

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

September 26, 2006

TOTALS	Number of Awards	Total Awards		Number of Awards	Total Awards
SALARY	80	\$120,000	TRAVEL	14	\$12,500

## TRAVEL AWARDS

	Student Last	Student First	Student Major	Student College	Mentor	Mentor School	Mentor College	ResearchTitle
<b>College of Computing - 2 Awards</b>								
	Hewitt	Anne	CS	COC	Dr. Amy Bruckman	COC	COC	How does the facebook affect student/faculty relationships?
	Lindsey	Laurence	Math	COS	Dr. Tucker Balch	COC	COC	The Georgia Tech Marine Robotics Group Autonomous Underwater Vehicle Design
<b>College of Engineering - 8 Awards</b>								
	Berguig	Geoffrey	ME	COE	Dr. Todd McDevitt	BME	COE	Spatially Controlled Differentiation of Embryonic Stem Cells
	Bumb	Shalini	BME	COE	Dr. Ravi Bellamkonda	BME	COE	Overcoming the Inhibitory Effects of Chondroitin Sulfate Proteoglycans in Central Nervous System Regeneration
	Dastidar	Rajarshi	AE	COE	Dr. Bruce Glasgow	GTRI	COE	Team SOMA
	Deutsch	Eric	ME	COE	Dr. Angela Lin	ME	COE	Osteogenic Capacity of Amniotic Fluid Stem Cells in vivo and the Effect of in vitro Culture
	Kim	Dooroo	ME	COE	Dr. William Singhose	ME	COE	Reduction of Double Pendulum Crane Oscillations
	Li	Yang	ChBE	COE	Dr. Athanassios Sambanis	ChBE	COE	Mass Transport of Cryoprotectants in Tissue Engineered Pancreatic Substitute
	Nourparvar	Paymon	BME	COE	Dr. Ajit Yoganathan	BME	COE	An In Vitro Fetal Circulation Model
	Zhang	Yu	BME	COE	Mr. Paul Fincannon (GT)/Dr. Brent Liu (USC)	BME	COE	Location Tracking and Verification System (LTVS)
<b>College of Sciences - 1 Award</b>								
	Thomas	Amanda	CEE	COE	Dr. Andrew Newman	EAS	COS	Defining the Seismogenic Plate Interface Geometry of the Middle America Trench near Northern Costa Rica
<b>Georgia Tech Research Institute (GTRI) - 1 Award</b>								
	Camacho-Aguilera	Rodolfo	MSE	COE	Dr. William Jud Ready	GTRI	GTRI	Functionalize Carbon Solar Cell Building and Characterization
<b>Ivan Allen College - 2 Awards</b>								
	Hunt	Devin	Comp Media	IAC	Dr. Michael Nitsche	LCC	IAC	Puppet Show: Intuitive Puppet Interfaces for Expressive Character Control
	West	Alexander	Comp Media	IAC	Dr. Michael Nitsche	LCC	IAC	Puppet Show

