

Programme

Friday 30 March

- 14:00-19:30 Registration and poster set up
- 18:15-18:25 **Welcome** (Hörsaal 215 - Audimax, Hörsaalgebäude Biegenstraße 10)
Regine Kahmann, chair of the organizing committee
- 18:25-18:35 **Welcome**
Frank Bremmer, Vice President of Philipps-Universität Marburg
- 18:35-18:45 **“What you are going to miss tonight”**
Michael Bölker, member of the organizing committee
- 18:45-19:45 **Keynote Lecture**
From genotype to phenotype - an inconvenient truth
Gerald R. Fink, Whitehead Institute for Biomedical Research, USA
Chair: Hans-Ulrich Mösch, Philipps-Universität Marburg, Germany
- 19:45-22:00 Welcome reception (on the 2nd and 3rd floor of Hörsaalgebäude, Biegenstraße 10)

Saturday 31 March

- 09:00-10:30 **Plenary session 1: Plant and Human Pathogens** **Audimax**
Chair: Paul Tudzynski, University of Münster, Germany
- 09:00-09:30 PL1.1 **How do arbuscular mycorrhizal fungi and plants recognize each other?**
Guillaume Bécard, Paul Sabatier University, France
- 09:30-10:00 PL1.2 **Dissecting phospholipid signalling in *Phytophthora infestans***
Francine Govers, Wageningen University, The Netherlands
- 10:00-10:30 PL1.3 **Metabolic adaptation and virulence factor expression in *Cryptococcus neoformans***
Jim Kronstad, University of British Columbia, Canada
- 10:30-11:00 Coffee
- 11:00-12:30 **Plenary session 2: Epigenetics and RNA Biology** **Audimax**
Chair: Michael Feldbrügge, University of Düsseldorf, Germany
- 11:00-11:30 PL2.1 **Centromeres of filamentous fungi**
Michael Freitag, Oregon State University, USA
- 11:30-12:00 PL2.2 **Diverse small RNA biogenesis pathways in *Neurospora***
Yi Liu, University of Texas, USA
- 12:00-12:30 PL2.3 **Post-transcriptional operons in the rice blast fungus**
Ane Sesma, Technical University of Madrid, Spain
- 12:30-14:00 Break for lunch
- 14:00-15:20 **Parallel session 1** **Audimax**
Fungal Cell Biology
Chairs: Gero Steinberg, University of Exeter, UK and Nick Read, University of Edinburgh, UK
- 14:00-14:20 PS1.1 **In *Candida albicans* the negative regulator of morphogenesis, Nrg1, is itself regulated at multiple post-transcriptional levels by kinase action**
Peter Sudbery, Sheffield University, UK
- 14:20-14:40 PS1.2 **Investigating the biology of plant infection by the rice blast fungus *Magnaporthe oryzae***
Nicholas Talbot, University of Exeter, UK
- 14:40-15:00 PS1.3 **Comparative live-cell imaging analyses of SPA-2, BUD-6 and BNI-1 in *Neurospora crassa* reveal novel features of the filamentous fungal polarisome**
Alexander Lichius, CICESE, Mexico

