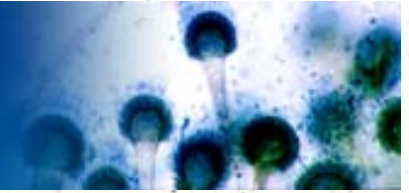




MMSA
Medical Mycological
Society of the Americas



Congratulations to
Billy Cooper Awardee
Mahmoud Ghannoum

mahmoud.ghannoum@case.edu

Election results

President-Elect Floyd Wormley Floyd.wormley@utsa.edu

Councilor East Mary Ann Jabra-Risk mrizk@umaryland.edu

Councilor West Tom Kozel tkozel@medicine.nevada.edu

Councilor Latin America Leila Lopes-Bezerra

leila.lopes_bezerra@pq.cnpq.br

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**Thanks to the folks ro-
tating off**

**Wiley Schell
Mike Saubolle**

Highlights of the Banquet



Arturo and Angela



John and Arturo



Carlyn



Cooper Award

2009 MMSA Banquet
City Tavern
Philadelphia



A Rose and a thorn



Four Old-Timers DiSalvo Halde Rippon
Goodman



2009 MMSA Banquet
City Tavern
Philadelphia



Case of the quarter-Check out the aspergillus website!

<http://www.aspergillus.org.uk/indexhome.htm?secure/casehistoryindex/csindex.php~main>

This section contains various case histories compiled from patients who have a variety of aspergillus related disease. Where possible images are added to complete the patient profile. The case histories include patients from the following groups:

Disease	Number of cases presented on the web site
Acute invasive pulmonary aspergillosis:	17
Subacute invasive (chronic necrotizing) pulmonary aspergillosis:	7
Primary pulmonary aspergillosis:	1
Other invasive disease:	14
Chronic cavitary pulmonary aspergillosis:	7
Aspergilloma	3
Allergic aspergillosis:	5
Pleural Aspergillosis :	1
Other types of aspergillosis:	6
Paediatric Aspergillosis	12
Severe Asthma with Fungal Sensitisation:	2
Sinus aspergillosis in non-immunocompromised:	1

JOB OPPORTUNITY!

Slone Partners is seeking an experienced Mycology Technologist in the NYC suburbs. This dynamic environment will challenge your analytical skills and provide opportunities for career growth. Qualified candidates will be an ASCP certified (preferred) medical technologist with a NYS license and come with focused and proficient mycology testing experience. This position offers competitive compensation and outstanding benefits. If you meet these qualifications, please send your inquiry and resume to Alberta Daggett at albertad@slonepartners.com .

*Book Review***BOOK REVIEW**

Pathogenic Fungi: Insights in Molecular Biology. G. San-Blas and R.A. Calderone, eds. Caister Academic Press, Norfolk, UK; 264 pp; \$310.

This book is a companion volume to the two volume work, *Pathogenic Fungi* (Vol. I -Fungal Dimorphism and Pathogenicity, Vol. II - Host Interactions and Strategies for Control), published in 2004. The aim of this volume is to review the advances, primarily in Molecular Biology, made since that time. The volume is split into 8 chapters, written by international experts. Each chapter is organized around a specific topic, which together give a broad cross section of the most rapidly advancing areas of research in molecular mycology. The breadth of topics discussed is a strength of the book and together provide an excellent survey of the current level of understanding in molecular mycology.

Transcriptional responses to environmental changes is reviewed by Munro and Hube, and provides a comprehensive survey of standard and high throughput methods that have been employed to analyze gene expression in fungi. Transcriptional profiling studies are reviewed for a wide variety of fungi, including *C. neoformans*, *A. fumigatus*, *H. capsulatum*, and *C. albicans*. This is complemented by more detailed discussion of a few judiciously chosen transcriptional regulators as well as key regulated genes.

Two chapters review fungal signaling pathways. An ambitious chapter from Fernandes et al. on regulatory networks for both host and pathogen that govern the interaction, briefly reviews

innate immune signaling, focusing on Toll-like receptors, mannose receptors and Dectin-1 signaling. On the fungal side, the roles of cAMP, MAPK and histidine kinase signaling in oxidative stress and temperature stress responses are reviewed, with informative comparisons between *C. neoformans*, *Paracoccidioides* and *C. albicans*. This chapter is followed by one from Arana et al., more focused on MAPK pathways and on the two model pathogens, *C. albicans* and *C. neoformans*. This chapter eloquently summarizes and compares cell wall integrity and oxidative stress signaling, as well as signaling involved in mating and morphology.

