National Science Foundation
Research Experience for Teachers (RET)

by Patricia A. Smith and Harold W. Keller

Program Description of RET — RET supplement awards represent a new program activity that supports participation of K-12 teachers of science and mathematics. The intent of these awards is to facilitate professional development of teachers at the cutting edge of science through strengthened partnerships between institutions of higher education and local school districts. This NSF award was submitted through the Division of Environmental Biology, Biodiversity Surveys and Inventories Program, as a supplement request that was part of an active NSF grant # 0343447 entitled “Biodiversity and Ecology of Tree Canopy Biota in the Great Smoky Mountains National Park.” Prospective applicants for an RET must first locate a current NSF grant awardee willing to develop a partnership, then consult with the appropriate NSF Program Officer before the application is submitted. The application requirements include a three page descriptive narrative, a two page curriculum vitae, budget justification, and a prepared budget with a total limit of $10,000 per teacher. The supplement is submitted electronically through the grant-holder’s university by NSF Fastlane. The RET narrative should clearly articulate in some detail the prospective teacher’s involvement in the Principal Investigator’s research project and how the involvement will lead to transfer of new knowledge into classroom practice. Applications can be submitted at any time and are reviewed internally within NSF programs. More details are available in NSF Program Announcement NSF 03-056.

Educational Experience of Applicant — Patricia A. (Trish) Smith is a seventh grade life science teacher from Warrensburg R-VI School District, Warrensburg Middle School (WMS), in Warrensburg, Missouri. She was invited by Dr. Harold W. Keller of Central Missouri State University to apply for an RET supplement to his NSF grant. Trish received her Bachelor of Science Degree in Education and her Master’s of Science in Curriculum and Instruction from Central Missouri State University (CMSU). With her major in biology,

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Trish has developed long-term working relationships with several of her former professors, which is how she learned of the new NSF RET program and was subsequently introduced to Dr. Keller. Trish prefers to teach an inquiry-based life science curriculum and stimulates her students’ interest in learning by incorporating the numerous animals housed in her classroom (warrensburg.k12.mo.us/animals/). In the past, she has developed several Internet-based activities for her students to participate in, including I-ADVENTURES, WebQuests, and student web pages, all of which are linked to her website at warrensburg.k12.mo.us/teachers/ts/.

Objectives of RET Supplement in Great Smoky Mountains National Park — The objectives are to:

- allow the teacher to participate in the summer tree canopy biodiversity field research in GSMNP
- learn the recognition of different taxa, collection techniques, and laboratory culture procedures from a multidisciplinary research team of international experts and participating undergraduate and graduate students
- provide the basis for development of parallel research experiences for 7th grade middle school students which will enhance their interest in biology and careers in science
- extend the benefits to secondary student’s world-wide as the student materials and research experiences will be published on the internet as an interactive web-based inquiry activity.

Participating students should experience the three phases of research emphasized in the original GSMNP grant: the Adventure Phase (tree climbing and sampling), the Laboratory Phase (sample sorting and moist chamber cultures), and the Publication Phase (poster and oral platform presentations and writing topical narratives).

Objectives of GSMNP tree canopy biodiversity research project — The objectives are to:

- complete the first comprehensive survey and inventory of tree canopy biodiversity for biota represented by myxomycetes, other mycetozoan groups (protostelids and dictyostelids), fungi, mosses, liverworts, lichens, ferns, selected insect groups, and molluscs in Great Smoky Mountains National Park
- assemble a multidisciplinary research team of experts who will collect, identify, and curate this diverse group of organisms and serve as mentors who will give special lectures, slide shows, hands on identification of specimens, and field demonstrations to aid undergraduate students in the recognition of specimens and collection of bark samples
- compare the assemblages of tree canopy organisms with those found on ground sites
- search for species new to science in all of the targeted groups of organisms
- sample for cryptogams along vertical transects of individual trees at different heights to quantify the association of the relative species composition, abundance, and diversity of these assemblages with the available environmental characteristics (host tree species, vegetation type, height class, light, pH, and humidity)
- provide research experiences for students that will enhance opportunities for postgraduate study.

Pre-trip Preparations at Central Missouri State University — Trish and her husband Stan (a former biology teacher who is now an instructional technology coordinator for the Warrensburg school district) began documenting this research project in Warrensburg as they interviewed, video taped, and photographed the student climbers during several pre-trip meetings and climbing clinics. Former graduate student and tree climber, Kenneth Snell, was the instructor for the demonstration and tying of all knots used to access the tree canopy. His first-hand experience as the project leader for the summers of 2000 and 2001 was helpful in preparing the prospective climbers for the daily activities of the research team in GSMNP.

Charly Pottorff was the instructor for the tree-climbing school held at the 200-acre forest research and education Pertle Springs area of the CMSU campus. Charly taught students how to use the double rope climbing system, including knot tying, proper use of tree climbing gear, tree climbing body positions, and how to advance to the highest possible position in the tree canopy. Charly Pottorff is an internationally known arborist who has a professional tree service in Manhattan, Kansas. Safety precautions and procedures were repeatedly emphasized for the double rope climbing technique and potential hazards were described while sampling in the tree canopy. There was a swarm of bees in a nearby tree and poison ivy on another tree that served as good examples of possible tree climbing hazards. Eight undergraduate students completed the tree climbing
Millipede female of Abacion magnum (class Diplopoda, order Callipodida: family Abacionidae) feeding on an immature, bright red, myxomycete fruiting body of Tubifera ferruginosa, (class Myxomycetes, order Liceales).

Transferring of New Knowledge into Classroom Practice — Trish is now working to create a two-tiered website that will allow worldwide access to the field experiences of tree canopy research and allow her secondary students the opportunity to conduct parallel field research in their outdoor laboratory at Pertle Springs near the University campus. The website activities will mirror the three phases: the Adventure Phase, the Laboratory Phase, and the Publication Phase. The first tier of the website, Exploring Life in the Forest Canopy, is still under construction as minor revisions will be made as a result of field-testing it with the WMS students, and it will be enhanced with digital movie clips of the training, field research, and interviews with the participants. Anyone who visits the first tier of the website (warrensburg.k12.mo.us/iadventure/GSMNPiadventure/) will be able to virtually experience tree canopy research and learn what the ATBI is all about. Interested student groups can then choose to continue to the second tier of the web activities and conduct similar field research in their region.

This second tier will be fashioned after the iAdventure model developed by Stan Smith (warrensburg.k12.mo.us/iadventure/whatis.html) An iAdventure is a problem solving activity in which students determine the direction and outcome of a content-rich storyline, using resources available on the Internet, particularly resources providing real-world data and primary documents. The activity is designed to help students discover how the characters could use access to unlimited data and information (the Internet) to solve problems and make choices. Although this second tier is not yet online, the related field, laboratory, and publication activities are being
developed and field-tested by Trish’s Warrensburg Middle School (WMS) seventh graders.

WMS students were introduced to the idea of conducting parallel research as they utilized one of the school’s laptop computer labs to explore the website’s first tier, “Exploring Life in the Forest Canopy”. A “worksheet” was developed for the students to fill out as they worked to ensure that they experienced all that was involved in developing and conducting field research. Ideally, months could be spent preparing the students to conduct the field research by teaching smaller lessons on the multitude of skills that would be utilized. In reality, the Warrensburg students had only a few weeks to work on a few of the necessary skills to be able to get out into the field prior to cooler weather. This required careful planning by Trish to cover the most essential skills and to develop field task guide sheets for the students to take into the field with them. All of the teaching plans and support documents developed will be available online as part of the website.

Trish’s past experience in developing quality field experiences for groups of students helped to develop a plan so all students were sampling and collecting data in the field similar to the GSMNP research team. The safety of the 7th grade students must be a priority; therefore they did not climb, use knives, or shoot lines with the Big Shot...much to their dismay! Canopy flight-intercept insect traps with upper and lower bottles of alcohol were installed a week prior to collection of insect samples by students. The list of field tasks included collecting bark samples, tree data, environmental data, insect specimens collected with canopy traps, insects from sweep nets and leaf litter, and lichen collections.

Students were divided into four major groups and then subdivided into task groups of one or two students, professors and students from both the Biology Department and the Curriculum and Instruction Department were enlisted to help, as were parents. Hours of planning and gathering materials paid off when, on September 28th and 29th, 2004, six groups of 20 to 24 students were transported to Pertle Springs for one-hour field trips. The quantity of specimens and data will keep them busy for weeks, or maybe months!

Moist chamber cultures of bark samples will enable students to observe a living miniature ecosystem composed of myxomycetes, fungi, lichens, mosses, liverworts, green algae, cyanobacterial algae, myxobacteria, tardigrades, insects, nematodes, and possibly other invertebrates. As this article is being submitted, the classes have entered the Laboratory Phase of the research and these culture plates have already proven to be fascinating to the students, as Dr. Keller has helped them identify numerous rare myxomycetes on Red Cedar, American Elm, and White Oak. The moist chamber...
students will continue to be incorporated into lessons all year, as the students cover Kingdoms, ecosystems, invertebrates, and more. The collected insect specimens will be used to perfect the use of taxonomic keys and create a basis for understanding diversity and adaptation. The density and diversity of insect orders will be logged and there is the possibility of making comparisons to the insects collected in the GSMNP as WMS students have been working to count the already sorted GSMNP specimens for Dr. Wilson.

After all of the specimens are examined and the initial laboratory exercises are complete, students will be expected to develop their own research questions, design their own experiment or investigation using the specimens and collected data. This will lead them to the Publication Phase, at which time they will be expected to create poster presentations to share with parents and the school community. It is hoped that some will take this further and submit entries to the Science Day event at CMSU in the spring.

