SCHEDULE OF EVENTS

Talks will be held in the Grand Ballroom.
Posters will be displayed in the Midway.

Thursday, March 14

8:00 AM – 1:30 PM	**OPTIONAL CAREER WORKSHOP (PRE-REGISTRATION REQUIRED)**	
8:00 AM – 1:30 PM	**Careers in Science beyond Academics** *Includes travel to/from Bayer, light breakfast, networking, tour of research facility, seminar by Dr. Rob Martienssen, and panel discussion.*	Bayer Crop Science
1:00 PM – 6:00 PM	**OPTIONAL PRE-CONFERENCE WORKSHOPS**	
	All workshops will be located on the main level in Grand Ballroom C	
1:00 PM – 2:00 PM	**MaizeMine**	Grand Ballroom C
~~2:00 PM – 3:30 PM~~ *Workshop cancelled*	~~**Gene editing and UAV drones: Perspectives and connections to drive research in an evolving regulation landscape.**~~	~~Grand Ballroom C~~
3:30 PM – 5:00 PM	**Maize Epigenetics and Chromatin network: Maize EPIC**	Grand Ballroom C
5:00 PM – 6:00 PM	**Make your data FAIR - Next Generation Data Management**	Grand Ballroom C
3:00 PM – 9:30 PM	**REGISTRATION** (Depot Registration Office)	
3:00 PM – 6:00 PM	**POSTER HANGING** (Midway)	
5:00 PM – 5:45 PM	**MaGNET Awardees and Mentors Introductions** (Conductor Room)	
6:00 PM – 7:00 PM	**DINNER** (Midway)	
7:00 PM – 9:00 PM	**SESSION 1 – WELCOME / COMMUNICATING WITHIN AND BETWEEN CELLS AND PLANTS** Chair: Michael Muszynski / Hilde Nelissen	Talks 1-5.
7:00 PM	**WELCOME AND ANNOUNCEMENTS**	(Grand Ballroom)
7:15 PM	**Carolyn Rasmussen, University of California - Riverside** [T1] *Role of the microtubule-binding protein TANGLED1 in plant cell division and growth*	
7:35 PM	**China Lunde, University of California - Berkeley** [T2] *Tasselseed5 overexpresses a wound-inducible enzyme, ZmCYP94B1 that affects jasmonate catabolism, sex-determination, and plant architecture in maize*	

7:55 PM	**Fionn McLoughlin, Washington University - St. Louis** [T3] *Maize multi-omics reveal roles for autophagic recycling in amino acid, nucleotide and carbohydrate metabolism during carbon starvation*	
8:15 PM	**Matthew Warman, Oregon State University** [T4] *Pollen vegetative cell and sperm cell transcriptomes help predict mutation effects on fertilization success*	
8:35 PM	**Benjamin Julius, University of Missouri** [T5] *An "a-maizing" connection between cell wall biosynthesis and carbohydrate partitioning: Brittle Stalk 2-Like3 encodes carbohydrate partitioning defective28*	
9:00 PM – 1:00 AM	**INFORMAL POSTER VIEWING & HOSPITALITY**	(Midway)

Friday, March 15

7:00 AM – 8:00 AM **BREAKFAST** (Midway)
7:30 AM – 12:30 PM **REGISTRATION** (Depot Registration Office)

8:00 AM – 10:10 AM **SESSION 2 – EMERGING TOOLS AND CHALLENGES**
Chair: Thomas Slewinski Talks 6-11.

8:00 AM **ANNOUNCEMENTS** (Grand Ballroom)

8:15 AM **Qiuyue Chen, University of Wisconsin - Madison** [T6]
TeoNAM: A nested association mapping population for domestication and agronomic trait analysis

8:35 AM **Kathryn Michel, University of Wisconsin - Madison** [T7]
Combining ability, per se yield components, and GxE in the Stiff Stalk heterotic group dissected using new genome assemblies combined with exome-capture genotyping of a multi-parent population

8:55 AM **Zhikai Liang, University of Nebraska - Lincoln** [T8]
Genome-Phenome Wide Association Study (GPWAS): Using high dimensional phenotype data to identify the genes that specify the traits of maize

9:15 AM **Elizabeth Lee, University of Guelph** [T9]
Functional genetic diversity in the commercial germplasm pool – Is there anything left?

