

Summer 2011 President's Undergraduate Research Award (PURA)

Award School	Student Name	Student Major	Mentor Name	Paper Title	Funding Type
College of Architecture					
School of Building Construction	Rogers, Angela	Building Construction	Castro-Lacouture,	Project Delivery, BIM, and Green Practices in the French Construction Industry: Lessons Learned for the U.S.	Salary
College of Engineering					
Aerospace Engineering	Holmes, Marlin	Aerospace Engineering	Smith, Marilyn J	Analysis of Aerodynamic/Dynamic Interactions	Salary
Aerospace Engineering	Sandwich, Christopher	Aerospace Engineering	Smith, Marilyn J	Role of Transition with Stall	Salary
Aerospace Engineering	Smith, Travis	Aerospace Engineering	Lieuwen, Timothy Charles	Effect of Fuel Composition on Flame Behavior for Gas Turbine Applications	Salary
Aerospace Engineering	Wong, Lawrence	Aerospace Engineering	Clarke, John-Paul B	Green Innovation in Air Transportation: The Continuous Descent Arrival	Salary
Biomedical Engr, GT/Emory	Bandari, Sahaja	Chemical and Biomolecular	Yoganathan, Ajit	Study of Shear Induced Blood Damage in a Bileaflet Mechanical Heart Valve using Blood Coagulation Assays	Salary
Biomedical Engr, GT/Emory	Bari, Bilal	Biomedical Engineering	Stanley, Garrett Baker	Detectability of Neural Electrical Stimulation in Behaving Rats	Salary
Biomedical Engr, GT/Emory	Cundiff, Caitlin	Biology	Olivares-Navarrete, Rene'	Wnt Signaling Pathways in Osseointegration with Titanium Implants	Salary
Biomedical Engr, GT/Emory	Damen, Frederick	Biomedical Engineering	Hu, Xiaoping	Language Pathway Homologues in Chimpanzees Reconstructed Using Diffusion Tractography	Travel
Biomedical Engr, GT/Emory	Foo, Andrew	Biomedical Engineering	Bost, Lewis Franklin	Designing an Ultrasound Guided Needle for Central Venous Catheterization	Salary
Biomedical Engr, GT/Emory	Gleber, Ryan	Biomedical Engineering	Zarnitsyna, Veronika	Two different kinetic regimes in T cell antagonism: TCR limitation and MHC limitation	Salary
Biomedical Engr, GT/Emory	Hadadi, Agreen	Biology	Boyan, Barbara D	Effects of 17beta-Estradiol on Expression of Metastatic Factors in Breast Cancer	Salary
Biomedical Engr, GT/Emory	Lamas, Gabriela	Biomedical Engineering	Babensee, Julia Elizabeth	Babensee Lab	Salary
Biomedical Engr, GT/Emory	Mukherjee, Gargi	Aerospace Engineering	Babensee, Julia Elizabeth	Immunological Tolerance Induced by the Primary Delivery of Agarose Scaffold with OVA-Expressing Cells	Salary
Biomedical Engr, GT/Emory	Mukhopadhaya, Shoumit	Biomedical Engineering	Bellamkonda, Ravi Venkat	Developing Scaffolds with 3-d fiber configurations for peripheral nerve regeneration	Salary
Biomedical Engr, GT/Emory	Orticelli, Alexa	Biomedical Engineering	Mitchell, Cassie Sue	An assessment of axonal transport deficiencies in Amyotrophic Lateral Sclerosis	Salary
Biomedical Engr, GT/Emory	Vanover, Daryll	Biomedical Engineering	Santangelo, Philip J	Characterization of Stress Granules in Bovine and Mouse Tissues Infected with Respiratory Syncytial Virus	Salary
Biomedical Engr, GT/Emory	Watkins, Elyse	Biomedical Engineering	Boyan, Barbara D	Assessing the Effects Growth Factors Secreted By Microencapsulated Adipose Stem Cells Have on Cartilage	Salary

