



Fourth meeting of the ISHAM working groups on Black Yeasts and chromoblastomycosis, "Hidden Danger, Bright Promise", website <http://www.blackyeast.org> Curitiba, Brazil, 1-4 December, 2011

Scientific programme

Thursday, December 1:

- 18.00 – 18.30** Vânia A. Vicente (*Federal University of Paraná state, Curitiba, Brazil*): Greetings and welcome.
- 18.30 – 19.15** Sybren de Hoog (*CBS, Utrecht, the Netherlands*): Opening lecture: Black Yeast: Hidden Danger and Unexplored Potential. Achievements and questions in black yeast research
- 19.15 – 19.40** Flávio de Queiroz-Telles (*Federal University of Paraná state, Curitiba, PR, Brazil*) and Arnaldo Colombo (*UNIFESP, Sao Paulo, Brazil*). Introducing the Brazilian Network on Black Fungi.
- 19:40 – 20.00** Sanjay G. Revankar (*Harper University Hospital, Detroit, U.S.A.*) Introducing the Mycosis Study Group Network of Phaeohyphomycosis.

20.15 - Opening celebration

Friday, December 2:

- 08.00 – 09.30** **Theme 1: New epizootic diseases in invertebrates.**
Chair: Walter Boeger (*Federal University of Paraná state, Curitiba, Brazil*), co-chair: Ryan B. Carnegie, Shellfish Pathology Laboratory OIE Reference Laboratory for Perkinsosis and Haplosporidiosis. Department of Environmental and Aquatic Animal Health Virginia Institute of Marine Science, USA
- 08.00 – 08.30** Walter Boeger (*Federal University of Paraná state, Curitiba, Brazil*): Current status of Lethargic Crab Disease in Brazil.
- 08.30 – 09.00** Sybren de Hoog (*CBS, Utrecht, the Netherlands*): Update on waterborne *Exophiala* and *Cladophialophora* species.

- 09.00 – 09.30** Ryan B. Carnegie (Department of Environmental and Aquatic Animal Health Virginia Institute of Marine Science, USA) “A fungal epizootic in deep-sea mussels, and other emerging marine molluscan diseases”.
- 09.30 – 11.00** **Theme 2: Case reports and clinical reviews.**
Chair: Sanjay G. Revankar (*Harper University Hospital, Detroit, U.S.A.*), co-chair: Daniel Wagner (*UNIFESP, Sao Paulo, Brazil*):
- 09.30 – 09.45** Marcio Nucci (*Rio de Janeiro Federal University, Rio de Janeiro, Brazil*): Fungemia and rhinosinusitis.
- 09.45 – 10.00** Daniel Wagner (*UNIFESP, Sao Paulo, Brazil*): Phaeohyphomycosis in solid transplant organ recipients.
- 10.00 – 10.15** Sanjay G. Revankar (*Harper University Hospital, Detroit, U.S.A.*): “Phaeohyphomycosis:Cerebral and disseminated infections.
- 10.15 – 10.30** Alexandro Bonifaz (*Narvart Hospital México*): Subcutaneous Phaeohyphomycosis due to *Veronaea botryosa*.
- 10.30 – 10.45** Sirlei Marques (Federal University of Maranhão state, São Luís , *Brazil*): "Secondary Bacterial Infections In Patients With Chromoblastomycosis".
- 10.45 – 11.00** Hamid Badali (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*): Molecular identification of *Veronaea botryosa* by use of amplified fragment length polymorphism, including in vitro antifungal susceptibility profile
- 11.00 – 11.15** **Coffee break**
- 11.15 – 12.45** **Theme 3: Clinical aspects of chromoblastomycosis.**
Chair: Alexandro Bonifaz (*Narvarte Hospital, México, Mexico*), co-chair: Liyan Xi (*Sun-yat Sen Hospital, Guangzhou, China*).
- 11.15 – 11.30** Liyan Xi (*Sun-yat Sen Hospital, Guangzhou, China*): Faces of Chromoblastomycosis in Mainland China
- 11.30 – 11.45** Alexandro Bonifaz (*Narvarte Hospital, México*): Cromoblastomycosis. Different Faces
- 11.45 – 12.00** Flavio de Queiroz-Telles (*Federal University of Paraná state, Curitiba, PR Brazil*): Faces of the disease in Brazil.
- 12.00 – 12.15** Claudio Guedes Salgado (Federal University of Pará state, Belém , *Brazil*): Present situation of chromoblastomycosis cases in the Amazon Region.
- 12.15 – 12.30** Conceição Pedroso e Silva (Federal University of Maranhão state, São Luís , *Brazil*): Chromoblastomycosis in Maranhão: Faces of the disease
- 12.30 – 12.45** Mohammad Javad Najafzadeh (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical*

Sciences, Iran): Biodiversity, pathogenicity, antifungal susceptibility of *Fonsecaea* and relatives.

