

President's Undergraduate Research Awards (PURA) -- Fall 2009

Mentor School	Student Name	Student Major	Mentor Name	Project Title	Award Type
College of Architecture					
ARCH	Solomero, Rustann	ISYE	Ashuri,Baabak	Models for Predicting Construction Cost	Salary
ARCH	Utting, Brittany	ARCH	Swarts,Matthew Ernest	Ephemeral City: Using cellular automata to model growth patterns of tent cities	Salary
ARCH	Winship, Aubrey	BC	Castro-Lacouture,Daniel	Evaluation of Rehabilitation Strategies for High Performance Green Buildings	Salary
College of Engineering					
AE	Chiguluri, Bhanu	AE	Sankar,Lakshmi N	Extension of an Airfoil Inverse Design Method to High-lift Multi-element System Design	Salary
AE	Fleming, Elizabeth	AE	Saleh, Joseph Homer	Response Surface Equations for Expendable Launch Vehicle Payload Capability	Travel
AE	Natarajan, Shweta	AE	Lieuwen,Timothy Charles	Flame Response of Swirl Premix Flames to Transverse Acoustic Excitation	Salary
AE	Roan, Alexander	AE	Lieuwen,Timothy Charles	Turbulent Flame Speed Measurements and Modeling of Syngas Fuels	Salary
AE	Walker, Jonathan	AE	Walker II,Mitchell L.R.	Static Electric Field Modeling of Carbon Nanotube Cathodes	Salary
BME	Anand, Sanjay	BME	Bellamkonda,Ravi Venkat	Fabrication of a microfluidic device to study CSPG inhibition on neurite outgrowth	Salary
BME	Chen, Justin	BME	Barker,Thomas Harrison	The Effect of Substrate Rigidity on Alveolar Cell Phenotype	Salary
BME	Desai, Kalpi	BME	Yoganathan,Ajit	Anatomical Characterization of Fontan Operation	Salary
BME	Frazier, Kaitlyn	BME	Yoganathan, Ajit	Characterization of the combined effects of mechanical forces present in hypertensive hemodynamic environments on the calcification and inflammation of porcine aortic valves in an ex vivo flow loop	Salary
BME	Javid, Mohsin	BME	Bellamkonda,Ravi Venkat	A Regenerating Electrode Scaffold for Peripheral Nerve Interfacing	Salary
BME	Khan, Rania	BME	Bellamkonda,Ravi Venkat	In vivo analysis of a combination drug therapy using rat glioma model	Salary
BME	Rothberg, Michael	BME	LaPlaca Ph.D.,Michelle Camille	Characterization of neuron membrane permeability upon biaxial mechanical insult in vitro	Salary
BME	Rowe, Jessica	BME	Barker,Thomas Harrison	Inhibition of pulmonary epithelial to mesenchymal transition by blocking transforming growth factor beta-1 signaling via SDKP	Salary
BME	Shannon, Patrick	BME	Yoganathan,Ajit	The Effects of Annular Dilation and Papillary Muscle Displacement on Tricuspid Valve Regurgitation	Salary
BME	Thayer, Patrick	BME	Yoganathan,Ajit	Effects of Pathophysiological Pressure and Cyclic Stretch on Expression of α SMA and Vimentin in Aortic Valve Leaflets	Salary