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Chemical and Biomolecular Engr	Andrews, James	Chemical and Biomolecular	Eckert, Charles A	Selective Deprotection of Organic Compounds Using Very Hot Water	Salary
Chemical and Biomolecular Engr	Belancik, Grace	Chemical and Biomolecular	Walton, Krista S	Microwave-Assisted Synthesis of Water-Stable MOFs	Salary
Chemical and Biomolecular Engr	Donaldson, Jordan	Chemical and Biomolecular	Eckert, Charles A	Carbon Dioxide Capture via Aqueous Silylated Amine Solutions	Salary
Chemical and Biomolecular Engr	Fitzgerald, Rachel	Chemical and Biomolecular	Banerjee, Sujit	Management of Calcium Carbonate Scale in a Pulp Mill Digester	Salary
Chemical and Biomolecular Engr	Kuo, Che-Ying	Chemical and Biomolecular	Dawson, Michelle R	The Development of Gelatin Scaffolds for Tissue Engineering	Salary
Civil & Environmental Engr	McKay, Mitchell	Civil and Environmental	Kurtis, Kimberly E	Development and Characterization of Autogenous Self-Healing Concrete Utilizing Novel Cement Binder Compositions	Salary
Civil & Environmental Engr	Wall, Amanda	Civil and Environmental	Garrow, Laurie Anne	Developing Policies to Reduce Emission Failures: Understanding Who Fails Automobile Emission Tests and Why	Salary
Electrical & Computer Engr	Kale, Sameer	Chemical and Biomolecular	Vela, Patricio Antonio	Using the Kinect for Automating Manipulation Tasks	Salary
Electrical & Computer Engr	Vishwakarma, Dhruv	Biomedical Engineering	Rozell, Christopher John	Implementation of Sparse Learning Algorithms on Multi-core CPUs and GPUs	Salary
Industrial & Systems Engr	Sisson, Jennifer	Industrial and Systems Engineering	Serban, Nicoleta	Evaluation of Telemedicine for Screening of Diabetic Retinopathy	Salary
Materials Science & Engr	Alexander, Jeremy	Polymer, Textile, and Fiber Engineering	Yao, Donggang	Recycling of Waste Polytetrafluoroethylene Fiber as Polypropylene Composite Filler	Salary
Materials Science & Engr	Bandzar, Sean	Biomedical Engineering	Jang, Seung Soon	Nano-Mechanical Investigation of DNA Self-Assembly	Salary
Materials Science & Engr	Marchese, Matthew	Nuclear and Radiological	Gerhardt, Rosario A	Conductivity and Transmission Studies of Graphene Thin Films Prepared from Exfoliated Carbon Nanotubes (CNTs), Highly	Salary
Materials Science & Engr	Metcalf, Daniel	Materials Science and Engineering	Beckham, Haske II W	Nanofluidic Transport in Inorganic Nanotubes	Salary
Mechanical Engineering	Cruz, Camille	Mechanical Engineering	Hu, David L	Mechanics of Lactation	Salary
Mechanical Engineering	Daugherty, Taylor	Biomedical Engineering	Dixon, James Brandon	Development of a near infrared (NIR) imaging system and image processing techniques for analysis of lymphatic	Salary
Mechanical Engineering	Goli, Venkat	Chemical and Biomolecular	Sulchek, Todd A	A Novel Microfluidic Device for Generation of Janus Particles of Sub-Micron Size	Salary
Mechanical Engineering	Henegar, Caitlin	Mechanical Engineering	Sulchek, Todd A	Investigation of mechanical properties of metastatic cells	Salary
Mechanical Engineering	Modi, Akhil	Mechanical Engineering	Pucha, Raghuram V	Computational Tools for Engineered Polymer Nanocomposites	Salary
Mechanical Engineering	MoraLes, Juan	Mechanical Engineering	Hastings, Mardi C	Performance of Tourmaline Hydrophones at Low and Mid Frequencies	Travel

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Mechanical Engineering	Natarajan, Aswin	Biomedical Engineering	Ku, David N	Encapsulation of Islet Cells Within Poly(vinyl alcohol) (PVA) Cryogels for Treatment of Diabetes (Medical Devices)	Salary
Mechanical Engineering	Patel, Karan	Biomedical Engineering	Sulchek, Todd A	Using Atomic Force Microscopy to Study the Biomechanics and Biophysics of Cancer Cells	Salary
Mechanical Engineering	Yamada, Yasukuni	Mechanical Engineering	Hu, David L	Mechanism of Splash-Cup Seed Dispersal	Salary
College of Science					
Biology	Jain, Kanav	Biomedical Engineering	Wartell, Roger M	[Poster] Permutations of short sRNA segments for sRNA-mRNA interaction study	Travel
Biology	Tsai, Ludmila	Biomedical Engineering	Montoya, Joseph P.	Stable carbon and nitrogen isotope analysis of baleen in Northern Right Whales	Salary
Chemistry & Biochemistry	Nichols, Charles	Physics	Brown, Kenneth Ray	Measuring Quantum Entanglement Coherence in Planar Ion Traps	Salary
Chemistry & Biochemistry	Rives, James	Chemistry and Biochemistry	Lieberman, Raquel L	Crystal Structure of 5-Nitroanthranilic Acid Deaminase Determination	Salary
Chemistry & Biochemistry	Uribe, Omar	Chemistry and Biochemistry	Soper, Jake D	Stabilization and Isolation of a bis(Aminophenol) Manganese(III) Complex O ₂ Adduct	Salary
Earth & Atmospheric Sciences	Johnson, Christopher	Earth and Atmospheric Sciences	Frankel, Kurt L	Measuring present-day rates of strain accumulation along the Fish Lake Valley fault system, Pacific-North America plate	Salary
Earth & Atmospheric Sciences	Tomaszewski, Elizabeth	Chemistry and Biochemistry	Taillefert, Martial	Precipitation of Uranium Phosphate Minerals Through Microbial Hydrolysis of Natural Organophosphates as a New	Salary
Physics	Marchenkova, Anastasia	Physics	Kuzmich, Alexander M	Long-lived, Interacting Neutral Atom Quantum Memories	Salary
Physics	Masse, Andrew	Physics	Goldman, Daniel I	Vertical position control of a bioinspired sand-swimming robot	Salary
Physics	Meeks, Zachary	Physics	Shoemaker, Deirdre Marie	Determining the Template Space of Black Hole Collisions with Precessing Spins for Advanced Gravitational Wave Detectors	Salary
Ivan Allen College					
History, Technology & Society	Rule, Robert	History, Technology, and Society	Bauchspies, Wenda K	Cultural and Institutional Obstacles to Greater Participation of Women in Computer Science and Chemistry	Salary
Literature, Com & Culture (LCC)	Zaitsev, Paul	Computational Media	Yaszek, Lisa	Didacticism through Immersion in Science Fiction Interactive Visual Media	Salary
Public Policy	Edwards, Austen	Public Policy	Barke, Richard P	The Efficacy of Science & Technology as Engagement in US Foreign Policy	Salary