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**GORDON RESEARCH CONFERENCES** *frontiers of science*  
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**Nancy Ryan Gray, Ph.D.**  
Director

**2011 GORDON RESEARCH CONFERENCE  
on PLANT LIPIDS: STRUCTURE, METABOLISM & FUNCTION**

**FINAL PROGRESS REPORT**

DEPARTMENT OF ENERGY  
GRANT NO. DE-SC0004721

The Gordon Research Conference on PLANT LIPIDS: STRUCTURE, METABOLISM & FUNCTION was held at Hotel Galvez, Galveston, Texas on January 30 – February 4, 2011. The Conference was well-attended with 127 participants (attendees list attached). The attendees represented the spectrum of endeavor in this field coming from academia, industry, and government laboratories, both U.S. and foreign scientists, senior researchers, young investigators, and students. Of the 127 attendees, 38 voluntarily responded to a general inquiry regarding ethnicity which appears on our registration forms. Of the 38 respondents, 26% were Minorities – 0% Hispanic, 26% Asian and 0% African American. Approximately 26% of the participants at the 2011 meeting were women.

In designing the formal speakers program, emphasis was placed on current unpublished research and discussion of the future target areas in this field. There was a conscious effort to stimulate lively discussion about the key issues in the field today. Time for formal presentations was limited in the interest of group discussions. In order that more scientists could communicate their most recent results, poster presentation time was scheduled. Attached is a copy of the formal schedule and speaker program and the poster program. In addition to these formal interactions, "free time" was scheduled to allow informal discussions. Such discussions are fostering new collaborations and joint efforts in the field.

Thank you for your support of this Conference. As you know, in the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research Conferences does not permit publication of meeting proceedings. If you wish any further details, please feel free to contact me. Thank you.

Sincerely,  
*Christoph Benning, Conference Chairperson*  
MICHIGAN STATE UNIVERSITY

## PLANT LIPIDS: STRUCTURE, METABOLISM & FUNCTION

January 30 - February 4, 2011

Hotel Galvez

Galveston, TX

Chairs:

Christoph Benning & Jan Jaworski

Vice Chairs:

Ruth Welti & Edgar Cahoon

This is the second Gordon Research Conference on "Plant Lipids: Structure, Metabolism & Function". It covers current topics in lipid structure, metabolism and function in eukaryotic photosynthetic organisms including seed plants, algae, mosses and ferns. Work in photosynthetic bacteria is considered as well as it serves the understanding of specific aspects of lipid metabolism in plants. Breakthroughs are discussed in research on plant lipids as diverse as glycerolipids, sphingolipids, lipids of the cell surface, isoprenoids, fatty acids and their derivatives. The program covers nine concepts at the forefront of research under which afore mentioned plant lipid classes are discussed. The goal is to integrate areas such as lipid signaling, basic lipid metabolism, membrane function, lipid analysis, and lipid engineering to achieve a high level of stimulating interaction among diverse researchers with interests in plant lipids. One Emphasis is on the dynamics and regulation of lipid metabolism during plant cell development and in response to environmental factors.

### Contributors



### SUNDAY

4:00 pm - 8:00 pm      Arrival and Check-in (Office Closed 6:00 pm - 7:45 pm)

6:00 pm      Dinner

7:30 pm - 7:35 pm      Welcome / Introductory Comments by GRC Site Staff

### Lipid Adaptation in Response to a Changing Environment

Discussion Leader: **Peter Doermann** (University of Bonn)

**Peter Doermann** (University of Bonn)  
"Introductory Remarks"

**Benjamin van Mooy** (Woods Hole Oceanographic Institution)

	"Changes in the lipids of marine phytoplankton in response to environmental stressors"
8:05 pm - 8:10 pm	Discussion
8:10 pm - 8:35 pm	<b>Hiroyuki Ohta</b> (Tokyo Institute of Technology) "Metabolic remodeling of glycerolipid synthesis in response to developmental and environmental changes"
8:35 pm - 8:40 pm	Discussion
8:40 pm - 9:00 pm	<b>Jyoti Shah</b> (University of North Texas) "Identification of a diterpenoid as a vasculature translocated signal associated with the activation of systemic acquired resistance"
9:00 pm - 9:05 pm	Discussion
9:05 pm - 9:25 pm	<b>Jedrzej Szymanski</b> (Max Planck Institute, Potsdam) "Gene networks shaping <i>Arabidopsis thaliana</i> membrane lipidome in changing environmental conditions - a systems approach"
9:25 pm - 9:30 pm	Discussion

