

Plant Genetics 2003: Mechanisms of Genetic Variation

(Supported by NSF, USDA and Pioneer-Hi Bred International)

October 22 – 26, 2003

Snowbird, Utah USA

Chair: Venkatesan Sundaresan, *University of California – Davis*

Vice-Chair: Rich Jorgenson, *University of Arizona*

FINAL PROGRAM

Wednesday, October 22

Registration & Information: 4:00 pm – 10:30 pm

Cliff Lodge, Level B, Ballroom Lobby

Opening dinner: 7:00 pm – 8:00 pm

Cliff Lodge, Level B, Golden Cliff Room

General Session: 8:00 pm – 10:30 pm

Cliff Lodge, Level B, Ballroom I

Keynote Lecture:

Enrico Coen, *John Innes Institute*

#5 – *From Genes to Morphogenesis*

8:00 pm – 9:00 pm

Coffee Break –

9:00 pm – 9:20 pm

Genomes I: Natural variation and natural processes of evolution;

Rod Wing, *University of Arizona*

#20 – *The Oryza Map Alignment Project: Toward a Closed Experimental System for the Genus Oryza*

Barbara Schaal, *Washington University*

#15 – *Genetic Variation and Phylogeography in Plants*

9:20 pm – 9:55 pm

9:55 pm – 10:30 pm

Thursday, October 23

Registration & Information: 8:00 am – 3:00 pm; 4:00 pm – 10:30 pm

Cliff Lodge, Level B, Ballroom Lobby

Breakfast: 8:00 am – 9:00 am

Cliff Lodge, Level B, Golden Cliff Room

General Session: 9:00 am – 12:05 pm

Cliff Lodge, Level B, Ballroom I

Genomes I: Natural variation and natural processes of evolution (cont'd)

- Maarten Koornneef, *Wageningen University* 9:00 am – 9:35 am
#12 – *Natural variation in Arabidopsis*
- Peter Westhoff, *Heinrich Heine University* 9:35 am – 9:55 am
#39 – *Molecular evolution of C4-specific gene expression – a case study with the genus Flaveria*
- Chris Kuhlemeier, *University of Berne* 9:55 am – 10:15 am
#26 – *Dissection of pollination syndromes in Petunia*

Coffee Break

10:15 am – 10:35 am

Genomes II: Speciation and crop domestication

- Loren Rieseberg, *Indiana University* 10:35 am – 11:10 am
#14 – *Hybridization and ecological divergence in wild sunflowers*
- John Doebley, *University of Wisconsin* 11:10 am – 11:45 am
#7 – *The evolution of plant form in maize*
- Stephen Moose, *University of Illinois* 11:45 am – 12:05 pm
#29 – *Genomic Responses to a Century of Phenotypic Selection in Maize*

Lunch: 12:15 pm – 1:15 pm

Cliff Lodge, Level B, Golden Cliff Room

General Session: 1:45 pm – 3:00 pm

Cliff Lodge, Level B, Ballroom I

Genomes II: Speciation and crop domestication (cont'd)

- Jonathan Wendel, *Iowa State University* 1:45 pm – 2:20 pm
#19 – *Genes, jeans, and genomes: insights from the cotton genus*
- Todd Vision, *University of North Carolina at Chapel Hill* 2:20 pm – 2:40 pm
#38 – *The genetic architecture of crop domestication: a meta-analysis*
- Kai-Yi Chen, *Cornell University* 2:40 pm – 3:00 pm
#22 – *High resolution mapping of se2.1:A QTL associated with the evolution of mating system in tomato*

Poster Session: 4:00 pm – 6:00 pm

Cliff Lodge, Level B, Ballroom II

Dinner: 6:15 pm – 7:15 pm

Cliff Lodge, Level B, Golden Cliff Room

Thursday, October 23 (cont'd)

General Session: 7:30 pm – 10:35 pm

Cliff Lodge, Level B, Ballroom I

Evolutionary Dynamics of Genetic loci

Robert Pruitt, *Purdue University* 7:30 pm – 8:05 pm

#34 – *A Novel Mechanism of Genetic Reversion of the HOTHEAD locus in Arabidopsis*

Magnus Nordborg, *University of Southern California* 8:05 pm – 8:40 pm

#30 – *The pattern of polymorphism in Arabidopsis*

Justin Borevitz, *Salk Institute* 8:40 pm – 9:00 pm

#21 – *Towards the Arabidopsis Haplotype Map using Arrays*

Coffee Break 9:00 pm – 9:20 pm

Molly Jahn, *Cornell University* 9:20 pm – 9:55 pm

#83 – *Comparative genetics and genomics of disease resistance in the Solanaceae*

Christine Queitsch, *University of Chicago* 9:55 pm – 10:15 pm

#35 – *Chaperone-mediated buffering of genetic variation*

Marco Kruijt, *Wageningen University* 10:15 pm – 10:35 pm

#25 – *The 9DC Cladosporium fulvum resistance gene cluster from Lycopersicon*



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Plant Science

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Poster Award – Plant Genetics 2003

Please help a panel of experts to award prizes to the top two posters by filling in the score sheet included in your conference pack. Winners of the poster award will be announced on Saturday, October 25 at 8:15 pm at the beginning of the Farewell Dinner and Party in Ballrooms I and II.

Please return your completed form before lunchtime on Friday 24th to the box at the Plant Genetics 2003 information desk or hand to Susanne Brink, Editor of *Trends in Plant Science* or Rick Cuellar, Director of Corporate Development, *Promega Corporation*.

