

## Newsletter of the Mycological Society of America

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#### March 15

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#### June 30

Last day for late registration for the MSA 2012 Annual Meeting

#### May 15

Deadline for submission to *Inoculum* 63(3)

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## PRESIDENT'S CORNER

### Prospects for a North American Mycota, and farewell to PEET

Dear Mycologists: Greetings from Worcester—I hope this finds you all well. As I write, preparations are well underway for the annual meeting of the MSA, July 15-18, in New Haven, Connecticut. One recent but important addition to the program is a pre-meeting meeting of the FESIN group on Saturday, July 14, titled “Charting a course towards a North American Mycoflora” (see <http://www.northamericanycoflora.org/> for more information on the project). The welcome addition of the FESIN workshop prompts me to consider the prospects for achieving a North American (let alone global) inventory of Fungi, and the potential role of MSA in this effort.

What will it take to document the diversity of North American Fungi, and provide resources for identification? Obviously, the work of traditional fungal taxonomists will be of paramount importance. To understand the diversity of Fungi it will be necessary to conduct fieldwork, curate collections, and perform the nomenclatural research that is needed to understand how names should be applied. But traditional taxonomy alone will not be enough—such efforts will have to be integrated with 21<sup>st</sup> century science. New endeavors in biodiversity informatics will be needed to consolidate information from diverse and scattered sources, and to bring the latent information in herbarium labels and specimens into the digital realm. Molecular phylogenetics will be essential to identify species-level entities and assess their relationships—indeed, I would argue that documenting fungal diversity is equivalent to assembling the fungal tree of life. Molecular ecology and sequence-based identification will be required to integrate the potentially vast numbers of species for which fruiting bodies or cultures are not (yet?) available. A significant outreach and education effort will be needed to mobilize amateur mycologists, who represent our best, perhaps our only, chance to fully explore the vast North American mycota. Only when a solid baseline of fungal biodiversity data is available will it be possible to develop informed conservation policies for Fungi.

Achieving a North American Mycoflora, and bringing this information to bear on conservation, will require coordination among disciplines that can be roughly classified as traditional taxonomy, biodiversity informatics, phylogenetic

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ics, molecular ecology, and citizen science. All of these concerns will be represented at the MSA meeting in New Haven. In addition to the FESIN workshop, there will be symposia and roundtables on nomenclature, barcoding, conservation biology, phylogenetics, and phylogenomics. The foray on Sunday July 15 will provide an opportunity for MSA members to interact with members of local mycological clubs, who could be recruited to participate in development of the North American fungal checklist. MSA is uniquely positioned to facilitate the work toward a North American fungal checklist, and to unite the diverse constituencies that must work together to realize this goal.

In addition to an organizational infrastructure, which MSA can help to provide, work toward a North American fungal inventory will require substantial financial support. By far the most important source of support for basic organismal mycology in the United States has been the National Science Foundation. Those of us who have struggled to obtain grants recently may grumble about funding rates, but I think all mycologists would agree that without NSF's long-term support the tremendous advances in basic fungal biology of recent decades (i.e., research on subjects other than medical, agricultural and industrial mycology) would not have taken place. As we all know, NSF, like all federal agencies, is under tremendous pressure to trim its budget. In this year's budget request ([http://www.nsf.gov/about/budget/fy2013/pdf/05-BIO\\_fy2013.pdf](http://www.nsf.gov/about/budget/fy2013/pdf/05-BIO_fy2013.pdf)), the Division of Environmental Biology (DEB) projects only a 0.8% increase in funding—essentially level. More troubling is that some programs that have been (or could be) important to organismal mycologists are slated for cuts. Specifically, the Collections in Support of Biological Research Program (CSBR), which supports the physical infrastructure and staffing of biological collections, is being proposed for reduction from an annual to a biennial competition. CSBR grants have supported compactorization of the lichen collection at Harvard's Farlow Herbarium as well as maintenance of lichen collections at Arizona State University. Similarly, the Assembling the Tree of Life (AToL) program is being proposed for a shift from an annual to a biennial competition. I am hardly unbiased on this point, having been funded through AToL, but I think that the Assembling the Fungal Tree of Life project (<http://aftol.org/>), which is now ending its second funding cycle, has had a strong positive impact on mycology. I wish that our community could undertake additional AToL projects. Given the diversity and importance of Fungi, it should be possible to argue for AToL grants on individual clades, particularly hyperdiverse groups, such as the Agaricales or Pucciniomycotina (among many others). Unfortunately,

the competition for those awards will be even tougher going forward.

The reduction of CSBR and AToL to biennial competitions is unfortunate, but some programs have been lost entirely. For example, Planetary Biodiversity Inventories (PBI), which supported a global survey of Eumycetozoa, is no longer accepting proposals. Even worse for mycologists, the Partnerships for Enhancing Expertise in Taxonomy (PEET) program has ceased. Since 1995, seventeen PEET grants (listed below) have provided over twelve million dollars for research *and training* in taxonomy of diverse Fungi and fungus-like organisms. One of the PEET awards has supported a project in my own laboratory for work on Polyporales (<http://wordpress.clarku.edu/polypeet/>). "PolyPEET" has allowed my lab to provide training to a diverse group of undergraduates, graduate students and post-docs in the taxonomy of wood-decaying basidiomycetes. It saddens me to think that my lab's award represents the last fungal PEET grant (according to the NSF award search site, the only other active fungal PEET award is Alex Weir's project on Laboulbeniomycetes).

To be fair to NSF, there is a host of relatively new special programs that support systematic mycology. Notably, new programs in Advancing Digitization of Biological Collections (ADBC) and Assembling, Visualizing, and Analyzing the Tree of Life (AVATOL) have the potential to be transformative, because they will integrate and make accessible large volumes of data of importance to systematists. Dimensions of Biodiversity will also benefit systematics, by elucidating patterns of organismal distributions and their causal factors. MSA members are active in all of these programs, and of course the core programs in the Systematics and Biodiversity Science cluster of DEB continue to support basic activities in taxonomy, including those funded through the Revisionary Systematics (REVSYS) program. Nonetheless, it is my impression that the most basic taxonomic work, by which I mean biodiversity inventories and support for the physical infrastructure (as opposed to cyberinfrastructure) of collections, has taken a disproportionate hit in recent budget allocations. The cutbacks in support for programs like CSBR and PEET will not make it any easier to achieve the North American Mycoflora and unfortunately there is nothing on the horizon to take their place.

Competition for grants is not likely to get better anytime soon. However, mycologists have repeatedly succeeded by banding together around common interests. Just as the Deep Hypha Research Coordination Network begat the AFTOL project, the FESIN RCN

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has the potential to spawn a serious long-term effort to document the diversity of Fungi of North America, involving professional and amateur mycologists, supported with a combination of public and private funding. The MSA should play a prominent role in achieving this grand mycological challenge.

Fungal projects supported by the Partnerships for Enhancing Expertise in Taxonomy (PEET) program (with PI names indicated):

1. 1995: PEET: Filamentous Ascomycetes and Monographic Studies on Sarcoscyphineae Fungi (Pfister)
2. 1995: PEET: Monographic Research in Agaricales and Aphyllophorales (Basidiomycotina, Fungi) (Petersen)
3. 1995: PEET: Monographs of Two Key Genera and Family-Level Phylogeny (Fungi, Ascomycetes, Sordariales) (Huhndorf)
4. 1995: PEET: Taxonomy and Co-evolution of Trichomycetes (Gut-Inhabiting Fungi) and their Chironomidae (Diptera) Hosts (Lichtwardt)
5. 1997: PEET: Monographic Studies in the Cladoniaceae (Lichen-Forming Ascomycetes) (DePriest)
6. 1997: PEET: Monographic Studies of Hypocrealean Fungi: Hypocrea and Hypomyces (Stewart)
7. 1999: PEET: Monographic Research on the Zoosporic Fungi, Chytridiomycetes (Powell)
8. 2000: PEET: Monographic research in higher fungi (Agaricales and Aphyllophorales) (Petersen)
9. 2001: PEET: Monographic Studies of Southeast Asian Saprotrophic Agaricales (Fungi) (Desjardin)
10. 2001: PEET: Studies in the Lasiosphaeriaceae II: Monograph of Podospora and Phylogeny of the Lasiosphaeria/Sordariaceae Group (Fungi, Ascomycetes, Sordariales) (Huhndorf)
11. 2003: PEET: A Revisionary Study of the Eumycetozoa (Spiegel)
12. 2003: PEET: Monographic and Phylogenetic Research on the Saprolegniales (watermolds) (Bailey)
13. 2004: PEET: Systematic Monography of the Gnomoniaceae (Ascomycetes) (White)
14. 2005: PEET: Phylogenetic and Monographic Research on Spizellomycetalean Chytrids (Chytridiomycota) (Powell)
15. 2006: PEET: A Monographic Study of Cordyceps and Related Fungi (Spatafora)
16. 2006: PEET: Monographic Approaches to the Laboulbeniales Subtribe Stigmatomycetinae and the Genus *Stigmatomyces* (Fungi, Ascomycota) (Weir)
17. 2010: MSB/PEET: PolyPEET: Enhancing taxonomic expertise in the Polyporales (Hibbett)

## MSA BUSINESS

### Secretary's Report

Hello everyone! By the time you read this we will be well into spring with visions of collecting baskets full of morels. I wish everyone the best in their wanderings!

If you have not been receiving emails from me, Allen Press, or MSA in general, it is because you forgot to renew your annual membership! Please do so as soon as possible or you will miss vital information about the upcoming annual meeting! Jean Lodge and the Program Committee promise us an exciting, vibrant program at Yale University in mid-July, 2012. Hope to see you there!

**Council Business:** Since my last report, the Council approved 9 actions by email poll. These included: a revision of award criteria for the Martin-Baker award; support for the D.C. Principles Coalition for Free Access to Science in opposition to federal legislation that would require immediate on-line open access to federal research which would hurt not-for-profit journals; a proposal to provide each of the seven Rotating Committees for Specific Expertise (Biodiversity, Culture Collections, Ecology, Environmental Health and Medical Mycology, Genetics and Cell Biology, Phytopathology, Conservation) with an annual budget of \$500 to support activities at the Annual Meeting; the disbanding of the Joint Commission on Common Names; a proposal to put a title change for MSA Secretary (to



**Jessie Glaeser,**  
Secretary  
(Photo by Tom Volk)

Executive Vice President) on the annual ballot; and approval of 3 MSA Fellows.

**New Members:** It is my pleasure to extend a warm welcome to new or returning members. Their membership will be formally approved at the 2012 Annual Business Meeting at Yale University.

**Australia:** Franck Op Stefani

**Brazil:** Nelson Menolli, Jr

**Canada:** Veronique Cloutier, Helene Poissant, Miao Liu, Kin Ming Tsui

**Colombia:** Mauricio Alberto Salazar Yepes

**France:** Virginie Cathy Molinier

**Germany:** Dominik Begerow, Ronny Kellner

**Italy:** Luigi Arras

**Japan:** Masatoki Taga

**Spain:** Laia Guardia Valle

**Thailand:** Kawinnat Buaruang

**United States:** Wesley Beaulieu, Lisa A Beirn, Benjamin Bolanos Rosero, Alexis Lily Carlson, Jessica R Coyle, Nor Fari-dah Dahlan, Nikhilesh Sudhir Desai, Jorge Ronny Diaz Valder-rama, Lynx K Gallagher, Youwen Gong, Carla J Harper, Paul Harris, Daniel John Hartigan, Richard None Hung, Derek Orson

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Johnson, Katherine Jumper, Clare Kazanski, Rachel A Koch, Nicholas Leblanc, Marcia R Lee, Arielle A Lemmons, Andrew Leumas Loyd, David S Mason, Kestrel Lannon Mccorkle, Lucas Michelotti, David Ryan Parker, Laura Andrea Quintanilla, Ann Raffel, Farhana Runa, Amy Salamone, Dustin Cody Sandberg, Victoria E Sepulveda, Elizabeth Thomas, Terri Lynn Tobias, Emily Walsh, Kenneth Andrew West, Tabitha F Williams, Darcy Young

**Emeritus Members:** There were no applications for Emeritus status in the past two months. Emeritus status is granted to MSA members who are retired from active professional employment and who have been MSA members for 15 years or more. There is no membership fee for Emeritus members although there is a reduced fee for access to *Mycologia*. If you are interested in becoming an Emeritus member, please contact me directly at [msasec01@yahoo.com](mailto:msasec01@yahoo.com).

**Reminder:** Renewing your MSA membership is easier than ever! Just log in to the MSA website at <http://www.msafungi.org>. There is now an email reminder system available if you have forgotten your MSA user id or password.

**REMINDER: MSA Directory Update:** Is your information up-to-date in the MSA directory? The Society is relying more

and more on email to bring you the latest MSA news, awards announcements and other timely information. To ensure that you receive Society blast emails and the *Inoculum* as soon as it comes out, and so that your colleagues can keep in touch, please check the accuracy of your email address and contact information in the online directory. This can be accessed via our web site at [www.msafungi.org](http://www.msafungi.org). If you need assistance with updating your membership information, please contact our Association Manager at Allen Press, the always-helpful Kay Rose at [krose@allenpress.com](mailto:krose@allenpress.com).

Please do not hesitate to contact me about MSA Business or any questions that you may have about the Society. In recent years we have suffered an alarming decline in membership and it would be wonderful to reverse this trend. The first step is for everyone who is currently a member to renew for the upcoming year. And don't forget to recommend MSA to your amateur or professional colleagues who are interested in fungi – be they pathologists, geneticists, ecologists, or people who just like to wander around in the woods. There is room in MSA for all!

**Jessie A. Glaeser**  
[msasec1@yahoo.com](mailto:msasec1@yahoo.com)  
MSA Secretary

## Minutes of the 2012 Executive Council Midyear Meeting

**Jessie A. Glaeser, Secretary**  
**February 5, 2012**

### Call to Order and Approval of Minutes

1. The 2012 Midyear Executive Council Meeting was called to order on Sunday, Feb. 5 at 1 PM EST via conference call, President David Hibbett presiding. In attendance: President Hibbett, President Elect Mary Berbee, Vice President Joey Spatafora, Secretary Jessie Glaeser, Treasurer Marc Cubeta, and Past President Tom Bruns. Editor-in-Chief Jeff Stone and Managing Editor Karen Snetslaar were present as invited participants. At 230 PM EST, Program Chair D. Jean Lodge and Local Arrangements Co-chair Erik Hobbie joined the call. President Hibbett began by thanking everyone, particularly Secretary Glaeser and Treasurer Cubeta, for their large amount of work for the Society over the past six months. Secretary Glaeser had emailed attendees an Executive Council packet before the meeting that included the Agenda, the minutes for the 2011 midyear EC meeting and annual Council meeting (held at the University of Alaska – Fairbanks), and updated MSA Roster, midyear reports, and copies of the MSA Constitution and Bylaws.

**MOTION: (approved unanimously) moved by Secretary Glaeser that the minutes from the 2011 Executive Council meeting be approved.**

**Old Business Arising from the Minutes:** none.

### Officers' Reports (excluding financial matters)

#### 2. President

President Hibbett then referred to his written report which addressed two major topics:

A. *Committee assignments and composition:* MSA has a large number of committees and it is often very difficult for the President to populate them with new members and for the Secretary to keep track of committee assignments. It has been especially difficult to find members for the Finance Committee, which provides an essential role for the Society by working with the financial investor to oversee MSA investments. Other assignments that remain va-

cant include Program Committee (1), Electronic Communication and Web Page Management (1), Environmental Health and Medical Mycology (1). Other committees seem to do very little and may need to be reinvigorated. Most MSA representatives, with the exception of the representative for IMA, have been unable to attend meetings in recent years and have been largely inactive. The Joint Commission on Common Names has also been largely inactive.

**Action Item: EC members** with names of potential members for these committees should contact President Hibbett.

**Action Item: President Hibbett** will send to Council a proposal to fund the seven Rotating Committees for Specific Expertise (Biodiversity, Culture Collections, Ecology, Environmental Health and Medical Mycology, Genetics and Cell Biology, Phytopathology, Conservation) with an annual budget of \$500 to support activities at the Annual Meeting. Possible activities would be finding symposia speakers or sponsoring workshops.

**Action Item: Future MSA Presidents** will allow the current terms of representatives to AIBS, ATCC, AAAS, (etc) to expire and do not refill until a time arises when they are needed.

**Action Item: President Hibbett** will send a proposal to Council to discontinue the Joint Commission on Common Names and invite its current members to become active in the Liaison with Amateur Societies Committee.

B. *Membership:* There is a need to update MSA membership categories; most scientific societies have many other options for membership with different pricing strategies. Currently there is no financial incentive for members to switch from hard copy to on-line version of *Mycologia*. There are also no provisions for reduced rates for scientists from developing nations or for post-doc rates; student memberships are high compared to other societies. Members may also be unaware of options for Emeritus membership or Family membership since they are not listed on the Allen Press website. One possibility would be for a regular membership to in-

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clude only on-line access to *Mycologia* and to a charge higher rate for those who want a hard copy. ME Snetselaar observed that any discussion of membership rates also needs to include subscription rates since many other societies subsidize their membership rates with their institutional subscriptions. President *Hibbett* stressed the need to increase the number of members, especially in developing nations, to maintain a healthy society. VP Spatafora asked if MSA had targets and goals for membership growth; President *Hibbett* admitted that there were no formal membership targets. Further discussion of membership rates was deferred until the financial portion of the meeting.