## MONDAY

7:30 am - 8:30 am	Breakfast
8:30 am	Group Photo
<b>Lipids Involved in Endomembrane and Plasma Membrane Structure and Function</b>	
9:00 am - 12:30 pm	Discussion Leader: <b>Edgar Cahoon</b> (University of Nebraska)
9:00 am - 9:05 am	<b>Edgar Cahoon</b> (University of Nebraska) "Opening Remarks"
9:05 am - 9:30 am	<b>Sebastien Mongrand</b> (CNRS, Université Victor Segalen Bordeaux 2) "Plasma Membrane Rafts: domains for lipid signal transduction and cell-to-cell communication in plants?"
9:30 am - 9:35 am	Discussion
9:35 am - 10:00 am	<b>Mee-Len Chye</b> (University of Hong Kong) " <i>Arabidopsis</i> and rice Acyl-CoA binding proteins for the endomembrane and plasma membrane"
10:00 am - 10:05 am	Discussion
10:05 am - 10:35 am	Coffee Break
10:35 am - 10:55 am	<b>Jean-Denis Faure</b> (Institut Jean-Pierre Bourgin) "Endomembrane dynamics during cytokinesis require lipids with very long acyl chains"
10:55 am - 11:00 am	Discussion
11:00 am - 11:20 am	<b>Ming Chen</b> (Univ. Nebraska, Lincoln) "Unraveling the function and biosynthetic complexities of glucosylceramides in <i>Arabidopsis</i> "
11:20 am - 11:25 am	Discussion

11:25 am - 11:40 am	<b>Yasuyo Yamaoka</b> (Saitama University) "Phosphatidylserine synthase 1 is required for microspore development in <i>Arabidopsis thaliana</i> "
11:40 am - 11:45 am	Discussion
11:45 am - 12:00 pm	<b>Markus Gierth</b> (University of Cologne) "An acyl-activating enzyme is involved in fatty acid uptake in <i>Synechocystis</i> "
12:00 pm - 12:05 pm	Discussion
12:05 pm - 12:20 pm	<b>Carlotta Peters</b> (Danforth Center, St. Louis) "Metabolic and Signaling functions of Non-Specific Phospholipase Cs NPCs in Plant Adaptation to Abiotic Stress and Nutrient Deprivation"
12:20 pm - 12:25 pm	Discussion
12:25 pm - 12:30 pm	<b>Edgar Cahoon</b> (University of Nebraska) "Closing Remarks"
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	<u>Poster Session</u> ( <i>Posters 1-15</i> )
6:00 pm	Dinner
7:30 pm - 9:30 pm	<b>Lipids in Protection of Plants against Abiotic and Biotic Stresses</b>
	Discussion Leader: <b>Ljerka Kunst</b> (University of British Columbia)
7:30 pm - 7:35 pm	<b>Ljerka Kunst</b> (University of British Columbia) "Opening remarks"
7:35 pm - 8:00 pm	<b>Asaph Aharoni</b> (Weizmann Institute of Science) "Transcriptional regulation of cuticular lipids metabolism in vegetative and reproductive plant organs"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:35 pm	<b>Owen Rowland</b> (Carleton University) "Biosynthesis of extracellular lipids in <i>Arabidopsis</i> "
8:35 pm - 8:45 pm	Discussion
8:45 pm - 9:00 pm	<b>Amelie Bernard</b> (Laboratoire De Biogenese Membranaire ) "Looking for CER1 partners to elucidate VLC-alkanes production in <i>Arabidopsis</i> waxes"
9:00 pm - 9:05 pm	Discussion
9:05 pm - 9:20 pm	<b>Anna Maria Zbierzak</b> (Univ. Bonn) "The chilling sensitive 1 (CHS1) gene of <i>Arabidopsis</i> : A resistance (R)-related protein negatively regulating hypersensitive response"
9:20 pm - 9:25 pm	Discussion
9:25 pm - 9:30 pm	<b>Ljerka Kunst</b> (University of British Columbia) "Closing Remarks"

