

# UMR Undergraduate Research Conference Awards Ceremony, April 11, 2007

## Oral Session Awards

### **Engineering Oral Session:**

**3<sup>rd</sup> Place-** Terry Yu – Mining & Nuclear Engineering – *Prototype Computer Based Procedure Implementation at University of Missouri-Rolla Reactor*, Dr. Shoaib Usman

**2<sup>nd</sup> Place-** Mahsa Dornajafi – Electrical and Computer Engineering – *Performance of a Quaternary Logic Design*, Dr. Steve Watkins

**1<sup>st</sup> Place-** Lisa Smith – Electrical & Computer Engineering – *Comparison of Particle Swarm Optimization and Greedy Search for Collective Robotic Search in a Complex Environment*, Dr. G. K. Venayagamoorthy

### **Humanities/Social Sciences Oral Session:**

**1<sup>st</sup> Place-** Rob Huerta & Adam Helton – Psychology – *Non-cognitive Predictors of Students' Achievement*, Dr. James Martin

### **Natural Sciences Oral Session:**

**3<sup>rd</sup> Place-** Matthew Austin – Computer Science – *Stochastic Sequential Dynamical Systems*, Dr. Mayur Thakur

**2<sup>nd</sup> Place-** Katherine Stockstill – Biological Sciences – *Cytokinesis Defects in Budding Yeast*, Dr. Katie Shannon

**1<sup>st</sup> Place-** Michael Hoffman - Physics Department - *Directing Gamma-rays with Quantum Dots*, Dr. Massimo Bertino & Dr. Ralph Alexander

### **Management & Information Systems Oral Session:**

**1<sup>st</sup> Place-** Benjamin Stauffer – Computer Science – *SonicData: An Open-Source Instrumental Data Acquisition Program*, Dr. Bruce McMillin, Mr. Joseph A. Council

## Poster Session Awards

### **Engineering Poster Session:**

**3<sup>rd</sup> Place-** Ashlee Abbott – Materials Science and Engineering – *Rapid Freeze Spraying of Graded Laminar Composites*, Dr. Fatih Dogan

**2<sup>nd</sup> Place-** Nathaniel Wilke – Mechanical and Aerospace Engineering – *Dynamic thin film measurement data analysis method*, Dr James Drallmeier

**1<sup>st</sup> Place-** Josh Eads – Computer Science – *Self-Adaptive Semi-Autonomous Democratic Parent Selection*, Dr. Daniel Tauritz

### **Humanities/Social Sciences Poster Session:**

**3<sup>rd</sup> Place-** Donald Joseph Mueller – Psychology – *Using Personality Scores to Predict GPA*, Dr. James Martin

**2<sup>nd</sup> Place-** Stuart Salvador – Mechanical & Aerospace Engineering – *The Sutro Tunnel: An engineering feat in the West, a global legacy*, Dr. Diana Ahmad

**1<sup>st</sup> Place-** Natalie Shanklin – Psychology – *Parental Trust and Links to Adult Relationships*, Dr. Julie A. Patock-Peckham

### **Natural Sciences Poster Session:**

**3<sup>rd</sup> Place-** Mark Herrera – Physics – *The Slow Light Effect in Dual-Periodic Photonic Crystals*, Dr. Alexey Yamilov, Physics

**2<sup>nd</sup> Place-** Lauren Rich – Physics – *Quantum Dot Photolithography*, Dr. Massimo Bertino, Physics

**1<sup>st</sup> Place-** Wesley Glick – Biological Sciences – *Assessment of in vivo bone formation using porous, glass scaffolds seeded with mesenchymal stem cells*, Dr. Roger Brown, Biological Sciences

### **Management & Information Systems Poster Session:**

**3<sup>rd</sup> Place-** Kristen Duvall –Business Administration – *Feasibility of Opening a Coffee and Tea House in Rolla, Missouri*, Dr. Bih-Ru Lea

**2<sup>nd</sup> Place-** Dan Nieters & David Trupiano – Electrical & Computer Engineering – *Computer Network Attack, Defense, and Forensics in Two Scenarios*, Dr. Ann Miller

**1<sup>st</sup> Place-** Ryan Andrews with Duane Alexander, Mitchell Diebold, & Ariel Hernandez – Computer Science – *Innovative Secure eVoting System*, Dr. Tom Sager, Dr. Waleed Al-Assadi, & Matt Buechler.

### **Research Proposals Poster Session:**

**2<sup>nd</sup> Place-** Evan Stevens- Geological Sciences & Engineering- *Investigation of Jointing and Joint Formation in the Roubidoux Sandstone, Rolla, Missouri-*, Dr. John Hogan & Dr. Derek Apel

**1<sup>st</sup> Place-** Jason Kaiser- Geological Sciences & Engineering- *Formation of Rapakivi Textures in Granite of the Deer Island Pluton, Maine*, Dr. John Hogan

### **OURE Fellows Research Proposal Award Recipients:**

- Nicholas Grither– *Real-Time Remote Monitoring of Bridge Scouring with Distributed Thermal Sensors* - Dr. Sahra Sedigh-Ali, Department of Electrical and Computer Engineering
- Josh Eads – *Deriving Gas-Phase Exposure History through Computationally Evolved Inverse Diffusion Analysis* - Dr. Daniel Tauritz, Computer Science and Dr. Glenn Morrison, Environmental Engineering
- Lauren Garten – *Epitaxial Electrodeposition of Pure and Doped Zinc Oxide* - Dr. Jay Switzer, Chemistry
- First Responder Design Competition Team (Brian Magaha, Paul Robinette, Paul Drews, Nick Lessley, Dr. Fathi Finaish) – *Development of An Aerial Robot for Surveillance Missions around Buildings* - Dr. Fathi Finaish, Mechanical and Aerospace Engineering
- Brian Payne – *Monitoring Dechlorination of PCE using Poplar Trees* – Dr. Joel Burken, Civil, Architectural & Environmental Engineering
- Jenna Tune – *Field Analyses for the Detection and Enumeration of Coliform Bacteria in Drinking Water in Rural Guatemala* – Dr. Curt Elmore, Geological Sciences and Engineering & Dr. Melanie Mormile, Biological Sciences
- Cory Cheatham – *Constructing a Biological Breathalyzer* – Dr. David Westenberg, Biological Sciences