



**12<sup>th</sup> World Congress of the  
International Association for Plant Biotechnology (IAPB)  
and the  
2010 In Vitro Biology Meeting of the Society for In Vitro Biology (SIVB)**

**America's Center, 701 Convention Plaza, St. Louis, MO**

**Wednesday, June 9**

Sessions in **red underline** below are SIVB IVACS sessions

- 8:00-8:30 a.m.      **Poster Viewing and Vendor Show**
- 8:30-9:30 a.m.      **The Malaysian Life Sciences Capital Fund Plenary Lecture**  
Jay Keasling, University of California-Berkeley, USA  
*"Engineering microorganisms with plant-derived genes to produce  
drugs and fuels"*
- 9:30-10:30 a.m.      **Plenary Lecture VIII**  
Peter Beyer, Albert-Ludwigs Universitat Freiburg, Germany  
*"Golden rice on a mission"*
- 10:30-11:00 a.m.      **Morning Break**
- 11:00 a.m.-12:00 p.m. **Plenary Lecture IX**  
Steven Pueppke, Michigan State University, USA  
*"The global rush to biofuels and what we are learning about food  
production, sustainability, and the carbon economy"*
- 12:00-1:00 p.m.      **Lunch in Ballroom**  
**Poster Viewing**  
**Vendor Show**
- 1:00-3:00 p.m.      **Concurrent Symposia**
- Biotic Stress I (sponsored by United Soybean Board)**  
Godelieve Gheysen, Ghent University, Belgium  
*"RNAi for research and applications in plant nematode  
interactions"*

1:00-3:00 p.m.

## **Concurrent Symposia (continued)**

### **Crop Biofortification I**

Cathie Martin, John Innes Centre, U.K.

*“Tackling chronic diseases: The potential of preventive medicine through improvements to foods”*

Mark Manary, Washington University School of Medicine, USA

*“Biotechnology and the potential it has to improve human health”*

### **Forest Biotechnology I**

Norm Lewis, Washington State University, USA

*“Trees now and in the future: A fantastic molecular bounty”*

### **New Biofuels Feedstock I**

Hans Blaschek, University of Illinois at Urbana-Champaign, USA

*“Prospects for the new bioeconomy”*

Richard Sayre, Donald Danforth Plant Science Center, USA

*“Algal biofuels, a systems approach”*

### **Gene Expression/Stacking III**

Rita Varagona, Monsanto Company, USA

*“Vector technologies for plant biotechnology”*

Jeff Smith, Precision BioSciences, Inc., USA

*“Efficient plant genome engineering using designed homing endonucleases”*

### **Optimizing Mineral Composition of Plant Growth Media**

Richard Williams, University of Queensland, Australia

*“Mineral nutrition in plants in vitro”*

Randall Niedz, USDA-ARS, USA

*“Determining mineral nutrient effects using ARS-media to remove ion confounding”*

Jeff Adelberg, Clemson University, USA

*“Spent medium analysis in plant tissue culture”*

Barbara Reed, USDA-ARS, USA

*“Improving in vitro mineral nutrition for diverse pear germplasm”*

### **Biological Sensors of Environmental, Chemical, and Biological Toxicants**

Lucila Lee, Wilfrid Laurier University, Canada

*“Fish & Chips: Toward the development of portable water testing devices”*

Mark Widder, U.S. Army - CEHR, USA

*“A portable impedance-based biosensor and automated cell maintenance system for water toxicity testing”*

Vipin K. Rastogi, U.S. Army - ECBC, USA

*“Development of a cell-based function assay for detecting very low holoricin levels”*

Charles Neal Stewart, University of Tennessee, USA

*“Phytosensors: Plants to report pathogens and environmental contaminants”*

3:00-3:30 p.m.

**Afternoon Break**

3:30-5:30 p.m.

**Concurrent Symposia**

**Biotic Stress II**

Eric Ward, Two Blades Foundation, USA

*“Toward durable disease resistance”*

**Crop Biofortification II**

Michael Grusak, USDA-ARS Children's Nutrition Research, USA

*“Golden rice: Development, nutritional assessment, and potential for alleviating vitamin A deficiency”*

**Forest Biotechnology II (sponsored by ArborGen)**

Maud Hinchee, ArborGen, LLC, USA

*“Purpose-grown trees for a sustainable future”*

Debra Mohnen, University of Georgia, USA

*“The BioEnergy Science Center (BESC) and overcoming recalcitrance of Populus to biofuels production”*

**Gene Expression/Stacking IV**

Vipula Shukla, Dow AgroSciences LLC, USA

*“Targeted genome modification in plants:*

*The ExZact™ precision technology platform*

Greg Gocal, Cibus, LLC, USA

*“RTDS: A molecular spell checker for trait development”*

**Novel Plant Growth Regulators for Plant Production**

Karel Dolezal, Palacky University, Czech Republic

*“New cytokinin derivatives for plant biotechnology, agriculture and forestry”*

**Evaluating the Impact of Bioactive Molecules on Animals using In Vitro Models**

Lena Gerwick, Scripps Institution of Oceanography, USA

*“The anti-inflammatory effect of the marine natural product malyngamide F Oac”*

Brian Dixon, University of Waterloo, Canada

*“The effect of soy proteins and anti-nutritional factors on a salmonid gut cell line”*

Lucila Lee, Wilfrid Laurier University, Canada

*“Evaluating the biocidal activity of antimicrobials using fish cell lines”*

5:30-7:00 p.m.

**Poster Viewing (odd)  
Vendor Show**

7:00-9:00 p.m.

**Workshops**

The Basics of Cellular Imaging Workshop

David Piwnica-Worms, M.D., Washington University at St. Louis

*“Real-time imaging of signal transduction pathways and drug action in live cells and animals”*

Britney Moss, Washington University at St. Louis

*“Real-time bioluminescence imaging of NF-kappaB signal transduction in live cells”*

James Johnson, Washington University at St. Louis

*“Caspase-activated cell penetrating probes for in vivo optical imaging of retinal neurodegeneration”*

**If you are interested in hosting a workshop,**  
**please** (contact [iapb2010@missouri.edu](mailto:iapb2010@missouri.edu) for more information)

**--- END OF DAY ---**

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