**TUESDAY**

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	<b>Lipid Signaling in Plant Development and Homeostasis</b> Discussion Leader: <b>Sam Wang</b> (University of Missouri, St. Louis / Donald Danforth Plant Science Center)
9:00 am - 9:05 am	<b>Sam Wang</b> (University of Missouri, St. Louis / Donald Danforth Plant Science Center) "Opening Remarks"
9:05 am - 9:30 am	<b>Glenda Gillaspy</b> (Virginia Tech) "Phosphoinositide signaling and metabolism"
9:30 am - 9:35 am	Discussion
9:35 am - 10:00 am	<b>Kent Chapman</b> (University of North Texas) "N-Acylethanolamines and plant growth and development"
10:00 am - 10:05 am	Discussion
10:05 am - 10:35 am	Coffee Break
10:35 am - 10:55 am	<b>Liang Guo</b> (University of Missouri, St. Louis / Danforth Plant Science Center) "Regulation of Sphingosine Kinase by Phosphatidic Acid in Signaling Stomatal Closure in <i>Arabidopsis</i> "
10:55 am - 11:00 am	Discussion
11:00 am - 11:15 am	<b>Ingo Heilmann</b> (Martin-Luther-University Halle-Wittenberg) "A distinct PtdIns(4,5)P <sub>2</sub> pool that influences Rac-signaling in pollen tubes of <i>Nicotiana tabacum</i> "
11:15 am - 11:25 am	Discussion
11:25 am - 11:40 am	<b>Günther F.E. Scherer</b> (University Hannover) "Patatin-related Phospholipase A: Functions in Signal Transduction"
11:40 am - 11:45 am	Discussion
11:45 am - 12:00 pm	<b>Johanna M. Rankenberg</b> (Kent State University / University of Amsterdam) "Underlying molecular principles of interactions between signaling lipids and plant protein kinases"
12:00 pm - 12:05 pm	Discussion
12:05 pm - 12:20 pm	<b>Susanne Hoffmann-Benning</b> (Michigan State University) "Characterization of a phloem lipid binding protein with a role in long-distance lipid-mediated regulation of plant development"
12:20 pm - 12:25 pm	Discussion
12:25 pm - 12:30 pm	<b>Sam Wang</b> (University of Missouri, St. Louis / Donald Danforth Plant Science Center) "Closing Remarks"
12:30 pm	Lunch

1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	<u>Poster Session</u> ( <i>Posters 16-30</i> )
6:00 pm	Dinner
7:30 pm - 9:30 pm	<b>Lipid Molecules as Building Blocks for the Biogenesis of Organelles</b>
	Discussion Leader: <b>Hiroyuki Ohta</b> (Tokyo Institute of Technology)
7:30 pm - 7:35 pm	<b>Hiroyuki Ohta</b> (Tokyo Institute of Technology) "Opening remarks"
7:35 pm - 8:00 pm	<b>Gilles Basset</b> (University of Nebraska) "Exploring phylloquinone biosynthesis and metabolism through plant-prokaryotes phylogenomics"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:35 pm	<b>Rebecca Roston</b> (Michigan State University) "Mechanisms of lipid trafficking between the ER and the plastid"
8:35 pm - 8:45 pm	Discussion
8:45 pm - 9:00 pm	<b>Katarzyna J. Lorenc-Kukula</b> (University of North Texas) "Role of the <i>Arabidopsis</i> dihydroxyacetone phosphate reductase SFD1 in lipid metabolism and plant defense"
9:00 pm - 9:05 pm	Discussion
9:05 pm - 9:20 pm	<b>Ikuro Nishida</b> (Saitama University) "The <i>pect1-4</i> mutation affects mitochondrial lipid composition and respiration capacity in <i>Arabidopsis</i> at low temperature"
9:20 pm - 9:25 pm	Discussion
9:25 pm - 9:30 pm	<b>Hiroyuki Ohta</b> (Tokyo Institute of Technology) "Closing Remarks"