9:35 AM **Ruth Wagner, Bayer Crop Science** [T10]
Sequence, assembly and annotation of Bayer Crop Science's maize inbred line LH244; A new resource for maize genetics and transformation

9:55 AM **Lisa Harper, USDA-ARS** [T11]
Next generation data management.

10:10 AM – 10:40 AM **BREAK**

10:40 AM – 12:30 PM **SESSION 3 – INVITED SPEAKERS**
Chair: Clint Whipple

10:40 AM Introduction

10:50 AM **Zachary Lippman, Cold Spring Harbor Lab** [IS1]
Unveiling and harnessing mechanisms of epistasis and quantitative variation in plants

11:40 PM **Sherry Flint-Garcia, USDA-ARS** [IS2]
The genetics and consequences of maize domestication and breeding

Friday, March 15 (continued)

12:30 PM – 1:30 PM **LUNCH** (Midway)

1:30 PM – 4:30 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 to 4:00 PM in Midway

4:40 PM – 6:00PM **SESSION 4 – THE GENES THAT MAKE MAIZE I**
Chair: Yongrui Wu Talks 12-15.

4:40 PM **Zhaobin Dong, University of California - Berkeley** [T12]
The regulatory landscape of a core maize domestication module controlling bud dormancy and growth repress

5:00 PM **Li Chaobin, China Agricultural University** [T13]
The ZmbZIP22 transcription factor regulates 27-kD γ-zein gene transcription during maize endosperm development

5:20 PM **Josh Strable, Cornell University** [T14]
Formation of the maize blade-sheath boundary: evidence for a prepattern

5:40 PM **Clinton Whipple, Brigham Young University** [T15]
Few branched1 is a positional regulator of inflorescence architecture in maize

6:00 PM – 7:00 PM **DINNER** (Midway)

7:00 PM –9:00 PM **SESSION 5 – AWARDS & MCCLINTOCK PRIZE PRESENTATION**
Chair: Jianming Yu

7:00 PM **Jianming Yu, MGEC Chair**
M. Rhoades Early-Career and L. Stadler Mid-Career Awards

7:25 PM **Natalia De Leon, MGEC Vice Chair**
R. Emerson Lifetime Awards 2018 and 2019

7:55 PM **Nathan Springer, University of Minnesota**
McClintock Prize Presentation

8:10 PM **Detlef Weigel, Max-Planck-Gesellschaft**
Epistasis, the spice of life: Lessons from the study of the plant immune system

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

Saturday, March 16

7:00 AM – 8:00 AM	**BREAKFAST** (Midway)
8:00 AM – 12:00 PM	**REGISTRATION** (Depot Registration Office)

8:00 AM – 10:00 AM	**SESSION 6 – INTERACTIONS WITH THE ENVIRONMENT** Chair: Andrea Eveland	Talks 16-21.
8:00 AM	**Li Guo, China Agricultural University** *Stepwise cis-regulatory changes in ZCN8 contribute to maize flowering time adaptation*	[T16]
8:20 AM	**Mon-Ray Shao, Donald Danforth Plant Science Center** *Quantifying maize root-shoot plasticity and 3D architectural changes from water stress using precision phenotyping*	[T17]
8:40 AM	**Alisa Huffaker, University of California – San Diego** *Genetic and biochemical delineation of the zealexin biosynthetic pathway reveals coordinated activity of multiple gene clusters to ensure production of a core maize defense*	[T18]
9:00 AM	**Davide Sosso, Inari Agriculture Inc.** *Improving maize NUE through multiplexed genome editing*	[T19]
9:20 AM	**Jiahn-Chou Guan, University of Florida** *Strigolactone deficient maize dramatically reduces parasitism by the "witchweed", Striga, and reveals other unknown stimulants.*	[T20]
9:40 AM	**Stephanie Klein, Pennsylvania State University** *Root metaxylem as a novel target for improved drought tolerance in maize*	[T21]
10:00 AM – 10:40 AM	**BREAK**	
10:40 AM – 12:30 PM	**SESSION 7 – INVITED SPEAKERS** Chair: Andrea Gallavotti	
10:40 AM	Introduction	
10:50 AM	**Dominique Bergmann, Stanford University** *Making a difference: stomatal pattern, form and function across plants*	[IS3]
11:40 AM	**Erik Vollbrecht, Iowa State University** *Shoot and inflorescence architecture in maize*	[IS4]

