

18th December 2023

Dear AMS Community,

As I reflect back on the past year (with Christmas tunes playing in background!), I am once again reminded of how thankful I am for the Australasian Mycological Society, and the people that make it up. This year the society has continued in its history of supporting post graduate and early career researchers with research grants and funds to attend conferences. We have been able to read about the strong research coming out of the Australasian region in our research spotlights and are hearing more and more about how our AMS members contribute to local and national citizen science endeavours. We continue have the priviledge to hear from local and international speakers in our monthly



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seminars – a tradition that we plan to continue in 2024. So, thank you to all of you who support this society, to your efforts in mycological research! Please continue to communicate with us and let us know if you have new ideas for how the AMS can continue to support you in the new year.

Merry Christmas and happy holidays,

Associate Professor Jonathan Plett Australasian Mycological Society President

Website: https://www.australasianmycologicalsociety.com
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Virtual Seminar Series - Recordings from 2023

October: Dr. Mary Hanson; Edith Cowan University Impacts on atmospheric fungal populations

November: Allison Mertin; University of Melbourne & Royal Botanic Gardens, Sydney 2022 AMS research grant awardee

<u>Understanding the diversity, biology and biogeography of native Australian grass seed</u> <u>fungi for improving restoration outcomes</u> Save the Date for our other upcoming 2024 Seminars and check our website for updates:



31st January: Dr Romina Gazis

Director of the Plant Diagnostic Clinic, University of Florida, USA

24th April: Dr. Adam Frew

Hawkesbury Institute for the Environment, Western Sydney University, Sydney

In our continued effort to promote and disperse the amazing mycology research being done in the Australasian region and beyond, we are always looking for suggestions of people you would like to hear from in our monthly seminars. Please contact Camille Truong (ausmycsoc@gmail.com) with your recommendations or let her know if you would like to give a seminar yourself!

We are calling for illustration and photograph submissions for the AMS merch store!



Do you have some awesome illustration that you would like to share? Or maybe an incredible photograph of a mysterious mushroom? We want you to contribute your 'fungi art' to our shop!

All proceeds of our shop will contribute to research grants and networking activities for mycological researchers in Aus & NZ.

You can already get T-shirts, jumpers, stickers, pins, or tote bags like this from our shop featuring Jordan Bailey's "Mushroom basket".

Submit your artwork to: ausmycsoc@gmail.com

To support our society, check out our products here at the RedBubble <u>AusMycSocShop</u>



Australasian Mycological Society

Thank you for your service, Bevan!



As many of you are aware, it was with great reluctance that we accepted Bevan Weir's resignation from the AMS council at the end of this year. Having served nine exceptional years on the council, the longest possible service allowed by the AMS constitution, Bevan has contributed so much to the direction of the society and has supported many of us in our roles on the council. I am very grateful to his guidance after accepting the role of President earlier this year, to his keen insights across the breadth of issues, and to his administrative genius. I first met Bevan while doing fieldwork in New Zealand - he and Teresa Lebel gave me a crash course into preservation of samples for herbariums. Considering that the fungi I was working with do not preserve well, this was easier said than done! I very much valued his patience. I have also been constantly intrigued by the scope of different works that he oversees, and I love listening to the latest project he is working on. Thank you so much for all the work you do in supporting mycological research in the Australasian region, Bevan, and for the work you have put into our society. While we will miss you on the council, we look forward to your continued collaboration across the AMS network!

- Jonathan Plett, AMS President 2023-Present

I've worked on the AMS council with Bevan since I became treasurer in 2018. Bevan and I then took on the Vice-President and President roles in 2020. I remember always being very grateful for Bevan's presence during that time. He knew the society inside out, understood AGM and council protocols, and of course, knew everyone connected with mycology in Australia and New Zealand. Over the course of the pandemic, our cancelled conference and meetings turned into the very successful monthly seminar series and the revamped newsletters to help keep our community engaged. Bevan's leadership and reliability was key in making this happen. We finally got to Wellington for the 2022 meeting and I had a chance to meet Bevan in person. He had done the lion's share of organising the meeting there and it was a fun and successful couple of days! Thanks Bevan, for all your guidance and confidence. I have no doubt our paths will continue to cross.

- Tracey Steinrucken, AMS President 2020-2022

Great work from Bevan – 9 years of service with the AMS - impressive! My main memories involving Bevan were when he took charge of designing the society's new logo. We had a number of false starts in 2015, but he confidently took charge with a graphic artist from NZ Landcare Research and came up with the design that we have been using successfully over the past few years. I also remember meeting him for the first time at our conference in Queenstown in 2016. I recall that Australian delegates were discussing how much he reminded them of the film star Jake Gyllenhaal!

- John Dearnaley, AMS President 2015-2017

Biosystematics 2023 Conference Report

By Grace Boxshall and Luke Vaughan https://biosystematics2023.org/

Over 250 people, including 16 AMS attended members. the Biosystematics 2023 conference at the Australian National University Canberra from 26 to 30 November 2023. The conference was celebrating the 50 years anniversary of the Australian Biological Resources Study (ABRS) and the Australasian Systematic Botany Society (ASBS). It was jointly organized by ABRS, ASBS, the Society of Australian Systematic Biologists and our very Australasian Mycological Society. It valuable opportunity to ideas with exchange systematists, regardless of their organism of interest, and find common ground in the pursuit of understanding biodiversity. Common themes that surfaced in many of the talks included:



Some of the AMS members who attended the Biosystematics 2023 conference (from left to right): Luke Vaughan, John Dearnaley, Kylie Agnew-Francis, Cécile Gueidan, Camille Truong, Matt Barrett, Frances Guard, Tom May, Brooke Raphael and Bevan Weir.

- Species delimitation using DNA sequencing and morphological characterisation
- Finding more species diversity than first thought
- Unravelling undocumented biodiversity in the field and in preserved collections
- How taxonomy in Australia has changed (or stayed the same) over the last 50 years
- How to ensure Australasian taxonomy can thrive in the future

Grace Boxshall (PhD candidate at the University of Melbourne):

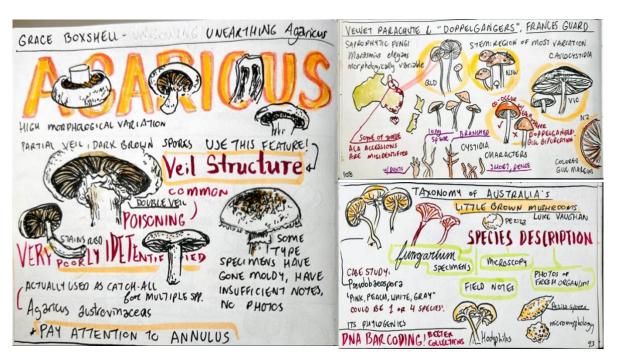
In the years I've been studying fungi, I've often felt like a fish out of water: the mushroom person in a plant lab, the small-data project amid big-data schemes, or, conversely, the nextgen sequencer surrounded by Sanger- and morphology-informed datasets. And yet, despite not always being able to chat to my lab mates and colleagues without some sort of mental translation, I've always felt that our diversity and ability to share ideas and techniques makes for better science. The Biosystematics 2023 joint conference epitomized that idea and brought us all together as systematists whether we studied plants, fungi, or animals. Some of my favourite moments of the conference were moments of mingling between fields: when Linette Umbrello upon hearing the phrase "LBM" (aka, "little brown mushroom") for the first time immediately adopted it to describe her "little brown marsupials", or when self-described accidental mycologist and recipient of the ASBS Nancy T. Burbidge medal, Tom May, talked about his beginnings studying drunken Drosophila. It was wonderful meeting with such a diverse audience from all around Australia and New Zealand – and even some further afield – to learn and share ideas, hear about different strategies and approaches, get tips for wrangling datasets and analyses, and try to inoculate them with an appreciation of all things fungal. From my perspective, it was validating to hear the statistics outlining how only 22 of the 2478 projects funded by the ABRS supported fungal research, and how the ABRS wants to support more fungal research but feels limited by their own funding and the comparative lack of

mycologists. After that, the conversation around how to ensure systematics training at universities continues in the future felt like an especially relevant follow-on.