### 3. President Elect

President Elect Berbee referred to her written report which was concerned with three major topics:

- A. *Securing the venue of the 2015 meeting.* Two options would be 1) a stand-alone meeting at the University of British Columbia on Victoria Island, or 2) a joint meeting with the Botanical Society of America, which will probably be in Montreal. The benefits of joint meetings include robust planning for meeting support. There are also financial incentives – at the Snowbird meeting BSA matched our spending for symposia, and APS helps assume risk (but also retains most of the profits). The decision was made to pursue a joint meeting with BSA for 2015.
- B. *Membership:* PE Berbee suggested dividing up the names of MSA members who had not yet renewed for 2012 and contacting them, as well as contacting potentially new members. Other ways to increase membership would be 1) EOC Stone volunteered to contact authors who has published in *Mycologia* within the past year who are not current members; 2) Treasurer Cubeta stressed the need to capture younger members so that they keep MSA as their parent society throughout their career; 3) PE Berbee suggested contacting faculty members with big research groups, particularly in Fungal Ecology which is under represented. 4) EOC Stone proposed modifying the page charge structure of *Mycologia* to encourage authors to become members.
- C. *Roles of MSA Secretary and Treasurer* need to be revisited since they have become very demanding, time consuming jobs. In the future, professional support may be required, especially in the area of finances. Currently the role of Treasurer is especially complicated with many legal requirements and excessive paperwork.

**Action Item: President Hibbett** will create an *ad hoc* committee to examine the role of a professional Society Manager. The Committee will consist of the President, President Elect, Vice President, Secretary, Treasurer, Editor-in-Chief, and Managing Editor who will brainstorm a list of duties that this position would be responsible for and a cost estimate. President Hibbett will consult with BSA management to see how they define their administrative roles. The committee will provide a briefing during the annual Council meeting in summer, 2012.

**Action Item: President Hibbett** will send to Council a proposal to place on the annual ballot a change of title from Secretary to Executive Vice President to better reflect the duties of the position.

### 4. Vice President

Vice President Spatafora referred to his written report concerning nominations for the 2012 annual election of officers. The deadline was Friday, Feb. 3. There were 53 nominations, several of whom were not MSA members or not particularly active in the Society. A slate of nominees has been forwarded to Don Hemmes, Chair of the Nominations Committee. There was some confusion about when prospective nominees should be notified; MOP specifies this be done after Nominations Committee finalized ballot. Secretary Glaeser commented that people should be asked if they would serve early in the process so there is no delay in assembling the ballot since there are timeline requirements in the Bylaws.

**Action Item: VP Spatafora** will draft a modification of the MOP concerning procedures to notify prospective nominees.

## 5. Secretary

Secretary Glaeser referred to her written report and had no additional issues for consideration.

## Officers' Reports – Financial and Publications

### 6. Treasurer

Treasurer Cubeta referred to his written report.

- A. *Annual Meeting 2011* had few expenses so were able to break even in finances. The auction brought in \$4491 and T-shirt sales accounted for another \$255. Eleven mentor travel awards were given instead of twelve since one student failed to attend the meeting. The Karling lecture expenses were \$2814 lower compared to 2010 and the Karling speaker donated his honorarium to the Bartnicki-Garcia fund. A problem developed at the auction since we were unable to collect credit card information. MSA members were very supportive and largely paid by cash, check or gave an IOU, all of which were later honored. For the 2012 meeting, procedures for collecting credit card information needs to be arranged ahead of time.
- B. *Awards:* recommended 12 awards be given at \$500 each from the top 12 endowment accounts. Still need to obtain money from NAMA for the NAMA award and from Paul Stametes for the Forest Fungal Ecology Award. VP Spatafora asked whether endowment funds were sustainable with mentor travel awards being based on interest income. Treasurer Cubeta replied that this was no longer the case, with the exception of the Orson Miller mentor travel award, due to low interest rates. VP Spatafora cited the need for an active capital campaign to increase endowment funds.

**Action Item: PP Tom Bruns** will contact Paul Stametes about donation to continue Forest Fungal Ecology award.

- C. *Publication expenses:* The costs of publishing *Inoculum* hasn't changed but the cost of *Mycologia* has increased. The cost of the Editorial Assistant has stabilized after several years of inconsistent billings. In general, publication costs are similar to last year. President Hibbett asked if there was an overall sheet on finances so he could determine the general financial health and requirements of the Society. ME Snetselaar commented that MSA has about 6 months of operating expenses in the bank, far better than in 2005, but it would be better to have a one year reserve. The increased page charges for *Mycologia* should also help finances but that decreased subscriptions from institutions is a very important component of the financial health of the Society.

**Action Item: Treasurer Cubeta** will provide a spreadsheet summarizing Society finances for the past few years.

- D. *Membership:* For the first time in several years, membership numbers have increased but this is offset by a decrease in subscriptions so overall income numbers are down.
- E. *Miscellaneous:*  
The Representative for Society Incorporation, Lafayette Frederick, has relocated to Tuskegee Alabama and will no longer be able to serve this function, which is essential for retaining MSA nonprofit status. Representative needs to have a Washington DC mailing address. This function can be provided by Nor Faridah Dahlan – an honorary MSA membership will be provided to her for providing this service.

Taxes have been paid for 2011. Bonding and liability policies have been renewed. The MSA web domain name has been renewed until 2015. A procedure for reimbursing the Book Editor for postage has been accomplished.

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Treasurer Cubeta will be on sabbatical in Sweden until October 2012. He is in the process of arranging procedures collecting funds from the auction and for paying awards and expenses in his absence.

## 7. Editor-in-Chief

Editor-in-Chief Stone referred to his written report. Publication of *Mycologia* is going well with many high quality papers in process, including a recently published review by Sally Smith and Andrew Smith from Sally Smith's Karling lecture in 2010. Costs are higher than in the past but this can be moderated by keeping the number of pages at a certain level – approximately 1400 for the current volume. The number of submissions and the amount of on-line readership have been increasing; the acceptance rate has correspondingly decreased. As Associate Editors' terms expire, requests will be sent to Council for approval of new ones. President Hibbett inquired why more articles from *Mycologia* were not being downloaded when on-line viewership has increased. EIC Stone replied that he was uncertain how HighWire tracked such information and noted that access to html versions of *Mycologia* papers and abstracts has been increasing. Some editorial personnel challenges developed in 2011 which were discussed. ME Snetselaar stressed the need for accurate and timely performance evaluations.

**Action Item:** EIC Stone will pass on to Don Natvig the need for accurate and timely performance evaluations of editorial staff.

The *Mycologia* website has been remodeled using the new Highwire 2.0 platform. EIC Stone and ME Snetselaar are working together to get current instructions to authors linked properly and to modify the language for pdf notification. The stamp on pdf files also needs to be revised, which is being done by ME Snetselaar.

The DC Coalition Principles for Open Access is requesting the MSA and other nonprofit publishers sign a letter of support to advocate the development of sustainable models of open access of publically funded research. This is currently under consideration by Council.

Highwire Press sponsors an annual meeting in March in Palo Alto, CA and waives registration fees for first time participants. During the meeting, they present information about marketing and other services available

**Action Item:** EIC Stone will attend the annual meeting of Highwire Press at MSA expense.

President Hibbett complemented EIC Stone on the quality of content and smoothness of operations of *Mycologia*. VP Spatafora asked about citation information; EIC Stone answered that citation reports compiled by ISI Thomson Reuters is made available in the summer months and the 2011 citation data will be discussed in his annual report. ME Snetselaar mentioned that the Highwire platform 2.0 has many features that we do not take full advantage of, including advertising. It can be used to highlight specific articles or link to other web pages, but this all takes time to set up.

## 8. Managing Editor

Managing Editor Snetselaar referred to her midyear report. She pointed out that MSA income is primarily from institutional subscriptions to *Mycologia* but this can only be increased about 5% per year without substantial loss of subscribers. There are not too many places where cost cuttings can be found in the publication of *Mycologia*. She does not recommend dropping membership rates. She plans on doing more with "publish ahead of print" and uploading supplemental documents which have lagged due to other time commitments.

This was followed by a general discussion of Society finances. It was generally felt that on-line only members should not have to pay as much as members who receive hard copies of the journal and that changes in

membership fees should reflect an increase for those who want to continue receiving hard copies. Any changes in dropping membership fees, e.g. for post-docs or scientists/students in developing nations, will need to be offset by increasing costs of hard copy versions. President Hibbett felt that Allen Press might be able to give guidance on membership pricing strategies. VP Spatafora also questioned when *Mycologia* would go to a totally on-line format; this is another topic that Allen Press might be able to offer advice given their experience with other societies. PE Berbee observed that the finances associated with journal aggregation also need to be explored. The MSA webpage also needs to be updated to reflect different membership options. More information is needed in order to develop a vision of the future for MSA.

**Action item:** President Hibbett will draft letter to Alan Press, inviting them to attend the MSA annual meeting and requesting them to develop recommendations for pricing issues for online vs. hard copy being mindful of other incomes streams and membership goals. Will also seek their advice on journal aggregation, publication, and conference services.

## Committee Reports

### 9. Program Committee and Local Arrangements

PC Chair Lodge and Local Arrangements Co-chair Hobbie provided an update for the 2012 meeting. The registration website went active on Jan. 27; MSA members were notified of this and registration/abstract deadlines in a blast email. Certain issues concerning the annual meeting were resolved:

- A. *Annual banquet:* There will be no special head table or riser for Council at the annual banquet. Facilities will be available for the Auctioneer.
- B. *The meeting registration web page* was largely based on the 2011 registration page from the University of Fairbanks but needed extensive (and expensive) recoding to make compatible with Yale's server. For an additional fee, the website can be recoded to make more portable for future conferences. No cost estimate for this is currently available. The website will not be used in 2013 (joint meeting with APS). This reflects a bigger issue of conference management since registration and abstract submissions are always a major problem for Local Arrangements /Program Committees.

**Action item:** Local Arrangements Co-Chair Hobbie will confer with website programmers and Michigan conference services to get cost estimate and direction on recoding registration webpage.

- C. *Invited speakers for symposia* (8 – 10) who are not MSA members will be allowed to register as MSA members. Treasurer Cubeta reminded everyone that symposia Chairs are empowered to allocate symposia funds.
- D. *PE Berbee* asked if rooms would be available for committee meetings if that was desired. Action Item: President Hibbett will inform committee chairs to request space via the Program Committee if so desired. This will be done when President Hibbett informs the Chairs of their \$500 allocation, assuming approval by Council.

**10. Secretary Glaeser** summarized the remaining reports from the Nomenclature Committee, Karling Lecture Committee, Honorary Awards Committee, Biodiversity Committee, Historian and Memorials Committee. These reports were for information only and none required EC action. The Endowment Committee will be filing their report at a later date due to problems getting information about recent donations.

**Action Item:** Secretary Glaeser will compile a list of Action Items and distribute to call participants.

The meeting was adjourned at 415 PM EST.

# MSA 2012 Midyear Officer and Committee Reports

## Report of the President February 3, 2012

To begin, I would like to thank the MSA members who have worked so hard this year to keep the Society running. Many have served, and I can't thank everyone individually, but I would particularly like to thank Secretary Jessie Glaeser and Treasurer Marc Cubeta, who have collectively provided the backbone of our operations. Program Chair Jean Lodge, and Local Arrangements Committee members Bob Marra and Erik Hobbie have been tremendously active in planning and promoting our 2012 meeting at Yale (ably assisted by the rest of the Program Committee, the Foray Coordinators, the University of New Hampshire and University of Alaska IT staff, and Yale Conference Services). Editor-in-Chief Jeff Stone, Managing Editor Karen Snetselaar and Inoculum Editor Don Natvig deserve thanks for keeping our publications strong and assisting in communication with our members. Finally, I thank Past President Tom Bruns for his continued support and vision for the Society, and President-elect Mary Berbee and Vice President Joey Spatafora, who have already been very active participants in our governance. Again, I know I am missing many who have worked very hard. All are thanked and are essential to creating our mycological community.

My report concerns two items: Committees and Membership (also see the PE report). I am sorry that this is both long and late. Please read this in advance of our meeting.

### 1. Committees

Basic statistics: Most committees are fully staffed, but several important vacancies remain, including:

- Electronic Communication and Web Page Management: One vacancy
- Finance: Three vacancies
- Program: One vacancy
- Environmental Health and Medical Mycology: One vacancy (the Committee members have been asked to supply nominations)

Martha Powell, the sole member of the Finance Committee suggests that we consider hiring a financial planner to manage the MSA Endowment. I think this is a reasonable consideration if we cannot find competent MSA members to serve. The fee for management of our portfolio could be costly. During our mid-year meeting, I would like to brainstorm about possible members for the Finance Committee. If we do not have a reasonably well-staffed committee by the Annual Meeting, then we should discuss the possibility of hiring a professional planner.

General concerns re. Committees: As you will recall, we have had discussions this year about the excessive number of committee and special assignment positions. I have asked for ideas about how to reduce the number of committee positions, and how to make the committees more efficient. All Committees have a "cost" to the Society in terms of administrative effort—which is felt mostly by the Secretary (who has to keep track of a large and changing roster) and the President (who has to fill the positions). The benefits of the committees vary. The Rotating Committees for Specific Expertise (Biodiversity, Culture Collections, Ecology, Environmental Health and Medical Mycology, Genetics and Cell Biology, Phytopathology, Conservation) are a hassle to fill, but these have the potential to help draw in and motivate different constituencies in our membership, so it may be worth keeping them going at the current levels. We (MSA Presidents) probably need to do a better job communicating with the Specific Expertise committees and encouraging them to be active in organizing symposia or other activities. Funds would help. Other Committees and assignments are of less obvious value, including the representatives to AAAS, AIBS, AMI, ATCC, IMA, IUMS, IUBS, NSCA, and the Collections Web Research Network, as well as the Joint Commission on Common Names (positions

as IUMS and IUBS representative are currently unfilled). With that, here are some recommendations that I would like us to discuss at the midyear meeting. If you agree, we can forward these to the Council for approval:

- Provide each of the Specific Expertise Committees with an annual budget of \$500 that can be used to promote activities at the annual meeting (e.g., contribution to symposia, workshops) or other activities, subject to approval of the MSA Council. That is, each committee will have a budget, but expenditures will require approval from Council.
- Allow the positions of representatives to AAAS, AIBS, AMI, ATCC, IMA, IUMS, IUBS, NSCA to go unfilled due to attrition.
- Eliminate the position of representative Collections Web Research Network.
- Eliminate the Joint Commission on Common Names, but encourage the current members to consult with the Liaison with Amateur Mycological Clubs and Societies committee about the possibility of forming a sub-committee for the specific purpose of resolving common names of fungi.

### 2. Membership recommendations/Allen Press

At the 2011 Annual Meeting, we discussed a series of recommendations from Allen Press for ways to strengthen membership. It was agreed that I would contact AP regarding the "noncontroversial" recommendations, which included:

- Early bird renewal offer
- Increased renewal reminders
- Required membership for manuscript submission

I have yet to contact AP regarding these matters. Before I do, I would like to take up a more complicated issue in the AP materials, which concerns their recommendation that we update membership pricing. With that in mind, I have been reviewing the MSA membership options and comparing them to those of other societies. Attached is a comparison of membership options from MSA, BSA, SSB, ESA and APS. SSB is closest to MSA in terms of membership, number of journals (one), etc. You can read the data in the table, but my general impression is that our membership options are quite limited compared to the other societies. Here are the problems that I perceive in our membership options:

- There is no incentive to subscribe to the on-line journal only. We charge the same price for regular Member (98) or Student (50) membership, with print or online journal.
- Member USA/Canada and Member Non-USA/Canada are the same price (98), which is higher than both BSA (50) and SSB (60). ESA and APS regular memberships are comparable to ours, but do not include journal subscriptions.
- There is no provision for developing countries\*. In contrast, BSA and ESA both offer reduced price memberships for developing countries.
- We have no post-doc rate.
- Student membership is too expensive (\$50). BSA and SSB student memberships are \$30 and \$23 respectively. ESA and APS are \$27 and \$31, but journal subscription does not come with membership.

\*see: <http://data.worldbank.org/about/country-classifications/country-and-lending-groups>

I would like us to consider revising our membership options and pricing. Some of the other societies have very complex membership options (particularly ESA), but I think we should keep it simple. I would sug-

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gest that all memberships come with the on-line versions of *Mycologia* and *Inoculum*, with a print subscription being available separately (for now—we will eventually eliminate print entirely) and voting privileges. The exception would be the Associate member category, which does not have the journal or voting privileges. As a starting point for discussion, I propose the following membership categories and prices:

- Regular member: \$80
- Post-doctoral member: \$60
- Student member: \$40
- Developing country regular member: \$30
- Developing country student member: \$10
- Emeritus (retired individual who were regular members for 25+ years): free
- Life member: \$1500
- Sustaining member: \$278 (odd number...why?)
- Associate member: \$50

Print subscription to *Mycologia* available to all of the above member types at a cost of \$50 (?) plus postage for overseas members. I would like to discuss this membership strategy for possible implementation in 2013. Cost is obviously a key consideration—can we afford this? If we agree, then I will contact AP to discuss how to make the transition. If we decide to implement a discounted membership rate for developing countries, as I hope we will, then I would like to reach out particularly to mycologists in Central and South America, with the help of the appropriate MSA committees (International, Biodiversity, Membership). We should work through the Latin American Mycological Association and the Brazilian Mycological Association and others.

If this requires more discussion than is possible at our mid-year meeting, as it very well may, then I will contact AP regarding only the three “non-controversial” recommendations listed above and we can continue the conversation at the annual meeting this summer.

*Respectfully submitted,  
David Hibbett*

### **Report of President Elect January 30, 2012**

#### **1. Plans for MSA 2015.**

I am exploring two possibilities for the 2015 meeting, first, a joint meeting with the Botanical Society of America (BSA), and second, a stand-alone meeting in Victoria on Vancouver Island.

##### *Possibility 1. Joint meeting with the BSA.*

BSA’s Director of Conferences (Joanne Stogran) has a quote from Montreal (McGill?) that she thought was favorable. MSA met in Montreal in 1997. If BSA decides to go with Montreal, should we join them?