Eventually the three project phases will be incorporated into the second tier of the website as an iAdventure experience, allowing students to choose an area of interest (myxomycetes, lichens, or insects) and hopefully this website experience will encourage secondary students, in Warrensburg and beyond, to choose some form of field biology as their future career.

**First Lichen BioQuest in GSMNP** — Dr. Keller’s GSMNP research also reached out to others as he helped produce the first Lichen Bioquest held there. The Bioquest was held on June 19th Saturday and 20th Sunday, 2004 at the Great Smoky Mountains Institute at Tremont (celebrating its 35th anniversary) near Townsend, Tennessee. Over 30 individuals registered including park service scientists and staff, park interns, Discover Life in America volunteers, public school science teachers, amateur scientists interested in learning more about lichens, university students and faculty, and the general public. Presentations were geared for a general audience. BioBlitz, MycoBlitz, or BioQuests are special events of limited time duration (24 hours to several days), designed to increase the public’s awareness and involvement in the diversity of life in a given area. If the area is small containing several hundred acres, for example, Pertle Springs, every taxonomic group is collected and identified. If the area is larger, for example, GSMNP containing over a half million acres, a number of expert taxonomists, in this case lichenologists, survey and inventory as many habitats as possible and concentrate on the collection and identification of a single target group of organisms such as lichens.

Two world-class lichenologists served as experts for identification and as foray captains. H. Thorsten Lumbsch, Ph.D., Assistant Curator, Department of Botany, The Field Museum, Chicago, Illinois presented a lecture that covered lichen symbioses, morphology (growth forms and terminology), reproduction, physiology, ecology, importance, lichen systematics, and taxonomic characters. Steven B. Selva, Ph.D., Professor of Biology and Environmental Biology, University of Maine at Fort Kent presented a lecture on the use of calicioid lichens (stubble lichens) as environmental indicators of old growth forests. Keith Langdon, Inventory and Monitoring Coordinator, GSMNP, gave a brief introduction to collecting in the park with special remarks about the endangered lichen species *Gymnoderma lineare*. A checklist of lichen species for the Lichen BioQuest and our additional new park lichen records will be published elsewhere in the near future. This Lichen BioQuest was funded by a grant award from Discover Life in America.

**In Closing,** the RET supplement will hopefully interest secondary teachers world-wide to get their students out into the field and their students to consider field biology as a career. Please note that there are research and teaching assistantships for Masters Degree level graduate students supported by the NSF grant. For additional information please visit the web site at faculty.cmsu.edu/myxo/ and/or contact by e-mail Trish Smith, tssci@earthlink.net and Harold W. Keller, keller@cmsu1.cmsu.edu.

**Acknowledgements** — We wish to acknowledge grant funds from the National Science Foundation, Discover Life in America, and National Geographic Committee for Research and Exploration. Our thanks go to the students, faculty colleagues, ground crew members, student parents, and collaborating experts from other institutions who helped collect and identify cryptogams. Glenda Carmack, Terry McNeely, and Lisa Schmidt provided the expertise to photograph and digitize our color images.

**Questions or comments should be sent to Harold Keller, Central Missouri State Univ., Department of Biology, 306 W C Morris, Warrensburg, MO 64093, email: keller@cmsu1.cmsu.edu.**

**Change of Author Information for Fungal Bonsai Article**

Questions or comments about the *Fungal Bonsai* article in *Inoculum* 55(5) should go to Ghulam M. Rabbani, (Mycologist and Technical Manager) at grabbani@STATAnalysis.com, or contact him at STAT Analysis Corporation, 2201 West Campbell Park Drive, Chicago, Illinois 60612. His telephone number is (312) 733-0551.
Dear Friends and Colleagues,

I want to devote this first message to events that have happened since the Asheville meeting and will affect the Society during the coming year. Among these happenings are the planning for the Hawaii meeting, establishment of a new MSA committee on Genetics and Cell Biology, changes in the Mycologia editorial office, implications for MSA of a proposal for making scientific publications free to the public, and establishment of a committee to review the current permit process for movement of organisms nationally and internationally.

MSA meeting 2005, 2006: Planning is in full swing for the symposia for the joint meeting of the MSA and the Mycological Society of Japan at Hilo next summer with Jean Lodge, Program Chair, spearheading the effort. Maren Klitch, Chair of the MSA-MSJ 2005 Meeting Planning Committee, is in Japan this month and will meet with members of MSJ to solidify plans. Don Hemmes, Local Arrangements Committee, is far along in organizing for social events and fieldtrips and is seeking funds to offset the expected high cost of this venue. This is shaping up to be an exciting meeting in an exciting location. Plan now to attend. Planning is also underway for the 2006 meeting in Quebec City with the American Phytopathological Society. President-elect James Anderson and past President Linda Kohn are heading up the planning committee.

New Genetics and Cell Biology Committee: A new rotating Committee on Genetics and Cell Biology has been formed with Steve Harris, who was instrumental in getting the committee established serving as the first chair. With the increasing cross-disciplinary nature of scientific research, we welcome the expansion of these areas within the Society. New ideas from these fields can stimulate other subdisciplines in mycology as well as vice versa. Mycology is strongest when all subdisciplines are fully represented within the Society.

Mycologia editorial office: On Sept. 15 Donald Natvig became the new Editor-in-Chief of Mycologia. The process of transferring the editorial office from New Orleans to Albuquerque is now in progress. We extend our sincere thanks to past Editor-in-Chief Joan Bennett for a job well done, including establishing the on-line manuscript processing system in the Mycologia editorial office. We also owe special thanks to John Donahue for has many hours of volunteer editorial assistance.

Cost of scientific publication: These are exciting times but hard times financially for the Society. We are seeing many exciting advances in analysis of fungal biodiversity, ecology, phylogenetics, and development made possible by use of molecular tools to identify and relate fungi in the laboratory and in ecosystem, and by the use of complete genome sequences and genomics to understand fungal genome evolution and gene function. But these are hard times in the limited return on the Society’s investments, which restricts the funds available to support aspiring young mycologists, and in the increasing costs of publication. While we all benefit by having Mycologia available on-line and are beginning to experience the greater efficiency of editing manuscripts with the electronic manuscript processing system, these new technologies come at an added cost without an increase in the number of subscriptions. A looming threat is the Open Access method for scientific publications that has emerged from the biomedical field. This Open Access policy seeks to make research supported by government funds free to the public on publication, and would make the author responsible for all costs of manuscript review and publication. While the model is proposed for NIH-funded research, there is an implication that the model could be mandated for all government-supported research. For small scientific societies, such as MSA, the Open Access model could undermine financial stability. At this writing we are reviewing a decision to join with the American Institute of Biological Sciences, a group in which we are represented by past President John Taylor, to support the DC Principles Coalition for Not-for-profit Publishers, which seeks to preserve the ability of not-for-profit publishers to make decisions that insure public access and financial stability, and best serve their members.

Ad hoc committee to review the permitting process for movement of organisms: The study of fungi is increasingly more international in scope. To truly understand any fungal group we need access to fungi on a global scale. These international interactions can also promote the study of fungi in less developed countries. But because of unprecedented threats to world order resulting from events of Sept. 11, 2001, the movement of fungi in and between countries has become more difficult, and is also confounded by the concerns of many countries about the value of indigenous biological material. As a result the permitting process for movement of fungi has become slower and more ponderous. To seek ways to alleviate some of these problems and to provide guidance to mycologists in navigating the permit system, the MSA Council approved the establishment of an ad hoc committee to review the permitting process. We are in the process of assembling this committee, and look forward to the guidance it will provide.
MSA DISTINCTIONS COMMITTEE

For over 20 years the Mycological Society of America has been recognizing excellence in research, teaching and service among its membership by awarding the Distinguished Mycologist Award, the Alexopoulos Prize and the William H. Weston Award. The awardees for these honors are selected from nominations made to the Distinctions Committee. Members of this committee are not eligible to nominate or be nominated for these awards, but all other members of the Society may make nominations and are strongly encouraged to do so. This is your chance to do something for that mycologist who sparked your interest in mycology as a teacher or whose research you have so much admired. You may, or may not, be able to achieve the excellence that you believe your heroes have demonstrated, but it is not difficult to praise them by nominating them for an appropriate award. If you don’t nominate them, they will surely not receive an award!

Members of the 2004-2005 Distinctions Committee

Dr. Ronald H. Peterson, Chair - Dept. of Botany, University of Tennessee, Knoxville, TN 37916, USA. Phone: 423 974 6217. Fax: 423, 974 0978. Email: repete@utk.edu.

Dr. Scott Redhead - Eastern Cereal & Oilseed Research Centre, Biological Resources, Research Branch, Agriculture and Agri-Food Canada, Ottawa, Ontario, K1A 0G6, Canada. Phone: 613 759 1384. Fax: 613 759 1599. Email: redheads@em.agr.ca.

Dr. Georgiana May - Dept. of Ecology, Evolution and Behavior, 100 Ecology Building, 987 Upper Buford Cir, University of Minnesota, St. Paul, MN 55108, USA. Phone: 612 625 1998. Fax: 612 625 1738. Email: gmay@maroon.tc.umn.edu.

Dr. Mary L. Berbee - Dept of Botany, University of British Columbia, 6270 University Blvd, Vancouver, BC V6T 1Z4, Canada, Office Phone: (604)822-2019, Fax: (604)822-6089, Email: berbee@unixg.ubc.ca.

Dr. James W. Kimbrough - Plant Path. Dept, PO Box 110680, Univ of Florida, Gainesville, FL 32611, United States, Office Phone: (352) 392-2158, Fax: (352) 392-7670, Email: jwk@mail.ifas.ufl.edu

Distinguished Mycologist Award

Awarded annually to an individual who has established an outstanding mycological career. This is one of the highest awards bestowed by the MSA and marks a distinguished career. Nominees for the award will be evaluated on the basis of quality, originality, and quantity of their published research, and on the basis of service to the MSA or the field of mycology in general.


