



MMSA
Medical Mycological
Society of the Americas



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MMSA is now
affiliated with
**FOCUS on FUNGAL
INFECTIONS**

See P. 2 for more details

Also, Check out the
**MMSA Division F Symposium
Philadelphia, PA ASM 2009**
**Granulomatous Host Defenses
against
Endemic Mycoses of the Americas**
May 19, 2009
2:30-5:00PM

See Page 10 for more details

FOCUS 19 on FUNGAL infections

March 4 – 6, 2009, Fort Myers, Florida

March 4 – 6, 2009

Sanibel Harbour

Fort Myers, Florida

Chairs

Elias J. Anaissie, MD

University of Arkansas for

Medical Sciences

Little Rock, Arkansas

Michael G. Rinaldi, PhD

University of Texas Health

Science Center at San Antonio

San Antonio, Texas

to a current problem in patients involving
fungal infections (in the broadest sense) in
contemporary medicine

- Candidate must submit a well-written, concise and accurate abstract
- Candidate must be registered for the meeting and agree to be present during the scheduled presentation times

March 4 – 6, 2009, Fort Myers,
Florida

ISHAM2009 TOKYO CONGRESS

MAY 25-29 JAPAN

<http://www.congre.co.jp/isham20>

The Impact of Impact Factor on Mycology Journals – For presentation at the upcoming ISHAM Congress—Ira Salkin

Impact factor has evolved into the generally accepted method of evaluating the importance/quality of scholarly publications. Impact factor assumes that (a) articles most frequently cited are the most significant and (b) journals which include a high percentage of these articles are the premier publications. However, close examination of the criteria used in establishing this comparative quality model raises serious questions, especially with respect to mycological journals.

A journal's impact factor is calculated by dividing the total number of cited articles in a two year period by the total number of articles published in the journal during the same timeframe. Consequently, publications dealing with rapidly changing areas of scientific investigation earn high impact factors. However, since many highly citable papers appearing in mycology journals have longer "shelf-lives", they are not included in the calculations of these journals' impact factors. Furthermore, impact factor of mycology journals is negatively affected by the comparatively small size of the research community; fewer numbers of citable works are generated. In addition, while case reports form an integral part of many mycology publications, they're among the least cited papers, and the journals which publish them as an educational service have lower impact factors. Since impact factor is applied as a comparative evaluation tool, journals are ranked within a group of similar publications. However, the primary factor that unites mycology publication is that they all, in some way, are concerned with fungi. Yet they significantly differ in their individual focus and content.

These and other issues to be discussed raise questions as to the accuracy of impact factor as a tool in evaluating mycology journals. Unfortunately, it has been adopted as the sole criterion to quantify what is essentially a qualitative issue, the importance/quality of scientific journals.

Can anyone help Karen?

Hello Leslie, I hope your New Year is going well.

I have a fungal question. Have you heard Chytridiomycosis. It's a fungal

pathogen in Amphibians mainly frogs.

I am expecting some samples from the zoo in the near future, and I was

looking it up on the web and found some

really good info on it, but

nothing on how to culture for it or what it looks like on culture

medium. They have info on how to ID it from Histo and PCR.

If you hear of anything please let me know.

Thanks much

Karen

parlor@dcpah.msu.edu

ASM Pre Meeting Workshops

News from/about our members.

Arthur Guruswamy will receive the prestigious

Scherago-Rubin award

At the ASM meeting in Philadelphia this year!

Tom Walsh wrote:

Dear All,

Our affiliation with Focus is developing well.

The Imedex Website (<http://www.imedex.com/appweb/announcements/A047-01.asp>)

now reflects the Society's logo, the affiliation and the "Mycology 101 Workshop."

We are still waiting for further developments on the "MMSA Clinical Implications of Basic Mycology Symposium."

I will keep you apprised.

