

## Fall 2007 President's Undergraduate Research Awards (PURA)

8-14-07

	Student Name	Major	Faculty Mentor	Mentor School	Paper Title	Type
<b>COA</b>						
	Cheng, Ting	ID	Reeder, Kevin	COA	Retail Environment Exhibit Design	Travel
	Marks, Derek	ARCH	Khan, Sabir	COA	The Evolution of the Pedestrian Experience in Atlanta	Salary
<b>COC</b>						
	He, Jiasheng	CS	Starnier, Thad E	Inter. Comp	A Wireless Contact-free Gesture based Wrist Interface	Salary
	Keyser, Jonathan (declined)	CS	Edwards, Warren Keith	Inter. Comp	Usability and Networking	Salary
<b>COE</b>						
	Prahnst, Benjamin	AE	Komerath, Narayanan M	AE	"Design of a Lunar Thermo-Photo-Electric Power Generator"	Salary
	Thaker, Pratik	AE	Calise, Anthony J	AE	Design of an optical sensor simulation for a UAV platform tracking a dynamic ground target.	Salary
	Ban, Lan	BME	Robert H. Lee	BME	Morphology and Behavior of Motoneuron	Salary
	Balusu, Sri	BME	Bellamkonda, Ravi Venkat	BME	The next generation of nanoscale contrast agents for early cancer detection using Computed Tomography	Salary
	Frazier, Kaitlyn	BME	Yoganathan, Ajit	BME	Effects of isolated shear stress and a combination of cyclic pressure and shear stress on aortic valve biology	Salary
	Anantharaman, Sandhya	BME	McDevitt, Todd C	BME	Assessment of Matrix Metalloproteinase Expression and Activity	Salary
	Chen, Inn-Inn	BME	Babensee, Julia Elizabeth	BME	Role of Mannose or Galactose Containing Neoglycoproteins in Dendritic Cell Maturation on Biomaterials	Salary
	Chen, Inn-Inn	BME	Babensee, Julia Elizabeth	BME	Profile of Galactose Family Glycosylations Associated with Adsorbed Proteins on Biomaterials	Travel
	Chen, Theodore	BME	Kemp, Melissa Lambeth	BME	Examining the Effects of Antioxidants on T Cell Receptor Activation and Protein Glutathionylation	Salary
	Eames, James	BME	Temenoff, Johnna Sue	BME	Static Culture of MSCs on RGD gradient Hydrogels	Salary
	Elhammali, Adnan	Physics	Ajit Yoganathan	BME	Effects of Normal and Altered Shear Stress on the Biology of Denuded Aortic Valve Leaflets	Travel
	Giles, Brian	BME	Balachandran, Kartik	BME	Site-specific Biological Responses of Porcine Aortic Valves to Cyclic Stretch	Travel
	Goette, Matthew	BME	McIntire, Larry Vern	BME	Design of reversing flow system to simulate flow patterns found at the carotid artery bifurcation	Travel
	Goette, Matthew	BME	Oshinski, John	BME	In vitro imaging of a vulnerable plaque model with dual-source CT: Implications for non-invasive diagnosis of atherosclerosis	Salary
	Huynh, Kiet	BME	Wang, Dongmei	BME	Improved Bolstering Error Estimation for Gene Ranking	Travel
	Kumar, Shruti	PSYCH	Wang, Yadong	BME	Optimization of Tissue-Engineered Small Arteries: Extracellular Matrix Protein Expression Analysis	Salary