Requirements:
1) The nominee must be a current member of MSA or eligible for emeritus membership.
2) The nominee must have received his or her terminal degree at least twenty years prior to January 1 of the year in which the award is given. There is no requirement for a minimum age or impending or actual retirement. Honorary degrees shall not be considered in determining the time interval.
3) An individual may receive the Distinguished Mycologist Award only once.
4) Self nomination is not allowed.
5) Nominators must be members of MSA.
6) Nominees who are not chosen for the award in the year in which they are nominated will be reconsidered for up to two additional years. The Distinctions Committee Chairperson will request updates of the nominee’s materials.

Documents required: The nomination folder should contain: 1) A nominating letter, including a detailed evaluation of the nominee’s outstanding contributions to Mycology. 2) A current curriculum vitae, including a list of the nominee’s publications. 3) Up to five additional letters of support.

Apply to: The nominator should prepare five copies of the completed nomination folder and send one copy each to Dr. Ronald H. Peterson, Chair, Dr. Georgiana May, Dr. Mary L. Berbee, Dr. James W. Kimbrough, and the MSA Business Office.

Alexopoulos Prize

Awarded annually to an outstanding mycologist early in their career. The nominees will be evaluated primarily on the basis of quality, originality, and quantity of their published work.


Requirements:
1) The nominee must be a current member of the MSA.
2) Nominees must have received their last degree within the ten year period immediately preceding January 1st of the year in which the award is given.
3) An individual may receive the Alexopoulos Award only once.
4) Self nomination is not allowed.
5) Nominators must be members of MSA.
6) Nominees who are not chosen for the prize in the year in which they are nominated will be reconsidered for up to two additional years (within the 10-year limit). The Distinctions Committee Chairperson will request updates of the nominee’s materials.

Documents required: The nomination folder should contain: 1) A nominating letter, including a detailed evaluation of the nominee’s outstanding contributions to Mycology. 2) A current curriculum vitae, including a list of the nominee’s publications. 3) Up to five additional letters of support.

Apply to: The nominator should prepare five copies of the completed nomination folder and send one copy to Dr. Ronald H. Peterson, Chair, Dr. Georgiana May, Dr. Mary L. Berbee, Dr. James W. Kimbrough, and the MSA Business Office.
MSA BUSINESS

contain: 1) A nominating letter, including a detailed evaluation of the nominee’s contributions to Mycology. 2) A current curriculum vitae, including a list of the nominee’s publications. 3) Reprints of the nominee’s 5 most significant papers. 4) Up to five additional letters of support.

Apply to: The nominator should prepare five copies of the completed nomination folder and send one copy to each member of the Distinctions Committee—one copy to the chair (addresses above). Each copy of the completed application must include all required documents listed above.

Note: The award consists of a plaque and a monetary award derived from the annual interest on the principle deposited in the MSA Alexopoulos Fund. The committee may choose to make no award in a given year, if it is appropriate. Presentation of the award will take place at the awards ceremony at the annual meeting of the MSA. The recipient will be notified in time to plan to attend the presentation. The name of the winner of the award will be published in *Inoculum*.

William H. Weston Award for Excellence in Teaching

Awarded annually to an outstanding teacher of mycology at the undergraduate and or graduate levels.


Requirements:
1) The nominee must be a current member of the MSA.
2) An individual may receive the Weston Award only once.
3) Self nomination is not allowed.
4) Nominators must be members of MSA.
5) Nominees who are not chosen for the prize in the year in which they are nominated will be reconsidered for up to two additional years. The Distinctions Committee Chairperson will request updates of the nominee’s materials.

Documents required: The nomination folder should contain:
1) A current curriculum vitae, including lists of a) courses taught in mycology, plant pathology or related areas, b) publications related to the teaching of mycology, c) teaching seminars, symposia or workshops given by the nominee to either lay or academic groups and, d) memberships on national, regional, state or local committees, panels, etc., on teaching. 2) A list of graduate students with thesis titles, degrees and dates, publications, and current addresses (where known), or explanation for the absence of such. 3) A statement from the nominee on teaching philosophy, i.e., what the nominee personally believes it takes to make an excellent teacher, what the nominee is trying to accomplish in teaching mycology, and how various teaching techniques and strategies help to accomplish this goal. 4) A list of previous awards or recognition for outstanding teaching. 5) Evaluation of the nominee’s teaching, including a) solicited and unsolicited letters from students and colleagues who have taken or audited the nominee’s courses, or been supervised by the nominee, b) course evaluation forms (or numerical summaries thereof) and c) any other information documenting teaching excellence.

Apply to: The nominator should prepare five copies of the completed nomination folder and send one copy to each member of the Distinctions Committee—one copy to the chair (addresses above). Each copy of the completed application must include all required documents listed above.

Note: The committee may choose to make no award in a given year, if it is appropriate. Presentation of the award, a plaque, will take place at the awards ceremony at the annual meeting of the MSA. The recipient will be notified in time to plan to attend the presentation. The name of the winner of the award will be published in *Inoculum*.

MSA HONORARY AWARDS COMMITTEE

MSA Fellows Award

Nominations requested for the MSA Fellows Award.

Deadline: 31st March 2005

Members of the MSA are encouraged to submit nominations for the MSA Fellow Awards to the Committee on Honorary Members.

Guidelines:
1) MSA Fellows are to be selected from members who have completed at least 11 years of service after their PhD, with no upper limit.
2) MSA Fellows are members who are outstanding mycologists on the basis of one or more criteria: a solid record of mycological research, and/or successful teaching and development of teaching materials for mycology, and/or significant service to the Society. This is meant to recognize a core group of mid-career mycological achievers and outstanding MSA volunteers.

To nominate a deserving mycologist for this Award, please submit a one-page overview to Committee Chair, Dr. George C. Carroll, Dept of Biology, Univ of Oregon, Eugene, OR 97403, United States, Office Phone: (541) 346-4522, Fax: (541) 346-2364, Email: gcarroll@oregon.uoregon.edu

MSA Honorary Members

Nominations are requested for the MSA Honorary Members.

Deadline: 31st March 2005

Members of the MSA are encouraged to submit nominations for MSA Honorary Member to the Committee on Honorary Members.

Guidelines:
1) Honorary members are distinguished senior scientists with a long record of significant contributions to the science of fungal biology and who reside in and work in countries other than the U.S. and Canada.
2) Honorary members are to be selected from members who a mycologist who resides outside of the U.S. and Canada for this Award, please submit a brief curriculum vitae and three letters of support to: Committee Chair, Dr. George C. Carroll, Dept of Biology, Univ of Oregon, Eugene, OR 97403, United States, Office Phone: (541) 346-4522, Fax: (541) 346-2364, Email: gcarroll@oregon.uoregon.edu

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STUDENT AWARDS COMMITTEE

Members of the 2004-2005 Awards Committee

Dr. François M. Lutzoni, Chair - Dept. of Biology, Duke University, Box 90338, Durham, NC 27708. Phone: (919)660-7261. Fax: (919) 660-7293. Email: flutzoni@duke.edu

Dr. Lori Carris, Dept. of Plant Pathology, Washington State Univ, PO Box 646430, Pullman, WA 99164-6430, United States, Office Phone: (509) 335-3733, Fax: (509)335-9581, Email: carris@mail.wsu.edu

Dr. M. Catherine Aime, Research Mycologist, USDA ARS Systematic Botany & Mycology Lab, Bldg 011A Rm 319 BARC-WEST, 10300 Baltimore Ave, Beltsville, MD 20705, United States, Office Phone: (301) 504-5758, Email: cathie@nt.ars-grin.gov

Dr. Jinx Campbell, University of Southern Mississippi, Dept of Costal Sciences, 703 E Beach Drive, Ocean Springs, MS 39564, United States, Office Phone: (217) 244-6326, Fax: (217) 244-7246, Email: jcampbe2@life.uiuc.edu

Graduate Fellowships

Two MSA Graduate Fellowships ($2,000 each), the Memorial NAMA Fellowship ($2,000), and the Backus Award ($1000) are awarded annually to promising graduate students in mycology. Applicants are evaluated on the basis of their scholastic merit, research ability and promise shown as a mycologist. These fellowships are intended as supplementary grants and may be used by the recipients in any way to further their graduate studies. They are awarded in addition to any fellowship or assistantship support from other sources.

Funds available: One award of $1000 and three awards of $2,000 each.

Application deadline: Applications must be postmarked no later than 31st March 2005. Applications submitted by e-mail or fax will not be accepted.

Requirements for eligibility: Applicants must be (1) student members of the MSA, (2) candidates for the Ph.D., (3) resident during the tenure of the fellowship in a university in Canada or the United States, and (4) The NAMA Fellowship comes with the stipulation that the awardee prepare an article for McIlvainea. Previous recipients of these fellowships are not eligible to apply.

Documents required (four copies): 1) A cover letter addressing your eligibility including a statement that you have passed your qualifying exams (comprehensive, oral, preliminary, or their equivalent). 2) A curriculum vitae that includes a paragraph describing your training for the proposed work. 3) A detailed plan of study. The text of this plan of study must be no longer than five (5) pages including tables and figures, but not including references. Applications that include proposals exceeding the 5-page limit will not be considered. The text of this proposal should be single-spaced and printed in a regular sized font (10 cpi or 12 point). Suggestions for preparing this plan of study are provided below. 4) Two letters of recommendation, one of which is from your supervisor or thesis advisor. We recommend that your supervisor’s letter also address your eligibility based on candidacy. 4) Graduate school transcripts showing courses taken, grades received, student Social Security number and Student ID number. Photocopies are acceptable if signed by your supervisor, but at least one of the four transcripts submitted must be an official transcript obtained from your institution’s Registrar.

