

Programme of the DGfM Conference, October 4 -7, 2021

Monday, 4th October

8:30 - 8:45 **Welcome address Marc Stadler, Meike Piepenbring, Marco Thines**

8:45 - 9:20 **Cathie Aime/Purdue (USA)**

The role of animals in two unique dispersal-limited neotropical fungi

Chair: Marco Thines

9:20 - 10:05 **Priscila Chaverri/San José (Costa Rica) & Maryland (USA)**

From fungal systematics to omics in the discovery of biocontrol agents in *Trichoderma*

Chair: Marco Thines

10:05 - 10:35 Coffee break

10:35 - 12:00 Symposium: Neomycetes

Chair: Markus Scholler

Speakers

10:35 **Markus Scholler/Karlsruhe (G)**

What are neomycetes and how to identify them?

10:55 **Marcin Pietras/Kórnik (Poland)**

Biogeography of potentially invasive boletes in Europe

11:15 **Ludwig Beenken/Zürich (Switzerland)**

Outline of neomycetes in Switzerland

11:35 **Michael Bradshaw/Harvard (USA)**

Reconstructing the worldwide epidemic spread of powdery mildews by sequencing herbarium specimens

12:00 - 13:00 Lunch break

13:00 - 15:00 Symposium: Medical Mycology

Chairs: Sybren de Hoog, Oliver Kurzai

Speakers

13:00 **Oliver Kurzai/Würzburg, Jena (G)**

Fungal infections as a One Health challenge

13:30 **Sybren de Hoog/Nijmegen (NL)**

From ant to human - The miraculous evolution of black yeasts

14:00 **Adela Čmoková/Prague (CZ)**

Zoophilic dermatophytes associated with pet animals

14:30 **Grit Walther/Jena (G)**

New insights into the evolution of the Mucorales

In parallel Kickoff meeting EU project Mycobiomics (non-public)

15:00 - 15:30 Coffee break

15:30 - 18:00 Special Interest: Group EU project "Mycobiomics"

Chairs: Theresia Stradal, Marc Stadler

Speakers

15:30 **Cobus Visagie/Pretoria (South Africa)**

Exploring fungal diversity in South Africa, a biodiversity hotspot

16:00 **Christopher Lambert/HZI Braunschweig (G)**

Progress on the structure activity relationship of cytochalasins isolated from Xylariales impairing eukaryotic actin cytoskeletal organisation by tracking differences in bioactivity

16:20 **Barbora Křížková/Prague (CZ)**

Taxonomically related, yet ecologically contrasting bark beetle species host fundamentally distinct microbial communities

16:40 **Joseph Strauss/Tulln (A)**

The genetic and epigenetic regulation of fungal secondary metabolism– key findings and introduction to lab activities

17:00 **Markus Gorfer/Tulln (A)**

Opportunities for applied mycological biodiversity research at the AIT

17:20 **Khadija Hassan/HZI Braunschweig (G)**

Screening of novel antimicrobial agents from Basidiomycota

17:40 **Josphat Matasyoh, Egerton (Kenya)**

New interesting natural products from Kenyan Basidiomycota

18:00 - 19:00 Dinner

Tuesday, 5th October

8:30 - 9:05 **Pedro W. Crous/Utrecht (NL)**

Redefining *Fusarium*

Chair: Priscila Chaverri

9:05 - 9:40 **Miroslav Kolarik/Prague (CZ)**

Ribosomal DNA – better the devil, you know

Chair: Marc Stadler

9:40 - 10:10 Coffee break

10:10 - 12:00 Symposium: Ascomycete Systematics

Chairs: Yasmina Marin-Felix, Johannes Z. Groenewald

Speakers

10:10 **Dania García Sánchez/Tarragona (Spain)**

Marine and freshwater sediments: outstanding ecosystems for ascomycetes

- 10:30 **Lucile Wendt/HZI Braunschweig (G)**
Current outline of Xylariales (Sordariomycetes)
- 10:50 **Yasmina Marin-Felix/HZI Braunschweig (G)**
Biodiversity of coprophilous fungi, with special focus in taxa belonging to the Sordariales
- 11:10 **Johannes Z. Groenewald/Westerdijk Institute (N)**
The genus *Mycosphaerella* – modern treasure chest or ancient coffin?
- 11:30 **Yalemwork Meswaet/Frankfurt am Main (G)**
Unraveling unexplored diversity of cercosporoid fungi (Mycosphaerellaceae, Mycosphaerellales, Ascomycota) in tropical Africa

