

Schedule of Events

Thursday, March 17

3:00 PM – 6:00 PM **REGISTRATION / POSTER HANGING**

6:00 PM – 7:00 PM **DINNER**

7:00 PM – 7:15 PM **WELCOME AND ANNOUNCEMENTS**

7:15 PM – 9:00 PM **SESSION 1 – PLENARY TALKS**

Chair: Erik Vollbrecht

7:15 PM **Elizabeth Lee, University of Guelph**

Grain Yield, the known knowns and the known unknowns ...

8:05 PM **Simon Chan, UC Davis**

Engineering centromeres to produce haploid plants

9:00 PM – 1:00 AM **INFORMAL POSTER VIEWING / REGISTRATION**

Friday, March 18

7:00 AM – 8:00 AM **BREAKFAST**

8:00 AM – 8:15 AM **ANNOUNCEMENTS**

8:15 AM – 10:15 AM SESSION 2 - TRANSPOSONS, EPIGENETICS AND DOMESTICATION

Chair: Karen Koch

- 8:15 AM **Anthony Studer, University of Wisconsin-Madison**
*A Transposon Insertion was the Causative Mutation in the Maize Domestication Gene *tb1**
- 8:35 AM **Jose Gutierrez-Marcos, University of Warwick**
Large-scale epigenetic reprogramming during maize seed development
- 8:55 AM **Hong Li, University of California, Berkeley**
Coordinate regulation of multiple targets of epigenetic silencing during maize development
- 9:15 AM **Huanhuan Jiang, BGI**
Genome-wide patterns of genetic variation among elite maize inbreds
- 9:35 AM **James Schnable, University of California, Berkeley**
The two different genomes within maize: differences in post-WGD gene loss, PAV, expression, and classical maize genes
- 9:55 AM **Matthew Hufford, University of California, Davis**
Genome-wide effects of domestication and improvement in landraces and modern maize

10:15 AM **BREAK**

10:45 AM – 12:25 PM SESSION 3 – CYTOGENETICS AND KERNEL DEVELOPMENT

Chair: Mark Cigan

- 10:45 AM **Hank Bass, Florida State University**
*SUN (*Sad1p/Unc-84*) Domain Genes Of Maize: Evidence for a Small Gene Family of Two Ancient Isoforms*
- 11:05 AM **Ashley Lough, University of Missouri**
Mitochondrial DNA Sequences in the Nuclear Genomes of Diverse Maize Lines
- 11:25 AM **Elizabeth Takacs, Cornell University**
Analyses of shoot meristem organization during maize embryo development
- 11:45 AM **Masaharu Suzuki, University of Florida**
VP8 and BE1, two distinct membrane-localized proteins, regulate embryo development and lateral organ numbers.
- 12:05 PM **Philip Becraft, Iowa State University**
A negative regulator and duplicate IDD transcription factors control aleurone cell differentiation

Friday, March 18 (continued)

12:30 PM – 1:30 PM **LUNCH**

1:30 PM – 5:00 PM **POSTER SESSION 1**

Presenters should be at odd numbered posters from 1:30 PM to 3:00 PM.

Presenters should be at even numbered posters from 3:00 PM to 4:30 PM.

Beverages will be available from 3:30 PM to 5:00 PM.

5:00 PM – 6:15 PM **SESSION 4 – RESOURCES FOR MAIZE GENETICS,
GENOMICS AND BIOLOGY**

Chair: Nathan Springer

5:00 PM **Donald McCarty, University of Florida**
New mutants in accessible UniformMu seed stocks

5:12 PM **Alice Barkan, University of Oregon**
*Use of Illumina Sequencing to Identify Transposon Insertions
Underlying Mutant Phenotypes in High-Copy Mutator Lines of Maize*

5:24 PM **Justin Walley, University of California, San Diego**
*Peptide-Driven Gene Models and Protein Atlas of the Developing
Maize Seed*

5:36 PM **Hilde Nelissen, Flanders Institute of Biotechnology and Gent
University**
*The maize leaf: an ideal tool to study cell division and cell expansion,
the processes driving growth*

5:48 PM **Carson Andorf, United States Department of Agriculture -
Agriculture Research Service (USDA-ARS)**
Reinventing MaizeGDB

6:00 PM **Jer-Ming Chia, Cold Spring Harbor Laboratory**
Maize HapMapV2 - Capturing variation in a genome in flux

