

BLACK YEASTS CHAETOTHYRIALES WORKING GROUP WORKSHOP 2026

Workshop Programme



22-23 October 2026



Sala Pere i Joan Coromines.
Institut d'Estudis Catalans, Barcelona

Day 1 - Thursday, 22 October 2026

Ecology, phylogeny, ecophysiology and applied biotechnology

08:30-09:00 Registration and welcome

09:00-09:20 Opening of the workshop

Thematic introductory lecture - Diversity, phylogeny and ecology:

09:20-09:40 **Josepa Gené** - *Diversity, phylogeny and ecology of black yeasts: insights into Chaetothyriales from freshwater sediments of Catalan rivers and streams*

09:40-11:00 Session 1. Diversity in environmental and symbiotic niches

09:40-09:55 **Mariana Machado** - *Exploring Chaetothyriales diversity in agricultural soils from Southern Brazil through shotgun metagenomics*

09:55-10:10 **Samah Mohamed Rizk Soliman** - *Dormant, recurrently emerging Knufia petricola in axenic Funaria hygrometrica cultures: evidence for an epiphytic dispersal reservoir and a facultative, condition-dependent interaction*

10:10-10:25 **Enrique Monzón** - *Exploring the diversity and new lineages of black yeast (Chaetothyriales) in freshwater sediments from Catalan rivers*

10:25-10:40 **Lucia Muggia** - *Black fungi and lichens: cryptic inhabitants, or also potential symbionts?*

10:40-11:00 Discussion

11:00-11:30 Coffee break and poster viewing

11:30-12:50 Session 2. Phylogenomics, taxonomy, and nomenclatural stability

11:30-11:45 **Sybren de Hoog** - *The nomenclatural dilemma in Chaetothyriales*

11:45-12:00 **Xin Zhou** - *Taxonomic diversity, ITS phylogeny and ecological differentiation across Chaetothyriales*

12:00-12:15 **Yalong Li** - *Multilocus phylogeny of the Chaetothyriales*

12:15-12:30 **Ricardo Belmonte-Lopes** - *Genomics and mitogenomics of the Chaetothyriales*

12:30-12:50 Discussion

12:50-14:00 **Lunch and poster viewing**

14:00-15:50 Session 3. Extremotolerance, polar habitats and rock-inhabiting fungi

14:00-14:15 **Laura Selbmann** - *Evolutionary trajectories of Antarctic rock-inhabiting black fungi at the limits of terrestrial habitability*

14:15-14:30 **Gerardo A. Stoppiello** - *Divergent ecological niches within Antarctic black Dothideomycetes: culture- and metabarcoding-based evidence of segregation between *Elasticomyces elasticus* and *Friedmanniomyces endolithicus**

14:30-14:45 **Carmen Del Franco** - *Antarctic cryptoendolithic black fungi remain viable after 21 days under simulated Martian conditions*

14:45-15:00 **Tonatiuh Moreno-Perlín** - *Emerging ecological and pathogenic risks of black yeasts from Mexican glaciers*

15:00-15:15 **Daniela Isola** - *Scolecobasidium: from phylogeny to function - a case study*

15:15-15:30 **Hugo Madrid** - *New species of Knufia (Trichomeriaceae, Chaetothyriales) from Chile (online)*

15:30-15:50 Discussion

15:50-16:20 **Coffee break and poster viewing**

Thematic introductory lecture - Biotechnology and applied perspectives:

16:20-16:40 **Francesc Prenafeta-Boldú** - *Black fungi as stress-adapted platforms for environmental and agricultural biotechnology*

16:40-18:30 **Session 4. Applied biotechnology, bioremediation and biodeterioration**

16:40-16:55 **Bruno Lustosa** - *Biotechnological insights of the genus Exophiala based on whole genome sequencing (online)*

16:55-17:10 **Diogo Robl** - *Cladophialophora exuberans CMRP1409 copper tolerance, transcriptomic and physiologic analysis for biotechnology applications*

17:10-17:25 **Bastiaan J. R. Cockx** - *Emergent biofilm properties of photovoltaic panel inhabiting black fungi*

17:25-17:40 **Giorgia Cavallini** - *Genomic and functional characterization of the hydrocarbon degradation potential of an Antarctic strain of Rhodosporidiobolus odoratus*

17:40-17:55 **Carlos García-Gálvez** - *Exophiala mesophila enhances leek drought resilience through microbiome-metabolome modulation*