## WEDNESDAY

7:30 am - 8:30 am	Breakfast
9:00 am - 12:30 pm	<b>Lipid Body Formation and Regulation of Lipid Metabolism</b>
	Discussion Leader: <b>Ivo Feussner</b> (University of Goettingen)
9:00 am - 9:05 am	<b>Ivo Feussner</b> (University of Goettingen) "Opening Remarks"
9:05 am - 9:30 am	<b>Yi Guo</b> (Gladstone Institute of Cardiovascular Disease) "Lipid droplet biology in animals and yeast"
9:30 am - 9:35 am	Discussion
9:35 am - 10:00 am	<b>Quiang Hu</b> (Arizona State University) "Lipid Bodies in Algae: Biogenesis, function and implications for biofuels"
10:00 am - 10:05 am	Discussion

10:05 am - 10:35 am Coffee Break

10:35 am - 11:00 am **Jay Thelen** (University of Missouri)  
"A proteome and phosphoproteome perspective of seed development"

11:00 am - 11:05 am Discussion

11:05 am - 11:20 am **Ljudmilla Borisjuk** (IPK, Gatersleben)  
"Unravelling developmental and positional cues for oil storage in rapeseed by 3D-NMR imaging"

11:20 am - 11:25 am Discussion

11:25 am - 11:40 am **Chris Yohn** (Sapphire)  
"Identification of the elusive algal lipid accumulation trigger"

11:40 am - 11:45 am Discussion

11:45 am - 12:00 pm **Kenzo Nakamura** (Nagoya University)  
"Large scale screening of *Arabidopsis* mutants in seed oil synthesis by using a high-throughput real-time bioluminescence monitoring system"

12:00 pm - 12:05 pm Discussion

12:05 pm - 12:20 pm **Carl Andre** (Brookhaven Natl. Lab)  
"Feedback Regulation of Fatty Acid Synthesis Occurs by Biochemical Inhibition of Acetyl-CoA Carboxylase in *Brassica napus* Embryo-like Cell Cultures"

12:20 pm - 12:25 pm Discussion

12:25 pm - 12:30 pm **Ivo Feussner** (University of Goettingen)  
"Closing Remarks"

12:30 pm Lunch

1:30 pm - 4:00 pm Free Time

4:00 pm - 6:00 pm Poster Session (Posters 31-45)

6:00 pm Dinner

7:00 pm - 7:30 pm Business Meeting  
*Nominations for the next Vice Chair; Fill out Conference Evaluation Forms; Discuss future Site & Scheduling preferences; Election of the next Vice Chair*

7:30 pm - 9:30 pm **Analysis of Triacylglycerols and other Lipids**

Discussion Leader: **Ruth Welti** (Kansas State University)

7:30 pm - 7:35 pm **Ruth Welti** (Kansas State University)  
"Opening Remarks"

7:35 pm - 8:00 pm **Tony Larson** (University of York)  
"Analysis of seed oil triacylglycerols by LCMSMS: untargeted screening for novel modifications"

8:00 pm - 8:10 pm Discussion

8:10 pm - 8:35 pm **Jonathan Markham** (Donald Danforth Plant Science Center)  
"What sphingolipid profiling of mutants tells us about the function of

	sphingolipids in plants"
8:35 pm - 8:45 pm	Discussion
8:45 pm - 9:00 pm	<b>Young Jin Lee</b> (Iowa State University) "Mass Spectrometry Imaging for the Localization of Plant Lipids in High Spatial Resolution"
9:00 pm - 9:05 pm	Discussion
9:05 pm - 9:20 pm	<b>Ivo Feussner</b> (University of Goettingen) "Analysis of galactolipids by LC/MS/MS: a tool to identify new functions of plastidial lipids"
9:20 pm - 9:25 pm	Discussion
9:25 pm - 9:30 pm	<b>Ruth Welti</b> (Kansas State University) "Closing Remarks"