12:00 - 13:00 Lunch break

13:00 - 15:30 Symposium: Bioactive Compounds

Chairs: Hedda Schrey, Eric Kuhnert

- Speakers**
- 13:00 **Hedda Schrey/HZI Braunschweig (G)**
Evaluation of the secondary metabolites of *Clitocybe nebularis* (Agaricomycetes, Tricholomataceae)
- 13:15 **Sepas Sarawi/Frankfurt am Main (G)**
Occurrence and chemotaxonomy of amatoxins in *Lepiota* spp. (Agaricales)
- 13:30 **Larissa Heck, Felix Schmidt/Mainz (G)**
Fungal attack: Chemical communication based on the secondary metabolism associated with tree canker
- 13:45 **Blondelle Matio Kemkuignou/HZI Braunschweig (G)**
Characterization and biological evaluation of secondary metabolites from the plant pathogenic fungus *Phoma macrostoma*
- 14:00 **Sandra Halecker/HZI Braunschweig (G)**
Exploring the chemical potential of the invasive ash dieback pathogen *Hymenoscyphus fraxineus* and its avirulent European relative *H. albidus*
- 14:15 **Tian Cheng/Prague (CZ)**
The biosynthesis of illudin
- 14:30 **Henrike Heinemann/Hannover (G)**
Investigation of the release from the PKS-NRPS hybrid and cyclisation steps during the biosynthesis of cytochalasans
- 14:45 **Katharina Schmidt/Hannover (G)**
Biosynthetic studies on tropolone maleic acid anhydride conjugates from *Hypoxyon lienhwacheense*
- 15:00 **Kevin Becker/Hannover (G)**
Azaphilone pigments from *Hypoxyton fragiforme* and *H. rubiginosum* – chemistry, biosynthesis, and biological activities

In parallel: Mycological Progress EB meeting (non-public)

15:15 - 18:00 Coffee break/**Poster session**

18:00 - 19:00 Dinner

19:00 - 19:15 **Springer Young Scientist Awards** (Claudia Panuschka)

19:15 - 19:30 **Laudatio Brefeld award** (Ewald Langer) and handing over the certificate

19:30 - 20:00 **Brefeld Award Lecture** (Oleksander Ordynets)

Diversity of aphyllorphoid fungi from taxonomical and biogeographical perspectives

Chair: Meike Piepenbring

Wednesday, 6th October

8:30 - 9:05 **Machiel Noordeloos**

The genus *Entoloma* revisited: towards a new European monograph based on molecular and morphological data

Chair: Tatiana Gibertoni

9:05 - 9:40 **Tatiana Gibertoni**

Using molecular data from (neo)tropical material to delimit taxa of Agaricomycetes (Basidiomycota)

Chair: Machiel Noordeloos

9:40 - 10:10 Coffee break

10:10 - 13:00 Symposium: Ecology

Chairs: Claus Bässler, Witoon Purahong

Speakers

10:10

Witoon Purahong/Halle (Saale) (G)

Application of next-generation sequencing (NGS) to characterize the fungal and prokaryotic communities associated with degradation of a bio-based and biodegradable plastic

10:25

Hans Halbwachs/Frankfurt am Main (G)

Fungal fossils – ecological probes into the past

10:40

Miguel Bermudez/Frankfurt am Main (G)

The enemy of my enemy is my friend: hyperparasitic fungi on Meliolales, hidden fungal diversity in the tropics

10:55

Franz Krah/Frankfurt am Main (G)

Response of mushroom communities to harsh microclimate is best explained by the toughness-protection hypothesis

11:10

Steffen Carl/Berlin (G)

Effects of laboratory conditions on the composition of leaf detached aquatic fungal communities on *Alnus glutinosa* leaf litter

11:25

Britta Uhl/Frankfurt am Main (G)

Relative importance of dead wood types and microclimate on saproxylic diversity

- 11:40 **Henrik Oechler/Frankfurt am Main (G)**
Fungal mushroom size and color along macro- and microclimatic gradients
- 11:55 **Rosemary Tonjock Kinge/Buea(Cameroon), Bayreuth (G)**
Comparison of mycobiomes in four entire legumes using the Illumina sequencing approach
- 12:10 **Enno Mager/Freising (G)**
Pest dynamics of sooty bark disease in Bavaria since 2018
- 12:25 **Li Ji/Halle (Saale) (G)**
Altitudinal patterns of soil fungal community in the Chinese cold temperate forest
- 12:40 **Benjawan Tanunchai, Witoon Purahong/Halle (Saale) (G)**
FungalTraits vs. FUNGuild: comparison of ecological functional assignments of leaf- and needle-associated fungi across 12 temperate tree species.