SALARY AWARD WINNERS								
Student Last	Student First	Student Major	Student College	Mentor	Mentor School	Mentor College	ResearchTitle	
<b>College of Engineering - 50 Awards</b>								
Boechler	Nicholas	AE	COE	Dr. Narayanan Komerath	AE	COE	Direct Conversion for Space Solar Power	
Liu	Yuan (James)	AE	COE	Dr. J. V. R. Prasad	AE	COE	Active Compressor Stability Management	
Perner	David	AE	COE	Dr. Mitchell Walker	AE	COE	MPDT Design Methodologies	
Prahst	Benjamin	AE	COE	Dr. Narayanan M. Komerath	AE	COE	"Reverse Flow Aerodynamics for High-Speed VTOL Craft"	
Thaker	Pratik	AE	COE	Dr. Anthony J. Calise	AE	COE	"Autonomous tracking of a mobile ground target by an Unmanned Aerial Vehicle (UAV) using vision-based sensors"	
Yano	Masayuki	AE	COE	Dr. Mitchell Walker	AE	COE	Experimental verification of annularly-bounded helicon plasmas	
Bachman	Ben	CS/Bio-Chem	COC	Dr. May Dongmei Wang	BME	COE	K-Nearest Neighbors Fast Implementation	
Balusu	Sri	BME	COE	Dr. Ravi Bellamkonda	BME	COE	Novel Contrast Agent Delivery System for Tumor Imaging	
Chervonski	Michael	BME	COE	Dr. Barbara D. Boyan	BME	COE	The Role of Phospholipase D in the Signaling Cascade of Osteoblast Regulation	
Elhammali	Adnan	Physics	COS	Dr. Ajit Yoganathan	BME	COE	Effects of Shear Stress on Biological Properties of Heart Valves.	
Falcone	Jessica	BME	COE	Dr. Yadong Wang	BME	COE	Nerve Repair with the use of PGS Scaffolds	
Goette	Matthew	BME	COE	Dr. Larry McIntire	BME	COE	The Effect of Reversing Blood Flow on the Transmigration of Monocytes through the Endothelium	
Gonzales	Christophe r	Biology	COS	Dr. Michelle LaPlaca	BME	COE	Elucidating Neural Cell Tolerances to Traumatic Loading	
Han	Xiao	BME	COE	Dr. May Dongmei Wang	BME	COE	Extensibility for Microarray & Proteomics Cancer Profiling Platform	
Hartzell	Christine	AE	COE	Dr. Hanjoong Jo	BME	COE	The Effects of Microgravity on Nitric Oxide Levels in Mouse Aortic Endothelial Cells	
Jayaprakash	Gopinath	ECE	COE	Dr. Ajit P. Yoganathan	BME	COE	Segmentation and 3D Reconstruction of the Complex Cardiovascular Anatomy with Emphasis on Extracting Surrounding Vessels and Structures to Aid Surgical Planning	
MacEachern	Patrick Blaise	BME	COE	Dr. Larry V. McIntire	BME	COE	Determining the contribution of cytochrome P450s in the downregulation of VCAM1 by shear stress	

	Nanavati	Darshini	Biology	COS	Dr. Barbara Boyan	BME	COE	Identifying Vitamin D Mechanisms in Cartilage Cells
	Patel	Darshin	BME	COE	Dr. Ajit Yoganathan	BME	COE	Effects of normal and elevated pulsatile pressure on porcine aortic valve inflammation and remodeling: an ex vivo study
	Reddy	Nakul	ECE	COE	Dr. Steve DeWeerth	BME	COE	Models of the electrode- electrolyte interface applied towards neural stimulation
	Roush	Kimberly	BME	COE	Dr. Michelle LaPlaca	BME	COE	Mesenchymal Stem Cell Differentiation for Use in Neural Transplants
	Shukla	Shreya	BME	COE	Dr. Todd C. McDevitt	BME	COE	Extracellular matrix synthesis by differentiating embryonic stem cells
	Smith	Kimberly	BME	COE	Dr. Ajit Yoganathan	BME	COE	PIV and PowerLoss of TCPC connections
	Vadoothker	Saujanya	BME	COE	Dr. Hanjoong Jo	BME	COE	Simulated Microgravity and Shear Stress Effects on 2T3 Pre-osteoblasts
	Wei	Chia-Hung	BME	COE	Dr. Julie Jacko	BME	COE	Examining the relative physiological and psychological responses during competitive and cooperative scenarios in violent video games
	Wike	Laurel	Biology	COS	Dr. Barbara Boyan	BME	COE	Thrombin Peptide TP508 Regulates Chondrocyte Phenotype via Activation of ERK1/2 MAP Kinase Signaling Pathways
	Zou	Yixiao	BME	COE	Dr. Steve M. Potter	BME	COE	Systematic Study of Multi-electrode Stimulation Parameters for Burst Quieting in Dissociated Cortical Cultures
	Gandhi	Varun	CEE	COE	Dr. Jaehong Kim	CEE	COE	Exploring reaction of water stable nano-C60 with hydroxyl radical
	Iqbal	Pervez	CEE	COE	Dr. James Mulholland	CEE	COE	Spatial Analysis of Ambient Air Pollutants in Atlanta
	Passione	Allison	CEE	COE	Dr. J. Carlos Santamarina	CEE	COE	A Geomechanical Study of Ant Tunnelling
	Almon	Elizabeth	CHBE	COE	Dr. Carson Meredith	CHBE	COE	Optimization of Fuel Cell Membranes with High-Throughput Screening
	Fritz	Ashley	CHBE	COE	Dr. Hang Lu	ChBE	COE	A Microfluidic System for High-Throughput Screening of Bacterial Phenotypical Mutants
	Hess	Nicole	CHBE	COE	Dr. Charles A. Eckert	ChBE	COE	Characterization and Phase Behavior of Polyethylene Glycol with CO2 for Tunable Solvent Systems
	Marin	Andrew	ChBE	COE	Dr. Charles A. Eckert	CHBE	COE	An Spectroscopic Determination of Tautomeric Equilibrium Constants in Gas Expanded Liquids
	Nunez	Laura	CHBE	COE	Dr. Charles A. Eckert	CHBE	COE	Organic-Aqueous Tunable Solvents (OATS) for homogeneous catalyst recycle
	Patel	Hinal	CHBE	COE	Dr. Pradeep K. Agrawal	ChBE	COE	Definition of Optimum Temperature Range for Catalytic Materials
	Saha Kuete	Carine	ChBE	COE	Dr. Sankar Nair	ChBE	COE	Thermal Properties of Nanostructured Zeolite Thin Films
	Shenstone	Megan	CHBE	COE	Dr. Charles A. Eckert	CHBE	COE	High Throughput Bioseparation Using Supercritical Fluid Chromatography
	Terrett	Stuart	CHBE	COE	Dr. Charles A. Eckert	ChBE	COE	Enhancing Separations in Environmentally Benign Polyethylene Glycol