## THURSDAY

7:30 am - 8:30 am	Breakfast
<b>Lipids and Fatty Acids for Human Health and Industrial Purposes</b>	
9:00 am - 12:30 pm	Discussion Leader: <b>Anthony Kinney</b> (Dupont)
9:00 am - 9:05 am	<b>Anthony Kinney</b> (Dupont) "Opening Remarks"
9:05 am - 9:30 am	<b>Edgar Cahoon</b> (University of Nebraska) "Unraveling vitamin E biosynthesis for enhanced antioxidant content of oilseeds"
9:30 am - 9:35 am	Discussion
9:35 am - 10:00 am	<b>Toralf Senger</b> (BASF) "Engineering of healthy plants: What is the next silver bullet?"
10:00 am - 10:05 am	Discussion
10:05 am - 10:35 am	Coffee Break
10:35 am - 10:50 am	<b>Chaofu Lu</b> (Montana State University) " <i>Camelina sativa</i> as a platform for the production of biofuels and lubricants"
10:50 am - 10:55 am	Discussion
10:55 am - 11:10 am	<b>John L. Harwood</b> (Cardiff School of Biosciences) "Algal VLC-PUFAs: what are the potential health benefits?"
11:10 am - 11:15 am	Discussion
11:15 am - 11:25 am	<b>Harrie van Erp</b> (Washington State University) "Castor phospholipid: diacylglycerol acyl transferase facilitates engineering of hydroxy fatty acids"
11:25 am - 11:30 am	Discussion
11:30 am - 11:40 am	<b>Philip D. Bates</b> (Washington State University) "The <i>Arabidopsis</i> triacylglycerol synthesis pathway both inhibits and

	promotes accumulation of unusual fatty acids in developing transgenic seeds"
11:40 am - 11:45 am	Discussion
11:45 am - 12:00 pm	<b>John Shanklin</b> (Brookhaven Natl. Lab) "Unusual fatty acids: Achieving high levels of omega-7 fatty acids in transgenic plants"
12:00 pm - 12:05 pm	Discussion
12:05 pm - 12:20 pm	<b>John Ohlrogge</b> (Michigan State University) "What determines the >100 Fold Difference In Oil Content between Oil Palm and Date Palm?"
12:20 pm - 12:25 pm	Discussion
12:25 pm - 12:30 pm	<b>Anthony Kinney</b> (Dupont) "Closing Remarks"
12:30 pm	Lunch
1:30 pm - 4:00 pm	Free Time
4:00 pm - 6:00 pm	<u>Poster Session (Posters 46-67)</u>
6:00 pm	Dinner
7:30 pm - 9:30 pm	<b>Regulation of Plant Lipid Metabolism: A Target for Engineering</b> Discussion Leader: <b>Jan Jaworski</b> (Donald Danforth Plant Science Center) <b>Jan Jaworski</b> (Donald Danforth Plant Science Center) "Opening Remarks"
7:35 pm - 8:00 pm	<b>Doug Allen</b> (USDA-ARS, Donald Danforth Plant Science Center) "Insights into primary metabolism in oilseeds from labeling and flux analysis"
8:00 pm - 8:10 pm	Discussion
8:10 pm - 8:35 pm	<b>John Browse</b> (Washington State University) "Reductant supply can limit desaturase activities in transgenic plants"
8:35 pm - 8:45 pm	Discussion
8:45 pm - 9:00 pm	<b>Ana Paula Alonso</b> (Ohio State University) "Revealing targets for fatty acid synthesis using metabolic flux analysis"
9:00 pm - 9:05 pm	Discussion
9:05 pm - 9:20 pm	<b>Knut Meyer</b> (Dupont) "Targets for engineering seed oil biosynthesis identified through characterization of enhancer tag lines with a dominant low oil phenotype"
9:20 pm - 9:25 pm	Discussion
9:25 pm - 9:30 pm	<b>Jan Jaworski</b> (Donald Danforth Plant Science Center) "Closing Remarks"

**FRIDAY**

7:30 am - 8:30 am Breakfast

9:00 am Departure

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### Plant Lipids: Structure, Metabolism & Function (2011)