All the best,

Tom

Norman Goodman's new e-mail nlgood01@uky.edu

Laboratory Diagnosis of Fungal Infections: Help for the Beginner

(2 Day) Seminar Saturday, May 16 8:30 a.m. – 4:30 p.m. Description: This workshop is designed to introduce basic clinical mycology to those not acquainted with the field. Technologists/microbiologists will be able to recognize fungi in clinical specimens; identify common filamentous fungi and yeasts; interpret fungal serologic test results and understand the use of antifungal susceptibility testing. Case presentations will illustrate the selection of appropriate clinical specimens; use of appropriate laboratory testing and importance of communication between the laboratorian and physician. Participants will gain an appreciation for this discipline that has a direct impact on patient care. Faculty: Gary Procop, Glenn Roberts, Gerri Hall and Leslie Hall

Let's Not Forget About Nocardia: Clinical Diagnosis, Identification and Susceptibility Testing (1 Day) Seminar Sunday, May 17, 2009

8:30 a.m. – 4:30 p.m. Description: Nocardia are often seen in the clinical microbiology laboratory and can be difficult to distinguish from other pathogenic aerobic actinomycetes. Using a case study format, this workshop will focus on the clinical and laboratory diagnosis of infections caused by Nocardia species. We will emphasize current recommended techniques for the identification and susceptibility testing of Nocardia. Did you know there are currently 86 species in the Genus Nocardia? We will discuss the current taxonomy and the importance of molecular techniques for accurate speciation of organisms. We will give practical guidelines as to when full speciation is expected and when identification to complex level is more practical.

Faculty: Barbara Elliott, Alan McNabb, Patti Conville and Leslie Hall

From our South American Councilor

The Medical Mycological Society of the Americas

"The Medical Mycological Society of the Americas (MMSA) is offering free membership to Latin American students in an effort to enhance their participation in the Society. Please visit the MMSA site and learn how to be a part of this group either as professional or student".

(Posted by kind request of Dr. Rosana Puccia, Sao Paulo, Brazil).

Forthcoming mycological meetings:

Tropical Fusarium Workshop

Date: 6-10 April 2009
Universidade Federal Rural de Pernambuco – UFRPE, Brazil

Website: <http://www.pgfitopat.ufrpe.br/tfw2009.html>

HFP2009: Molecular Mechanisms of host-pathogen interactions and virulence in human fungal pathogens

Date: 2009 May 2 - 2009 May 8 Venue: la Bergerie, La Colle sur Loup, France
Contact: Dr Christophe d'Enfert Fungal Biology and Pathogenicity, Institut Pasteur, rue du Docteur Roux 25, Paris Cedex 15, 75724, France **Tel:** +33-1-4061 3257 **Fax:** +33-1-4568 8938 **Email:** hfp2007@pasteur.fr
<http://www.fems-microbiology.org/website/nl/page61.asp>

TOKYO 2009 - 17th International ISHAM Con-

gress

Tokyo, Japan, May 25-29, 2009

Contact: isham-tokyo@congre.co.jp

Website: <http://www.congre.co.jp/isham2009/SatelliteSymposia:Beijing,China>,

Date: May 30-31, 2009

Contact: isham2009@fungalinfection.cn

The 26th International Congress of Chemotherapy

Toronto, Canada, Date: 18-21 June, 2009.

26th ICC 2009 c/o AMMI

Canada
E-mail: icc09@ammi.ca
Web site: www.icc-09.com

Meeting of The French Society of Medical Mycology

Date: June 18-19, 2009. Poitiers, France,
Contact bruetsch@pasteur.fr

The 27th International Specialised Symposium on Yeast: " Pasteur's Legacy: Yeast for Health and Biotechnologies"

Date: 2009 Aug 26 - 2009 Aug 29
Venue: Institut Pasteur, Paris, France
Contact: Dr Claude Gaillardin Microbiologie et Génétique Moléculaire, CNRS UMR 2582 INRA UMR 1238, Institut National Agronomique Paris-Grignon, Thiverval Grignon, 78850, France **Tel:** +33 1 30 815 452 **Fax:** +33 1 30 845 457 **Email:** claude.gaillardin@grignon.inra

[.fr](http://www.fems-microbiology.org/website/nl/page61.asp)

<http://www.fems-microbiology.org/website/nl/page61.asp>

X Congreso Mexicano de Micología

Fecha: 20-25 septiembre 2009
Lugar: Hotel Aranzazú, Guadalajara, Jalisco, México
Contacto: www.cucba.udg.mx/micologia