	Alreja	Arish	ECE	COE	Dr. Ian F. Akyildiz	ECE	COE	Comparison of UWB transmission techniques for Wireless Multimedia Sensor Networks
	Chalasanani	Punnaiah	ECE	COE	Dr. Shen, Shyh-Chiang	ECE	COE	Nanoscaled Device Fabrication Development on Wide-Bandgap Microelectronics
	Diamos	Gregory	EE	COE	Dr. Sudhakar Yalamanchili	ECE	COE	Using Dynamic Feedback Systems to Control Process Variation in On-Chip Networks
	Jolly	Sundeep	ECE/Physics	COE/COE	Dr. Ali Adibi	ECE	COE	Diffuse-source, Fourier transform spectroscopy using multiplexed spherical-beam volume holograms
	Raghavan	Manu	ECE	COE	Dr. James H. McClellan	ECE	COE	Tracking automated landmine detection system by camera-sensor imaging and signal correlation methods
	Trzeciecki	Alexander	ECE	COE	Dr. Gregory Durgin	ECE	COE	A Multi-Channel Gold Code Generator for MIMO Channel Sounding
	Xu	Ding Ding (Michael)	BME	COE	Dr. Robert Butera	ECE	COE	Bridging the Gap in neural signaling in a Transected Nerve
	Schlosser	Jeffrey	ME	COE	Dr. Chris Paredis	ME	COE	Managing Multiple Sources of Epistemic Uncertainty in Engineering Decision Making
	Weathers	James	NRE	COE	Dr. S. I. Abdel-Khalik	ME	COE	Thermal Performance of Mist Cooled Divertors for Magnetic Fusion Reactor Applications
	Dunham	Simon	MSE	COE	Dr. Chris Summers	MSE	COE	Processing, measurement, and simulation of 2D Photonic Crystals
<b>College of Management - 1 Award</b>								
	Ganti	Arun	ME	COE	Dr. Ravi Subramanian	COM	COM	Pricing Strategies for Remanufactured Products
<b>College of Sciences - 21 Awards</b>								
	Larkins	Denise	Psych	COS	Dr. Boris Priloutski	Appl Phys	COS	Understanding the Role of Feedback in Normal Locomotion After Nerve Injury
	Pirkle	Christen	Biology	COS	Dr. Julia Kubanek	Biology	COS	The effects of two potentially harmful phytoplankton species on zooplankton grazers
	Hadizadeh	Shervin	Biology	COS	Dr. Marion Sewer	Biology	COS	The Role of Liver Receptor Homologue in Breast Cancer
	Lee	Byron	Biology	COS	Dr. Roger Wartell	Biology	COS	Quantifying microRNA Gene Targets as a Function of the Loblolly Pine Embryo's Developmental Stages
	Shah	Nemil	ISYE	COE	Dr. Soojin Yi	Biology	COS	Dual species neutral atom source temperature control system.
	Vande Ven	Stephanie	Biology	COS	Dr. Soojin Yi	Biology	COS	Hair Growth in Hominoid Evolution and Mutations in Lineages.
	Clark	Mary	Chemistry	COS	Dr. Sheldon W. May	Chemistry	COS	Stopped flow studies on the reactions of organoselenium antioxidant compounds with glutathione
	Foley	Jonathan	Chemistry	COS	Dr. Rigoberto Hernandez	Chemistry	COS	D2Check: A web-server for protein structure interpretation
	Hipp	Dustin	Chemistry	COS	Dr. L. Andrew Lyon	Chemistry	COS	Protein Adsorption Studies of Polypeptide-Modified PEG-Crosslinked Microgels Covalently Bonded onto a Solid Substrate
	Kumar	Anjli	Chemistry	COS	Dr. David Collard	Chemistry	COS	The Synthesis of Functional Poly(norbornene)-b-poly(lactide) Diblock Copolymers for use as Reinforcing Agents in Biomimetic Scaffolds.

