The ECMM/CEMM Mycology Newsletter is mailed to the members of the national societies affiliated to the European Confederation of Medical Mycology (about 3000 in 23 different countries)

ECMM activities: an overview

The ECMM continues to attract individuals who are interested in undertaking projects with ECMM support. This year Dr Petrikkos from the Hellenic Society for Medical Mycology has initiated a survey of zygomycosis in Europe — you can read more about this elsewhere in this Newsletter. A study group to survey fungal infections in intensive care units is being planned by Dr Lena Klingspor in Sweden. Dr Sybren De Hoog, who has been coordinating the ECMM working group on \textit{Pseudallescheria} is also organizing a symposium in January on the African perspective on fungal disease. This meeting is part-sponsored by ISHAM and the ECMM. We are not a wealthy society, but we do our best to invest in activities that clearly extend our range of interests beyond the most common fungal diseases into the less well explored arenas.

Our meeting in Wroclaw this year was a great success, which generated a lot of positive feedback. We are very grateful to Prof Eugeniusz Baran and Dr Jacek Szepieciowski for the enormous amount of hard work they put in personally to ensure the congress ran smoothly. The meeting made a profit for the Society, which is a very positive finale for an important moment in the history of the ECMM. The meeting in Wroclaw was the last ECMM congress of its type. Next year we meet in Berlin at the second Trends in Medical Mycology congress sponsored jointly by ourselves and the EORTC. A ready an exciting programme is being assembled for Berlin, and the organizers have attracted generous sponsorship from our colleagues in the pharmaceutical industry. From now on there will be a biannual TIMM congress in every odd-numbered year.

In years with an even number (excepting 2006, when the ISHAM Congress will take place in Paris) there will be an ECMM meeting held to provide training in medical mycology. Each meeting will focus on a particular theme, and we hope these workshops will particularly attract young participants who are entering the field of medical mycology. The timing of the ISHAM Congress means that the first of the new training workshops will take place in 2008.

We hope we can continue to expand the projects we undertake in the ECMM. We are not a wealthy society, and our status as a confederation of national societies sometimes means that we seem remote from you, the individuals who make up our numbers. Please do not let such considerations deter your enthusiasm to approach the ECMM with any ideas or projects you think this society might sponsor. Because we reach medical mycologists all over Europe we can sometimes achieve things on a broader scale than a national society.

Frank C. Odds
ECMM President

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20 ECMM Working Group on \textit{Pseudallescheria/Scedosporium} Infections

22 6th International Conference on Cryptococcus and Cryptococcosis
23 Medical Mycology in Africa
ECMM Affiliated Societies

(Information provided by the member Societies)

A Il-Russian National A cademy of Mycology
President: V. V. Sergeev
Vice president: Head of M edical Section: S. A. Burova
Secretary: A. Y. Sergeev (ECMM delegate)
Vice president: V. M. L eschenko
Membership 2004: 246
National meeting: Third R ussian Congress of M edical M ycology, March 24-25, 2005
Website: www.mycology.ru

A associação Portuguesa de Micologia Médica (A SPOM M)
President: M. R. ocha
Vice president: R. M. Velho
Secretary: M. L. Rosado (ECMM delegate)
Treasurer: M. G. ardetete
Membership 2004: 50

A sociedade Espanhola de Micologia (A E M)
President: J. Pontón San E meterio
Secretary: F. J. Cañabes Saenz
Treasurer: F. H. hernando
President M edical M ycology S ection: J. Pemán G arcía (ECMM delegate)
Membership 2004: 142
National meeting: every two years
Journal: E vista Iberoamericana de Micología

A ustralian S ociety for M edical M ycology/ O sterreirische G esellschaft für M edizinische M ycologie (A SM M /Ö G M M)
President: R. W ürzner
Vice president: G. G inter-H anselmayer, B. W illinger
Secretary: C. Lass-Fiörl (ECMM delegate)
Vice secretary: H. -J. Dornbusch
Treasurer: C. Speth
Vicedirector: K. Kuchler
Membership 2004: 119

B ritish S ociety for M edical M ycology (B SM M)
President: F. C. O'dds (ECMM delegate)
General Secretary: H. R. A. shbee
Meetings Secretary: E. Lignell
Treasurer: D. M. ilac allum
Membership 2004: 281
National meeting: April 3-5, 2005, Canterbury
Newsletter: BSM M Newsletter

B ulgarian M ycological S ociety (B MS)
President: T. K. K antardjiev (ECMM delegate)
Vice president: G. M atev
Secretary: A. K ouzmanov
Treasurer: T. Velinov
Membership 2003: 41

C ommittee for M edical M ycology of C zechovskov S ociety for M ycology (CSSM)
President: K. M encl (ECMM delegate)
Secretary: P. H amal
Treasurer: J. Stendrup
Membership 2004: 14
National meeting: 2006
Newsletter: Bulletin of CSSM

D anish S ociety for M ycopathology
President: J. Stendrup (ECMM delegate)
Vice president: B. A. ndersen
Secretary: B. K. nudsgaard
Treasurer: J. Stendrup
Membership 2004: 25
National meeting: twice a year
Newsletter: Bulletin of the Danish Society for M ycopathology

D eutschsprachige M ykologische G esellschaft e.V. (D MGK)
President: H. H. Hof
Vice president: M. R. hunke
Secretary: H. C hr. korting
Treasurer: M. E yser
Vice president: M. Schaller
Membership 2004: 503
National meeting: September 8-10, 2005, Leipzig
Journal: M yogesce Newsletter: M ykologe Forum (4 issues/year)

F ederazione Italiana di M ycopathologia U mana e A nimale (FIMUA)
President: M. T. M ontagna
Vice president: P. L. Viale
Secretary: F. Archies
Treasurer: A. M. Torronato
ECMM delegate: M. A. Viviani
Membership 2004: 160
Newsletter: FIMUA news
National meeting: 2006, Firenze

F innish S ociety for M edical M ycology
President: E. L. Mintikka
Vice president: J. Salonen (ECMM delegate)
Secretary: H. Ranta
Treasurer: V. Vuotilainen
Membership 2004: 85
Newsletter: Sienet ia Terveys (Fungi and H ealth)

H ellenic S ociety for M edical M ycology
President: G. L. Petrakis
Vice president: G. Samonis
Secretary: E. Frangouli
Treasurer: A. Miträusia
ECMM delegate: E. D. Iad
Membership 2004: 49
National meeting: June 2005

H ungarian M edical M ycological S ociety
President: G. Simon (ECMM delegate)
Secretary: G. Fekete
Membership 2004: 59

I srael S ociety f or M edical M ycology
President: E. Segei
Vice president: I. Polacek
Secretary: I. Berdichevsky (ECMM delegate)
Treasurer: D. E. iad
Membership 2004: 60
National meeting: twice a year

M ycology G roup of B osnia H ercegovina
President: L. O. zegovic (ECMM delegate)
Secretary: M. Babić
Membership 2003: 19
National meeting: twice a year