Joanne has also requested information from potential sites in western Canada, including University of Victoria, U. British Columbia Okanagan, and Kananaskis Alberta. BSA however, met in Vancouver BC in 2009, so BSA may not want to meet again on the west coast this soon.

##### *Possibility 2. Stand alone meeting at University of Victoria*

Located on Vancouver Island off Canada’s west coast, Victoria is a good tourist town with reasonably good public transport and good restaurants. If possible, I would like to involve the Pacific Key Council. For a foray, Shannon Berch and Andy MacKinnon would, based on preliminary contact, be willing to take a group to the wetter west coast of the island. We’d need a local organizer.

Currency exchange rates can change quickly and unpredictably. This influences affordability of meetings in Canada. As Jessie Glaeser pointed out, at present, USDA members would not be allowed to travel to a foreign country (Canada) during work time.

To provide an idea of what travel costs may be like, flights from O’Hare to Victoria BC, Aug 4 2012-Aug 9 2012 cost \$638.52. Alternative, a flight from O’Hare to Seattle, then fast a ferry to Victoria, costs \$515; Aug 4 2012-Aug 9 2012, flight \$401; ferry \$114. At the University of Victoria, bed and breakfast with a twin dorm room costs ~\$55.

#### **2. MSA membership growth.**

As PE, one of my jobs is to poll council for names of potential new members, and then send out invitations. However, a direct appeal from someone who knows the potential new member best is likely to be more persuasive than a letter from me. So, I’ll collate a list of possible new members from council, to make sure we don’t have duplicates, and to make sure they are not already members. I’ll then return the checked list to you, asking you to email the invitation to join.

=>Please send suggestions to me (name, email) of people who might be willing to join MSA to Mary Berbee [mary.berbee@gmail.com](mailto:mary.berbee@gmail.com).

=>Shall we once again contact those who fail to renew?

=>We still need to organize multiyear membership options and membership price reductions for electronic only members.

#### **3. Fairness.**

Is it time to revisit the definition of the role of MSA secretary? The secretary is absolutely essential in lending continuity and keeping MSA on track.

Can the ratio of glory to conscientious work be increased for the position of secretary?

*Respectfully submitted,  
Mary Berbee*

### **Report of the Vice President February 4, 2012**

After consulting with me, Secretary Jessie Glaeser sent a blast message on Jan. 4, 2012 to all MSA members requesting nominations for VP, Secretary and for four council positions: Cell biology/physiology, Genetics/molecular biology, Systematics/evolution, and Ecology/pathology. A second reminder blast message was sent out on Jan. 19, 2012.

As of Feb 3, 2012 I received 53 nominations with the following breakdown by office: VP – 6, Secretary - 10, Cell Biology/Physiology - 5, Genetics/Molecular Biology - 9, Systematics/Evolution - 14, Ecology/Pathology - 9. Five of these nominees are not current members based on the MSA online directory. If this is accurate, nominees should be encouraged to participate in the society, and perhaps this issue needs greater emphasis/clarity in the call for nominations documentation. Nomination patterns show that grassroots organization helped generate support for candidates or slates of candidates.

I emailed several of the nominees, requesting whether they would be willing to be considered for nomination. This was deemed especially important for offices of VP, Secretary and Cell Biology/Physiology Councilor due to number of nominations or workload of position. I have shared the lists of nominees received to date with Don Hemmes, Chair of the Nominations Committee. As part of this list, I have provided the names of nominees, number of nominations, names of nominators, and the willingness of nominee – if contacted – to be considered for nomination at this time. At this time, I await the slate of any additional candidates from the Nominations Committee. I will select a second slate of candidates consisting of the nominees with most nominations sent in by the membership for each position and the nominees from the Nominations Committee. If needed, I will contact any nominees from the Nominations Committee and from the membership to check whether they are willing to serve before adding their names on the Spring ballot.

Note: During the midyear meeting, I would like to discuss best practices with respect to contacting nominees and gauging their willingness to

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stand for nomination/election. Current and past practices seem to deviate from the letter of the MOP regarding VP duties.

### Secretary's Midyear Report January 30, 2012

Activities since 2011 annual meeting:

- Contacted committees and new officers, as new appointments made by the President, providing contact information for new and old members and a copy of the appropriate section of the Manual of Operations that describe their responsibilities. Updated emails and contacted delinquent committee members about renewing MSA membership as required.
- Updated the list of officers and the directory. Provided copies to *Inoculum* editor, MSA webmaster, and *Mycologia* Editor-in-Chief for publication.
- Revised the Manual of Operations and sent the new edition to the MSA Webmaster for posting on the MSA website.
- Conducted five email polls of Council concerning 1) revision of the procedure for selecting and notifying the Honorary member; 2) approval of the Karling lecturer; 3) revision of selection criteria for the Martin-Baker award; and 4) approval for MSA to pay travel costs of Executive Council members (President, President Elect, Vice President, Secretary, Treasurer), Editor-in-Chief, and Managing Editor to attend annual meeting if they have no other funding source available.
- Issued a call for items for the midyear meeting including midyear reports and changes to the Manual of Operation.
- Worked with Awards Coordinator Andy Methven to get awards committees fully functional and announce awards deadlines through *Inoculum* (electronic version of October issue), MSA webpage, and blast emails to all members sent out on November with reminders in January and February. Correction to MSA Mentor Travel Awards Chair's award contact information and clarification of application information sent to membership by blast email.
- Worked with Vice President and Nominations Committee to initiate call of nominations for the offices of Vice President, Secretary, and 4 Council members. Sent out blast email seeking nominations in early January with reminders in mid- and late- January.
- Provided *Inoculum* editor with "MSA Secretary Email Express" for each issue, which includes a list of: email polls of Council, new members, those members who have requested Emeritus status, and deaths. Also included instructions for renewing MSA membership on-line.
- Worked with President Hibbett to organize agenda for midyear meeting. Made arrangements for conference call connection. Contacted all officers and committee chairs to submit midyear reports.
- Facilitated a blast email sent to the membership by D. Jean Lodge, Chair of the Program Committee, to solicit topics for symposia and workshops for the 2011 annual meeting and to notify members of registration site and abstract deadline.
- Provided Dr. David Hawksworth with a column describing the MSA annual meeting in Fairbanks, AK for the International Mycological Association Newsletter.
- Responded to numerous email inquiries about MSA, both from outside contacts and within the organization and via Allen Press. Recommended whom people should contact for issues of nomenclature and other specialized requests.
- Responded to Treasurer's request on information concerning the Liaison for Society Incorporation.

**Respectfully submitted,  
Jessie A. Glaeser**

### Report of the Treasurer February 5, 2012

#### Meeting, Awards and Symposia finances:

For the 2011 annual meeting in Fairbanks, Alaska, \$5500 was paid out for 11 Mentor Student Travel Awards at \$500 each (Alexopoulos, Barksdale-Raper, Barr-Bigelow, Butler, Denison, Fitzpatrick, Gilbertson, Korf, Luttrell, Thiers, and Trappe). One Mentor Student Travel Award (Bigelow) for \$500 was rescinded because the student did not attend the meeting. A total of \$12,500 was paid out (\$5,500 from endowment and \$7,000 from operating accounts) for 9 research awards (Alexopoulos Prize (\$1,000), Backus (\$1,000), Forest Fungal Ecology (\$1,000), Martin-Baker (\$2,000), NAMA (\$2,000), MSA Graduate Fellowship (\$4,000 for two awards at \$2,000 each), Rippon (\$500), and Rogerson Awards (\$1,000)). \$11,500 was paid from the endowment account for the 11 Mentor Travel and six of the nine research awards. There were no applicants for the A.H. and H.V. Smith Research Award in 2011. An additional \$5,747.71 was paid out from the operating account for awards and symposia. A total of \$2,971.71 was paid for expenses for the Karling lecture from operating and \$500 for an honorarium from the endowment account. The Karling speaker returned the \$500 honorarium check to the treasurer who then at the request of the speaker, deposited it into the Bartnicki-Garcia Mentor Research Award fund. MSA paid \$869.31 for council report binding, plaques, postage, and printing costs associated with the annual meeting. The auction (\$4491) and t-shirt (\$255) sales generated \$4,746 for the uncommitted endowment.

At the auction in Fairbanks meeting we encountered an unexpected situation where members of the Society were not permitted to capture written credit card information on the University of Alaska Fairbanks campus. To address this situation, a cash/check only system was implemented and when someone could not pay for an auction item with cash or a check, they were issued an IOU. Although all of the IOUs were paid in a timely manner, the Program and Local Arrangement Committees for the upcoming annual meeting should investigate the regulations governing the collection of written credit card information by MSA members and determine whether an electronic system to track charges to facilitate record keeping can be implemented to accommodate payment for auction items with a debit/credit card. The Society greatly appreciated all the cooperation and patience of the members and their guests in dealing with this situation at the auction in Fairbanks.

Because one of the allotted Mentor Student Travel Awards was not given last year and based on the performance of our interest-bearing accounts, the treasurer recommends that the variable-amount awards be funded assuming approximately 4% interest on our investments again for this year. My recommendations are: \$6,000 for the Mentor Student Travel Awards (12 at \$500 each for Alexopoulos, Barr-Bigelow, Bigelow, Butler, Denison, Fitzpatrick, Gilbertson, Korf, Kramer, Luttrell, Miller, and Trappe); Martin-Baker Award at \$2,000; C.T. Rogerson Award at \$1,000; Bartnicki-Garcia Award at \$500. The amounts for the following awards will remain the same; J.W. Rippon Research Award (\$500); C.J. Alexopoulos Prize (\$1,000), Backus Award (\$1,000), and A.H. and H.V. Smith Research Award (\$1,200), MSA Graduate Fellowships (\$4,000 for two awards), and the MSA Graduate Student Research Prizes (\$800 for four awards). These recommendations are consistent with the amounts advertised on our website. The awarding of the Forest Fungal Ecology Award (\$1,000) is dependent upon a contribution renewal by Paul Stamets, as the amount contributed in 2010 was depleted last year. The awarding of the NAMA Award (\$2,000) is also dependent upon the contribution renewal by NAMA; the treasurer has contacted Karen Hughes who will contact treasurer Judith McCandless at NAMA to follow up on this issue.

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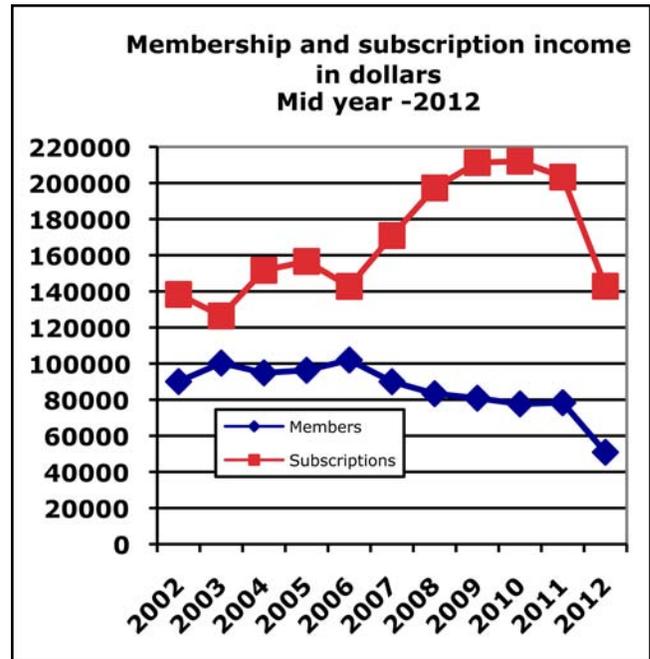
**Publication finances:**

For FY2012 to date, we have paid production costs for three issues of Mycologia with production, manuscript tracking, editorial office, and online publication costs of \$174,170.52. From FY2010 to FY2011 the total costs for publishing Mycologia have increased from \$213,930.44 to \$313,503.33. Cost for publishing three issues of Mycologia has increased from this time last year (mid year 2012=\$154,842.89 versus mid year 2011=\$149,933) and total management costs for publishing three issues of Mycologia have also increased from this time last year (mid year 2012=\$19,327.63 versus mid year 2011=\$6286). The total Allen Management costs are fixed at approximately \$36,000 per year. The Society paid out \$318.66 to provide internet services associated with the editorial office.

Publication Expenses	FY2012 to date	FY2011	FY2010	FY2009
<b>Total publication costs<sup>1</sup></b>	<b>\$174170.52</b>	<b>\$355139.75</b>	<b>\$256774.40</b>	<b>\$280945.84</b>
<b>Inoculum</b>	<b>0</b>	<b>6199.53</b>	<b>6187.23</b>	<b>9033.47</b>
Management fees	2544.23	15354.72	1044.99	567
author billing	437.04	1949.13	716.34	1066.03
back issue mailing	1554.78	3376.12	2404.88	3591.84
back issue storage	1209.36	569.96	320.26	425.99
base mgmt. fees	13582.22	12211	28938.26	28095.40
renewal notices, ballots	0	1975.96	3232	1913.48
<b>TOTAL MANAGEMENT</b>	<b>19,327.63</b>	<b>35436.89</b>	<b>36656.73</b>	<b>35659.74</b>
Mycologia printing	90842.36	165340.50	158177	147788.23
Allen Track	2853	6370	5041.94	4625.00
Editorial office	49019.85	108313.58	22706	45528.45
Online Publication	11789.25	33479.25	25949	35197.45
reprints	0	0	516.5	3113.50
author reimbursement	0	0	1600	0
<b>TOTAL MYCOLOGIA</b>	<b>154,842.89</b>	<b>313503.33</b>	<b>213930.44</b>	<b>236252.63</b>
# of issues per year	3 issues	6 issues	6 issues	8 issues
Cost per issue	51614.29	52250.55	35655.07	29,531.58
<b><sup>1</sup>Total publication costs (Inoculum, Allen Management and Mycologia)</b>				

**Membership:**

Membership has increased from this time last year (mid year 2012=813 versus mid year 2011=765) and subscriptions have decreased from this time last year (mid year 2012=467 versus mid year 2011=486). The income dollars from membership have increased from this time last year (mid year 2012=\$50,916 versus mid year 2011=\$48,694) and from subscriptions have decreased from this time last year (mid year 2012=\$142,853 versus mid year 2011=\$157,395).



Year	Number of		Income \$ from	
	Members	Subscriptions	Members	Subscriptions
2002	1342	804	90037	138325
2003	1295	757	100305	126404
2004	1226	774	94875	151671
2005	1232	763	96277	156574
2006	1185	729	101992	142756
2007	1199	724	89971	170910
2008	1134	713	83339	197282
2009	1123	680	80834	211317
2010	1087	657	77670	212087
2011	1052	617	48694	205142
2012	813	467	50916	142853

this fiscal year to date (01/31/2012)



**Statistics Report**

Type	Description	2010	2011	2012	2013
<b>MYCO</b>	<b>Subscription</b>				
AFINS	Agency Foreign Inst Sub Print & Online	1			
AFINSB	Agency Foreign Inst Sub Print & Online	120	98	61	
AINSB	Agency Inst Sub Print & Online	341	295	225	
AINSO	Agency Inst Sub Online	134	169	164	
COM	Complimentary	11	12	12	
FINSB	Foreign Inst Sub Print & Online	24	23	9	
INSB	Inst Sub Print & Online	15	15	7	
INSO	Inst Sub Online	11	10	9	
	<b>Total</b>	<b>657</b>	<b>622</b>	<b>487</b>	
<b>MYSA</b>	<b>Membership</b>				
ASC	Associate Member Worldwide	17			
ASCW	Associate Member Worldwide	5	28	16	
COMPO	Complimentary Online Only	1	1	1	
EMR	Emeritus with Journal	50	48	40	1
ENJ	Emeritus no Journal	117	114	119	
FAM	Family Member	3	3	2	
HON	Honorary no Journal	3	3	3	
HONJ	Honorary with Journal	21	22	23	
LJF	Life Member Comp	70	69	70	
	Life Member Pay	1	2		
MEMF	Member NON US/Canada	172	174	126	
MEMO	Member Online Only	67	78	59	
MEMR	Member US/Canada	399	368	262	
STUD	Student	130	129	71	
STUDO	Student Online Only	23	24	15	
SUSW	Sustaining Member	10	9	6	
	<b>Total</b>	<b>1,089</b>	<b>1,072</b>	<b>813</b>	<b>1</b>
	<b>Overall Total</b>	<b>1,746</b>	<b>1,694</b>	<b>1,300</b>	<b>1</b>

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## Endowment Finances:

The endowment fund amounts are presented in the table below. From August 1, 2011 to January 31, 2012, \$2,322 was contributed to the Mentor Travel Funds and \$1,640 to the Research Funds. Contributions to the Uncommitted Endowment were \$5,263. No new funds were started in FY2012. Six of the 17 mentor travel awards and all Mentor Research awards except for the Undergraduate Research Award, have funds of \$10,000 or more.

