2009

**T-cell Mediated Delivery of Gold Nanoparticles for Externally Triggered Photothermal Cancer Therapy**
Rebekah Drezek, Rice University
Aaron Foster, Baylor College of Medicine

**Synthetic Tuning of a Breast Cancer-controlling Network**
Oleg Igoshin, Rice University
Michael Mancini, Baylor College of Medicine
Gabor Balazsi, UT M. D. Anderson Cancer Center

**Development of High Resolution Endoscopes for In Vivo Imaging of the Inner Ear**
Tomasz Tkaczyk, Rice University
John Oghalai, Baylor College of Medicine

**Event**
**Early Disease Detection: Biomarker Discovery to Clinical Application**
John McDevitt, Rice University
Christie Ballantyne, Baylor College of Medicine
David Gorenstein, UT Health Science Center at Houston

2010

**Single cell dynamics of the white/opaque epigenetic switch in Candida albicans**
Matthew Bennett, Rice University
Kresimir Josic, University of Houston
Michael Gustin, Rice University

**Molecular Activated Stealth Chemotherapy (MASC) Nanoparticles for Cancer Treatment**
Rebekah Drezek, Rice University
Liz Bikram, University of Houston

**Structure determination of novel targets identified from a multi-drug resistant pathogen**
Yousif Shamoo, Rice University
Cesar Arias, University of Texas Health Science Center at Houston

**Event**
**Planning a Center for NeuroEngineering**
Peter Saggau, Baylor College of Medicine
Steven Cox, Rice University
Richard Baraniuk, Rice University
Nitin Tandon, University of Texas Health Science Center at Houston
Robert Raphael, Rice University

2011

**Developing Split Protein Biocatalysts and Reporters for Translational Systems and Synthetic Biology**
Jonathan Silberg, Rice University
Lynn Zechiedrich, Baylor College of Medicine
Anthony Maresso, Baylor College of Medicine

**A Bio-Nano-Chip for Salivary Anticonvulsant Drug Assay in Epilepsy Patients**
Giridhar Kalamangalam, UT Health Science Center at Houston
John McDevitt, Rice University

**Engineered, Affordable Glycans as New Antimicrobials**
George Bennett, Rice University
Mary Estes, Baylor College of Medicine

**Event**
**Multicellular Self-Organization Meeting**
Amina Qutub, Rice University
Oleg Igoshin, Rice University
Gábor Balazsi, MD Anderson Cancer Center
Waleed Gaber, Texas Children’s Hospital

2012

**New Antimicrobials Through MEP Pathway Inhibition**
Janet Braam, Rice University
Heidi Kaplan, University of Texas Medical School

**Multi-layered Cardiac Patches from Dynamic Surfaces**
Jeffrey Jacot, Rice University
Rafael Verduzco, Rice University
Iki Adachi, Baylor College of Medicine/Texas Children’s Hospital

**Metabolic Signatures of Cancer Stem Cells**
Ching Lau, Baylor College of Medicine
Ka-Yiu San, Rice University

**Event**
**Telehealth Research Institute: Mission, Strategy, and Structure**
Robert Satcher, University of Texas MD Anderson Cancer Center
Jan Odegard, Rice University
Michael Twa, University of Houston
Cindy Farach-Carson, Rice University

