

Schedule of Events

Talks will be held in the Regency Ballroom.

Posters will be displayed in the Midway.

Thursday, March 9

2:00 PM – 6:00 PM **OPTIONAL PRE-CONFERENCE WORKSHOPS**

2:00 PM – 3:30 PM	“The Maize Genomes”	Midway Suite 4
2:00 PM – 3:30 PM	“Losing the Fear of the Command Line Part I	Midway Suite 3
3:30 PM – 4:30 PM	“The Carpenter Workshop: Maize, Missouri, and Meeting the Need”	Midway Suite 4
3:30 PM – 4:30 PM	“Career Opportunities”	Midway Suite 3
4:30 PM – 6:00 PM	“Maize Tools & Resources”	Midway Suite 4
4:30 PM – 6:00 PM	“Losing the Fear of the Command Line Part II”	Midway Suite 3

Pre-registration recommended for the above sessions.

3:00 PM – 9:30 PM **REGISTRATION** (Depot Registration Office)

3:00 PM – 6:00 PM **POSTER HANGING** (Midway)

6:00 PM – 7:00 PM **DINNER** (Midway)

7:00 PM – 9:00 PM **SESSION 1 – PLENARY TALKS** Chair: David Braun (*Regency Ballroom*)

7:00 PM **WELCOME AND ANNOUNCEMENTS** (Regency Ballroom)

7:15 PM **Nathan Springer, University of Minnesota**
Shedding light on the dark spaces of the maize genome

8:05 PM **Rebecca Nelson, Cornell University**
Sacrificing for security? Trade-offs related to disease resistance in plants

9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Midway)

Friday, March 10

7:00 AM – 8:00 AM

BREAKFAST (Midway)

7:00 AM – 1:30 PM

REGISTRATION (Depot Registration Office)

8:00 AM – 9:55 AM

SESSION 2 – THE MAIZE GENOMES

Chair: Gernot Presting (*Regency Ballroom*)

Talks 1-5.

8:00 AM

ANNOUNCEMENTS

(Regency Ballroom)

8:15 AM

Kelly Dawe, University of Georgia

[T1]

A novel maize kinesin causes neocentromere activity and meiotic drive, altering inheritance patterns across the genome

8:35 AM

Maud Tenaillon, Le Moulon – INRA, France

[T2]

Evolutionary genomics of European maize and its American counterparts

8:55 AM

Miguel Vallebuena-Estrada, Cinvestav, Mexico

[T3]

Genetic diversity and genomic constitution of ancient Tehuacan maize dated 5300 to 5000 years before present

9:15 AM

Tim Kelliher, Syngenta

[T4]

MATRILINEAL, a sperm-specific phospholipase, triggers maize haploid induction

9:35 AM

Alyssa Anderson, University of California, Berkeley

[T5]

*Understanding maize development through the *Liguleless* narrow mutant and its phenotypic modifier: *Sympathy for the ligule**

9:55 AM

BREAK

10:45 AM – 12:25 PM

SESSION 3 – THE GENES THAT MAKE MAIZE I

Chair: Karen McGinnis (*Regency Ballroom*)

Talks 6-10.

10:45 AM

Hannes Claeys, Cold Spring Harbor Laboratory

[T6]

*Natural variation in meristem size regulation: a naturally occurring hypomorphic allele of *thick tassel dwarf1* modifies the phenotype of *fasciated ear2* and increases kernel row number in maize*

11:05 AM

Silvio Salvi, University of Bologna, Italy

[T7]

*Cloning of *Vgt3*, a major QTL for flowering time in maize*

11:25 AM

Dean DellaPenna, Michigan State University

[T8]

Natural variation for Vitamin E content is controlled by a novel chlorophyll cycle in maize grain

11:45 AM

Stacie Shuler, University of Wisconsin-Madison

[T9]

*Return to near-normal starch accumulation: the unexpected contribution of pullulanase in a *su1-ref* background*

12:05 PM

Zhaobin Dong, University of California, Berkeley

[T10]

tassels replace upper ears1 encodes a BTB/POZ ankyrin repeat gene that is directly targeted by teosinte branched1

Friday, March 10 (continued)

12:30 PM – 1:30 PM **LUNCH** (Midway)

1:30 PM – 5:00 PM **POSTER SESSION 1** (Midway)

1:30 PM – 3:00 PM *Presenters should be at odd numbered posters.*

3:00 PM – 4:30 PM *Presenters should be at even numbered posters.*

Beverages will be available from 2:30 PM to 4:00 PM.

