

## Summer 2006 President's Undergraduate Research Awards (PURA)

Student	Student's Major	College of Award	Advisor	Project Title	
<b>Travel Awards</b>					
Bryson	Amanda Claire	NRE	COE	Zhuomin Zhang	Measuring the Emittance of Silicon Wafers with Anisotropic
Narewski	Taylor Scott	Public Policy	IAC	Dr. Monica Gaughan	Religion and Science Education in the Minds of Young Adults
Van Acker	Christopher	STaC	IAC	Lisa Yaszek	Buffy The Vampire Slayer as Cyberpunk Fantasy
Keifer, Jr.	Orion P.	BME & Psychology	COS	Dr. Paul M. Corballis	Elucidating Neural Connections between the LGN and the MT/V5: A Combined fMRI-DT-MRI Study
<b>Salary Awards</b>					
Cash	Ryan P.	AE	COE	Eric Feron	Autonomous Aggressive Landings of a Small UAV
Bailey	Angela Gill	BME	COE	Barbara Boyan	Characterization of Microencapsulated Chondrocytes
Banerjee	Subina	BME	COE	Ajit Yoganathan	Mitral Valve Mechanics: effect of annular area change on valve
Freedenberg	Melissa	BME	COE	Robert Lee, Ph.D.	Developing a Tool to Interface with FPGA Neural Models
Jiva	Karishma	CMPE	COE	Ajit Yoganathan	Computer aided modeling in heart valve research
Kaddi	Chanchala	BME	COE	Dr. May Dongmei Wang	High Throughput Mass Spectrometry Data Analysis for Cancer Profiling
Kantheti	Prathyusha	BME	COE	Niren Murthy	The use of polyketal nanoparticles (PKNs) as a new pH-sensitive, biodegradable drug delivery vehicle
Liang	Yue	BME	COE	May Dongmei Wang	Sphingolipid Pathway Modeling for Cancer Research and Treatment
Liou	Shasan William	BME	COE	Ajit Yoganathan	Effects of Different Annular Geometries Under Different Pathological Conditions in Mitral Valve Leaflet Stress
Marklein	Ross Alexander	BME	COE	Todd McDevitt	Microsphere-Mediated Delivery of Differentiation Factors Within Embryoid Bodies
Oh	Jin Sol	ChBE	COE	Ajit Yoganathan	Designing 3D interpolation software and reconstructing 3D models
Parikh	Ravi	BME	COE	Lena Ting	Inverse Dynamics and Center of Mass
Somani	Karun	BME	COE	Yadong Wang	Bioactive Materials That Promote Axon Regeneration
Srikanchana	Brian	BME	COE	Johnna Temenoff	Degradation properties of novel hydrogel materials for ligament tissue engineering
Trivedi	Hari	BME	COE	Lena Ting	The effects of automatic postural response on voluntary movement
Yermeni	Srinivasu	BME	COE	Ajit Yoganathan	Computational Fluid Dynamic Study of Transient Flows in Pre/Post Fontan Anatomies and Blood Flow Patterns in the Confluent Venous Branches of the Innominate and Hepatic Vessels.
Zhang	Yu	BME	COE	Yadong Wang	Tissue Engineered Aortic Valve
Stewart	Bethany Alane	BME	COE	Marie Csete, MD	Major signals generated by stem cell infusions that cause reversal of
Smith III	Eugene Arlington	CE	COE	Michael Bergin	Carbonaceous Particulate Matter on the Greenland Ice Sheet

