### Thursday, March 11

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Speaker/Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:00-7:15</td>
<td>Announcements</td>
<td>Chairs</td>
</tr>
<tr>
<td>7:15-8:00</td>
<td><strong>EVENING SESSION</strong></td>
<td><strong>Chair: Dave Jackson</strong></td>
</tr>
<tr>
<td>7:15-8:00</td>
<td>Ed Buckler, USDA-ARS</td>
<td><em>Bridging Genomics and Breeding with Maize Diversity</em></td>
</tr>
<tr>
<td>8:15-9:00</td>
<td>Patricia León, Universidad Autónoma de Mexico, <em>Glucose Regulation in Plants: A Dissection of a Complex Signaling Network</em></td>
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<tr>
<td>9:15</td>
<td>Informal Poster Viewing (hang Posters late Thursday Night)</td>
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</table>

### Friday, March 12

**Session 2**

<table>
<thead>
<tr>
<th>Time</th>
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</tr>
</thead>
<tbody>
<tr>
<td>8:30-8:45</td>
<td>Developmental Genetics</td>
<td>Chair: Sarah Hake</td>
</tr>
<tr>
<td>8:30-8:45</td>
<td>Thomas Dresselhaus, University of Hamburg</td>
<td><em>Peptide-Mediated Signaling from the Egg Apparatus of Maize</em></td>
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<td>8:50-9:05</td>
<td>Andrea Gallavotti, University of California – San Diego</td>
<td><em>Barren stalk1 and the Control of Lateral Meristem Initiation in Maize</em></td>
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<td>9:10-9:25</td>
<td>David Jackson, Cold Spring Harbor Laboratory</td>
<td><em>Control of Phyllotaxy in Maize by ABPHYL1</em></td>
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<td>9:30-9:45</td>
<td>Michelle Juarez, Cold Spring Harbor Laboratory</td>
<td><em>Adaxial/Abaxial Specification of the Maize Leaf</em></td>
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<tr>
<td>9:50-10:05</td>
<td>Elizabeth Kellogg, University of Missouri – St. Louis</td>
<td><em>Evolution of Genes Related to leafy hull sterile1 in the Grasses</em></td>
</tr>
<tr>
<td>10:10-10:25</td>
<td>Michael Muszynski, Pioneer Hi-Bred International</td>
<td><em>knotted1 Modulates Different Hormone Pathways in Maize Compared to Dicots</em></td>
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**Session 3**

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<th>Time</th>
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</thead>
<tbody>
<tr>
<td>10:50-11:05</td>
<td>Biochemical Genetics</td>
<td>Chair: Monika Frey</td>
</tr>
<tr>
<td>10:50-11:05</td>
<td>Chun-Hsiang Chang, Pioneer Hi-Bred International</td>
<td><em>Expression of Feedback Insensitive Corn Aspartate Kinase in Corn Seed Results in an Increase of Threonine</em></td>
</tr>
<tr>
<td>11:10-11:25</td>
<td>Jorge Nieto-Soto, UNAM</td>
<td><em>Relevance of the Structure of the Middle Region in the Evolution of HSP100/ClpB Proteins</em></td>
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<tr>
<td>11:30-11:45</td>
<td>David Stern, Cornell University</td>
<td><em>A Nucleus-Encoded Sigma Factor Targeted to Both Mitochondria and Chloroplasts</em></td>
</tr>
<tr>
<td>11:50-12:05</td>
<td>Bao-Cai Tan, University of Florida</td>
<td><em>The Dominant White Endosperm Factor White Cap Encodes the ZmCCD1 Carotenoid Dioxygenase in a Large Multiple Copy Gene Array</em></td>
</tr>
<tr>
<td>12:10-12:25</td>
<td>Manli Yang, The University of Toledo</td>
<td><em>The lethal leaf-spot1 (ils1) Protein Which Catalyzes Chlorophyll Degradation is Localized to the Inner Chloroplast Membrane</em></td>
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</table>
1:30-3:30 PM - POSTER SESSION  
Contributors will be at EVEN-NUMBERED Posters  
3:00-3:30 pm - BEVERAGES SERVED

