

## Programme ECFG12. Hotel Silken Al Andalus

### Saturday, March 22

17.00-23.00 Satellite meetings. The 11th International *Aspergillus* Meeting (Asperfest)

### Sunday, March 23

09.00-16.00 Satellite meetings

12.00-18.00 Registration

18.00-20.00 **Welcome address** (Lecture Hall Velázquez)

#### **Opening Lecture**

Chair: Miguel A. Peñalva

**KL1  $\gamma$ -Tubulin: A multitasking cell organizer**

Berl Oakley

20.00-22.00 Welcome reception

### Monday, March 24

09.00-12.00 **The Yanofsky plenary session** (Lecture Hall Velázquez)

Chairs: Arthur Ram and Marc-Henri Lebrun

09.00-09.30 PS1.1 **Gene silencing, heterochromatin formation and DNA methylation in *Neurospora***

Eric Selker

09.30-10.00 PS1.2 **Early endosome motility spatially organizes polysome distribution**

Gero Steinberg

10.00-10.30 PS1.3 **HookA is a novel dynein-early endosome linker critical for endosome movement *in vivo***

Xin Xiang

10.30-11.00 Break

11.00-11.30 PS1.4 **Photobiology in model and clinical fungi**

Jennifer Loros

11.30-12.00 PS1.5 **Light and time in *Aspergillus nidulans***

Reinhard Fischer

12.30-14.00 Lunch

14.00-16.00 **Poster session 1** (Manolo "Caracol" Hall)

16.00-19.00 **Concurrent sessions 1-3**

**Unconventional gene regulation** (Lecture Hall Velázquez)

Chairs: Rosa Ruiz-Vázquez and Joseph Strauss

16.00-16.20 CS1.1 **Histone de-methylases regulate primary and secondary metabolism in *Aspergillus nidulans***

Joseph Strauss

16.20-16.40 CS1.2 **Regulatory networks and regulators of chromatin structure governing global responses to changes in light and time**

Jay Dunlap

16.40-17.00 CS1.3 **Heterochromatin controls  $\gamma$ H2A localization and genome stability in *Neurospora crassa***

Zacharias Lewis

- 17.00-17.20 CS1.4 **The functional characterization of the *Neurospora crassa* HAC-1 transcription factor reveals a crucial role for the unfolded protein response in plant cell wall deconstruction**  
Luis Larrondo
- 17.20-17.40 Break
- 17.40-18.00 CS1.5 **Regulation of endogenous functions by small RNAs in the pathogenic fungus *Mucor circinelloides***  
Rosa Ruiz-Vázquez
- 18.00-18.20 CS1.6 **Mechanisms of small non-coding RNA pathways in *Neurospora***  
Yi Liu
- 18.20-18.40 CS1.7 **RNAi-dependent epimutations evoke antifungal drug resistance in the zygomycete fungal pathogen *Mucor***  
Silvia Calo Varela
- 18.40-19.00 CS1.8 **Spliceosomal twin introns in fungal nuclear transcripts: structure and evolution**  
Michel Flipphi
- Fungal development** (Lecture Hall Alexandre)  
Chairs: Minou Nowrousian and Eduardo Espeso
- 16.00-16.20 CS2.1 **Comparative genomics and transcriptomics to analyze fruiting body development**  
Minou Nowrousian
- 16.20-16.40 CS2.2 **Tracking the evolution of perithecium morphology through transcriptomics**  
Frances Trail
- 16.40-17.00 CS2.3 **Sexual development and female fertility in *Trichoderma reesei***  
Monika Schmoll
- 17.00-17.20 CS2.4 **A retinoic-acid biosynthetic enzyme involved in morphology and sexual development in *Fusarium verticillioides***  
Violeta Díaz Sanchez
- 17.20-17.40 Break
- 17.40-18.00 CS2.5 **Deciphering the role of the Flb-apical complex in asexual development of *Aspergillus***  
Eduardo Espeso
- 18.00-18.20 CS2.6 **Regulation of morphogenesis during development in the filamentous fungus *Aspergillus nidulans***  
Steven Harris
- 18.20-18.40 CS2.7 **Investigating the role of the exocyst complex in appressorium-mediated tissue invasion by rice blast fungus *Magnaporthe oryzae***  
Yogesh Gupta
- 18.40-19.00 CS2.8 **Light-responsive transcription factors (LTFs) regulate differentiation and virulence in the gray mold fungus *Botrytis cinerea***  
Julia Schumacher
- Social fungal biology** (Lecture Hall Turina)  
Chairs: Natalia Requena and Barry Scott
- 16.00-16.20 CS3.1 **Defining the line between mutualism and parasitism**  
Natalia Requena
- 16.20-16.40 CS3.2 **Did1, a novel fungal histidine-rich effector-protein that binds to metal ions to perturb plant immunity**  
Alga Zuccaro
- 16.40-17.00 CS3.3 **The effector protein Missp7 of the mutualistic ectomycorrhizal fungus *Laccaria bicolor* interacts with *Populus* Jaz proteins**  
Claire Veneault-Fourrey
- 17.00-17.20 CS3.4 **Trojan horse strategy and fair trade among symbioses: how one fungal species can invade thousands of plant species**  
Mathilde Malbreil
- 17.20-17.40 Break
- 17.40-18.00 CS3.5 **Cell fusion is required to maintain an *Epichloë festucae* symbiotic hyphal network in *Lolium perenne***  
Barry Scott
- 18.00-18.20 CS3.6 **Genomic analyses of *Mortierella elongata* and associated bacterial endosymbiont (*Candidatus glomeribacter* sp.)**  
Jessie Uehling

