

President's Undergraduate Research Awards (PURA) -- Spring 2010

Award School	Student Name	Student Major	Mentor Name	Paper Title	Award Type
College of Architecture					
COA	Shin, SeungHo	ISYE	Ashuri,Baabak	Studying the Impact of Labor Market and Construction Volume on Building Construction Cost	Salary
College of Management					
COM	Tulei, Ilya	MGMT	Zhang,Han	The Continual Usage of Social Networking Site: Intrinsic Motivation and Social Influence	Salary
College of Computing					
CSE	Stebar, Brian	CS	Fujimoto,Richard M	Online Transportation System Simulation	Salary
IC	Bardagjy, Andrew	CS	Dellaert, Frank	Appearance Based Manifold Localization	Salary
IC	Jain, Abhishek	CS	Starner,Thad E	Developing a mobile system capable of detecting play behaviors of autistic children	Salary
IC	Russell, Christopher	CS	Dellaert, Frank	Robotic Painting: Rendering Graphics on a Canvas	Salary
College of Engineering					
AE	Chterev, Ianko	AE	Lieuwen,Timothy Charles	Pratt and Whitney Heat Release Distribution Unit Problem	Salary
AE	Ma, Hsin-Hsiao (Jim)	AE	Mavris, Dimitri	Manufacturing Influenced Design in Aerospace Applications	Salary
AE	Miers, Jesse	AE	Walker II, Mitchell L.R.	Developing Methodologies for Determining the Ionization Cost of Helicon Plasma Sources	Salary
AE	Pedroza, Juan	AE	Lieuwen,Timothy Charles	Turbulent Flame Speed Measurements of Syngas Fuels	Salary
AE	Richards, Phillip	AE	Smith, Marilyn J	An Exploration of the Physics of Dynamic Stall	Travel
AE	Sullivan, Ryan	ME	Lieuwen,Timothy Charles	Flame Shape Analysis of Lean, Premixed, Swirl-Stabilized Combustors in Response to Geometric and Operational Changes	Salary
AE	Vaden, Sarah	AE	Seitzman, Jerry M	Laminar Flame Speeds of Hydrocarbon Fuels with Dilution	Salary
AE	Wasmund, Thomas	ME	Lieuwen,Timothy Charles	Turbulent Flame Speed Measurements of Syngas Fuels at Gas Turbine Operating Conditions	Salary
AE	Wise, Marcie	AE	Saleh, Joseph	Survey of Past and Current Satellite Platforms: Characteristics and Timeline of Introduction	Travel

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BME	Aboujamous, Nader	BME	Barker,Thomas Harrison	Altering Fibrin Structure and Polymerization Dynamics Using PEGylated Fibrin Knob Peptides	Salary
BME	Brasuk, Katie	BME	Kemp,Melissa Lambeth	Modeling of NF- κ B regulation through redox couples in pediatric acute lymphoblastic leukemia	Salary
BME	Britt, Chelsea	BME	Boyan,Barbara D	The Bone, Cartilage, and Bone Marrow Cell Phenotypes of the Sick Cell Mouse Model	Salary
BME	Brown, Wendy	BME	Barker,Thomas	Identification of Unique Fibrin-Binding Antibodies	Salary
BME	Buice, Dana	BME	Yoganathan,Ajit	The Effects of a Three-Dimensional Saddle-Shaped Annulus on Tricuspid Valve Leaflet Strain	Salary
BME	Dehitta, Eleanor	BME	Bellamkonda,Ravi Venkat	Comparison of Novel Nano-encapsulated Drug to a Commercially Available Drug for Anti-angiogenic and Anti-invasive Therapy of Malignant Glioma	Salary
BME	Mitra, Debika	BME	Kemp,Melissa Lambeth	Comparison of IKK glutathionylation during TNF- α and T cell receptor stimulation	Salary
BME	Mukhopadhaya, Shoumit	BME	Bellamkonda,Ravi Venkat	Fiber Based Scaffold for Peripheral Nerve Regeneration	Salary
BME	Nizkorodov, Alexandr	BME	Boyan,Barbara D	In vivo Cartilage Regeneration in a Rat Critical-Size Xiphoid Cartilage Defect Model Using Tissue Engineered-Chondrocytes/Silk Scaffolds	Salary
BME	Rajan, Nithish Balaji	BME	Bellamkonda,Ravi Venkat	Study of reactive astrocytes and its role in glial scar tissue formation.	Salary
BME	Richards, Megan	BME	Boyan,Barbara D	Characterization of Pathological Suture Fusion in Twist1 Mice	Salary
BME	Riemenschneider, Kelsie	BME	Boyan,Barbara D	Mechanism Involved in Pdia3-Mediated 1,25-Dihydroxyvitamin D3 Actions in Regulation of Skeletal Development	Salary
BME	Rudra, Soumon	BME	Bellamkonda,Ravi Venkat	Understanding the Role of Fibrin in Peripheral Nerve Regeneration	Salary
BME	Srimani, Jaydeep	ECE	Wang,Dongmei	A Web-based Platform for Pharmacokinetic Analysis of Dosing Models	Salary

