



# Plant & Seed Sciences Partnership Program



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- Bring science to market faster by strengthening university-industry partnerships.
- Facilitate basic and applicationdriven research collaborations that respond to industry needs.
- Facilitate intellectual property & technology transfer.



Seed Central<sup>SM</sup> & its Members

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### PLANT & SEED SCIENCES PARTNERSHIP PROGRAM







# Tier 1 Educational, Networking, & Corporate Relations

Education Programs, Network Events, Single Point Access to Corporate Relations Gift Fee, currently 6%

### Tier 2 Research Consortia

Co- or Non- Exclusive IPR Option 20% Indirect Costs Administration Fee (minimum \$5,000 or 5%)

# Tier 3 Sponsor Research

Exclusive IPR Options
UC Davis Indirect Costs
Administration Fee (minimum \$5,000 or 2%)

### **PSPP: BENEFITS**

### **TIER 2: RESEARCH CONSORTIA**

### Consolidation of funding to support research in areas of interest to Seed Central and its members

- Seed Central and its members collectively decide project objectives and R&D Plan.
- Pre-publication access to research resulting from the consortia projects.

# Pre-negotiated intellectual property rights benefits

- Technology jointly developed by UC Davis and Tier 2 industry members will be jointly owned.
- Pre-negotiated intellectual property rights.
- Shared rights to co-exclusively license technologies developed under the aegis of the PSPP consortium.
- In some cases non-exclusive, royalty-free license options.

### Costs

- Reduced indirect cost rate, currently 20%
- Administration fee \$5,000 or 5% of total direct costs

**PSPP: BENEFITS** 

**TIER 3: SPONSORED RESEARCH** 

Project-specific research sponsorship agreements with individual sponsors.

# Pre-negotiated intellectual property rights benefits

First option to negotiate an **exclusive or non-exclusive license** (at the sponsor's choice) to new intellectual property developed through the specific sponsored project.

### Costs

- UC indirect cost rate, currently 54%
- Administration fee \$5,000 or 2% of total direct costs



## Spinach Sequencing Research Consortium

Established October 2012

Principal Investigator:

Allen Van Deynze <u>avandeynze@ucdavis.edu</u>



# Research Consortia: Strategies for Improving Fruit Quality

- Soluble Solids
  - U Gene
  - Invertase Expression
- Flavor
- Pigments and Antioxidants
- Postharvest Properties
- Fruit Disease Susceptibility

Seed Central
Keynote
Presentation:

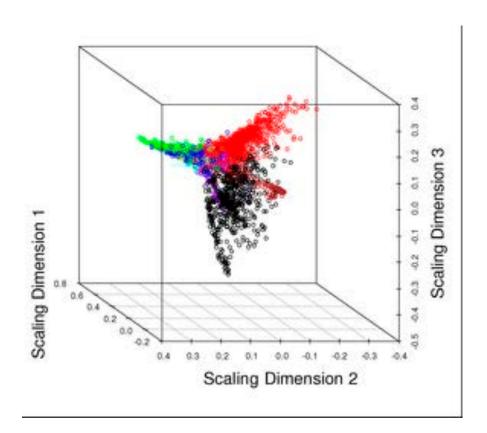
Linking plant
genomes to
food quality
making a better
tomato

Alan B. Bennett

# Bioinformatics for Breeders

Richard Michelmore & Dawei Lin UC Davis Genome Center

Kent Bradford & Allen Van Deynze Seed Biotechnology Center



Principal Investigator: David Tricoli

### Tissue Culture



- Embryogenesis
- Induction Somatic Embryo
- Conversion of Somatic Embryo into Plants.
- Tradition Double Haploid Approaches

# Tier 2 Research Consortia Ideas:



#### Collaborative Research Lab:

Focused pre-competitive research in cell biology (e.g., doubled haploids, tissue culture, transformation), bioinformatics and other topics of interest.

### Molecular Markers for Breeding:

DNA sequencing and development of DNA markers associated with an array of traits (e.g. disease resistance, quality, nutrition) in diverse crops.

### **Biotechnology Services:**

Opportunity to access transformation services and segregate conventional and transgenic research at different sites.

#### Foods for Health:

Interdisciplinary research focused on technologies to improve the nutritional content of foods and their ability to promote health.

December Seed Central Event Bruce German, Foods for Health Institute

#### **Customized Consortia:**

Tailored research focusing on industry needs.

### **TILLING Resources for Tomato**

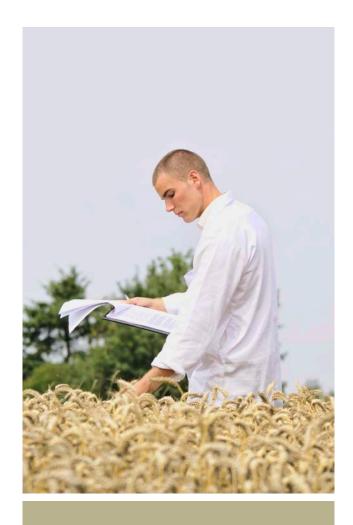
Junda Jiang, Allen Van Deynze, Roger Chetelat, & Luca Comai





# DEVELOPING A DOUBLE HAPLOID SYSTEM FOR PLANT BREEDING

Simon Chan, discovered how to breed plants with genes from only one parent, making it possible to "breed true" without generations of inbreeding.





# Corporate Affiliate Partnership Program

# Plant & Seed Sciences Partnership Program

For additional information contact:

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