6:30 PM – 7:45 PM **DINNER**

8:00 PM – 1:00 AM **INFORMAL POSTER VIEWING & HOSPITALITY**

Saturday, March 19

7:00 AM – 8:15 AM **BREAKFAST**

8:15 AM – 10:15 AM **SESSION 5 – QUANTITATIVE GENETICS AND SYSTEMS BIOLOGY**

Chair: Jane Dorweiler

- 8:15 AM **Jagdeep Kaur, Donald Danforth Plant Science Center**
Toward Fusarium ear rot resistant fumonisins-free transgenic maize for sub-Saharan Africa
- 8:35 AM **Judith Kolkman, Cornell University**
Comprehensive association, linkage and mutant analysis implicate Tasselseed2 in defense response in maize
- 8:55 AM **Guri Johal, Purdue University**
Integrating MAGIC and NAM to enrich the genetic network underlying the maize immune response
- 9:15 AM **Gregory Downs, University of Guelph**
Identification and Characterization of Gene Coexpression Networks in Maize Development
- 9:35 AM **Richard Johnson, University of Illinois**
Ear Shoot Meristem Transcript Abundance and Grain Yield
- 9:55 AM **Andrea Eveland, Cold Spring Harbor Laboratory**
A systems approach to elucidating transcriptional networks that control maize inflorescence architecture

10:15 AM – 10:45 AM **BREAK W/ BEVERAGES**

10:45 AM – 12:25 PM **SESSION 6 – DEVELOPMENTAL AND CELL BIOLOGY**

Chair: Paula McSteen

- 10:45 AM **Charles Hunter, University of Florida**
A narrow-leaf warty phenotype and cell division anomalies result from mutations in maize Cellulose Synthase-like D1
- 11:05 AM **Jihyun Moon, University of California, Berkeley**
The grass specific liguleless narrow gene and its paralog regulate leaf development in maize
- 11:25 AM **Jong-Jin Han, Cold Spring Harbor Laboratory and Stony Brook University**
The maize mutant Tunicate1 is caused by ectopic expression of a MADS-box transcription factor, Zmm19 gene in a dosage-dependent manner
- 11:45 AM **Xiang Yang, Iowa State University**
RAMOSA1 interacts with KNOTTED1 and regulates meristem determinacy via gibberellins during maize inflorescence development
- 12:05 PM **Peter Bommert, Cold Spring Harbor Laboratory**
Natural variation and new pathways in maize meristem size regulation

12:30 PM – 1:30 PM **LUNCH**

Saturday, March 19 (continued)

1:30 PM – 5:00 PM **POSTER SESSION 2**

Presenters should be at even numbered posters from 1:30 PM to 3:00 PM.

Presenters should be at odd numbered posters from 3:00 PM to 4:30 PM.

Beverages will be available from 3:30 PM to 5:00 PM.

5:00 PM – 6:00 PM **COMMUNITY SESSION - Maize Genetics Executive Committee**

6:00 PM – 7:00 PM **DINNER**

7:15 PM – 9:00 PM **SESSION 7 – PLENARY TALKS**

Chair: Uta Paszkowski

7:15 PM **Ron Phillips, University of Minnesota**

Good science in maize genetics: is serendipity involved?

8:05 PM **Ueli Grossniklaus, University of Zurich**

Epigenetic control of seed development in Arabidopsis

9:00 PM – 2:00 AM **INFORMAL POSTER VIEWING & DANCE**

Sunday, March 20

7:00 AM – 8:20 AM **BREAKFAST**

8:20 AM – 8:30 AM **ANNOUNCEMENTS**

8:30 AM – 9:50 AM **SESSION 8 – BIOCHEMICAL GENETICS / FUNCTIONAL GENOMICS I**

Chair: Bob Bensen

8:30 AM **Xinhui Shi, University of Toledo**
The roles of ZmMYB31 and ZmMYB42 in the regulation of the maize lignin biosynthetic pathway

8:50 AM **Rajeev Gupta, Pioneer Hi-Bred International, Inc.**
Engineering N Storage Capacity of Plants to Improve NUE

9:10 AM **Yuanxin Yan, Texas A&M University**
Diverse roles of jasmonic acid in reproductive development and defense as revealed by the analyses of the JA-deficient OPR mutants

9:30 AM **Federico Martin, University of Florida**
Maize threonine synthase mutants cause an embryo-lethal, rough endosperm phenotype

9:50 AM **BREAK**

10:20 AM – 11:30 AM **SESSION 8 – BIOCHEMICAL GENETICS / FUNCTIONAL GENOMICS II**

Chair: John Fowler

10:20 AM **Nengyi Zhang, Cornell University**
Genome-wide association study of carbon and nitrogen metabolism in the maize nested association mapping population

10:40 AM **Annett Richter, Martin Luther University Halle**
Identification of regulatory elements of terpene biosyntheses by Nested Association Mapping (NAM) and Genome Wide Association Study (GWAS)

11:00 AM **Sanzhen Liu, Iowa State University**
Segregation of Non-allelic Homologs Generates Transgressive Variation in Genome Content

11:30 AM **ADJOURNMENT**