Netherland S ociety for M edical M ycology
President: J. F. G. M. E . M eis (ECMM delegate)
Secretary: E. P. F. Y zerman
Scientific Secretary: S. de H ooog
Treasurer: M. H. D.安
Membership 2004: 155
National meetings: A pril 2005, A rhem;
October 2005, Utrecht
Newsletter: NV M y Newsletter

Nordic S ociety for M edical M ycology
President: M. C. A rendrup (ECMM delegate)
Vice president: M. R. nichardson
Secretary: P. Sandven
Treasurer: D. M. L. S auente
Membership 2004: 85
National meeting: A pril 2005, Copenhagen
Newsletter: at web site
Website: www.nsmm.nu

Polish D ermatologic S ociety
President: E. Baran
Vice president: Z. A.amska, R. M aleszka
Secretary: J. Szepeckzyński (ECMM delegate)
Treasurer: A. Bialynicki-B iurla
Membership 2004: 98
National meeting: 2006, G dansk
Journal: M ykologia Le karska (M edical M ycology)

S ociété Belge de M ycologie Humaine et A nimale/B elgische V ereniging Voor M enselijk en D iertijlke M ycologie
President: D. Swinnen
Vice president: D. Parent, M. L ontie
Secretary: P. E. Lagneau, K. Lagrou
Treasurer: P. Symens
ECMM delegate: N. Nolard
Membership 2004: 187

S ociété Française de M ycologie M édicale
President: O. M ahin
Vice president: N. Contet-Audonneau, A. D atry, P. B oiron
Secretary: B. D upont (ECMM delegate)
Treasurer: G. Lacroix
Membership 2004: 400
National meeting: M ay 25-27, 2005, B esançon
Journal: J ournal de M ycologie M édicale

Swedish S ociety for C linical M ycology
President: J. Fagermann
Vice president: T. K aaman
Secretary: L. K lingspor (ECMM delegate)
Treasurer: M. L. van Rosan
Membership 2004: 85

Swiss M ycological G roup
ECMM delegate: M. Monod

Turkish M icrobiological S ociety
President: O. A. ng
Secretary: C. B. Johansson
Treasurer: D. Y aygili
ECMM delegate: E. T umbay
Membership 2003: 150
National meeting: N ovember 2005, K onya
Newsletter: Bulletin of the Turkish M icrobiological Society.
Austrian Society for Medical Mycology/ Österreichische Gesellschaft für Medizinische Mykologie (ASMM/ÖGMM)

Reinhard Würzner
President of the ASMM/ÖGMM

The Austrian Society for Medical Mycology (ASMM/ÖGMM) was founded on November 21st 2000, in order to increase the flow of information concerning international and national meetings and improve the medical education and research in the field of Medical Mycology in Austria. Such a separate legal entity was considered necessary as medical education and science funding is still dependent on national governments and different country-specific political and financial structures.

The particular aims of the ASMM were, and still are, the organisation of symposia and practical courses, the standardisation of diagnostic procedures and the establishment of therapeutic guidelines. A further aim is the exchange of know-how within Austria to spread or learn special techniques.

Despite the ASMM’s independence from both the German-speaking Mycological Society (Deutschsprachige Mykologische Gesellschaft - DMykG) and the Austrian Society for Hygiene, Mikrobiologie and Preventive Medicine/Österreichische Gesellschaft für Hygiene, Mikrobiologie & Präventivmedizin (ÖGHM P), the ASMM considers itself as offspring and as partner of both societies and will maintain strong links to them - most of the ASMM members are also members in one or both of these societies.

At present the ASMM does not organise its own national annual meetings, but encourages its members to participate in the DMykG and ÖGHM P meetings. The president of the ASMM has agreed to organise the MYK 2006 in Innsbruck as a joint meeting with the ASMM.

After over three years of proving to be a very active society with organisation of several symposia and workshops - for further details please visit the ASMM homepage at http://www.oegmm.at - the ASMM has applied for membership in the ECMM which was kindly accepted on the occasion of the ECMM meeting in Wroclaw in spring 2004. The ASMM has 119 members at present, including 16 companies.

In order to maintain the present momentum, the ASMM would be very interested in hosting an ECMM meeting in the not too distant future in Vienna, but this will be discussed with the other ECMM members. Nevertheless, the ASMM wants to emphasize that it is committed to contribute to the future success of the ECMM at a very early stage of its membership.

Reinhard Würzner
President of the ASMM/ÖGMM

Symposia and Workshops of the Austrian Society for Medical Mycology

- Clinical Mycology and Diagnostics
  Innsbruck, June 2002
- Molecular Diagnostics of Fungal Infections
  Vienna, December 2002
- Diagnostics and Therapy of Fungal Infections in Immunosuppressed Patients
  Innsbruck, July 2003
- Systemic Fungal Infections: Prevention, Diagnostics and Therapy
  Graz, October 2003
- Joint Statusworkshop with the German Hygiene & Microbiology Society (DGHM)
  Innsbruck, February 2004
- Joint Mycology-Workshop with the Austrian Hygiene & Microbiology Society (ÖGHM P)
  Bad Ischl, May 2004
- Medical Mycology - Practical Course
  Vienna, November 2004
The Nordic Society for Medical Mycology (NSMM) was formed in Copenhagen the 25th of August 2003. The motivation hereof has arisen from the fact that although medical mycology is a growing field and relevant to doctors and scientists in many medical and microbiological specialities, mycology still forms a rather small area in each of the Nordic countries. Thus, it is our hope that a Nordic society will increase the possibilities of collaboration across the borders by creation of a forum where doctors, scientists, students and others with interest in human and animal medical mycology can meet.

The society plans to arrange at least one annual scientific meeting in medical mycology which will be held in Copenhagen at Statens Serum Institute March 31st 2005 and the "2nd NSMM scientific meeting" focusing on "Proper use of Antimycotics" which will be held also in Copenhagen on April 1st 2005. Information on both arrangements can be found at the web-site.

The board established at the founding meeting consists of the following eight members:

Maiken Cavling Arendrup, M.D., Ph.D. - President, Meetings Secretary for the 1st scientific meeting, Karolinska Institutet, Huddinge University Hospital, Stockholm, Sweden,
Jan Faergemann, M.D., Ph.D., Professor in Dermatology, D apartment of Dermatology, Sahlgrenska University Hospital, Göteborg, Sweden,
Niels Anker Peterslund, M.D. - Department of Haematology, Århus C, Denmark,
Juha Salonen, MD, Päijät-Häme Central Hospital, Lahti, Finland.

Applications for membership of the society are most welcome, the application form can be found at our web page: www.nsmm.nu or can be acquired by E-mail request at the following E-mail address: Per.Sandven@rikshospitalet.no

Maiken Cavling Arendrup President of the NS MM
The 10th Congress of ECMM in Wroclaw, Poland, turned out to be a very successful meeting, with several hundred participants from all over the world. The local organizers, Prof. E. Baran and J. C. Szepietowski, together with the Mycological Section of the Polish Dermatological Society undertook a difficult job to attract scientists, mycologists, and clinicians from all continents in a wonderful meeting to discuss topics related to fungi and fungal diseases. During the congress, excellent presentations were delivered by the invited speakers. In addition, a great number of high-quality submitted abstracts contributed to lively poster and oral presentation sessions. The social program of the meeting also was quite nice.

