

Programme

Monday 29 March 2010

14.00-18.00 Registration and poster setup

room: Rotondo

18.00-18.05 Welcome

Prof. Dr. C.A.M.J.J. van den Hondel

Chair of the Organizing committee

18.05-18.15 Opening

Prof. Dr. S. M. Verduyn Lunel. Dean of the Faculty of Science, Leiden University

18.15-19.15 Key note Lecture

Arturo Casadevall, Albert Einstein College of Medicine, USA **(KL1)**

Thoughts on the Origin of Virulence of Pathogenic Fungi

19.15-23.00 Welcome reception

Tuesday 30 March 2010

room: Rotondo

Plenary Lectures I: Fungal Diversity and Evolution

Chair: Pedro Crous

- 09.00-09.30 François Lutzoni, Duke University, Durham, NC, USA **(PL1.1)**
Macroevolution as a unifying framework for integrative studies of fungal symbiotic systems
- 09.30-10.00 Christina Cuomo, Broad Institute of MIT and Harvard, Cambridge, MA **(PL1.2)**
Genome Insights into Early Fungal Evolution and Global Population Diversity of the Amphibian Pathogen *Batrachochytrium Dendrobatidis*
- 10.00-10.30 Francine Govers, Wageningen University, Wageningen, The Netherlands **(PL1.3)**
Effector diversity and gene innovations in *Phytophthora*
- 10.30-11.00 Coffee break
- 11.00-11.30 Jan Stenlid, Swedish University of Agricultural Sciences, Uppsala, Sweden **(PL1.4)**
What have we learnt about pathogenicity from sequencing the *Heterobasidion* genome?
- 11.30-12.00 Igor Grigoriev, DOE Joint Genome Institute, Walnut Creek, CA, USA **(PL1.5)**
Genomic Encyclopedia of Fungi: Bioenergy Prospective
- 12.00-14.00 Lunch

Parallel session 1

room: Asamblea

Phylogeny and fungal tree of life

Chairs : Pedro Crous & Joey Spatafora

- 14.00-14.25 Joey Spatafora, Oregon State University, USA **(PS1.1)**
Pan-orthologs, Phylogenetic Informativeness and the Fungal Tree of Life
- 14.25-14.45 Marcel Zamocky, BOKU-University, Vienna, Austria **(PR1.1)**
Horizontal Gene Transfer of katG Genes from Bacteroidetes into Ascomycetes
- 14.45-15.05 Evy Battaglia, Utrecht University, The Netherlands **(PR1.5)**
Analysis of regulation of pentose utilization in *Aspergillus niger* reveals evolutionary adaptations in the Eurotiales
- 15.05-15.30 Jennifer Wortman, University of Maryland School of Medicine, Baltimore, USA **(PS1.2)**
AspGD comparative genomics pipelines and visualization tools
- 15.30-16.00 Coffee break
- 16.00-16.20 Robert Proctor, US Department of Agriculture, Illinois, USA **(PR1.8)**
Variation in Sequence and Location of the Fumonisin Mycotoxin Biosynthetic Gene Cluster in *Fusarium*
- 16.20-16.40 Gerrit HJ Kema, Plant Research International, Wageningen, The Netherlands **(PR1.10)**
The Draft Genome Sequence of *Mycosphaerella fijiensis*, the Black Sigatoka Pathogen of Banana
- 16.40-17.05 Berend Snel, Utrecht University, The Netherlands **(PS1.3)**
The Evolution of Pathways and Gene Functions: Lessons from Phylogenomics in Fungi

Parallel session 2**room: Sorbon****Fungal-host biology**

Chairs : Gillian Turgeon and Paul Verweij

- 14.00-14.25 Li-Jun Ma, The Broad Institute, USA (**PR2.21**)
Comparative genomics reveals mobile pathogenicity chromosomes in *Fusarium oxysporum*
- 14.25-14.45 Elena Perez-Nadales, University of Cordoba, Spain (**PS2.1**)
Role of a mucin-like membrane protein in signalling and pathogenicity of *Fusarium oxysporum*
- 14.45-15.05 Nicole Gerardo, Emory University, Atlanta, USA (**PS2.2**)
The Evolution and Maintenance of Pathogen Specialization in the Fungus-Growing Ant Symbiosis
- 15.05-15.30 Duur Aanen, Wageningen University, The Netherlands (**PS2.3**)
High symbiont relatedness stabilizes mutualistic cooperation in fungus-growing termites
- 15.30-16.00 Coffee break
- 16.00-16.20 Pietro D. Spanu, Imperial College London, UK (**PR2.29**)
Genome expansion in powdery mildews is caused by loss of immunity against genomic parasites
- 16.20-16.40 Jens Heller, Westf. Wilhelms-Universität, Germany (**PR2.18**)
The use of redox-sensitive GFP2 as a biosensor of the redox status in *Botrytis cinerea*
- 16.40-17.05 Hubertus Haas, Innsbruck Medical University, Austria (**PR2.10**)
HAPX is involved in maintenance of iron homeostasis and virulence of *Aspergillus fumigatus*