- 15:00-15:20 PS1.4 **The *Aspergillus nidulans* kinesin-3 tail is necessary and sufficient to recognize modified microtubules**
Constanze Seidel, Karlsruhe Institute of Technology, Germany
- 14:00-15:20 **Parallel session 2** **Room 113**
Sex and Sexual Development
Chairs: Ursula Kües, University of Göttingen, Germany and Robert Debuchy, University of Paris Sud, France
- 14:00-14:20 PS2.1 **A mating type loci in *Coprinopsis cinerea* differ in numbers of homeodomain transcription factor genes**
Ursula Kües, University of Göttingen, Germany
- 14:20-14:40 PS2.2 **Systematic deletion of homeogenes in an ascomycete fungus supports analogy of clamp and crozier in Dikaryomycota**
Robert Debuchy, University of Paris Sud, France
- 14:40-15:00 PS2.3 **Sexual development and spore pathogenesis of *Cryptococcus***
Michael Botts, University of Wisconsin, USA
- 15:00-15:20 PS2.4 **Living together - genetics and genomics of the dikaryotic lifestyle**
Antonio G. Pisabarro, Public University of Navarre, Spain
- 14:00-15:20 **Parallel session 3** **Room 114**
Genomes and Genome Evolution
Chairs: Eva Stukenbrock, Max Planck Institute for Terrestrial Microbiology, Germany and Marco Thines, Biodiversity and Climate Research Centre (BiK-F), Germany
- 14:00-14:20 PS3.1 **Evolution of obligate parasitism in the white rust pathogen of *Arabidopsis thaliana***
Eric Kemen, The Sainsbury Laboratory, UK
- 14:20-14:40 PS3.2 **Harnessing natural genetic variation to elucidate the relationship between genotype and phenotype in *Saccharomyces paradoxus***
Jeremy Roop, University of California, USA
- 14:40-15:00 PS3.3 **Evolutionary genomics of accessory chromosomes in *Mycosphaerella graminicola***
Daniel Croll, Institute of Integrative Biology Zurich, Switzerland
- 15:00-15:20 PS3.4 **Genome sequence of Shiitake mushroom *Lentinula edodes* and comparative mushroom genomic analyses**
Hoi Shan Kwan, Chinese University of Hong Kong, China
- 15:20-16:00 Coffee and cakes
- 16:00-17:20 **Parallel session 1 continued** **Audimax**
Fungal Cell Biology
Chairs: Gero Steinberg, University of Exeter, UK and Nick Read, University of Edinburgh, UK
- 16:00-16:20 PS1.5 **Active plus-end capture of dynein at astral microtubules increases the efficiency of anaphase B**
Yvonne Roger, University of Exeter, UK
- 16:20-16:40 PS1.6 ***Candida albicans*: sensing the host environment**
Carol Kumamoto, Tufts University School of Medicine, USA
- 16:40-17:00 PS1.7 **A steep phosphoinositide phosphate gradient is critical for filamentous growth in *Candida albicans***
Robert Arkowitz, University of Nice, France
- 17:00-17:20 PS1.8 **In vivo nonlinear spectral imaging of fungi**
Helene Knaus, University of Utrecht, The Netherlands

- 16:00-17:20 **Parallel session 2 continued** **Room 113**
Sex and Sexual Development
 Chairs: Ursula Kües, University of Göttingen, Germany and Robert Debuchy, University of Paris Sud, France
- 16:00-16:20 PS2.5 **The transcription of the putative mating type genes *sexM* and *sexP* is regulated by trisporic acid in *Mucor mucedo***
 Jana Wetzel, Friedrich Schiller University Jena, Germany
- 16:20-16:40 PS2.6 **Interspecific sex in grass smuts and the genetic diversity of their pheromone-receptor system**
 Ronny Kellner, Ruhr University Bochum, Germany
- 16:40-17:00 PS2.7 **The pheromone system of *Hypocrea jecorina* (*Trichoderma reesei*) and its regulation by photoreceptors upon sexual development**
 Monika Schmoll, Vienna University of Technology, Austria
- 17:00-17:20 PS2.8 **A developmental protein as scaffold for a MAP kinase pathway controlling fungal fruiting body development?**
 Ines Teichert, Ruhr University Bochum, Germany

- 16:00-17:20 **Parallel session 3 continued** **Room 114**
Genomes and Genome Evolution
 Chairs: Eva Stukenbrock, Max Planck Institute for Terrestrial Microbiology, Germany and Marco Thines, Biodiversity and Climate Research Centre (BiK-F), Germany
- 16:00-16:20 PS3.5 **Comparative genomics of *Fusarium pseudograminearum* and other cereal fungal pathogens**
 John Manners, CSIRO Plant Industry, Australia
- 16:20-16:40 PS3.6 **Comparative genomics of basidiomycetes telomere and subtelomere regions**
 Lucía Ramírez, Public University of Navarre, Spain
- 16:40-17:00 PS3.7 **Comparative genomics of *Cochliobolus* cereal pathogens: the core and pan genome**
 Gillian Turgeon, Cornell University, USA
- 17:00-17:20 PS3.8 **A dynamin-like protein affects both RIP and premeiotic recombination**
 Kyle Pomraning, Oregon State University, USA
- 17:30-20:30 Poster session sponsored by Genencor