- 18.20-18.40 CS3.7 ***Verticillium* transcription activator of adhesion Vta2 suppresses microsclerotia formation and is required for systemic infection of plant roots**  
Susanna A. Braus-Stromeyer
- 18.40-19.00 CS3.8 **Phylogenomics of Hypocreales and the evolution of secondary metabolism**  
Joseph W Spatafora
- 19.00-20.00 **Special lecture** (Lecture Hall Velázquez)  
Chair: Reyes González-Roncero
- KL2 **Chromatin structure as a mediator of transcription- and R-loop-associated genome instability**  
Andrés Aguilera

## Tuesday, March 25

- 09.00-12.30 **The Clutterbuck plenary session** (Lecture Hall Velázquez)  
Chairs: David Archer and Gillian Turgeon
- 09.00-09.30 PS2.1 **The initiation of asexual development in *Aspergillus nidulans***  
Unai Ugalde
- 09.30-10.00 PS2.2 ***Aspergillus nidulans* septins in multicellular development**  
Michelle Momany
- 10.00-10.30 PS2.3 **Morphological and metabolic adaptation to environmental conditions by *Penicillium marneffe* and its role in the host**  
Alex Andrianopoulos
- 10.30-11.00 Break
- 11.00-11.30 PS2.4 **Evolution of sexual reproduction: a view from the fungal kingdom**  
Joseph Heitman (dedicated to the memory of Prof. Lorna Casselton)
- 11.30-12.00 PS2.5 **Fruiting-body development in *Sordaria macrospora*-A matter of recycling**  
Stefanie Pöggeler
- 12.30-14.00 Lunch
- 14.00-17.00 **Concurrent sessions 4-6**
- Infecting the host** (Lecture Hall Velázquez)  
Chairs: Regine Kahmann and Antonio Di Pietro
- 14.00-14.20 CS4.1 **A secreted *Ustilago maydis* effector promotes virulence by targeting anthocyanin biosynthesis in maize**  
Shigeyuki Tanaka
- 14.20-14.40 CS4.2 **Effector specialization in a lineage of the Irish potato famine pathogen**  
Sophien Kamoun
- 14.40-15.00 CS4.3 **Hotspots of recombination shape the evolution of virulence in the wheat pathogen *Zymoseptoria tritici***  
Daniel Croll
- 15.00-15.20 CS4.4 **Characterization of a circadian clock in *Botrytis cinerea* and its role in pathogenesis using *Arabidopsis thaliana* as a plant model**  
Montserrat Hevia
- 15.20-15.40 Break
- 17.40-16.00 CS4.5 **Chemotropic sensing in the fungal pathogen *Fusarium oxysporum***  
David Turrà
- 16.00-16.20 CS4.6 **Modulation of pathogenicity by pH regulation in the host**  
Dov Prusky
- 16.20-16.40 CS4.7 **Investigating the role of tyrosine catabolism and pyomelanin production during in vivo growth in the human pathogen *Penicillium marneffe***  
Kylie Boyce
- 16.40-17.00 CS4.8 **Pathogenicity chromosomes in host-specific toxin-producing *Alternaria* species**  
Motoichiro Kodama