<table>
<thead>
<tr>
<th>Session 4</th>
<th>Sequencing the maize gene space-a progress report</th>
<th>3:30-5:35pm</th>
<th>Chair: Mike Scanlon</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:30-3:40</td>
<td>Gary Davis, National Corn Grower’s Association</td>
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<tr>
<td></td>
<td><em>A Grower’s Perspective on Maize Research</em></td>
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<tr>
<td>3:45-3:57</td>
<td>Patrick Schnable, Iowa State University</td>
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<tr>
<td></td>
<td><em>An Assembly of the Maize Genomo</em></td>
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<tr>
<td>4:02-4:14</td>
<td>Brad Barbazuk, Donald Danforth Plant Science Center</td>
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<tr>
<td></td>
<td><em>Consortium for Maize Genomics - An Examination of Maize Gene Coverage Obtained From Shotgun Sequences Derived From Methyl-filtered and High COT Selection Libraries</em></td>
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<tr>
<td>4:19-4:31</td>
<td>Agnes Chan, The Institute For Genomic Research</td>
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<tr>
<td></td>
<td><em>Consitute for Maize Genomics – Assembly and Annotation of the Filtered Maize Genome</em></td>
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<tr>
<td>4:36-4:48</td>
<td>Joachim Messing, Waksman Institute, Rutgers University</td>
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<tr>
<td></td>
<td><em>High Resolution Physical Mapping of the Maize Genome and Sequencing a Part Thereof</em></td>
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<tr>
<td>4:53-5:05</td>
<td>Jeff Bennetzen, University of Georgia</td>
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<tr>
<td></td>
<td><em>Techniques for Finishing and the Assembly of Gene-Enriched Shotgun Sequence Data into a Linked Archipelago of Beautiful Gene Islands, Beaches and All</em></td>
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<tr>
<td>5:10-5:22</td>
<td>Pablo Rabinowicz, Cold Spring Harbor Laboratory</td>
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<tr>
<td></td>
<td><em>Maize Genome Sequencing By Methylation Filtration</em></td>
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<tr>
<td>5:27-5:35</td>
<td>Maize Genetics Executive Committee</td>
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<tr>
<td></td>
<td><em>Wrap Up</em></td>
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</tbody>
</table>

6:00-7:30 pm - DINNER

<table>
<thead>
<tr>
<th>Session 5</th>
<th>EVENING SESSION</th>
<th>7:30- 9:15 pm</th>
<th>Chair: Dan Grimanelli</th>
</tr>
</thead>
<tbody>
<tr>
<td>7:30-8:15</td>
<td>Nancy Craig, Johns Hopkins University School of Medicine, The Mechanism of hAT Element Transposition</td>
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<tr>
<td>8:30-9:15</td>
<td>Luis Herrera-Estrella, Centro de Investigacion y Estudios Avanzados del IPN Phosphorus Stress Responses in Arabidopsis and Maize</td>
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<tr>
<td>9:30</td>
<td>Informal Poster Viewing</td>
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<tr>
<td>Session 6</td>
<td>Cytogenetics and Transposons</td>
<td>8:30-10:10 am</td>
<td>Chair: Pat Schnable</td>
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</tbody>
</table>
| 8:30-8:45 | James Birchler, University of Missouri – Columbia  
Somatic Karyotype Analysis in Maize |               |                     |
| 8:50-9:05 | Olivier Hamant, University of California – Berkeley  
Elucidating the Cohesion Protein Network by Analysis of Maize Mutants |               |                     |
| 9:10-9:25 | Jerry Kermicle, University of Wisconsin  
Cross Incompatibility Between Maize and Annual Mexican Teosintes |               |                     |
| 9:30-9:45 | Cagla Altun, Purdue University  
A New Twist on DNA Repair: Characterization of the Maize Mre11 Gene(s) |               |                     |
| 9:50-10:05 | Akemi Ono, Stanford University  
Epigenetic Silencing of MuDR/Mu Transposon |               |                     |
|           | **10:10-10:40 am - BREAK WITH BEVERAGES** |               |                     |
| Session 7 | Quantitative Traits / Epigenetics /Cell Biology | 10:40-12:20pm | Chair: Jay I lolllick |
| 10:40-10:55 | Mei Guo, Pioneer Hi-Bred International  
Allelic Variation of Gene Expression in Maize Hybrids |               |                     |
| 11:00-11:15 | Carlos Harjes, Cornell University  
Advanced Backcross Analysis of Maize / Zea diploperennis: Identification and Verification of Novel U L L with Agronomic Importance in Hybrid Maize |               |                     |
| 11:20-11:35 | Chris Della Vedova, University of Missouri – Columbia  
RNA Silencing of an Endogenous Gene in Maize |               |                     |
| 11:40-11:55 | Jose Gutierrez-Marcos, Oxford University  
ZmMEG1-1 is an Endosperm Transfer Cell-Specific Gene with a Maternal Parent-of-Origin Pattern of Expression |               |                     |
| 12:00-12:15 |Montserrat Pages, Consejo Superior de Investigaciones Cientificas  
Protein Kinase CK2 Modulates Developmental Functions of the Abscisic Acid Responsive Protein RAB17 From Maize |               |                     |
|           | **12:30-1:30 PM – LUNCH** |               |                     |
|           | **1:30-3:30 PM– POSTER SESSION**  
Contributors will be at ODD-NUMBERED Posters |               |                     |
<p>|           | <strong>3:00-3:30 pm - BEVERAGES SERVED</strong> |               |                     |</p>
<table>
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<tr>
<th>Session 8</th>
<th>Maize genetic diversity - exploration, maintenance and applications</th>
<th>3:30-5:00 pm</th>
<th>Chair: Martha James</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:35-3:45</td>
<td>Major Goodman, North Carolina State University</td>
<td><strong>Variation in Latin American Maize</strong></td>
<td></td>
</tr>
<tr>
<td>3:50-4:00</td>
<td>Steven Smith, Pioneer Hi-Bred International</td>
<td><strong>Maize Genetic Diversity</strong></td>
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</tr>
<tr>
<td>4:05-4:15</td>
<td>Maud Tenaillon, Station de Genetique Vegetale, Ferme du Moulon</td>
<td><strong>A Multilocus Investigation of the Domestication Process in Maize</strong></td>
<td></td>
</tr>
<tr>
<td>4:20-4:30</td>
<td>Marilyn Warburton, CIMMYT</td>
<td><strong>Accessing Useful Diversity from the CIMMYT Maize Genetic Resources Collection</strong></td>
<td></td>
</tr>
<tr>
<td>4:35-4:45</td>
<td>Denise Costich, Boyce Thompson Institute for Plant Research</td>
<td><strong>Exploring Maize Genetic Diversity to Understand Light Response Pathways</strong></td>
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<tr>
<td></td>
<td><strong>5:15 pm Buses depart for trip to Anthropology Museum</strong></td>
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<tr>
<td>6:00-9:30</td>
<td><strong>MUSEUM TRIP</strong> (beverages and finger food provided)</td>
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<tr>
<td></td>
<td>Bruce Benz, Texas Wesleyan University</td>
<td><strong>A Story of Maize: Archaeological Evidence from Mexico</strong></td>
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<td></td>
<td><strong>9:30 - 11:00 PM-DINNER</strong></td>
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**Sunday, March 14**