Parallel session 3**room: Rotondo****Regulation of gene expression at genome level**

Chairs : Han de Winde and Cees Sagt

- 14.00-14.25 Heinz Osiewacz, Johann Wolfgang Goethe-University, Frankfurt, Germany (**PS3.1**)
Molecular pathways controlling the lifespan of the ascomycete *Podospora anserina*
- 14.25-14.45 Linda Johnson, AgResearch Limited, New Zealand (**PR3.24**)
Mutualism versus pathogenesis: fungal endophyte, friend or foe ?
- 14.45-15.05 Peter Punt, TNO Quality of Life, The Netherlands (**PR3.31**)
Constructed *Aspergillus niger* gene co-expression networks relate to biological processes
- 15.05-15.30 Tobias Schafmeier, Heidelberg University Biochemistry Center, Germany (**PS3.2**)
Frequency-modulated nucleo-cytoplasmic shuttling cycles are the basis for circadian activity and abundance rhythms of the *Neurospora* clock transcription factor WCC
- 15.30-16.00 Coffee break
- 16.00-16.20 Julio Rodriguez-Romero, Karlsruhe Institute of Technology, Germany (**PR3.28**)
Light-dependent gene regulation in *Aspergillus nidulans* is mediated through binding of a phytochrome white-collar light regulator complex
- 16.20-16.40 Philipp Wieman, Westfälische Wilhelms-Universität Münster, Germany (**PR3.6**)
Components Of A Velvet-like Complex In *Fusarium fujikuroi* Affect Differentiation, Secondary Metabolism And Virulence
- 16.40-17.05 Graeme Garvey University of Wisconsin-Madison, USA (**PS3.3**)
Functional Characterization of LaeA
- 18.00-19.30 Dinner
- 19.30-20.30 Poster Session 1a. Poster categories presenting: 1, 2, 3, 4 (even posters)
- 20.30-21.30 Poster Session 1b. Poster categories presenting: 1, 2, 3, 4 (uneven posters)

Wednesday 31 March 2010

room: Rotondo

Plenary Lectures II: Fungal Way of Living

Chair: Paul Tudzynski

- 09.00-09.30 Han A.B. Wösten, Utrecht University, The Netherlands **(PL2.1)**
Micro- and macro-colonies of *Aspergillus niger* are heterogenic with respect to gene expression and secretion
- 09.30-10.00 Michael Feldbrügge, University Düsseldorf, Düsseldorf, Germany **(PL2.2)**
Microtubule-dependent mRNA transport in *Ustilago maydis*
- 10.00-10.30 Miguel A. Peñalva, Centro de Investigaciones Biológicas CSIC, Madrid, Spain **(PL2.3)**
Membrane Traffic in *Aspergillus nidulans*
- 10.30-11.00 Coffee break
- 11.00-11.30 Paul S. Dyer University of Nottingham, Nottingham, UK **(PL2.4)**
Sex Change in Fungi: Revealing Secrets
- 11.30-12.00 John W. Taylor University of California, Berkeley, USA **(PL2.5)**
Unexpected Population Structure in *Neurospora crassa* from the Caribbean Basin
- 12.00-18.00 Pick-up Lunch and excursion to the Keukenhof
- 18.00-20.00 Dinner