Fund name	Totals as of July 31, 2011	Direct contr. as of Jan 31, 2012	Totals as of Jan 31, 2011
Constantine J. Alexopoulos Travel Fund	10692	200	10892
Alma Whiffen Barksdale/ John P. Raper Travel Fund	5794	0	5794
Howard E. Bigelow Travel Fund	9863	30	9863
Margret Barr Bigelow Travel Fund	10625.5	80	10705.5
Edward E. Butler Travel Fund	9422	0	9422
William C. Denison Travel Fund	11634	50	11684
Harry Morton Fitzpatrick Travel Fund	8318	0	8318
Fuller/Emerson/Whisler Travel Fund	6796	500	7296
R. L. Gilbertson Travel Fund	10325	100	10425
Richard P. Korf Travel Fund	8621	302	8923
Charles Kramer emerging Travel Fund	10163.75	0	10163.75
Everett S. Luttrell Travel Fund	11566.5	0	11566.5
Orson K. Miller Travel Fund	21384	290	21674
Harry D. Thiers Travel Fund	7477	170	7647
James M. Trappe Travel Fund	8256	350	8606
Francis A. (Bud) Uecker Travel Fund	5060	50	5110
Kenneth Wells Travel Fund	4050	200	4250
<b>Total Mentor Travel Funds</b>	<b>160047.75</b>	<b>2322</b>	<b>162369.75</b>
Constantine J. Alexopoulos Prize Fund	18289	0	18289
Myron P. Backus Award Fund	27218	1000	28218
George W. Martin/ Gladys E. Baker Research Fund	55423	0	55423
John Rippon Graduate Research Award	10522	0	10522
Clark T. Rogerson Fund	23858	0	23858
Alexander H. & Helen V. Smith Fund	25684	40	25724
John S. Karling Annual Lecture Fund	10212	50	10262
Saloman Bartnicki-Garcia Research Fund	11244	500	11744
Undergraduate Research Award	510	50	560
<b>Total Mentor Research Funds</b>	<b>182960</b>	<b>1640</b>	<b>184600</b>
<b>Total Restricted Endowment</b>	<b>343007.75</b>	<b>3962</b>	<b>346969.75</b>
Uncommitted Endowment	239683.5	5263	244946.5
<b>Total Endowment</b>	<b>582691.25</b>	<b>9225</b>	<b>591916.25</b>

## General Issues:

During fiscal year 2011, tax-exempt not-for-profit form 990 and related schedules were prepared by our accountant John Adkisson (\$1500 fee), signed by the treasurer and mailed to the Internal Revenue Services on January 30, 2012. We are currently in the process of identifying an active MSA member with a Washington, DC work address to replace Lafayette Frederick at Howard University as our current Society Incorporation Liaison. The person that assumes this position is responsible for receiving our not-for-profit forms from the Department of Consumer and Regulatory Affairs (DCRA) and forwarding them to the treasurer, who will then sign the forms, pay the biennial fees, and return the forms to the DCRA to retain the not-for-profit status for the Society. The not-for-profit organization fidelity bond and liability policies for the Society were renewed this year at a cost of \$764. Kathie Hodge has renewed our website domain name MSAfungi.org through April 2015 at a cost of \$45. Book editor Bob Marra incurred expenses of \$145.75 to ship six books for review and anticipates that he will ship four additional books for review in the next few months. Annual membership dues of \$300 were paid to American Institute for Biological Sciences (AIBS) and National Science Collections Alliance with an additional payment of \$1,000 to the AIBS Public Policy Office Service.

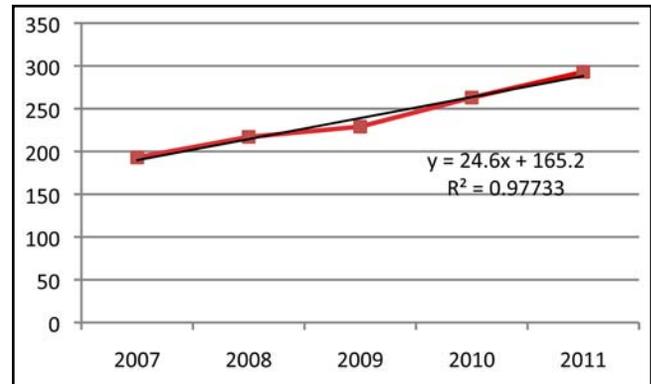
*Respectfully submitted,*  
**Marc A. Cubeta**

## *Mycologia* Editor in Chief Midyear report Feb 2012

*Mycologia* Volume 103 was completed on Nov 17, 2011 with the release of issue 103.6. Volume 103 consisted of 1465 pages, 126 regular research papers, two memorials and 3 reviews and one erratum. The production of *Mycologia* in print and online is on schedule and going very smoothly with good coordination of responsibilities and only minor problems to be solved from time to time. Issue 104.1, 336 pages, was released Jan 10, 2012 and included an invited review on AM fungi by Sally Smith and Andrew Smith, the topic of Sally Smith's 2010 Karling lecture. Issues 104.2 – 104.4 are now in various stages of production.

We thank Pete Letcher, whose term of service as an associate editor was completed in 2011. One associate editor was added to the editorial board in late 2011. Bryn Dentinger, Royal Botanic Gardens, Kew, has kindly agreed to serve as an associate editor in the area of Agaricomycete systematics.

Numbers of new manuscripts submitted have continued to increase steadily over the past four years. During calendar year 2011, 293 new manuscripts were submitted, an increase of 30 (11%) compared to 2010 and 64 (28%) more than were submitted in 2009. Although I have no data on submissions to comparable journals it is encouraging that submissions to *Mycologia* continue trending upward and that *Mycologia* is attracting excellent and noteworthy papers. Obviously increasing submissions have increased the workload for the editorial staff. The increased numbers of submissions also is reflected in somewhat larger issues in the past two volumes. We have been trying to meet a target of 1400 pages per year, approximately 230 pages per issue.



**FIGURE 1. New manuscript submissions to *Mycologia* 2007 – 2011.**

The acceptance rate for papers submitted in calendar year 2010 was 43%, with about 25% still pending decision as of Dec. 31, 2011. The average processing time for papers 1/1/11 to 12/31/11 was 42 days to the first decision and 64 days for final decision. Averaged for the past two years, the acceptance rate has been 47%, and average manuscript review time 42 days to first decision and 71 days to final decision. The associate editors have been doing a great job in keeping review and decision times reasonable, and assistant editors Jerry Hebert and Mitch Donahue have been processing accepted papers promptly and maintaining a high standard of quality for the journal.

The new HighWire platform has been installed and the *Mycologia* home page has been updated. Online readership seems to be increasing. In 2010 there were about 75,000 accesses to the home page, and about 112,000 in 2011 (+33%). In 2010 there were 193,000 abstracts and 246,400 full-text articles viewed, and 155,400 pdf downloads; in 2011 there were 343,800 abstracts (+78%), 283,000 full-text articles viewed (+15%) and 166,600 pdfs downloaded (+7%). It would be interesting to have some data from similar journals to see how *Mycologia* compares in online readership.

*Continued on following page*

**TABLE 1. Summary of Mycologia electronic access data combined from HighWire and CrossRef 2009-2011.**

Access Events to	2009	2010	2011
Home page	64,437	74,800	111,486
Current Issue TOC	10,427	10,701	13,381
All TOC	11,436	11,958	23,083
HTML	198,459	246,420	282,897
PDF	156,258	155,419	166,610
Abstracts	164,529	193,032	343,831
Searches	39,233	33,957	27,961
Direct DOI links (Crossref)	5,972	10,302	16,504

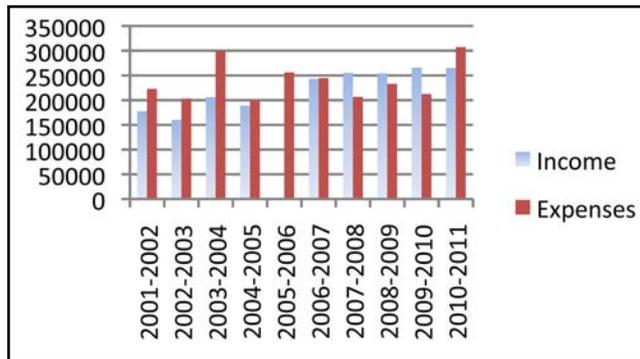
In general everything seems to be going well.

Respectfully,  
Jeff Stone

**Report of the Managing Editor of Mycologia  
February 5, 2012**

**Overall Financial Picture for Mycologia**

This past year six issues were published so we are on schedule. Editorial expenses were very high for 2010-11. In part this is because the expense for the editorial office did not get paid appropriately for the past few years due to issues with negotiating the contract with UNM. So in fiscal 2011 we paid out over \$108,000 in editorial expenses whereas budgeted editorial expenses should be in the range of \$60,000. The rest of the increase in expenses is due to an increase in pages published (see below). For 2010-2012 we raised subscription rates by 5%, but income has not gone up because total subscription numbers continue to go down. Just “breaking even” on publication expenses is not good enough because memberships do not cover the cost of print journal publication, yet we provide print copies of the journal to members.



The chart below calculates expenses/pg and shows income for page charges. As I pointed out last summer, the number of pgs per issue has increased a lot lately. We say we publish 180-200 pgs per issue and that’s what we budget for. If page number goes up costs go up a lot.

	Income	Expenses	#Issues	Exp/issue	Pgs/issue**	Exp/pg	Pg/plate in
2001-2002	177500	222905	6	37150			
2002-2003	160148	203102	5	40620			27K
2003-2004	206152	299584	7	42797	231	185	43K
2004-2005	188895	199901	4	49975	269	185	26K
2005-2006	187560*	256094	6	42682	208	205	30K
2006-2007	243132	244645	7	35645	181	205	55K
2007-2008	255155	206741	6	34456	161	214	47K
2008-2009	253887	232763	8	29095	150	193	28K
2009-2010	265527	212330	6	35388	234	151	34K
2010-2011	265019	307500	6	51250	244	210	39K
2011-12 incomplete		154842	3	51614	255	202	11K

\*not including 16K refund

Because of these increases in costs, mainly due to increased number of pages, I am concerned about reducing membership rates anymore, as we discussed last summer, in an attempt to move to online only publication. Until we can identify another way to either increase income or reduce expenses for the journal, in my opinion we can’t afford to do that.

**Publish-Ahead of Print (PAP)**

This has been working more smoothly. There are still some formatting issues with the author-entered data. This is in part because of issues between AP and HW. It’s important to realize that these problems are corrected upon final publication. In addition, were we to switch to a HW author submission system these problems would end.

**Highwire/online changes**

The shift to the new format H2O format was made late last year and took place with just a few glitches. This format makes it easier to do inline advertising and make other changes more frequently—we haven’t really taken advantage of these capabilities.

**Issues around aggregation and licensing of content**

This is a continuing discussion and information regarding these issues will be provided separately. I ask for your help in researching these issues, along with decision about moving to online only publication.

Respectfully submitted,  
Karen Snetselaar

**Report from the Association Manager, Allen Press  
January 30, 2012**

So far for 2012 the MSA has welcomed 30 new members. Eleven of these are Regular members, seventeen are Student members and two of these are Associate members. Of these new members, twenty are from the United States. There are 292 individuals who were members of the MSA in 2011 that have not yet renewed in 2012 [Secretary’s note: this list was attached for Executive Council meeting but is not reproduced here]. I would encourage the Council to look through this list and reach out to members they know personally and ask them to renew for 2012, or solicit feedback on why they have chosen not to renew their membership.

Respectfully submitted,  
Christy Classi

**Report of the Finance Committee  
March, 2012**

The total market value of the MSA Investment Portfolio with Wells Fargo Advisors as of February 29, 2012 is \$918,005.49, an increase from \$814,941.50 on February 28, 2011. Assets in the Endowment Account are now \$593,257 and assets in the Operating Account are currently at \$324,748. As of July 31, 2011, the values of the two accounts were \$584,193 and \$366,896 respectively. The Society’s finances remain stable with some growth.

*Continued on following page*

Our ability to generate new moneys from interest on our assets continues to be limited. Presently interest rates on CDs are very low for 6 month, 1 year or even 2 year certificates. Unfortunately, they are not any better for US Treasury Notes. The interest rates for CDs fluctuate and obtaining a reasonable, albeit low, interest is often a matter of timing. Interest generated this coming year from these investments will certainly continue to be low until interest on CD's, the primary instrument we use for investment, reverses the trend of low interest returns on such investments.

Our Mutual Funds investments are growing slowly but steadily even though interest rates are still low (1.27% in a conservative fund to 3.64% in a more aggressive fund). With continued upward trends in these markets, we are nearing complete recovery from losses suffered during the recent economic down turn.

The MSA portfolio managed by Well Fargo Advisors is set up as two separate accounts, the Operating Accounts and the Endowment Accounts. Moneys are invested in the following percentages for each account as of February 29, 2012. In the Operating Account the funds are apportioned currently as 28.55% in Cash, 43.13% in Fixed Income Securities and 28.32% in Mutual Funds. For the Endowment Account the funds are distributed as 8.8% in Cash, 51.43% in Fixed Income Securities and 39.69% in Mutual Funds.

**Respectfully submitted,  
Finance Committee members:**

*Timothy J. Baroni, Acting Chair (2006-2010)*  
*Martha Powell Current Chair (2010-  
Vacant  
Vacant  
Marc Cubeta, ex officio  
David S. Hibbett, ex officio*

**Summary of MSA investments as of February 29, 2012**

Operating Account	Value	Avg ann yield	Est Income
Mutual Funds			
Fundamental Investors	\$91,956	1.27	1,163
Fixed Income Securities (CDs)	140,000	0.60	840
Cash	92,731	0.01	9
<b>Total Account Value</b>	<b>\$324,748</b>		<b>\$2,012</b>
Endowment Account			
Mutual Funds			
Capital Income Builder	\$108,838	3.64	4,077
Income Fund of America	123,470	3.78	4,665
Fixed Income Securities (CDs)	305,098	0.61	1,850
Money Market	52,710	0.01	5
<b>Total Account Value</b>	<b>\$593,257</b>		<b>\$10,597</b>

**Report of the Nomenclature Committee  
February 10, 2012**

Since our last report (July 2011, Annual Report), the Nomenclature Section was convened at the International Botanical Congress during 18-22 July 2011 in Melbourne, Australia. Proposed changes to the Code relevant to fungi and lichens were enacted and have been summarized in several journals including *Mycotaxon* (L.L. Norvell, 2011). In essence, (1) the title of the Code was revised to mention fungi specifically in that title; (2) new names of fungi need to be registered for valid publication; (3) Latin is no longer required for valid publication and English is the alternative; (4) Effective publication is now allowed in electronic media; (5) Article 59 was drastically altered to progress toward a system of single name nomenclature (one fungus = one name).

The Nomenclature Committee for Fungi (of the IAPT) is seeking volunteers to serve on subcommittees to moderate changes to the priority of names affected by the modification to Article 59. One of the goals is to start controlled processes for developing Protected Names lists. A publication by S. Redhead & K. Seifert in *IMA Fungus* 2(2), pp. 44-45, (<http://www.imafungus.org/Issue/4/04.pdf>) describes some of the major issues and notes that there are societal meetings around the globe

this year to inform the mycological community of changes to the Code. A symposium, "*The mycologist's guide to the new International Code of Nomenclature for algae, fungi, and plants*" is planned for the annual MSA meeting in New Haven, CT during July 2012. This would be the best portal for interested parties wishing to participate in the process.

Because of those changes enacted at the Melbourne IBC, the Committee has revised the Nomenclature FAQ in use for prospective *Mycologia* authors. That FAQ is now available online at *Mycologia's* HighWire site.

Members of the Committee have advised the Editor-in-Chief of *Mycologia* and other membership on matters of mycological nomenclature.

**Respectfully submitted,**  
*Roy E. Halling, Chair  
Drew Minnis  
Keith Seifert*

**Report of the Honorary Awards Committee  
January 24, 2012**

The Honorary Awards Committee reports that they have several good nominations for MSA Fellow and are currently waiting until the Feb. 15 awards submission deadline to proceed.

**Respectfully submitted,**  
*Greg Mueller, Chair*

**Report of the Karling Lecture Committee  
January 24, 2012**

The Karling Lecture committee is honored to report that Dr. Barbara Valent will be giving the lecture at the 2012 annual meeting. The title of her talk will be "Stealth Strategies of a Cereal Killer".

**Respectfully,**  
*Brian Shaw, Chair*

**Report of the Program  
and Local Arrangements Committees  
30 January 2012**

Current Program Committee Members: Kerry O'Donnell & Sharon A. Cantrell

Local Arrangements Committee: David Hibbett, Erik Hobbie and Bob Marra

The plans for the MSA 2012 meetings at Yale in New Haven, CT are complete except for room assignments for sessions. The meeting home website went live on Friday 27 January (a month delayed from the original goal of late December), but the website looks great and functions very well (<http://msa2012.net/>). Abstract submission is live, and will run through 15 March ([http://msa2012.net/registration/abstract\\_submission.php](http://msa2012.net/registration/abstract_submission.php)). Registration on a Yale website will begin 1 February (<http://www.regonline.com/Register/Checkin.aspx?EventID=1033055>).

**Foray.** The MSA foray this year is being coordinated by Nathan Wilson; local arrangements member, Bob Marra, has been invaluable in applying for permits and getting quotes. Harold Kellor has been serving as an advisor and supplied us with an accident liability waiver form. The foray site (West Rock Ridge State Park) is very close to Yale, minimizing transportation time and cost (\$30). Following the foray, most MSA participants will be transported to the Connecticut Agricultural Experiment Station (CAES) on the edge of New Haven for a pizza or salad lunch and specimen viewing. Forty others will be transported to Long Wharf at the harbor for a schooner lunch cruise. We expect about another 40 Connecticut Valley Mycological Society participants on the foray and at CAES. Because the capacity of the auditorium at CAES is capped at 150 people, and we need to leave space for the local amateur participants, the foray-schooner cruise duo will allow for 140-150 in-

*Continued on following page*

stead of 100-110 MSA foray spaces. We have additional tour options for those not going on the foray, and a dinner cruise for Tuesday night.

**Symposia.** We have six mini-symposia and one roundtable for 2012. We have raised \$7,800 in grants and about \$6,000 in other support for the six symposia and roundtable in need of travel funds, and a few additional grant applications are still outstanding. A significant proportion of the symposium speakers are from Europe so it is likely that the full \$3,000 in MSA funds will be needed to supplement the external support this year.

**Budget.** The meeting budget is looking good this year, and we estimate a profit of \$23,000, not including profits from the auction or debit of \$3,000 in support of symposia.