4:40 PM – 6:00 PM **SESSION 4 – THE GENES THAT MAKE MAIZE II**
Chair: Petra Wolters (*Regency Ballroom*) Talks 11-14.

4:40 PM **Mona Mazaheri, University of Wisconsin-Madison** [T11]
Zmm22 gene in maize has pleiotropic effects on traits important for the production of food, feed, and fuel

5:00 PM **Nelson Garcia, Rutgers University** [T12]
The maize dek34-Dsg encodes Tti2, a member of the TTT complex essential for PIKK stability

5:20 PM **Camila Ribeiro, University of Florida** [T13]
Engineering amyloplast 6-phosphogluconate dehydrogenase activity to improve heat stability of the oxidative pentose phosphate pathway

5:40 PM **Adrienne Moran Lauter, USDA-ARS** [T14]
Pectinmethylesterase (PME) is differentially expressed in Ga1-S silks and maps to a PME-repeat region near the Ga1-S locus

6:00 PM – 7:00 PM **DINNER** (Midway)

7:00 PM – 9:00 PM **SESSION 5 – MCCLINTOCK PRIZE PRESENTATION**
Chair: Shawn Kaeppler (*Regency Ballroom*)

7:00 PM **Shawn Kaeppler, MGEC Chair**
Early- and Mid-Career Awards

7:10 PM **Jim Birchler, University of Missouri**
McClintock Prize Presentation

7:30 PM **Michael R. Freeling, University of California at Berkeley** [M1]
Mutagenic consequences of polyploidy and how plant polyploids repeatedly avoided extinction and took over the world

9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**
(Midway)

Saturday, March 11

7:00 AM – 8:00 AM	BREAKFAST (Midway)	
7:30 AM – 12:30 PM	REGISTRATION (Depot Registration Office)	
8:00 AM – 10:00 AM	SESSION 6 – EXPRESSING THE GENOME Chair: Andrea Eveland (<i>Regency Ballroom</i>)	Talks 15-20.
8:00 AM	Qi Li, Chinese Academy of Sciences, China <i>Maize imprinted gene floury3 encodes a PLATZ protein required for tRNA and 5S rRNA transcription through interaction with RNA Polymerase III</i>	[T15]
8:20 AM	Steffen Knauer, Cold Spring Harbor Laboratory <i>An expression atlas of the maize shoot apex reveals signatures TFs as important drivers for cell identity and sub-functionalization of key downstream factors</i>	[T16]
8:40 AM	Prakitchai Chotewutmontri, University of Oregon <i>Contribution of translational control to establishing the distinct proteomes of bundle sheath and mesophyll cells in maize</i>	[T17]
9:00 AM	Wenwei Xiong, Montclair State University <i>Highly-interwoven communities of gene regulatory network unveil crucial genes for maize seed development</i>	[T18]
9:20 AM	Thomas Hartwig, Stanford University <i>Functional analysis of genetic variation of the brassinosteroid cis-regulatory network using hybrid allele-specific ChIP-Seq</i>	[T19]
9:40 AM	Amy Siebert, Oakland University <i>Evolutionarily conserved role of a novel RNA binding protein involved in the splicing of U12-type introns</i>	[T20]
10:00 AM – 10:45 AM	BREAK	
10:45 AM – 12:25 PM	SESSION 7 – COMMUNICATING WITHIN AND BETWEEN CELLS AND PLANTS Chair: Michael Muszynski (<i>Regency Ballroom</i>)	Talks 21-25.
10:45 AM	Marisa Otegui, University of Wisconsin, Madison <i>Regulation of vacuolar trafficking by autophagy in maize aleurone cells</i>	[T21]
11:05 AM	Rachel Wang, Academia Sinica, Taiwan <i>The mitosis-to-meiosis transition of pollen mother cells is controlled independently by Mac1 and Am1 in maize</i>	[T22]
11:25 AM	Claudiu Niculaes, Technical University of Munich, Germany <i>A combination of pharmacological approaches and genetics provides insights into benzoxazinoid exudation by young maize roots</i>	[T23]
11:45 AM	Alisa Huffaker, University of California, San Diego <i>Comparative phosphoproteomic analysis of immunoregulatory signaling in maize and arabidopsis</i>	[T24]
12:05 PM	Xiquan Gao, Nanjing Agricultural University, China <i>Crosstalk between 9-oxylinpans and jasmonates pathways modulates the maize resistance to stem rot caused by Fusarium graminearum</i>	[T25]