Of course, my most favourite part of the conference was the people. Reuniting with old friends, meeting new friends, playing SECR Bingo, smashing all the other tables to win at trivia, and cheering for the so-daggy-they-were-cool taxonomy-themed cover band during the conference dinner. Biosystematics 2023 reminded us all that although we study different organisms in different kingdoms, a lot of us are very like-minded people, we face similar challenges and we're all working towards the same goal.

Luke Vaughan (MSc student at the University of Melbourne, research assistant at the Royal Botanic Gardens Victoria, and recipient of the AMS travel award to attend the conference):

As this was the first conference I have attended, I knew it was going to be interesting, but I was not sure what to expect. With stacked sessions in parallel, it was a lot of information to take in over three days, but the standard is now set high! It was an insightful experience to present some of my research on the systematics of macrofungi, and then find that other researchers have encountered similar taxonomic problems in their fields. After seeing Patricia Chan's notetaking illustrations of Grace's, Fran's and my own talk (see below), I was inspired to take notes on key points, which made comprehending and remembering talks and topics much easier. I was intrigued by the many varied research questions, field work, analytical methods, and presentation styles across the three days. I was especially inspired by award winners, Lyn Cook and Tom May, who delivered oration speeches that showed the different paths that lead to their distinguished careers in research and highlighted the underlying curiosity and passion for understanding the natural world that drives their research. Some mycology-related highlights were Brooke Raphael and the varied morphology of an endophytic Coprinopsis isolated from a leaf and grown in culture, Melinda Greenfield on three-kingdom interactions in ant plants, Sadia Ayyub on Eucalyptus mycorrhizal fungi, Fran Guard's untangling of cryptic Marasmius, and Camille Truong's discussion of dark taxa fungi and the future of taxonomic mycology. The BEAST workshop by Remco Bouckaert and Jordan Douglas from the University of Auckland was a great way to learn about data analysis directly from the authors of the program. I really valued the opportunity to talk about mycology with researchers from around Australia and New Zealand, and it was fascinating to hear about their research and interests.



Sketches about Grace's, Frances's and Luke's talks made by Patricia Chan, PhD student at the University of Wisconsin-Madison, USA (used with permission).

ASBS Nancy T. Burbidge medal awarded to Tom May

By Camille Truong

Dr Tom May, Principal Research Scientist (Mycology) at the Royal Botanic Gardens Victoria, was awarded the 2023 Nancy T. Burbidge Medal at the Biosystematics 2023 Conference in Canberra. This is the highest award of the Australasian Systematic Botany Society (ASBS) in recognition of Tom's longstanding and significant contribution to the discovery, description, understanding and conservation of Australia's vast fungal diversity.



Katharina Nargar (President of ASBS) presenting the award to Tom, and Tom's keynote speech at the Biosystematics 2023 conference in Canberra.

Tom's vast research includes morphological taxonomy, fungal conservation, biogeography, phylogenetics and, more recently, genomics and environmental metabarcoding. He has also published extensively on fungal nomenclature and was a co-author of the latest edition of the Code of Nomenclature for Algae, Fungi and Plants (Shenzhen Code). A champion of fungispecific language such as 'fungarium', 'funga' and 'sporing body', Tom is active in raising awareness of the vital ecological roles of fungi and the need to address their conservation. His renown dedication to mentor the next generation of mycologists and citizen scientists is illustrated by the FungiMap program that he initiated and led for over 20 years. During his career, Tom has taken substantial leadership roles in Australia and internationally, including the steering committee of Taxonomy Australia, the Fungal Conservation Committee of the IUCN, the UNITE management board, and as a founding member of our very own Australasian Mycological Society (AMS).