- 12.45 – 13.00** Takashi Yaguchi (*Chiba University, Chiba, Japan*). Molecular phylogenetics of strains of *Fonsecaea* from clinical specimens in Japan”.
- 13:00 – 13.30** **Lunch**
- 13.30: Transfer to Clinical Hospital UFPR.**
- 14.00 – 14.30** **Mini symposium of Brazilian Network on Black Fungi:** Chair: Arnaldo Colombo (*UNIFESP, Sao Paulo, Brazil*), co-chair Flávio de Queiroz-Telles (*Federal University of Paraná state, Curitiba, Brazil*).
- 14.00 – 14:15** Arnaldo Colombo (*UNIFESP, Sao Paulo, Brazil*): Structure of network: (data registrations: clinical cases, clinical data and medical records registrations; culture collections; biological material destination)
- 14.15 – 14.30** Luciane Marinoni (*Federal University of Paraná state, Curitiba, PR Brazil*): Taxon line – Network of Biological Collections (www.taxonline.ufpr.br) and Brazilian Network on black fungi.
- 14:30 – 15.30** **Theme 4: Chromoblastomycosis: virulence and host response.** Chair: Lucimar Ferreira Kneipp (*FIOCRUZ, Rio Janeiro, Brazil*), co-chair: Conceição Pedroso e Silva (*Federal University of Maranhão state, São Luís, Brazil*).
- 14.30 – 14.45** A. L. S. Santos (*Rio de Janeiro Federal University*): Deciphering the antifungal activity of HIV aspartic protease inhibitors: lessons from *Fonsecaea pedrosoi*.
- 14.45 – 15.00** Sandro Rogério Almeida (*Faculdade de Ciencias Farmaceuticas, São Paulo, Brazil*): Monocyte-derived dendritic cells from patients with severe forms of chromoblastomycosis induce CD4⁺ T cell activation *in vitro*.
- 15.00 – 15.15** Conceição Pedroso e Silva (*Federal University of Maranhão state, São Luís, Brazil*): Detection of delayed hypersensitivity to *Fonsecaea pedrosoi* metabolic antigen (chromomycin) in healthy peoples in a endemic area.
- 15.15 – 15.30** Moisés Batista da Silva (*Federal University of Pará state, Belém, Brazil*): Chromoblastomycosis, meristematic cells and possible life-cycle.
- 15.30 – 15.45** **Coffee break**
- 15.45 – 18.00** **Theme 5: Infections caused by melanized fungi: demonstrations with patients.** Chair: Flávio de Queiroz-Telles (*Federal University of Paraná state, Curitiba, PR Brazil*), co-chair: Takashi Yaguchi (*Chiba University, Chiba, Japan*).
- 15.45 – 16.00** Flavio de Queiroz-Telles (*Federal University of Paraná state, Curitiba, PR Brazil*): Treatment with the old and new triazoles.

16.00 – 16.15 Liyan Xi (*Sun-yat Sen Hospital, Guangzhou, China*): Photodynamic antifungal therapy against chromoblastomycosis.

16.15 – 18.00 Session clinical cases – Patients

16.15 – 18.00 Poster session

□ **Title:** A case of chromoblastomycosis at medial region of the leg: a case report.

Authors: Marcela Mattos, Claudia B. Assunção, Cidiane Melo, Cristiane L. Alves, Hugo V. Froes, Mauricio Nunes and Rachel B. Caligiorne.

□ **Title:** Cromoblastomycosis in a patient with Diabetes mellitus: a case report.

Authors: Valeria Pincer, Claudia B. Assunção, Cidiane Melo, Cristiane L. Alves, Hugo V. Froes, Mauricio Nunes and Rachel B. Caligiorne.

□ **Title:** Tinea nigra

Authors: Alexandro Bonifaz, Javier Araiza Hamid Badali, Rosa María Ponce RM, Sybren de Hoog

□ **Title:** Itraconazole Tissue Concentrations in patients with Chromoblastomycosis

Authors: Daniella Paternostro de Araújo; Heleno Ramos Massoud Junior; José Luiz Fernandes Vieira; Moises Batista da Silva ; Claudio Guedes Salgado

□ **Title:** *In Vitro* Activities of five Antifungal Drugs against 100 Clinical Isolates of *Fonsecaea* spp. by CLSI broth dilution method and E-test®

Authors: Tânia Sueli de Andrade, Maria Walderez Szeszs, Marcia S. C. Melhem, Rosário D. C. Hirata

□ **Title:** Evaluation of antifungal activity of amphotericin B, ketoconazole, itraconazole, terbinafine and voriconazole against *Fonsecaea pedrosoi*

Authors: Daboit, T.C. ; Magagnin, C.M.; Antochevis, L. C.; Vigolo, S. ; Meirelles, L.C.; Scroferneker, M. L.