Parallel session 4

room: Rotondo

Fungal physiology and Biochemistry

Chairs : Merja Penttila and Christien Lokman

- 20.00-20.25 Gerhard Braus, Georg-August-Universität Göttingen, Germany **(PS4.1)**
Coordination of Fungal Development and Secondary Metabolism in *Aspergillus nidulans*
- 20.25-20.45 Jerica Sabotic, Jožef Stefan Institute, Ljubljana, Slovenia **(PR4.20)**
Clitocypin and Macrocybins Cover Different Mushroom Defences
- 20.45-21.05 Carol Davis, NUI Maynooth, Ireland **(PR4.24)**
A glutathione S-transferase, GliG, may mediate thiol incorporation in gliotoxin biosynthesis and is not involved in auto-protection against gliotoxin
- 21.05-21.30 Valeria Mapelli, Chalmers University of Technology, Sweden **(PS4.2)**
Metabolism of Selenium in *Saccharomyces cerevisiae* and Improved Biosynthesis of Bioactive Organic Se-compounds
- 21.30-22.00 Coffee break
- 22.00-22.20 Vivian (Paraskevi) Geogakopoulos, University of Adelaide, Australia **(PR4.1)**
Components of the SAGA complex are involved in acetate repression in *Aspergillus nidulans*
- 22.20-22.40 Michael Blatzer, Medical University Innsbruck, Austria **(PR4.3)**
SidL, an acetyltransferase involved in biosynthesis of the intracellular siderophore ferricrocin in *Aspergillus fumigatus*
- 22.40-23.05 Bernhard Seiboth, TU Vienna, Austria **(PS4.3)**
Arabinan and L-arabinose metabolism in *Trichoderma reesei*

Parallel session 5

room: Asamblea

Fungal way of living: sex and other encounters

Chairs : Paul Tudzynski and Pierre de Wit

- 20.00-20.25 Gerrit H.J. Kema, PRI, Wageningen, The Netherlands **(PS5.1)**
The dodge of blotch: saving sex in *Mycosphaerella graminicola*
- 20.25-20.45 Céline O’Gorman, Ruhr-Universitaet Bochum, Germany **(PR5.4)**
Penicillium chrysogenum: is it another shy sexual Ascomycete?
- 20.45-21.05 Jan A.L. van Kan, Wageningen University, The Netherlands **(PR5.6)**
Mating type loci of *Botrytis cinerea*
- 21.05-21.30 Sébastien Duplessis, INRA, France **(PS5.2)**
Chasing effectors in the genomes of fungal symbionts and pathogens of trees
- 21.30-22.00 Coffee break
- 22.00-22.20 Gillian Turgeon, Cornell University, USA **(PR5.9)**
Sex, virulence, stress, and histidine kinase response regulator proteins
- 22.20-22.40 Erika Kothe, Friedrich-Schiller-University, Jena, Germany **(PR5.12)**
Mushroom forming basidiomycetes: Mating and more
- 22.40-23.05 Nicholas J. Talbot, University of Exeter, United Kingdom **(PS5.3)**
Investigating the genetic control of infection-related development in the rice blast fungus *Magnaporthe oryzae*

Parallel session 6

room: Sorbon

Fungal way of living: cell biology

Chairs : Vera Meyer and Ben Cornelissen

- 20.00-20.25 Steven Harris, University of Nebraska, USA **(PS6.1)**
Ancestral homologs of the yeast bud site selection proteins regulate septum formation and development in filamentous fungi
- 20.25-20.45 Alexander Lichius, University of Edinburgh, Scotland, United Kingdom **(PR6.23)**
Tip-focused Rho GTPase activity and the actin cytoskeleton regulate directional growth of *Neurospora crassa* germlings
- 20.45-21.05 Mojca Bencina, National institute of Chemistry, Ljubljana, Slovenia **(PR6.8)**
Calcium and pH homeostasis in *Aspergillus*: small molecules under control
- 21.05-21.30 Gregory Jedd, The National University of Singapore, Singapore **(PS6.2)**
Biogenesis and Evolution of the Fungal Woronin Body
- 21.30-22.00 Coffee break
- 22.00-22.20 Sara Gremillion, Armstrong Atlantic State University **(PR6.18)**
Mutations in two Golgi apparatus COG proteins affect growth and glycosylation in *Aspergillus nidulans*
- 22.20-22.40 Corby Kistler, University of Minnesota **(PR6.9)**
Fusarium graminearum as a model for human Niemann-Pick type C disease
- 22.40-23.05 Ida van der Klei **(PS6.3)**
The role of microbodies in penicillin production