Sunday 1 April

- 09:00-10:30 **Plenary session 3: Secondary Metabolism** **Audimax**
 Chair: Barry Scott, Massey University, New Zealand
- 09:00-09:30 PL3.1 **Secondary metabolism in *Fusarium fujikuroi* – the role of nitrogen availability and histone modifications**
 Bettina Tudzynski, University of Münster, Germany
- 09:30-10:00 PL3.2 **LaeA-directed natural product discoveries**
 Nancy Keller, Madison School of Medicine and Public Health, USA
- 10:00-10:30 PL3.3 **Secondary metabolites of *Leptosphaeria maculans*, the causal agent of blackleg of canola**
 Barbara Howlett, University of Melbourne, Australia
- 10:30-11:00 Coffee
- 11:00-12:30 **Plenary session 4: Synthetic and Systems Biology** **Audimax**
 Chair: Axel Brakhage, Friedrich Schiller University Jena, Germany
- 11:00-11:30 PL4.1 **Mathematical modeling of yeast stress response and cell cycle regulation**
 Edda Klipp, Humboldt University of Berlin, Germany
- 11:30-12:00 PL4.2 ***Aspergillus* spp.: ironing out iron problems**
 Hubertus Haas, Innsbruck Medical University, Austria

- 12:00-12:30 PL4.3 **Systems biology of industrially important filamentous fungi**
Jens Nielsen, Chalmers University of Technology, Sweden
- 12:30-14:00 Break for lunch
- 14:00-15:20 **Parallel session 4** **Audimax**
Organismic Interactions
Chairs: Alga Zuccaro and Gunther Döhlemann, Max Planck Institute for Terrestrial Microbiology, Germany
- 14:00-14:20 PS4.1 **β -1,3-glucan synthase of the maize anthracnose fungus *Colletotrichum graminicola* is essential at specific stages of pathogenesis**
Holger Deising, The Martin Luther University of Halle-Wittenberg, Germany
- 14:20-14:40 PS4.2 **Effectors and biotrophic invasion by the rice blast fungus, *Magnaporthe oryzae***
Barbara Valent, Kansas State University, USA
- 14:40-15:00 PS4.3 **Downy mildew effectors and their activity in the host plant**
Guido van den Ackerveken, Utrecht University, The Netherlands
- 15:00-15:20 PS4.4 **SpHtp1 from the oomycete *Saprolegnia parasitica* shows fish cell-specific entry and tyrosine-O-sulphate-dependent import**
Stephan Wawra, Aberdeen Oomycete Laboratory, UK
- 14:00-15:20 **Parallel session 5** **Room 113**
Mitochondria
Chairs: Roland Lill, Philipps-Universität Marburg, Germany and Benedikt Westermann, University of Bayreuth, Germany
- 14:00-14:20 PS5.1 **Functional analysis of ERMES and TOB (SAM) complex components in *Neurospora crassa***
Frank Nargang, University of Alberta, Canada
- 14:20-14:40 PS5.2 **On mitochondrial genes, genomes and proteomes**
Franz Lang, University of Montreal, Canada
- 14:40-15:00 PS5.3 **Mitochondrial dynamics and organismal ageing in *Saccharomyces cerevisiae***
Christian Q. Scheckhuber, Groningen Biomolecular Sciences and Biotechnology Institute, The Netherlands
- 15:00-15:20 PS5.4 **Mitochondrial dynamics in yeast**
Benedikt Westermann, University of Bayreuth, Germany
- 14:00-15:20 **Parallel session 6** **Room 114**
ROS, Autophagy and Apoptosis
Chairs: Jesus Aguirre, National Autonomous University of Mexico and Heinz Osiewacz, Johann Wolfgang Goethe University, Germany
- 14:00-14:20 PS6.1 **ROS signal transduction and cell differentiation in filamentous fungi**
Jesus Aguirre, National Autonomous University of Mexico
- 14:20-14:40 PS6.2 **The NADPH oxidase complexes in *Botrytis cinerea***
Ulrike Siegmund, University of Münster, Germany
- 14:40-15:00 PS6.3 **Identifying targets of NADPH oxidase-mediated redox signalling in *Fusarium graminearum* using proteomics approaches.**
Christof Rampitsch, Agriculture and Agrifood, Canada
- 15:00-15:20 PS6.4 **Production and epidemiological importance of photodynamic toxins produced by the necrotrophic fungus *Ramularia collo-cygni***
Michael Hess, Technical University München, Germany
- 15:20-16:00 Coffee and cakes