Thank you

Friday, October 24

Information: 8:00 am – 1:00 pm; 4:00 pm – 10:30 pm

Cliff Lodge, Level B, Ballroom Lobby

Breakfast: 8:00 am – 9:00 am

Cliff Lodge, Level B, Golden Cliff Room

General Session: 9:00 am – 12:05 pm

Cliff Lodge, Level B, Ballroom I

Genetics of Chromosomal Inheritance

Paul Franz, *University of Amsterdam* 9:00 am – 9:35 am

#8 – Variation of heterochromatin in Arabidopsis accessions

Kelly Dawe, *University of Georgia* 9:35 am – 10:10 am

#6 – Centromeric chromatin

Wojtek Pawlowski, *University of California - Berkeley* 10:10 am – 10:30 am

#31 – Dissection of early meiotic prophase events in maize

Coffee Break 10:30 am – 10:50 am

Dorothy Shippen, *Texas A&M University* 10:50 am – 11:25 am

*#16 – Molecular analysis of critically shortened telomeres and telomere fusions
in Arabidopsis reveals a Ku-independent pathway for chromosome fusion*

Paul Talbert, *Fred Hutchinson Center* 11:25 am – 11:45 am

#37 – Adaptive evolution of Centromere Protein C in plants and animals

Antonius Matzke, *Austrian Academy of Sciences* 11:45 am – 12:05 pm

#28 – Use of fluorescence-tagged T-DNAs to study interphase chromatin in Arabidopsis

Lunch: 12:15 pm – 1:15 pm

Cliff Lodge, Level B, Golden Cliff Room

Poster Session: 4:00 pm – 6:00 pm

Cliff Lodge, Level B, Ballroom II

Dinner: 6:15 pm – 7:15 pm

Cliff Lodge, Level B, Golden Cliff Room

General Session: 7:30 pm – 10:35 pm

Cliff Lodge, Level B, Ballroom I

Chromatin, imprinting and epigenetic mechanisms

Vicki Chandler, *University of Arizona* 7:30 pm – 8:05 pm

*#4 – Paramutation, an allele interaction that causes heritable changes in
transcription involves long distance interactions and chromatin structural changes*

Eric Richards, *Washington University* 8:05 pm – 8:40 pm

#13 – Chromatin, imprinting and epigenetic mechanisms

Craig Pikaard, *Washington University, St. Louis* 8:40 pm – 9:00 pm

#33 – Chromatin modification and phenotypic homeostasis in inter-species hybrids

Coffee Break 9:00 pm – 9:20 pm

Ueli Grossniklaus, *University of Zurich* 9:20 pm – 9:55 pm

#9 – Genetic and Epigenetic Control of Seed Development in Arabidopsis

Tara Phelps-Durr, *Cold Spring Harbor Laboratory* 9:55 pm – 10:15 pm

*#32 – The Maintenance of *knox* Gene Silencing*

Yeonhee Choi, *University of California - Berkeley* 10:15 pm – 10:35 pm

*#60 – DME, a DNA glycosylase domain protein, regulates MEA imprinting
and seed viability in Arabidopsis*

Saturday, October 25

Information: 8:00 am – 1:00 pm; 4:00 pm – 7:00 pm

Cliff Lodge, Level B, Ballroom Lobby

Breakfast: 8:00 am – 9:00 am

Cliff Lodge, Level B, Golden Cliff Room

General Session: 9:00 am – 12:00 pm

Cliff Lodge, Level B, Ballroom I

RNA and protein movement

Bonnie Bartel, *Rice University* 9:00 am – 9:35 am

#1 – Targets and functions of plant microRNAs

Herve Vaucheret, *Laboratoire de Biologie Cellulaire, INRA* 9:35 am – 10:10 am

#18 – Genetic dissection of miRNA and siRNA pathways in Arabidopsis

Cameron Johnson, *University of California - Davis* 10:10 am – 10:30 am

#86 – Target-based prediction of miRNA precursors within the Arabidopsis genome

Coffee Break 10:30 am – 10:50 am

Vicki Vance, *University of South Carolina* 10:50 am – 11:25 am

#17 – Viral suppression of RNA silencing in plants

David Jackson, *Cold Spring Harbor Laboratory* 11:25 am – 12:00 pm

#11 – Regulation of Intercellular Homeodomain Protein Trafficking

Lunch: 12:15 – 1:15 pm

Cliff Lodge, Level B, Golden Cliff Room

Posters up for viewing until 4:00 pm

Cliff Lodge, Level B, Ballroom II

General Session: 4:00 pm – 7:05 pm

Cliff Lodge, Level B, Ballroom I

Plant form and function

John Bowman, *University of California - Davis* 4:00 pm – 4:35 pm

#3 – Establishment of polarity in shoots of land plants

Sarah Hake, *Plant Gene Expression Center* 4:35 pm – 5:10 pm

#10 – Patterning of leaf shape

Elena Kramer, *Harvard University* 5:10 pm – 5:30 pm

#24 – Variations on a theme: The evolutionary genetics of petal identity

Coffee Break 5:30 pm – 5:50 pm

David Smyth, *Monash University* 5:50 pm – 6:25 pm

#36 – Genetic patterning of the Arabidopsis perianth

M. David Marks, *University of Minnesota* 6:25 pm – 6:45 pm

*#27 – A contradictory GLABRA3 allele helps define gene interactions
controlling trichome development*

Jose Dinneny, *University of California, San Diego* 6:45 pm – 7:05 pm

#23 – The role of JAGGED in shaping lateral organs

Announcement of Best Poster Awards by Trends in Plant Science and Promega 8:15pm

Farewell Dinner & Party: 8:15 pm – 11:30 pm

Cliff Lodge, Level B, Ballrooms I & II

Sunday, October 26

Information: 7:00 am – 8:30 am
Cliff Lodge, Level B, Ballroom Lobby

Breakfast: 7:00 am – 8:30 am
Cliff Lodge, Level B, Golden Cliff Room

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