The first day of the meeting, June 17, 2004, started with the meeting of the ECMM Council. The opening ceremony was then held followed by a welcome reception where friends and colleagues met in a relaxing, warm, and joyful atmosphere. The next day, Friday, and the subsequent days the meeting continued with excellent lectures delivered by national specialists. In addition, scientific symposia were organized by experienced faculty and contained high-quality lectures on specific topics related to biology, pathogenesis, diagnosis, and management of fungal diseases. The prestigious E. Drouhet Lecture was delivered by Prof. Eugeniusz Baran, who presented a series of beautiful pictures of the Wax Mycological Models Collection stored in Wroclaw’s Department of Dermatology. This presentation intended to review the history of wax mycological models collection built and found in the Department for many decades. These models represented skin lesions, tumors, or other pathological conditions. They were called “moulages”. The audience was enthusiastic to participate in 3 well-attended satellite symposia generously supported by grants of equal number of pharmaceutical companies.

The next ECMM annual meeting will be held jointly with EORTC as 2nd TIMM (Trends in Medical Mycology) in Berlin, 23-26 October 2005 in the new renovated Berlin Congress Centre located at the historical Alexanderplatz in the middle of the cultural centre of Berlin. During 2006, ECMM will not hold a separate meeting, but a co-sponsored meeting within ISHAM in Paris from June 25 to 29, 2006. Please schedule your attendance to our future meetings in Berlin 2005, Germany, and in Paris 2006, France. We are looking forward to seeing all the members of the national mycological societies to actively participate in these two very important ECMM meetings.

Emmanuel Roilides
Fungal infections in immunocompromised hosts

The session chaired by I. Berdicevky, L. Polachek and Z. Adamski focussed on different topics concerning invasive mycoses in the IC host, including pathogenesis, advances in molecular diagnosis and typing, the present status of invasive fungal infections in patients with AIDS and epidemiology and management of invasive mycoses in the immunocompromised child.

Pathogenesis

June Kwon Chung (National Institute of Health, Bethesda) gave a fascinating presentation on the mechanism by which Cryptococcus neoformans penetrates into the brain and CSF via circulating blood causing meningoencephalitis, which was one of the least understood steps in CNS cryptococcosis.

How yeast cells interact with and cross the blood brain barrier was investigated using an in vitro model of the human blood-brain barrier. Within 15 to 30 min exposure to C. neoformans, human brain microvascular endothelial cells were shown by SEM to produce extensive microvillus-like projections and to adhere to the penetrating yeast cell at the entry site on the surface of the endothelial cell. In addition, using TEM, the fungal cell was shown to be enclosed in a vacuole within the endothelial cell and to cross the endothelial monolayer cells without affecting their integrity. No yeast cells were found between endothelial cells.

Both in vitro and in vivo results indicate that C. neoformans cells invade the central nervous system by transcellular crossing of the endothelial brain-blood barrier.

Molecular diagnosis and typing

An update of the molecular methods developed in medical mycology was presented by Aristea Velegraki (Mycology Reference Laboratory, University of Athens). The variety of clinical presentations of invasive fungal infections in the immunocompromised host as well as the antifungal susceptibility trend of common and emerging fungal pathogens pose diagnostic and therapeutic challenges requiring adoption of dependable sensitive and specific laboratory assays. Molecular diagnostic methods seem to be the best candidates to fit the above requirements. Technological developments have introduced into the clinical laboratory methods for detection, identification, and quantification of fungal DNA or mRNA by single and multiplex real time PCR. In addition, assays such as the line probe assay (LiPA) for recognition of specific fungal pathogens in clinical material or the use of peptide nucleic acid (PNA) probes for detection of fungi in histological material are now considered for use in fungal diagnostics. More promising are the multiplex PCR and the microarray assays as they represent an evolution of well-established techniques and are supported by the development of procedures that facilitate data analysis and interpretation of results. Molecular methods such as DNA fingerprinting, AFLP, PCR-SSCP, and multilocus sequence typing (MLST) are also becoming essential for understanding the epidemiology of nosocomial infections. Furthermore, the recent development of a reverse transcription PCR for studying azole resistance gene expression and regulation in Candida albicans isolates can contribute in optimising management strategies for invasive Candida infections.

Invasive fungal infections in patients with AIDS

Spinello Antinori (Infectious and Tropical Disease Institute, University of Milan) reviewed the changing face of opportunistic mycoses in HIV-positive patients treated with highly active antiretroviral therapy (HAART). He focussed on the dramatic decrease in the incidence of pneumocystosis, cryptococcosis and esophageal candidosis observed either in Europe and USA as the consequence of the introduction of HAART. The potential direct activity of protease inhibitors against fungal pathogens, especially Candida spp. and Pneumocystis jiroveci was...
Systemic fungal infections have not only emerged in the adult population, but also in children and especially in preterm infants. Certain children are at higher risk to develop fungal infections: children suffering inherited (chronic granulomatous disease, myeloperoxidase deficiency, severe combined immunodeficiency), and acquired immunodeficiencies (HIV, chemotherapy induced neutropenia), acute myeloid leukaemia, complicated abdominal surgery, long-term use of broad-spectrum antibiotics and steroids, patients with implanted catheters and preterm infants below 1.500g birth weight. Even a full-term newborn is not immunocompetent and due to a high Candida colonization rate of the mother during pregnancy, it may develop oropharyngeal candidiasis and diaper dermatitis or congenital cutaneous candidiasis. Candidaemia and disseminated candidiasis are inversely correlated with the gestational age and birth weight: Extremely low birth weight infants (ELBW) have a risk of up to 20% for developing neonatal candidiasis during their stay in the neonatal intensive care unit (NICU). From a recent epidemiological study conducted in Germany, 50% of ELBW infants are colonized with fungi, and from those that develop disseminated infection the mortality rate is 30%. C. albicans is the most commonly isolated pathogen (70%), but 23% were other Candida spp. with C. parapsilosis the leading one. Other so far rare yeasts, such as Trichosporon and Rhodotorula spp. as well as rare moulds are emerging in paediatric oncology patients undergoing bone marrow transplantation or stem cell transplantation. Unfortunately, in general almost 60% of the children and 90% of the newborns receive treatment with unlicensed drugs in Europe, so it is the paediatrician’s choice either to prescribe a drug with high efficacy in adults that has not been tested in children or a drug with less efficacy that has been tested in children. Antifungals that are commonly used in paediatrics are conventional and liposomal amphotericin B as well as the azoles fluconazole and itraconazole due to their oral bioavailability. The new antifungals of the next generation triazoles (voriconazole, posaconazole and ravuconazole) as well as the echinocandins (caspofungin, micafungin, anidulafungin) have potential for the paediatric population due to their broader spectrum, oral bioavailability for the azoles as well as their tolerability and excellent safety profiles. Before these drugs can be recommended in paediatrics, clinical trials including pharmacokinetic and pharmacodynamic studies for the different age groups are warranted. Despite these potent antifungals, mortality rates in paediatrics caused by yeasts and moulds are still far too high. Therefore the concept of prophylaxis, empirical and preemptive antifungal therapy has been implemented in the care of paediatric oncology patients. Currently it is under debate in the paediatric community whether these concepts need to be expanded to other patient groups such as preterm infants. Initial studies have shown reduced colonization and less fungal infections in fluconazole treated patients in comparison to placebo, but survival rates were so far not significantly different. From a number of studies it appears that thrombocytopenia in preterm infants is highly suspicious for a fungal infection. Other patient groups, such as cystic fibrosis (CF) patients and asthmatics are not clearly regarded as immunocompromised, but long-term use of systemic and inhaled steroids as well as implanted catheters may predispose to fungal infection. It is already well known that allergic bronchopulmonary aspergillosis can be caused not only by Aspergillus spp., but by different other moulds and various mould infections have been observed in the destroyed lung of CF-patients.