<table>
<thead>
<tr>
<th>Session 9</th>
<th>Bioinformatics and Genomics</th>
<th>9:00-10:40 am</th>
<th>Chair: Lynn Senior</th>
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<tr>
<td>9:00-9:15</td>
<td>Bi Irle Vroh, Cornell University</td>
<td><strong>Global Picture of Linkage Disequilibrium Assessed on Maize Unigene Set in Maize Inbred Lines</strong></td>
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<td>9:20-9:35</td>
<td>Jean-Philippe Vielle-Calzada, CINVESTAV</td>
<td><strong>Simultaneous Prediction of microRNAs and Their Target mRNAs Acting By Translational Repression</strong></td>
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<td>9:40-9:55</td>
<td>David Skibbe, Iowa State University</td>
<td><strong>Genome-Wide Examination of Gene Expression in Developing Maize Anthers</strong></td>
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<tr>
<td>10:00-10:15</td>
<td>Nigel Walker, University of Oregon</td>
<td><strong>Photosynthetic Mutant Library: Functional Genomics of Chloroplast Biogenesis</strong></td>
<td></td>
</tr>
<tr>
<td>10:20-10:35</td>
<td>Michele Morgante, Universita di Udine</td>
<td><strong>Extensive cis-Acting Regulatory Variation and Expression Overdominance in Maize: A Molecular Basis for Heterosis</strong></td>
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<tr>
<td>10:40</td>
<td><strong>FINAL ANNOUNCEMENTS</strong></td>
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<tr>
<td>10:45</td>
<td><strong>ADJOURN</strong></td>
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</table>
### Abstracts – Talks and Poster Presentations

#### Plenary Talks

<table>
<thead>
<tr>
<th>T1</th>
<th>Ed Buckler</th>
<th>Bridging Genomics and Breeding with Maize Diversity</th>
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<td>T2</td>
<td>Patricia León</td>
<td>Glucose Regulation in Plants: A Dissection of a Complex Signaling Network</td>
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<td>T4</td>
<td>Luis Herrera-Estrella</td>
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#### Developmental Genetics Talks

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<tr>
<th>T5</th>
<th>Thomas Dresselhaus</th>
<th>Peptide-Mediated Signaling from the Egg Apparatus of Maize</th>
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<tr>
<td>T6</td>
<td>Andrea Gallavotti</td>
<td>Barren stalk1 and the Control of Lateral Meristem Initiation in Maize</td>
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<td>T7</td>
<td>David Jackson</td>
<td>Control of Phyllotaxy in Maize by ABPHYL1</td>
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<th>T11</th>
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#### Genomics Workshop Talks

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<th>Gary Davis</th>
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<td>Patrick Schnable</td>
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T19  Agnes Chan  Consortium for Maize Genomics – Assembly and Annotation of the Filtered Maize Genome

T20  Joachim Messing  High Resolution Physical Mapping of the Maize Genome and Sequencing a Part Thereof

T21  Jeff Bennetzen  Techniques for Finishing and the Assembly of Gene-Enriched Shotgun Sequence Data into a Linked Archipelago of Beautiful Gene Islands, Beaches and All Maize Genome Sequencing By Methylation Filtration

Cytogenetic & Transposon Talks

T23  James Birchler  Somatic Karyotype Analysis in Maize

T24  Olivier Hamant  Elucidating the Cohesion Protein Network by Analysis of Maize Mutants

T25  Jerry Kermicle  Cross Incompatibility Between Maize and Annual Mexican Teosintes

T26  Cagla Altun  A New Twist on DNA Repair: Characterization of the Maize Mre11 Gene(s)

T27  Akemi Ono  Epigenetic Silencing of MuDR/Mu Transposon

QTL, Epigenetic, and Cell Biology Talks

T28  Mei Guo  Allelic Variation of Gene Expression in Maize Hybrids

T29  Carlos Harjes  Advanced Backcross Analysis of Maize / Zea diploperennis: Identification and Verification of Novel QTL with Agronomic Importance in Hybrid Maize