Two chapters focus on genome-wide approaches in drug discovery and understanding drug resistance. Chauhan and Calderone give a comprehensive summary of functional genomic approaches to drug target identification, focused largely on identification of essential genes. The review of approaches based on conditional expression, haploinsufficiency, RNAi, as well as classic transposon mutagenesis, covers multiple species, but is focused on *A. fumigatus* and *C. albicans*. Waldin et al, present a careful summary of approaches to understand fungal drug resistance, focused on *Candida* species and azoles. The chapter details transcriptional profiling approaches to understand differences in drug resistance and sensitive isolates, and has an exceptionally strong discussion of proteomic approaches for the same question.

Two chapters take on the challenges of diagnostics. Pitarch et al. focus on recent advances in identifying IgG antibodies specific for *Candida* proteins that can function as predictors of disease and/or outcome. A sum-

mary of the required features for a useful biomarker, and approaches used in biomarker identification is followed by discussion, illustrated with the examples of α -Eno1 and α -Met6 antibodies, of potential approaches for assay methodology and importantly for clinical validation of potential biomarkers. San Blas and Niño-Vega give a comprehensive review of molecular approaches to species identification in clinical samples. This useful review summarizes across many species, PCR approaches including target choice (23S, etc.) sensitivity and specificity for different assays, and then touches upon potential future directions for rapid species identification and PCR-based approaches for detection of drug resistant isolates.

Lastly, Larriba and Calderone give a detailed review of the *C. albicans* genome, focusing on heterozygosity and reviewing evidence for the functional consequences of allelic differences and loss of heterozygosity. This chapter is an excellent and comprehensive review of a diffuse literature and will be of broad interest, since it intersects with topics as diverse as acquisition of drug resistance, the parasexual cycle, and adaptability to different stresses.

In all, this is an excellent companion volume that serves to update the reader as to advances in key areas of research. As a general summary of the latest advances in molecular mycology, this book will be a welcome resource for both basic researchers and clinical mycologists.

Brendan Cormack, Ph.D.

Johns Hopkins University School of Medicine

Pathogenic Fungi: Insights in Molecular Biology.

Book Review

Dictionary of the Fungi, 10th edition, by PM Kirk, PF Cannon, DW Minter and JA Stalpers. 2008, CABI Europe, Wallingford, UK, 771 pp., \$140.00

This very large, 771 page volume, contains somewhere near 20,000 entries and is quite useful and impressive. The dictionary is organized into three separate parts: the fungi, the chromistan/stramenopile (unicellular, filamentous or phototropic colonial organisms that do not contain chitin or β -D glucan and protozoan fungi-like organisms (slime molds). At the beginning of the text, there is a users guide relating to how the dictionary presents information. It defines how entries are supplemented with entries on ecology, distribution, toxins, fungal antibiotics and biographical notes on well known mycologists.

All of the most well known fungi are included along with the mushrooms, lichens, yeasts and slime molds. This edition includes information on the high level classification of

fungi based on the "Assembling the Fungal Tree of Life" that uses phylogenic data obtained by multi-gene nucleic acid sequencing. This 10th edition includes anamorphic taxa that were omitted from the previous edition and this proves to be very helpful to mycologists. Each individual genus entry contains the name of the author who proposed the genus. Also included is the year of publication along with the family name, number of species and numerous references including some clinical citations. Invalid names are included so that future publications can avoid using them.

The Dictionary also includes discussions about media; nomenclature; slide making; phylogeny; molecular biology; mushrooms; structures; stains; spore dispersal; laboratory methods and many more that relate to the fungi. Surprisingly, there are entries on wine and beer making; cot death, patent protection and

laboratory safety.