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BME	Yu, Joana	BIOL	Santangelo, Philip J	Characterizing the Dynamics of Fluorescent Molecule Delivery in Live Cells Using Reversible Membrane Permeabilization	Salary
BME	Zeller, Mark	BME	Barker, Thomas	Identifying Novel Unfolded Fibronectin Binding Proteins	Salary
CHBE	Crane, Matthew	CHBE	Filler, Michael Aaron	An in situ study of group-IV surface functionalization for use in next-generation photovoltaic devices.	Salary
CHBE	Kim, Jeong	CHBE	Hess, Dennis W	Plasma Enhanced Chemical Vapor Deposition of Limonene	Salary
CHBE	McGrail, Daniel	CHBE	Dawson, Michelle R	Real-Time Intravital Microscopy Characterization of Interspecies Mesenchymal Stem Cell Differences	Salary
CHBE	Nagarkar, Divya	CHBE	Agrawal, Pradeep K	Kinetics of Biomass Gasification	Salary
CHBE	Park, Sohyun	CHBE	Prausnitz, Mark R	Hollow Metal Microneedles for Intradermal Drug Delivery	Salary
CHBE	Ricketts, Michael	CHBE	Bommarius, Andreas S	Improving Enzyme Thermostability for use in Antibiotic Synthesis	Salary
CHBE	Schlumpberger, Sven	CHBE	Reichmanis, Elsa	Effects of Solvents on Polymer Aggregation and Field-Effect Mobility	Salary
CHBE	Sood, Devika	CHBE	Teja, Aryn S	Porous Polymer Blends for Hydrogen Storage	Salary
CEE	Belsante, Michelle	CEE	Teizer, Jochen	Real-time Construction Noise and Safety Data Collection and Analysis at the Clough Undergraduate Learning Center (CULC)	Salary
CEE	Hoynowski, Ashley	CEE	Teizer, Jochen	Using Visualization Software to Assess Construction Work Site Safety and Productivity	Salary
CEE	Kabir, Nadir	ME	Webster, Donald R	Kinematics of Krill Motility and its Effects on the Environment	Salary
CEE	Kim, Jenny	BIOL	Spain, Jim C	Aerobic Biodegradation of Diphenylamine	Salary
ECE	Bhandari, Seema	ECE	Swaminathan, Madhavan	Self-Healing Methodology for 3-D Mixed-Signal Circuits and Systems	Salary
ECE	Dewan, Rahul	ECE	Wills, Donald Scott	Automated Traffic Flow Analysis and Optimization	Salary
ECE	Green, David	ECE	Ji, Chuanyi	Geospatial Analysis of Natural Disaster-Induced Network Outages	Salary