Thursday 1 April 2010

room: Rotondo

Plenary Lectures III: Fungal Physiology and Gene Expression

Chair: David Archer

- 09.00-09.30 Joseph Strauss, Austrian Institute of Technology, Vienna, Austria **(PL3.1)**
Chromatin-level regulation of metabolic gene clusters in *Aspergillus*
- 09.30-10.00 Matthew Sachs, Texas A&M University, USA **(PL3.2)**
Gene regulation through the control of ribosome movement
- 10.00-10.30 Jurg Bahler, University College London, UK **(PL3.3)**
Dynamic repertoire of the fission Yeast transcriptome surveyed at single-nucleotide resolution
- 10.30-11.00 Coffee break
- 11.00-11.30 Pascale Daran-Lapujade, Delft University of Technology, The Netherlands **(PL3.4)**
Regulation of the glycolytic activity in *Saccharomyces cerevisiae*: a systems biology approach
- 11.30-12.00 Cees A.M.J.J. van den Hondel, Leiden University, The Netherlands **(PL3.5)**
Filamentous-fungal biotechnology: Veni, Vidi, Vici?
- 12.00-13.00 Lunch and poster session
- 13.00-14.00 Poster Session 2a. Poster categories presenting: 5, 6, 7, 8 (even posters)
- 14.00-15.00 Poster Session 2b. Poster categories presenting: 5, 6, 7, 8 (uneven posters)

Parallel session 7

room: Sorbon

Fungal and oomycete effectors

Chairs : Guido Van den Ackerveken and Marc-Henri Lebrun

- 15.00-15.25 Marc-Henri Lebrun, CNRS-UCB-INSA-BCS, CRLD Bayer Cropscience, France **(PS7.1)**
Fungal secondary metabolites as effectors of pathogenicity
- 15.25-15.45 Tim Friesen, USDA-ARS, Fargo, North Dakota, USA **(PR7.21)**
Cloning and characterization of SnTox1, a novel virulence effector gene important in the wheat-*Stagonospora nodorum* interaction
- 15.45-16.10 Martijn Rep, University of Amsterdam, The Netherlands **(PS7.2)**
Effectors of *Fusarium oxysporum*
- 16.10-16.35 Regine Kahmann, Max Planck Institute, Marburg, Germany **(PS7.3)**
The effectors of *Ustilago maydis* and related smut fungi
- 16.35-17.00 Coffee break
- 17.00-17.20 Rahim Mehrabi, PRI, Wageningen University, The Netherlands **(PR7.8)**
Genome mining and functional genomics of small secreted proteins (SSPs) in *Cladosporium fulvum*, *Mycosphaerella graminicola* and *M. fijiensis*
- 17.20-17.40 Isabelle Fudal, UMR Bioger-CPP, INRA, Grignon, France **(PR7.19)**
Crystal Structure of the Avirulence Gene AvrLm4-7 Of *Leptosphaeria maculans* Illuminates Its Evolutionary And Functional Characteristics
- 17.40-18.05 Stephan Wawra, University of Aberdeen, Scotland, United Kingdom **(PS7.4)**
Unraveling the mechanism of RxLR mediated translocation of Oomycete effector proteins

Fungal Biotechnology

Chairs : Hein Stam and Peter J. Punt

- 15.00-15.25 Roel Bovenberg, DSM, The Netherlands **(PS8.1)**
Fungal Biotechnology: lessons learned from *Penicillium* strain improvement
- 15.25-15.45 An Li, TNO Quality of Life, Zeist, The Netherlands **(PR8.22)**
A systems biology approach towards itaconic acid production in *Aspergillus*
- 15.45-16.10 Lena Nilsson, Aalborg University, Denmark **(PR8.45)**
Biochemical producing fungi
- 16.10-16.35 Jamie Ryding, Verenum Corporation, USA **(PS8.2)**
Fungal Enzyme Expression as a Unit Operation in the Production of Cellulosic Ethanol
- 16.35-17.00 Coffee break
- 17.00-17.20 Astrid Mach-Aigner, Vienna University of Technology, Austria **(PR8.15)**
Engineering an N-acetylneuraminic acid synthesis pathway into *Trichoderma*
- 17.20-17.40 Hans Visser, Dyadic Nederland, Wageningen, The Netherlands **(PR8.5)**
Development of a low-cellulase background *Chrysosporium lucknowense* C1 strain.
- 17.40-18.05 Randy Berka, NOVOzymes Inc, USA **(PS8.3)**
Genomic and Transcriptomic Analysis of *Thielavia terrestris* – a Thermophilic Ascomycete of Biotechnological Interest
- 19.30-late Conference Dinner and Farewell Party