There are twenty-seven figures and a small number of tables within the text that are very useful. This edition is supposed to contain an increased number of eminent deceased mycologists; however, only one medical mycologist is included—a bit disappointing. Otherwise, this text is very well done and is packed with useful information. I have no difficulty recommending this dictionary to anyone who is associated with the fungi. Students would find it invaluable and mycologists would find it to be a resource that they should not be without. The authors should be congratulated for a job well done; they have provided us with a dictionary that is complete and easy to read.

Glenn D. Roberts, Ph.D.

Professor of Microbiology,
Laboratory Medicine and Pathology

Mayo Clinic and Mayo College
of Medicine

Rochester, Minnesota

**Dictionary of
the Fungi, 10th
edition, by PM
Kirk, PF
Cannon, DW
Minter and JA
Stalpers**

MEDICAL MYCOLOGICAL SOCIETY OF THE AMERICAS

Financial Report for period 5/1/08 - 4/30/09 EXPENSES

2008 Annual Meeting Expenses

Banquet charges – Parris	\$5,284.66	
Cooper Award	\$ 500.00	
Printing/Engraving	\$ 233.80	
Travel Awardees	\$ 2000.00	
Milton Huppert Award	\$ 500.00	
Latin American Travel Award	\$1,000.00	
Registration for Incorporation in the State of Georgia	\$ 30.00	
Pfizer Sponsored Speaker	\$1,824.40	
Web Diva New Website Design/Isovera Web	\$ 694.95	
Archive Scanning	\$ 60.17	
Rhoda Benham Awards Minting	\$1,831.77	
Bankcard expense	\$ 236.64	
TOTAL EXPENSES		\$14,196.39

INCOME

Earned Bank Interest (CD, and Money Market Account)	\$ 298.14	
Member Dues (including sustaining memberships)	\$13,369.21	
TOTAL INCOME		\$13,667.35

Net Income versus Expenses **\$529.04**

SPECIAL FUNDS

Milton Huppert Graduate Student Account Balance as of 5/1/08	\$ 10,668.64	
Membership Donations	\$ 0.00	
Interest	\$ 298.14	
TOTAL BALANCE AS OF 4/30/09		\$10,966.78

MMSA Endowment Fund		
Balance as of 5/1/08	\$12,868.85	
Membership Donations	\$ 0.00	
Interest	\$ 206.29	
TOTAL BALANCE AS OF 4/30/09		\$13,075.14

ASSETS OF THE SOCIETY AS OF 5/1/09

*Certificate of Deposit – Frost National Bank – San Antonio, TX	\$10,966.78	
Checking Account – Frost National Bank – San Antonio, TX	\$ 9,388.65	
**MMSA – Frost Brokerage Services	\$13,075.14	

TOTAL ASSETS \$33,430.57

Statement prepared for the 2009 General Meeting of the Medical Mycological Society of the Americas in Philadelphia, PA. May 18, 2009.
W. Fothergill, Secretary/Treasurer

Annette



**AMERICAN
SOCIETY FOR
MICROBIOLOGY**



**The Carlyn Halde Medical Mycology Travel Grant for Junior Microbiologists
Award Parameters**

Purpose: To fund the travel of a junior level Medical Microbiologist from Latin America or the Caribbean to participate in ASM General Meeting.

Eligibility:

Applicants are not required to have an abstract accepted by the ASM General Meeting, though applicants are encouraged to submit their abstracts.

Applicants should demonstrate a strong interest and commitment to a career in Medical Mycology.

Applicants should be in the process of obtaining, or have obtained within the past 5 years, their Masters, MD, PhD or equivalent degree.

Preference will be given to applicants who have had a paper(s) published.

The award is open to both members and non-members of ASM and MMSA.

Funding:

The \$30,000 endowment will allow for an annual award of \$1,200.

The \$1,200 will be used to fund the recipients travel to the ASM General Meeting and the cost of a one-year membership in ASM and MMSA.

If the cost of the travel and membership is under \$1,200 the remaining funds may be used to cover other expenses related to meeting attendance.

Review Committee:

The four member review committee will be chosen by MMSA.

The reviewers will be members of both MMSA and ASM.

2008-2009 MMSA Council \

e-mail council@mycologicalsociety.org

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Vice President	Arturo Casavel	2008-0
President elect	Floyd Wormley	2010-2011

Secretary Treasurer Annette Fothergill 2005-10

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