Your plan of study should include the following: 1) a 200- or 250-word Abstract; 2) an Introduction that explains what you want to do and why it is interesting or important; 3) A Methods section that convinces the reader that the project is feasible and describes how the study will be conducted; and 4) A Discussion section that explains preliminary results of your study (if any) and their significance. Be concise. Use section headings and double spacing between paragraphs to make your proposal easier to read.

To apply: Send four copies of your completed application to the Committee Chair, Dr. François M. Lutzoni, Dept. of Biology, Duke University, Box 90338, Durham, NC 27708. Phone: (919) 660-7261. Fax: (919) 660-7293. Email: flutzoni@duke.edu

NOTE: The Chair will appoint an ad hoc member to replace any Committee member who has a student applying for a fellowship or who otherwise feels a conflict of interest. The successful applicants will be notified upon selection (usually within four weeks of the closing date for nominations) so that they may plan to attend the awards presentation at the annual meeting. Those applicants not notified within this time were not selected as awardees, but all applicants will be notified of their status. The stipends are awarded following confirmation that the applicants meet the requirements for eligibility.

MENTOR STUDENT TRAVEL AWARDS COMMITTEE

Travel Awards

For the 2005 meeting of MSA with the Mycological Society of Japan in Hilo, Hawaii, 30 July-5 August.

Please see the Society website for future updates on the amounts of these awards.


Application deadline: Received by 31st March 2005 (early applications appreciated).

Requirements: Applicants (1) must be MSA student members or past student members who have been awarded the degree within one year of the annual meeting and (2) must be presenting a paper or poster at the meeting. Previous recipients may apply again; if applicant numbers are higher than the number of awards available, preference will be given in order of receipt and based on number of awards available.

Continued on following page
to those who have won the award less than two times.

Documents required (four copies): 1) A cover letter requesting consideration for an MSA Mentor Student Travel Award. Provide telephone number and, if available, fax and email addresses, and include information on any past Mentor Travel Award(s). If matching funds are available from the applicant’s institution, provide an address the committee can use to officially verify the receipt of an award. 2) Abstract of paper or poster (note which). 3) Curriculum vita. 4) A one page description of the research project including an explanation of how this award will further the applicant’s research. 5) A letter of support from the applicant’s major professor addressing the student’s abilities and potential and briefly summarizing the student’s current research. To assist the judging committee in making Mentor “assignments” to award winners, inclusion of comments regarding which Mentor(s) would be most appropriate for the student are welcome but not required.

To apply: Send four copies of all documents listed above to the Committee Chair, Dr. Charles W. Bacon, USDA, ARS, Russell Res Ctr, PO Box 5677, Athens, GA 30604-5677, United States. Office Phone: (706) 546-3142, Fax: (706) 546-3118; email: cbacon@saas.ars.usda.gov

RESEARCH AWARDS COMMITTEE

Martin-Baker Endowment Fund Award

An award to a recent (within the past five years) PhD mycologist based on proposed research and past research record.

Award amount: $2200


Documents required: 1) Cover letter. 2) Curriculum vitae including publication list and alternative support sources. 3) Research proposal not to exceed three single-spaced pages

To apply: Send two copies of required documents and corresponding electronic files (in Word or similar format) to Dr. Nancy Weber, Chair of the MSA Research Awards Committee, 2160 NW Beechwood Pl., Corvallis, OR 97331-1001, USA, Phone: (541) 753-9626, Email: weberja@aol.com

Forest Fungal Ecology Research Award

This award supports ecological studies of fungal interactions in old growth forests or other unique or endangered ecosystems.

Award amount: $1,000, approximately.

Proposals should address innovative approaches to examining fungal systems or interactions of individuals, or groups of fungi, with hosts or substrates in old growth forest or other sensitive ecosystems. Floristic and systematic studies will not be considered.

Eligibility: Applicants must be students working on their Masters or PhD degrees or be recent recipients of a PhD. Honors theses for BA/BS degree students may be considered.

Documents required: 1) Cover letter. 2) Proposal of not more than 6 single-spaced pages that includes the rationale for the study and the hypotheses to be tested, a detailed description of the site to be studied, methodologies to be used, description of the study design, including specifics on the time line to complete the proposal (generally one year), and a plan for dissemination of results. 3) A letter of support from the major professor. 4) Copy of the permit or letter requesting a permit if it is needed to work in a sensitive site.

Application deadline: Please see the MSA Society website for future updates on the availability of this award for 2005 or contact the Chair of the committee. If available for 2005, the deadline will be 31st March 2005.

To apply: Send two copies of required documents and corresponding electronic files (in Word or similar format) to Dr. Nancy Weber, Chair of the MSA Research Awards Committee, 2160 NW Beechwood Pl., Corvallis, OR 97331-1001, USA, Phone: (541) 753-9626, Email: weberja@aol.com

Alexander H. & Helen V. Smith Research Award

The primary purpose of the fund shall be to encourage the study of specimens of macrofungi, fleshy Basidiomycetes and Ascomycetes, collected by Alexander H. Smith and his associates. These collections, and materials relating to them, are currently deposited at the University of Michigan Herbarium. The Fund will distribute grants-in-aid to cover all or a significant part of the expense of visiting the Herbarium and working with the collections and materials relating to them. Grants may be made available to members of the Mycological Society of America who are working actively on the tax-

Continued on following page
onomy or floristics of the fleshy fungi, with the main emphasis on supporting high quality research. Professional and trained “amateur” mycologists are eligible and are encouraged to submit proposals. The individual should be at a point in their studies where having full access to Alex’s material would advance the applicant’s work. These grants are not intended for preliminary studies of possible lines of investigations.

Documents required: 1) A proposal indicating how the study of Alex’s specimens and manuscripts would advance the applicant’s work. 2) An estimated budget to cover all or part of the anticipated expenses, such as travel, per diem, copying, etc. 3) Curriculum vitae.

The agreement of the Director of the University of Michigan Herbarium to have the potential recipient(s) work there must be obtained before the grant is awarded. In the event there are no suitable applications requesting the utilization of Alex’s collections for floristic or monographic studies, the Awards Committee, at its discretion, may award grants to support field work on fleshy fungi of North America, or for other type of studies on the fleshy macro fungi of North America. If support of a field project is awarded to an applicant, duplicate/representative collections resulting from the field work are to be deposited at the University of Michigan Herbarium. Prior arrangement should be made with the Director of the Herbarium. Recipients of these grants-in-aid are asked to provide the University of Michigan Herbarium with copies of any publications which result from this support. A summary of activity should be forwarded to the Awards Committee in a timely manner. In compliance with Internal Revenue Service regulations, the grant recipient must submit all original receipts of expenditure of grant funds to the Treasurer of the MSA. The receipt of documented expenditures by the Treasurer may be necessary before complete funding of the proposal will be made.


To apply: Send two copies of required the documents and corresponding electronic files (in Word or similar format) to Dr. Nancy Weber, Chair of the MSA Research Awards Committee, 2160 NW Beechwood Pl., Corvallis, OR 97331-1001, USA, Phone: (541) 753-9626, Email: weberja@aol.com

MSA Secretary Email Express

Council voted in two email polls since my last report and passed the following motions:

- E-Poll 2004b-9: Motion approved by Council: that the MSA Constitution and By-Laws, Article IX (D), be amended so that the term “audit” is replaced with “review”, as follows:
  “ARTICLE IX. FINANCES...
  (D) Prior to each annual meeting the Treasurer shall prepare a summary of the Society’s financial status. At the conclusion of the Treasurer’s term, normally every three years, the Treasurer will commission a professional audit review. This audit review shall include all financial activities of the society, including the publication of the official journal, endowment funds, and operating budget. The Treasurer’s report shall be read at the annual business meeting and published in the Society’s newsletter.”

- E-Poll 2004b-10: Motion approved by Council: that the Howard Bigelow Mentor Travel Fund be split in two, so that the original fund is retained and, in addition, naming a new fund, the Margaret Barr-Bigelow Mentor Travel Fund.

New Members: The MSA extends a warm welcome to new (or returning) members: from South Africa: Elsie M De Meyer; and from the United States: Cynthia Lehman, Rosanne Healy, Andrea Porras-Alfaro, Barbara I Sanchez. New memberships will be formally approved by the Society at the Annual Business Meeting in Hilo, Hawaii (July 30-Aug 5, 2005).

Emeritus candidates: Two long-standing members have applied for Emeritus membership status: Ruth L. Harold and John Krug. Emeritus status is conferred upon retired or retiring members who have at least 15 years good standing with the Society. Emeritus status will be formally approved by the general membership at the Annual Business Meeting in Hilo, Hawaii (July 30-Aug 5, 2005).

Special Mention: We are very fortunate to have Kay Rose as the Society’s manager at Allen Marketing and Management. I am happy to report that Kay is now back to work after some time off convalescing from injuries. On behalf of the Society, I would like to welcome Kay back and wish her the very best of health.

Correction to the 2004 Council Minutes published in the last issue of Inoculum: The annual reports were published in Inoculum 55(5) (not Inoculum 55(6) (5) as written).

Respectfully submitted,
Faye Murrin
MSA Secretary
fmurrin@mun.ca
Minutes of the MSA Annual Business Meeting, July 20, Asheville, N.C.

(1) President Carol Shearer called the 2004 annual MSA business meeting to order at 7:35 am, welcomed attending members and introduced Society Officers and meeting organizers. She extended a warm welcome to all members and thanked those who volunteered their time by serving on Society committees this past year, in particular the Asheville meeting organizers, MSA Program Committee Chair, Jessie Micales, and Local Organizing Committee Chair, Rytas Vilgalys.