Dear All,
Happy New Year from South America and congratulations on the new President!
I am forwarding the message sent by Gioconda San-Blas to her list of mycologists, where there is a note about free subscription to MMSA granted to South American students.
Rosana

Forthcoming Courses and other information

The French-language course in medical mycology

at the Pasteur Institute, Paris, France, will take place from 2 March - 10 April, 2009; deadline for registration is 15 November, 2008. For general information on the course, click <http://www.pasteur.fr/ip/easysite/go/03b-000027-01t/teaching/courses-2008-2009/cours-d-analyse-des-genomes>

Maestría en Micología Médica

Universidad Nacional del Nordeste, Resistencia, Chaco y Hospital Muñiz, Buenos Aires, República Argentina. Duración: 2 años. Inicio: Marzo de 2009. Contactos: Dra. Alicia Arechavala- E-mail: aa-rechavala@intramed.net. Dr. Gustavo E. Giusiano- E-mail: gusgiusi@bib.unne.edu.ar. Sra. Marina Vallejos E-mail: inme-dreg@bib.unne.edu.ar

The 4th Medical Mycology masterclass of the Australian Society for Microbiology

Date: 29 Oct - 1 Nov, 2009, on Hamilton Island, Queensland, Australia. For information go to <http://www.theasm.com.au/meetings>.

The BSMM/University College London MSc/ Diploma Course in Medical Mycology

Applications are invited for this distance learning based course in the theory and practice of medical mycology. The course is based at University College London and run jointly with the British Society for Medical Mycology. Teaching is by means of DVDs, web-based materials and practical courses, and includes a research project conducted at the student's home institution.

Further details and contact: <http://www.isham.org/BSMM.html>

The Aspergillus Website

The Aspergillus Website [<aspergillus@manchester.ac.uk>](mailto:aspergillus@manchester.ac.uk) can be visited at: <http://www.aspergillus.org.uk/>, with interesting information on this fungus, and permanent updating.

Molecular Biology

Blog: The blog for research scientists and advanced students

A new blog was launched this week. The Molecular Biology Blog aims to keep research scientists,

advanced students and other professionals informed on current research, recent advances, topical issues and new technology.

<http://www.caister.com/molecular-biology-blog/>

Lots of opportunity to learn!

New books:

New guidelines for susceptibility testing of fungi

are available from the Clinical and Laboratory Standards Institute (CLSI) and can be purchased at the [CLSI website http://www.clsi.org/](http://www.clsi.org/).

Innovative Approaches to Target Identification and Assay Development for Fungal Diagnosis (R21/R33), see <http://grants.nih.gov/grants/guide/rfa-files/RFA-AI-08-055.html>

This Funding Opportunity Announcement (FOA), is issued by the NIAID, National Institutes of Health, and solicits applications to foster collaborative efforts between the mycology research community and the innovative technology sector to develop novel clinical diagnostic targets and subsequent assays for invasive aspergillosis (IA) and other invasive fungal diseases common to immunocompromised or immunosuppressed patients. Ultimately, research sponsored in response to this FOA should lead to the development of a novel diagnostic test(s) for detection of invasive fungal disease(s) that must include invasive aspergillosis. For scientific questions, please contact Rory A. Duncan, rd188u@nih.gov.

Focus on Fungi

The American Academy of Microbiology has released a new colloquium report, "[The Fungal Kingdom: Diverse and Essential Roles in Earth's Ecosystem](#)", which describes the critical role of fungi and outlines a research agenda for furthering the field.

