

32nd Fungal Genetics Conference - Fusarium Workshop 2024

Tuesday, 12 March 2024, 9:00 AM – 5:15 PM, Chapel

9:00 – 9:10 Welcome and instructions for <i>“Top unanswered questions in Fusarium”</i>		
9:10 – 09:40 Keynote speaker: Amey Redkar Title: Decoding the interconnected life across scales in <i>Fusarium</i> wilt pathogenesis - from molecules to ecosystems		
9:40 – 10:25 Tribute session <i>“20 years of Fusarium oxysporum Six effectors”</i> (Rep <i>et al.</i> , 2004, Mol Microbiol) Chair: Domingo Martínez-Soto		
9:40 – 9:55	Madison Newman	Comparative proteomic analysis of <i>Solanum lycopersicum</i> in response to endophytic and pathogenic strains of <i>Fusarium oxysporum</i>
9:55 – 10:10	Babette Vlioger	Exploring host compatibility in <i>Fusarium oxysporum</i> -cucurbit interactions through ECC1 effector analysis
10:10 – 10:25	Andrea Doddi	A novel broad range effector from <i>Fusarium oxysporum</i> is able to induce cell death hijacking plant immune system
10:25 – 10:55 ***Coffee Break***		
10:55 – 12:25 Session <i>“Pathogenic interactions”</i> Chair: Thomas Baldwin		
10:55 – 11:10	Luca Degradi	Two genomes of <i>Fusarium verticillioides</i> from human patients: a comparative genome analysis
11:10 – 11:25	Hye-Seon Kim	Genome-wide identification of effectors and variant effects from across the breadth of diversity of <i>Fusarium</i>
11:25 – 11:40	Lily Peck	Horizontal transfers between fungal <i>Fusarium</i> species contributed to successive outbreaks of coffee wilt disease
11:40 – 11:55	Mitch Elmore	Integrative multi-omics analyses of host and pathogen signaling during <i>Fusarium</i> Head Blight disease of cereals
11:55 – 12:10	Thomas Witte	Accessory chromosomes are reservoirs of unique secondary metabolite biodiversity in <i>Fusarium poae</i>
12:10 – 12:25	Lily Lofton	Inter-fungal warfare in the maize kernel: mechanism of pyrrocidine-induced fumonisin elimination

12:25 – 2:00			***Lunch Break***
2:00 – 3:00 Session “Gene regulation” and Short Talks (Research Snapshots)			
Chair: Slavica Janevska			
2:00 – 2:15	Allyson Erlendson	Mutations in core PRC2 components reveal targeting mechanism of H3K27me3 to sub-telomeric chromatin in <i>Fusarium graminearum</i>	
2:15 – 2:30	Ana Rodríguez López	Developmental regulation of transposon activity drives adaptation in the clonally evolving fungal pathogen <i>Fusarium oxysporum</i>	
2:30 – 2:34	Erika Kroll	FgCWP1: A novel protein involved in MAP-kinase regulation of the cell wall integrity pathway	
2:34 – 2:38	Bradley Laflamme	Exploring the efficacy of cationic amphiphilic drugs for controlling <i>Fusarium graminearum</i> -borne disease	
2:38 – 2:42	Fabio Gherlone	Structural and molecular investigation of secondary metabolite compartmentalization in fungal vesicles	
2:42 – 2:46	Rafael Palos Fernández	Role of Mac1-dependent copper acquisition and superoxide dismutase activity in <i>Fusarium oxysporum</i> pathogenicity	
2:46 – 2:50	Gengtan Li	Investigation of potential CFEM proteins that contribute to host recognition in <i>Fusarium oxysporum</i> 47	
2:50 – 2:54	Abbeah Navasca	Exploring the unique genome of <i>Fusarium solani</i> in sugarbeet: Insights on its opportunistic habits	
2:54 – 2:58	Christopher Blackman	The pan-genomic effectome of the <i>Fusarium sambucinum</i> species complex	
3:00 – 3:30			***Coffee Break***
3:30 – 3:45 Discussion “Top unanswered questions in <i>Fusarium</i>”			
3:45 – 4:45 Discussion “Nomenclature issues in the post-genomic era”, Chair: Li-Jun Ma			
<ol style="list-style-type: none"> 1) Barbara Robbertse (Comparative Genomics Resource at NCBI): New possibilities to advance <i>Fusarium</i> research 2) Madison Newman: Consolidation of genome annotation -- a case study using <i>Fusarium oxysporum</i> Fo 47 3) FungiDB 			
4:45 – 5:15 Keynote speaker: Shay Covo			
Title: The DNA damage response of <i>Fusarium oxysporum</i> - There are unknown unknowns			