**MSA Meeting Website.** The meeting home webpages, including the abstract submission and program scheduling functions were successfully moved to the University of New Hampshire (UNH) under the guidance of Erik Hobbie. This package/programming was developed by Ed Debevec at University of Alaska for the 2011 meetings, and it is the best website and abstract processing and program scheduling software we have ever used. The programming code, however, is old, which limits portability to other websites. We could potentially use some of the profits from this year's meetings to pay the UNH IT team to recode the programming into a newer, more portable type. Ideally, it would be best if we could put the MSA meeting website on the MSA website. We have just initiated discussions between UNH and Kathy Hodge (stepping down) and Jason Stajich from the MSA Electronic Communications Committee. Kathy Hodge says there is no expert IT support for the MSA website, which is run on a commercial site, Lunarpages, so it might require a contractor to make the changes needed for next year (and subsequent years) if we run it on the MSA website. It is important that we stabilize the MSA meeting website software so that 1) the local committee doesn't expend a lot of time and funds on IT support creating a meeting website *de novo* every year, 2) we keep the well-designed abstract and scheduling functions, which save the program committee time in editing abstracts, scheduling, and producing an accurate output for printing the program, 3) the third year member learns to use the software before they become program chair instead of having to learn a completely different program and procedure, and 4) we can develop a table of web page content that needs to change for each new meeting with slots for who is responsible for changing content on each page so that posting the website doesn't slip.

**There are a few questions for Council:**

- (1) If moving the website to the MSA home website for the 2013 meetings (and beyond) is feasible, can we allocate some of the projected profits from this year's meeting to contract the UNH IT team to recode the programming to a portable form and transfer it to the MSA website?
- (2) If moving the meeting software to the MSA website is not feasible, should we proceed with contracting UNH IT to recode the software so that it can be transferred to wherever next year's meeting will be run?
- (2) The MSA banquet, awards ceremony and live auction will take place in Ballrooms A+B at the Omni Hotel. We have asked for a riser, podium and PA system. The rest of the room will have seating at round tables, unless Council wants to be up on a riser in front. What are your wishes?

**Respectfully submitted,  
D. Jean Lodge, Chair**

**Report of the MSA Membership Committee  
January 30, 2012**

Members: José Herrera, Andy Wilson and Suzanne Joneson

I took the webinar training in spring of 2011 given by Allen Press on retaining membership. One of the key suggestions of use to us is to contact non-renewed members repeatedly but with different messages/content and via different means until there are no additional renewals. To that end, each Membership Committee member crafted a letter with a different theme, and we divided up the 2011 non-renewed members among us and sent our letters via email. José Herrera's letter emphasized how wonderful the MSA is for connecting students to prospective graduate mentors or professional contacts. Suzanne Joneson's letter was similar but emphasized the importance of the society in fostering networking and supporting students. Andy Wilson's letter emphasized the importance of the MSA for keeping abreast of changes in the field, making new friends and forming new collaborations. My letter was written as the Program Committee Chair and emphasized how exciting this year's meetings at Yale University will be and that MSA members benefit from significantly lower registration fees. We found two people who had changed addresses and they renewed. Seven renewed late and renewed for 2012 on their own. Only five of 115 people who received one letter subsequently renewed (4.3% success rate). I think the numbers are too low to judge the responses to specific messages.

As of 13 January 2012 we had 711 renewed and 385 not renewed for 2012, but there is a lag due to processing time. Many of the unrenewed were active MSA members, including committee members, chairs, and past presidents, so it was deemed inefficient to start targeting them with emails. Many of these people are just late in renewing. Instead, a two-sided letter from me as the MSA 2012 Program Chair will be sent by mail in the same envelope with the late renewal notice from Allen Press. We will resume the emailing of letters using a round-robin scheme in late February to give time for recipients to respond to the mailing from Allen Press.

On sustaining members, I've been courting Katie Montgomery from Roche 454, but have not yet succeeded, though they did provide a substantial grant in support of one of the symposia, and she will attend the symposium. I am working on getting thank you letters to those who renewed, and reminder letters on how important their support is to those who have not yet renewed. I've been offering free exhibition space at the meetings in addition to the other benefits.

Mycotaxon, Ltd.	√
Triarch Inc.	√
Sylvan Inc	√
Syngenta Seeds Inc.	√
Genencor International, Inc.	√
BCN Research Laboratories, Inc	No
Fungal & Decay Diagnostics, LLC	No
Novozymes Inc.	No
Harald Mikkelsen	No

One of the other useful suggestions from the webinar on retaining membership was to recruit new members into committees since they come in with lots of energy but may not stay in if they don't feel they are vital. To facilitate this, we will be putting stars on nametags of new members so they can be readily identified by committee chairs looking for new members. We can also encourage members to welcome new members into their discussions and dining groups.

**Respectfully,  
D. Jean Lodge  
Chair of the Membership Committee**

*Continued on following page*

## Report of the Biodiversity Committee January 30, 2012

In the second semester of 2011 members of the Biodiversity Committee were involved in the following activities:

### Teaching

We are including teaching as one of the activities of this committee as suggested by P. Brandon Matheny. **Cathy Cripps** teaches a class on *Ecology of Fungi* at Montana State University. **Maria-Alice Neves** teaches a class on *Field Mycology* at the Universidade Federal de Santa Catarina (UFSC) and **Kabir Peay** teaches *Introduction to Fungal Biology* at the University of Minnesota.

### Outreach

**Cathy Cripps** gave a talk to the Colorado Mycological Society on *Biodiversity of Montana Mushrooms*, and led local mushroom forays. Cathy Cripps was on local TV to discuss mushrooms to eat or avoid, and completed a 100 page technical report on the *Fungi of Yellowstone*. Cathy Cripps participated, with her lab colleagues, as the mycologists in the *American Prairie Bioblitz* in northern Montana.

**Maria-Alice Neves** organized the *II Rick Foray - Incursões Micológicas*, in Itapoá, North of Santa Catarina State, Southern Brazil. **Juliano Marcon Baltazar** also participated in this Foray. Maria-Alice Neves and her lab participated with a stand to show fungi diversity and ecology from Santa Catarina at the *Semana de Ensino, Pesquisa e Extensão* at UFSC.

**Kabir Peay** moderated the *Ecology & Pathology* session and judged student presentations at MSA Fairbanks, AK 2011 and co-organized a Symposium entitled *Assessing the relative contributions of fungi and bacteria to terrestrial biogeochemical processes: state of the art* at the Ecological Society of America (ESA) meeting in Austin TX 2011. In addition Kabir gave departmental seminars at San Francisco State University (SFSU) and Humboldt State University (HSU). In addition, a taxonomic publication on a new gasteroid bolete from Malaysia received widespread press coverage (see for example, the [San Francisco Chronicle](#) article).

### Publications

**Cathy Cripps** participated in the MSA Symposium *Molecular ecology and biodiversity of arctic and boreal fungi*; presented the poster *Synopsis of Rocky Mountain Arctic-Alpine Macro-fungi: central & southern floristic zones* - MSA meeting in Alaska (2011).

**Cripps, C.L.** & R. Antibus. 2011. Native Ectomycorrhizal fungi of limer and whitebark pine: necessary for sustainability? Pgs. 37-44. In: Keane, R. et al., editors, *The future of high-elevation five-needle white pines in Western North America: Proceedings of the High Five Symposium*, 28-30 June 2010, Missoula, MT. Proceedings RMRS-P-63, Fort Collins, CO; USDA FS, Rocky Mountain Research Station.

Gibertoni, T.B., Drechsler-Santos, E.R.; **Baltazar, J.M.**; Gomes-Silva, A.C.; Nogueira-Melo, G.S.; Ryvarden, L.; Cavalcanti, M.A.Q. 2011. The genus *Trichaptum* (Agaricomycetes, Basidiomycota) in Brazil. *Nova Hedwigia*, 93: 85-96.

**Neves, M.A.** 2012. Boletales. In: *Lista de Espécies da Flora do Brasil. Jardim Botânico do Rio de Janeiro*. (<http://floradobrasil.jbrj.gov.br/2012/FB000014>).

**Neves, M.A.**, Gibertoni, T.B., Jaeger, M.C.W., Melo, G.S.N., Gomes-Silva, A.C., Araújo Neta, L. 2012. Russulales. In: *Lista de Espécies da Flora do Brasil. Jardim Botânico do Rio de Janeiro*. (<http://floradobrasil.jbrj.gov.br/2012/FB000024>).

Beslisle M, **Peay KG**, Fukami T. (in press). Flowers as islands: distribution of nectar-inhabiting microfungi in a California landscape. *Microbial Ecology*.

**Peay KG**, Beslisle M, Fukami T. (2011). Phylogenetic relatedness predicts priority effects in nectar yeast communities. *Proceedings of the Royal Society B*. 279:749-758.

Desjardin DE, **Peay KG**, Bruns TD. (2011). *Spongiforma squarepantsii*: a new species of gasteroid bolete from Borneo. *Mycologia*. 103:1119-1123

**Peay KG**, Kennedy PG, Bruns TD. (2011). Rethinking ectomycorrhizal succession: are root density and hyphal exploration types drivers of spatial and temporal zonation? *Fungal Ecology*. 4: 233-240

**Respectfully submitted,  
Maria Alice Neves**

## Report of the MSA Historian and Memorials Committee

### 1. MSA Archives:

David Rose (former archivist for NYBG, Murrill papers, N.L. Britton papers; NAMA archive) was contacted as a possible archivist for MSA material at NYBG. Although he expressed intense interest in the project, he is employed full-time and could not take on the task at this time. Moreover, MSA Council did not appropriate any budget for the MSA archive, so the project is at a standstill at present.

The MSA Archivist has embarked on three projects:

1) A survey of old mycological publications [as of this writing – *Journal of Mycology* (all volumes), *Mycologia* (first 23 volumes), *Annales Mycologici* (all volumes), *MSA Newsletter* (first 30 volumes)], harvesting biographical material on MSA members, especially officers and prominent personages. This material is annotated and stored on a server at TENN for eventual deposit in the MSA Archive.

2) Gathering and arranging all biographical material in the personal collection of RHP for eventual deposit into MSA archive or NYBG biographical reprint collection.

3) Soliciting and receiving photographs of MSA fieldtrip participants, NAMA (and subsidiary societies) foray faculties and miscellaneous “people photos” to identify MSA members over the years. Annotations are being added to the files under 1) above.

### 2. Memorials Committee

The following memorials for *Mycologia* have been commissioned:

- Bob Gilbertson to Hal Burdsall
- Roger Goos to Keith Killingbeck (submitted)
- Bob Bandoni to Jim Ginns (submitted)
- Everett Smith Beneke to Ron Petersen (published)
- James Gerdemann to Jim Trappe (published)

A short memorial for *Inoculum* has been submitted for:

- Johannes van der Walt (South Africa ; yeasts)
- Cecil Terence Ingold to Nick Money (published)

A brief notice for *Inoculum* has been submitted for:

- Audrey Coxbill Gabel

**Respectfully submitted,  
Ron Petersen**

# MYCOLOGICAL NEWS

## RCN Update: A Community of Ex Situ Microbial Germplasm Collections

Collections of living microbes represent an essential foundation for US science and for the future bio economy. Environmental and plant-associated microbes include organisms that promote plant growth (symbionts), promote carbon cycling in the environment (saprophytes), fix carbon directly (algae), and cause plant (microbial and viral pathogens) or human disease. Other microbes are able to protect plants from attack by pathogens and pests (biocontrol agents), or can confer desirable or deleterious traits upon host plants (endophytes). Unfortunately, while the US has world-caliber collections of materials for genetic and health research, there is no well-coordinated national system for locating, preserving, or distributing valuable environmental or plant-associated microbes. As part of an ongoing effort to develop support for culture collections in the US it became obvious that there was no forum for discussions of culture collection issues in the US. In the past this role was partly filled by the US Federation for Culture Collections (USFCC), but the USFCC has not held a meeting since 2001. Because the collection community has shared goals and needs, we propose to develop a series of key resources as a focal point to this community. Among these goals are the development of shared informatics tools, visits to active culture collections, outreach into communities hosting collections, workshops on collection management and practices, and the growth of contacts among US and international collections and collection networks. An additional goal is to explore ways to institutionalize long-term support for this network of culture collection scientists and users, and this may include identifying an institutional manager for the USFCC or the establishment of a new society to fill the role originally held by the USFCC. Specifically, the RCN will engage in the following activities:

1. Develop syllabuses and organize a series of workshops to address specific challenges and needs associated with collection management, distribution, and practices with the goal of establishing a web-accessible database of protocols, policies, and best practice guidelines;
2. Design a blueprint for a robust, yet flexible community cyberinfrastructure that supports the management of collection and associated data and coordinate community efforts to develop this cyberinfrastructure;
3. Develop a formal back-up plan for active, orphaned, or endangered collections;
4. Support visits to successful culture collections to facilitate the spread of best practices and educate the next generation of culture collection scientists;
5. Strengthen and expand contacts among US and international collections and users to facilitate knowledge and material sharing;
6. Explore sustainable mechanisms for institutionalizing long-term support for this network of culture collection scientists and users.

A series of meetings will be organized, each held at an active collection site and each targeted to address one or more of the above-mentioned goals. Development of workshop materials will be a top priority and workshops will begin in the second year. Laboratory exchanges will be combined with workshops and outreach. Additional meetings will deal with the cyberinfrastructure, backing up collections, institutionalizing the network, developing standards, and planning for the future.

**Initial steering committee:** Kevin McCluskey, UMKC (PI); A. Rick Bennett, U Arkansas (CO-PI); Seogchan Kang, Penn State (CO-PI); David Geiser, Penn State; Jessie Glaeser, USDA Northern Research Station; Kyria Boundy-Mills, UC Davis Pfaff yeast collection; Willie Wilson, Bigelow Laboratory for Ocean Sciences; Ulrich Melcher, OK State; Micah Krichevsky, USFCC; Kellye Eversole, APS; David Ellis, USDA NCGRP; David Smith, CAB International and GBRCN.

Webpage:

[http://www.fgsc.net/RCN2011/CSBR\\_RCN.htm](http://www.fgsc.net/RCN2011/CSBR_RCN.htm)

### MSA 2012 Meeting at Yale

Early Registration ends **30 April**. Last day for late registration (except at conference) is **30 June**. Meeting details are at <http://msa2012.net/>.

**D. Jean Lodge**  
MSA Program Chair for 2012

### Forum on the Future of Microbial Databases

A Forum on the Future of Microbial Databases organized by the Mycological Society of Japan, and co-organized by Federation of Microbiological Societies, Japan will be held on 28 May, 2012 at Tamagawa University, Tokyo, Japan. Early bird registration has started. Do not miss this opportunity!

The website is as follows:

[http://www.tamagawa.ac.jp/sisetu/gakujutu/alsrc/forum/microbial\\_db\\_forum\\_e.htm](http://www.tamagawa.ac.jp/sisetu/gakujutu/alsrc/forum/microbial_db_forum_e.htm)

**Toru Okuda**

President of the Mycological Society of Japan

# Introduction to Food- and Air-Borne Fungi

**Introduction to Food- and Air-Borne Fungi.** 18-22 June 2012, Ottawa, Canada. We are pleased to offer our five day course for mycologists interested in food spoilage, indoor air quality, industrial hygiene, mycotoxins, pharmaceuticals, biodeterioration, etc.. More than 100 mould and yeast species common in indoor air and on food will be examined, including important species of *Penicillium*, *Aspergillus*, *Fusarium*, *Trichoderma*, *Cladosporium*, *Mucor*, *Rhizopus*,

*Alternaria* and *Scopulariopsis*. The text for the course is the recently published *Food and Indoor Fungi* by R.A. Samson *et al.*, now in full colour. For more information please contact Keith Seifert, Eastern Cereal and Oilseed Research Centre, Ottawa, Ontario K1A 0C6, Canada. Email: [keith.seifert@agr.gc.ca](mailto:keith.seifert@agr.gc.ca) or visit the course web site at [www.indoormold.org/courses.htm](http://www.indoormold.org/courses.htm)

## MYCOLOGIST'S BOOKSHELF

For this April issue of *Inoculum*, we have 6 book reviews. I've added several new titles to the list below, which has been updated indicating which books are already in the process of being reviewed, and which still need reviewers. I've adopted a new process for getting books to you, whereby books will be "drop-shipped" directly from publisher to reviewer; this will significantly streamline the process and save the Society some money, as well. And one of the publishers whose books we frequently review is adopting a new policy that currently only applies to some of their books: the review will have to be done using an online version (but not a pdf or something for a Kindle or e-reader); once the publisher receives a copy of the published review, they'll ship the reviewer the hard copy. This will be the case with the Springer "Laboratory Protocols in Fungal Biology" by Gupta *et al.*

If you would like to review a book or CD, please contact me ([robert.marra@ct.gov](mailto:robert.marra@ct.gov)). A book goes to the first person requesting it, and its review due four weeks after it has been received. Also, if you know of a newly published book that might be of interest to your fellow mycologists, please let me know so I can request it from the publisher.