Pathogenic Fungi: Insights in Molecular Biology

Publisher: Caister Academic Press, 2008
 Edited by: Gioconda San-Blas and Richard A. Calderone *Instituto Venezolano de Investigaciones Cientificas, Caracas, Venezuela and Georgetown Univ Medical, Center Georgetown University, Washington DC, USA*
 ISBN: 978-1-904455-32-5
 Price: GB £150 or US \$310 (hardback).
 Pages: 264

For contents, link to <http://www.horizonpress.com/hsp/books/pat2.html>

Two previous volumes (2004):

Volume 1: Pathogenic Fungi: Host Interactions and Emerging Strategies for Control

Volume 2: Pathogenic Fungi: Structural Biology and Taxonomy

The Aspergilli - Genomics, Medical Aspects, Biotechnology, and Research Methods

Publisher: CRC Press, 2008
 Edited by: Gustavo H. Goldman and Stephen A. Osmani *Universidade de Sao Paulo, Brazil, and Ohio State University, Columbus, USA*
 ISBN: 978-0-8493-9080-7
 Price: GB £82 or US \$149.95
 Pages: 576

For contents, link to http://www.crcpress.com/shopping_cart/products/product_contents.asp?id=&parent_id=&sku=9080&isbn=9780849390807&pc=

ASPERGILLUS FUMIGATUS AND ASPERGILLOSIS

Editors: Jean-Paul Latgé, Institut Pasteur; **William J. Steinbach**, Duke University
 Modern medical technologies are repairing the human body in

ways never imagined only a few years ago, but they are leaving an increasing population of patients who are newly susceptible to opportunistic pathogens. Invasive and chronic fungal infections have become a formidable clinical opponent, and foremost among them is *Aspergillus fumigatus*. This volume offers the latest insights into the fundamental biology and pathogenesis of *A. fumigatus* and how it establishes disease, as well as the newest strategies for characterizing, diagnosing, and treating its spectrum of clinical infection. ISBN: 978-1-55581-438-0

Hardcover, 598 pages, full-color insert, illustrations, index. List price: \$169.95 ASM member price: \$159.95

Link to:

<http://estore.asm.org/viewItemDetails.asp?ItemID=797>

Textbook of Medical Mycology

Third edition
 Jagdish Chander, MD, DNB, MAMS
<http://www.isham.org/TextbookChander.html>

Current Fungal Infection Reports

Themes covered so far include epidemiology, genomics and pathogenesis, pharmacology of new antifungal agents, therapy, diagnosis and much more. The journal is published quarterly by the Current Medicine group, in paper and electronic formats. Website: http://www.current-reports.com/home_journal.cfm?JournalID=FR%20.

Journal of Invasive Fungal Infections

A new quarterly review journal in medical mycology has been started: the *Journal of Invasive Fungal Infections*, with John Perfect as editor-in-chief. For full information and online access, click <http://www.invasivefungalinfections.com/default.aspx>.

BOOK REVIEW

Diagnosis and Treatment of Human Mycoses, Duane R. Hospenthal and Michael G. Rinaldi, eds. 2008. Humana Press, Totowa, NJ, 428 pp; \$99.00

Medical technology has advanced in recent years allowing prolonged survival of more severely debilitated patients. These advances have resulted in a larger population of individuals susceptible to invasive fungal infections. Early diagnosis and treatment of fungal infections can result in improved patient recovery and outcome. *Diagnosis and Treatment of Human Mycoses* is an up-to-date and timely contribution to the medical literature addressing the most current methods to diagnose and treat mycotic diseases.

The book consists of twenty-one chapters divided into four parts. Part I (Chapter 1) is a general overview of the epidemiology, risk factors, endemicity, and affected organ systems associated with human mycoses. Part II (Chapters 2-5) introduces the reader to clinical mycology tools available for the diagnosis of mycotic diseases including culture, histopathology, serology and radiological techniques. Part III (Chapter 6) details the most current antifungal drug armamentarium available and discusses the mechanism of action for each of the various classes of antifungal drugs as well as antifungal drug resistance, antifungal drug susceptibility testing, and the spectrum of antifungal drug activities by microorganism. Drug pharma-

cokinetics, toxicities, and interactions are also discussed. Part IV (Chapters 7-21) consists of in-depth discussions of medically important human mycoses written by experts in the field. The chapters in Part IV are consistently and concisely organized by etiologic agent, epidemiology, pathogenesis/immunology, clinical manifestations, diagnosis, treatment, and prevention (with some minor variations). A compact disk (CD) containing color photomicrographs of the organisms described in these chapters is also included. The chapters are followed by eighteen instructive case presentations to allow the reader to test the knowledge gained from reading the text and to bring attention to particularly relevant difficulties encountered in the diagnosis and treatment of human mycoses.