(2) Membership passed a motion to approve the minutes of the 2003 MSA Business Meeting held in Asilomar, California [as published in Inoculum 54(5)].

(3) Vice-President James B Anderson reported on the 2003 MSA ballot for the election of Officers and voting on proposed by-law amendments. Newly elected officers for 2004-2005 are Vice President, Gregory M. Mueller; Treasurer, Karen Snetselaar; Councilor for Systematics and Evolution, David Geiser; Councilor for Cell Biology and Physiology, Brian Shaw; Councilor for Ecology and Pathology, Tom Volk; and Councilor for Genetics and Molecular Biology, Lisa Vaillancourt. In addition, three amendments to the by-laws were approved: 1) amendment to Article IV (E) for the formation of a new rotating committee on specific expertise, in the area of Genetics and Cell Biology; 2) amendment to Article IV (F) (5) to amend the responsibilities of the Electronic Communication and Web Page Management Committee and 3) amendment to Article IV-E-6-c to add the administration of the Clark Robinson Award and other appropriate awards to the Research Awards Committee. Vice-President Anderson reminded the membership that voting this year was by a combination of on-line voting via the MSA Business website run by Allen Marketing and Management and the traditional mail-out ballot, and expressed his hope that Society balloting would be entirely on-line in the future. He thanked Kay Rose at AMM for her help with this work.

(4) Secretary Faye Murrin referred the membership to the midterm and annual reports of the Secretary for 2003-2004 [Inoculum 55(3), 55(5)]. She summarized important decisions made during the General Council Meeting, held on July 17th at Asheville [Inoculum 55(5)].

(5) Membership voted unanimously to grant Emeritus Membership status to the following MSA members: from Canada, I. Brent Heath, Michele C. Heath, Japla P. Tewari, from Israel Yehoshua Anikster, and from the United States, Karl L. Braun Jr., David R. Hosford, Shang-Chong Jing, Larry J. Littlefield, Rosalind Lowen, Robert T. McMillan Jr., J. Thomas Mullins.

(6) Membership voted unanimously to grant MSA membership to the following new (and returning) members for 2003-2004: from Australia, Treena Burgess; from Brazil, Ludwig H. Pfennig; from Canada, P. N Achar, Young Woon Lim; from China, Wei Jiang-Chun, Yi-Jian Yao; Xiao-Qing Zhang; from Costa Rica, Javier Brenes; from the Dominican Republic, Maria Quirico; from Denmark, Birgitte Andersen; from Germany, Philomena M Bodenstein, Carsten Renker; from India, Srinivasan Bhuvaneswari; from Finland, Marjo Hlander, Richard P Shefferson; from Korea, Yeonghan Han, Yujun Kim, Yeon Yim Up; from Mexico, Allan C Chavarria; from South Africa, Lieschen De Vos-Bahlmann, Emma Steenkamp; from Turkey, Mustafa Isiloglu; and from the United States, Marylee Arroyo Rojas, Cathy J Barbeauld-Sinkeus, Kirk Aaron Bartholomew, Chandalin M Bennett, Charlie L Biles, Gregory M Bonito, Ania Boyd, Glenn Boyd, Catharine M Catrakis, Jeaninne M Cavender-Bares, Pamela J Coker, Gail D Dailey, Randy G Darrah, Vanessa De Souza Machado, Greetchen M Diaz, Joseph Dumanov, James J Farrar, Astrid Ferrer, Jennifer L Gillett, Ian Herriott, Rebecca E Huskins, Crystal L Ivey, Arinnaa Jalsrai, Andrew Janjigian, Kelsea A Jewell, Kevin Geofrey Jones, Sein C Jones, Richard K. Kiyomoto, Sage B LaCroix, David S LeBauer, Erik A Lilleskov, Darlene M Lompete, Keerthi G. Mandyam, Jordan R Mayor, Nancy Mcclenny, Hillary L Mehl, Rachel S Novick, Jon M Palmer, Kabir G Peay, N.K. Udaya Prakash, Ghulam M Rabbani, Satyendra Nath Rangjgu, Amy C Ramsey, Gail L Redberg, Scott C Redlin, Brantlee S Richter, Megan K Romberg, Steve Roon, Jason C Slot, Kimberly Smith, Jolanta M Sokol, Maurice V Strickland, Daniel R Sundin, William Swenson, Monica S. Torres, Elizabeth Turner, Maho Uchida, Paula H Vance, Kasey S Vaughans, Djibo Zanzot.

(7) Treasurer James Worrall presented his report [Inoculum 55(5)]. He also thanked Society volunteers who enable the MSA to continue as a vigorous organization and gave some suggestions on how members can help the Society financially: by encouraging colleagues to join the MSA, companies to become sustaining members, and libraries to subscribe to Mycologia. He encouraged individuals to spend at the auction and consider donating during membership renewal.

(8) Awards Presentations

(a) President Shearer called upon past MSA Presidents, and previous award winners to stand and be recognized, including Distinguished Mycologists, recipients of the Alexopoulos and Weston Awards, and MSA Fellows.

(b) President-Elect David McLaughlin presented Certificates of Appreciation to Society members for outstanding volunteer contributions to the MSA: Mycologia Managing Editor, James Ginn; Mycologia Editor-in-Chief, Joan Bennett; Orson K Miller, Jr, Chair of Finance for 11 years; Treasurer James Worrall, and to President Carol Shearer for her courageous leadership over the past year.

(c) The membership unanimously approved the Honorary Awards Committee’s selection of Dr. Robert Samson (Centraal Bureau voor Schimmel cultures) as the Society’s new Honorary Member.

(d) Orson K Miller Jr, Chair of the MSA Honorary Awards Committee, introduced the five new MSA Fellows for 2004 to the membership. This year’s recipients are Drs. Don Hemmes (University of Hawaii), Maren Klich (USDA, New Orleans, LA), Linda Kohn (University of Toronto), Donald Ruch (Ball State University) and Christopher Schardl (University of Kentucky).

(e) President Shearer presented the MSA Distinctions Awards for 2005. Committee Chair Gregory Mueller, introduced Dr. Dirk Reeder of the University of Basel, winner of this year’s Alexopoulos Prize, and Dr. Jack Rogers of Washington State University, win-
The following awards were presented:

(a) **Student Awards** were presented by the President of the Society for the honor of the award and the Society’s continued support. Chair Mueller acknowledged the members of the committee for their work this year, and noted that they were unable to put forward a candidate for the Weston Award; he called on the general membership to nominate their deserving colleagues for this award in the future.

(b) Karen Snetselaar of the Research Awards Committee presented the following awards on behalf of Chair Karen Nakasone. The Alexander H. and Helen V. Smith Research Award went to Andrew M. Minnis (PhD student, Department of Plant Biology, Southern Illinois University), the Clark T. Rogerson Student Research Award to Todd W. Osmundson (PhD student, Institute of Systematic Botany, The New York Botanical Garden), the Forest Fungal Ecology Research Award to Benjamin E. Wolfe (MS student, Department of Botany, University of Guelph), and the Martin-Baker Research Award to P. Brandon Matheny (Post-doctoral Fellow, Biology Department, Clark University)

(c) The Mentor Student Travel Awards were presented by Charles Bacon on behalf of Chair Greg Shearer. The MS Fuller Award was awarded to Jennifer Anderson (CL Shearer, supervisor); the ES Luttrell Award to Rebecca Bennett (GC Bergstrom, supervisor); the HE Bigelow Awards to Jozsef Geml (D Geiser, supervisor) and Adam Gusse (T Volk, supervisor); the CJ Alexopoulos Award to Maria Lee (T Volk, supervisor); the WC Denison Award to Bernadette O’Reilly (T Volk, supervisor); and the EE Butler Award to Zheng Wang (DS Hibbett, supervisor).

(9) The following awards were presented prior to the Social and Auction later in the day.

(a) **Student Awards** were presented by Donald Natvig who represented Chair Jamie Platt. MSA Graduate Fellowships were awarded to Valerie Reeb (Duke University) and Jozsef Geml (Pennsylvania State University), the Backus Award went to Rachel Novick (Yale University), and the NAMA Memorial Fellowship to Jerri Parrent (Duke University). Winners of awards for best Student Oral Presentation were Jennifer Anderson (University of Illinois), Mathew Greif (University of Alberta) and Terri Mcleon (University of Toronto); the awards for Poster Presentation were awarded to P. Brandon Matheny (University of Washington) and Rebecca Yahr (Duke University).

(b) Karen Snetselaar of the Research Awards Committee presented the following awards on behalf of Chair Karen Nakasone. The Alexander H. and Helen V. Smith Research Award went to Andrew M. Minnis (PhD student, Department of Plant Biology, Southern Illinois University), the Clark T. Rogerson Student Research Award to Todd W. Osmundson (PhD student, Institute of Systematic Botany, The New York Botanical Garden), the Forest Fungal Ecology Research Award to Benjamin E. Wolfe (MS student, Department of Botany, University of Guelph), and the Martin-Baker Research Award to P. Brandon Matheny (Post-doctoral Fellow, Biology Department, Clark University)

(c) The Mentor Student Travel Awards were presented by Charles Bacon on behalf of Chair Greg Shearer. The MS Fuller Award was awarded to Jennifer Anderson (CL Shearer, supervisor); the ES Luttrell Award to Rebecca Bennett (GC Bergstrom, supervisor); the HE Bigelow Awards to Jozsef Geml (D Geiser, supervisor) and Adam Gusse (T Volk, supervisor); the CJ Alexopoulos Award to Maria Lee (T Volk, supervisor); the WC Denison Award to Bernadette O’Reilly (T Volk, supervisor); and the EE Butler Award to Zheng Wang (DS Hibbett, supervisor).

