7th Annual Undergraduate Research Conference Awards Winners

Oral Session Awards

Engineering Oral Session:

3rd Place – **Tamas Erdos** – Thermal Magic Formula Based Tire Model for Simulation Use in Racing Applications – *Research Advisor, Dr. Ryan Hutcheson / Mechanical & Aerospace Engineering*

2nd Place – Mariana Escalona Diaz – Vortex Induced Lift Augmentation: Case Study – *Research Advisor, Dr. Fathi Finaish / Mechanical & Aerospace Engineering*

1st Place – Anan Takroori- Influence of Flow Baffles on Mixing of Two Air Streams -Research Advisor, Dr. Fathi Finaish / Mechanical & Aerospace Engineering

Sciences Oral Session:

3rd Place – **Kristin Kelly** – Genomic Analysis of an Unknown Gene Family in Glycine Max - *Research Advisor, Dr. Ronald Frank / Biological Sciences*

2nd Place – Tiffany Ramsey – Removal of Sulfamethoxazole in Water Samples Using Nano-materials and Activated Carbon, *Dr. Yinfa Ma / Chemistry*

1st Place – Erica Shannon – Changes in the Gene Expression of Muscarinic Acetylcholine Receptors as a Result of a Constitutively Active Phenotype - *Research Advisor, Dr. Robert Aronstam / Biological Sciences*

Social Sciences Oral Session:

3rd Place – Joseph Pieczynski – Virtual Communities in an Enterprise Portal and the Effect on Corporate Governance for Generation Y - *Research Advisor, Dr. Bih-Ru Lea / Information Science & Technology*

2nd Place – Lauren Summerville - Second to Fourth Digit Ratio: A Measure of Intelligence - Research Advisor, Dr. Jacqueline Bichsel / Psychology

1st **Place** – **Frank Keehn** – Collective Efficacy and Group Performance in Computer Mediated Settings - *Research Advisor, Dr. Nancy Stone / Psychology*

Arts and Humanities Oral Session:

3rd Place – Evan Mobley – Know When to Fold'Em: The Portrayal of Compulsive Gambling and Gamblers Anonymous in News Articles, 1956-1999 - *Research Advisor, Dr. Larry Gragg / History & Political Science*

2nd Place – Samantha Lucker – When Nature is Not Enough: Frederick Douglass' Desire to Enter Human Society in Narrative of the Life of Frederick Douglass: Ann American Slave - *Research Advisor, Lindgren H Johnson / English & Technical Communication*

1st Place – Ashley Grace – Public Policy on Pathological Gambling: An Examination of Federal Recommendations and the Gaming industry's Response - *Research Advisor, Larry Gragg / History & Political Science*

Poster Session Awards

Sciences Poster Session:

3rd Place – **Crystal Twenter** – The Origin of Minor Folds Associated With A Structural Dome Along the Seiyal Fault in the Western Desert of Egypt - *Research Advisor, Dr. John Hogan / Geological Sciences& Engineering*

2nd Place – Alexis Martin and Megan Koerner – Honokiol Blocks Store Operated Calcium Entry in CHO Cells Expressing the M3 Muscarinic Receptor - *Research Advisor, Dr. Robert Aronstam / Biological Sciences*

1st **Place** – **Casey Burton** – Sarcosine Detection by Dichlorofluorescein as a Hydrogen Peroxide Probe - *Research Advisor, Dr. Yinfa Ma / Chemistry*

Research Proposal Poster Session:

3rd Place – **Daniel Hillis** – Inspection Methods for Porosity and Disbonds of Polyaniline (PANI) Coating on Aluminum Alloy 6061 - *Research Advisor, Dr. Reza Zoughi / Electrical & Computer Engineering*

2nd Place – Joseph Kurtz – Balancing Limited Resources for Speech Transcription on Mobile Devices - *Research Advisor, Dr. Daniel Tauritz / Computer Science*

1st Place – Amanda Foster and April Pummill – Saving the Honeybees: A Synthetic Biology Approach – Research Advisor, Dr. David Westenberg / Biological Sciences

Engineering Poster Session:

3rd Place – **Rachel Bartz and Jordan Wilson** – Effect of Groundwater Depth on Aerobic Biodegradation of BTEX Using In-Planta Measurements – *Research Advisor, Dr. Joel Burken / Civil, Architectural & Environmental Engineering*

2nd Place – Cailie Carlile – Effect of Fly Ash on Growth of Mustard and Corn - Research Advisor, Dr. Joel Burken / Civil, Architectural & Environmental Engineering

1st Place – Benjamin Weideman – Effects of Thermal Loading on Oil Well Cement -Research Advisor, Dr. Runar Nygaard / Geological Sciences & Engineering

2011-12 OURE Fellows / Award Recipients:

- Emily Kackley and Jacob Mueller Spectral Analysis of Basal Cell Carcinoma

 Dr. Joe Stanley, Dr. Randy Moss, Dr. Bijaya Shrestha, Dr. Joe Stanley and Dr.
 William Stoecker/Electrical and Computer Engineering, Research Advisors
- 2. **Austin Ramsey** Ionic Liquids as the Working Fluid in a Cooling System Dr. Klaus Woelk, Research Advisor
- Amanda Foster and Erica Shannon Public Opinion of Synthetic Biology in Response to Education, Dr. David Westenberg/Biological Sciences, Research Advisor
- 4. **Abhinav Saxena and Levi Malott** Adversarial Localization in Wireless Sensors Networks: Theories, Algorithms and Implementation, Dr. Akim Adekpedjou, Dr. Maciej Zawodnick and Dr. Sriram Chellappan/Mathematics & Statistics, Computer Engineering, Computer Science, Research Advisors

Best Bibliography Award Recipients:

Engineering – **Andrew Brune** - Aerodynamic Heating Analysis of Hypersonic Cruise Vehicles in Conceptual Design

Sciences – **Erica Shannon** – Changes in the Gene Expression of Muscarinic Acetylcholine Receptors as a Result of a Constitutively Active Phenotype

Social Sciences – **Joseph Pieczynski** – Virtual Communities in an Enterprise Portal and the Effect on Corporate Governance for Generation Y

Arts & Humanities – **Evan Mobley** - Know When to Fold 'Em: The Portrayal of Compulsive Gambling and Gamblers Anonymous in News Articles, 1956-1999