T30  Chris Della Vedova  RNA Silencing of an Endogenous Gene in Maize

T31  Jose Gutierrez-Marcos  ZmMEG1-1 is an Endosperm Transfer Cell-Specific Gene with a Maternal Parent-of-Origin Pattern of Expression

T32  Montserrat Pages  Protein Kinase CK2 Modulates Developmental Functions of the Abscisic Acid Responsive Protein RAB17 From Maize

Genetic Diversity Workshop Talks

T33  Major Goodman  Variation in Latin American Maize

T34  Steven Smith  Maize Genetic Diversity

T35  Maud Tenoilh  A Multilocus Investigation of the Domestication Process in Maize

T36  Marilyn Warburton  Accessing Useful Diversity from the CIMMYT Maize Genetic Resources Collection

T37  Denise Costich  Exploring Maize Genetic Diversity to Understand Light Response Pathways

Museum Talk

T38  Bruce Benz  A Story of Maize: Archaeological Evidence from Mexico

Bioinformatics & Genomics Talks

T39  Bi Irie Vroh  Global Picture of Linkage Disequilibrium Assessed on Maize Unigene Set in Maize Inbred Lines
T40 Mario Alberto Arteaga-Vazquez  Simultaneous Prediction of microRNAs and Their Target mRNAs Acting By Translational Repression
T41 David Skibbe  Genome-Wide Examination of Gene Expression in Developing Maize Anthers
T42 Nigel Walker  Photosynthetic Mutant Library: Functional Genomics of Chloroplast Biogenesis
T43 Michele Morgante  Extensive cis-Acting Regulatory Variation and Expression Overdominance in Maize: A Molecular Basis for Heterosis

Biochemical Genetics Posters
P1 Cyrus Abdmishani  Correlation and Path Analysis of Grain Yield and its Componente in Maize
P2 Analilia Arroyo  Characterization of the Plastidic Isoprenoid MEP Pathway in Maize
P3 Pat Bafuma  Characterization of the OPT Gene Family in Rice
P4 David Bergvinson  Molecular Mapping of U1L for Fall Armyworm Resistance and Associated Traits in a Tropical RIL Population (CML67xCML131)
P5 Paula Casati  How High Altitude Maize Landraces Respond to Ultraviolet Radiation - Investigation of Different Mechanisms Involved in UV-B Acclimation
P6 Berenice Cueva-Torres  Proteomic Profiles and Nutritional Properties of Maize Landraces of ‘El Bajo’
P7 Kristyn Dumont  Substrate Specificity of the Rice Peptide Transporter OsPTR1
P8 Emily Dunn  Comparative Study of Lepidopteron Resistance in Maize Lines through Protein Analysis
P9 James English  Evolution of an Amine Oxidase for Detoxification of Fumonisins by Gene Shuffling
P10 George Heine  Functional Characterization of Evolutionary Conserved MYB Domain Residues Using P1 as a Model
P11 Robert Holmes  Characterization of a Maize Inhibitor of Aflatoxin Accumulation
P12 David Moody  Characterization of an OPT Type Transporter from Zea mays
P13 Christina Murillo  Gene Duplication in the Carotenoid Biosynthetic Pathway Preceded Evolution of the Grasses (Poaceae): Implications for Pathway Engineering
P14 William Rapp  Anthranilate Synthase from Agrobacterium tumefaciens Promotes Increases in Free Tryptophan When Expressed in Plant Seeds
P15 Quintin Rascon-Cruz  
Amarantin Accumulation in Transgenic Tropical Maize Germplasm

P16 Carol Rivin  
Evolution of Novel Gene Function by Divergent Targeting of Duplicated Gene Products

P17 Silvio Salvi  
An Introgression Library of the Maize Early-Flowering Variety Gasp Flint into B73

P18 Paul Scott  
Transgenic Maize Grain Containing Pnrcine Alpha Lactalbumin Has Elevated Levels of Lysine

P19 Moira Sheehan  
Phenotypic Analyses of Phytochrome B Single and Double Mutants in Maize

P20 Masaharu Suzuki  
Cloning and Characterization of viviparous15: Application of MuTAIL-PCR, Blast Filtering, and In Silico Subtraction to Identify Candidate Genes

P21 Chi-Wah Tseung  
Biochemical and Molecular Characterization of Maize vp13 Mutants

Bioinformatics Posters

P22 Juan Burgueno  
Spatial Analysis of cDNA Microarray Experiments

P23 Terry Casstevens  
GDPC: The Genomic Diversity and Phenotype Connection: Accessing Data Sources via XML Web Services

P24 Evelyn Hiatt  
MaizeGDB Curation and undergraduate training: can they be symbiotic?