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ECE	Saenz Landazabal, David	ECE	Divan,Deepakraj M	Power Flow Control in MATLAB using Controllable Network Transformers	Salary
ISYE	Park, Jisu	ISYE	Serban,Nicoleta	The Equity of Healthcare Service Distribution	Salary
MSE	Bhatnagar, Shivani	BME	Gall,Kenneth A	Visible Light Photoinitiation of Drug-Eluting Poly(β -amino ester) Networks	Salary
MSE	Hsie, Sinsar	MSE	Wong,C P	Conductive Polymer Composites from Multi-walled Carbon Nanotubes and Epoxy for Polymer Ageing Sensor Applications	Salary
MSE	Karesh, Matthew	ME	Gall,Kenneth A	Incorporation of High Performance Engineering Materials to Increase the Strength of Shape-Memory Polymers	Salary
MSE	Kemp, Jonathan	CHBE	Gall,Kenneth A	Using Novel Monomers to Optimize Toughness in Shape-Memory Polymers	Salary
MSE	Tsukruk, Taisia	MSE	Gall,Kenneth A	Mechanical Effects of Particle Incorporation into Hydrogel Systems	Salary
ME	Atangcho, Perry	BME	Karim Sabra	Measuring the Mechanical Properties of Skeletal Muscles Using Natural Vibrations Generated by Muscles during Voluntary Contractions	Salary
ME	Caulk, Alexander	ME	Gleason Jr.,Rudolph	In Vivo Arterial Response to Mechanical Stimuli and Significance of Perivascular Tissue During Loading	Salary
ME	Fechtman, Michael	ME	Harris,Tequila A. L.	Energy Efficiency Improvements in Quantum Dot Sensitized Solar Cells	Salary
ME	Hartley, Douglas	ME	Bras,Bert	Energy Mapping of the Georgia Tech Campus	Salary
ME	Kulpe, Jason	ME	Leamy,Michael Joseph	The Calculation of Acoustic Absorption using the Mesh Periodicity Property on Parallel Microtubes	Salary
ME	Manohar, Nivedh	NRE	Cho,Sang Hyun	Monte Carlo Optimization of an X-ray Fluorescence Detection System	Salary
ME	McAnuff, Kadija	BME	Garcia,Andres J	Generation of antibodies against bioengineered materials using phage display technology	Salary
ME	Mock, Caleb	ME	Choi,Seung-Kyum	Tolerance Analysis of Visual Display System Assembly using Fuzzy Set Theory	Salary

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ME	Murphy, Andrew	ME	Harris, Tequila A. L.	Testing and Characterization of the In-plane and Through-plane Permeability of Woven Gas Diffusion Layers for Polymer Electrolyte Membrane Fuel Cells	Salary
ME	Nemat bakhsh,	ME	Berthelot, Yves H	Transducers with Directional Characteristics	Salary
ME	Pare, Marc-Antoine	ME	Paredis, Christiaan	A Framework for Optimizing the System Architecture of Hydraulic Systems	Salary
ME	West, Daniel	ME	Hu, David L	Thermotaxis of Mexican Jumping Beans	Travel
ME	Zhao, Michael	BME	Gleason Jr., Rudolph	Stress Mediated Degradation of Poly(glycerol) Sebacate	Salary
GTRI					
GTRI - EEO	Bryan, Natalie	PTFE	Ready, William Judson	Carbon Nanotube Growth on Carbon Fiber	Salary
GTRI - EEO	Manfre, Alec	ME	Ready, William Judson	Electrical Characterization of 3D Solar Cells	Salary
GTRI - EEO	Mattix, Brandon	BME	Ready, William Judson	Drug Eluting Nanoelectrode Array	Salary
GTRI - EEO	Muhlbauer, Rachel	MSE	Kang, Zhitao	Quantum Dot Array for Neural Signal Recording	Salary
GTRI - EEO	Rogers, Thomas	MSE	Kang, Zhitao	Luminescent Nanocrystals/Quantum Dot Functionalized Paper	Salary
College of Sciences					
EAS	McLaughlin, Molly	CHBE	Nenes, Athanasios	Construction and Characterization of a Thermometer in order to directly measure the CCN properties of Organic Aerosol across the Volatility Spectrum	Salary
BIOL	Brouillette, Ashley	BIOL	Wartell, Roger M	Enhancing DNA hybridization stringency in Nucleic Acid Sensors	Salary
BIOL	Gray, Rebecca	BIOL	Pullman, Gerald S	Studying Somatic Embryogenesis and Germination in Fraser Fir (<i>Abies fraseri</i>)	Salary
BIOL	Jacob, Robin	BIOL	Wartell, Roger M	Determining the Secondary Structure of Small Non-Coding RNAs (sRNA) as a Function of Temperature By Modified Ribonuclease H Digestion Assay	Salary
BIOL	Jain, Kanav	BME	Wartell, Roger M	Software-guided analysis of Hfq-mediating sRNAs in several pathogenic bacteria	Salary
BIOL	Kendig, Amy	BIOL	Kubaneck, Julia M	Allelopathy in Invasive <i>Spartina Alterniflora</i>	Salary
BIOL	Lee, Janet	BIOL	Jiang, Lin	Using laboratory protist microcosms to explore the effects of disturbance and prey refuge on predator-prey interactions.	Salary