- 16:00-17:20 **Parallel session 4 continued** **Audimax**
Organismic Interactions
 Chairs: Alga Zuccaro and Gunther Döhlemann, Max Planck Institute for Terrestrial Microbiology, Germany
- 16:00-16:20 PS4.5 **Calnexin complex is involved in the establishment of fungal biotrophy in *Ustilago maydis***
 José Ibeas, The Pablo de Olavide University, Spain
- 16:20-16:40 PS4.6 **Functional analysis of candidate effector proteins by host-induced gene silencing in *Blumeria graminis* f. sp. *hordei***
 Clara Pliego, Imperial College London, UK
- 16:40-17:00 PS4.7 **Elucidating the response of wheat to the exposure of *Stagonospora nodorum* effectors**
 Lauren Du Fall, Australian National University, Australia
- 17:00-17:20 PS4.8 **How do mobile pathogenicity chromosomes collaborate with the core genome?**
 Charlotte van der Does, University of Amsterdam, The Netherlands
- 16:00-17:20 **Parallel session 5 continued** **Room 113**
Mitochondria
 Chairs: Roland Lill, Philipps-Universität Marburg, Germany and Benedikt Westermann, University of Bayreuth, Germany
- 16:00-16:20 PS5.5 **Mitochondrial protein quality control influences lifespan and stress adaptation in *Podospora anserina***
 Fabian Fischer, Johann Wolfgang Goethe University, Germany
- 16:20-16:40 PS5.6 **A mitochondrial molecular marker for estimating arbuscular mycorrhizal fungal biomass in soil and roots**
 Cristina Micali, University of Montreal, Canada
- 16:40-17:00 PS5.7 **The mitochondrial genome of the wood-decaying basidiomycete *Phlebia radiata* is the largest in size (156 kb) among fungi and contains a 6 kb inversion, stretches with repetitive elements and long introns invaded with homing endonucleases**
 Taina Lundell, University of Helsinki, Finland
- 17:00-17:20 PS5.8 **Phylogenetic analysis of the complete mitochondrial genome of *Madurella mycetomatis* confirms its taxonomic position within the order Sordariales**
 Wendy van de Sande, Erasmus MC, The Netherlands
- 16:00-17:20 **Parallel session 6 continued** **Room 114**
ROS, Autophagy and Apoptosis
 Chairs: Jesus Aguirre, National Autonomous University of Mexico and Heinz Osiewacz, Johann Wolfgang Goethe University, Germany
- 16:00-16:20 PS6.5 **ROS damage defence mechanisms in *Podospora anserina***
 Andrea Hamann, Johann Wolfgang Goethe University, Germany
- 16:20-16:40 PS6.6 **Mitophagy is linked to the general stress response pathway in *Saccharomyces cerevisiae***
 Andreas Reichert, Frankfurt Institute for Molecular Life Sciences, Germany
- 16:40-17:00 PS6.7 ***Botrytis*-plant interaction: interplay of cell death**
 Amir Sharon, Tel-Aviv University, Israel
- 17:00-17:20 PS6.8 **Farnesol-induced cell death in the filamentous fungus *Aspergillus nidulans***
 Gustavo Goldman, University of São Paulo, Brazil
- 17:30-20:30 Poster session sponsored by Genencor