(10) Future MSA and Affiliated Society meetings:

(a) Chair of the 2005 Local Organizing Committee, Don Hemmes, invited members to come to next year’s joint annual meeting with the Japanese Mycological Society in Hilo, Hawaii, July 30-August 5th. Dr. Hemmes read a letter from the MSJ Organizing Committee to the MSA expressing their warm endorsement of this joint meeting.

(b) President Shearer announced that the 2006 Annual Meeting will be held jointly with the American Phytopathological Society and the Canadian Phytopathological Society in Quebec City, Canada, July 29 to August 2.

(11) Out-going President Carol Shearer turned over the presidential gavel to the new 2004-2005 President of the Mycological Society of America, David McLaughlin. President McLaughlin adjourned the meeting at approximately 8:35 am.

Respectfully submitted

Faye Murrin

MSA Secretary

### Important MSA Awards Due Dates

[See Inoculum 55(6):7-11 for details]

- **Alexander H. & Helen V. Smith Research Fund**  March 31, 2005
- **Alexopoulos Prize**  March 31, 2005
- **Clark T. Rogerson Student Research Award**  March 31, 2005
- **Forest Fungal Ecology Research Award**  March 31, 2005
- **Mentor Student Travel Awards**  March 31, 2005
- **Martin-Baker Endowment Fund**  March 31, 2005
- **MSA Distinctions**  March 31, 2005
- **MSA Fellows Award**  March 31, 2005
- **MSA Graduate Fellowships**  March 31, 2005
- **MSA Honorary Members**  March 31, 2005
- **William H. Weston Award for Excellence in Teaching**  March 31, 2005
In an audacious ten-day collecting expedition, three intrepid mycologists from the NSF-Biotic Surveys & Inventories funded project to study basidiomycete fungi in Belize and the Dominican Republic (DEB-0103621) and several botanists and zoologists were transported by helicopter onto the highest mountain in Belize to conduct a biotic survey. Co-principal investigators, Drs. Timothy J. Baroni and D. Jean Lodge, were joined by Dr. Dan Czederpiltz as the mycological contingent. The fearless leader of the expedition, Dr. Sharon Matola, is former mycologist and former survival training expert with the Air Force, and is now head of the Belize Zoo. It all began last year with Tim, Jean and Sharon sharing their dreams and aspirations over dinner and drinks at the Cheers restaurant near the Belize Zoo. Dr. Sharon Matola, through her hard work and perseverance, made our dreams come true. The helicopter transport, helicopter landing site, field camp preparation and equipment were provided by the British Armed Forces stationed in Belize, thanks to their Commanding Officer, Col. Alan Whitelaw who joined us on the mountain for one night. We also owe thanks to former British Mycological Society president, Prof. Neil Gow, for persistence in sending letters in support of the expedition to Col. Whitelaw after his first letter did not go through. Sharon Matola and Greg Sho, our Mayan guide, went in several days early to set up a superb base camp. We were able to work flat-out owing to a fortuitous drying cycle and excellent field camp conditions and support. Three of us described and photographed 416 collections during eight days of field work. The remnants of Tropical Storm Lisa only diminished our collections on our last field day, but it made for a tense night as rain came down in torrents and lightning flashed all around us; it made me wonder about the wisdom of camping on the highest peak in the region. The botanists and naturalists, Martin Meadows and Drs. Sam Bridgewater and Steve Brewer, were helpful with plant identifications and greatly augmented the fungus collections. We chose our Mayan guide, Greg Sho, as the one person we would most want to be with if the helicopter didn’t return to pick us up.

The area we surveyed in the Maya Mountains of southern Belize was named Doyle’s Delight in reference to a book, entitled “The Lost World”, written by Sir Arthur Conan Doyle, about an ancient South American cloud forest isolated on a tapui. Whereas most of Central Amer-

Continued on following page
ic, such as Costa Rica, Panama, Nicaragua, and the lowlands of Honduras and Guatemala emerged above sea level only 3-5 million years ago and are thus geologically recent, the mountains of Belize and neighboring Chiapas Mexico and Guatemala comprise ancient terrain. The peaks of the Mountain Pine ridge and the Maya Mountains, including Doyle’s Delight, are well over 100 million years old, but the biological slate was presumably ‘wiped clean’ at the Cretaceous/Tertiary boundary 65 million years ago when a giant tidal wave was set off by an extraterrestrial bolide that struck the Gulf of Mexico near the Yucatan Peninsula. When sea levels rose during subsequent interglacial periods, these peaks became isolated islands that were very distant from any mainland, making them ancient refugia dating back 65 million years. Thus the reference to Doyle’s book is an apt one for this idyllic ‘lost world’. Doyle’s Delight straddles the divide between headwaters of the Chiquibul Branch that drains west through Guatemala, and Snake Creek, a tributary of Bladen Branch that drains east into the Caribbean in southeastern Belize. We had to carefully note which direction we headed out of camp, as north or west took us into Chiquibul National Park in the Cayo District, whereas south or east took us into the Bladen Nature Reserve of the Toledo District. Doyle’s Delight is a tall cloud forest laden with orchids and other epiphytes, and comprised predominantly of neotropical plant species with a few north temperate trees such as *Liquidambar styraciflua* and two or three species of *Quercus*. The basidiomycete fungi of Doyle’s Delight were often unusual and exquisite. A few of these fungi can be seen in color by going to the New York Times article by Bruce Barcott, who accompanied us on the ex-

**MYCOLOGICAL NEWS**

This distinctive silvery gray, canescent basidiome (left) with dark gray lamellae was found to be an unusually large, undescribed species of *Pouzarella* (Entolomataceae). We almost fell off our chairs when it was brought to us by Sam Bridgewater, a British botanist on the expedition. It appears to be conspecific with an undescribed species that Tim Baroni discovered in a wet montane forest of the Dominican Republic. (photo by D. J. Lodge)

Jean Lodge was thrilled when Tim Baroni found this clearly undescribed species of *Hygrocybe* (left) in Section *Firmae*, characterized by a pale yellow cap with purple-brown scales, and a white stipe and lamellae. (photo by D. L. Czederpiltz)

Dan Czederpiltz was delighted at finding tropical genera, such as this *Cymatoderma*, since he normally works in the North Temperate and Boreal zones. (photo by D. L. Czederpiltz)

This undescribed species of *Arthrosporella* (Thicholomataceae) was one of the most abundant fungi fruiting at Doyle’s Delight. *Arthrosporella* is a genus described by Rolf Singer from the Amazon Basin, and is characterized by having conidia on the cap and stalk. (photo by T.J. Baroni)

Continued on following page
pedition to Doyle’s Delight (query.nytimes.com/gst/ab-
abstract.html?res=FA0914F935550C74CDDA00894DC404482). We have identified at least 20 undescribed species and varieties among the 416 collections so far, and the list is growing. While some of these new taxa are conspecific with undescribed species or varieties we have found elsewhere in the Caribbean (e.g., the striking wine colored *Humidicutis* that appeared on the cover of the Mycologist, Vol. 15, August 2001, an undescribed gray *Pouzarella* also known from one mountain in the Dominican Republic and several undescribed *Mycena* spp. (known also from Puerto Rico). Others, however, are unique, including a pale yellow *Hygrocybe* with purple-brown scales in Sect. *Firmae*, and a new species of *Arthrosporella* (a genus that bears conidia on the pileus and stipe, described by Singer from Amazonian Brazil), a new very small *Boletus* sp. associated with *Quercus*, new *Alboleptonia* and *Rhodocybe* spp, and at least one undescribed *Pleurocollybia* (stipeless and imbricate over downed logs).

The undescribed *Arthrosporella* species was one of the most abundant agarics at Doyle’s Delight as it was collected on every outing. Several of the undescribed taxa represent species or their close relatives previously known to us only from the Amazon Basin. One of these is an unusual, bright coral red species of *Mycena* with a hymenidermic pileipellis that is related to *M. ixoxantha* Singer. This species was previously discovered on a British Mycological Society Expedition to Ecuadorian Amazon (see Lodge 1996, The Mycologist Vol. 10: 56-67). Another undescribed species of *Mycena* most closely resembles *M. amazonica* in Sect. *Saccharifereae*. A few of the new finds appear not to have any connections to existing taxa, such as the small *Boletus* that belongs in Sect. *Pseudoboleti* with its smooth spores and an hymenidermic rugulose pileus surface but looking like a miniature *Boletellus chrysenteroides*.

The British Mycological Society is organizing a research expedition and overseas foray to Belize in November 2005. While ‘Doyle’s Delight’ is not on the itinerary, other exciting forests and reserves will be visited, including the Cockscomb Basin Wildlife Refuge which also has Amazonian species, and oak and pine forests in the Mountain Pine Ridge. If interested, go to the British Mycological Society web page (www.britmycolsoc.org.uk) or contact one of the co-organizers, Dr. John Hedger (johnhedger@yahoo.co.uk or hedgerj@westminster.ac.uk) or D. Jean Lodge (djodge@caribe.net or dlodge@fs.fed.us).

The British Armed Forces used helicopters to ferry the group and their equipment onto and off of the highest peak in Belize, Doyle’s Delight (photo by T.J. Baroni).

A screen tent was helpful for keeping the frequent rain and abundant black flies out, and providing shade when the sun was out. Dr. Timothy Baroni is shown annotating specimens at our very comfortable base camp at Doyle’s Delight (benches & chairs courtesy of the British Armed Forces; photo by Dan Czederpiltz).

Hygroaster albellus was described by Rolf Singer from the Amazon basin and has also been found on mountains in Puerto Rico.
MYCOLOGICAL NEWS

Membership Contact Information Changes

Bill Brandt has a new email address: bhbrandt@cmug.com. Please address future emails to that address because the present address will soon cease to reach me.

Michelle T. Seidl’s new email at the University of Washington is seidl@myuw.net. Her preferred address for contact is seidl@comcast.net.