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Lee, Bitna	BME	Yoganathan,Ajit	BME	Velocity Reconstruction of the Complex Cardiovascular Anatomy to Aid Surgical Planning	Salary
Lu, Xi	BME	Bellamkonda,Ravi Venkat	BME	Biodegradable polymers for use in the construction of peripheral nerve guidance channels	Salary
Medway, Scott	BME	LaPlaca,Michelle C	BME	The effect of laminin-1 derived peptides IKVAV- and IKLLI in the migration, differentiation, and proliferation of neural stem cells.	Salary
Nguyen, Brian	BME	Temenoff,Johnna Sue	BME	Degradation of Laminated Fumarate-Based Hydrogels Under Tensile Stress	Travel
Roush, Kim	BME	Michelle C LaPlaca	BME	Optimizing the Culture Conditions to Promote Neuronal Differentiation of Mesenchymal Stem Cells	Salary
Roy, Auroop	BME	Gang Bao	BME	Development and Characterization of Magnetic Nanoparticle Coating and Conjugation	Salary
Seaman, Scott	BME	McDevitt,Todd C	BME	Microenvironment Engineering within Stem Cell Embryoid Bodies	Salary
Shaffer, Sydney	BME	Murthy,Niren	BME	Optimizing the Synthesis of Poly(cyclohexane-1,4-diyl acetone dimethylene ketal) and Poly(lactic-co-glycolic acid) for Drug Encapsulating Microparticles	Salary
Shah, Neil	BME	Wang, Dongmei	BME	Modified Genetic Algorithm for Parameter Selection of Compartmental Models	Travel
Torrance, James	BME	Wang,Dongmei	BME	A Method for the Quantification and Visualization of the Correspondence of Biomarker and Outlier Probe on Oligonucleotide Microarrays	Travel
Vo, Tan	BME	Wang,Dongmei	BME	Reproducibility of Differential Gene Detection across Multiple Microarray Studies	Travel
Zachariah, Nishant	BME	Bellamkonda,Ravi Venkat	BME	Early Detection of Breast Tumor using Targeted Strategies	Salary
Zou, Yixiao	BME	Potter,Steven M	BME	Imaging Memory-related Morphological Dynamics in Neural Networks	Salary
Castellino, Candice	CHBE	Eckert,Charles A	CHBE	A Spectroscopic Exploration of Specific Solvent Interactions in Gas-Expanded Liquids	Salary
Dodd, Matthew	CHBE	Hang Lu	CHBE	On-chip microfluidic flow control device for generation of chemical signaling gradients	Salary
Luders, Chris	CHBE	Nair,Sankar	CHBE	Functionalization of Inorganic Nanotube Systems	Salary
Parriott, Kathrine	CHBE	Henderson,Clifford	CHBE	Investigation of Hot Embossing Techniques for Making Porous Films	Salary
To,Monquy Alicia	CHBE	Jones,Christopher	CHBE	Adsorption of Cruciform Chromophores onto Functionalized Mesoporous Silica Materials	Salary

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Yeh, Victor	CHEM/ BIOCHEM	Bommarius, Andreas S	CHBE	The Effects of Co-solute on the Stability of Amyloidogenic Proteins	Salary
Gowdy, Savannah	CEE	Rix, Glenn J	CEE	Aging Effects on the Dynamic Properties of Colloidal Silica Gel and Sand Mixtures	Salary
Quarshie, Perrin	CEE	Teizer, Jochen	CEE	Using RFID & UWB Technologies to Enhance Construction Site Performance and Safety	Salary
Crawford, Joseph	ECE	Citrin, David S	ECE	Characterization of Coverage in Real Cellular Networks using Statistical Descriptions of Crystal Lattices	Salary
Jolly, Sundeep	ECE	Adibi, Ali	ECE	Recording geometry considerations in the performance of cylindrical beam volume holograms implemented as spectral diversity filters	Salary
Ramakrishnan, Jagdish	ECE	McClellan, James H	ECE	Realtime Digital Signal Processing (DSP) Algorithm for Landmine Detection	Salary
Snow, Logan	ECE	Vela, Patricio Antonio	ECE	Implementation of a System for Real Time Solving of Optimal Control Problems	Salary
Wang, Jiuguang	ECE	Howard, Ayanna MacCalla	ECE	Multi-Robot Coordination with Embedded Graph Grammars	Salary
Wellkamp, Nicholas	ISYE	Thomas, Valerie	ISYE	An Examination of Energy Needs for the Manufacture and Transport of Biomass Energy Products vs. Agricultural Goods	Salary
Zhu, Sheng-Bo	ISYE	Griffin, Paul M	ISYE	Logistics and Supply Chain on Diabetes in Countries	Salary
Jakus, Adam	MSE	Thadhani, Naresh N	MSE	Computer Modeling of High Impact Loading of Nano Ta + Fe <sub>2</sub> O <sub>3</sub> Powder Filled LCA <sup>TM</sup> s to Produce a Structurally Energetic Composite Material	Salary
Lesniewski, Martha	MSE	Gall, Kenneth A	MSE	Foam and Polymer Properties of Biocompatible Shape Memory Polymer Foams	Salary
Murff, Rebecca	BME	Milam, Valeria Tohver	MSE	Hydrogels as Cellular Substrates: Comparing the Mechanical Sensitivity of Normal and Cancerous Fibroblasts	Salary
Adams, Robert	ME	Wilfred Van Rooijen	ME	Development of an Algorithm for Determining Radiotoxicity of Spent Nuclear Fuel Over Time	Salary
Johnston, Matthew	ME	Gleason Jr., Rudolph Lawson	ME	Pharmomechanical Improvement of Drug-Eluting Stents	Salary
Storey, Matthew	ME	Harris, Tequila A. L.	ME	Manufacturability of Nano-Organic Materials	Salary
Tucker, Lina	ME	Paredis, Christiaan Jos Jan	ME	Modeling Fluid Power Components to Ensure Optimal Design	Salary
Gilbert, Michael	PTFE	Kumar, Satish	PTFE	Conductive Paper Filter	Salary

