Friday, August 13, 2004

4:00 - 7:00 PM Registration Lobby, CLSL
5:30 - 7:00 PM Reception Lobby, CLSL

Saturday, August 14, 2004

8:30 - 8:45 Welcome and Introductory Remarks B102 CLSL

Session 1: Pathogenesis and Biological Control

The Cucumopine Ri Plasmid and Root Mat in Cucumbers and Tomatoes

9:10 - 9:35 G. Hao, S. Carle, and Thomas Burr
Quorum-sensing and a putative LCPUFA Operon are Associated with Grape Necrosis and a Tobacco Hypersensitivity Response by Agrobacterium vitis

9:35 - 10:00 Ann G. Matthysse and Cecilia Jeter
Contribution of Attachment and Virulence by Incomplete Sets of att Genes is Plant Host Specific

10:00 - 10:20 BREAK

10:20 - 10:45 Shengchang Su and S. K. Farrand
Lon Protease of Agrobacterium is Required for Full Tumorigenicity But Not for Ti Plasmid Conjugative Transfer

10:45 - 11:10 B. Lethbridge, V. Rumjanek, J. J. Sims, Max E. Tate, E. W. Triplett, and A. S. Edison
Covalent Structure of Trifolitoxin, a Blue Fluorescent Undecapeptide Bacteriocin

Functional Analysis of the Agrocinogenic Plasmid pAgK84 from Agrobacterium radiobacter K84

11:35 - 12:00 John S. Reader, P. T. Ordoukhian, J.-G. Kim, V. de Crécy-Lagarde, I. Hwang, S. K. Farrand, and P. Schimmel
The Role of aminoacyl tRNA Synthetases in Crown Gall Disease

12:00 - 1:45 LUNCH and POSTERS

Session II: Physiology and Molecular Biology of Agrobacterium

1:45 - 2:10 Amelia A. Tomlinson, B. Ramey, T. W. Day, J. L. Rodriguez, and C. Fuqua
Regulation and Synthesis of the Exopolysaccharide Succinoglycan Differentially Influences Biofilm Formation of Agrobacterium tumefaciens on Abiotic Surfaces and Plant Tissues

2:10 - 2:35 Thomas Danhorn and C. Fuqua
The Pho Regulon Controls the Adherence of Agrobacterium tumefaciens to Surfaces

2:35 - 3:00 Manfredo J. Seufferheld
Probing the "Missing Link" From Prokaryotes to Eukaryotes
3:00 - 3:25  B. E. Ramey, A. D. Tomlinson, Veena, S. B. Gelvin, and Clay Fuqua
Analysis of the Agrobacterium tumefaciens Surface Interaction Regulator SinR Provides Insights Into the Relationship Between Bacterial Adherence and Virulence

3:25 - 3:45  BREAK

3:45 - 4:10  Ching-Sung Tsai and Stephen C. Winans
Positive Control Mutations of the LysR-Type Protein OccR Abolish Ligand-Responsive Bending of Operator DNA

T Pilus Biogenesis and a Eukaryotic Transcriptional Regulator in Agrobacterium

4:35 - 5:00  Yinping Qin and S. K. Farrand
Involvement of Residues with the C-Terminal Domain of the RNA Polymerase α-Subunit of A. tumefaciens in Activation of tra Promoters by the Quorum-Sensing Activator TraR

5:00 - 5:25  Yunrong Chai and Stephen C. Winans
A Small Antisense RNA Regulates the Replication of an Octopine-Type Ti Plasmid in Agrobacterium tumefaciens

5:25 - 6:30  POSTERS

6:30 - 9:30  Informal Reception and Light Buffet. Home of Stephen and Linda Farrand

Sunday, August 15, 2004

8:25 - 8:30  Announcements

Session III: The T-Strand Transfer System

8:30 - 9:20  Keynote Address - Peter Christie
S. J. Jakubowski, V. Krishnamoorthy, E. Cascales, and P. J. Christie
Agrobacterium tumefaciens VirB6 Domains Direct the Ordered Export of a DNA Substrate Through a Type IV Secretion System

9:20 - 9:45  P. Judd, R. B. Kumar, and Anath Das
The Cell Pole is the Site of Assembly of the Agrobacterium tumefaciens Type IV Secretion Apparatus

9:45 - 10:10  Olga Draper, J. Zupan, D. Ward, and P. Zambrsksy
Potential Role for VirB1* in Type IV Secretion System Pilus Formation

10:10 - 10:30  BREAK

10:30 - 10:55  Padmaja Uppala, P. Judd, and A. Das
Functional Analysis of the Agrobacterium tumefaciens DNA Transfer Protein VirD4

Agrobacterium rhizogenes GALLS protein Substitutes for A. tumefaciens Single-Stranded DNA-Binding Protein VirE2

VirE2-ssDNA Complex Mechanics Investigated by Optical Tweezers

11:45 - 12:10  Krishnamohan Atamakuri, E. Cascales, and P. J. Christie
Energetic Components VirD4, VirB11, and VirB4 Mediate Early DNA Transfer Reactions for Bacterial Type IV Secretion Systems

12:10 - 2:00  LUNCH and POSTERS
Session IV: The Genomics of *Agrobacterium* and its Relatives

2:00 - 2:50 Keynote Address - Michael L. Kahn
Michael L. Kahn
**Genetics and Genomics of Rhizobia**

