johanna

We're after content highlighting your latest research, profiles on mycologists from your network, mycological events and news, career and scholarship opportunities, and photos of new or interesting fungal species.

We hope you enjoyed the December 2021 edition of the AMS Newsletter.

Stay Safe and All the best for 2022.

Tracey Steinrucken

AMS President