Name	Organization	Participation	Status
AHARONI, ASAPH	WEIZMANN INSTITUTE OF SCIENCES	Speaker	Registered
ALLEN, DOUG K	USDA-ARS/ DONALD DANFORTH PLANT SCIENCE CENTER	Speaker	Registered
ALLEN, JAMES W	UNIVERSITY OF NEBRASKA LINCOLN	Poster Presenter	Registered
ALONSO, ANA PAULA	OHIO STATE UNIVERSITY	Speaker	Registered
ANDRE, CARL	BROOKHAVEN NATIONAL LABORATORY	Speaker	Registered
BAI, SHUANGYI	WASHINGTON STATE UNIVERSITY	Poster Presenter	Registered
BASSET, GILLES	UNIVERSITY OF NEBRASKA	Speaker	Registered
BATES, PHILIP D	WASHINGTON STATE UNIVERSITY	Speaker	Registered
BAYON-DE-NOYER, SHEN Y	WASHINGTON STATE UNIVERSITY	Poster Presenter	Registered
BENNING, CHRISTOPH	MICHIGAN STATE UNIVERSITY	Chair	Registered
BERNARD, AMELIE	LABORATOIRE DE BIOGENESE MEMBRANAIRE	Speaker	Registered
BIN HAJI MOHD TAHA, AHMAD ISKANDAR	HOKKAIDO UNIVERSITY	Poster Presenter	Registered
BLACK, PAUL N	UNIVERSITY OF NEBRASKA	Speaker	Registered
BORISJUK , LJUDMILLA	INSTITUTE OF PLANT GENETICS AND CROP PLANT RESEARC	Speaker	Registered
BROWSE, JOHN A	WASHINGTON STATE UNIVERSITY	Speaker	Registered
BRUNE, DANIEL C.	ARIZONA STATE UNIVERSITY	Poster Presenter	Registered
BUCHER, MARCEL	UNIVERSITY OF COLOGNE	Poster Presenter	Registered
BUER, BENJAMIN	UNIVERSITY OF COLOGNE	Poster Presenter	Registered
BURGOS, ASDRUBAL	MAX PLANCK INSTITUTE FOR MOLECULAR PLANTPHYSIOLOGY	Poster Presenter	Registered
CAHOON, EDGAR	UNIVERSITY OF NEBRASKA-LINCOLN	Vice Chair	Registered
CHAPMAN, KENT	UNIVERSITY OF NORTH TEXAS	Speaker	Registered
CHEN, HUI	DONALD DANFORTH PLANT SCIENCE CENTER	Poster Presenter	Registered
CHEN, MING	UNIVERSITY OF NEBRASKA LINCOLN	Speaker	Registered
CHYE, MEE LEN	UNIVERSITY OF HONG KONG	Speaker	Registered
COTTON, KIMBERLY L	WASHINGTON STATE UNIVERSITY	Poster Presenter	Registered
DENOLF, PETER	BAYER CROPSCIENCE	Attendee	Registered
DIRUSSO, CONCETTA C	UNIVERSITY OF NEBRASKA - LINCOLN	Attendee	Registered
DOERMANN, PETER	UNIVERSITY OF BONN	Discussion Leader	Registered
EDSTAM, MONIKA M	LINKOPING UNIVERSITY	Poster Presenter	Registered

FAN, JILIAN	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
FAURE, JEAN-DENIS	INRA AGROPARISTECH	Speaker	Registered
FEUSSNER, IVO	GEORG-AUGUST-UNIVERSITY	Discussion Leader	Registered
FUJIKI, YUKI	SAITAMA UNIVERSITY	Poster Presenter	Registered
GIERTH, MARCUS	UNIVERSITY OF COLOGNE	Speaker	Registered
GILLASPY, GLENDA	VIRGINIA TECH	Speaker	Registered
GUO, LIANG	UNIVERSITY OF MISSOURI-SAINT LOUIS/DDPSC	Speaker	Registered
GUO, YI	J. DAVID GLADSTONE INSTITUTE	Speaker	Registered
HAN, OKSOO	CHONNAM NATIONAL UNIVERSITY	Poster Presenter	Registered
HARRISON, MARIA	BOYCE THOMPSON INSTITUTE FOR PLANT RESEARCH	Poster Presenter	Registered
HARWOOD, JOHN L	CARDIFF UNIVERSITY	Speaker	Registered
HEILMANN, INGO	MARTIN-LUTHER-UNIVERSITY HALLE-WITTENBERG	Speaker	Registered
HIRSCHI, KENDAL	BAYLOR COLLEGE OF MEDICINE	Poster Presenter	Registered
HOFFMANN-BENNING, SUSANNE	MICHIGAN STATE UNIVERSITY	Speaker	Registered
HORN, PATRICK J	UNIVERSITY OF NORTH TEXAS	Poster Presenter	Registered
HU, QIANG	ARIZONA STATE UNIVERSITY	Speaker	Registered
JAWORSKI, JAN	DONALD DANFORTH PLANT SCIENCE CENTER	Chair	Registered
KANEDA, MINAKO	UNIVERSITE DE MONTREAL	Poster Presenter	Registered
KANG, SHIN GENE	DONALD DANFORTH PLANT SCIENCE CENTER	Poster Presenter	Registered
KEEREETAWEET, JANTANA	UNIVERSITY OF NORTH TEXAS	Poster Presenter	Registered
KIMBERLIN, ATHEN	UNIVERSITY OF NEBRASKA-LINCOLN	Poster Presenter	Registered
KINNEY, ANTHONY J	DUPONT EXPERIMENTAL STATION	Discussion Leader	Registered
KOLOMIETS, MIKE V	TEXAS A&M UNIVERSITY	Poster Presenter	Registered
KOO, ABRAHAM JK	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
KOOIJMAN, EDGAR E	KENT STATE UNIVERSITY	Poster Presenter	Registered
KOSMA, DYLAN K	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
KUNST, LJERKA	UNIVERSITY OF BRITISH COLUMBIA	Discussion	Registered