Monday 2 April

- 08:30-10:05 **Plenary session 5: Genomes** **Audimax**
Chair: Jörg Kämper, Karlsruhe Institute of Technology (KIT), Germany
- 08:30-09:00 **PL5.1 Population genomics uncovers the *Verticillium dahliae* effector that is recognized by the tomato Ve1 immune receptor**
Bart Thomma, Wageningen University, The Netherlands
- 09:00-09:30 **PL5.2 Interacting with plants: lessons from fungal genomes**
Marc-Henri Lebrun, INRA-APT, France
- 09:30-10:00 **PL5.3 Genomic dynamics and host specificity in *Fusarium oxysporum* species complex**
Li Jun Ma, University of Massachusetts Amherst, USA
- 10:00-10:05 **Genome sequencing and beyond: A new JGI call for proposals**
Igor Grigoriev, DOE Joint Genome Institute, USA
- 10:05-10:30 Coffee
- 10:30-12:00 **Plenary session 6: Regulation and Development** **Audimax**
Chair: Erika Kothe, Friedrich Schiller University Jena, Germany
- 10:30-11:00 **PL6.1 Coordination of fungal development and secondary metabolism**
Gerhard Braus, University of Göttingen, Germany
- 11:00-11:30 **PL6.2 Tipping the balance: what turns a fungal mutualist into a pathogen**
Barry Scott, Massey University, New Zealand
- 11:30-12:00 **PL6.3 Novel intrinsically disordered proteins assemble at septal pores and regulate diverse aspects of hyphal homeostasis**
Greg Jedd, Temasek Life Sciences Laboratory, Singapore
- 12:00-13:00 International Scientific Committee meeting **Room 109**
- 12:40-13:20 Demonstration: **Room 113**
PhytoPath - a new resource for integrating genomic and phenotypic information from plant pathogens
- 13:20-14:00 Demonstration: **Room 113**
PhytoPath - a new resource for integrating genomic and phenotypic information from plant pathogens
- 12:00-14:30 Extended lunch break for sightseeing and guided tours
- 14:30-15:50 **Parallel session 7** **Room 114**
Sensing and responding
Chairs: José Pérez-Martin, Centre for Biotechnology Madrid, Spain and Jürgen Wendland, Carlsberg Laboratory, Denmark
- 14:30-14:50 **PS7.1 The Pals wink at the ESCRT: pH signalling in the plasma membrane**
Miguel Penalva, Centre for Biotechnology Madrid, Spain
- 14:50-15:10 **PS7.2 pH control of infectious growth in *Fusarium oxysporum* involves reprogramming of MAPK signalling cascades**
Antonio di Pietro, University of Cordoba, Spain
- 16:20-16:40 **PS7.3 Subcellular localization of the *Neurospora crassa* MAP kinase MAK-2 influences its activity and function during cell-cell signalling**
Julia Illgen, Braunschweig University of Technology, Germany
- 15:30-15:50 **PS7.4 Functional characterization of G-protein-coupled receptors in the cereal pathogen *Fusarium graminearum***
Van Thuat Nguyen, University of Hamburg, Germany