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<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Recipients</th>
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<tbody>
<tr>
<td>2013</td>
<td><strong>Enhanced Cancer Detection through Development of Novel Immunoprobes</strong></td>
<td>Kathleen Beckingham, Rice University</td>
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<td>Robert Bast, University of Texas MD Anderson Cancer Center</td>
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<td></td>
<td><strong>Non-invasive MR Colonoscopy and Early Detection of Colon Cancer by Targeted Hyperpolarized Silicon Nanoparticles</strong></td>
<td>Pratip Bhattacharya, University of Texas MD Anderson Cancer Center</td>
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<td>Daniel Carson, Rice University</td>
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<td><strong>High-content Quantitative Imaging and Flow-based Remodeling of in vitro Vascularized Engineered Tissues</strong></td>
<td>Jordan Miller, Rice University</td>
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<td>Mary Dickinson, Baylor College of Medicine</td>
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<td><strong>Imaging the delivery and therapeutic response of protease-activated virus nanotherapeutics in a model of cancer metastasis</strong></td>
<td>Junghae Suh, Rice University</td>
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<td>Eva Sevick, University of Texas Health Science Center-Houston</td>
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<td><strong>Early Stage Colorectal Cancer Screening via Ultraspecific Detection of Circulating Nucleic Acid Biomarkers</strong></td>
<td>David Zhang, Rice University</td>
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<td>John Holcomb, University of Texas Health Science Center at Houston</td>
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<td><strong>Event</strong></td>
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<td><strong>Plasmon-hybrid Superstructures for Functionally Biomimetic Light-Driven Processes</strong></td>
<td>Christy Landes, Rice University</td>
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<td>Stephan Link, Rice University</td>
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<td>Neal Waxham, University of Texas Medical School-Houston</td>
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<td>Richard Willson, University of Houston</td>
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<td>2014</td>
<td><strong>Local Dual Delivery of Antifungals and Growth Factors for Treatment of Necrotizing Invasive Mold Infections</strong></td>
<td>Antonios Mikos, Rice University</td>
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<td>Dimitrios Kontoyiannis, University of Texas MD Anderson Cancer Center</td>
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<td><strong>Nanoparticle prophylaxis protection from chemotherapy ototoxicity and hearing loss</strong></td>
<td>Fred Pereira, Baylor College of Medicine</td>
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<td>James Tour, Rice University</td>
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<td><strong>Identifying the molecular basis of CO&lt;sub&gt;2&lt;/sub&gt;chemosensitivity via microfluidic characterization and cell sorting</strong></td>
<td>Jacob Robinson, Rice University</td>
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<td>Russell Ray, Baylor College of Medicine</td>
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<td><strong>Maximizing therapeutic gain from metallic nanoparticle-radiation interaction via rational design</strong></td>
<td>Eugene Zubarev, Rice University</td>
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<td>Sunil Krishnan, University of Texas MD Anderson Cancer Center</td>
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<td><strong>Event</strong></td>
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<td><strong>TMC-GCC Collaborative Workshop: Regenerative Medicine in Neuroscience and Neuroengineering</strong></td>
<td>Charles S. Cox, Jr., University of Texas Health Science Center at Houston</td>
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<td>Jane Grande-Allen, Rice University</td>
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<td>Behnaam Aazhang, Rice University</td>
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<td>Benjamin Deneen, Baylor College of Medicine</td>
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2009-2015 John S. Dunn Collaborative Research Award Program Recipients

2015

**Engineering E. coli for Temperature Independent and Light-activated Secretion of Colanic Acid to Enable Fundamental and Translational Studies of a Novel Gut Microbiota-mediated Longevity Pathway**
Jeffrey Tabor, Rice University
Meng Wang, Baylor College of Medicine

**Mini Mechanobiology: Mechanical Testing and Organ Culture of Rodent Heart Valves**
Jane Grande-Allen, Rice University
Dianna Milewicz, University of Texas Health Science Center Houston

**Linking Transcriptional Regulation of Signaling Pathway Components to Embryonic Patterning**
Aryeh Warmflash, Rice University
Ido Golding, Baylor College of Medicine

**Genes in Context: Using Genome Editing to Reveal how Molecular, Neural, and Social Factors Orchestrate Variation in Drosophila Aggressive Behavior**
Julia Saltz, Rice University
Herman Dierick, Baylor College of Medicine

2016

**Quantitative Assessment of Liver-Directed In Vivo Genome Editing with CRISPR/Cas9**
Gang Bao, Rice University
William Lagor, Baylor College of Medicine

**Monitoring intracellular temperature in cancer cells using metal complexes**
Angel A. Marti-Arbona, Rice University
Steven Curley, Baylor College of Medicine

**Decoding the gene regulatory mechanism underlying fate determination of hematopoietic stem progenitor cells**
José Onuchic, Rice University
Yun Huang, Institute for Biosciences and Technology, Texas A&M-HSC

**Cellular level, functional brain imaging using multi-probe, snapshot image spectroscopy**
Tomasz Tkaczyk, Rice University
Kimberley Tolias, Baylor College of Medicine

**Event**

**TMC-GCC Collaborative Symposium: Metabolism in Cancer**
Pratip Bhattacharya, MD Anderson
Deepak Nagrath, Rice University
Arun Sreekumar, Baylor College of Medicine
Daniel Frigo, University of Houston

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**Event**

**Symposium on Membrane Biophysics**
Michael Zhu, University of Texas Health Science Center Houston
James McNew, Rice University
Ted Wensel, Baylor College of Medicine
Jim Briggs, University of Houston