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CHEM	Miller, Sean	CHEM	Oyelere,Adegboyega	Synthesis & Preliminary Assay of Novel β -Lactam Antibiotics	Salary
CHEM	Santha, Savini	CHEM	Tolbert,Laren M	Mechanism of Bleaching of Fluorescent Protein KillerRed	Salary
CHEM	Vavra, Kevin	CHEM	Janata,Jiri	Study of Copper and Nickel Multilayered Arrays Using Magnetic Quartz Crystal Microbalance	Salary
CHEM	Zapata, Jairo	CHEM	Payne,Christine K	Intracellular Degradation of Low-Density Lipoprotein	Salary
Math	Music, Michael	Math	Harrell, Evans	Eigenvalue Inequalities for Quantum Graphs	Travel
PHYSICS	Cabrera, Nicole	Physics	Sowell, James	Orbital Elements and Absolute Dimenions of the Eclipsing Binary ES Librae	Travel
PSYCH	Kuriakose, Princy	BIOL	Engle,Randall W	Cognitive Predictors of Multitasking	Salary
PSYCH	McDaniel, Brooke	PSYCH	Engle,Randall W	How does positive affect influence task performance? The interplay between positive affect, working memory capacity and personality	Salary
PSYCH	Newsome, Rachel	PSYCH	Duarte,Audrey L	Encoding effects of emotional stimuli on subsequent source memory recall	Salary
PSYCH	Strika, Kevin	PSYCH	Shipstead,Zachary	Unconscious Formation of Multiple Impressions	Salary
Ivan Allen College					
ECON	Staight, Annie	ECON	Iacopetta,Maurizio	Can Ecolabels Improve Environmental Practices?	Salary
ECON	Yu, Fengning	INTA	Uwaifo,Ruth O	Educator Shortage, HIV, and Economic Decline: The Case of Rural South Africa	Salary
HTS	Hall, Della	HTS	Flamming,Douglas	A History of Wind Power	Salary
HTS	Martin, Kelsey	HTS	Pearson Jr,Willie	The Image of Women in Advertising	Salary
INTA	Bennett, Benjamin	INTA	Birchfield,Vicki L	The Role of Identity in Shaping French Voting on the EU	Salary
INTA	Lange, Katherine	INTA	Kosal,Margaret E	Deterring Bioterrorism	Salary
LCC	Ead, SAmer	CM	Pearce,Celia	Mermaids MMOG	Salary
ML	Sweetnich, Lindsey	ML	Montes-Alcala,Cecilia	Keeping the Spanish Language Alive in the United States	Salary
PP	Derby, Laurel	PP	Levine,Aaron David	Access to Fertility Treatment	Salary
PP	McMillian, Christina	INTA	Leggon,Cheryl	Greater Educational Attainment for Women in Developing Nations through Emerging Communications Technology and Supplemental Support Infrastructure	Salary