

# Meeting of the ISHAM Working groups on Black Yeasts

## Emerging Potential of Black Yeasts

14-16 May, 2010

Hotel Slon, Ljubljana, Slovenia

Organizers: Nina Gunde-Cimerman, Polona Zalar, Ana Plemenitas, Martin Grube and Sybren de Hoog

Depending on sponsorship, we aim to provide coffee breaks, lunches and excursion at modest cost to the participants. The workshop is limited to about 50 participants; early registration is recommended using <http://blackyeast2010.bf.uni-lj.si/>. Further information about the congress are available at the official congress web page <http://blackyeast2010.bf.uni-lj.si/>

The atmosphere will be open and friendly, we welcome spontaneous reactions and presentations. Each session starts with an introductory talk of 30 min. Remaining talks are shorter (recommended 10-15 min), but may vary according to the speaker's needs. All participants are strongly stimulated to present something orally. Please let the organizers know in advance if you nevertheless would like to present posters.

No abstracts will be published, but in order to make a definitive program, please send us ([nina.gunde-cimerman@bf.uni-lj.si](mailto:nina.gunde-cimerman@bf.uni-lj.si)) the details of your presentation as soon as possible:

- Authors with presenting author
- Affiliations
- Presentation title

Registration closes on April 20, 2010.

As a result of the meeting we aim to publish a special issue with 10-12 selected papers in a special issue of "Fungal Biology".



## Theme 1: Ecology, evolution and phylogeny

### Ecology: The weird habitats of black yeasts:

- Sybren de Hoog: Main ecological trends in three orders of black yeasts and relatives.
- Daniela Isola, Laura Selbmann, Sybren de Hoog, Laura Zucconi and Silvano Onofri: A world-wide sampling of rock fungi.
- Rok Tkavc, Cene Gostinčar, Polona Zalar, Nina Gunde-Cimerman: Black yeasts in microbial mats of salterns.
- Silva Sonjak, Yenice Gursu Bukay, Nina Gunde-Cimerman: Magnesium-tolerant fungi from the bitterns.
- Francesc Prenafeta-Boldu, Derlene Attili, Katja Sterflinger: Presentations on black yeasts association with hydrocarbon pollution.
- Silva Sonjak, Tina Kogej, Nina Gunde-Cimerman: Black yeasts tolerate extremely high temperatures.
- Polona Zalar, Nina Gunde-Cimerman: Dishwashers – an indoor extreme environment for survival and propagation of *Exophiala dermatitidis*.
- Lian Xin, Sybren de Hoog: Black yeasts in your bathroom.
- Martin Grube, Walter Buzina: Acidotolerant black yeasts.
- Nina Gunde-Cimerman, Cene Gostinčar, Polona Zalar: Black yeasts in glaciers.
- Rumsais Blatrix, Hermann Voglmayr, Konrad Dettner, Luis Pagnocca: Presentations on ant-and insect-associated black yeasts and their signalling metabolites.

### Phylogeny: Where do they come from, and where do they go?

- Cene Gostinčar, Martin Grube, Sybren de Hoog, Polona Zalar, Nina Gunde-Cimerman: Fungal evolution on the edge.
- Laura Selbmann, Cécile Gueidan, Costantino Ruibal, Silvano Onofri, Sybren de Hoog: Millions of years without sex and still happy.
- Marie Machouart, Kittipan Samerpitak: The Ochroconiales: new order, new genera.
- Cecile Gueidan, Martin Grube, Tino Ruibal, Laura Selbmann: The origin of pathogenic and hyperparasitic Chaetothyriales.
- Bert Gerrits van den Ende, Montarop Sudhadham, Jiufeng Sun: Positive selection of *Exophiala dermatitidis* genotype A in human environment.

There will be room for short introductions of your ecological study object.

## Theme 2: Adaptations to extreme environments

### Evolution: The machinery of adaptation:

- Tina Kogej, Tea Lanišnik Rižner, Nina Gunde-Cimerman: Melanin synthesis in *Hortaea werneckii*.
- Kate Dadachova, Arturo Casadevall: Ionizing radiation changes melanin and enhances growth.
- Ana Plemenitas, Nina Gunde-Cimerman: Overview of molecular adaptations to hypersaline environments in halophilic *Hortaea werneckii*.
- Metka Lenassi: NAD<sup>+</sup> dependent glycerol-3-phosphate dehydrogenase proteins have distinct roles in adaptation to hypersaline environments in halophilic *Hortaea werneckii*.
- Martin Fettich: The HOG pathway - *HwSHO1* genes in *Hortaea werneckii*.
- Silvano Onofri, Laura Selbmann, Kasturi Venkateswaran, Giuliano Scalzi, Laura Zucconi: Black fungi in space.

## Theme 3: Pathogenic potential of black yeasts

Pathology: Diseases caused by black yeasts:

- Walter Boeger, Vania Vicente: Lethargic crab disease in Brazil.
- Seyedmojtaba Seyedmousavi Tasieh, Vania Vicente, Javad Najafzadeh, Sybren de Hoog: The pathogenic potential of waterborne black yeasts.
- Wendy van de Sande, Hamid Badali: Subcutaneous infections.
- Ditte Saunte Linhardt: Black fungi on the skin.
- Javad Najafzadeh, Hamid Badali: Clinical aspects and epidemiology of chromoblastomycosis.
- Enrique: An animal model for chromoblastomycosis.
- Gerhard Haase: Cystic fibrosis.
- Sybren de Hoog, Cecile Gueidan: Primary cerebral abscess.

There will be room for some case presentations.

## Theme 4: Novel techniques for the study of black yeasts

- Francesc Prenafeta-Boldu: An overview of isolation methods.
- Katja Sterflinger: Proteomics in black fungi.
- Janja Zajc, Tomaž Vaupotič: Salt-induced change in cell wall protein population of halophilic *Hortaea werneckii*.
- Vania Vicente: Isolation of agents of chromoblastomycosis.
- Damjana Drobne, Nina Gunde-Cimerman: Black yeasts as model organisms for nanotoxicology
- Javad Najafzadeh, Jiufeng Sun: Novel detection methods: LAMP, RCA.
- Gerhard Haase: The use of secondary structures in the barcoding of black yeasts.
- Marie Machouart: The use of introns in population dynamics.
- Hamid Badali: AFLP population genetics in *Cladophialophora*.
- Domen Jaklič, Nina Gunde-Cimerman, Hamid Badali: Antimycotic activity of an excretion of *Lucilia sericata* larvae.
- Kristina Sepčić, Nina Gunde-Cimerman: Production of bioactive metabolites by black yeasts.

There will be room to briefly introduce further techniques.