□ **Title:** Evaluation of the sensitivity to antifungal agents of *Fonsecaea pedrosoi* clinical isolate from a relapsed patient after treatment with itraconazole

Authors: Daboit, T.C.; Stopiglia, C.D.O.; Antochevis, L. C.; Heidrich, D.; Magagnin, C.M.; Vettorato, G; Scroferneker, M. L.

□ **Title:** Dematiaceous fungi in nasal polyps among Sudanese patients.

Authors: Elham Suliman

□ **Title:** Chromoblastomycosis in Maranhão: *in vitro* susceptibility profile of clinical isolates to antifungal agents

Authors: Sirlei Garcia Marques, Conceição de Maria Pedrozo Silva de Azevedo, Cleide Viviane Buzanello Martins, Ana Claudia Garcia Marques, Thais Furtado Ferreira Magalhães, Caroline Barcelos Costa, Azizedite Guedes Gonçalves, Maria Aparecida de Resende

18.30 **Back to hotel**

Saturday, December 3:

08.30 – 9:00 Poster session (other areas)

Title: Comparison of three isothermal amplification techniques for rapid identification of *Cladophialophora carrionii*

Authors: S.Deng, L.Yang, J.Sun, S.de Hoog, J,Najafzadeh ,R.Li

□ **Title:** *In vitro* susceptibility of *Chaetothyriales* from hydrocarbon-contaminated areas to four antifungal drugs

Authors: Duarte, A.P.M.; Pagnocca, F.C.; Baron, N.C; Melhem, M.S.C.; Palmeira, G.A; Attili-Angelis, D.

□ **Title:** Yeast isolated from dust in book collections

Authors: Diniz P. Leite-Jr, Rafael E. Nani, Ana Caroline A. Yamamoto, Janaina V. R. S. Amadio, Evelin R. Martins, Fábio Alexandre L. Santos, Sara A. A. Simões, Thaiza P. Mello, Rosane C. Hahn

□ **Title:** Characterization of *Hortaea werneckii* strains from a non common source from Spain.

Authors: M. Rosa Bragulat*, Gemma Castellá & F. Javier Cabañes

□ **Title:** Black yeast-like fungi isolated from dialysis water and dialysate in brazilian hemodialysis units

Authors: Izabel Cristina Figel; Paulo Roberto D. Marangoni; Sabina M. Tralamazza; Vânia A. Vicente; Patrícia R. Dalzoto; Ida C. Pimentel.

□ **Title:** Nutritional physiology and growth phenotypes of a rock-inhabiting fungus from an ancestral lineage of Chaetothyriales.

Authors: Corrado Nai, Annette Pannebecker, Helen Wong, William Broughton, Anna Gorbushina

□ **Title:** Incidence of black fungi in herbal teas marketed in Brazil.

Authors: Wellington R. Lima, Rachel B. Caligiorne

□ **Title:** Mangrove Flora

Authors: Raquel Schier, Raphael Ribeiro, Mariana Nascimento, Stephanie Miesch Vania Vicente and *Walter Boeger*.

□ **Title:** Effect of aspartyl peptidase inhibitors on secreted peptidase activity and growth of *Phialophora verrucosa*

Authors: Granato, M.Q., Alviano, C.S., Santos, A.L.S., & Kneipp, L.F.