- 14:30-15:50 **Parallel session 8** **Audimax**
Biotechnology
 Chairs: Peter Punt, TNO, The Netherlands and Bernhard Seiboth, Vienna University of Technology, Austria
- 14:30-14:50 **PS8.1 Systems biology approaches to dissecting plant cell wall deconstruction in a model filamentous fungus**
 Louise Glass, University of California-Berkeley, USA
- 14:50-15:10 **PS8.2 Modeling the XlnR regulon of *Aspergillus niger***
 Leo H. de Graaff, Wageningen University, The Netherlands
- 15:10-15:30 **PS8.3 Breaking the silence: protein stabilization uncovers silenced biosynthetic gene clusters in the fungus *Aspergillus nidulans***
 Jennifer Gerke, University of Göttingen, Germany
- 15:30-15:50 **PS8.4 Lactose induces all genes related to plant biomass hydrolysis and corresponding mono- and oligosaccharide transporters in *Trichoderma reesei***
 Christa Ivanova, Vienna University of Technology, Austria
- 14:30-15:50 **Parallel session 9** **Room 113**
The Fungal Cell Wall
 Chairs: José Ibeas, The Pablo de Olavide University, Spain and Steffen Rupp, Fraunhofer IGB, Germany
- 14:30-14:50 **PS9.1 Advances in fungal cell wall proteomics**
 Piet de Groot, University of Castilla – La Mancha, Spain
- 14:50-15:10 **PS9.2 Interaction of cell wall polysaccharides with amyloid forming proteins**
 Han Wösten, Utrecht University, The Netherlands
- 15:10-15:30 **PS9.3 Microarray analysis of antifungal synergy between inhibitors of chitin synthases and beta-(1,3)-glucan synthase**
 Emmanuelle Galland, Bayer CropScience, France
- 15:30-15:50 **PS9.4 Cell wall stress affects chitin synthase delivery and secretion in the pathogen *Ustilago maydis***
 Magdalena Martin-Urdiroz, University of Exeter, UK
- 15:50-16:30 Coffee and cakes
- 16:30-17:30 **Parallel session 7 continued** **Room 114**
Sensing and Responding
 Chairs: José Pérez-Martin, Centre for Biotechnology Madrid, Spain and Jürgen Wendland, Carlsberg Laboratory, Denmark
- 16:30-16:50 **PS7.5 Specific structural features of sterols affect cell-cell signalling and fusion in *Neurospora crassa***
 Martin Weichert, Braunschweig University of Technology, Germany
- 16:50-17:10 **PS7.6 Structural and functional comparison of pyrrolnitrin- and iprodione-induced modifications in the class III histidine-kinase Bos1 of *Botrytis cinerea***
 Sabine Fillinger, INRA Thiverval-Grignon, France
- 17:10-17:30 **PS7.7 Transcriptomic and molecular analysis of germination and plant infection of *Botrytis cinerea***
 Michaela Leroch, University of Kaiserslautern, Germany
- 16:30-17:30 **Parallel session 8 continued** **Audimax**
Biotechnology
 Chairs: Peter Punt, TNO, The Netherlands and Bernhard Seiboth, Vienna University of Technology, Austria
- 16:30-16:50 **PS8.5 Endophytic fungi; a novel biotechnology tool**
 Milan Gagic, Agresearch, New Zealand

- 16:50-17:10 **PS8.6 Characterisation of constitutive promoters of *Aspergillus niger* exhibiting different expression intensities as a useful tool for metabolic engineering**
Marzena Blumhoff, BOKU University of Natural Resources and Life Sciences, Austria
- 17:10-17:30 **PS8.7 Control of morphogenesis and pellet architecture by cell surface proteins in *Streptomyces coelicolor***
Dennis Claessen, Leiden University, The Netherlands
- 16:30-17:30 **Parallel session 9 continued** **Room 113**
The Fungal Cell Wall
Chairs: José Ibeas, The Pablo de Olavide University, Spain and Steffen Rupp, Fraunhofer IGB, Germany
- 16:30-16:50 **PS9.5 Self-assembly at air/water interfaces and chitin-binding properties of the small cell wall protein EPL1 from *Trichoderma atroviride***
Verena Seidl-Seiboth, Vienna University of Technology, Austria
- 16:50-17:10 **PS9.6 Analysis of the cell wall integrity (CWI) pathway in *Ashbya gossypii*.**
Klaus Lengeler, Carlsberg Laboratory, Denmark
- 17:10-17:30 **PS9.7 Efg1 shows a haploinsufficiency phenotype in modulating cell wall architecture and immunogenicity of *Candida albicans***
Steffen Rupp, Fraunhofer IGB, Germany
- 17:45-18:45 **Keynote Lecture** **Audimax**
***Ustilago maydis*: an experimental organism for 21st century biology**
William Holloman, Weill Cornell Medical College, USA
Chair: Michael Bölker, Philipps-Universität Marburg, Germany
- 18:45 Poster prize winners announced
- 19:30-22:30 Conference dinner at Marburg Castle