Saturday, March 16 (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 *Presenters should be at even numbered posters.*

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

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

5:00 PM – 6:00 PM **COMMUNITY SESSION - Maize Genetics Executive Committee**
MGEC Chair: Jianming Yu (Grand Ballroom)

6:00 PM – 7:00 PM **DINNER** (Midway)

7:00 PM – 9:00 PM **SESSION 8 – The Genes That Make Maize II**
Chair: Maike Stam Talks 22-27.

7:00 PM **Matthew Hufford, Iowa State University** [T22]
Assembly and comparative genomic analysis of the maize NAM founders

7:20 PM **Yinan Jian, Huazhong Agricultural University** [T23]
Cloning an ear length QTL reveals ethylene as a developmental signal controlling kernel number in maize.

7:40 PM **Fang Bai, University of Florida** [T24]
The maize maternal rough endosperm1 (mre1) mutant is a parent-of-origin effect locus that disrupts endosperm development

8:00 PM **Hardeep Gumber, Florida State University** [T25]
The Maize LINC KASH AtSINE-like2 (MLKS2) gene encodes an ARM domain KASH protein that tethers the nucleus to actin and is required for normal development and meiotic chromosome segregation.

8:20 PM **Natalie Deans, Ohio State University** [T26]
Paramutation at the maize pl1 locus is manifest by a developmentally-essential CHD3 nucleosome remodeler

8:40 PM **Yongxian Lu, Carnegie Institution for Science** [T27]
A silk-expressed pectin methylesterase confers cross-incompatibility between wild and domesticated strains of Zea mays.

9:00 PM – 2:00 AM **INFORMAL POSTER VIEWING, HOSPITALITY, & DANCE** (Midway)

Sunday, March 17

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

Posters should be taken down by 9 AM!

8:20 AM – 10:00 AM **SESSION 9 – GENOME BIOLOGY AND EVOLUTION**
Chair: Jeff Ross-Ibarra Talks 28-32.

8:20 AM **Bill Ricci, University of Georgia** [T28]
Evidence of widespread gene-distal cis-regulatory elements in the maize genome

8:40 AM **Yong Peng, Huazhong Agricultural University** [T29]
Three-dimensional chromatin interactions reveals the functional maize genome

9:00 AM **Kyle Swentowsky, University of Georgia** [T30]
TR1 knobs become motile neocentromeres in the presence of a kinesin-14-like motor protein encoded on Ab10

9:20 AM **Benjamin Berube, Cold Spring Harbor Laboratory** [T31]
Epigenetic perturbation of male meiosis in Zea mays

9:40 AM **Patrick Monnahan, University of Minnesota** [T32]
More references, more questions: Limitations in maize annotations that leads to different representations of gene models across maize reference genomes

10:00 AM – 10:30 AM **BREAK**

10:30 AM – 11:40 PM **SESSION 10 – EXPRESSING THE GENOME**
Chair: Todd Jones Talks 33-35.

10:30 AM **Robert Maple, University of Warwick** [T33]
Meiosis-associated argonaute (MAGO) proteins are necessary for protecting the germline from misregulated transposable elements in maize.

10:50 AM **Hao Wu, Iowa State University** [T34]
Investigation of gene regulatory network of maize endosperm development

11:10 AM **Maria Katherine Mejia Guerra, Cornell University** [T35]
Decoding the transcriptional regulatory atlas of the maize leaf

11:30 AM **CLOSING REMARKS**

11:40 AM **ADJOURNMENT**