When Tom first became interested in mycology back in the 1980s, there was no national mycological organisation, so the ASBS meetings were the go-to place to network with other taxonomists. Realising the value of professional societies through his positive interactions with ASBS, Tom participated in the initial organising committee set up in 1992 to consider the incorporation of a national mycological society. He was a member of the founding executive when the AMS was incorporated in 1995 and served as Secretary from 1995 to 1999. He was the lead organiser for the inaugural conference of AMS, held in Melbourne in 1996, as part of the "1996 Conferences" together with ASBS to commemorate the 150th anniversary of the

death of Ferdinand von Mueller. 1996 was a big year for mycology in Australia, with the launch of the <u>Fungi of Australia</u> series from ABRS. Tom also coordinate the AMS <u>Australasian Fungi Conservation Group</u> together Peter Buchanan and was a Subject Editor for the AMS journal <u>Australasian Mycologist</u> from 2007 to 2013. To showcase new and interesting fungi from Australasia, Tom also compiles the <u>Fungus Portraits</u> on the AMS website.

Tom told us "I've always enjoyed my interactions with AMS. It is so good to see the society continuing to be active, and especially to see the support for students through the travel and research grants, and the Dr Jack Warcup Memorial Prize. I had the chance to meet Jack once at an Australasian Plant Pathology Society conference in 1987. I wish that AMS had been there when I was first interested in mycology, as a place to learn about fungi and connect with other mycologists on a regular basis. I remember particularly fondly the post-conference foray in 1996, when we decamped to Marysville after the hectic week of the AMS and ABRS conferences. It is when I first met lifelong friends and collaborators including Peter Buchanan, David Catcheside, Pam Catcheside, Eric McKenzie, Ian Pascoe, Bettye Rees and Katrina Syme. It was also the first time I had the pleasure of discussing the wonderful world of fungi with a group of mycologists."

A big congratulation to Tom and thank you for your long-lasting contribution to the AMS!



Tom documenting Australian fungi in the field.
Photograph courtesy of FungiMap "Guide to Surveying Fungi in Australia"



The International Mycological Association is awarding **two outstanding Australasian mycologists early in their career.** The nominees will be evaluated primarily based on the quality, originality, and quantity of their published work. Awards consist of a certificate and free registration to the IMC12 meeting, 11-15 August 2024 in Maastricht, The Netherlands. Presentation of the awards will take place at the awards ceremony at the IMC meeting.

Due to the postponement of IMC12 to 2024, two awards will be given:

- Candidates who obtained their PhD degree from 2012 to 2021
- Candidates who obtained their PhD degree from 2014 to 2023

Selection criteria

Candidates are expected to have contributed appreciably to mycology and they should have achieved international recognition based on: (a) The quality, innovation, thoroughness, and impact on science of their published research, with consideration given to the contribution of the nominee to multi-authored publications. (b) Service as editors of journals or as officers of societies. (c) Membership on national or international policy committees. (d) Invitations to present research at national or international meetings.

General requirements

- Nominees must be members of the AMS.
- An individual may receive the same IMA Award only once.
- Nominees who are not chosen for the prize, may be renominated for up to two additional terms (within the year limit linked to the Young Mycologist Award).

Procedure for nominations and election

Nomination of candidates consists of a cover letter from the nominator, two letters of support from mycologists familiar with the candidate, and a current curriculum vitae of the candidate. Self-nomination is not allowed. These documents are to be sent in a single PDF file to: ausmycsoc@gmail.com

Nomination deadline: 15 January 2024

The AMS Young Mycologist Award Regional Committee will evaluate all nominations and propose their choice for the two awardees to the IMA Young Mycologist Awards Committee, convened by the IMA VicePresident. The IMA Young Mycologist Awards Committee will ratify the AMS choice and inform the successful awardees no later than 15 April 2024.

