



THE 29<sup>TH</sup> ANNUAL CROWN GALL CONFERENCE

9:30-9:55 am Michael E. Hibbing and Clay Fuqua

**A mutational analysis of *Agrobacterium tumefaciens* iron response regulation**

9:55-10:20 am BREAK/REFRESHMENTS

Secretion Systems

Convening: Kirankumar Mysore

10:20-10:40 am Joseph J. Gillespie, Nicole C. Ammerman, Sheila M. Dreher-Lesnick, Rebecca S. Maag, M. Sayeedur Rahman, Micah J. Worley, Joao C. Setubal, Bruno S. Sobral, Abdu F. Azad

**An Anomalous Type IV Secretion System in *Rickettsia* is Evolutionarily Conserved**

10:40-11:05 am Gisèle Blossier-Bourg, Romain Sube, David O'Callaghan and Gilles Patey

**Interactions between *B. suis* VirB8 and its homolog TraJ from plasmid pSB102 underline the dynamic nature of type IV secretion systems**

11:05-11:30 am Amelia Tomlinson and Clay Fuqua

**ExoR regulates diverse functions in *Agrobacterium tumefaciens*, including biofilm formation, motility, succinoglycan production and type VI secretion**

11:30-1:30 pm Lunch on Your Own

Plant Responses I

Convening: Tzvi Tzfira

1:30-1:55 pm Adi Zaltsman, Alexander Krichevsky and Vitaly Citovsky

**To shield, or not to shield, that is the question**

1:55-2:20 pm Ajith Anand, and Kirankumar S. Mysore

**Functional characterization of VIP2 and its role in *Agrobacterium*-mediated plant transformation**

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2:20:-2:45 pm Nagesh Sardesai, Gayla Olbricht, Hau-Hsuan Hwang, Yun-Long Tsai, Rebecca Doerge, Erh-Min Lai, and Stanton B. Gelvin

**Cytokinin regulates expression of a myb transcription factor which influences susceptibility of *Arabidopsis* roots to *Agrobacterium*-mediated transformation**

2:45-3:10 pm BREAK/REFRESHMENTS

Plasmids

Convening: Lois Banta

3:10-3:30 pm Hongbaek Cho, Uelinton M. Pinto, and Stephen C. Winans

**Entry exclusion of an octopine-type Ti plasmid is mediated by TrbJ and TrbK**

3:30-3:55 pm Margaret Wetzel and S.K. Farrand

**Identification and comparison of an *Agrobacterium* plasmid in which conjugation is inducible by mannopine**

3:55-4:20 pm Shinji Yamamoto, Kazuya Kiyokawa, Katsuyuki Tanaka, Kazuki Moriguchi and Katsunori Suzuki

**Novel toxin-antitoxin genes on pTiC58 determine the stability and high incompatibility of the plasmid**

4:20-4:45 pm Yinping Qin and Stephen K. Farrand

**New Insights into the Protein-Protein Interaction Interfaces on the Quorum Sensing Activator TraR with RNA Polymerase**

4:45-5:10 pm Thomas Platt, James Bever, Clay Fuqua

**Ecological dynamics of the *Agrobacterium tumefaciens* virulence plasmid**

5:10-5:45 pm BREAK/HANG POSTERS

5:45-7:00 pm WINE/BEER/POSTER SESSION

7:00-8:30 pm DINNER

8:30-9:30 pm Michael Elbaum

**VirE2: virulent and versatile**

Agrobacterium Technologies I

7:30-8:30 am CONTINENTAL BREAKFAST

Convening: Clay Fuqua

8:30-8:55 am Lan-Ying Lee, Mei-Jane Fang, Lin-Yun Kuang, and Stanton B. Gelvin

**Using multi-color bimolecular fluorescence complementation to investigate protein-protein interactions in living plant cells**

8:55-9:20 am Stanton B. Gelvin, Lan-Ying Lee, Joerg Spantzel, Cuiping Xia, Nathan Hood, Yaling Wang, and Zhuzhu Zhang

**Peptide aptamers for defining protein function**

9:20-10:45 am Andriy Tovkach, Vardit Zeevi, and Tzvi Tzfira

**Towards Controlled T-DNA Integration in Plants**

10:45-11:00 am BREAK/REFRESHMENTS

Agrobacterium Technologies II

Convening: Michael Elbaum

11:00-11:25 am Carla Rosenfield, Nagesh Sardesai, and Stanton B. Gelvin

**A novel *Agrobacterium* tumorigenesis assay**

11:25-11:50 am Zeevi Vardit, Tovkach Andriy and Tzfira Tzvi

**Expanding Cloning Possibilities and Binary Vectors Assembly using Zinc Finger Nucleases**

11:25-11:50 am Nagesh Sardesai, Ann Perera, Rebecca Doerge, and Stanton B. Gelvin

