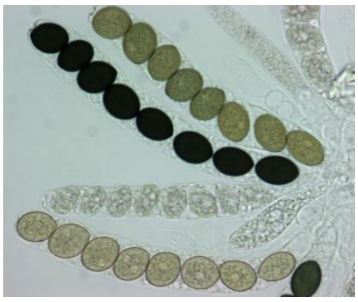

Kaiserslautern,
7-9 September 2022

TECHNISCHE UNIVERSITÄT KAISERSLAUTERN

Symposium Molecular Biology of Fungi 2022

7th - 9th September, TU Kaiserslautern

14th Symposium of the VAAM Special Group ‚Biology and Biotechnology of Fungi'

2nd joint meeting with the GeneAG ‚Fungal Genetics' of the German Society of Genetics

Program

Wednesday, Sept. 7th 2022

14:00 Registration

16:00 Welcome address

16:10 - 18:10 Session 1: Plant Pathology

16:10 - 16:50 Keynote lecture: **Sylvain Raffaele**, Toulouse, FR: Evolutionary genomics of generalist parasitism in Ascomycetes

16:50 - 18:30 (15 min talks)

Arne Weiberg (LMU München): Small RNA communication in fungal-plant interaction

Weiliang Zuo (Univ. Köln): Sts2, a transcriptional activator-like effector secreted from *Ustilago maydis* regulates tumor formation on maize leaves

David Scheuring (TU Kaiserslautern): The *Botrytis* hypersensitive response inducing protein 1 triggers non-canonical PTI to induce plant cell death

Slavica Janevska (Univ. Amsterdam): The influence of epigenetic modifications on pathogenicity and chromosome transfer in tomato-infecting *Fusarium oxysporum*

Vera Göhre (Univ. Düsseldorf): Nuclear-localized effectors of the Brassicaceae smut fungus *Thecaphora thlaspeos*

Daniela Nordzieke (Univ. Göttingen): Spore types-specific infection of different maize tissues by *Colletotrichum graminicola*

Lukas Dorian Dittiger (Univ. Jena): Characterizing effector proteins of *S. reilianum* specifically targeting the phytoalexin response of *Sorghum bicolor*

18:30 - Get together with finger foods and drinks

Poster Session 1

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Thursday, Sept. 8th 2022

08:30 - 10:30 Session 2: Cell Biology

08:30 - 09:10 Keynote lecture: **Joris Sprakel** (Wageningen, NL): *Phytophthora* sharpens its knives; the mechanobiology of host invasion

09:10 - 10.30 (15min talks)

Iris Eisermann (John Innes Inst., Norwich): Defining the septin interactome and its role in appressorium-mediated plant infection by the rice blast fungus *Magnaporthe oryzae*

Florian Altegoer: (Univ. Düsseldorf): Structural and functional analysis of the cerato-platanin-like effector protein Cpl1 suggests diverging functions in smut fungi

Meihang Du (KIT Karlsruhe): Analysis of the putative virulence factor EinA in the nematode-trapping fungus *Arthrobotrys flagrans*

Sanchi Dali (Univ. Düsseldorf): Deciphering the molecular mechanism of Jps1 in unconventional protein secretion

Hamzeh H. Hammadeh (Univ. Bochum): BRO1 localizes to a specific subpopulation of vesicular structures which mediate cell-cell fusion in *N. crassa*

10:30 Coffee Break

11:10 - 13:00 Session 3: Multicellular development

11:10 - 11:50 Keynote lecture: **Minou Nowrousian** (Univ. Bochum): The role of transcription factors and chromatin modifiers in multicellular development in ascomycetes

11:50 - 13:05 (15min talks)

11:50 **Ines Teichert** (Univ. Bochum): Role of edited in fruiting body development (efd) genes in *Sordaria macrospora* sexual development

Maria Shariatnasery (Univ. Bochum): Functional analysis of components of the septation initiation signaling (SIN) network in *Sordaria macrospora*

Hollstein Lucas (Univ. Göttingen): Establishment of *in vivo* protein-proximity labeling with biotin in *Sordaria macrospora*

Shanta Subba (Univ. Göttingen): Dark stipe mutants in fruiting body development of *Coprinopsis cinerea*

Lea Geißl (Univ. Düsseldorf): The RNA-binding protein Khd4 is critical for *Ustilago maydis* pathogenicity

13:05 **Lunch**

14:00 Poster session 2

15:30 Coffee Break

16:00 - 17:30 Session 4: Pathogenesis of Infectious Disease

16:00 - 16:40 Keynote lecture: **Antonis Rokas** (Vanderbilt Univ., U.S.A): Evolution of pathogenicity in Aspergillus

16:40 - 17:20 Keynote lecture: **Christophe D'Enfert** (INRA Paris, FR): Investigation of regulatory networks in the fungal pathogen of humans, *Candida albicans*

17:20 - 17:35 **Fabio Gherlone** (HKI Jena): Structural and molecular investigation of secondary metabolite compartmentalization in fungal vesicles

17:35 - 18:30 Transfer TUK → Restaurant Brauhaus an der Gartenschau (Forellenstr. 6; 67659 K'lautern)

18:30 Dinner Talk: **Johannes Herrmann** (TU Kaiserslautern): The Biology of Mitochondria (or the impressive potential of fungi as model systems in life sciences)

19:30 - Conference Dinner

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Friday, Sept. 9th 2022

08:30 - 10:30 Session 5: Biotechnology

08:30- 09:10 Keynote lecture: **Jolanda van Munster**, Scotland's Rural College, Edinburgh, UK: Deconstructing the plant cell wall: fungal degradative mechanisms and their exploitation

09:10 - 10.30 (15min talks)

09:10 **Lars Barthel** (TU Berlin) Quantifying fungal pellets during submerged cultivation: from 3D X-ray microtomography imaging to diffusive mass transport

Andreas Schüller (BOKU Tulln/Wien) Targeted gene activation based on the inducible trans-activator VPR-dCas9 and nucleosome map-guided sgRNA positioning in *Aspergillus nidulans*

Eileen A. Erdmann (BAM Berlin) Tools for reverse and forward genetics in *Knufia petricola*

Kamalraj Subban (Univ. Kiel) Molecular cloning and Sequence Analysis of transcription factor WRKY, ERF and AP2 genes from Taxol® producing endophytic fungi

Marcel K. Rüllke (TU München) Engineering of a reporter tool to quantify carbon catabolite repression in filamentous fungi in real-time

10:30 **Coffee Break**

11:00 - 13:00 Session 6: Sensing and Signaling

11:00 - 11:40 Keynote lecture: **Lori Huberman**, Cornell University, USA: The regulatory and transcriptional landscape of nutrient sensing

11:40 - 13:00 (15min talks)

11:40 **Harald Berger** (BOKU Tulln-Wien) Polaramycin B, and not physical interaction, is the signal that rewires fungal metabolism in the Streptomyces – Aspergillus interaction

Stefan Jacob (IBWF Mainz) Signal diversity by alternative splicing in multi-step phosphorelay systems of fungi

Kai Leister (KIT Karlsruhe) Analysis of the two fungal phytochromes *Af*FphA and AfFphB from the human pathogen *Aspergillus fumigatus*

Matteo Jurca (KIT Karlsruhe) Transcriptional regulation during the transition from the saprophytic to the biotrophic stage of *Ustilago maydis*

Elisabeth Tamayo (TU München) Multicopper oxidases in the arbuscular mycorrhizal fungus *Rhizophagus irregularis*

13:00 -13.30 Poster prizes and end of the event