

28th Annual Crown Gall Conference at Arizona State University

The organizers of the 28th Crown Gall Conference are grateful for the continued financial support provided by Monsanto Company. We also thank The Biodesign Institute and Arizona State University for their help in organizing and presenting the conference.

Saturday Dec 15, 2007

7:30-8:30 am **REGISTRATION - CONTINENTAL BREAKFAST**

8:30 - 8:40 am **Welcome and Introductory Remarks - Steve Slater**

Cell Surface/Attachment

(abstracts start on page 7)

8:40-9:00 am **Elise R. Morton, Peter M. Merritt, Michael E. Hibbing, Thomas Danhorn, Cherie Blair and Clay Fuqua**

Polar surface attachment and biofilm formation of *Agrobacterium tumefaciens* requires contact-dependent extrusion of a unipolar polysaccharide analogous to the *Caulobacter* holdfast

9:00-9:20 am **Lois Banta, David Rogawski, Ian Buchanan, Jason Fan, Gape Machao, Shengchang Su, Stephen Farrand, Amelia Tomlinson, Clay Fuqua, Yuan Ze-Chun, Jen Strater, Brad Goodner, and Gene Nester**

Lon Protease and a Type VI Secretion System Regulate Surface Attachment in *Agrobacterium tumefaciens*

9:20-9:40 am **Amelia D. Tomlinson, David Rogawski, Lois M. Banta and Clay Fuqua**

The ExoR protein of *Agrobacterium tumefaciens* is a novel global regulator that controls diverse functions influencing motility, exopolysaccharide synthesis and biofilm formation

Plant Responses to *Agrobacterium* Infection-Session I

(abstracts start on page 10)

9:40-10:00 am T. J. Burr, L. Cursino-Parent, D. Zheng, G. Hao and S. Sule

Regulation of *Agrobacterium vitis* induced plant responses and swarming motility

10:00-10:20 am Marina Efetova, Rainer Hedrich, Rosalia Deeken

Response of Plants to Infection and Transformation with *Agrobacterium tumefaciens*

10:20-10:40 am Ze-Chun Yuan, Denis Faure, and Eugene W. Nester

Salicylic acid, γ -amino butyric acid, and indoleacetic acid influence *Agrobacterium tumefaciens* through independent but overlapping signaling processes

10:40-11:00 am **BREAK/REFRESHMENTS**

Plant Responses to *Agrobacterium* Infection-Session II

(abstracts start on page 12)

11:00-11:20 am Nagesh Sardesai, Huabang Chen, Joerg Spantzel, and Stanton B. Gelvin

Characterization of *Arabidopsis* mutants that are hypersusceptible to *Agrobacterium*-mediated transformation (hat mutants)

11:20-11:40 am Nagesh Sardesai, Veena, Clay Fuqua, and Stanton B. Gelvin

Agrobacterium attachment to *Arabidopsis* roots induces the systemic expression of a defense-response gene, PAL1

11:40-12:00 am Ajith Anand and Kirankumar S. Mysore

The SCF (SKP1/CUL/F-BOX) ubiquitin ligase complex plays an important role in T-DNA transfer and integration

12:00-1:30 pm **LUNCH on your own** (suggestions will be provided)

Chromosome Biology and T-DNA Integration

(abstracts start on page 14)

1:30-1:50 pm **Gabriela N.Tenea, Joerg Spantzel, Lan-Ying Lee, Susan Jonhson, Yanmin Zhou, Heiko Oltmanns and Stanton B. Gelvin**

Over-expression of *Arabidopsis* chromatin genes results in increased transformation efficiency and/or transgene expression

1:50-2:10 pm **Benoît Lacroix, and Vitaly Citovsky**

In vitro interactions between plant nucleosomes and VIP1 or reconstituted T-complex

2:10-2:30 pm **Zarir Vaghchhipawala and Kirankumar S. Mysore**

Identification and Characterization of Repair Components Involved in *Agrobacterium*-mediated Plant Transformation