		Leader	
LABUSCH, CORINNA	UNIVERSITY OF HANNOVER	Poster Presenter	Registered
LARSON, TONY	UNIVERSITY OF YORK	Speaker	Registered
LEE, YOUNG JIN	IAWA STATE UNIVERSITY	Speaker	Registered
LI, MAOYIN	UNIVERSITY OF MISSOURI-ST. LOUIS	Poster Presenter	Registered
LI, XIANGJUN	UNIVERSITY OF NEBRASKA-LINCOLN	Poster Presenter	Registered
LIU, BENSHEUNG	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
LORENC-KUKULA, KATARZYNA J	UNIVERSITY OF NORTH TEXAS	Speaker	Registered
LOU, YING	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
LU, CHAOFU	MONTANA STATE UNIVERSITY	Poster Presenter	Registered
MANAS FERNANDEZ, AURORA	UNIVERSITY OF BRITISH COLUMBIA	Poster Presenter	Registered
MARILLIA, ELIZABETH F	PBI/NRC	Poster Presenter	Registered
MARKHAM, JONATHAN E	DONALD DANFORTH PLANT SCIENCE CENTER	Speaker	Registered
MENDEZ, MICHAEL	SAPPHIRE ENERGY INC	Attendee	Registered
MEYER, KNUT	DUPONT AGRICULTURAL BIOTECHNOLOGY	Speaker	Registered
MOELLERING, ERIC R	SYNTHETIC GENOMICS, INC.	Poster Presenter	Registered
MONGRAND, SEBASTIEN	UNIVERSITY OF BORDEAUX	Speaker	Registered
MORITA, NAOKI	NATL INST ADV IND SCI & TECHNOL (AIST)	Poster Presenter	Registered
NAKAMURA, YUKI	MAX-PLANCK-INSTITUTE FOR PLANT BREEDING RESEARCH	Poster Presenter	Registered
NAKAMURA, KENZO	NAGOYA UNIVERSITY	Speaker	Registered
NEOGI, PURNIMA	UNIVERSITY OF NORTH TEXAS	Poster Presenter	Registered
NGUYEN, TAM H	UNIVERSITY OF NEBRASKA-LINCOLN	Poster Presenter	Registered
NIKOLAU, BASIL	IOWA STATE UNIVERSITY	Poster Presenter	Registered
NISHIDA, IKUO	SAITAMA UNIVERSITY	Speaker	Registered
OHLROGGE, JOHN B	MICHIGAN STATE UNIVERSITY	Speaker	Registered
OHTA, HIROYUKI	TOKYO INSTITUTE OF TECHNOLOGY	Discussion Leader	Registered
PADDOCK, TROY	NATIONAL RENEWABLE ENERGY LABRATORY	Poster Presenter	Registered
PETERS, CARLOTTA	UM-ST LOUIS	Speaker	Registered