13:00 - 14:00 Lunch break

14:00 - 15:30 Symposium: Biotechnology/Genomics

Chairs: Annegret Kohler, Martin Rühl

Speakers

- 14:00 **Marine Duhamel/Bochum (G)**
Convergent stepwise recombination suppression in mating-type chromosomes of *Microbotryum* fungi
- 14:15 **Florian Hennicke/Bochum, Martin Rühl/Gießen (G)** (first author Axel Orban)
Transcriptomics of different fruiting stages of the edible agaric *Cyclocybe aegerita* indicates a complex regulation of fruiting and enzymes that are putatively involved in fungal oxylipin biosynthesis
- 14:30 **Axel Orban/Gießen (G)**
Volatile organic compounds of the mushroom *Cyclocybe aegerita* – an example of altering volatiles during fungal developmental stages
- 14:45 **Miriam Große/HZI Braunschweig (G)**
Volatile polyketides from Basidiomycota
- 15:00 **Helmut König/Mainz (G)**
Mixtures and hybrids of *Saccharomyces* and wild yeast strains in wine making
- 15:15 **Fabio Brescia/Gießen (G)**
Biogenesis of aroma-active bicyclic monoterpene benzofuran derivatives by fungi of the division Basidiomycota

15:30 - 16:00 Coffee break

16:00 - 18:00 Symposium: Plant and animal pathogens

Chairs: Marco Thines, Danny Haelewaters

Speakers

- 16:00 Danny Haelewaters/Ghent (B)**
Interactions of Laboulbeniales with their hosts and hyperhosts: association networks and community ecology
- 16:30 Anthony Buaya/Frankfurt am Main (G)**
Disentangling the taxonomy and diversity of the simple holocarpic oomycetes
- 16:45 Fatemeh Salmaninezhad/Frankfurt am Main (G)**
Oomycetes associated with ornamental trees in Iran
- 17:00 Gitta Langer/Göttingen (G)**
Current forest diseases in Germany and the impact of latent fungal pathogens on tree health
- 17:30 Marco Thines/Frankfurt am Main (G)**
Evolutionary patterns in oomycetes – the way behind and steps ahead

18:00 - 19:00 Dinner

- 19:00 Evening Lecture**
Meike Piepenbring/Frankfurt am Main (G)
Pioneer studies of fungal diversity in West Africa

Chair: Machiel Noordeloos

Thursday, 7th October

- 8:30 - 9:05 **Eric Kuhnert/Hannover (G)**
From biodiversity to biosynthesis - The adventures of a mycologist

Chair: Marc Stadler

- 9:05 - 9:40 **Annegret Kohler/Nancy (F)**
The evolution of mycorrhizal genomes und transcriptomes

Chair: Miroslav Kolarik

9:40 - 10:10 Coffee break

10:10 - 12:00 Symposium: Systematics of Basidiomycota

Chairs: Meike Piepenbring, Slavomír Adamčík

Speakers

- 10:10 Slavomír Adamčík/Bratislava (Slovakia)**
How to deal with recent tremendous changes in systematics of agaricoid Clavariaceae
- 10:40 Cathrin Manz/Frankfurt am Main (G)**
Four new species of *Russula* subsect. *Roseinae* from tropical montane forests in western Panama

- 10:55 **Kai Reschke/ Frankfurt am Main (G)**
Multiple loci and numerous type sequences for a new understanding of *Entoloma* subg. *Nolanea*
- 11:10 **Frederick Witfeld/Bochum (G)**
Characterization of a new lineage of heat resistant basidiomycetous species
- 11:25 **Lena Steins/Bochum (G)**
Comparative genomics of Ustilaginales indicate ability of sexual reproduction in asexual species and reveal hints for hybridization
- 11:40 **Vasilii Shapkin/Bratislava (Slovakia)**
Solitary trees in agricultural open land and their impact on soil fungi

12:00 - 13:00 Lunch break

13:00 - 15:00 Symposium: Lichenology and molecular ecology of lichen associated organisms
Chairs: Robert Lücking, Martin Grube

Speakers

- 13:00 **Robert Lücking/Berlin (G)**
The basidiolichen story: a homage to Franz Oberwinkler
- 13:30 **Bibiana Moncada/Bogotá (Colombia)**
ColFungi: Cataloguing the fungi including lichens from Colombia
- 14:00 **Martin Grube/Graz (A)**
Diversity and effect: microbial associations of lichens
- 14:30 **Fernando Fernández/Graz (A)**
Genomic consequences of hybridization in a lichenized fungal syngameon

15:00 - 15:30 Closing ceremony