

Summer 2010 President's Undergraduate Research Awards

Award School	Student Name	Student Major	Mentor Name	Paper Title	Funding Type
College of Architecture					
COA	Abboud, Josef	ARCH	Khan,Sabir	Ethnic Entrepreneurship in Metro Atlanta	Salary
College of Engineering					
AE	Cummings, Amy	AE	Saleh,Joseph Homer	On the Concept of Defense-in-Depth and the High Reliability Organization Paradigm for the Mining Industry	Travel
AE	Garza, Dennis	AE	Sankar,Lakshmi N	Collection Efficiency of a Helicopter Rotor Using an Eulerian Approach and Numerical Integration	Salary
AE	Lundrigan, Julia	AE	Lieuwen,Timothy Charles	Effects of Flame Temperature Ratio on Bluff Body Wakes in Augmentor Applications	Salary
AE	Lundrigan, Julia	AE	Volovoi,Vitali	Investigating the Means of Assessing and Improving the Safety of the Future Air Transportation System	Salary
BME	Barry, Zachary	BME	Platt,Manu Omar	Computational Modeling of Cathepsin Kinetics	Salary
BME	Kopfle, Eric	BME	Platt,Manu Omar	Regulation of Cathepsin Activity by Monocytes and Endothelial Cells in Sickle Cell Disease	Salary
BME	Poukalova, Mariya	BME	Yakacki, Christopher	The Effect of Trabecular Microstructure and Mechanical Properties on the Pullout Strength of Suture Anchors	Travel
BME	Song, Rosemary	BME	Boyan,Barbara D	Modifying Titanium Surface Properties: Effects on Bone Cell Growth and Differentiation	Salary
BME	Tamilselvan, Gowthami	CHBE	Yoganathan,Ajit	Characterization of Fluid Shear Stress on the Bicuspid Valve Leaflet Using Laser Doppler Velocimetry	Salary
BME	Xu, He	BME	Babensee,Julia Elizabeth	Carbohydrate Microarrays for High-Throughput Analysis of Dendritic Cell-Glycan Interactions	Salary
CHBE	Ha, Thanh	CHEM /BCHM	Janna K Blum	Investigating the Role of Amino Ester Hydrolase (AEH) Active-Site Residues by Site-Directed Mutagenesis	Salary
CHBE	Kuo, Che-Ying	CHBE	Lu,Hang	Cell and Particle Mixing Behavior in Microfluidic Devices	Salary
CHBE	Marchbanks, Melissa	CHBE	Taite,Lakeshia J.	In Vitro Vascular Cell Behavior within Nitric Oxide Releasing Hydrogels	Salary
CHBE	McGrail, Daniel	CHBE	Dawson,Michelle R	Analysis of Mechanical and Morphological Response of Mesenchymal Stem Cells in Response to Chemical and Environmental Conditions Towards the Development of a Homing Gene Delivery System	Salary
CHBE	Natarajan, Aswin	BME	Taite,Lakeshia J.	Synthesis of Chain Transfer Agents for the RAFT Polymerization of Hyper-Branching Polymers	Salary