—Bob Marra

### Recently Added Books

- **Plant Fungal Pathogens: Methods and Protocols.** 2012. Melvin D Bolton, Bart PHJ Thomma (Eds). Part of the "Methods in Molecular Biology" series, v.835. Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-1-61779-5008. 769 pp, 138 illus., 74 in color. Price: \$159.00 (hardcover). *Review needed.*
- **Biology of Marine Fungi.** 2012. Chandralata Raghukumar (Ed). Part of the "Progress in Molecular and Subcellular Biology" series, v.53. Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-3-642-23341-8. 354 pp, 83 illus., 27 in color. Price: \$209.00 (hardcover). *Review needed.*
- **Pollination Biology.** 2012. D. P. Abrol. Biodiversity, Conservation, and Agricultural Production. Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-94-007-1941-5. 792pp, 23 illus., 18 in color. Price: \$209.00 (hardcover). *Review needed.*
- **Elements of Evolutionary Genetics.** 2010. Brian Charlesworth and Deborah Charlesworth. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-0-9815-1942-5. 768 pp, b&w. Price: \$64 (softcover). *Review needed.*
- **Coalescent Theory: An Introduction.** 2009. John Wakely. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-0-9747-0775-4. 352 pp, b&w. Price: \$48 (softcover). *Reviewer assigned.*
- **The Analysis of Biological Data.** 2009. Michael Whitlock and Dolph Schluter. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-0-9815-1940-1. 704 pp, full color. Price: \$80 (hardback). *Review needed.*
- **The Tangled Bank: An Introduction to Evolution.** 2010. Carl Zimmer. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-0-9815-1947-0. 394 pp, full color. Price: \$48 (hardback). *Review needed.*
- **Laboratory Protocols in Fungal Biology: Current Methods in Fungal Biology.** Avail June 2012. Vijai Kumar Gupta, Maria Tuohy, Eds. Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-1-4614-2355-3. 802 pp, 105 illus., 40 in color. Price: \$279.00 (hardcover). *Review needed. Review Copy online only; hardcover copy provided following receipt of published review.*
- **Tree Thinking: An Introduction to Phylogenetic Biology.** Available July 2012. David Baum and Stacey Smith. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-1-9362-2116-5. 400 pp, b&w. Price: \$60 (hardback). *Review needed.*
- **Evolution: Making Sense of Life.** Available August 2012 (copyright year 2013). Carl Zimmer and Douglas J. Emlen. Roberts & Company Publishers, Greenwood Village, CO. [www.roberts-publishers.com/](http://www.roberts-publishers.com/). ISBN: 978-1-9362-2117-2. 800 pp, printed in four colors. Price: \$92 (hardback). *Review needed.*

Continued on following page

- **Fungal Plant Pathogens (Principles and Protocols Series)**. March 2012. CR Lane, P Beales, KJK Hughes (Eds). CABI, Oxfordshire, UK. [www.cabi.org](http://www.cabi.org). ISBN: 978-1-8459-3668-6. 324 pp. Price: \$75. *Review needed.*
- **Fundamentals of Mold Growth in Indoor Environments and Strategies for Healthy Living**. 2011. Olaf CG Adan & Robert A Samson (Eds). Wageningen Academic Press, Wageningen. [www.wageningenacademic.com](http://www.wageningenacademic.com). ISBN: 978-90-8686-135-4. 524 pp. (hardback). Price: €97. *Review needed.*
- **Biology of Lichens – Symbiosis, Ecology, Environmental Monitoring, Systematics and Cyber Applications**. Bibliotheca Lichenologica vol 105. 2010. Thomas Nash III, Linda Geiser, Bruce McCune, Dagmar Triebel, Alexandru M Tomescu, William Sanders (Eds.). Borntraeger/Schweizerbart Publishers, Stuttgart. [www.schweizerbart.de](http://www.schweizerbart.de). ISBN: 978-3-443-58084-1. 256 pp, 81 figures, 19 tables. Price: €79.00 (softcover). *Review needed.*

- **Biomonitoring, Ecology, and Systematics of Lichens**. Bibliotheca Lichenologica vol 106. 2011. Scott T Bates, Frank Bungartz, Robert Lucking, Maria A Herrera-Campos, Angel Zambrano (Eds.). Borntraeger/Schweizerbart Science Publishers, Stuttgart. [www.schweizerbart.de](http://www.schweizerbart.de). ISBN: 978-3-443-58085-8. 442 pp, 102 figures, 33 tables, 16 color plates. Price: €109.00 (softcover). *Review needed.*

## Previously Listed Books

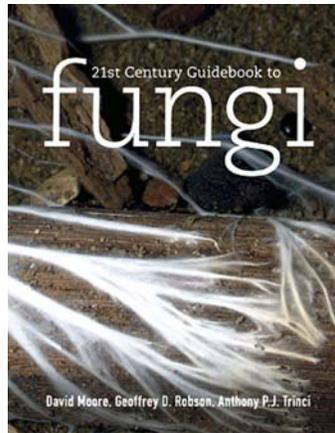
- **Key For Identification of Common *Phytophthora* Species**. 2011. Jean Beagle Ristaino. APS Press, St. Paul, MN. [www.apsnet.org](http://www.apsnet.org). ISBN: 978-0-89054-397-9. CD-ROM. Price: \$269.00 (single user). *Review needed.*
- **Practical Guide to Turfgrass Fungicides**. 2011. Richard Latin. APS Press, St. Paul, MN. [www.apsnet.org](http://www.apsnet.org). ISBN: 978-0-89054-392-4. 280 pp, 115 images, 29 chemical structures. Price: \$139.95 (hardcover). *Review needed.*
- **The Mycota, Vol. 10: Industrial Applications, 2<sup>nd</sup> ed.** 2011. Martin Hofrichter (Ed.). Karl Esser (Series Ed.). Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-3-642-11457-1. 485 pp, 152 illus. Price: \$269.00 (hardcover). *Review needed.*
- **Parasites in Ecological Communities: from Interactions to Ecosystems**. 2011. Melanie J. Hatcher and Alison M. Dunn. Part of the *Ecology, Biodiversity and Conservation* series. Cambridge University Press, Cambridge, UK. [www.cambridge.org](http://www.cambridge.org). ISBN: 978-0-521-71822-6. 464 pp, 113 b/w illus., 7 tables. Price: \$60.00 (paperback). *Review needed.*
- **Forest Health: An Integrated Perspective**. 2011. John D. Castello, Stephen A. Teale (eds.). Cambridge University Press, Cambridge, UK. [www.cambridge.org](http://www.cambridge.org). ISBN: 978-0-521-76669-2. 404 pp, 80 b/w illus. 7 tables. Price: £65.00 (hardcover). *Reviewer assigned.*
- **21<sup>st</sup> Century Guidebook to Fungi**. 2011. David Moore, Geoffrey D. Robson, Anthony P. J. Trinci. Cambridge University Press, Cambridge, UK. [www.cambridge.org](http://www.cambridge.org). ISBN: 978-0-521-18695-7. 640 pp, 406 b/w illus., 57 tables, plus 1 CD-Audio. Price: £40.00 (paperback). *Reviewer assigned.*
- **Yeast Research: An Historical Overview**. 2011. James A. Barnett, Linda Barnett. ASM Press, Washington, DC. [www.asmpress.org](http://www.asmpress.org). ISBN: 978-1-55581-516-5. 392 pp, illus. Price: \$159.95 (hardcover). *Reviewer assigned.*
- **Medically Important Fungi: A Guide to Identification, 5<sup>th</sup> ed.** 2011. Davise H. Larone. ASM Press, Washington, DC. [www.asmpress.org](http://www.asmpress.org). ISBN: 978-1-55581-660-5. 508 pp, illus, color plates. Price \$109.95 (hardcover). *Reviewer assigned.*
- **Cryptococcus: From Human Pathogen to Model Yeast**. 2010. Joseph Heitman, Thomas R. Kozel, Kyung J. Kwon-Chung, John R. Perfect, Arturo Casadevall (eds). ASM Press, Washington, DC. [www.asmpress.org](http://www.asmpress.org). ISBN: 978-1-55581-501-1. 646 pp, full-color insert, illus. Price: \$169.95 (hardcover). *Reviewed in this issue.*
- **The Mycota, Vol. 14: Evolution of Fungi and Fungal-Like Organisms**. 2011. Stefanie Pöggeler, Johannes Wöstemeyer (Eds.). Karl Esser (Series Ed.). Springer-Verlag, Berlin. [www.springer.com](http://www.springer.com). ISBN: 978-3-642-19973-8. 345 pp, 60 illus., 10 in color. Price: \$269.00 (hardcover). *Reviewer assigned.*
- **Conspectus of World Ethnomycology: Fungi in Ceremonies, Crafts, Diets, Medicines, and Myths**. 2011. Frank M. Dugan. APS Press, St. Paul, MN. [www.apsnet.org](http://www.apsnet.org). ISBN: 978-0-89054-395-5. 160 pp, 18 color images, 9 b/w figures. Price: \$69.96. *Reviewed in this issue.*
- **Smut Fungi of the World**. 2011. Kálmán Vánky. APS Press, St. Paul, MN. [www.apsnet.org](http://www.apsnet.org). ISBN: 978-0-89054-398-6. 1480 pp, 650 line drawings, 2800 micrographs. Price: \$499.00 (hardcover). *Reviewed in this issue.*
- **Microbial Biofilms: Current Research and Applications**. 2012. Gavin Lear, Gillian D. Lewis (Eds.). Caister Academic Press, Norfolk, UK. [www.caister.com](http://www.caister.com). 228 pp. Price: GB £159, US \$310 (hardcover). *Reviewer assigned.*
- **Mushroom**. 2011. Nicholas P. Money. Oxford University Press, New York, NY ([www.oup.com](http://www.oup.com)). ISBN: 978-0-19-973256-2. 224 pp, 15 line art, 15 halftones, 8-pg color insert. Price: \$24.95 (hardback). *Reviewed in this issue.*

## REMINDER: MSA Directory Update

Is your information up-to-date in the MSA directory? The Society is relying more and more on email to bring you the latest MSA news, awards announcements and other timely information, and our newsletter. To ensure that you receive Society blast emails and the Inoculum as soon as it comes out, and so that your colleagues can keep in touch, please check the accuracy of your email address and contact information in the online directory. This can be accessed via our web site at [www.msafungi.org](http://www.msafungi.org). If you need assistance with updating your membership information, or help with your membership log-in ID and password, please contact Kay Rose, Association Manager at Allen Press, at [kröse@allenpress.com](mailto:kröse@allenpress.com).

# 21st Century Guidebook to Fungi

*21st Century Guidebook to Fungi*. 2011. David Moore, Geoffrey D. Robson, Anthony P. J. Trinci. Cambridge University Press, Cambridge, UK. [www.cambridge.org](http://www.cambridge.org). ISBN: 978-0-521-18695-7. 640 pp, 406 b/w illus., 57 tables, plus 1 CD-Audio. Price: £40.00 (paperback).



This is an innovative text, both in its presentation and its organization.

It applies the integrative approach of systems biology and covers aspects of fungal biology from the cell, to tissue organization, to the organism as it interacts with the fungal environment. The authors' broad experience and nearly encyclopedic knowledge lend strength and their many years of teaching experience (all at Manchester where this text was developed from course materials) all increase its value. It's generally well written and the complex material is refreshingly clearly explained.

One needs to wonder: why a new text? The authors implicitly address this question in their approach to presenting the Kingdom Fungi. The volume is separated into seven parts. Part I, the first three chapters, quickly reviews the nature and origins of fungi, their evolutionary origins and present a quick overview of current concepts of classification. This last section is short and there is an appendix that outlines the opinions of Kirk *et al.* in the 9<sup>th</sup> and 10<sup>th</sup> editions of the Dictionary of the Fungi and the (intermediate) results of AFTOL. A second appendix, also referencing the latest editions of the Dictionary, as well as the APS Illustrated Dictionary of the Fungi, condenses and illustrates much of fungal morphology as it applies to hyphae and mycelial differentiation.

Parts II and IV cover fungal cell biology and biochemistry and developmental biology of fungi and it is in these sections that the impact of the -omics revolution is fully expressed. The authors draw on information from animal, plant and bacterial biology as well as filamentous fungi and yeasts to organize these chapters and do an elegant job of synthesizing a vast amount of information into a credible story. The chapter on morphogenesis of carpal structure focuses almost entirely on fleshy basidiocarps of Agaricales. This reflects more about the status of current research than it does on the authors. Part III, which covers fungal genetics and diversity is also very good, if brief, in its coverage.

Part V on fungal ecology focuses on fungi as saprophytes, symbionts and pathogens of other kingdoms and of fungi. While the authors suggest that 95% of plants live in mutualistic associations with fungi, fewer than 20 pages are dedicated to mycorrhiza and only five to lichens, which

seems small compared to the importance of these symbioses, both in diversity of fungi and ecosystem function. Too, they use the common meaning of symbionts (as mutualists) rather than covering a spectrum of interactions between and among organisms. Their usage is an oversimplification. For the many plant pathologists who study fungi, only a single chapter of about 20 pages covers the field. It includes one of the few errors detected in the volume: even by their own strictures on naming, which are correctly if casually presented – they refer to *Cochliobolus heterostrophus* as *Helminthosporium* (not even *Bipolaris!*) *maydis*. There is some biology being lost here. They impose restrictions on the strategies devised during the evolution of pathogens by emphasizing biotrophs and necrotrophs, barely acknowledging the existence of hemibiotrophic pathogens. The discussion of animal pathogens and fungal di (poly-)morphism returns to an earlier theme of ecological advantages and evolutionary benefits accruing to growth by hyphal extension or in single celled yeast-phase. A significant chapter on human pathogenic fungi and their activities in immunocompromised hosts with concomitant difficulty of treating infections and approaches to the design of anti-fungal drugs follows.

Part VI is comprised of two chapters: one on whole organism fermentation and the second on molecular (and mathematical) biotechnology. The first of these chapters presents and discusses on liquid and solid-state fermentation. The section on liquid fermentations brings us back to first principals: limits and of diffusion of oxygen; determination of growth kinetics and manipulation of growth parameters; design of fermentation apparatus — batch, fed-batch and continuous flow systems. This presentation uses as much space as the sections on mutualistic associations. They discuss the QUORN fermentation, alcohol, citric acid and penicillin production as well as cheese, tempeh, and soya. The final chapter on molecular biotechnology starts with discussion of membrane and wall targeting anti-fungals, their modes of action and design and then proceeds through the a comparison of the fungal genome with that of other eukaryotes, the sequencing and comparison of genomes, their annotation, the aims of gene ontogeny, goes on to discuss genetic manipulations, techniques of recombination and the production of recombinant proteins through fermentation and then presents the -omics revolution and attempts to integrate the vast amount of information arising from DNA sequences, the transcriptomes, proteomes and metabolomes. The authors show, for example, that comparison of full sequences from 875 metazoans, 53 plants and 141 fungi demonstrate that none of the sequences involved in plant or animal multicellular development can be found in any of the fungal genomes, that no sequences were strictly fungus specific and that 'true homology' was limited to 78 sequences involved in the cell architecture of eukaryotes. The chapter finishes with two addenda related to the early subjects only by their need for computational power: climate change effects on fungi;

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and mathematical modelling of fungal growth and development. The program for the latter is included on the handy CD that comes with the text. Here, too, one will find the with hypertext links to cross references within the book and to the bibliographical references (with DOIs for these).

The volume is remarkably well written and well copy-edited (only two errors found in the text and two in figure headings). A single cross-reference was incorrect when checked. The hyperlinks work and do not clutter. The failure of the publishers to integrate the color photographs and diagrams into the text, instead of inserting them in two sections is a weakness and wouldn't have cost much (or any) more to produce. There is only one glaring factual error: Millardet developed the Bordeaux mixture not for management of late blight of potatoes, as suggested, but for mildew on grapes. The authors occasionally use excrete or excretion for secrete and secretion. This is particularly annoying as they make such efforts to describe cell membrane functions and the release of active enzymes into the environment is clearly not a process of waste elimination - as far as I can tell, the only waste product externally eliminated from fungal cells is ammonium ion. They are similarly casual in their use (and misuse) of homology, which they occasionally use in a proportional (non)sense.

For whom is this book appropriate? I wouldn't recommend this book as a primary text for people new to the fungi.

However, as an adjunct text or as a text for more advanced students, it presents a coherent view of a rapidly advancing field. It could be recommended, as well, for the more senior among us, who have a grasp on fungal diversity but were trained prior to the -omics age.

How much baby got tossed with the bathwater? This book is a marvelous effort to holistically integrate mycology into modern systems biology. In doing so, the authors have emphasized the organism as an integrated individual, and pay relatively small attention to that individual as a member of a population, a cohort, and a community. Still, that and much other information can be retrieved from the citations and directions are given for full access to earlier investigations: Buller's Researches on Fungi volumes 1, 2, 3, 4 and 6 are cited in different chapters. What is lost are the biology of mycelial organisms of other kingdoms (there is a wee bit of discussion of Chromista in various locations); while biologically fully justifiable, their segregation require the use of supplementary texts if their teaching continues to fall under the umbrella of mycology. As one who kept pet dictyostelids as a child, I would consider this a sad loss.

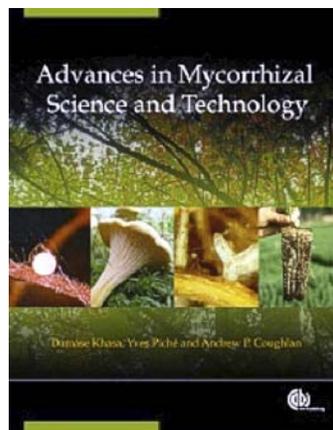
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## Advances in Mycorrhizal Science and Technology

*Advances in Mycorrhizal Science and Technology*. 2010. Damase Khasa, Yves Piché and Andrew P. Coughlan (Eds.). CABI, Oxfordshire, UK. ISBN: 978-1-84593-586-3. 197 pp. (hardcover). \$115.

This multi-authored book is dedicated to Prof. J. André Fortin and Dr. Yolande Dalpé, both well deserving of the recognition. Prof. Fortin is known for his cheerful energy and creative thinking as a researcher and teacher. Dr. Dalpé, noted for her studies on arbuscular mycorrhizae (AM) and their fungi, is program leader for mycology at Agriculture and Agri-Food Canada and has been active in professional societies throughout her career. The chapters' authors are nearly all former and/or present collaborators and students of Fortin and Dalpé. The book thereby features the wide-ranging "Québec school" of mycorrhiza research. The downside is that the worthy contributions of Canadian researchers from Ontario to British Columbia are not similarly recognized, so the overall scope of Canadian research on mycorrhizae is disappointingly incomplete.

That said, the 14 chapters of the book generally follow a



logical progress of topics, starting with an overview of the kinds of mycorrhizal associations in Chapter 1. Chapters 2-4 follow with AM spore germination and mycorrhiza formation, the stages of AM asymbiotic, presymbiotic and extraradical hyphal development, and interactions between AM fungi and soil microorganisms. Chapters 5-7 deal with applications of AM fungi in agriculture, followed by Chapter 8, a broad overview of Canadian research on applications of both AM and ectomycorrhizal (EM) fungi.