Additions, Corrections to the List of North American Myxomycologists

Following are corrections additions and corrections to the list of myxomycologists in North America from Inoculum 54 (6):

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FAX: (479) 575-4010
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Membership 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.

I want to provide an MSA Gift Membership to the following individual:

Name ______________________________________________________________________________
Institution __________________________________________________________________________
Complete Address ____________________________________________________________________
Phone _____________________ FAX _________________________ Email _______________________

Please send renewal notices to:
(YOUR name) ________________________________________________________________________
(YOUR address) _______________________________________________________________________ 
Phone _____________________ FAX _________________________ Email _______________________

I agree to pay $80* 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.
Forest Fungi Phytogeography . . .


Biogeography of fungi is an interesting research topic in mycology. In this book some 30 articles and abstracts on this topic, resulting from the author’s research for nearly half a century, were gathered together from journals, conference proceedings and a booklet to form this extensive volume. Most of the articles are in English with some in Chinese. A booklet on forest diseases and insects of the Tibetan Plateau from Forest of Tibet, published in Chinese in 1985, was translated into English. Several articles are apparently first published in this book.

Many of the articles included in the volume are valuable because they contain first hand information on forest fungi, especially rust fungi, in China, North America and Siberia. Edible mushrooms and other fungi are also covered. One substantial article first published in the book needs to be mentioned, namely The Forest Fungi of the Alaskan Inland Ecosystem, derived from the results of the Alaska Inland Economy Fungi Research Project. About 150 fungal species were recorded and described from the taiga forests of Alaska. Material listed in the appendices of the book also proves to be useful, e.g. Index of Forest Diseases and Insects of Siberia and the Soviet Far East and Index of Forest Tree Pathogens in China. These two appendices contain vast information on the forest diseases and pests in those areas.

Some articles are accompanied by beautiful photographs and line drawings, providing more information on the fungi and sites of interest. However, the color of the photographs tends to be blue and the definition of pictures not very sharp, possibly due to poor reproduction of the original images. The binding quality is also problematic. The review copy arrived in several parts before any use.

The book is useful to researchers and laboratories engaged in forest fungi, both pathogenic and non-pathogenic fungi, especially for fungal constitution in different forests and species geographic distribution.

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The Rainbow Beneath My Feet: A Mushroom Dyer’s Field Guide

This corrected book review is re-published with apologies to the author.


A self-described “unique how-to reference” this book gives detailed descriptions of the best methods for dying wool and silk using dyes from fungi. The emphasis is on dyeing wool. There is even a picture of a handsome gray sheep and instructions for “scouring” wool fibers to remove the lanolin before adding the dye. Recipes are provided for fixing the colors, preparing dye baths and after baths, and boiling sporocarps. It’s a new kind of mushroom cookbook! Pictures demonstrate how pH affects colors, and methods are given for saddening (darkening) and blooming (brightening) the hues. This exquisitely illustrated book is printed on expensive glossy paper.

It is the fungi that receive pride of place. The book has over 200 color photographs, of which more than 150 depict fungal fruiting bodies. Bessette and Bessette use the term “mushroom” generously to encompass a variety of shelf fungi, coral fungi, earthstars, puffballs, re-

Continued on following page
supinate species and even morels. Each species is identified with a Latin name, a photograph and an accurate morphological description, including habitat, spore prints and possible macrochemical tests.

In addition to all the lovely pictures of fungi, there are also whimsical photographs of crocheted hats, silk scarves, skeins of yarn, knitted vests and toy gnomes dyed with mushroom pigments. Further, there are pictures of happy people preparing the dye baths, checking for color and “swinging the skeins”. Mycologists who have prized boletes solely for their delectable flavor will be pleased to discover that they also can be harvested for the tinctures they yield. An appendix gives a list of species organized by the dye color each one yields. Extracts of Collybia iocephala mycelia yield blue tints, Bankera violascens gives greens and Chroogomplus viniticolor gives reds, for example. Appendix C is a list of “dye duds”, which are the species that yielded little to no dye when tested. Included in the duds are Armillaria mellae, Lentinus torulosus, Morchella esculenta and Xyalaria polymorpha. Curiously, lichens are ignored in this book, despite their rich history as a source of pigments for textile coloring.

The Rainbow Beneath My Feet is aimed at weavers and dyers, so the excellent glossary is comprised largely of mycological terms that they will need to identify fungi. There are also definitions of terms that were unfamiliar to me. For example, Glauber’s salt is sodium sulfate, “a mordant that prevents streaking and ensures even distribution of color;” and a mordant is “a chemical added to fiber that causes a certain color to bind to the fiber.” “In the grease” refers to wool before it has been washed to remove the lanolin.

Flipping through this field guide is a visual pleasure. It has an emotional appeal that evokes earlier times. Indeed, until the middle of the 19th century, all dyes used in textiles came from plants, animals or fungi. Important plant dyes, such as indigo, woad, saffron and tumeric, were big business and allowed textile manufacturers to produce their wares in various shades of blues, reds, yellows and browns. Then came William Perkin (1838-1907). Working in his home laboratory, Perkin unsuccessfully tried to synthesize quinine from coal tar, stumbling instead on the first synthetic dye, an excellent purple that he later named “mauve”. Perkin’s father financed the construction of a factory devoted to the production of synthetic dyes. It was the beginning of a vast new industry. The human world became far more colorful. Industrial chemists learned how to tweak molecules, turning magenta into aniline yellow, creating a range of dazzling blues. The bright hues that were previously the rare privilege of flowers, corals and bird plumage became commonplace. Yet, after a century of living with synthetic colors, our attitudes have changed. We have learned that rivers, streams and canals near dye manufacturing plants can turn strange colors. Synthetic dyes have become serious environmental pollutants. Aesthetically, what once was seen as desirable and fashionable is now just gaudy. The subtle hues of mushroom pigments presented by Bessette and Bessette have serenity and dignity. As such, this book celebrates the revival of vanishing lost folk traditions and preserves a pre-industrial form of natural products chemistry.

My only complaint with this book has to do with the treatment of color names. “Color is so subjective,” the Bessettes write at the beginning of Appendix A. “One of the most difficult tasks in writing this book was reaching agreement on the difference between green-blue and blue or green, or deciding what was gold versus brownish yellow….” They proceed to do their best, describing color ranges and using general color names. For example, under Cortinarius cinnamomeus the dye notes read: “No mordant, light brown; alum pinkish brown... tin-golden brown; copper-brownish green...” These color names are somewhat informative but the book would have far more value if the authors had done a little more research. They seem unaware of the various standardized color languages that have been developed by Ridgeway, Methuen and others. The National Bureau of Standards and the Inter Society Color Council developed A Universal Color Language during the 1960s, originally intended to describe the colors of drugs and chemicals. The ISCC-NBS system is useful to all who want to make concise color designations widely understandable. It would not have taken much effort to find these resources. For example, when I googled “Methuen color” the second item on the list was “an index to color concordance” from Ron Peterson’s mycology home page at the University of Tennessee (http://fp.bio.utk.edu/mycology/Color/Color-index.htm). If Bessette and Bessette continue their interesting research in myco-dye stuffs, let us hope their future publications take advantage of this and other resources for color standardization.

In summary, if you appreciate the visually dazzling attributes of fungi, you will love this book. It makes a valuable gift for the mycophile who has everything.

— J. W. Bennett
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**MYCOLOGIST’S BOOKSHELF**

### Books and Publications Received September – October 2004


### Previously Listed Books


*Continued on following page*


Ongoing Research of Interest In New Mexico

Relf Price is the project leader of an unfunded project for the Valles Caldera National Preserve (VCNP) located in the Jemez Mountains of Northern New Mexico. Relf has networked with a number of volunteer scientists to survey the cryptogams of the VCNP. His major areas of interest are the myxomycetes and the algae. Relf, Ted Stampfer, Harold Keller and Steven Stephenson are collaborating on the myxomycetes. Relf, David Borsheim and Robert Egan are collaborating on the lichens. Gerald Baker is helping with the fungi and the algae. Voucher specimens for the project are being maintained in the VCNP Herbarium and the Herbarium of Southwestern Biology at the University of New Mexico. The project leader would like to augment the team with volunteers capable of assisting in the survey of basidiomycetes, ascomycetes, bryophytes and algae. Interested persons may contact Relf at relf3@cybermesa.com.

Ecological Database Survey Request

We are a National Center for Ecological Analysis and Synthesis (NCEAS) working group attempting to identify impediments to, and incentives for data-sharing. To that end we have created a survey exploring attitudes and perceptions about the sharing of ecological data. It is becoming increasingly clear that many of the most pressing ecological problems and questions can be addressed only through the integration and analysis of data collected by multiple different researchers and research organizations and we now have the technology to share data easily. However, gaining access to ecological databases can still be a problem. Our goal is to reach a large audience of ecologists around the world to obtain information that will identify impediments to data-sharing and perhaps identify strategies to overcome these impediments. We are asking you to take 10-20 minutes to complete our data-sharing survey. The survey can be accessed at www.surveymonkey.com/s.asp?u=20315501517. Any concerns or comments about the survey can be addressed to jeffhoul@unbsj.ca or sfindlay@science.uottawa.ca.