**Over-expression of a UDP-glucosyltransferase represses plant defense responses and increases susceptibility to *Agrobacterium*-mediated transformation**

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11:50-12:15 pm Closing Remarks

Passing of the Gail

**Poster Abstracts:**

**Peptide aptamers for defining protein function**

Stanton B. Gelvin, Lan-Ying Lee, Joerg Spantzel, Cuiping Xia, Nathan Hood, Yaling Wang, and Zhuzhu Zhang

**Lon Protease Regulates Biogenesis of the VirB Type IV Secretion System and Host Cell Attachment in *Agrobacterium tumefaciens***

Lois Banta, Ian Buchanan, Brenna Baccaro, Shengchang Su, Stephen Farrand

**A novel *Agrobacterium tumorigenesis* assay**

Carla Rosenfield, Nagesh Sardesai, and Stanton B. Gelvin

**Plant development inhibitory genes in binary vector backbone improve quality event efficiency in soybean transformation**

Ye X, Williams EJ, Shen J, Esser JA, Nichols AM, Petersen MW, Gilbertson LA.

**Visualizing the transfer of internally tagged VirE2 from *Agrobacterium* to plant cells**

ShouDong Zhang, Vijay Nadella, and Stanton B. Gelvin

**Forward genetic screening identifies new genes important for biofilm formation by *Agrobacterium tumefaciens***

Anthony D. Bowen, Amelia D. Tomlinson and Clay Fuqua

**Over-expression of a UDP-glucosyltransferase represses plant defense responses and increases susceptibility to *Agrobacterium*-mediated transformation**

Nagesh Sardesai, Ann Perera, Rebecca Doerge, and Stanton B. Gelvin<sup>1</sup>

**Cytokinin regulates expression of a myb transcription factor which influences susceptibility of *Arabidopsis* roots to *Agrobacterium*-mediated transformation**

Nagesh Sardesai, Gayla Olbricht, Hau-Hsuan Hwang, Yun-Long Tsai, Rebecca Doerge, Erh-Min Lai, and Stanton B. Gelvin

**Blocking T-DNA Integration by Expression of Single-Stranded DNA Binding Proteins**

Mery Dafny-Yelin, Raz Dafny, Avner Levy and Tzvi Tzfira

**Using multi-color bimolecular fluorescence complementation to investigate protein-protein interactions in living plant cells**

Lan-Ying Lee, Mei-Jane Fang, Lin-Yun Kuang, and Stanton B. Gelvin

**Construction of disarmed Ti plasmids transferable between *Escherichia coli* and *Agrobacterium* species**

Kazuya Kiyokawa, Shinji Yamamoto, Kei Sakuma, Katsuyuki Tanaka, Kazuki Moriguchi and Katsunori Suzuki

**Identification of a Patch of Amino Acid Residues on the Surface of TraR that may Directly Contact RNA Polymerase**

Esther D. Costa and Stephen C. Winans

**Activation leads to morphological changes in the *Agrobacterium* cell wall**

Allon Weiner and Michael Elbaum

**Tumor development is accompanied by altered lipid metabolism**

Klinkenberg J., Krischke M., Hedrich R. and Deeken R.

**The diguanylate cyclases PleD and Atu1060 affect exopolysaccharide production, virulence and cellular interaction of *Agrobacterium tumefaciens*.**

Michael Barnhart and Stephen K. Farrand

**Integration of *Agrobacterium*'s T-DNA Molecules into Genomic Double Strand Breaks**

Amanda D. Freed and Tzvi Tzfira

**Expanding Cloning Possibilities and Binary Vectors Assembly using Zinc Finger Nucleases**

Vardit Zeevi, Andriy Tovkach and Tzvi Tzfira

Gabriela N. Tenea, Joerg Spantzel, Lan-Ying Lee, and Stanton B. Gelvin

***Arabidopsis* histone H2As-mediated enhancement of transgene expression by stabilizing incoming transgene DNA in plant cells**

Regina Kuehner, Caroline Mueller, Rainer Hedrich and Rosalia Deeken

**The role of glucosinolates for crown gall development of *Arabidopsis thaliana***