

## 4<sup>th</sup> Symposium on Zygosporic and Zoosporic Fungi

March 17, 2026

33rd Fungal Genetics Conference

Asilomar Conference Grounds, California, USA

### **Organizers:**

Joseph Heitman (Duke University, USA)

Victor Garre (University of Murcia, Spain)

Luis M Corrochano (University of Seville, Spain)

Joey Spatafora (Oregon State University, USA)

**Location:** Fred Farr Forum

### **Scientific program**

9:00-9:15 Welcome by the organizers

#### **Session 1: Cell & Developmental Biology**

Chairs: Edgar Medina Tovar, Teresa Pawlowska

9:15-9:30 Stephanie Brody; University of Massachusetts Amherst  
“Actin-based cell crawling in chytrid zoospores illuminates potential mechanisms of ancestral fungal locomotion”

9:30-9:45 Artury Ramirez, University of California Santa Barbara  
“Anaerobic Gut Fungi Produce Extracellular Vesicle-Like Particles”

9:45-10:00 Kirsten Underwood, University of Massachusetts Amherst  
“Polarized cell wall growth during exit tube assembly in the chytrid *Batrachomyces dendrobatidis*”

10:00-10:15 Maria Corrochano-Luque, University of Seville  
“Transcriptional regulation during vegetative reproduction in the Mucoral fungus *Phycomyces blakesleeanus*”

10:15-10:30 Gabriel Navarro-Del Saz, Universidad de Murcia  
“A Yak1 ortholog (Dkl) orchestrates dimorphism and global gene expression in *Mucor lusitanicus*”

10:30-11:00 Coffee break

#### **Session 2: Evolutionary & Functional Genomics**

Chairs: Soo Chan Lee, Steven Ahrendt

11:00-11:15 Lluvia Vargas-Gastélum, Oregon State University  
“The shattered genome of *Basidiobolus*: a fungus from the gut of reptiles and amphibians”

11:15-11:30 Kyle Mondron, Oregon State University

“Evaluation of a candidate MAT locus for *Linnemannia elongata* (Mortierellomycotina) using quantitative PCR methods”

11:30-11:45 Tim James, University of Michigan  
“Mycodnaviridae: a new group of giant viruses discovered as past and present infections of zoosporic fungi”

11:45-12:00 Ameya Jalihal, Duke University  
“Mapping nuclear cooperation in fungal syncytia”

12:00-12:15 Hayden Johnson, Oregon State University  
“Whole genome similarity provides a robust framework for classification of fungal species and their variants”

12:15-2:00 Lunch

**Session 3: Biochemistry & Gene Regulation**

Chairs: Vinnie Bruno, Laila Partida-Martínez

2:00-2:15 Tuo Wang, University of Michigan  
“Elucidating Cell Wall Architecture in *Rhizopus* and *Mucor* Species and Melanin Structure in *Lichtheimia* via Solid-State NMR Spectroscopy”

2:15-2:30 Pablo Carrillo Marin, Universidad de Murcia  
“Identification of potential DNA N6-methyladenine readers uncovers a broad regulatory role of adenine methylation in non-dikarya fungi”

2:30-2:45 Kim Syring, Oregon State University  
“Environmental impacts on gene expression in the amphibian gut fungus *Basidiobolus*”

2:45-3:00 Greg Bonito, Michigan State University  
“Host transcriptomic and metabolic pathway shifts imposed by intracellular bacteria within Mortierellaceae”

3:00-3:15 Yeeun Son, Duke University  
“Epimutations driven by RNAi or heterochromatin evoke transient antimicrobial drug resistance in fungi”

3:15-3:45 Coffee break

**Session 4: Cross-kingdom interactions: from pathogenesis to mutualism**

Chairs: Jeffrey Rybak, Ingrid Richter

3:45-4:00 Alannah Holderbusch, ETH Zurich  
“Inducing novel endosymbioses in the filamentous fungus *Rhizopus microsporus*”

4:00-4:15 Jack Gregory, University of Exeter

“Understanding Diversity of Endohyphal Bacteria in Clinical Mucorales Isolates”

- 4:15-4:30 Kerstin Voigt, University of Jena  
“*Lichtheimia*: An Emerging Fungal Pathogen in Human Mucormycosis - Insights from Lung-on-Chip and Invertebrate Models”
- 4:30-4:45 Alan Wanke, Sainsbury Laboratory  
“Mucoromycotina Fine Root Endophytes: a distinct mycorrhizal strategy in early-diverging fungal lineages”
- 4:45-5:00 Riley Risteen, University of Maryland School of Medicine  
“Exploring the Interface between *Cunninghamella bertholletiae* and Lung Epithelium”
- 5:00-5:30 Open discussion / Farewell