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CHBE	Vowell, Bryan	CHBE	Bommarius, Andreas S	Improving Enzymatic Hydrolysis of Cellulose for Biofuel Application	Salary
CHBE	Wilms, Jillian	CHBE	Champion, Julie Anne	Effects of Crosslinking and Coatings on Nanoparticle Properties	Salary
CHBE	Yu, Hua-Hsiang	CHBE	Bommarius, Andreas S	Xenobiotic reductase A from Pseudomonas putida: characterization and catalytic activity study	Salary
ECE	Giardina, Christopher	BME	Hunt, William D	Prostate Cancer Detection via Acoustic Sensor of Biomarkers	Salary
ECE	Palacios, Sebastian	ECE	Tentzeris, Emmanouil M	Integrated Wireless Sensors on Flexible Organics using Inkjet-printing Technologies	Salary
ISYE	Vandegrift, David	ISYE	Tovey, Craig A	Pursuit-Evasion on Graphs	Salary
ME	Beebe, Christopher	ME	Sulchek, Todd A	Formation of an Antimicrobial Agent through Synthesis of Asymmetric Microspheres Using Coconut Oil Technique	Salary
ME	DeMercurio, Peter	ME	Hu, David	Biology and Fluid Mechanics of the Eye	Salary
ME	Holt, Travis	ME	Kalaitzidou, Kyriaki	Designing an Electrically Conductive Polypropylene Composite with Graphite Nano-particles for Automotive Paint Application	Salary
ME	Lai, Ethan	CEE	Antoniou, Antonia	Quantifying material behavior in a corrosive environment	Salary
ME	McKenzie, Joseph	ME	Ryherd, Erica Eileen	Evaluating the Soundscape in Hospitals & Other Facilities	Salary
ME	McNicoll, David	ME	Choi, Seung-Kyum	Design of the Boeing 787 Material Structures Using Stoichiastic Optimization Techniques	Salary
ME	Mills, Zachary	ME	Hu, David L	Improving Washing Machine Design: A Biomimetic Approach	Salary
ME	Sullivan, Owen	ME	Kumar, Satish	Thermoelectric Coolers for Thermal Gradient Management on Chip	Salary
PTFE	Meree, Caitlin	PTFE	Shofner, Meisha Lei	Structural Health Monitoring in Polymer Nanocomposites	Salary
College of Sciences					
AP	VanLoozen, Josephine	BIOL	Chang, Young-Hui	Morphometric Study of Segment Inertias in the Rat Model	Salary
BIOL	Angra, Aakanksha	BIOL	Yen, Jeannette	Comparing the sensorimotor response and behavior of invertebrate larvae Temora longicornis and vertebrate larvae Fundulus heteroclitus when exposed to Harmful Algal Blooms, Karenia brevis and Alexandrium fundyense.	Salary
BIOL	Kwon, Khillip	BIOL	Lobachev, Kirill S	Developing a system to study branch migration of Holliday junctions in S cerevisiae	Salary

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BIOL	Norsworthy, Michael	BIOL	Streelman, Jeffrey Todd	Elaborating on the mechanisms contributing to cusp development in the cichlid dentition	Salary
CHEM /BCHM	Jekot, Heather	CHEM /BCHM	Payne, Christine K	Functionalization of Quantum Dots for Labeling Proteins in Live Cells	Salary
CHEM /BCHM	Zapata, Jairo	CHEM /BCHM	Payne, Christine K	Delivery of Small Interfering RNA into the Cytosol	Salary
EAS	Shaikh, Afshan	EAS	Frankel, Kurt L	Rate of Deformation Along the Western Tunka Fault Zone and Intracontinental Deformation in Central Asia	Salary
Physics	Blumoff, Jacob	Physics	Kuzmich, Alexander M	Spectroscopy of Thorium-229 – Preparing for an excited nucleus	Salary
Physics	Marchenkova, Anastasia	Physics	Kuzmich, Alexander M	Entanglement at Telecommunication Wavelengths	Salary
Physics	Meeks, Zachary	Physics	Shoemaker, Deirdre Marie	Determining the Template Space of Black Hole Collisions for Gravitational Wave Detectors	Salary
Georgia Tech Research Institute					
GTRI-EOS	Han, Chenlu	ME	Kang, Zhitao	Nanophosphor Embedded Polymeric Nanocomposite for X-ray Imaging	Salary
GTRI-EOS	Nguyen, Justin	PTFE	Ready, William Judson	Analysis and Characterization of 3D Amorphous Silicon Solar Cells	Salary
Ivan Allen College					
ECON	Rieck, Kristin	ECON	Nair-Reichert, Usha C	Nuclear Energy Technologies Trade: A Study of the Developing Market and its Impacts on International Policymaking	Salary
HTS	Meyer, Jessica	HTS	Gerona, Carla	Athanase de Mézières and other Observations of East Texas during the 1700s	Salary
HTS	Whiteside, Kaitlyn	HTS	Bayor, Ronald H	The Implementation of Desegregation in Chattanooga, TN	Salary
PP	Ratray, Liam	PP	Cozzens, Susan E	Hackspaces: A Study of Community Innovation in Emerging Technologies	Salary