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<b>GTRI</b>						
	Boyea, John	MSE	Ready, William Judson	GTRI	Conductive Carbon Nanotube Films Incorporated into Electrochemical Double Layer Capacitors	Salary
	Kepple, Kirsten	BME	Ready, William Judson	GTRI	Neuronal Growth on Carbon Nanotube Substrates	Salary
<b>IAC</b>						
	Jain, Gaurav	ECE	Klimenko, Mikhail M	ECON	To study the effect of wireless license fee on the tariff levied by the cellular companies in India	Salary
	Farmer, Kathryn	HTS	Tone, John L	HTS	Medical Marijuana and the Controversy of the Forbidden Drug	Salary
	Palmer, Leyna	HTS	D'Unger, Amy V	HTS	Involuntary Sterilization as State-Sponsored Resistance to the Civil Rights Movement	Salary
	Bufford, Matt	INTA	Dion, Michelle Lynn	INTA	Pension Reform and Gender Equity in Latin America	Salary
	Liu, Siwan	INTA	Wang, Fei-Ling	INTA	Western Perceptions of China's Rise as a Great Power	Salary
	Pratt, Kathryn	INTA	Salomone, Michael D	INTA	Could the Ultimate Failure of the Schlieffen Plan Have Been Avoided to Allow for a German Military Victory in World War I?	Salary
	Preininger, Andrea	LCC	Bolter, Jay D	LCC	The Voices of Oakland: An Experiment in Mobile Technology Experience Design for Oakland Cemetery	Salary
	Ratray, Liam	PP	Broglio, Ron	LCC	The Effects of Urban Placemaking on Food Consciousness: Bringing a Local Farmer's Market to Georgia Tech	Salary
	Swisshelm, John	CM	Bogost, Ian S	LCC	XNA Playing : A Toolkit For Experimentation and Pedagogy on Xbox 360	Salary
	Armanios , Laura	AE	Boulard, Stephanie	ML	The Implications of Color and Trauma in French Film	Salary
	Moreland, Michael	INTA	White, James D	PP	A Comparative Cross-System Analysis of Alternative Hybrid Organizational Models	Salary
<b>COM</b>						
	Amaraneni, Akshay	MGMT	Subramanian, Ravi	COM	Matching Uncertain Supply with Demand in Organ Transplantation	Salary
	Fitzgerald, Andrew	MGMT	Zhang, Han	COM	Hide or Show: How Do Online Retailers Benefit From Providing Rich Information	Salary
<b>COS</b>						
	Estrada, Piedad	BME	Chang, Young-Hui	AP	Lower Limb Orthotics and Spinal Cord Injury	Salary
	Bloomquist, Ryan	BIOL	Streelman, Jeffrey Todd	BIOL	Gene Expression in the Development and Evolution of the Cichlid Dentition	Salary
	Knish, Sarah	BIOL	McDonald, John F	BIOL	Cellular Metabolites as Novel Therapeutic Agents for Ovarian Cancer	Salary
	Ghosh Dastidar, Rajarshi	AE	Finkelstein, David	Physics	The Feasibility of Space-based Electromagnetic Accelerators	Travel

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	London, Lionel	PHYSICS	Goldman, Daniel I	Physics	Forces Encountered when Pushing and Pulling Ramified Structures In and Out of Granular Media	Salary
	Abraham, Robert	PSYCH	Engle, Randall W	PSYCH	Updating, and response probabilities in relation to individual differences in working memory capacity	Salary
	Kishi, Roudabeh	PSYCH	Catrambone, Richard	PSYCH	The Effects of Ordering on Retention Interval	Salary
	Okuno, Erin	PSYCH	Engle, Randall W	PSYCH	Speed and Aging: Effects of Response Type	Salary
	Shippee, Dianna	PSYCH	Engle, Randall W	PSYCH	The Cost of Greater Working Memory Capacity	Salary