2:30-2:50 pm **Mery Dafny-Yelin, Raz Dafny, Lorenzo Prieto, Avner Levy and Tzvi Tzfira**

Blocking T-strand conversion to double-stranded intermediates by expression of single-stranded DNA binding proteins

2:50-3:10 pm **BREAK/REFRESHMENTS**

Agrobacterium Technologies

(abstracts start on page 17)

3:10-3:30 pm **Stephen K. Farrand, R. Martin Roop, II, and Sharik R. Khan**

A New Broad Host Range Vector for Very Tightly Controlled Expression of Cloned Genes in the Alpha Proteobacteria Including *Agrobacterium* and *Brucella*.

- 3:30-3:50 pm **Stanton B. Gelvin, Zhuzhu Zhang, and Lan-Ying Lee**
Peptide aptamers for defining protein function
- 3:50-4:10 pm **Jeanine Louwerse, Miranda van Lier, Dirk van der Steen,
Clementine de Vlaam, Paul Hooykaas and Annette Vergunst**
Stable Recombinase Mediated Cassette Exchange in *Arabidopsis*
- 4:10-4:30 pm **Amanda S. Freed and Tzvi Tzfira**
T-DNA trapping by genome-wide double-strand DNA breaks.
- 4:30-5:00 pm **Sylvestre Marillonnet**
Design of an industrial *Agrobacterium tumefaciens* strain
for use with magniffection
- 5:00-6:00 **BREAK**
- 5:45-6:00 pm **Hang Posters**
- 6:00-7:00 pm **Poster Session**
Snacks, and Open Bar (Wine/Beer 6:00-9:30). (available
all evening) Biodesign Institute Atrium A
- 7:00-8:00 pm **DINNER BUFFET**
Southwestern Cuisine, Biodesign Institute Atrium A
- 8:00-9:00 pm **Keynote Address**
David Fischhoff, Vice President, Technology Strategy
and Development, Monsanto Company
"The State of Agricultural Biotechnology in 2007:
Technical, Commercial, and Public Perception."

Sunday Dec 16, 2007

7:30-8:30 am **CONTINENTAL BREAKFAST**

Virulence and Secretion Systems

(abstracts start on page 20)

8:30-8:50 am **Hung-Yi Wu, Pei-Che Chung, Hsiao-Wei Shih, Sy-Ray Wen, and Erh-Min Lai**

Secretome analysis uncovers an Hcp-family protein secreted via a type VI secretion system in *Agrobacterium tumefaciens*

8:50-9:10 am **Yasunori Machida, Shinji Terakura, Yoshihisa Ueno, Chiyoko Machida**

The *Agrobacterium* 6b protein has histone-chaperone-like activity

9:10-9:30 am **Yun-Long Tsai, Ming-Hsuan Wang, and Erh-Min Lai**

A small heat-shock protein HspL is induced by virB and involved in tumorigenesis in *Agrobacterium tumefaciens*

9:30-9:50 am **Larry D. Hodges, Lan-Ying Lee, Stanton B. Gelvin, and Walt Ream**

Agrobacterium rhizogenes GALLS gene encodes two secreted proteins required for gene transfer to plants

9:50-10:10 am **BREAK/ REFRESHMENTS**

Agrobacterium Genomics

(abstracts start on page 23)

10:10-10:30 am **Brad Goodner & the *Agrobacterium* Genome Consortium**

Using Bioinformatics to Reconstruct the Origin of Multichromosome Bacterial Genomes

10:30-10:50 am **Barry Goldman & the *Agrobacterium* Genome Consortium**

The evolutionary relationships of the *repABC* genes from three sequenced *Agrobacterium* species are incongruous with their cognate plasmids and with each other

10:50-11:10 am **Steve Slater, Katherine Houmiel, Erika Frederick & the *Agrobacterium* Genome Consortium**

Genome sequencing of *Agrobacterium* biovars: the genome of *Agrobacterium rhizogenes* A4

11:10-11:30 am **Closing Remarks - Steve Slater**
Ceremonial Passing of the Gall