17:55-18:10 **Luis Lucena Soriano** - *Black yeast strains of the genus Aureobasidium as modulators of plant stress: effects on drought and heat tolerance in olive*

18:10-18:30 Discussion

18:30-19:00 **Best early-career researcher award and day 1 wrap-up**

19:00 **Networking buffet dinner**

Day 2 - Friday, 23 October 2026

Medical Mycology

09:00-09:10 Opening of Day 2

Thematic introductory lecture - Medical Mycology:

09:10-09:40 **Yinggai Song** - *Genomic signatures of opportunism and environmental adaptation in the closely related species Cladophialophora bantiana and Cladophialophora psammophila*

09:40-11:30 Session 5. Pathogenicity, virulence and host adaptation

09:40-09:55 **Yinghui Liu** - *Gcn5-mediated acetylation governs morphogenesis, stress adaptation, virulence, and fatty acid metabolism in Fonsecaea monophora*

09:55-10:10 **Yalong Li** - *The role of melanin synthesis genes and protein lactylation modification in the pathogenicity of dematiaceous fungi*

10:10-10:25 **Lyselle Ruíz de León** - *Polyextremotolerant resilience and adaptive divergence of Exophiala dermatitidis across clinical, urban, and natural niches*

10:25-10:40 **Ana Fernández-Bravo** - *Distinct bacterial partners shape polymicrobial virulence through interactions with Exophiala dermatitidis in cystic fibrosis*

10:40-10:55 **Mery Patricia Ulloa González** - *Environmental Scedosporium isolates exhibit virulence traits comparable to those of clinical isolates*

10:55-11:10 **Xueke Niu** - *Black yeasts and antifungal resistance: comparative susceptibility of Chaetothyriales and major fungal pathogens (online)*

11:10-11:30 Discussion

11:30-12:00 Coffee break and poster viewing

12:00-13:50 Session 6. Clinical diagnosis, antifungal susceptibility and therapeutic approaches

12:00-12:15 **Liyan Xi** - *Parasitic morphological plasticity in cutaneous and subcutaneous fungal infections: five cases with atypical microscopic findings and literature review*

12:15-12:30 **Jing Zhang** - *The efficacy and mechanism of ZnBP(w)-mediated photodynamic therapy against Fonsecaea monophora*

12:30-12:45 **Volker Rickerts** - *Genotypic diversity of Cladophialophora bantiana isolated in Germany*

12:45-13:00 **Iris Bertonecelj** - *Hidden in the flow: black yeasts persist in hospital water systems*

13:00-13:15 **Ali Mohamed Elhassan Ali Abdalla** - *Nanoformulated itraconazole for eumycetoma: a translational strategy to improve penetration into melanin-rich mycetoma grains*

13:15-13:30 **Maria T. Nelson** - *Molecular detection of Cladophialophora bantiana at a clinical reference laboratory, United States, 2009-2026 (online)*

13:30-13:50 Discussion

13:50-14:20 **Best early-career researcher award, conclusions and closing remarks**

14:20-15:30 **Lunch and farewell**

Poster communications

Dídac Barroso-Bergadà

Cladosporium inoculation modifies exudate composition and promotes root growth in ryegrass

Carlos García-Gálvez

Dark septate endophytes enhance sustained growth and reshape the exometabolome of Lolium perenne under Fusarium inoculation

Gerhard Haase

Could the concept of a barcode identifier be expanded to include all Chaetothyriomycetidae?

Huaiqiu Huang

Cutaneous mucormycosis caused by Lichtheimia ramosa in a liver transplant recipient: a case report and literature review

Filomena de Leo

Black fungi from Antarctic and Arctic lakes: divergent adaptive strategies and biotechnological potential

Kevin Yair Méndez-Domínguez

Extremophilic fungal microbiota: a biotechnological strategy for the resilience of Mediterranean olive groves facing climate change

Amaia Nogales

Compatibility between dark septate endophytes and arbuscular mycorrhizal fungi modulates grapevine rootstock responses to water availability

Alejandro Vázquez

Melanin-linked extremotolerance in Exophiala mesophila: transcriptomic and synchrotron FTIR responses to arsenate and chromate stress

Yadong Liu

Genomic signatures of host adaptation in dematiaceous fungi isolated from CARD9-deficient patients: a comparative genomic study across three genera

Funding entity:

Collaborating entities: