SOCIAL HOUR MUSIC
Purdue String Quartet
   Justin Lee, violin
   Myranda Moye, violin
   Taylor Winpenny, cello
   Andrew Zeller, viola

DINNER MUSIC
John Wellman, piano

EXCELLENCE IN RESEARCH AWARDS DINNER
October 31, 2016

OPENING REMARKS
Suresh Garimella
Executive Vice President for Research and Partnerships
Recognition of First-time Bronze Acorn Awards

PRESENTATION OF AWARDS
Mitch Daniels
President
Herbert Newby McCoy Award
Arden L. Bement Jr. Award

DINNER
Deba Dutta
Provost
Morrill Awards
University Awards

SEED FOR SUCCESS AWARD CITATIONS
Mike Piggott
Master of Ceremonies
Jian-Kang Zhu  
Distinguished Professor of Plant Biology  
Departments of Horticulture and Landscape Architecture, and Biochemistry  

The Herbert Newby McCoy Award recognizes Jian-Kang Zhu for his groundbreaking contributions to our understanding of the mechanisms and role of epigenetics in stress biology.

Arvind Varma  
R. Games Slayter Distinguished Professor of Chemical Engineering  

The Arden L. Bement Jr. Award recognizes Arvind Varma for his pioneering contributions to the discipline of chemical-reaction engineering.
MORRILL AWARDS

The Morrill Award recognizes those whose careers have demonstrated excellence in their teaching, research and engagement missions, as well as in demonstrating synergies among them.

MORRILL AWARD RECIPIENTS 2016

Monika Ivantysynova
The Maha Fluid Power Systems Professor, School of Mechanical Engineering and Department of Agricultural and Biological Engineering
For her advances in the design of current hydraulic actuation systems resulting in improved reliability, and reduction of fuel consumption, noise emissions and system costs.

Douglas Powell
Distinguished Professor of Human Development and Family Studies
For his development of interventions to enhance the skills of parents and teachers in promoting successful child development resulting in the improved literacy and language skills of preschool children.

Phillip Wankat
The Clifton L. Lovell Distinguished Professor of Chemical Engineering and Engineering Education
For his pioneering effort in the emerging discipline of engineering education through groundbreaking research articles, workshops, editorial work, and course design and for his technical research on mass transfer and separation.

UNIVERSITY AWARDS

July 2015 through June 2016

COLLEGE OF AGRICULTURE

Linda Prokopy
Spirit of the Land-Grant Mission Award
For her work in soil and water resources management.

Jianxin Ma
Purdue University Agricultural Research Award
For significant contributions using comparative, computational and experimental genomic approaches to understand genetic diversity and complex traits of soybeans.

COLLEGE OF EDUCATION

Yukiko Maeda
Outstanding Faculty Discovery Award, Associate Level
For high-quality publications to high-impact journals, extensive work on grant funded projects and contributions to the doctoral program.

Mandy Rispoli
Outstanding Faculty Discovery Award, Associate Level
For numerous publications and submissions as well as grant submissions and scholarly contributions to her field.
Eric Deemer
Outstanding Faculty Discovery Award, Assistant Level
For his strong record of publications, funded research, submitted grant proposals, editorial contributions, and work with doctoral students.

Marcia Gentry
Outstanding Faculty Discovery Award, Professor Level
For her consistently outstanding record of funded research and publications, work with numerous doctoral students, and contributions to her field.

COLLEGE OF ENGINEERING

Xiulin Ruan
Early Career Research Award
For his substantial contributions to theory and simulations of nanoscale heat transfer and thermal radiation and for his demonstrated talent for merging fundamental physical principles with evolving technological topics.

Ji-Xin Cheng
Research Award
For his exceptional capability of creating new science to combat significant biomedical problems and enhance understanding — specifically label-free medical imaging and bioanalysis — through the establishment of highly interdisciplinary research teams.

COLLEGE OF HEALTH AND HUMAN SCIENCES

Kathleen Abrahamson
Early Career Research Achievement Award
For excellence in scientific and scholarly contributions in her early years at Purdue.

Ravi Krishnan
Career Research Achievement Award
For excellence in research throughout his career.

Steve Wilson
Lorene Burkhart Award for Excellence in Research about Families
For outstanding research that serves to strengthen the capacity of families to provide a nurturing environment for their family members.

KRANNERT SCHOOL OF MANAGEMENT

Fabrice Lumineau
Jay N. Ross Young Faculty Scholar Award
For significant scholarly accomplishment in research and future research potential.

Susan Lu
John and Mary Willis Young Faculty Scholar Award
For significant scholarly accomplishment in research and future research potential.

COLLEGE OF LIBERAL ARTS

Patricia A. Sullivan
Discovery Excellence in Research Award for the Humanities
For national scholarly reputation and impact in the field of professional writing and in rhetoric and composition studies.

S. Laurel Weldon
Discovery Excellence in Research Award for the Social Sciences
For widely recognized impact on the discipline of political science as well as for scholarship and leadership internationally in the areas of comparative social policy and social movements.
LIBRARIES

Michael Witt
*College of Libraries Research Award*
For scholarship focused on defining methods and tools to provide discovery and access to new collections and for initiating work on managing research data collections, citation, curation and preservation.

COLLEGE OF PHARMACY

Val J. Watts
*Chaney Faculty Scholar Award*
For outstanding research, scholarship and professional accomplishments in pharmacy and the pharmaceutical sciences.

Markus A. Lill
*Chaney Family Early Scholar Award*
For the impact and potential of his research program during the first 10 years of his career.

COLLEGE OF SCIENCE

Gabor Csathy
*Research Award*
For his very careful and insightful work on the FQH effect in cutting-edge science that has produced and will continue to produce high-impact results in condensed matter physics.

Dongyan Xu
*Research Award*
For his study and development of system virtualization technologies to enable advanced capabilities in computer malware defense, cyber forensics and virtual infrastructure hosting in the cloud.

Zhao-Qing Luo
*Research Award*
For his world-class research program aimed at understanding the cellular and molecular basis of disease caused by Legionella pneumophila as well as other important bacterial pathogens.

PURDUE POLYTECHNIC INSTITUTE

Eric Dietz
*Outstanding Faculty in Discovery Award*
For his leadership in Purdue University homeland security areas of focus, including energy security, healthcare response and emergency response effectiveness.

COLLEGE OF VETERINARY MEDICINE

Daniel Hogan
*2016 Zoetis Research Award*
For outstanding research on thrombosis and for developing a better understanding of the appropriate use of antithrombotic drugs in dogs and cats.

Suresh Mittal
*College of Veterinary Medicine Excellence in Research Award*
For exceptional success in conducting innovative research in molecular virology and vaccines that has significant national and international impact and enhances the recognition of the College of Veterinary Medicine and Purdue University.

J. Paul Robinson
*College of Veterinary Medicine Excellence in Research Award*
For exceptional success in conducting innovative research in flow cytometry and imaging that has significant national and international impact and enhances the recognition of the College of Veterinary Medicine and Purdue University.
SEED FOR SUCCESS AWARDS

The Seed for Success Award is given in recognition of the accomplishments of principal investigators and co-principal investigators in obtaining an award of $1 million or more from an external sponsor. The following acknowledges fiscal year 2016 single-year and multi-year award notifications.

**RECIPIENTS 2016**

Angela R. Abbott, Heather A. Eicher-Miller, Dennis A. Savaiano, Melissa Maulding, from U.S. Department of Agriculture, Snap Ed/FNP Project, $1,506,728


Darcy M. Bullock, from U.S. Department of Transportation, Joint Transportation Research Program Operating Budget Request FY2017, $7,990,349

Ryan A. Cabot, from National Institute of Child Health and Human Development (NIH), Developmental Requirements of SWI/SNF Chromatin Remodeling Complexes in Porcine Embryos, $1,641,026


Monica E. Cardella, Sean Brophy, Morgan M. Hynes, Tamara J. Moore, Senay Purzer, from National Science Foundation, Integrated STEM and Computing Learning in Formal and Informal Settings for Kindergarten to Grade 2, $2,044,930

Ji-Xin Cheng, from National Heart, Lung and Blood Institute (NIH), In Vivo Photoacoustic Sensing of Lipid-Laden Plaque, $2,127,173


R. Graham Cooks, from U.S. Department of Energy, Charged Microdroplets in Air: Characterization and Use in Surface Functionalization and Nanomaterials Preparation, $1,776,345

Monica F. Cox, Joyce B. Main, from National Science Foundation, Collaborative Research: Why We Persist: An Intersectional Approach to Characterizing and Examining the Experiences of Women of Color Tenure-Track Faculty in Engineering, $1,131,464

Meng Cui, from National Institute of Neurological Disorders and Strokes (NIH), High Resolution Deep Tissue Calcium Imaging with Large Field of View Wavefront Correction, $1,404,827

Jennifer J. DeBoer, Edward J. Berger, Jeffrey F. Rhoads, from National Science Foundation, IUSE: Understanding and Supporting Mechanical Engineering Undergraduate Student and Faculty Engagement with an Active, Blended and Collaborative (ABC) Learning Environment, $1,400,000

Edward J. Delp III, from Air Force Research Laboratory, Media Forensics Integrity Analytics, $4,045,790

Brian Dilkes, Gurmukh S. Johal, from National Science Foundation, The Genetic and Genomic Exploration of the Maize HR Response, $1,934,074

Natalia Doudareva, from National Science Foundation, Evolution of Specialized Metabolite Biosynthetic Pathways in the Lamiaceae: Sources of Chemical Diversity for Molecules Essential for Human Use and Plant Defense, $1,369,992


Christopher I. Eckhardt, from National Institute on Alcohol Abuse and Alcoholism (NIH), Mechanisms of Alcohol-Facilitated Intimate Partner Violence, $1,335,101

Marxa L. Figueiredo, from National Cancer Institute (NIH), Disrupting Tumor/Bone Malignant Interactions with Multifunctional Cytokine Sonodelivery, $1,773,626

Ananth Y. Grama, Saurabh Bagchi, Somali Chaterji, from National Institute of Allergy and Infectious Diseases (NIH), Continued Development and Maintenance of the MG-RAST Metagenomics Pipeline, $3,656,042

Stacey L. Halum, Sherry L. Harbin, from National Institute on Deafness and Other Communication Disorders (NIH), Muscle Progenitor Cell-Based Implants for Dynamic Laryngeal Muscle Reconstruction, $2,182,110


Marlene O. Heeg, from Intercept Pharmaceuticals Inc. and Salix Pharmaceuticals Inc., 2016 CLDF EXPAND National Educational Initiative, $1,500,000

Stephen D. Heister, Jay P. Gore, Timothée L. Pourpoint, Carlo Scalo, from Rolls-Royce Inc., Purdue UTC in Advanced Thermal Management System, $2,071,000

Randall A. Hountz, Mark K. Clare, from Agency for Healthcare Research and Quality, Midwest Small Practice Care Transformation Research Alliance, $1,256,568

Randall A. Hountz, Allison Bryan-Jungels, from Centers for Medicare and Medicaid Services, Great Lakes Practice Transformation Network, $4,617,634


Pedro Irazoqui, Matthew P. Ward, from Glaxo Smith Kline, GSK Innovation Challenge: Closed-Loop Neuromodulation of Urinary Incontinence, $1,000,000

Carla C. Johnson, from Department of the Army, Battelle – Army Educational Outreach Program Cooperative Agreement, $5,376,189

Panagiota Karava, Ilias Bilionis, Jianghai Hu, Robert W. Proctor, Athanasios Tzempelikos, from National Science Foundation, Cyberses: Type 2: Human-Centered Systems for Cyber-Enabled Sustainable Buildings, $1,200,000

Shubitha S. Kever, from U.S. Department of Education, TRIO Student Support Services at IPFW, $1,100,000

Chang H. Kim, Harm HogenEsch, from National Institute of Allergy and Infectious Diseases (NIH), Homing of Functionally Distinct ILC Subsets, $1,894,175

Jane M. Kirkpatrick, from Health Resources and Services Administration, Health Center Cluster, $1,926,709

Jane M. Kirkpatrick, Pamela M. Aaltonen, from National Center for Health Services Resources, Health Center Cluster and Expanded Services Supplemental Funding, $5,301,006
Regina A. Kreisle, from Indiana University, *IUSM-Lafayette General Fund*, $2,568,945


Xiaoqi Liu, Timothy L. Ratliff, from National Cancer Institute (NIH), *Overcoming Drug Resistance of Castration-Resistant Prostate Cancer*, $1,302,434

Xiaoqi Liu, Timothy L. Ratliff, from National Cancer Institute (NIH), *Enhancing Anti-Neoplastic Activity of Metformin in Prostate Cancer*, $1,785,542

Maureen C. McCann, Rakesh Agrawal, J. Eric Deitz, Suresh V. Garimella, Hilka I. Kenttämaa, Gozdem Kilaz, Vilas G. Pol, Timothée L. Pourpoint, Pankaj Sharma, Rodney W. Trice, Justin A. Weibel, Clifford J. Wojtaliewicz, Dongyan Xu, Peide Ye, Jeffrey P. Youngblood, Xiangyu Zhang, from Office of Naval Research, *NEPTUNE Center for Power and Energy Research*, $2,000,000

Eric T. Matson, J. Eric Dietz, Anthony H. Smith, John A. Springer, Julia Taylor Rayz, from Information and Communication Tech Promotion, Korean Software Square, $1,815,000

Sceema Mattoo, from National Institute of General Medical Science (NIH), *Role of Fic Proteins in Cellular Signaling*, $1,507,601


Suresh K. Mittal, from National Institute of Allergy and Infectious Diseases (NIH), *Adenoviral Vector-based Pandemic Influenza Vaccine*, $1,564,716

Dallas T. Morisette, from Army Research Laboratory, *Revolutionary Innovations in SiC Power Devices*, $2,043,476


Dimitrios Peroulis, Venkataramanan Balakrishnan, Jeffery L. Gray, from American University of the Middle East, *Curriculum Development and Laboratory Support Package: Electrical Engineering Program*, $1,712,429

Dimitrios Peroulis, Venkataramanan Balakrishnan, Jeffery L. Gray, from American University of the Middle East, *Curriculum Development and Laboratory Support Package: Computer Engineering Program*, $1,227,383

Dimitrios Peroulis, Charilaos Mousoulis, from Landauer, *MEMS-Scale Accumulating Radiation Sensor Program*, $1,723,589

R. Byron Pipes, from Indiana Economic Development Corporation, *IACMI – Institute for Advanced Composites Manufacturing Innovation*, $15,000,000


Karen I. Plaut, from Indiana Corn Marketing Council, *Sponsorship Agreement between Indiana Corn Marketing Council and Purdue University*, $1,000,000

Karen I. Plaut, from Indiana Corn Marketing Council, *Research Agreement between Indiana Corn Marketing Council and Purdue University*, $1,000,000
Karen I. Plaut, from Indiana Soybean Alliance, *Research Agreement between Indiana Soybean Alliance and Purdue University*, $1,000,000

Karen I. Plaut, from Indiana Soybean Alliance, *Sponsorship Agreement between Indiana Soybean Alliance and Purdue University*, $1,000,000

Timothy L. Ratliff, from National Cancer Institute (NIH), *Cancer Center Support Grant*, $7,334,397


Leonid P. Rokhinson, from U.S. Department of Energy, *Engineering Topological Superconductivity Toward Braiding Majorana Excitations*, $1,245,000

Michael G. Rossmann, from National Science Foundation, *X-ray Determinations of Proteins and Viruses*, $1,584,059


Xiulin Ruan, Mark S. Lundstrom, from Defense Advanced Research Projects Agency, *First Principles-Based Predictive Design of Thermoelectric Materials under Large Temperature Gradients*, $1,010,948


Alejandro H. Strachan, Weinong W. Chen, Marisol Koslowski, Volkan Ortalal, Steven F. Son, from Office of Naval Research, *PC@Xtreme – Predictive Chemistry and Physics at Extreme Temperature and Pressure: Molecules, Crystals and Microstructures*, $4,456,157

Elizabeth A. Strickland, Michael G. Heinz, from National Institute on Deafness and Other Communications Disorders (NIH), *Temporal Effects in Forward Masking, Suppression, and Simultaneous Masking*, $1,506,728


Satish V. Ukkusuri, Milind Kulkarni, Seungyoon Lee, from National Science Foundation, *Hazards SEES: Bridging Information, Uncertainty and Decision-Making in Hurricanes Using an Interdisciplinary Perspective*, $2,475,000

Rosa M. Villarreal, from U.S. Department of Education, *Horizons Student Support Services*, $1,841,585

Connie M. Weaver, George P. McCabe, Kathleen Hill Gallant, from National Heart, Lung and Blood Institute (NIH), *DASH-Sodium Trial in Adolescents*, $8,625,440

Peide Ye, Xianfan Xu, Dmitry Y. Zemlyanov, from National Science Foundation, *EFRI 2-DARE: Phosphorene, an Unexplored 2D High-mobility Semiconductor*, $2,000,000

Xiangyu Zhang, Dongyan Xu, from Defense Advanced Research Projects Agency, *Transparent Computing*, $1,100,000