2:50 - 3:15 **Steve Slater, Y. Zhou, R. Kaul, B. Goodner, E. W. Nester, and D. Wood**
*Whole Genome Analysis of Sequence Differences Between Two A. *tumefaciens* C58 Culture Lines*

3:15 - 3:40 **Derek Wood, J. Jhaveri, J. C. Setubal and the K84/S4 Genome Consortium**
**Genome Sequencing of *Agrobacterium* Biovars II and III**

3:40 - 4:00 BREAK

4:00 - 4:25 Barry Goldman and the K84/S4 Genome Consortium
**Genomic Analysis of *Agrobacterium* Biovars II- and III-Type Strains**

4:25 - 4:50 **Brad Goodner, L. Wilson, N. Pride, and T. Ostheimer**
**Genomic Archeology: Chromosome II in *Agrobacterium* and Its Relatives**

**Proteomic Analysis of *Agrobacterium* tumefaciens in Response to Plant Signals**

5:15 - 8:00 POSTERS

Monday, August 16, 2004

8:25 - 8:30 Announcements

Session V: T-Strand Transit and Integration

8:30 - 9:20 Keynote Address - **Barbara Hohn**
Barbara Hohn, L. Valentine, S. S. Jacob, Y.-Q. Wu, M. Duckely, and P. Pelczar
**Transfer and Integration 2004**

9:20 - 9:45 **Nancy Podevin, S. De Buck, C. De Wilde, and A. Depicker**
**Functionality of T-DNA Borders and Origin of Multiple Copies in *Agrobacterium*-Mediated Plant Transformation**

9:45 - 10:10 **Benoit Lacroix, T. Tzfira, M. Vaidya, and V. Citovsky**
**VirE3 Facilitates Nuclear Import of VirE2 and T-DNA In Plant**

10:10 - 10:30 BREAK

10:30 - 10:55 **Ajith Anand and K. S. Mysore**
**SGT1, Skp1, and Rar1 of the E3 Ubiquitin Ligase Pathway Are Required for the Integration of the T-DNA Into the Plant Genome**

10:55 - 11:20 **Sang-Ic Kim and S. B. Gelvin**
**Genome-Wide Analysis of T-DNA Target Sites in the *Arabidopsis* Genome Under Non-Selective Conditions**

**The Preference of *Arabidopsis thaliana* AtImpa-4 for *Agrobacterium*-Mediated Transformation - Best of the Rest!**

11:45 - 12:10 **A. Anand, C.-M. Ryu, L. Kang, and Kirankumar S. Mysore**
**A Novel Approach to Identify Plant Genes Involved in *Agrobacterium*-Mediated Transformation**

12:10 - 1:40 LUNCH and POSTERS
Session VI: Contributions by the Plant

1:40 - 2:30 Keynote - Stanton B. Gelvin

Stanton B. Gelvin

Plant Processes Involved in Agrobacterium-Mediated Genetic Transformation: More (Genes and Collaborators) Are Better!

2:30 - 2:55 Tzvi Tzfira, M. Vaidya and V. Citovsky

Involvement of Targeted Proteolysis in Plant Genetic Transformation by Agrobacterium


Adventitious Root Induction by the Rooting Locus Gene B (rolB) Correlates with the Nuclear Localization and Interaction of RolB Protein With Plant 14-3-3 Proteins

3:20 - 3:40 BREAK

3:40 - 4:05 Yasunori Machida, S. Terakura, S. Kitakura, and H. Wabiko

Tobacco Proteins that Interact with Proteins Encoded by Oncogene 6b from Agrobacterium tumefaciens

4:05 - 4:30 Susan J. Johnson, L.-Y. Lee, X. Sui, and S. B. Gelvin

Arabidopsis Histone H2A-1 Increases Agrobacterium-Mediated Transformation Efficiency Through Increased Transgene Expression

4:30 - 4:55 Veena and Stanton B. Gelvin

The Host Plant Defense Response Influences Agrobacterium-Mediated Transformation

4:55 - 6:30 POSTERS

6:30 - 7:30 SOCIAL HOUR Room 314 Illini Union

7:30 - 8:45 BANQUET Room 314 Illini Union

8:45 After dinner Address - Allen Kerr

Tuesday, August 17, 2004

8:25 - 8:30 Announcements

Session VII: Biotechnological Applications of Agrobacterium

8:30 - 9:20 Keynote Address - Paul J. J. Hooykaas

Paul Hooykaas, H. van Attikum, P. Bundock, C. Michielse, A. den Dulk-Ras, B. Schrammeijer, and A. Vergunst

Agrobacterium From Plant Pathogen to Fungal Vector

9:20 - 9:45 D. Monks, P. de Figueiredo, R. Roberts, and Eugene W. Nester

Transformation of Plant Cells by Escherichia coli

9:45 - 10:10 Mary-Dell Chilton, A. DeFramond, W. Gu, J. Suttie, and Q. Que

Targeted Insertion of T-DNA Into the Plant Genome

10:10 - 10:30 BREAK

10:30 - 10:55 Seung-Beom Hong, C. Peeble, J. V. Shanks, K.-Y. San, and S. I. Gibson

Expression of the Arabidopsis Feedback-Insensitive Anthranilate Synthase Holoenzyme and Tryptophan Decarboxylase Genes in Catharanthus roseus Hairy Roots


Ex Vitro Conditions for Agrobacterium rhizogenes Induced Composite Plants: A Technology for Accelerating Root Functional Genomics

11:20 - 11:30 Meeting Conclusion