P25 Carolyn Lawrence  
PGROP: the Plant Genome Research Outreach Portal

P26 Christopher Maher  
Identifying microRNAs in Plant Genomes

P27 Octavio Martinez  
MAZORKA: A Fully Automatic Bioinformatics Process for Maize ESTs

P28 Donald McCarty  
Informatics filtering and cluster analysis of MuTAIL sequences: tools for in silico detection and confirmation of transposon tagged mutants

P29 Donald McCarty  
Informatics infrastructure for performing field genetics on a genomics scale

P30 Trent Seigfried  
MaizeGDB: Four Usage Cases

P31 Wei Zhao  
An Update on the Comparative Maps of Maize and Rice in Gramene

Cell Biology Posters

P32 James Crowley  
Study of the High Protein Trait of Maize Using the In Vitro Kernel Culture Model System

P33 Adela Goday  
Interaction of the Plant Glycine-Rich RNA Binding Protein MA16 with a Novel Nucleolar DEAD Box RNA Helicase Protein from Zea mays

P34 Jose Gutierrez-Marcos  
Developing Tools for the Study of Cellular Dynamics During Maize Development

P35 Antoine Harfouche  
Jasmonic Acid and Ethylene Modulate the Activation of Insect Defense Signaling Pathways in Maize
P36  Niloufer Irani  Novel Regulation of Anthocyanin Pigmentation by Light
P37  Agredano Lourdes  Regulation of the Expression of TOR and S6rp Kinase in Maize (Zea mays L.)
P38  Wojciech Majeran  Comparative Proteomics of Mesophyll and Bundle Sheath Plastid Differentiation in Maize Leaves
P39  Georgina Ponce-Romero  Root Cap-Quiescent Center: A Never Ending Dialog
P40  Kan Wang  Establishment of Robust Maize Transformation Systems for the Public Sector

Cytogenetics Posters
P41  Evgueni Ananiev  Comparative Cytogenetic Map of Two Maize Inbreds: Mo17 and D79
P42  Lorinda Anderson  Recombination Rate, EST Distribution and Gene Clustering along the Physical Structure of Maize Chromosomes
P43  Matthew Bauer  Organization of Endoreduplicated Chromosomes in the Endosperm
P44  Daniel Grimanelli  Characterization of the elongate1 Mutant in Maize
P45  Lisa Harper  What is the Role of the Noncrossover Recombination Pathway in Meiosis?
P46  Carolyn Lawrence  The Behavior of Abnormal Chromosome 10 in the Monosomic Condition
P47  Michael Lee  Meiotic Recombination and Strose in Maize
P48  Juliana Melo  Maize Centromeres: Organization and Functional Adaptation in the Genetic Background of Oat
P49  Wojtek Pawlowski  Initiation of Meiosis in Maize by ameiotic1
P50  Stephen Stack  Integrating Genetic Linkage Maps with Pachytene Chromosome Structure in Maize
P51  Juan Vega  Localization of Large DNA Fragments Transferred into Maize Chromosomes by Agrobacterium Infection
P52  Weichang Yu  Chromosomal Localization of Transgenes in Maize by Fluorescence In Situ Hybridization

Developmental Genetics Posters
P53  Ivan Acosta  Dissecting the Mechanisms of Sex Determination in Maize
P54  Gerardo Acosta-Garcia  Xochiquetzal (XOC), an Arabinogalactan Protein Essential for Female Gametogenesis in Arabidopsis thaliana
P55  Kirstin Arthur  Characterization of Maize rop2 Mutant Pollen Suggests Multiple Roles for the ROP2 GTPase in Pollen Tube Development
P56 Linnea Bartling Mapping of the Allele pt*-McClintock at a Distinct Locus From P1
P57 Philip Becraft Analysis of Mu-Tagged Empty Pericarp Mutants from the UniformMu Maize Population
P58 Wes Bruce Maize CLAVATA3-functional Ortholog
P59 Hector Candela-Anton Genetic and Molecular Analysis of the Wavy Auricle in Blade (wa1) and Milkweed Pod (mwp) Mutants of Maize
P60 Heather Cartwright Pangloss Genes are Required for the Asymmetric Divisions of Subsidiary Mother Cells in Maize Stomata
P61 Prem Chourey Evidence of Programmed Cell Death and its Possible Role in the Functional Activation of Placento-Chalazal Layer in the Pedicel Tissue of Developing Maize Caryopsis through Maternal-Filial Interaction
P62 George Chuck Microarray Analysis of the Branched Silkless Mutant of Maize and the Frizzy Panicle Mutant of Rice
P63 Ryan Dierking Identification of Genes Associated with Root Architecture Under Water Stress in Zea mays L.
P64 Ana Elena Dorantes-Acosta Molecular and Genetic Analysis of Mutants Causing Male Gametophytic Lethality in Arabidopsis thaliana
P65 Andrew Doust Control of Branch Architecture in Foxtail Millet (Setaria italica)
P66 Andrea Eveland ABA Sensing Mediates Expression of Vacuolar Invertase during Female Reproductive Development in Maize
P67 Diego Fajardo Molecular and Genetic Analysis of rgh Endosperm Mutants
P68 Suneng Fu Clonal Mosaic Analysis Revealed Distinct Functions of EMPTY PERICARP2 in Maize Shoot Development
P69 Stewart Gillmor Dominant Non-Reduction Mutants of Maize
P70 Jose-Luis Godinez-Martinez Differential Expression of the Actin Gene macl in the Embryo and Endosperm During Maize Seed Development
P71 Jose Gutierrez-Marcos The Globy1-1 (glo1-1) Mutation Affects Cell Proliferation and Differentiation During Early Endosperm Development
P72 David Henderson Ragged Seedling2 Leaves Fail to Expand Despite Retention of Adaxial/Abaxial Polarity
P73 Wilson Huanca-Mamani INVUNCHE, An ISWI-like Chromatin Remodeling Factor Essential for Megagametogenesis and Early Seed Development in Arabidopsis thaliana
P74 Jiabing Ji The Maize Duplicate Gene Narrow Sheath2 Encodes a Conserved Homeobox Gene Function in a Lateral Domain of Shoot Apical Meristems
P75 Sharon Kessler Interactions Between XCL1 and KNOX Genes: A Hormonal Connection
Katherine Krolikowski
mutations in the MADS box genes ZMM8 and ZMM14 are associated with an indeterminate floral apex phenotype