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Hodges	Justin Edward	CE/GT Savannah	COE	Dr. David Scott	Adhesion Capacity of Elastomeric Materials Fixed to Cementitious Materials
Baker	Michelle	ChBE	COE	Rachel Chen	Metabolic engineering of Agrobacterium sp. for sugar nucleotide cofactor regeneration
Clarke	Christopher	BME	COE	Rachel Chen	Assessing the Viability of Utilizing Enzymatic Processes for Deriving Ethanol from Agricultural Wastes
Collins	William Ryan	ChBE	COE	Victor Breedveld	Rheology of Membrane Dope Suspensions
Meyer	David	ChBE	COE	Prof. Charles A. Eckert	CO <sub>2</sub> -Facilitated Separation and Recycle of Homogeneous Catalysts
Mino	Jean Claudio	ChBE	COE	Dr. Sankar Nair	Molecular simulations of water transport through single-walled metal oxide nanotubes
Howe	Louis Howe	CMPE	COE	Vincent Mooney	Floating-Gate Based Field Programmable Gate Arrays
Bhuiyan	Ruhull Alam	ECE/BME	COE	Chuanyi Ji	Assessing impact of natural disaster (Hurricane Katrina) to Internet
Mehra	Zen Anubhav	ECE/BME	COE	Dr. Shyh-Chiang Shen	Development of Next Generation High Voltage GaN-Based Power Electronics
Dalton	Steven	Physics	COE	George Riley	Validation of PFTK Equation In Large TCP Transfers
Petrova	Evgeniya I.	ISYE	COE	Julie Swann	Effective Prevention and Treatment Plans for Hepatitis C
Para	Andrea	BME	COE	Dr. David Ku	An in-vitro model of thrombosis using highly stenotic tubing
Rahnema	Sara	NRE	COE	Eric Elder	Retrospective Analysis of Tissue Heterogeneity Effects for Radiation Treatment Planning
Song	Jin	ME	COE	Dr. Janet Allen	Blast Resistant Panel
Patel	Neil	MSE	COE	Hamid Garmestani	Solid Oxide Fuel Cells
Siddiqi	Arsalan	MSE	COE	Dr. Naresh Thadhani	Synthesis of Nanometer Sized Nickel as Next Generation of Energetic Materials
Fernandez	Mark Keith	ECE/BME	COM	Beril Toktay	Analyzing the viability of a product recovery system for used
Langdale	Ryan Patrick	Mgmt	COM	Fred Allvine	Analysis of the Falling Personal Savings Rate: Causes and
Akhtar	Mariam	Biol	COS	Erin Dickerson	The Effect of Peptide Targeting on EphA2 Signaling Transduction
Chumley	Tatiana	Biol	COS	John Kirby	An Analysis of Autolysis and Predation in Myxococcus xanthus Using Fluorescence Microscopy
Fay	Nicole Cheung	Biol	COS	John R. Kirby	Characterizing CheC and CheD Proteins in Bacillus subtilis Chemotaxis Pathway
Lie	Lively	Biol	COS	Roger M. Wartell	Study of Isolated Hfq and its binding affinity to specific RNA
Paglioni	Sarah	Biol	COS	John Kirby	Regulation of Chemotaxis by CheC and CheD in Bacillus Subtilis
Rich	Constance	Biol	COS	Joseph Montoya	Ontogenetic trends in feeding habits reflected in d <sup>15</sup> N and d <sup>13</sup> C

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Seladi	Jillian	Biol	COS	Jennifer Leavey	Role of pyocyanin in <i>P. aeruginosa</i> pathogenesis as modeled by two organisms
Turner	Emily Kay	Biol	COS	Dr. John Cairney	Bioengineering the Microbial Production of Cellulose from Landfill
Chaudhry	Aneese Fatemeh	Chem	COS	Dr. Fahrni	Synthesis and Characterization of Zinc(II)-Selective Ratiometric Fluorescent Sensors
Thompson	Richard Adam	Chem	COS	Christoph Fahrni	Zn(II)-Selective Sensors for Biological Applications
Chesley	Patrick Miles	Chem	COS	Dr. Nils Kroger	Isolation of Silica Deposition Vesicles in the Diatom <i>Thalassiosira pseudonana</i>
Patel	Pratiq Akshay	Chem	COS	Adegboyega Oyelere	Ligand Assisted Aptamer Selection
Brady	Kimberly	EAS	COS	Kim Cobb	Quantifying Sea Surface Temperature and Salinity from Coral Strontium/Calcium Ratios to Assess El Niño Uncertainties
Nichols	Joseph Brandon	Physics	COS	Alexei Marchenkov	Environmental regulation of electronic properties of atomic and molecular wires
Rockhold	Jason E.	BME	COS	Paul Corballis	Steady-State Visually Evoked Potentials and Induced Contrast Asynchronies
Carter	Laura Lynn	Psych	COS	Randall W. Engle	Working Memory and Counting
Klein	Rachele Noel	Psych	COS	Randall W. Engle	WMC and Retroactive Interference in Paired-Associate Learning
Weldon	Elizabeth	Psych	COS	Randall W. Engle	Auditory Working Memory and Attention
Rifkin	David Norman	ECE/BME	COS	Mindy-Millard-Stafford	Effects of carbohydrate drinks towards fatigue, in sport.
Casner	Michael Ryan	Mgmt	COS	Mindy-Millard-Stafford	Lactate Testing in Swimmers: Effect of Pre-exercise Carbohydrate
O'Rear	Elijah	CmpMedia	IAC	Alexandra Mazalek	Tviews TableTop Role-Playing Game(TTTRPG)
McCloud	Charles L.	AE	IAC	Philip Shapira	A Bibliometric Analysis of Trends in the Field of Nanotechnology
Lawson	Yyokkia	Mgmt	IAC	Diana Hicks	Examination of the Marketing Strategy of Small, Innovative
Leo	Gregory Carl	Econ	IAC	Marco Castillo	Why People Reciprocate?