It is a future task to assign more attention and focus in research to fungal infections in paediatric patients with special regard to preterm infants and other immunocompromised (oncology, HIV) and immunocompetent (cystic fibrosis, asthmatics) children at high risk for developing fungal infection or mould allergy. The new antifungals need to be investigated in this population including in preterm infants and new concepts of antifungal preemptive therapy and prophylaxis need to be carefully evaluated in children to reduce morbidity and mortality caused by fungi.

Frank-Michael Müller
Host-fungus relationships

This symposium, chaired by E. Roilides, S. Levitz and P. Kurnatowski, gave a fascinating insight into the innate immunity as well as the recognition of fungi by different membrane cell receptors.

O. Ibrahim-Granet (Unité des A. spérgillus, Institut Pasteur, Paris) focussed her talk on the interactions between the alveolar macrophage which is the first line of defence against Aspergillus fumigatus and the conidia of this fungus. Cellular mechanisms involved in the phagocytosis and the killing of conidia have been described. Polymerisation of the actin cytoskeleton is essential for phagocytosis and the killing of conidia is directly associated with acidification of the phagolysosome and the production of reactive oxidant intermediates. In this talk the activation of MAP kinases in alveolar macrophages was reported, also activation of the transcription factor NFkB in response to the interaction with A. fumigatus conidia. The activation of the transcription factor as well as expression of the cytokines are correlated with the first stage of germination of the conidia within the phagolysosome.

S. Levitz (Boston University School of Medicine, USA) focussed his talk on the contribution of Toll-Like Receptors and mannose receptors to the immune response to Cryptococcus neoformans and A. fumigatus. TLR 2, TLR 4 and CD 14 recognize the major cryptococcal capsular polysaccharide. Mice lacking TLR adaptor proteins and CD 14 show reduced survival when infected with C. neoformans. TLR 2 signalling was essential for optimal macrophage proinflammatory cytokine responses to A. fumigatus and TLR 4/- and MyD 88 immunosuppressed deficient mice died sooner when infected with A. fumigatus.

In the third talk C. Gil-Lamaignere (University of Heidelberg, Germany) reviewed the participation of acquired and innate immunities in host defence against Candida infections with a particular emphasis on the role of polymorphonuclear leucocytes. The involvement of pH variations, reactive oxidant production and release of antimicrobial peptides killing processes was discussed. Expression of inflammatory cytokines suggests that Candida modulates host gene expression to its advantage.

The last presentation was made by E. Roilides (University of Thessaloniki, Greece) on host defence against emerging fungal infections. The enhancing activity of the oxidative stress of polymorphonuclear leukocytes against Scedosporium, Rhizopus, Fusarium and Aspergillus species following treatment by different cytokines, particularly IL5, has been shown.

Several studies have shown immunomodulatory effects on the function of the polymorphonuclear leucocytes following the combination of cytokines and antifungal agents such as azoles. This suggests the utility of cytokines as adjunctive therapy in combination with conventional antifungal chemotherapy.

Oumaïma Granet
Nikolaos Tegos from the Mycology Reference Laboratory of Medical School, University of Athens, was awarded the 2004 ECMM Young Investigators Travel Award.

It was a great honour receiving the ECMM Young Investigators Travel Award as judged on the content of my poster entitled “Diploidy and single nucleotide polymorphism identified in the rDNA ITS 2 region of bloodstream Candida albicans isolates from a single intensive care unit” (Authors: N. Tegos, P. Menounos, A. Mitroussia-Ziouva and A. Velegraki), which was presented at the 10th ECMM Congress, held at Wroclaw, Poland in June 2004.

I am a 3rd year PhD student undertaking my thesis in the Mycology Reference Laboratory (Hellenic Centre for Diseases Control), Department of Microbiology, Medical School, University of Athens, Greece. My studies are focused on the molecular identification and subtyping of Candida species isolated from immunocompromised patients, a high risk group of individuals for opportunistic fungal infections. Over the past decade fungal infections have risen from 2.0 to 10.8 cases per 1000 hospital admissions. Of these, C. albicans constitutes the most common aetiology of nosocomial infections that not only it is accounting for mortality rates of up to 40% in bloodstream infections, but it is also a biologically complex microorganism demonstrating virulence-associated phenotypic plasticity.

The aim of my study was to validate the potential of the ITS regions of the nuclear rDNA complex as molecular markers for reliable typing of C. albicans nosocomial isolates. For this purpose a population...
of sixty six (66) bloodstream strains, isolated over a period of two years from a single Intensive Care Unit (ICU), were studied by PCR amplification of the ITS 1 and ITS 2 regions followed by single strand conformation polymorphism (SSCP) analysis of the amplification products. ITS2 PCR-SSCP clustered the strains in 8 distinct groups, whereas the ITS 1 region was found conserved. Sequencing of the ITS 2 amplicons (ABI Prism 310 Genetic Analyzer, Applied Biosystems, USA) confirmed this clustering and, furthermore, revealed five novel types (GenBank Accessions AY560099-AY560106) in addition to the three already published. Of these, three were the result of diploidy and the remaining two of single nucleotide substitutions. C. albicans diploidy identified in the ITS 2 region is reported for the first time. In addition, ITS 2 PCR-SSCP showed that ICU patients hospitalized at the same period of time were infected by the same C. albicans SSCP subtype. Therefore, recognition of C. albicans ITS 2 subtypes and diploidy in different clinical isolates is feasible by PCR-SSCP. These results corroborate that diploidy can be recognized in the C. albicans ITS 2 region and hence this locus can serve as a marker for detecting it. They can also contribute in the confirmation of the notion that the endurance of genetic phenomena in divergent clinical microenvironments can highlight the epidemiology of nosocomial infections owing to this genetically intricate yeast.

The 10th ECMM Congress was particularly educational in that it comprised sessions with multidisciplinary topics, a trend which induces the awareness to new comers in the field, like me, that Mycology can confidently amalgamate a plethora of science disciplines with a multitude of medical and veterinary specialties. I wish to thank to the ECMM for granting me the opportunity to benefit through the Young Investigators Travel Award.