China Lunde
the role of the maize gene, thick tassel dwarf1, in inflorescence architecture

Enrico Magnani
a reverse genetic approach to find new members of the ERF family of transcription factors involved in maize inflorescence development

Mihaela Luiza Marton
the egg apparatus-specific peptide ZMEA1 from maize is required to guide the pollen tube towards the female gametophyte

Marina Nadal
corn smut induced maize genes

Nasim Sadeghian
cloning extended auricle1, an essential component in maize leaf development

Stefanie Sprunck
gene expression profiles from isolated egg cells and pro-embryos of wheat

Rosalinda Tapia-Lopez
analysis of the expression pattern and regulation and probably function of AGL12, a MAUS-box gene involved in development of Arabidopsis thaliana

Pilar Tellez
obtainment and molecular characterization of transgenic Cuban maize highly resistant to Spodoptera frugiperda Smith attack

Elene Valdivia
beta-expansins in maize pollen: role of Zea m 1 in development and fertilization

Vanessa Vernoud
OCI genes are involved in the determination of kernel size in maize

Cunxi Wang
dynamics of aluronico cell formation: the surfaco rulo

Clinton Whipple
assessing the functional redundancy in the maize C-class control of carpel and stamen identity

Katrin Woll
isolation of the new root mutant rum1 affected in lateral and seminal root initiation

Michael Zanis
fate and consequence of the ZAG1/ZMM2 gene duplication across the grasses

Andres Zurita-Silva
Genetic analysis of root responses to phosphate starvation in Arabidopsis thaliana (L.) Heynh

Epigenetics Posters

Karen Cone
chromatin genes: discovery, mutagenesis, and function

Guillermo Corona
role of chromatin remodelling factors during female gametogenesis in Arabidopsis thaliana

Olga Danilevskaya
imprinting of the maize endosperm specific gene fie1 is mediated by demethylation of maternal complements

Stephen Gross
Epigenetic stability at the Maize pt1 locus
P96  Shawn Kaeppler  Analysis of Tissue Culture-Induced White Cob Mutants Define Mechanisms of Epigenetic Change Induced by Stress

P97  Mary Ann McGill  RNAi-Mediated Silencing of Maize Chromatin Genes and Their Effects on Maize Transformation and Genomic Methylation

P98  Susan Parkinson  Rmr6 Functions in Paramutation and Developmental Epigenetics

P99  Michael Robbins  Ufo1 Induces Global Gene Up Regulation in Maize Pericarp

P100  Rajandeep Sekhon  Genomic and Molecular Characterization of Interaction of Different Alleles of p1 with a Dominant Epigenetic Modifier Ufo1

P101  Alan Smith  CpNpG Methylation Reduction in Plants Homozygous for the Chromomethylase Mutant Allele zmet2.m1 Is Sequence Dependent

P102  Nathan Springer  The Maize Polycomb Group Gene, Mez1, Shows Imprinted Expression Throughout Endosperm Development

P103  Maike Stam  Paramutation: Long-Range Epigenetic Interactions in Maize

P104  Christopher Topp  Centromeric RNAs are a Component of Maize Centromeric Chromatin

P105  Virginia Zaunbrecher  Allelic Effects of Maize Chromomethylase Mutants on DNA Methylation

Genomic Structure & Synteny Posters

P106  Hank Bass  Cytogenetic Mapping of Maize with Sorghum BAC FISH Probes

P107  John Bowers  High-Throughput Anchoring Of Bac-Based Physical Maps Of Maize to Sorghum, Rice And Sugarcane

P108  Jennifer Jaqueth  High-Resolution Genetic Mapping of Chromosome 1 in Maize after Ten Generations of Recurrent Intermitting in the IBM Population

P109  Wade Odland  Chromosomal Relationships Defined by Repetitive Sequence Profiles

P110  Mary Polacco  IBM Neighbors -- Mutual Enhancement of Genetic and Physical Maps

P111  Erik Vollbrecht  Comparative Analysis of Rama31 Gene Function in Maize, Sorghum and Rice

P112  Roger Wise  Comparative Analysis of a One-Megabase Sequence Spanning the Maize Rf1 Fertility Restorer with the Rice Genome