- 09.00 – 10.00** **Theme 6: New concepts in symbiotic interactions of black yeasts: hyperparasitism, ant association, oligotrophism**
Chair: Lucia Muggia (*Karl-Franzens-University, Graz, Austria*), co-chair: Fernando Carlos Pagnocca (*UNESP, Rio Claro, Brazil*)
- 9.00 – 9:30** Fernando Carlos Pagnocca – (*UNESP, Rio Claro, Brazil*): Social insects as isolation sources of black yeast-like fungi.
- 9.30 – 10.00** Lucia Muggia (*Karl-Franzens University, Graz, Austria*): Lichens and black fungi: evolutionary relationships and shared habitats.
- 10.00 – 10.15** **Coffee break**
- 10.15 – 11.30** **Theme 7: Extremotolerant black yeasts**
Chair: Nina Gunde-Cimerman (*University of Ljubljana, Ljubljana, Slovenia*), co-chair: Anna Gorbushina (*Free University of Berlin and Department "Materials and Environment", Federal Institute for Materials Research and Testing (BAM), Berlin, Germany*).
- 10.15 – 10.30** Anna Gorbushina (*Free University of Berlin and Department "Materials and Environment", Federal Institute for Materials Research and Testing (BAM), Berlin, Germany*): Model rock biofilm: genetic and microbiological experiments.
- 10.30 – 10.45** Nina Gunde-Cimerman (*University of Ljubljana, Ljubljana, Slovenia*): Dishwasher and Car Wash: Man-made Environments Accommodating Human Opportunistic Black Yeasts
- 10.45 – 11.00** Polona Zalar (*University of Ljubljana, Ljubljana, Slovenia*): Arctic black yeasts from glaciers.
- 11.00 – 11.15** Ana Plemenitaš (*University of Ljubljana, Ljubljana, Slovenia*) Molecular developments in the halotolerant fungus *Hortaea werneckii*
- 11.30 – 13.30** **Lunch**
- 13.30 – 14.45** **Theme 8: Bioremediation of hydrocarbon-contaminated areas and industrial gases**
Chair: Francesc Prenafetá-Boldú (*GIRO, Mollet de Valles, Spain*), co-chair: Derlene Atilli de Angelis (*Division of Microbial Resources – DRM, CPQBA/UNICAMP, Campinas, SP, Brazil*).
- 13.30 – 13.45** Francesc Prenafetá-Boldú (*GIRO, Mollet de Valles, Spain*): Naturally enriched black yeasts in biofilters packed with an organic material applied for the treatment of toluene, ethylbenzene and p-xylene vapors.
- 13.45 – 14.00** Noemi Carla Baron (*Center for the Study of Social Insects, IB, UNESP- São Paulo State University, RC, SP, Brazil*): Hydrocarbon-degrading black yeasts from ants.

- 14.00 – 14.15** Hamid Badali (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*): Sibling species in Chaetothyrialean black yeasts: the genus *Cladophialophora*.
- 14.15 – 14.30** Márcia de Souza Carvalho Melhem (*Adolfo Lutz Public Health Reference Laboratory, RC, São Paulo, Brazil*): In vitro susceptibility of Chaetothyriales from hydrocarbon-contaminated areas to four antifungal drugs.
- 14.30 – 14.45** Derlene Attili de Angelis (*Division of Microbial Resources – DRM, CPQBA/UNICAMP, Campinas, SP, Brazil*). Implementation of Biosecurity Code of Conduct in Brazil.
- 14.45 – 15.00** **Coffee break**
- 15.00 – 16.00** **Theme 9: Black yeast in the human environment**
Chair: Guido Heinrichs (*Institute of Medical Microbiology, University Hospital RWTH, Aachen, Germany*), co-chair: Hamid Badali (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*)
- 15.00 – 15.15** Vania A. Vicente (*Federal University of Paraná state, Curitiba, PR Brazil*): Environmental isolation of black yeast fungi involved in human infection.
- 15.15 – 15.30** Guido Heinrichs (*Institute of Medical Microbiology, University Hospital RWTH, Aachen, Germany*): Origin and compositional analysis of tap water associated dark fungal biofilms.
- 15.30 – 15.45** Lucia Muggia (*Karl-Franzens-University, Graz, Austria*): Isolation methods to study black-yeasts in lichens
- 15.45 – 16.00** Javier Cabañes (*Universitat Autònoma de Barcelona, Barcelona, Spain*). Unexpected environmental source of *Hortaea werneckii* in Spain.
- 16.15 – 17.30** **Theme 10: New techniques of identification and diagnosis; progress in genome sequencing**
Chair: Mohammad Javad Najafzadeh (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*), co-chair: Jiufeng Sun (*Key Laboratory of Tropical Disease Control, Guangzhou, China*).
- 16.15 – 16.30:** Shuwen Deng (*Hospital of Xinjiang Medical University, Urumqi, China*): Rapid identification of *C. carrionii* by rolling circle amplification.
- 16.30 – 16.45** Mohammad Javad Najafzadeh (*Department of Molecular and Medical Mycology, School of Medicine, Mazandaran University of Medical Sciences, Sari, Iran*): Rapid detection and identification of fungal pathogens by rolling circle amplification (RCA).
- 16.45 – 17.00** Jiufeng Sun (*Key Laboratory of Tropical Disease Control, Guangzhou, China*): Mating type genes in black yeasts.

17.00 – 17.15 Anna Gorbushina (Free University of Berlin and Department “Materials and Environment”, Federal Institute for Materials Research and Testing (BAM), Berlin, Germany) DNA extraction methods, as well as genome analysis of several black fungi

17.15 – 17.30 A.H.G. Gerrits van den Ende (CBS, Utrecht, the Netherlands) Diagnostics of agents of chromoblastomycosis by Reverse Line Blot (RLB) assay

17.30 - 18:15 Session closing: Sybren de Hoog (*CBS, Utrecht, the Netherlands*).

21:00 – Dinner

Sunday, December 4:

Social programme: Excursion to mangrove area at Paraná seashore.