The greatest strength of the book is the enormous quantity of information provided in a very concise and well-organized manner. The numerous comprehensive tables placed throughout the book make detailed information easily and rapidly accessible. Comparisons between and among fungal organisms, diseases, diagnostic methods and treatments are also facilitated by these extensive, informative tables. The consistent organizational structure of each chapter in Part IV of the book allows the reader to find similar information about different organisms easily and rapidly. Photomicrographs and figures within the book are very detailed and of excellent quality; the color photomicrographs on the accompanying CD are outstanding. The case studies at the end of the book, with discussions by experts immediately following, give a very practical flavor to the information presented. For these reasons, this text is an excellent reference book and resource for the busy clinician and clinical microbiologist alike.

This book has very few minor short-

comings that are mostly related to form rather than content. Some chapters suffer from a lack of editorial proof reading and display typographical and grammatical errors that are distracting. The photomicrographs would benefit from having a micron scale incorporated on the face so that the reader could get a better sense of the relative size of the structures being viewed (or having an indication of the fold magnification of the photo provided in the figure legend would be helpful). Although most complex terms are spelled out in full at first use, followed by an abbreviation or acronym, a glossary of abbreviations at the beginning or end of the book would be valuable. Finally, the photomicrograph files on the CD are organized by the corresponding chapter and figure numbers; it would be useful to have the figure number followed by the name of the microorganism for easy reference.

Thanks to

Christine J. Morrison, Ph.D.

For writing and to Paul Fidel for coordinating!

This book represents a much needed, up-to-date reference book for use by busy physicians and critical care specialists. The extensive details in each chapter in Part IV of the book also make it an excellent resource for training at the graduate level. The only topic absent from the book is a discussion of molecular biological methods for the identification of fungal diseases. This may be a reflection of the paucity of these tests currently available for routine clinical use and the intended clinical rather than research audience for the book.

FUN FUNGI.....

Hormonema Species

Last Issues Picture Quiz Answer:

Hormonema species

Hormonema Species:

Hormonema species are often misidentified as *Aureobasidium* species. Although similar in colonial appearance, they can be differentiated microscopically by conidial formation. Colonies are yeast-like, white, tan, or slightly pinkish in color becoming dark brown to olivaceous black

with age. Optimum growth temperature for *Hormonema* is 25°C. Microscopically, hyphae are initially hyaline, septate and thin walled. With age, the hyphae become dematiaceous and thick walled with the cells becoming wider than they are long; often converting into thick walled chlamydospores. Conidia are hyaline, ellipsoidal and vary in size. *Hormonema* conidia are formed asynchronously through percurrent proliferation (successive conidia form through the same

opening). Conidia often appear as a cluster around an individual conidiogenous structure, making it difficult to differentiate *Hormonema* from *Aureobasidium* species. *Aureobasidium* species' conidia form synchronously (at the same time) in close tufts with each conidia attaching by a separate denticle to the conidiogenous structure.

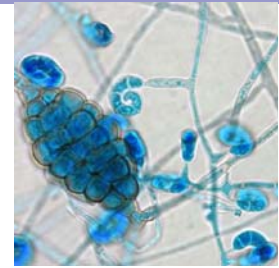
Hormonema dematioides is an important woodbluing

fungus associated with the discoloration of coniferous wood or needles. *H. dematioides* has rarely been found to be pathogenic to humans. It has been documented as the cause of subcutaneous phaeohyphomycosis of the hand

in an immunocompetent host and the cause of peritonitis in a patient on continuous ambulatory peritoneal dialysis (CAPD). *H. dematioides* has been recovered from pleural fluid, CSF, blood and a surgical wound.