### **Sensing the environment** (Lecture Hall Alexandre)

Chairs: Alfredo Herrera-Estrella and Michael Brunner

- 14.00-14.20 CS5.1 **An injury response mechanism conserved across kingdoms**  
Alfredo Herrera-Estrella
- 14.20-14.40 CS5.2 **Interplay between self and nonself recognition mechanisms regulate chemotropic interactions and cell fusion in *Neurospora crassa***  
N. Louise Glass
- 14.40-15.00 CS5.3 **Class III peroxidases secreted by tomato roots trigger hyphal chemotropism in *Fusarium oxysporum***  
Mennat El Ghalid
- 15.00-15.20 CS5.4 **Composition of the MAK-2 MAP kinase cascade in *Neurospora crassa***  
Stephan Seiler
- 15.20-15.40 Break
- 15.40-16.00 CS5.5 **Cooperation of the GATA type transcription factors WCC and SUB1 in light-induced transcription**  
Michael Brunner
- 16.00-16.20 CS5.6 **Light sensing in *Phycomyces blakesleeanus***  
Alex Idnurm
- 16.20-16.40 CS5.7 **The novel sensor-globin Fungogloblin is involved in low oxygen adaptation of *Aspergillus fumigatus***  
Falk Hillmann
- 16.40-17.00 CS5.8 **Genome-wide transcriptional response to ambient pH changes in *Fusarium graminearum*: A large metabolic reorganization controlled by Pac1**  
Christian Barreau

### **Putting fungi to work** (Lecture Hall Turina)

Chairs: José Arnau and Peter Punt

- 14.00-14.20 CS6.1 **Systems biology approaches for organic acid production in filamentous fungi**  
Peter Punt
- 14.20-14.40 CS6.2 **Genetic characterization of itaconic acid biosynthesis in *Ustilago maydis***  
Sandra Przybilla
- 14.40-15.00 CS6.3 **Cellulase and hemicellulase regulation and production in *Trichoderma reesei***  
Bernard Seiboth
- 15.00-15.20 CS6.4 **The responses of *Aspergillus niger* to different lignocellulosic substrate**  
Paul Daly
- 15.20-15.40 Break
- 15.40-16.00 CS6.5 **The first ribosomal peptide synthase pathway in filamentous fungi**  
Myco Umemura
- 16.00-16.20 CS6.6 **Comparative genome-scale reconstruction of gapless metabolic networks**  
Mikko Arvas
- 16.20-16.40 CS6.7 ***Yarrowia lipolytica* as a host for carotenoid production**  
John Royer
- 16.40-17.00 CS6.8 ***Streptomyces*: the beauty of a filamentous industrial bacterium**  
Gilles van Wezel

17.00-20.30 Sightseeing tour

## **Wednesday, March 26**

- 09.00-12.30 **The *Scazzocchio* plenary session** (Lecture Hall Velázquez)  
Chairs: Paul Tudzynski and Merja Penttilä
- 09.00-09.30 PS3.1 **Sensory perception in the mammalian host: Guiding invasive growth and rational therapeutic design**  
Elaine Bignell. *The BMS lecture.*
- 09.30-10.00 PS3.2 **Transposable elements reshaping genomes and favoring the evolutionary and adaptive potential of fungal phytopathogens**  
Thierry Rouxel