Nikolaos Tegos

The ECMM President congratulates Dr. Nikolaos Tegos

- Concerning our presentation, titled:

- By authors (please mark the presenting author):

Presented □ As a poster / □ Orally (Tick square as appropriate);

Yes, we wish that our presentation is considered as a candidate for the ECMM Young Investigators Travel Award. Our presentation meets the eligibility criteria as follows (tick all squares that are appropriate):

1) The following team members are aged 35 years or less:

□ First author
□ Presenting author
□ Other coauthor(s) (who?)

2) The following team members do not hold an established position:

□ First author
□ Presenting author
□ Other coauthor(s) (who?)

3) The following team members are citizens of, or work in, a European country and are either members of a ECMM member society or willing to submit a membership application if selected.

□ First author
□ Presenting author
□ Other coauthor(s) (who?)

To be signed by the first or presenting author:

Date / 2005,

To be submitted as paper, fax or email to the Congress Secretariat (Congress Care, Muntelbolwerk 1, P.O. Box 440, 5201 AK’s-Hertogenbosch, The Netherlands, fax: +31 73 690 1417, email: info@congresscare.com). To facilitate handling, we kindly recommend submission before October 15th, 2005. However, forms given at the Congress registration desk at latest October 23rd, will be considered.
The second international congress on Trends in Medical Mycology (TIMM-2) will be held in Berlin (Germany) on 23-26 October 2005. The yearly congress of the European Confederation of Medical Mycology (ECMM) and the bi-annually international conference Trends in Invasive Fungal Infection (TIFI) have merged in 2003. Therefore Trends in Medical Mycology will be organised under auspices of the EORTC and the ECMM. The first TIMM organized in October 2003 in Amsterdam, has been a very successful meeting with approximately 1000 participants enjoying an outstanding meeting. It is now our privilege to organize TIMM-2 in Berlin, one of the most rapidly changing big cities of the world. Here you will find both a fascinating process of innovation and the omnipresent trademarks of a unique tradition of science, culture and politics. Berlin is the place where Rudolf Virchow, Robert Koch and many other prominent medical scientists spent the most productive period of their professional life.

The congress venue is located right in the heart of Berlin at the Alexanderplatz and will take place at the Berlin Conference Center. We have prepared an ambitious program spanning all hot topics of medical and clinical mycology, consisting of 33 program parts with symposia, interactive morning sessions, plenary and poster sessions, oral presentation sessions, workshops, a keynote lecture and last but not least industry sponsored symposia. Main topics are antifungals, emerging fungal pathogens, fungal infections in the different patient population (immunocompromised host, children, hematology/oncology), dermatomycology, diagnostic methods, molecular methods, host-fungus relationship and allergy, mycotoxins). A part from symposia several interactive sessions with presentation and discussion of clinical case scenario will be included as well as workshops with face-to-face discussion on selected topics with experts (e.g. how to use molecular database?, interpretation of radiology findings?, importance of fungi in plants for humans? etc.). The welcome reception will be a "Berlin-like" come-together-party for all who enjoy a vibrant place with food, music and dance. In contrast, the congress dinner is planned in the outstanding German Historical Museum in the middle of the fascinating "Museumsinsel", formerly known as "Zeughaus". The Zeughaus is the oldest building located on the avenue Unter den Linden. It is one of most beautiful secular buildings of the Baroque period in northern Germany and owes its special place in art history to the high quality of its sculptural works.

The deadline for abstract submission is 1 June 2005. Information on the program could be found at the internet (www.timm2005.org). For further information please contact the congress secretariat at Congress Care (info@congresscare.com or www.congresscare.com). Detailed information on the final program will be given at the website in the beginning of 2005.

We would be delighted to welcome all of you in the capital of Germany for the largest European meeting on medical mycology.

Markus Ruhnke and Georg M. Aschmeyer
for the Executive Committee
The 7th ASM Conference on Candida and Candidiasis. Impressions

From Thursday, March 18 to Monday, March 22, 2004 the 7th ASM Conference on: "Candida and Candidiasis" was held at the Hyatt Regency Hotel in Austin, Texas, USA.

About 350 participants were at this conference. It was an exciting mixed "crowd", composed of many known faces, such as John Bennett or Michael Pfaffer from the clinical field, and Pete Magee, Richard Calderone or William Fonzi from basic research, intermingled with many, many young faces, for whom this may have been the first encounter in this form with the Candida topic. Also, although it was an ASM Conference, the participants actually represented the whole globe, including a significant number from Europe, and few from Asia, the Middle East or Latin America.

The opening session on Thursday evening focused on the past, present and future of Candida research with leading experts from basic (David Soll), clinical (John Rex) and industry (Chris Hitchcock) research. It was a most interesting concept contributing to a broad in depth perspective on what was already achieved and what could possibly be expected to be gained in the future.

The scientific program of the following three and a half days consisted of 11 symposia sessions with invited presentations and 3 poster sessions with 247 posters.

The organizers of the conference based the program of the symposia sessions on a novel interesting approach. Each session was chaired by two conveners assigned by the organizers. The conveners presented research from their groups and selected the rest of the presentations from the submitted abstracts. The topics covered the major current areas of interest of Candida research, including among others, Candida mating, genomics and proteomics, signaling, biofilms, epidemiology and population studies, non-albicans Candida.

Of the large number and variety of the interesting lectures, to pick a few scientific highlights, would be a difficult task. Based on personal impression, the presentation of Beatrice Magee on the role in virulence of mating and ploidy in C. albicans, was exciting. In view of the finding that C. albicans can produce tetraploids and that natural isolates are diploid, they infected mice with diploid (heterozygous and homozygous at the mating type locus [MTL]) and tetraploid strains. They noted that the tetraploids were less virulent, and that the configuration of the MTL affects virulence only in some strains. Importance of ploidy was also discussed by James Andersen from Toronto, who stressed the impact of ploidy on the evolution of resistance to fluconazole in C. glabrata. Special interest could also be assigned to the presentation of Michael Kruppa at the session of Signaling. He reported on quorum sensing in C. albicans by farnesol, which is an endogenous lipid and is produced under high density cell population. High cell density affects morphogenesis and this effect seems to be regulated by farnesol. A nother presentation of interest at the same session was that of Joachim Morschhauser from Germany who described a study which provided insights into the mechanisms how C. albicans senses an environmental signal that regulates hyphal growth. It was also exciting to be informed by Derek Sullivan about the initiation of the project of sequencing of the C. dubliensis genome.

As a more general observation, it could be noted that the conference was rich in presentations describing transcriptional profiles of C. albicans in different models, as the use of DNA micro-arrays technology has become more extensive.

The 3 poster sessions (247 posters) that were held each afternoon during the 3 full days of scientific activity were grouped by topic area, and each day all topics were covered. This resulted in very significant participation during these sessions, mingling of senior and younger participants and lively discussions around the poster boards.

The conference organizers provided breakfasts, lunches and coffee breaks, which supplied additional opportunities for interactions between the participants. The social activities included an opening reception and a banquet on Sunday. The latter was a most lively event with music and dancing. Austin is a city well known for its musical activities, which added an additional flavor to the social part.

In summary, the 2004 ASM Candida Conference in Austin was a successful event, both scientifically as well as socially, and the Candida community looks forward to the next conference.