PLESKOT, ROMAN	INSTITUTE OF EXPERIMENTAL BOTANY AS CR, V. V. I.	Poster Presenter	Registered
PUTTICK, DEBRA M	LINNAEUS PLANT SCIENCES INC	Poster Presenter	Registered
RANKENBERG, JOHANNA M	KENT STATE UNIVERSITY	Speaker	Registered
RAWAT, RICHA	SUNY STONY BROOK	Poster Presenter	Registered
ROBERTS, NICK	AGRESEARCH	Poster Presenter	Registered
ROLLETSCHER, HARDY	INSTITUTE OF PLANT GENETICS AND CROP PLANT RESEARC	Attendee	Registered
ROSTON, REBECCA	MICHIGAN STATE UNIVERSITY	Speaker	Registered
ROWLAND, OWEN	CARLETON UNIVERSITY	Speaker	Registered
RYU, STEPHEN B	KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECH	Poster Presenter	Registered
SAKURADANI, EIJI	KYOTO UNIVERSITY	Poster Presenter	Registered
SANGHANI, PARESH C	DOW AGROSCIENCES LLC	Attendee	Registered
SCHERER, GUENTHER F. E.	LEIBNIZ UNIVERSITAET HANNOVER	Speaker	Registered
SENGER, TORALF	BASF PLANT SCIENCE COOMPANY GMBH	Speaker	Registered
SENGODON, PADMAVATHI	TEXAS A&M UNIVERSITY	Poster Presenter	Registered
SHAH, JYOTI	UNIVERSITY OF NORTH TEXAS	Speaker	Registered
SHANKLIN, JOHN	BROOKHAVEN NATIONAL LAB	Speaker	Registered
SHIVA, SUNITHA	KANSAS STATE UNIVERSITY	Poster Presenter	Registered
SIMPSON, JEFFREY P	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
SMITH, MARK A	NRC PLANT BIOTECHNOLOGY INSTITUTE	Poster Presenter	Registered
SNAPP, ANNA R	MONTANA STATE UNIVERSITY	Poster Presenter	Registered
SZYMANSKI, JEDRZEJ	MAX PLANCK INSTITUTE	Speaker	Registered
TANOUYE, RYO	UNIVERSITY OF TOKYO	Poster Presenter	Registered
THELEN, JAY	UNIVERSITY OF MISSOURI	Speaker	Registered
TJELLSTROM, HENRIK	MICHIGAN STATE UNIVERSITY	Poster Presenter	Registered
TOMBOKAN, XENIA	BRUKER OPTICS INC.	Poster Presenter	Registered
VAN ERP, HENRICUS E.G.	WSU	Speaker	Registered
VAN MOOY, BENJAMIN	WOODS HOLE OCEANOGRAPHIC INSTITUTION	Speaker	Registered
VENABLE, MARK E	APPALACHIAN STATE UNIVERSITY	Attendee	Registered
VON BERLEPSCH, SIMON	UNIVERSITY OF COLOGNE	Poster	Registered

		Presenter	
<b>VU, HIEU S</b>	KANSAS STATE UNIVERSITY	Poster Presenter	Registered
<b>WANG, PENG</b>	UNIVERSITY OF NEBRASKA-LINCOLN	Poster Presenter	Registered
<b>WANG, SAM</b>	DONALD DANFORTH PLANT SCIENCE CENTER	Discussion Leader	Registered
<b>WANG, GELIANG</b>	UNIVERSITY OF MISSOURI - ST LOUIS	Poster Presenter	Registered
<b>WELTI, RUTH</b>	KANSAS STATE UNIVERSITY	Vice Chair	Registered
<b>WHITTLE, EDWARD J</b>	BROOKHAVEN NATIONAL LAB	Poster Presenter	Registered
<b>XU, CHANGCHENG</b>	BROOKHAVEN NATIONAL LABORATORY	Poster Presenter	Registered
<b>YAMAOKA, YASUYO</b>	SAITAMA UNIVERSITY	Speaker	Registered
<b>YAN, YI</b>	BROOKHAVE NATIONAL LAB	Attendee	Registered
<b>YAN, YUANXIN</b>	TEXAS A&M UNIVERSITY	Poster Presenter	Registered
<b>YOHN, CHRISTOPHER</b>	SAPPHIRE ENERGY	Speaker	Registered
<b>YU, OLIVER</b>	DANFORTH PLANT SCIENCE CENTER	Poster Presenter	Registered
<b>YU, XIAOHONG</b>	STONYBROOK UNIVERSITY	Poster Presenter	Registered
<b>ZARSKY, VIKTOR</b>	CHARLES UNIVERSITY AND IEB ASCR	Poster Presenter	Registered
<b>ZBIERZAK, ANNA MARIA</b> <b>127 Attendees</b>	IMBIO, UNIVERSITY OF BONN	Speaker	Registered