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BME	Vesper, Kathryn	CHEM/B CHM	Boyan,Barbara D	Synthetic Fraction C promotes osteogenesis and cementogenesis in osteoblasts and human mesenchymal stem cells	Salary
CHBE	Cho, Soohee	CHEM/B CHM	Bommarius,Andreas S & Tolbert, Lauren	Optically Modulated Fluorescent Proteins	Salary
CHBE	DaCunha, James	CHBE	Grover,Martha A & Ludovice, Pete	Coarse-graining of molecular dynamics simulations via model reduction, with application to polyolefin tacticity for morphology control	Salary
CHBE	Pety, Stephen	PTFE	Lu, Hang & Thio, Jonathan	Microviscometer for the Measurement of Polymer Molecular Weight	Salary
CHBE	Yan, Jing	CHBE	Teja,Amyn S	Deposition of Metal Oxide Nanostructures on Zeolite Surfaces	Salary
CHBE	Yong, Chun	BME	Sambanis,Athanassios	Microencapsulation of β TC-tet Cells with Barium-Alginate	Salary
CEE	Harris, Brandon	CEE	Stoesser,Thorsten	Quantification of Vegetative Flow Resistance in Constructed Wetlands	Salary
CEE	Lim, Mary	CEE	Yiacoumi,Sotira	Experimental Investigation of Colloidal Behavior in Aqueous Environments	Salary
CEE	Reuter, Emma	CEE	Stoesser,Thorsten	Quantification of Vegetative Flow Resistance in Constructed Wetlands	Salary
CEE	Strellis, Brandon	CEE	Stoesser,Thorsten	Flow Resistance of Natural Vegetation	Salary
ECE	Katariya, Ashish	ECE	Taylor, David G	Building a Wheeled Inverted Pendulum for Personal Transportation	Salary
ECE	Jones, Jeremy	ECE	Ghovanloo,Maysam	Utilizing the Tongue Drive System for Robotic Arm Control	Salary
ECE	Parikh, Sharan	ECE	Habetler,Thomas G	Analysis and Implementation of a Surge Tester for the Diagnosis of the Turn Insulation of Induction Machines	Salary
ECE	Shahbuddin, Sarosh	ECE	Tannenbaum,Allen R	Automated Three-Dimensional MRI Segmentation for Optimizing Approximations in Transphyseal Tunnel Placements	Salary
ECE	Tan, Edward	ECE	Tentzeris,Emmanouil M	Novel "Green" Flexible Inkjet-Printed LCP-Based Wireless Sensor Design	Salary
MSE	Brahmbhatt, Parth	ME	Gall,Kenneth A	Foaming Aligned Nanoparticle Composites Using Shape-Memory Polymer Epoxies	Salary
MSE	Evans, Nathan	MSE	Gall,Kenneth A	Screening Biocompatible Polyurethanes Based On Thermo-Mechanical Properties to Create Acrylate Blends with Shape-Memory	Salary
MSE	Jones, Frank	MSE	Yushin,Gleb	Electrochemical evaluation of Silicon based Li-ion batteries with novel binders	Salary
MSE	Kwasnik, Agatha	BME	Gall,Kenneth A	Developing Vacuum-Assisted Resin Transfer Molding Techniques to Enable Advanced Processing of Fiber-Reinforced Shape-Memory Polymers	Salary
MSE	Lesniewski, Martha	MSE	Gall,Kenneth A	Mouse Embryonic Stem Cell Encapsulation with Poly (ethylene) glycol-based Poly(beta-amino esters)	Salary

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MSE	Lesniewski, Victor	BME	Gall,Kenneth A	Optimizing Thermo-mechanical Properties of Shape-Memory Polymer Blends in Aqueous Environments for Orthodontic Applications	Salary
MSE	Ware, Taylor	MSE	Gall,Kenneth A	Using Time-Temperature Superposition to Design Enhanced Acoustic Damping	Salary
ME	Batta, Sahil	ME	Pucha,Raghuram V	Modeling and Design Aspects of CNTs as Hydrogen Storage Medium	Salary
ME	Carroll, Phares	ME	Neitzel,G Paul	Dynamics of Colliding Droplets	Salary
ME	Dextraze, Katherine	NRE	Cho,Sang Hyun	Fabrication and testing of tissue-equivalent radio-/heat-sensitive gels	Salary
ME	Hartley, Douglas	ME	Bras,Bert	Energy Mapping of the Georgia Tech Campus	Salary
ME	Hurwitz, Jeremy	BME	Ku,David N	Mechanisms Thrombus Formation at High Shear Rates	Salary
ME	Lee, Phillip	BME	Forest,Craig R	Array for Simultaneous Neural Patch Clamping	Salary
ME	Miller, Nicole	ME	Mayor,James Rhett	Investigation of Stacking Options for Combined-Cycle, High Thermal Efficiency Internal Combustion Engines	Salary
ME	Suleiman, Shadeah	Biology	Fox,Timothy H	Molecular targeting and imaging of pituitary adenomas	Salary
ME	Tian, Harvey	BME	Gleason Jr.,Rudolph Lawson	Determination of the Mechanical Properties of Tissue Engineered Arterial Vessel Walls	Salary
ME	West, Daniel	ME	Hu,David L	Mechanics of Mexican Jumping Beans	Salary
ME	Chaudhury, Rafeed	BME	Gleason Jr.,Rudolph Lawson	Manufacturing and Mechanical Testing of Chemically Stimulated Tissue-Engineered Blood Vessel Constructs	Salary
PTFE	Herst, Matthew	PTFE	Thio,Yonathan S	Analysis of nanoscale self-assembly of electrospun block copolymers	Salary
PTFE	Lewis, Brandon	PTFE	Beckham,Haskell W	Development and Characterization of Polymeric Supramolecular Templating Systems	Salary
College of Management					
MGMT	Martin, Alfred	MGMT	Zhang,Han	Do Positivity and Negativity Biases Matter in Consumer Decision Making? An Experiment Study	Salary
College of Sciences					
BIOL	Stallings, Carrie	Biology	Jiang,Lin	Incorporating Pathogens into Community Assembly	Salary
BIOL	Tjahjadi, Michael	Biology	Kubanek,Julia M	Brevetoxin concentrations in the Eastern oyster (<i>Crassostrea virginica</i>) exposed to the bloom-forming <i>Karenia brevis</i> and planktonic diatom <i>Skeletonema costatum</i>	Salary
BIOL	Weigel, Emily	Biology	Snell,Terry W	RNA interference of androgen receptor genes regulating reproduction of <i>Brachionus manjavacas</i> (Rotifera)	Salary
CHEM/B CHM	Castaneda, Alma	CHEM/B CHM	Collard,David M	Evaluation of the CWCS Workshops	Salary
CHEM/B CHM	Chen, Michael	CHEM/B CHM	Hud,Nicholas V	Non-enzymatic linking of nucleotides: Chemical Sticky End Ligations and Reversible Backbone Linkages	Salary
CHEM/B CHM	Holmes, Scott	BME	Kroger,Nils Klaus	Characterization of Structure and Cellular Localization of Silaffin-like Proteins in the Diatom <i>Thalassiosira pseudonana</i>	Salary

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CHEM/B CHM	Morales-Pico, Brenda	CHEM/B CHM	Hud,Nicholas V	Self-Assembly of Purine Base Pairs in Aqueous Solution	Salary
CHEM/B CHM	Om, Mijung	CHEM/B CHM	May,Sheldon W	A New Treatment for Inflammatory Diseases	Salary
CHEM/B CHM	Parrish, Robert	ME	Sherrill,Charles David	An Analysis and Extension of Modern Quantum Chemistry Techniques	Salary
CHEM/B CHM	Suidan, Tala	CHEM/B CHM	Kelly,Wendy L	Genome Mining in Streptomyces laurentii	Salary
CHEM/B CHM	Wright, Kenneth	CHEM/B CHM	Brown,Kenneth Ray	Performance of concatenated dynamical decoupling on trapped Calcium ions	Salary
EAS	Bracco, Jacquelyn	EAS	Stack,Andrew Gregory	Molecular Dynamics and Kink Site Formation on Barite	Salary
Physics	Devaiah, Sharan	Physics	Fernandez De Las Nieves,Alberto	Configuration of topological defects on spherical nematics	Salary
Psych	Moskovitch, Yarden	Psych	Walker,Bruce N	Dual Task Experiments using Auditory Menus	Salary
Psych	Murray, Rory	Psych	Hertzog,Christopher K	Item selection and self-paced study when learning Chinese pictographs: Does the region of proximal learning hypothesis apply to unfamiliar stimuli?	Salary
Psych	Newsome, Rachel	Psych	Duarte,Audrey L	The effects of self-referential processing on source memory in young and older adults: Behavioral and ERP evidence	Travel
Psych	Tsui, Benjamin	CHBE	Duarte,Audrey L	The Effects of Aging on Associative Recognition Memory	Salary
Ivan Allen College					
ECON	Sirow, Gabrielle	ECON	Uwaifo,Ruth O	Decomposing the Effects of the Subprime Mortgage Boom and Bust on Native Citizens, Naturalized Immigrants and Resident Immigrants in the United States.	Salary
HTS	Thadhani, Kiran	INTA	D'Unger,Amy V	The Inequality of Resources for Homeless Women in Atlanta; The Effects of Homelessness on Health, Hygiene, and Parenting	Salary
HTS	Williams, Molly	LCC	D'Unger,Amy V	The Inequality of Resources for Homeless Women in Atlanta; The Effects of Homelessness on Health, Hygiene, and Parenting	Salary
INTA	Mangels, Colby	INTA	Birchfield,Vicki L	Changes to the EU Legal Structure Following 9/11:	Salary
INTA	Windsor, Andrew	INTA	Woodall,Brian E	The State and Consequences of Information Security in East Asian Energy Security	Salary
PP	Karmali, Ruchir	BME	Levine,Aaron David	Understanding the emergence, effectiveness and impact of state stem cell programs	Salary
GTRI					
GTRI Electro- Optical	Haverly, Christopher	CHBE	Ready,William Judson	Cadmium Chloride Annealing for 3D Solar Cells	Salary