Additional awards from the International Mycological Association

Nominations to the following awards are made directly to the International Mycological Association. Details are provided here:

- De Bary Medal for outstanding career research
- Ainsworth Medal for recognition of extraordinary service to world mycology.

The Future is Fungi: Award winners announced

The Future is Fungi Awards were announced in November at an internationally publicised <u>ceremony</u>. The ceremony was opened with "fungal" music from world-known artist Tarun Nayar. The esteemed winners of The Future is Fungi Awards were Jens Laurids Sørensen (Research Award), Novobiom (Startup Award), and MycoMine (Startup Award). All three were chosen from 253 applications from around the globe, and were chosen based on their exceptional contributions to pioneering sustainable solutions. Congratulations to all three!



ABRS National Taxonomy Research Grant Program 2024-25

https://www.dcceew.gov.au/science-research/abrs/grants

This unique funding scheme support research into taxonomy and systematics, to improve our understanding and management of Australia's unique biodiversity, including fungi. Researchers can apply for varying grant amounts depending on the research stream:

- \$10,000 for Honours, Masters Scholarship and Non-salaried Researcher Grants
- \$20,000 for PhD Scholarship Support Grants
- \$20,000 for Early Career Research Grants
- \$270,000 for Research Grants
- \$300,000 for Postdoctoral Fellowship Grants.

Eligibility criteria are set out in the grant opportunity guidelines provided on the <u>Business Grant Hub</u> website. You can apply if you are an eligible entity and have a project aligned to the ABRS Priority Areas with suitable expenditure. Up to 50% co-funding is required for Early Career Research Grants, Research Grants, and Postdoctoral Fellowship Grants.

Submit your application through the online <u>Business Grant Hub</u> portal.

Opening date: Monday 18 December 2023 10:00am AEDT Closing date: Monday 26 February 2024 5:00pm AEDT

Upcoming Events

13th International Congress on Plant Molecular Biology

4 - 9 August 2024 | Website | Cairns, QLD

The scientific program highlights recent discoveries in plant science from basic molecular biology to crop biotechnology. The range of presentations demonstrate the importance of plant molecular biology to understanding species diversity, plantmicrobe interactions, promotion of plant conservation, and goals toward fulfilling the need for the development of ecologically sustainable farming in our changing world.

International Conference on Mycorrhiza

4 - 9 August 2024 | Website | Manchester, UK

The 12th International Conference on Mycorrhiza (ICOM12) will be held in Manchester, UK. The conference is being organized by Prof David Johnson (University of Manchester), Dr Katie Field (University of Leeds), Prof Tim Daniell (University of Sheffield), Dr Thorunn Helgason (University of York) and Dr. Uta Paszkowski (University of Cambridge)

International Mycology Congress 12

11 – 15 August 2024 | <u>Website</u> | Maastricht, Netherlands

The 12th International Mycological Congress (IMC12) will be held in Maastricht, Netherlands. Note the change from the earlier announced July date.

Australasian Soilborne Disease Symposium 2024

26-29 August 2024 | Website | Kingscliff NSW

This conference will be a hub of knowledge-sharing and collaboration, where we dive into the intricate interactions between plants and pathogens. Join them to discover ground-breaking research, innovative solutions, and sustainable practices that help combat these destructive diseases.

Conference of the Ecological Society of Australia

9-13 December 2024 | Website | Melbourne, VIC

The ESA fosters excellence in ecological science and practice. We create an inclusive community to support research and knowledge sharing to better understand ecological systems. We apply this knowledge for the benefit of people and nature. More information on the conference will be announced in early 2024.

If you have anything you'd like to contribute to the next edition of the AMS Newsletter, or if you would like to have your research or event featured, please contact our Interim Secretary Camille Truong (ausmycsoc@gmail.com) or the President (ausmycsoc.president@gmail.com). We're after content highlighting your latest research, profiles on mycologists from your network, mycological events and news, career and scholarship opportunities, and photos or artwork of new or interesting fungal species.

Associate Professor Jonathan Plett AMS President, on behalf of the AMS Council