Esther Segal
The inaugural meeting of Advances Against Aspergillosis was held from Sept. 9-11, 2004 at the Grand Hyatt Hotel in San Francisco. Overall, this new international meeting was designed as a way of assembling many of the leading clinicians and basic scientists from around the world to drive forward the scientific and medical research agenda in Aspergillus and aspergillosis. The international flavor of the meeting was evidenced by the inclusion of 60 Faculty from 12 countries. The strong scientific program and attractive venue of San Francisco proved to be an excellent combination, with 364 registrants from 28 countries. Attendees included clinicians (oncologists, hematologists, pulmonologists, infectious disease specialists), basic research scientists (mycologists, immunologists), medical technologists, veterinarians, industrial hygienists, graduate and post-doctoral students, as well as pharmaceutical industry representatives. The generous sponsorship of numerous pharmaceutical companies helped offset the costs of the meeting and provided additional satellite symposia, as well as social events. Support from the International Society for Human and Animal Mycology (ISHAM) was used for important travel scholarships to allow young scientists that had submitted an abstract for poster presentation to attend the meeting. Three of these awards were made, two other donors funded two other awardees, and the meeting offered funding to 14 others.

Day one of the meeting included open registration, and a welcome reception, sponsored in part by Vicon Pharmaceuticals, for registrants and faculty. The reception was held on the 36th floor of the Grand Hyatt providing stunningly clear views of San Francisco and a friendly atmosphere for the attendees to mingle, renew friendships, and create new ones. A dinner for the faculty and their guests was hosted by Gilead Sciences. Open to all attendees was an evening dinner satellite symposium sponsored by Merck following the welcome reception.
this symposium current clinical issues of treatment using the newer antifungals and criteria for diagnosis of aspergillosis were presented by J. Perfect and W. Hope. Two additional breakfast symposia were open to all attendees. The initial session began at 7:00 AM Friday morning and was co-sponsored by BioR ad laboratories and Enzon Pharmaceuticals. Among the issues discussed were new diagnostic testing assays, antifungal susceptibility testing patterns and clinical response of aspergillosis patients to lipid-formulated amphotericin B. The faculty included P. Pappas, P. Verweij, P. Chandraskar, and M. Kleinberg. A second breakfast symposium sponsored by Schering-Plough was held the following day and included talks on oral prophylaxis and chronic pulmonary aspergillosis by E. Bow and D. Denning.

Friday morning began the first of two full days of scientific sessions. The official opening of the meeting was performed by Dr. David A. Stevens, who welcomed all and provided a synopsis of the genesis of the meeting. The evolution of the meeting began with the writing of a review paper, which evolved into a 173-page full supplement published in 2003 by “Clinical Infectious Diseases”, with further evolution into the idea of organizing a meeting solely dedicated to A. fumigatus, to finally the meeting proper. Drs. Stevens, Denning, and Steinbach became the Chairs of the meeting, inviting other interested scientists to participate in the Organizing (five members) and Scientific (12 members) committees. The goals for the meeting were numerous and translational in nature. They wished to assemble the world’s leading clinicians and scientists to advance the scientific and medical research agenda in A. fumigatus and aspergillosis, to present the very latest advances and thoughts on aspergillosis from speakers actively advancing the field with new discoveries, and to engender collaborative relationships amongst clinicians, basic scientists, as well as industry to further advance the field. Thus, the program for the meeting encompassed a broad range of topics including basic research, genomics, molecular biology, molecular genetics, immunology, pathogenesis, clinical medicine, veterinary medicine, diagnostics and epidemiology. Overall, the program included 45 invited speakers, 4 speakers chosen from submitted abstracts, 87 submitted abstracts presented in posters and three industry sponsored satellite symposia.

The scientific sessions began with epidemiology of Aspergillus, focusing on the frequency of infection and mortality in humans and animals, environmental sources of infection including water supplies in patient rooms and links of response to A. fumigatus to asthma (D. Warnock, A. Warris, E. Tovey, C. Hogaboam, and L. Tell). The following session addressed the difficult issues of diagnosis of aspergillosis from phenotypic aspects to molecular methods used in clinical laboratories, as well as how radiological diagnostics contribute to the overall clinical differential decision making process (N. McClenny, C. Orrison, D. Buchheidt, and R. Greene). A novel aspect of the programming for the meeting became apparent with the intentional interspersion of sessions dealing with clinical sciences with those of basic sciences, allowing a marriage of the two crucial halves of scientific advancement. Thus, the third session of Friday initiated the basic science and molecular biology part of the program. The session topics began with an overview and up-date of the four genome sequencing projects related to species of Aspergillus. These sequences are due for publication in the fall of 2004 and will become an invaluable resource for the A. fumigatus community. Also discussed were the topics of sexual reproduction in A. fumigatus, comparative cell wall structure and function and biosynthesis of ergosterol and transporter genes in relation to the development of drug resistance (W. Nierman, P. Dyer, J-P. Latté, and G. Goldman). The intensity of the scientific portion of the meeting became apparent with three additional sessions following the afternoon break. The first of these returned to the clinical side with a roundtable discussion of the utility and key issues debating prophylactic versus empirical antifungal therapy in immunocompromised patients (K. Marr and E. A. Naissie) in a session chaired by P. Pizzo, who pioneered the concept, and T. Walsh.

A true highlight of the conference followed with four speakers chosen by the conference committee members from the submitted abstracts. Each of the four 10 minute talks were superbly presented by the young investigators and exam...
The complete 2004 conference syllabus as a PDF file, as well as meeting updates and information for the 2006 conference, are available at the conference website: www.advancesagainstaspergillosis.org
In addition, a supplement of speaker's papers from the 2004 meeting will be published in "Mycological" in 2005.
There are few studies addressing the epidemiology of infections due to Zygomycetes in Europe. Most of them are detailed, yet, sporadic case reports or single-site reviews covering a time period. A systematic multicentre survey of these infections in Europe may, therefore, offer the opportunity to analyse epidemiological data that would consequently increase vigilance for early diagnosis and expand on existing prevention and treatment schemes. It will also give further details on the predisposing factors for these infections, highlight the possible role that antibacterial and antifungal chemotherapy play in the emergence of zygomycosis and disclose any potential temporal and geographical variation in its incidence.

Therefore, the specific goals of this epidemiological survey are a) to record cases of zygomycosis in collaborating countries and b) to analyse the zygomycete strains isolated from these infections.

Data will be collected from all European and other (i.e. Israel) countries collaborating in this study. In each country, a Coordinator will be responsible for disseminating information regarding the survey, as well as for distributing and collecting the completed epidemiological forms. The procedure for collecting cases will be individualised in each country, depending on pre-existence of national network for mycological surveillance or mycology reference centre. The following ways of approach for implementing this survey in each country are recommended: a) through the Hospital Microbiology Laboratories, b) through Pathology Departments and c) through Infectious Diseases, Haematology, Internal Medicine and Surgical Departments. A combined approach would be the most successful, as in each case drawing clinical information and corresponding isolates together will ultimately contribute in collecting valuable information on the biodiversity of pathogenic Zygomycetes in Europe. Confidentiality regarding names of patients, clinical data and strain ownership rights will be meticulously followed as in the previous ECMM studies.