Saturday, March 11 (continued)

12:30 PM – 1:30 PM	LUNCH (Midway)	
1:30 PM – 5:00 PM	POSTER SESSION 2 (Midway)	
1:30 PM – 3:00 PM	<i>Presenters should be at even numbered posters.</i>	
3:00 PM – 4:30 PM	<i>Presenters should be at odd numbered posters.</i>	
<i>Beverages will be available from 2:30 PM to 4:00 PM.</i>		
5:00 PM – 6:00 PM	COMMUNITY SESSION - Maize Genetics Executive Committee MGEC Chair: Shawn Kaeppler	(Regency Ballroom)
6:00 PM – 7:00 PM	DINNER (Midway)	
7:00 PM – 8:55 PM	SESSION 8 – PLENARY TALKS Chair: Alain Charcosset	(Regency Ballroom)
7:00 PM	ANNOUNCEMENTS	(Regency Ballroom)
7:15 PM	Jane Glazebrook, University of Minnesota <i>Plant immunity - The signaling network and the role of a family of calmodulin-binding proteins</i>	[Plen 3]
8:05 PM	Philip Becraft, Iowa State University <i>Regulation of endosperm development: Insights and surprises</i>	[Plen 4]
9:00 PM – 2:00 AM	INFORMAL POSTER VIEWING/DANCE (Midway)	

Sunday, March 12

7:00 AM – 8:20 AM **BREAKFAST** (Midway)

Posters should be taken down by 9 am!

8:20 AM – 9:50 AM **SESSION 9 – INTERACTIONS WITH THE ENVIRONMENT**
Chair: Ivan Baxter (*Regency Ballroom*) Talks 26-29.

8:20 AM **ANNOUNCEMENTS** (Regency Ballroom)

8:30 AM **Qin Yang, North Carolina State University** [T26]
A caffeoyl-CoA O-methyltransferase gene confers quantitative resistance to multiple pathogens in maize

8:50 AM **Davide Sosso, Stanford University** [T27]
Corn smut sugar pathophysiology detected by live FRET imaging

9:10 AM **Shaoqun Zhou, Cornell University** [T28]
Genetic control of maize biochemical defense against Fusarium graminearum seedling blight.

9:30 AM **Ross Zhan, Purdue University** [T29]
A forward genetics approach to explore natural variation for enhancer/suppressors identifies components of the guard strategy of plant immunity

9:50 AM **BREAK**

10:20 AM – 11:30 AM **SESSION 10 – EMERGING TOOLS & CHALLENGES**
Chair: Sylvia Morais de Sousa (*Regency Ballroom*) Talks 30-32.

10:20 AM **David Wills, USDA-ARS** [T30]
Testing hypotheses on adaptation with exotic allele series at photoperiod loci in maize

10:40 AM **Karl Kremling, Cornell University** [T31]
Revealing the regulatory impacts of rare variants in maize with low cost RNASeq

11:00 AM **Carolyn Rasmussen, University of California, Riverside** [T32]
Mathematical modeling predicts division plane orientation in maize cells

11:30 AM **ADJOURNMENT**