25th Annual Mid-Atlantic States Mycology Conference in North Carolina

The 25th annual Mid-Atlantic States Mycology Conference (MASMC) will be held on the campus at North Carolina State University in Raleigh from April 1-3, 2005. The meeting will be co-hosted by NCSU and Duke University. An informal gathering will be held on Friday night April 1 at the NCSU Faculty Club to welcome meeting participants. Dr. David Geiser, Department of Plant Pathology, Penn State University, will be the keynote speaker for the meeting on Saturday night at the JC Raulston Arboretum. A foray organized by Larry Grand will commence on Sunday morning at the Schenck Forest in Raleigh. For information on MASMC, please contact Marc A. Cubeta, marc_cubeta@ncsu.edu. A website with specific details about the program for the MASMC meeting is currently under construction and should be available by December 1, 2004.
**MYCOLOGICAL CLASSIFIEDS**

**Tenure-Track Position Available at the University of California, Riverside**

The Department of Plant Pathology invites applicants for a 9-month, 50% research, 50% teaching, tenure-track position at the rank of Assistant to Full Professor position. A Ph.D. in Plant Pathology, experience with soil-borne diseases and the proven ability to conduct innovative research are required. The focus of the position is on the management of soil- and waterborne pathogens of subtropical crops with an emphasis on avocado and citrus. The successful applicant will be expected to develop a competitive, innovative, problem-solving research program, using both modern and classical methods. Additionally, the successful candidate will direct the well-funded avocado rootstock development program. Applicants should send curriculum vitae, college transcripts, statements of research and teaching interests, a complete list and selected reprints of publications, and three letters of reference to: Dr. John A. Menge, Search Committee Chair, c/o Cheryl Brusuelas (cherylfb@ucr.edu), Department of Plant Pathology, University of California, Riverside, California 92521-0415. Evaluations of applications will begin January 10, 2005, but the position will remain open until filled. More information is available at [www.plantpathology.ucr.edu](http://www.plantpathology.ucr.edu). The University of California is an Affirmative Action/Equal Opportunity employer.

**Graduate Student Stipends**

Graduate Student Stipends for Phylogenetic/Systematic Studies of Fungal Structure with the NSF AFTOL Project. Support is available for graduate students to work for 1 to 12 months on subcellular structure in any group of Fungi through the Assembling the Fungal Tree of Life project (http://ocid.NACSE.ORG/research/aftol/). All costs for cell analysis are covered by the AFTOL project. Students work at the University of Minnesota Imaging Center, St. Paul, and our laboratory under the guidance of postdoctoral fellow, Gail Celio. For further information or to apply, please contact David McLaughlin, davem@umn.edu or Gail Celio, celio001@umn.edu.

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**Samples Requested for Cedar Apple Rust Study**

Samples of all species of Gymnosporangium spp. and Roestelia spp. <25 years old are needed for a study of cospeciation and life history evolution. Please write to Rachel Novick at rachel.novick@yale.edu or 73 Pearl St., New Haven CT 06511.

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Tubeuf, K.F. and Smith, W.G. 1897. Diseases of Plants Induced by Cryptogamic Parasites. Longman and Green. London. 598 pp. 333 figures ............... $69


**Free Books**

Two books free for the Postage are available from Dana Richter, School of Forestry, Michigan Technological Univ., Houghton, MI 49931, dricht@mtu.edu.


MYCOLOGY ON-LINE

Below is an alphabetical list of websites featured in *Inoculum* during the past 12 months. Those wishing to add sites to this directory or to edit addresses should email <rbaird@plantpath.msstate.edu>. Unless otherwise notified, listings will be automatically deleted after one year (at the editors discretion). * = New or Updated info (most recent *Inoculum* Volume-Number citation)

Ascomycota of Sweden  
www.umu.se/myconet/asco/indexASCO.html
Asociacion Latinoamericana de Micologia (51-5)  
www.alm.org.br
Australasian Mycological Society Website  
for Introductory Fungal Biology (53-4)  
bugs.bio.usyd.edu.au/mycology/default.htm
Authors of Fungal Names (54-2)  
www.indexfungorum.org/AuthorsOfFungalNames.htm
Bibliography of Systematic Mycology  
www.speciesfungorum.org/BSM/bsm.htm
Bibliography of Systematic Mycology (51-6)  
194.131.255.3/cabipages/BSM/bsm.htm
British Mycological Society (54-1)  
britmycolsoc.org.uk
Cordyceps Website  
www.mushtech.org
Dictionary of The Fungi Classification  
www.indexfungorum.org/names/fundic.asp
European Powdery mildews (52-2)  
nt.ars-grin.gov
Fun Facts About Fungi (55-1)  
www.herbarium.usu.edu/fungi/funfacts/factindx.htm
Funga Veracruzana (53-6)  
www.uv.mx/institutos/forest/hongos/fungavera/index.html
Hadrianus Junius Stinkhorns (52-2)  
www.collectivesource.com/hadrianus
IMC7 (51-3)  
lsb380.plbio.lsu.edu/ima/index.htm
Index of Fungi  
www.indexfungorum.org/names/names.asp
ING (Index Nominum Genericorum) Database (52-5)  
rathbun.si.edu/botany/ING/ingForm.cfm
Interactive Catalogue of Australian Fungi (52-1)  
www.rbge.org.au/fungi/
Interactive Key, Descriptions & Illustrations  
for Hypomyces (52-6)  
nt.ars-grin.gov/taxadescscriptions/hypomyces/
ISHAM: the International Society  
for Human and Animal Mycology  
www.isham.org
Mycologia On-Line (53-1, page 18)  
www.mycologia.org
Mycological Progress (52-3)  
www.mycological-progress.com
The Myconet Classification of the Ascomycota  
www.umu.se/myconet/Myconet.html
MycoSearch web directory/search engine (51-5)  
www.mycosearch.com
Mushroom World [new Korean/English site in 2001] (51-6)  
www.mushworld.com
NAMA Poison Case Registry (51-4)  
www.sph.umich.edu/~kwcee/mpcr
Pathogenic Fungi From South Africa (52-4, page 29)  
nt.ars-grin.gov/fungaldatabases/southafrica
or  
www.saspp.co.za/
Plant-associated Fungi of Brazil (52-2)  
nt.ars-grin.gov
(Select Search Fungal Databases, option 3, Host-Fungus Distributions)
Registry of Mushrooms in Art Website  
members.cox.net/ mushroomsinart/
Species of Glomeromycota Website (55-3)  
www.amf-phylogeny.com
Systematics of the Saprolegniaceae (53-4)  
www.ilumina-dlib.org
Tripartite Similarity Calculator (55-1)  
www.amanitabear.com/similarity

### Change of Address

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Note: Members may also submit directory corrections via the form included in the MSA directory via the MSA Home Page: www.msafungi.org
CALENDAR OF EVENTS

Event dates and descriptions (bold) precede event locations (italic), contacts (plain font), and Email/Websites (bold, no brackets). Those wishing to list upcoming mycological courses, workshops, conventions, symposia, and forays in the Calendar should submit material formatted as shown below and include complete postal/electronic addresses.

2004 (November 14-19)
IV Asian Mycological Congress and IX International Marine and Freshwater Mycology Symposia
DETAILS: Inoculum 55(3):30
Chiang Mai, THAILAND
www.thai.net/amc4imfms9ex/index.htm

2004 (November 19-21)
International Symposium on Microbial Diversity
DETAILS: Inoculum 55(4):50
Jabalpur (M.P.), India
Tara Dubey
tdubey@forensica.com

2005 (March 15-20)
23rd Fungal Genetics Conference at Asilomar
Asilomar Conference Center, Pacific Grove, CA

2005 (March 19-20)
SouthEastern Regional Yeast Meeting (SERYM)
Georgia Institute of Technology, Atlanta, GA
Yury Chernoff
yury.chernoff@biology.gatech.edu

2005 (April 1-3)
25th Annual Mid-Atlantic States Mycology Conference
DETAILS: Inoculum 55(6):22
North Carolina State University in Raleigh, NC
Marc A. Cubeta
marc_cubeta@ncsu.edu

2005 (June 3-6)
6th International Meeting on Genetics and Cellular Biology of Basidiomycetes (GCBB VI)
DETAILS: Inoculum 55(3):31
Pamplona, SPAIN
Antonio G. Pisabarro
gpisabarro@ybavarra.es

2005 (June 12-16)
XII International Sclerotinia Workshop
Monterey, CALIFORNIA
Steven Koike
831.759.7350
stkoike@ucdavis.edu
entoplp.okstate.edu/iswg/index.html

2005 (June 24-28)
6th International Conference on Cryptococcus and Cryptococcosis
Boston Marriott Long Wharf, Boston, MA
Stuart M. Levitz
cme@bu.edu
www.bu.edu/cme/iccc.html

2005 (July 23-28)
International Microbiology Congress
DETAILS: Inoculum 54(5):35
San Francisco, California
www.iums2005.org

2005 (July 30 - August 5)
2005 MSA Annual Meeting
University of Hawaii in Hilo
Hilo, HAWAII

2005 (August 15-19)
International Congress on the Systematics and Ecology of Myxomycetes V
DETAILS: Inoculum 54(6):21
Tlaxcala, MEXICO
Arturo Estrada Torres
arturomixo@hotmail.com

2006 (August 21-26)
8th International Mycological Congress
Cairns, Australia
Wieland Meyer, Chair
Ceri Pearce, Vice-Chair
www.sapmea.asn.au/imc8
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THE MYCOLOGICAL SOCIETY OF AMERICA

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(You may apply for membership on-line at http//msafungi.org)

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AREAS OF INTEREST

Mark most appropriate area(s)

___ Cell Biology – Physiology  (including cytological, ultrastructural, metabolic regulatory and developmental aspects of cells)

___ Ecology – Pathology  (including phytopathology, medical mycology, symbiotic associations, saprobic relationships and community structure/dynamics)

___ Genetics – Molecular Biology  (including transmission, population and molecular genetics and molecular mechanisms of gene expression)

___ Systematics – Evolution  (including taxonomy, comparative morphology molecular systematics, phylogenetic inference, and population biology)

PAYMENT

___ CHECK  [Payable to Mycological Society of America and drawn in US dollars on a US bank]

___ CREDIT CARD:   _____ VISA   _____ MASTERCARD

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