Clinical and epidemiological information on each case will be filled-in on the provided form. Every three months the Coordinator of each country will collect these forms and forward them to the Study Coordinator. An effort will be made to construct a web site so that participants are able to submit their data online.

The isolates corresponding to each recorded case will be submitted to the National Mycology Reference Lab, University of Athens. The mailing address of the Lab and instructions on how the strains are to be packaged and secured for shipping will be provided upon commencement of the study. In addition, serum specimens from each patient should be kept in store at each Centre for future serological studies.

The prospective study is planned to start on January 1st, 2005 and it will last for one year. One year (2004) retrospective data will be also collected.

All clinical and epidemiological data will be analysed yearly and will be available to all participants through the coordinating site.

In the event that publications result from the study, the participants having contributed the largest number of cases and isolates to the study will be cited as authors. Although the exact number of authors remains to be defined, all contributors will be appended to the authors in the first page of the article, as was the case with previous ECMM studies.

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Fax +30210 7462635
E-mail: petrikos@med.uoa.gr
ECMM survey: Zygomycoses in Europe
Clinical isolates / Medical form

<table>
<thead>
<tr>
<th>Centre: Country: City:</th>
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### Patient information

<table>
<thead>
<tr>
<th>Country</th>
<th>City:</th>
<th>Race:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient code:</td>
<td>Birthday: (mo/y)</td>
<td>Sex:</td>
</tr>
<tr>
<td>Hospital/Ward:</td>
<td></td>
<td>Occupation:</td>
</tr>
<tr>
<td>Name of Physician:</td>
<td></td>
<td>Name of Mycologist/Microbiologist:</td>
</tr>
</tbody>
</table>

### Underlying disease / factors

- Non-Hodgkin lymphoma  
- Hodgkin’s lymphoma  
- Leukemia
- Autoimmune disease  
- Surgery
- Trauma (accidental)
- Burn
- Cancer
- Non-ablative allogeneic transplant
- GVHD
- Solid organ transplant
- Tacrolimus
- Diabetes
- Ketoacidosis at time of diagnosis: YES [ ] NO [ ]
- Chronic ambulatory peritoneal dialysis
- Chronic renal failure
- Neutropenia
- Resolution of neutropenia at time of diagnosis: YES [ ] NO [ ]
- At time of diagnosis neutropenia had resolved (days): 
- Treatment with antibacterial antibiotics
- Duration: 
- Catheter
- Polymorphonuclears <500
- Neutropenia
- CD4 cells: 
- Other

### Treatment (within 1 month prior to diagnosis of zygomycosis)

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Dosage</th>
<th>Date started</th>
<th>Date stopped</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Immunosuppressive</td>
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<tr>
<td>Antifungal</td>
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</table>

### Clinical data

- Fever
- Site of infection
- Other clinical data

### Imaging data

- XRay
- CTScan
- NMR
### Mycology

**Date of diagnosis:**

#### Histopathology
- Not done
- Organ/Biopsy/Autopsy: specify
  - Absence of hyphae
  - Presence of hyphae

#### Microscopy & Culture

<table>
<thead>
<tr>
<th>Sample</th>
<th>Direct microscopy</th>
<th>Culture</th>
<th>Identification (if completed)</th>
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</thead>
<tbody>
<tr>
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<td>Done</td>
<td></td>
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<tr>
<td>Sample 2</td>
<td>Not done</td>
<td>Done</td>
<td>Identification (if completed)</td>
</tr>
<tr>
<td>Sample 3</td>
<td>Not done</td>
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<td>Identification (if completed)</td>
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</table>

### Zygomycete pathology

**Date of diagnosis:**

<table>
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<tr>
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<th>Rhinocerebral</th>
<th>Sinusitis</th>
<th>Cutaneous infection</th>
<th>Mycetoma</th>
<th>Ophthalmic orbit</th>
<th>Oral cavity</th>
<th>Gastrointestinal</th>
<th>Bloodstream infection</th>
<th>Osteomyelitis</th>
<th>Other</th>
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### Treatment of zygomycosis

- **Surgery:** Specify Date:
- **Antifungal therapy:** Specify Drugs Dosage Date started Date stopped
- **Outcome:** Cured Death Date:

### Zygomycete isolates

<table>
<thead>
<tr>
<th>Ref. no</th>
<th>Date</th>
<th>Cultured from</th>
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<tr>
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### Other remarks:

- Zygomycete isolates
- Treatment of zygomycosis
- Surgery
- Antifungal therapy
- Outcome
- Zygomycete pathology
- Co-infection with
At the 8th ECMM Congress in Budapest, 2002 an ECMM Working Group on Pseudallescheria / Scedosporium infections was founded, which held its launching workshops on 16 and 17 April at the CBS, Utrecht, The Netherlands, and on June 16 as a pre-congress activity in Wroclaw, Poland. Altogether we had 33 speakers from 14 countries in a friendly atmosphere and nice ambiance. It was a pleasant surprise to note how much hidden knowledge on this fungal problem is already available in Europe. Subjects were surveillance, case reports, recent research data, and also future plans, ideas and techniques to be developed. Some areas of prime urgency were recognized.

The program contained four major areas, focusing on (1) clinical presentations, (2) the fungal agents of Pseudallescheria and Scedosporium and their ecology, (3) on animal models and antifungal therapy, and (4) on building up an efficient network with a web-accessible data base. Regular meetings are scheduled between partners active in the respective areas formed along these lines, and another workshop with the entire Working Group is scheduled in 2006. We will try to obtain European funding for the consortium, to which aim projects are being written. A dequate funding will facilitate our work considerably, and will attract wider attention to the problem of these frequently misdiagnosed fungi. Our ultimate aim should be a set of routinely applicable techniques, and protocols and guidelines for diagnostics, epidemiology and therapy.

Theme 1: Clinical surveillance

Pseudallescheria boydii is a relatively frequent colonizer of the lungs of patients with cystic fibrosis. In these patients Aspergillus is also relatively common, and after antifungal therapy to eradicate this fungus, P. boydii frequently appears to have taken its place. The problem has then aggravated, because P. boydii is more difficult to remove. Rarely this leads to invasive disease directly, but it is contra-indicative for heart-lung transplantation, which would have been the optimal therapy for these patients. Another important disease entity by P. boydii is cerebral infection after near-drowning or major trauma. The route of dissemination to the CNS is still a mystery, since blood is negative at culturing. Scedosporium prolificans is able to produce conidia in blood, which probably is an essential factor in the frequent disseminated infections due to this species. Systemic infections are nearly always fatal. One of the primary tasks of this subgroup is the development and wide distribution of an efficient isolation protocol. The subgroup is co-ordinated by Jean-Philippe Bouchara, Gerhard Haase and Sevtap A rikan.