Genomics Posters

P113  Baldomero Alarcon-Zoniga  Integrative Genomic Analysis in Mexican Forage Maize
James Allen  Dynamic Nature of the Integration of Plastid Sequences into the Mitochondrial Genome
Joseph Bedell  The Effectiveness of GeneThresher™ Methylation Filtering Technology in Sorghum and Its Comparison to Maize
Carletha Blanding  Identification of Early Expressed Genes and Genes Expressed Differently in B73 and Mo17 after UV Radiation
Carlos Calderon-Vazquez  Construction of Libraries and Analysis of ESTs From a Phosphorus Efficient-Zea mays Line Grown Under Low-Phosphorus Stress
Ed Coe  Integration of Genetic and Physical Data in 2,585 Contigs
Guillermo Corona  EST Sequencing Efforts at CINVESTAV-Irapuato
Jeremy Edwards  Polyphyletic Origins of Cultivated Rice from Pre-Differentiated Ancestors
Fulgencio Espejel  Host Effects of a Susceptible and a Resistant Maize Line on the Replication and Movement of the Sugarcane Mosaic Virus
Christiane Fauron  Sequence Comparisons of Six Mitochondrial Genomes From Maize and Teosinte
Jack Gardiner  Long-Oligonucleotide Arrays in Maize for Comprehensive Analysis of Gene Expression
Luca Gianfranceschi  Generating a Pollen Functional Map Using Oat-Maize Addition Lines
Jose Luis Goicoocochea  An Integrated Genetic and Physical Map of the Maize Gonomo
Angela Hayano  Analysis of Subtractive and Standard cDNA Libraries Produced from mRNA of Drought-Stressed Maize (Zea mays L.) Plants
Stephen Howell  Gene Expression Patterns during Somatic Embryogenesis in Maize Tissue Culture
Christina Ingvardsen  Identification of Genes Differentially Expressed in Association with SVMV Resistance in Maize by Combining SSH and Macroarray Techniques
Michael Kolomiets  Genomic Characterization of the Maize 12-Oxo-Phytodienoic Acid Reductases
Susan Latshaw  Candidate Gene Selection and Molecular Analysis of 50 smk Mutants
Bailin Li  An Integrated Physical, Genetic and EST Map of Maize
Jose Lopez-Valenzuela  Identification of Genes Coordinately Expressed with eEF1A in Maize Endosperm
Donald McCarty  High-Throughput Insertional Mutagenesis of Genes Controlling Seed Development

Valérie Mèchin  A Two Dimensional Proteome Map for Maize Endosperm Development Studies

Steve Moose  Gene Discovery for Maize Seed Composition and Nitrogen Metabolism Traits using the Illinois Protein Strains

Antonio Oliveira  Use of an Indica Rice Mutant Collection as a Tool For Root Functional Genomics

Enrico Pè  Comparison of Transcription Levels in Immature Ears Between Inbred Lines and Corresponding F1 Hybrid By DNA Microarray Technology

Bela Peethambaran  Comparative Proteomic Analysis of Maize Silks in Aspergillus flavus Resistant and Susceptible Inbreds

Ronald Phillips  Oat-Maize Addition and Radiation Hybrid Lines: Development and Application

Michaela Sauer  Transcriptome and Proteome Wide Analysis of Crown Root Initiation in Maize

Nathan Springer  Optimizing Conditions for SNP Detection Using Oligonucleotide Microarrays

Clifford Weil  Status of the Maize TILLING Project

Katia Wostrikoff  Functional Genomics to Understand Chloroplast Gene Regulation

Xiaolan Zhang  Global Expression Analysis of Genes Involved in Meristem Organization and Leaf Initiation

Robert Ziegler  The Challenge Program for Unlocking Genetic Diversity in Crops for the Resource-Poor

Quantitative Traits & Breeding Posters

Peter Balint-Kurti  Towards the Detailed Analysis of QTLs for Southern Leaf Blight and Gray Leaf Spot Resistance

Andrew Baumgarten  Identification of QTLs Controlling Ustilago maydis Resistance in Two Recombinant Inbred Populations

Patrick Brown  Population Genetic Analysis of Candidate Genes for Variation in Sorghum Panicle Architecture

Dana Bush  QTL Analysis of Stomatal Density

Letizia Camus-Kulandaivelu  A Comprehensive Study of Genetic Structure in a Collection of American and European Maize Inbred Lines and Its Use in Association Genetics

Maria de la Luz Gutierrez-Nava  Identification of Key Genes for Drought Tolerance in Tropical Maize