- 10.00-10.30 PS3.3 **Septin-mediated plant tissue invasion by the rice blast fungus *Magnaporthe oryzae***  
Nick Talbot. *The EMBO Lecture*.
- 10.30-11.00 Break
- 11.00-11.30 PS3.4 **Genomic analysis in the search for oxidoreductases of industrial interest**  
Ángel Martínez
- 11.30-12.00 PS3.5 **The evolution of fungal chemodiversity**  
Antonis Rokas. *The FGB Lecture*.
- 12.00-12.15 PS3.6 **Fungal genomics resources of the US Department of Energy Joint Genome Institute**  
Igor Grigoriev
- 12.30-14.00 Lunch
- 13.30-14.00 **JGI Orientation** (Lecture Hall Aleixandre)
- 14.00-16.00 **Poster session 2** (Manolo "Caracol" Hall)
- 16.00-19.00 **Concurrent sessions 3**
- Inside the fungal cell** (Lecture Hall Velázquez)  
Chairs: Meritxell Riquelme and Steve Osmani
- 16.00-16.20 CS7.1 **The ordered accumulation of vesicles at the Spitzenkörper is regulated by the action of distinct RAB GTPases and the exocyst in *Neurospora crassa***  
Meritxell Riquelme
- 16.20-16.40 CS7.2 **Phosphatidylinositol phosphate gradients during fungal filamentous growth**  
Robert Arkowitz
- 16.40-17.00 CS7.3 **Dual targeting of peroxisomal proteins**  
Michael Bölker
- 17.00-17.20 CS7.4 **Inside an *A. gossypii* hypha: combining high-resolution electron tomography, video microscopy and proteomics**  
Peter Philippsen
- 17.20-17.40 Break
- 17.40-18.00 CS7.5 **Mitotic regulation within a multicellular fungus**  
Steve Osmani
- 18.00-18.20 CS7.6 **Autophagy controls nuclear dynamics during vegetative hyphal growth and fusion of *Fusarium oxysporum***  
Carmen Ruiz Roldán
- 18.20-18.40 CS7.7 **Interplay of phosphatases and kinases: STRIPAK and MAP kinases regulate cell differentiation in *Sordaria macrospora***  
Ines Teichert
- 18.40-19.00 CS7.8 **Cisternal maturation within the *Aspergillus nidulans* Golgi visualized in vivo**  
Areti Pantazopoulou
- Fungal genomes: now what?** (Lecture Hall Aleixandre)  
Sponsored by *Pacific Biosciences*  
Chairs: Hanna Johannesson and Toni Gabaldón
- 16.00-16.20 CS8.1 **Adaptive introgression slows down molecular degeneration of the mating-type chromosome in *Neurospora tetrasperma***  
Hanna Johannesson
- 16.20-16.40 CS8.2 **Data-driven comparative functional genomics in yeast**  
Maitreya J. Dunham
- 16.40-17.00 CS8.3 **Insights into the evolution of the mycorrhizal symbiosis**  
Francis Martin
- 17.00-17.20 CS8.4 **The genomic architecture of ectomycorrhizal symbiosis in the genus *Amanita***  
Jaqueline Hess
- 17.20-17.40 Break
- 17.40-18.00 CS8.5 **Got a genome? Get a phylome!: Fungi through the evolutionary lens**  
Toni Gabaldón

- 18.00-18.20 CS8.6 **Early origins of the fungal cell wall and multicellularity in fungi**  
Jason E Stajich
- 18.20-18.40 CS8.7 **Combining population genomics, RNA-seq and miniature transposable element (MITE) presence to identify the AVR2 gene of the melon pathogenic fungus *Fusarium oxysporum* f. sp. *melonis***  
Sarah M. Schmidt
- 18.40-19.00 CS8.8 **Insights on the evolution of mycoparasitism from the genome of *Clonostachys rosea***  
Magnus Karlsson
- DNA/RNA/protein interplay** (Lecture Hall Turina)  
Chairs: Ane Sesma and Michael Feldbrügge
- 16.00-16.20 CS9.1 **Multiple layers of regulation of fungal cleavage factor I proteins**  
Ane Sesma
- 16.20-16.40 CS9.2 **The *FgPRP4* kinase is important for RNA processing, growth, and pathogenesis in *Fusarium graminearum***  
Jin-Rong Xu
- 16.40-17.00 CS9.3 **Epigenetic control of effector gene expression in the plant pathogenic fungus *Leptosphaeria maculans***  
Isabelle Fudal
- 17.00-17.20 CS9.4 **Regulatory crosslinks of the unfolded protein response control fungal development and pathogenicity**  
Kai Heimel
- 17.20-17.40 Break
- 17.40-18.00 CS9.5 **mRNA transport meets membrane trafficking**  
Michael Feldbrügge
- 18.00-18.20 CS9.6 **The coordination of mRNA degradation and translational repression**  
Mark Caddick
- 18.20-18.40 CS9.7 **The *spf27*-homologue *num1* connects splicing and cytoplasmic trafficking processes in *Ustilago maydis***  
Jörg Kämper
- 18.40-19.00 CS9.8 **Laser microdissection and transcriptomics of infection cushion development of *Fusarium graminearum***  
Schäfer Willi
- 19.00-19.30 Poster awards
- 19.30-20.30 **Closing lecture** (Lecture Hall Velázquez)  
Chair: Santiago Torres-Martínez
- KL3 Life and sex in the lab and in the field**  
Enrique Cerdá-Olmedo
- 21.00 Conference dinner

## Thursday, March 27

- 09.00-12.00 Departure
- 09.00-17.00 Satellite meetings. 4th workshop of the Mycorrhizal Genomics Initiative Consortium