Theme 2: Biology of the etiologic agents

It is estimated that on average two cases by a Scedosporium species are diagnosed yearly in each academic centre in Europe. However, there are indications that this number varies considerably between otherwise comparable hospitals. This may be due to the fact that the fungi are recognized with difficulty in histological sections: it is then nearly indistinguishable from Aspergillus, which may lead to incorrect diagnosis of the infection as aspergillosis. The route of transmission is also insufficiently understood. We know that the fungus occurs in high concentrations in agricultural soil and mud of polluted ponds and ditches, but we do not understand how most patients acquire their infection. Since the fungus is only rarely isolated from outside air or the indoor environment, an air-borne infection route seems unlikely, although dispersal by sticking to e.g. Aspergillus conidia might be possible. One of the primary tasks of this subgroup is the development and wide distribution of diagnostic...
protocols. The subgroup is co-ordinated by Juan Rodrigues-Tudela, Johannes Rainer and Sybren de Hoog.

**Theme 3:** Animal models and therapy

Although several new antifungals were registered during the past years, such as voriconazole and caspofungin, treatment of invasive infection by Scedosporium species remains problematic. S. prolificans is multi-resistant and insensitive to polyenes such as amphotericin B and the azoles. The registered antifungals also show poor activity in animal models. This also holds true for the new azole voriconazole, that has a response rate of only 25% in patients with invasive infection. An azole that is still in the process of being developed, albaconazole, seems effective, but it is as yet uncertain whether the compound will be developed further. Research therefore focuses on the efficacy of combination therapy, such as voriconazole combined with terbinafine. S. apiospermum is also multi-resistant, though less than S. prolificans. Treatment with voriconazole seems to be the most effective, although 41% of the patients with invasive infection still fail to respond. One of the primary tasks of this subgroup is the further testing of combination therapy and the development of albaconazole for therapy against S. prolificans, as well as the preparation of a genomic bank of P. boydii for virulence studies. The subgroup is co-ordinated by Paul Verweij, Josep Guarro, Aristea Velegraki and Bernard Cimon.

**Theme 4:** Data management

A database will be built by the Centraalbureau voor Schimmelcultures (Utrecht, The Netherlands, www.cbsknaw.nl), where all information concerning the fungus and its clinical course will be freely accessible on-line. Important nodes of the Working Group housing significant collections are located in Belgium, Spain and France; free exchange of strains will be organized by Françoise Symoens at Brussels. In addition to research, the ECM M Scedosporium Working Group also aims to increase awareness of this fungus and provide information to the clinician. Diagnostic guidelines and protocols for isolation from clinical materials as well as for treatment will be made available to the public. One of the primary tasks of this subgroup is the implementation of the web-accessible database and strain deposition structure. The subgroup is co-ordinated by Françoise Symoens and Vincent Robert.

**Information**

Symposia on the theme are scheduled at several forthcoming congresses, such as TIMM Berlin, 2005. A Network Workshop is scheduled for Spring 2006 in Angers, France. General information on the Working Group can be obtained from Sybren de Hoog dehoog@cbsknaw.nl

All those who are interested in these fungi are stimulated to become a member of our Working Group.
Dear Colleagues:
The Sixth International Conference on Cryptococcus & Cryptococcosis will be held in Boston, Massachusetts from June 24 - 28, 2005. This is the first time that the conference has been held in the United States. The conference headquarters hotel will be the Boston Marriott Long Wharf Hotel, located in the heart of downtown Boston on the city’s historic and vibrant harbor.

Following an opening address to be delivered by Dr. Arturo Casadevall (Albert Einstein College of Medicine, Bronx, NY, USA), there will be twelve symposia covering the latest advances in the ecology and molecular biology of the fungus, the immunology of the host response to the fungus, and therapy for cryptococcosis. Top mycology researchers will be presenting their research findings and summarizing the state-of-the-art in their fields. Submission of abstracts is strongly encouraged and accepted abstracts will be assigned for either oral presentation or to poster sessions. Posters will remain on display for the entire conference.

A genome workshop, open to all conference registrants, will be held immediately prior to the conference. Social events planned for the conference include an opening reception, a Boston Harbor boat cruise, and a banquet at the New England Aquarium. There is discounted registration for graduate students and postdoctoral fellows. An “Accompanying Person Package” is also available. Further information regarding this conference can be obtained at the conference website:

http://www.bu.edu/cme/iccc.html
or by sending an email to iccc@bu.edu

Stuart M. Levitz
Conference Chair
Over the last few years the significance of medical mycology in Africa has grown enormously. The dramatic increase of cryptococcosis in the Southern part of the continent is an obvious example. Mycetoma, histoplasmosis and dermatophyte infections are other major disease categories. The newly founded Africa Fund for Fungal Biodiversity and Mycotic Infections has taken the initiative to organize a symposium on mycological problems which are endemic to the African continent, including themes where African scientists have achieved major breakthroughs. This 1-day symposium will be held on 25 January, 2005 in conjunction with the congress of the Southern African Society for Plant Pathology (SA SPP) and under the auspices of the European Confederation of Medical Mycology (ECMM) and of the International Society for Human and Animal Mycology (ISHAM).

Venue
The congress will be held at the sea-side resort in Hartenbos, near George on the Garden Route of the Southern Cape, South Africa. Accommodation options and costs for the above-mentioned meetings will be communicated in the 2nd Circular, but rest assured that it would be most reasonable.

Contact
If you have any questions concerning the programme, please contact Sybren de Hoog, de.hoog@cbs.knaw.nl +31-30-2122663.
For any administrative question or inquiries concerning your accommodation, please contact: Tineke van den Berg, van.den.berg@cbs.knaw.nl +31-30-2122645.

Sybren de Hoog, Utrecht
Abdallah Ahmed, Khartoum
Jacques Meis, Nijmegen

PATIENTIC FUNGI
A major new two-volume work. Over 840 pages on medical mycology.

These books detail the latest advances in areas such as genomics, molecular and cellular biology, molecular epidemiology, immune response, vaccine development, and strategies to combat infections. Essential reading for everyone involved in medical mycology.

Editors: Gioconda San-Blas and Richard A. Calderone
Instituto Venezolano de Investigaciones Científicas, Caracas, Venezuela and Georgetown University, Washington DC, USA

Volume 1: Pathogenic Fungi: Structural Biology and Taxonomy
Publication date: June 2004 ISBN: 0-9542464-7-0 Price: GB £99 or US $199 (hardback). Pages: viii + 372
In this book expert international authors critically review current topics including morphogenesis, the cell cycle, and the cell wall of human pathogens. There is a focus on molecular and biochemical analysis and areas covered include the use of mathematical modelling to understand the building of three-dimensional cell structures in the morphogenetic process, novel approaches to aid the understanding of strain variability, the significance of environmental and patient strains, and the relatedness of “uncultured” fungi. In addition the use of molecular tools for the taxonomic classification of previously unclassifiable fungi is featured.

Volume 2: Pathogenic Fungi: Host Interactions and Emerging Strategies for Control
Publication date: June 2004 ISBN: 0-9542464-8-9 Price: GB £99 or US $199 (hardback). Pages: x + 470
The emphasis of this volume is on the two-way recognition systems that exist between the host and the fungus. Experts in fungal-host interactions discuss new initiatives for alternatives to drug therapy through the development of vaccines and passive antibody therapy. New target development, molecular modelling and drug resistance, both at the individual organism level and in a biofilm, are featured.

Full information including chapter abstracts at: www.caister.com/pfhi

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