Hiroyuki Enoki  Identification of Quantitative Trait Loci Controlling Early Flowering of a Northern Flint Maize Inbred Line
<table>
<thead>
<tr>
<th>Page</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>P153</td>
<td>Jenelle Frost</td>
<td>The Genetic Basis of Recurrent Selection Gains for Maysin in Maize Silks</td>
</tr>
<tr>
<td>P154</td>
<td>Silverio Garcia-Lara</td>
<td>QTL Analysis for Maize Weevil Resistance in Tropical Maize</td>
</tr>
<tr>
<td>P155</td>
<td>Michael Gerau</td>
<td>Identification of QTL Associated with Root Architecture Under Well-Watered, and Water-Stressed Conditions in Zea mays</td>
</tr>
<tr>
<td>P156</td>
<td>Philippe Herve</td>
<td>How is the TraitMill™ platform delivering valuable target genes for cereal breeding?</td>
</tr>
<tr>
<td>P157</td>
<td>Fidel Marquez-Sanchez</td>
<td>Comparison of &quot;Z&quot; Lines With &quot;PL&quot; Open-Pollinated Inbred Lines of Maize, With Initial Inbrooding of One Half</td>
</tr>
<tr>
<td>P158</td>
<td>Enrico Pè</td>
<td>Identification of QTLs For Heterosis Using Two Pseudo-Dackcross Populations in the B73 x I89 Background</td>
</tr>
<tr>
<td>P159</td>
<td>Froylan Rincon-Sanchez</td>
<td>Agronomic Performance of Maize Populations Developed by Different Crop Management and Selection Schemes</td>
</tr>
<tr>
<td>P160</td>
<td>Valeriy Rotarenco</td>
<td>Breeding Effect of Selection at the Level of Haploid Sporophyte in Maize</td>
</tr>
<tr>
<td>P161</td>
<td>Valeriy Rotarenco</td>
<td>Utilization of Maize Haploid Plants in Recurrent Selection Procedure</td>
</tr>
<tr>
<td>P162</td>
<td>Juan Salerno</td>
<td>Identification of Quantitative Trait Loci (QTLs) Conferring Resistance To Mal de Rayo Cuarto (MRC) Virus in Maize</td>
</tr>
<tr>
<td>P163</td>
<td>Silvio Salvi</td>
<td>Root-ABA1, a QTL Affecting Root Angle and Lodging, Leaf ABA Concentration and Other Traits in Maize</td>
</tr>
<tr>
<td>P164</td>
<td>Ashish Srivastava</td>
<td>Heterosis and Combining Ability of CIMMYT and NARS Lines</td>
</tr>
<tr>
<td>P165</td>
<td>Stephen Szalma</td>
<td>Quantitative Trait Locus Mapping of Agronomically Important Traits in Maize With Near Isogenic Lines</td>
</tr>
<tr>
<td>P166</td>
<td>William Tracy</td>
<td>Historical and Biological Bases of the Concept of Heterotic Patterns in ‘Corn Belt Dent’</td>
</tr>
</tbody>
</table>

**Transposable Elements Posters**

<table>
<thead>
<tr>
<th>Page</th>
<th>Authors</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>P167</td>
<td>Rao Abbaraju</td>
<td>Diagnosis of Hot Spots for Mu Integration in the Maize Genome: A Progress Report</td>
</tr>
<tr>
<td>P168</td>
<td>Cesar Alvarez-Mejia</td>
<td>Establishing an Ac/Ds-Based Enhancer Detection and Gene Trap System in Maize</td>
</tr>
<tr>
<td>P169</td>
<td>Ling Bai</td>
<td>Manipulation of Lycopene-b-cyclase in Maize</td>
</tr>
<tr>
<td>P170</td>
<td>Liza Conrad</td>
<td>Development of a Two-Component Activator/Dissociation Tagging System in Maize</td>
</tr>
<tr>
<td>P171</td>
<td>Andres Estrada-Luna</td>
<td>Establishing an Activation Tagging System in Maize (Zea mays L.) Through a Modified Suppresor/Mutator Mobile Element</td>
</tr>
</tbody>
</table>
P172  Ericka Havecker  The Capsid of a Novel Maize Retrotransposon Interacts with Light Chain B, a Protein with Diverse Roles in Molecular Trafficking
P173  Judith Kolkman  Regional Activator (Ac) Mutagenesis in Maize
P174  Shailesh Lal  Discovery of Helitron Type Transposable Elements in Maize
P175  Damon Lisch  Epigenetic Modification of Mu Activity
P176  Damon Lisch  Taming the Mutator System
P177  Cathy Melamed-Bessudo  Retrotransposon Activation in Nascent Polyploids and Silencing in Subsequent Generations
P178  Darren Morrow  Initial Results from Analysis of the RescueMu Transposon-Tagging Gene Discovery Strategy in Maize and Continuing Research
P179  Thomas Peterson  Transposon-Induced Deletions: A New Tool for Plant Genomics Research
P180  Tony Pryor  Activation Tagging for Rust Resistance in Maize and Barley
P181  Fabiola Ramirez-Corona  Detection of Maize MuDR Transposon of the Mutator Family in the Races Bolita and Zapalote Chico from Oaxaca (Mexico) as a Tool for Gene Flow Monitoring
P182  George Rudenko  Transposases Controlling Mutator Activity
P183  R. Keith Slotkin  Post-Transcriptional and Transcriptional Gene Silencing of the Mutator Transposable Element Family by Mu Killor
P184  Udo Wienand  Development of a Promoter Trapping System in Zea mays L. Using the Transposable Element Mutator and Regulators of the Anthocyanin Biosynthesis
P185  Margaret Woodhouse  The mOP1 (Mediator of Paramutation1) Mutation Exhibits Maternally-Dependent Reactivation of Silenced Mutator Transposons in Maize