With Chapter 9, the topics switch to ECM management in forest nurseries, followed by Chapter 10 on ECM inoculation of seedlings for afforestation of sites after deforestation for oil sand extraction in the boreal forest zone of Alberta. ECM inoculation of northern African nurseries is covered in Chapter 11, as is ecology and associations of ECM in lowland forests in the neotropics in Chapter 12. Ecophysiology of ECM sporocarp development is featured in Chapter 13 and ecology and management of edible EM mushrooms in Canada in Chapter 14.

The illustrations throughout the book are good and often excellent.

This array of chapters is presented more cohesively than often seen in multi-authored books, and mycorrhizologists will find topics of interest in some or all chapters. The book will serve as a useful compendium of information for teachers and researchers alike. The chapters by the various authors are somewhat uneven in quality, with several being excellent

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and a few mediocre. One unsettling feature is that, although the editors signed their preface to the book in April 2008, some chapters cite few references dated after 1999. In those cases it's hard to believe that so few relevant papers have appeared since 2000.

I chose not to single out individual chapters for critique; some were outstanding and all merited some praise. I make one exception: Chapter 2 is my favorite. "From a germinating spore to an established arbuscular mycorrhiza: signaling and regulation" by José M. Garcia-Garrido and Horst Vier-

heilig presents a clear, comprehensive, up-to-date, and well-illustrated coverage that overcame my ignorance about this fascinating topic.

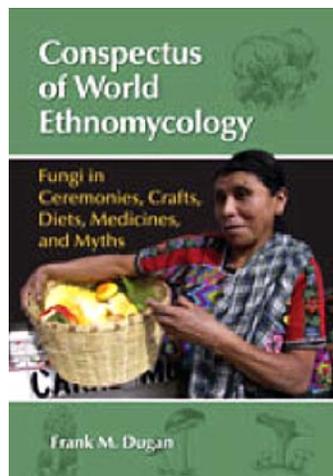
Editing multi-authored books is akin to herding cats: editors Khasa, Piché and Coughlan have done a good job of it!

**Jim Trappe**

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## Conspectus of World Ethnomycology

*Conspectus of World Ethnomycology: Fungi in Ceremonies, Crafts, Diets, Medicines, and Myths.* By Frank M. Dugan. 2011. APS Press (American Phytopathological Society Press), St Paul, MN. (<http://www.shopapspress.org>). 160 pp., 27 images (18 color). ISBN 978-0-89054-395-5. Price US\$ 69.95.



This work follows hot on the heels of Dugan's *Fungi of the Ancient World: how mushrooms, mildews, molds, and yeast shaped the early civilizations of Europe, the Mediterranean, and the Near East* (2008, APS Press), but is much broader in scope. It also has benefited from a substantial amount of additional reading and delving into obscure literature sources, which made it a much more satisfying work for me.

Dugan traces the varied applications of the term "ethnomycology," and bemoans the phase when it almost became synonymous with the use of neurotropic mushrooms in the 1950s and 1960s. Here I was pleased to see a much broader view adopted, essentially the study of the multifarious uses of fungi by humans since pre-historic times. Particular attention, indeed a whole chapter, is primarily concerned with the role of women as custodians of knowledge of fungi (an important source of knowledge for herbalists and mycologists) and also as collectors and exploiters, not least as witches. Also stressed is the role of folk uses of fungi in the establishment of the discipline of mycology. It is men, however, who he notes become involved in the collection of some of the most sought-after fungi, notably truffles. In this section, I encountered the term "myconym" for the first time; this was evidently used at least in 2004 to refer to the common names applied to mushrooms by the Romanian ethnomycologist C. Drăgulescu. There are numerous footnotes and asides, with fascinating more general information on some early herbals.

The main body of the work comprises chapters devoted to particular regions: Europe and the Mediterranean; Asia and the Pacific; Sub-Saharan Africa; Latin America and the Caribbean; and North America. In these, he endeavours to list the exploited fungi region by region, and each chapter concludes with a table on those "commonly documented as ethnomycologically important" in the region. I was pleased to see that lichen-forming fungi were incorporated throughout, although the scale of their use in China in both cooking and medicine does not seem to be recognized; I suspect he never had the opportunity to visit the Wal-Mart superstore in Kunming. While I recognize the difficulty in being comprehensive, I would have expected to see something on the burgeoning *Ophiocordyceps sinensis* trade out of Bhutan, and the mass-hysteria cases attributed to inadvertent consumption of *Claviceps purpurea* "ergots" (not least the Salem Witch Trials) and especially given that Fuller's *The Day of St Anthony's Fire* (1968, Hutchinson) is now difficult to obtain.

In his concluding remarks, the concept of "folk" is explored, and the emphasis on conservation is welcome. Sources of "germplasm" in fungal culture collections are compiled in two Appendices, and a third has 20 recipes from around the world – but evidently gleaned from the literature rather than personally tested. The bibliography is particularly full, extending over 25 pages, though there are a few works that I would have expected to see still missing; but then perhaps they were deliberately omitted, such as Puharich's *The Sacred Mushroom* (1959, Doubleday), and Findlay's *Fungi, Folklore, Fiction & Fact* (1982, Richmond Publishing).

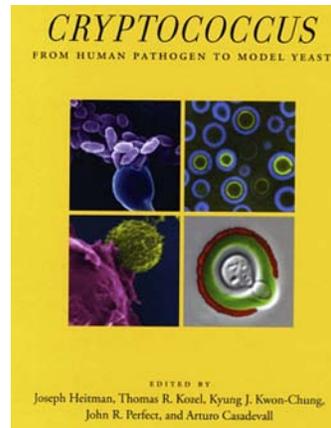
I found this an absorbing read during a flight from Madrid to London in March, protracted by a 160 mph headwind, and can heartily commend it. I am also sure numerous teachers will find tid-bits here with which to embellish their mycology classes. My main regret is the price, which sadly may deter both inquisitive students and the public from acquiring personal copies of this fascinating book.

**David L Hawksworth**

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# Cryptococcus: From Human Pathogen To Model Yeast

**Cryptococcus: From Human Pathogen To Model Yeast.** 2010. Joseph Heitman, Thomas R. Kozel, Kyung J. Kwon-Chung, John R. Perfect, and Arturo Casadevall (Eds.). ASM Press, Washington, DC. ([www.estimate.asm.org](http://www.estimate.asm.org)). ISBN: 978-1-55581-501-1. 646 pp, full-color insert, illustrations, index. Price: \$169.95 (hardcover).



The yeast-forming basidiomycete genus, *Cryptococcus*, has emerged as a significant model for both fungal genetics and pathogenicity. A long history of research compounded with numerous laboratory resources, as well as two sequenced genomes, have yielded a great deal of information on this enigmatic fungus. The new book *Cryptococcus: From Human Pathogen To Model Yeast*, edited by Heitman, Kozel, Kwon-Chung, Perfect, and Casadevall, features contributions from 123 authors and summarizes a vast amount of data as well as synthesizes disparate concepts on the biology of *Cryptococcus*. If you consider Casadevall & Perfect's 1998 tome *Cryptococcus neoformans* as the groundwork for this book, then these 646 pages are evidence for the explosive advance of knowledge on *Cryptococcus* that has accrued over the last 12 years.

*Cryptococcus* species, arguably the most important fungal pathogen of mammals, are common in immunocompromised hosts; HIV-associated cryptococcosis alone infects more than 1 million people per year. For example, *Cryptococcus* has been confirmed in laboratories in Sub-Saharan African countries to be responsible for anywhere from 10 to 70% of fatal meningitis cases over the last two decades. A well-publicized outbreak of a particularly virulent strain of *C. gattii* was determined to be the causative agent of more than 200 cases of human meningitis in non-immunocompromised individuals within the Pacific Northwest over the last decade. A concerted global consortium of medical mycology researchers—the majority of whom are authors of chapters in this book—have provided the foundation for establishing *Cryptococcus* as the model system for understanding fungal pathogenesis in both a medical and veterinary setting.

Species of *Cryptococcus* entered my personal radar when they kept turning up in plant-associated environmental samples. Wanting to get up to speed with natural history, population genetics, and methods for typing Cryptococcal di-

versity, this book was an obvious entry point for me. Chapters here are dedicated to identification from environmental niches – such as the description of avian- or plant-associated vectors – as well as population biology to phylogeography, and species complexes to hybridization.

Copiously illustrated throughout, notable figures include those documenting *Cryptococcus* morphology, cell and molecular biological networks, secondary metabolite chemistry, and gene and genome structure. Chapters devoted to phylogeography and species complexes have detailed phylogenetic trees and distribution maps. Additionally, this wouldn't be a clinical textbook if it didn't include a series of color and monochrome plates of human and animal infections that remind you why you have—or haven't—studied medical mycology.

Mycologists aren't the only ones who will find this resource useful. Geared toward a wide array of specialists, this book is equally applicable to the interests of clinicians and physicians, microbiologists and immunologists, disease ecologists and epidemiologists, and, to a lesser extent, public health and policy administrators. The book succeeds in connecting and interpreting basic research science and applying this knowledge in a clinical context.

The book consists of a whopping 44 chapters separated into seven sections. These sections are devoted to general biology; genetics and genomics; virulence; environmental interactions and population biology; immune host responses; pathogenesis; and diagnosis, treatment, and prevention. Each of the sections consist of five to eight chapters and each informative chapter stands on its own – concise enough to allow for discrete chunks of reading without overwhelming the reader. In fact, I would argue that the book's greatest strength is cohesive breadth blended with factual depth. My only criticism—and this is an *extremely* minor one—is that the book as a whole is slightly overwhelming in scope. This by no means indicates a lack of vision from the authors or editors, but reflects their desire to take into consideration the complete state of knowledge relating to *Cryptococcus* and its biology. As a result, the contributors have not only provided a truly fascinating and utterly comprehensive collection of everything *Cryptococcus*, but have set the bar high for the best treatise on fungal biology at the genus level. I would consider this book essential for anyone working directly with *Cryptococcus*—or wanting to get up to speed—and for mycologists looking for a framework to fully grasp the biology of an important model fungus.

**Joshua R. Herr**

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[jherr@psu.edu](mailto:jherr@psu.edu) [www.joshuaherr.com](http://www.joshuaherr.com)

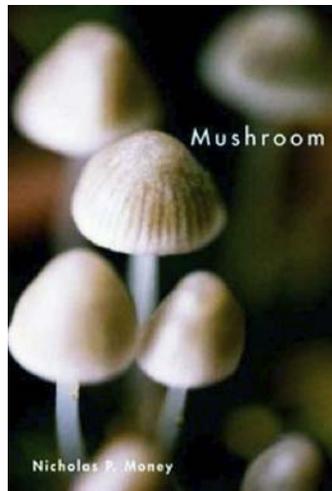
# Mushroom

**Mushroom.** 2011. Nicholas P. Money. Oxford University Press, New York, NY ([www.oup.com](http://www.oup.com)). ISBN: 978-0-19-973256-2. 224 pp, 15 line art, 15 halftones, 8-pg color insert. Price: \$24.95 (hardback).

If I met Nick Money at a cocktail party, Mushroom is an extended version of the conversation we would have.. This little book is full of interesting facts and details about fungal biology and natural history. It is also witty, punctuated with references to pop culture, and has just enough off-color humor that it almost seems meant to be enjoyed with a gin and tonic in hand. The first three chapters of Mushroom cover some basics: the biology and physics of fruiting and spore release, biodiversity, and ecosystem function. The later five chapters are more focused on social engagements with fungi and this is where the author gets into a bit of trouble, with this reader at least. Money uses chapters on harvesting, commercial cultivation, mushroom poisoning, mushrooms as drugs, and medicinal mushroom uses and abuses as opportunities to express his opinions about complex political, cultural, and economic domains of human-fungal relationships. Unfortunately these discussions, at times, come off as a bit offensive and heavy handed. With that said, Mushroom remains an interesting, accessible read for fungal enthusiasts and students.

Part of what makes Mushroom interesting is Money's ability to weave together topics like evolution, mycological history, and fungal classification and make them both scientifically and socially relevant. Fungal biology and ecology is explained in part through details about professional and amateur mycologists through the ages, interspersed with current research and a lot of personal commentary that keeps things lively. I was especially interested to read about pioneering women mycologists from the late 19<sup>th</sup> and early 20<sup>th</sup> centuries. Too many of the textbooks I read as an undergraduate would have you believe Marie Curie was the only woman who ever managed to have a scientific thought, and I am a fan of any text that continues to debunk that trope. And while discussing the role of spores in fungal classification, Money is able to weave in comments on the omnipresent concern over declining numbers of fungal taxonomists (do we have enough data yet to put them on a red list??), and also praise their important work.

Money also re-scales his discussion to make it more accessible, impressive, and amusing to the reader. A little more about spores helps me make my point. For the uninitiated,



spore dispersal may not seem like the most riveting of topics. I mean, how much time do you think the average person spends thinking about spores, never mind the details of how they get around? As a social scientist I am here to tell you, not a lot. That's not what most people think about. Sorry. But, with the idea now and forever firmly planted in my head that a pork chop is more likely to hit the annoying person across the room than a pea is (p. 43), I have a much better appreciation for the relationship between the weight and size of a spore and its worldly adventures. On the topic of mushroom poisoning, where so much wariness and anxiety about mushrooms comes from, Money points out that there were 5,644 to 8,821 mushroom poisonings in the U.S. over the last five years. This may seem like a lot, and of course we can all agree that we do not want anyone to be poisoned by eating mushrooms. However, 2008 statistics on poisoning by toilet bowl cleaning agents (9,000) and poisonings by swallowing cosmetics and personal care products (200,000!) help us put things in perspective.

Still, at times the tone in this text is equal parts mycophilic (great for an interested reader) and extremely misanthropic (potentially offensive to an interested reader). This is particularly interesting to a thoughtful reader, because Money clearly deeply admires and is passionate about fungi to the extent that he anthropomorphizes many of their actions and behaviors, while demonizing the habits and choices of actual humans, which he regularly refers to as apes. This, combined with his stark stances on evolution and atheism, which come across strongly in these pages, may also alienate certain readers. In fact, in 175 pages Money manages to take fairly pointed jabs at the political Right, creationists, inattentive waitresses, people he feels are perpetuating overpopulation, and anyone and everyone interacting with fungi in a way that he doesn't approve of or agree with, or which he deems not supported by science, as defined by his experience. This last comment is especially apparent in his take on mushroom harvesting and fungal conservation. Chapter 4 is devoted to a discussion of mushroom harvesting, and early on Money positions himself in opposition to a large segment of the academic mycological community, including those who have published in peer reviewed journals on this subject, who are supportive of certain levels of harvesting. My impression from these pages is that Money would prefer that no mushrooms be harvested, but is slightly more tolerant of "cutting their throats" (p. 83) when it is done by scientists or with reverence by natural history-type amateurs. No one else deserves this privilege, nor should others be advocating for it. Because of this position, other major proponents of mycology and champions of fungal PR campaigns fall prey to Money's sharp pen. Paul Stamets, Andrew Weil, Gordon Wasson, Rebecca McLain, and generally anyone associated with fungi through folklore, anthropology, or medicine may feel the sting of some of this prose.

*Continued on following page*

With that said, Mushroom gave me plenty to think about, and kept me entertained for at least a few hours, and those are both hallmarks of time well spent with a book. Anyone interested in mushrooms that would like an easy and entertaining read for a plane, train, or automobile ride or wants to introduce fungal worlds to the uninitiated, would be well equipped with this text. I am already considering using it in an ethnomycology class for non-biology majors. As Money writes, “the whole history of our species can be told

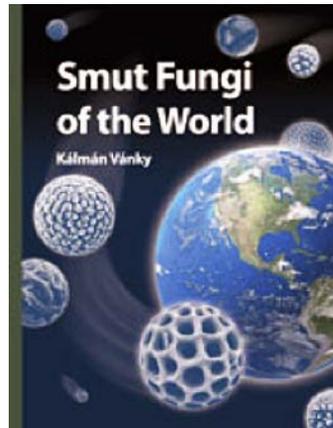
through our interactions with mushrooms, from our continuing emancipation from superstition to our forthcoming demise,” (p. 77). No small task for fungi or for their interpreters, but I think we are up to the challenge.

**Elizabeth Barron**

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## Smut Fungi of the World

*Smut Fungi of the World*. 2011. Kálmán Vánky. APS Press, St. Paul, MN. [www.apsnet.org](http://www.apsnet.org). ISBN: 978-0-89054-398-6. 1480 pp, 650 line drawings, 2800 micrographs. Price: \$499.00 (hardcover).



This is an astonishing publication, wonderfully presented, starting with its fascinating cover. Looking at it I imagined the earth under a barrage of smut fungal spores, plants running for their lives. Ok, let's get back to reality. After reading through this book it occurred to me that it might soon be regarded the “*Holy Book of Smut Fungi*” because it's such an impressive work. Anyone with an interest in smut fungi cannot ignore it.

The book includes a brief introduction with some general explanations and remarks about its use and contents. This is followed by a presentation of a hierarchical classification of the “classical” (quotation marks of Vánky) basidiomycetous smut fungi, which includes seven orders belonging to the Subphylum Ustilaginomycotina and one (Microbotryales) which was recently relocated to the Subphylum Pucciniomycotina. Next there is a key to the 93 genera that are presently recognized. The key is conveniently based on the host plant families, mirroring the close fungus-host connections typical of this group of fungi. This host-based key narrows down the options and makes the identification at generic level easier to perform.