	d'Heurle	Albert	IAML	IAC	Dr. John Zhang	try	COS	Localizing Reactions Using Magnetic Nanoparticles
	Lathem	Terry	EAS	COS	Dr. Athanasios Nenes	EAS	COS	Laboratory Studies on the Cloud Droplet Formation Potential of Multi-Component Organic Aerosols.
	Block	Alexander	Math	COS	Dr. Ernest Croot	Math	COS	Stepenov's Method for Bounding Solutions to Polynomial Congruences
	Indrei	Emanuel	Math	COS	Dr. Eric Carlen	Math	COS	Markov Chains and Traffic Analysis
	Ghosh Dastidar	Rajarshi	AE	COE	Dr. David Finkelstein	Physics	COS	A Numerical Model of the Solar Systems Using the Principle of General Relativity
	Seltzman	Andrew	ECE/Physics	COS/COE	Dr. Chandra Raman	Physics	COS	Generations of arbitrary custom optical potentials to manipulate Bose-Einstein condensates.
	Widloski	John	Physics/Math	COS	Dr. Roman Grigoriev	Physics	COS	Chaotic Mixing in Microdroplets
	Garcia	Bath-Ammi	Psych	COS	Dr. Elizabeth T. Davis	Psych	COS	The effect of color cuing and labeling in detection and localization performance in a visual search task
	Housman	Gillian	Psych	COS	Dr. Wendy Rogers	Psych	COS	CREATE
	Orlosky	Jason	ECE	COE	Dr. Bruce Walker	Psych	COS	Aquarium Sonification: Soundscapes for Accessible Dynamic Informal Learning Environments
	Chauhan	Shakti	CS/Bio-Chem	COC	Dr. Bruce Walker	Psych	COS	Advanced Localization through Sensor Fusion
<b>Georgia Tech Research Institute (GTRI) - 3 Awards</b>								
	Kepple	Kirsten	BME	COE	Dr. William Jud Ready	GTRI	GTRI	Carbon Nanotube Reinforced Composites: Basalt and Quartz Fabric
	Kumsomboone	Victor	MSE	COE	Dr. William Jud Ready	GTRI	GTRI	Enhancing vertically aligned carbon nanotube array field emission properties
	McLeod	Trevor	ECE	COE	Dr. William Jud Ready	MSE	COE	Chemical Bath Deposition of CdS for Solar Cell Applications
<b>Ivan Allen College - 6 Awards</b>								
	Johnson	David	Econ/ISyE	IAC	Dr. Rehim Kilic	Economics	IAC	Uncovered Interest Rate Parity: An empirical investigation across emerging and developed economies
	Shah	Sarang	Physics/Public Policy	COS/IA C	Dr. Maurizio Iacopetta	Economics	IAC	The Effect of Liberalized Washington Consensus policy on Latin America
	Shoaib	Summar	INTA	IAC	Dr. Sylvia Maier	INTA	IAC	The Status of Women After the Taliban
	Vaughn	Christine	IAML	IAC	Dr. Michelle Dion	INTA	IAC	Mexico's Political Atmosphere after the fall of the PRI in 2000
	Finney	Sharyn	Public Policy	IAC	Jan Youtie	Public Policy	IAC	Multilateral Comparative Analysis of the Appropriability of Nanotechnology Research
	Taylor	Jason	CS	COS	Dr. Michael H.G. Hoffmann	Public Policy	IAC	"Intelligent design: Documenting a debate about 'What is science?'"