References:

1. De Hoog, G.S., Guarro, J., Figueras, Gene & M.J. 2000. *Atlas of Clinical Fungi*, 2nd ed. Centraalbureau voor Schimmelcultures. Utrecht, the Netherlands.
2. Howard, Dexter ed., 2003. *Pathogenic Fungi in Humans and Animals*, Marcel Dekker, Inc., New York.
3. St-Germain, G., Summerbell, R. 1996. *Identifying Filamentous Fungi*, Star Publishing Company. Belmont, CA.
4. Shin, Jong Hee, et al. *Fatal Hormonema dematioides Peritonitis in a Patient on Continuous Ambulatory Peritoneal Dialysis: Criteria for Organism Identification and Review of Other Known Fungal Etiologic Agents*. 1998. *Journal of Clinical Microbiology*. Vol. 36, no. 7. pp. 2157-2163.



What Fungus is this?

Answer in the next Newsletter!

Thanks, Sandy

Sandy Arduin MT (ASCP) & Bruce Palma MT (ASCP) - Mycobacteriology/Mycology Unit

Michigan Department
of Community Health



Jennifer M. Granholm, Governor
Janet Olszewski, Director

MMSA Division F Symposium Philadelphia, PA ASM 2009

Granulomatous Host Defenses against Endemic Mycoses of the Americas

| Time and Place to be determined. | |
|----------------------------------|---|
| Author's Name | Presentation Title |
| Angela Restrepo | Paracoccidioidomycosis: Current concepts in epidemiology, host response, diagnosis, and treatment |
| Kieren Marr | Granulomatous responses and epidemiology of <i>Cryptococcus gattii</i> infections |
| George Deepe | Granulomatous inflammation in host defense against histoplasmosis |
| Bruce Klein | Host-pathogen interactions in granulomatous host defenses of blastomycosis |

Summary: Paracoccidioidomycosis, histoplasmosis, cryptococcosis and blastomycosis share in common a prominent granulomatous host response. This symposium will review the mechanisms of granuloma formation, macrophage response, and immunoregulation in host response to *Paracoccidioides brasiliensis*, *Cryptococcus gattii*, *Histoplasma capsulatum*, and *Blastomyces dermatitidis*. Understanding this response has implications that affect not only treatment of the infections but understanding basic host-microbe mechanisms of interaction. New advances in immunology are shedding light on our understanding of the basic mechanisms to control granuloma formation and resolution/persistence. Ultimately, this interplay between the host and pathogen share a common feature with many other infectious agents in that this latent/persistent infection can become a nidus of reactivation during immunodeficiency. The four fungi covered in this session represent four major endemic mycoses of North and South America.

Upon completion of this session, participants should be able to:

- describe the similarities in the granulomatous responses to these four endemic mycoses
- identify the key differences in the granulomatous responses to these four endemic mycoses
- describe the current state-of-understanding for each of these mycotic agents of the mechanisms of host-pathogen interaction that lead to persistent/latent infection

info@mycologicalsociety.org

What's Happening?

March 4-5, 2009 Focus on Fungal Infections 19 Sanibel Island, Florida

Hotel Location

<http://www.imedex.com/appweb/announcements/A047-01.asp>

March 14, 2009 , A walk thru the Fungal Jungle

1 Day Workshop, Jacksonville, Florida. Contact Jane Hata, Director Microbiology, Mayo Clinic Jacksonville hata.donna@mayo.edu

May 17-21, 2009 American Society for Microbiology Annual Meeting, Philadelphia, PA— Workshops of interest: 2 day Mycology (for beginners) and 1 day on Nocardia

May 25-29, 2009 ISHAM Congress, Tokyo, Japan

A major event during the next few years will be the ISHAM Congress in Tokyo, May 25-29, 2009, with the theme: "Medical Mycology in the 21st Century: Scientific Base and Anticipated Challenges". The organizers have managed to offer this congress at a very moderate fee. Available hotels on site in the Shinjuku area are in all classes, ranging from high quality to the famous Japanese business hotels at modest prices. The costs of the congress thus can be kept quite limited, making this great event in reach for everyone. For information, click on <http://www.congre.co.jp/isham2009/> or go to the Mycological Happenings section of the ISHAM website.

2008-2009 MMSA Council e-mail council@mycologicalsociety.org

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Link to the Council is found on the MMSA WEBSITE:

<http://d2153591.u37.hosting-advantage.com/index.html>

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