After these introductory pages the core of the book is presented in a very friendly format: the genera, and the species, are given in alphabetical order. Within each genus, except for the monotypic genera, a key to the species is also provided. For each of the 93 genera a brief description, highlighting its diagnostics features, is provided. For each species

the type information, followed by a description (most resulting from the personal examination of the types by the author – an incredible feat, to say the least), host range and geographical distribution are provided. Nevertheless the author calls the reader's attention to the fact that the host lists may be incomplete and that the geographic distribution is not given in detail. Excellent light and scanning micrographs are provided for most of the species totaling nearly 2,800 pictures of the spores, plus 650 line drawings of the symptoms on infected plants. According to the author, after the manuscript was finished 37 new species or new combinations were published. He took care to include these as an addendum to the book, although keys for these are not provided. The total amount of fully described species is 1,688; comments are included on an additional 202 taxa that the author considers of dubious validity, for various reasons. After that a “Selected smut fungus literature” section follows, which includes more than 2,000 references for the group. Additionally there is an alphabetical list of the host genera and the smut species that affect them, and in the end an “Index of fungal names” with valid smut taxa in italics and page numbers with descriptions in bold. All this results in a very quick way to find the taxon that you are looking for, even if you do not have any initial idea of what it is!

This book is a monumental work crowning more than half a century of Dr. Kálmán Vánky's life dedicated to this important and fascinating fungal group. This book can already be regarded one of the most important contributions to mycology in the XXI century, and will certainly be the most important textbook for the smut fungi for decades to come.

Every mycologist and plant pathologist dedicated to the smut fungi should own a copy of this book, a worthwhile investment. Additionally, this magnificent book belongs in the libraries of all research institutions and universities.

**Dartanhã J. Soares**

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# MYCOLOGICAL CLASSIFIEDS

## Mold and Fungus Testing and Identification Services

Biochallenge tests for ink, microfluidic materials; testing for resistance of materials to fungal invasion. Identification of fungal contaminants in manufactured products. Epifluorescent microbial detection in deionized water systems, microfluidic devices, medical

fluids, manufactured goods. Identification of fungi from buildings, animal and plant diseases. 10% discount for regular and sustaining MSA members. Email [info@pacificanalytical.com](mailto:info@pacificanalytical.com). For more information see [www.pacificanalytical.com](http://www.pacificanalytical.com)

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Center for Regulatory Research, LLC specializes in regulatory permit application services for biological control and biotechnology organisms/products. Let us evaluate your research discoveries for commercial potential and environmental impacts. We also offer assistance with writing proposals for SBIR grant programs (Small

Business Innovation Research) that fund new commercial ventures. Contact Dr. Sue Cohen by email ([sdcohen@regresearch.com](mailto:sdcohen@regresearch.com)) or by phone (612-246-3838). For more information about our company, visit our website at [www.regresearch.com](http://www.regresearch.com).

# MYCOLOGICAL JOBS

## Professor of Environmental and Occupational Health Sciences

**Search #AA3056.** The Department of Environmental and Occupational Health Sciences at the University of Washington invites applications and nominations for a 12-month, full-time (100% FTE) tenure-eligible faculty position at the rank of Associate Professor WOT or Full Professor WOT, with expertise in environmental and occupational health microbiology. "WOT" denotes positions that do not confer tenure automatically upon appointment to the faculty. WOT faculty are eligible for tenure contingent upon the availability

of funding and meeting the Department's criteria for tenure. It is anticipated that interviews will begin in Summer 2012, and that the appointment will begin in January 2013. The Department is committed to increasing the diversity of its faculty, and encourages women and minority applicants to apply.

Further information can be found at <http://www.washington.edu/admin/acadpers/ads/aa3056.html>

## Manager, Penn State University Mushroom Research Center

**Research Associate in Mushroom Science and Manager of the Penn State University Mushroom Research Center**, Penn State University, University Park, PA. This is a non-

tenure track, PhD level position. Details are at: <http://msafungi.org/wp-content/uploads/mushroom-position-description132012.pdf>

## Post-doctoral Position in Fungal Phylogenetics

A Post-Doctoral position in fungal phylogenetics is available in the Hibbett laboratory at Clark University (<http://www.clarku.edu/faculty/dhibbett/>). The Post-doc will participate in a large collaborative endeavor supported by the NSF AVA-TOL Program that is aimed at synthesizing a comprehensive tree of life from published analyses, and developing novel tools for community-driven annotation of the tree. Specific responsibilities will include (1) assembly and integration of phylogenetic datasets and trees representing all groups of Fungi; (2) coordination with a multi-laboratory team including software developers and systematists to develop and test new methods for tree integration and annotation; (3) outreach to the fungal systematics community; (4) contribution to a distributed web-based undergraduate course on assembling the tree of life, and co-instruction of a linked undergraduate course at Clark University.

The ideal candidate will be a productive researcher with interests in fungal systematics and the construction and interpretation of large-scale phylogenetic trees, will have excellent communication

and interpersonal skills, and will seek a career involving both research and education. Candidates lacking background in fungal systematics, but with strong qualifications in phylogenetics, and excellent potential as educators, may be considered.

It is anticipated that the position will be available beginning May 1, 2012. Up to three years of support is possible, depending on progress. Funding is contingent on final NSF approval.

To apply, e-mail a curriculum vitae, statement of research interests and career goals, PDFs of major publications, and names and e-mail addresses for three references. Applications from women and members of underrepresented groups in science are encouraged.

Clark University is an EEO/AA Employer.

**David S. Hibbett**  
Biology Department  
Clark University  
Worcester, MA 01610  
(508) 793-7332  
[Dhibbett@clarku.edu](mailto:Dhibbett@clarku.edu)

# MYCOLOGY ON-LINE

Below is an alphabetical list of websites featured in *Inoculum*. Those wishing to add sites to this directory or to edit addresses should email [dnavtig@gmail.com](mailto:dnavtig@gmail.com). **Unless otherwise notified**, listings will be automatically deleted after one year (at the editors discretion).

- A New Web Page About Tropical Fungi, Hongos Del Parque "El Haya" (58-5)  
**[hongosdelhaya.blogspot.com/](http://hongosdelhaya.blogspot.com/)**
- ASCOFrance.com, a very useful site for illustrations of ascomycetes including anamorphs (accessible in both French and English)  
**[ascofrance.com/?lang=us](http://ascofrance.com/?lang=us)**
- Ascomycota of Sweden  
**[www.umu.se/myconet/asco/indexASCO.html](http://www.umu.se/myconet/asco/indexASCO.html)**
- Basidiomycete Research Group (University of Helsinki, Finland) studies systematics, ecology and evolution of fungi in forest environment.  
**[www.basidio.fi](http://www.basidio.fi)**
- Bibliography of Systematic Mycology  
**[www.speciesfungorum.org/BSM/bsm.htm](http://www.speciesfungorum.org/BSM/bsm.htm)**
- Cold Spring Harbor Laboratory; Meetings & Courses Programs (58-2)  
**[meetings.cshl.edu](http://meetings.cshl.edu)**
- Collection of 800 Pictures of Macro- and Micro-fungi  
**[www.mycolog.com](http://www.mycolog.com)**
- Cordyceps Website  
**[www.mushtech.org](http://www.mushtech.org)**
- Cornell Mushroom Blog (58-1)  
**<http://blog.mycology.cornell.edu/>**
- Cortbase (58-2)  
**[andromeda.botany.gu.se/cortbase.html](http://andromeda.botany.gu.se/cortbase.html)**
- Corticoid Nomenclatural Database (56-2)  
**[www.phyloinformatics.org/](http://www.phyloinformatics.org/)**
- The Cybertruffle internet server for mycology seeks to provide information about fungi from a global standpoint (59-3).  
**[www.cybertruffle.org.uk](http://www.cybertruffle.org.uk)**
- Cyberliber, a digital library for mycology (59-3).  
**[www.cybertruffle.org.uk/cyberliber](http://www.cybertruffle.org.uk/cyberliber)**
- Cybernome provides nomenclatural and taxonomic information about fungi and their associated organisms, with access to over 548,000 records of scientific names (59-3).  
**[www.cybertruffle.org.uk/cybernome](http://www.cybertruffle.org.uk/cybernome)**
- Dictionary of The Fungi Classification  
**[www.indexfungorum.org/names/fundic.asp](http://www.indexfungorum.org/names/fundic.asp)**
- Distribution Maps of Caribbean Fungi (56-2)  
**[www.biodiversity.ac.psiweb.com/carimaps/index.htm](http://www.biodiversity.ac.psiweb.com/carimaps/index.htm)**
- Entomopathogenic Fungal Culture Collection (EFCC)  
**[www.mushtech.org](http://www.mushtech.org)**
- Fungal Environmental Sampling and Informatics Network (58-2)  
**[www.bio.utk.edu/fesin/](http://www.bio.utk.edu/fesin/)**
- Fungi of Ecuador  
**[www.mycokey.com/Ecuador.html](http://www.mycokey.com/Ecuador.html)**
- German Mycological Society DGfM  
**[www.dgfm-ev.de](http://www.dgfm-ev.de)**
- Glomeromycota* PHYLOGENY  
**[amf-phylogeny.com](http://amf-phylogeny.com)**
- MYCO-LICH facilitates mycology and lichenology studies in Iran.  
**[www.myco-lich.com](http://www.myco-lich.com)**
- Mycologia*  
**[mycologia.org](http://mycologia.org)**
- Humboldt Institute — Located on the eastern coast of Maine, the institute is known for the extensive series of advanced and professional-level natural history seminars it has offered in Maine since 1987, along with ecological restoration seminars and expeditions to the neotropics. It publishes the *Northeastern Naturalist* and *Southeastern Naturalist*, two scholarly, peer-reviewed, natural history science journals.  
**[www.eaglehill.us](http://www.eaglehill.us)**
- Website relating to the taxonomy of the Hysteriaceae & Mytiliniaceae (Pleosporomycetidae, Dothideomycetes, Ascomycota) to facilitate species identification using a set of updated and revised keys based on those first published by Hans Zogg in 1962. 59(4)  
**[www.eboehm.com/](http://www.eboehm.com/)**
- Index of Fungi  
**[www.indexfungorum.org/names/names.asp](http://www.indexfungorum.org/names/names.asp)**
- Interactive Key to *Hypocreales* of Southeastern United States (57-2)  
**[nt.ars-grin.gov/sbmlweb/fungi/keydata.cfm](http://nt.ars-grin.gov/sbmlweb/fungi/keydata.cfm)**
- ISHAM: the International Society for Human and Animal Mycology  
**[www.isham.org](http://www.isham.org)**
- JSTOR (58-3)  
**[jstor.org](http://jstor.org)**
- Libri Fungorum Mycological Publications (58-3)  
**[194.203.77.76/LibriFungorum/](http://194.203.77.76/LibriFungorum/)**
- Mold Testing and Identification Services (58-2)  
**[www.pioneer.net/~microbe/abbeylab.html](http://www.pioneer.net/~microbe/abbeylab.html)**
- McCrone Research Institute is an internationally recognized not-for-profit institute specializing primarily in teaching applied microscopy. 59(4)  
**[www.mcri.org](http://www.mcri.org)**
- Mountain Justice Summer (58-3)  
**[www.MountainJusticeSummer.org](http://www.MountainJusticeSummer.org)**
- Mycology Education Mart where all relevant mycology courses can be posted. **[www2.bio.ku.dk/mycology/courses/](http://www2.bio.ku.dk/mycology/courses/)**
- MycKey  
**[www.mycokey.com](http://www.mycokey.com)**
- The Myconet Classification of the Ascomycota  
**[www.fieldmuseum.org/myconet](http://www.fieldmuseum.org/myconet)**
- New Electronic Journal about mushrooms from Southeast Mexico (61-4)  
**<http://fungavera.blogspot.com>**
- Northeast Mycological Federation (NEMF) foray database (58-2)  
**[www.nemfdata.org](http://www.nemfdata.org)**
- Pacific Northwest Fungi — A peer-reviewed online journal for information on fungal natural history in Alaska, British Columbia, Idaho, Montana, Oregon and Washington, including taxonomy, nomenclature, ecology, and biogeography.  
**[www.pnwfungi.org/](http://www.pnwfungi.org/)**
- Pleurotus* spp.  
**[www.oystermushrooms.net](http://www.oystermushrooms.net)**
- Rare, Endangered or Under-recorded Fungi in Ukraine (56-2)  
**[www.cybertruffle.org.uk/redlists/index.htm](http://www.cybertruffle.org.uk/redlists/index.htm)**
- Registry of Mushrooms in Art  
**[members.cox.net/mushroomsinart/](http://members.cox.net/mushroomsinart/)**
- Robigalia provides information about field observations, published records and reference collection specimens of fungi and their associated organisms, with access to over 685,000 records (59-3).  
**[www.cybertruffle.org.uk/robigalia](http://www.cybertruffle.org.uk/robigalia)**
- Searchable database of culture collection of wood decay fungi (56-6)  
**[www.fpl.fs.fed.us/rwu4501/index.html](http://www.fpl.fs.fed.us/rwu4501/index.html)**
- Small Things Considered — A microbe blog on microbes in general, but carries occasional pieces specifically on fungi.  
**[schaechter.asmblog.org/schaechter/](http://schaechter.asmblog.org/schaechter/)**
- Tree canopy biodiversity project University of Central Missouri (58-4)  
**[faculty.cmsu.edu/myxo/](http://faculty.cmsu.edu/myxo/)**
- Trichomycete site includes monograph, interactive keys, a complete database, world literature, etc. (61-4)  
**[www.nhm.ku.edu/~fungi](http://www.nhm.ku.edu/~fungi)**
- The TRTC Fungarium (58-1)  
**[bbc.botany.utoronto.ca/ROM/TRTCFungarium/home.php](http://bbc.botany.utoronto.ca/ROM/TRTCFungarium/home.php)**
- U.S. National Fungus Collections (BPI)  
Complete Mushroom Specimen Database (57-1)  
**[www.ars.usda.gov/ba/psi/sbml](http://www.ars.usda.gov/ba/psi/sbml)**
- Valhalla provides information about past mycologists, with names, dates of birth and death and, in some cases, biographies and/or portraits (59-3).  
**[www.cybertruffle.org.uk/valhalla](http://www.cybertruffle.org.uk/valhalla)**
- Website for the mycological journal *Mycena* (56-2)  
**[www.mycena.org/index.htm](http://www.mycena.org/index.htm)**
- Wild Mushrooms From Tokyo  
**[www.ne.jp/asahi/mushroom/tokyo/](http://www.ne.jp/asahi/mushroom/tokyo/)**

# CALENDAR OF EVENTS

## NOTE TO MEMBERS:

Those wishing to list upcoming mycological courses, workshops, conventions, symposia, and forays in the Calendar of Events should include complete postal/electronic addresses and submit to *Inoculum* editor Don Natvig at [dnatvig@gmail.com](mailto:dnatvig@gmail.com).

### May 28, 2012

Forum on the Future of Microbial Databases  
Tamagawa University  
[http://www.tamagawa.ac.jp/sisetu/gakujutu/alsrc/forum/microbial\\_db\\_forum\\_e.htm](http://www.tamagawa.ac.jp/sisetu/gakujutu/alsrc/forum/microbial_db_forum_e.htm)

### June 11-15, 2012

18th Congress of the International Society  
of Human and Animal Mycology (ISHAM)  
Berlin, Germany  
<http://www.isham2012.org/index.php>

### June 18-22, 2012

Course: Introduction to Food- and Air-Borne Fungi  
Ottawa, Ontario, Canada  
[www.indoormold.org/courses.htm](http://www.indoormold.org/courses.htm)

### July 9-13, 2012

The XVII<sup>th</sup> Biennial Workshop on the Smuts  
and Bunts  
Shenzhen, Guangdong, China  
Contact Dr. Wu Pinshan, [smut2012@163.com](mailto:smut2012@163.com)

### July 15-19, 2012

2012 MSA Meeting  
Yale University, New Haven, CT

### July 31 - Aug 5, 2012

Yeast Genetics and Molecular Biology Meeting  
Princeton University, Princeton, NJ  
<http://www.yeast-meet.org/2012/>

### August 2-5, 2012

36th Annual Samuel Ristich Foray, NEMF  
East Stroudsburg, PA  
<http://www.nemf.org/files/menu.htm>

### August 4-8, 2012

American Phytopathological Society  
Providence, RI  
<http://www.apsnet.org/Pages/default.aspx>

### Aug 5-10, 2012

Ecological Society of America  
Portland, OR  
<http://www.esa.org/portland/>

### Sept 3-6, 2012

BMS Fungal Interactions  
Alicante, Spain  
<http://www.britmycolsoc.org.uk/science/scientific-meetings/2012-alicante/>

### Dec 13-16, 2012

NAMA Foray  
Scotts Valley, CA  
<http://www.namyco.org/>

## Mycological Society of America — Gift Membership Form

Sponsoring a gift membership in MSA offers tangible support both for the recipient of the membership as well as for mycology in general. Providing both *Mycologia* and *Inoculum*, a gift membership is an excellent way to further the efforts of our mycological colleagues, especially those who cannot afford an MSA membership. In addition to a feeling of great satisfaction, you also will receive a convenient reminder for renewal of the gift membership the following year.

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Please send renewal notices to:

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(YOUR address) \_\_\_\_\_  
Phone \_\_\_\_\_ FAX \_\_\_\_\_ Email \_\_\_\_\_

I agree to pay \$98\* for this membership by check (payable to MSA, drawn on US bank)  VISA  Mastercard   
Acct. # \_\_\_\_\_ Name (as it appears on card) \_\_\_\_\_ Exp. date \_\_\_\_\_

Send this form to: MSA Business Office, PO Box 1897, Lawrence KS 66044  
or FAX to (785) 843-1274, Attn: Processing Department

\*If this membership is given after June 1, please add \$10 to cover postage for past issues.

# The Mycological Society of America Sustaining Members 2012

*The Society is extremely grateful for the continuing support of its Sustaining Members. Please patronize them and, whenever possible, let their representatives know of our appreciation.*

## **Fungi Perfecti**

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