

SPRING 2014 PURA SALARY & TRAVEL AWARDS

Award Type	Project Title	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor College	Mentor Department/School
Student Salary	Optimized Smooth Pulses for Ion Trap Quantum Computers	John	Addison	Physics (PHYS)	Kenneth	Brown	Sciences	Chemistry and Biochemistry
Student Salary	Radiosensitivity of mammalian cells with prolonged G1 phase	Brian	Anderson	Nuclear Engineering (NE)	Chris	Wang	Engineering	Other
Student Salary	Optimizing gene therapy correction pathways for treatment of sickle cell anemia	Caleb	Appleton	Biomedical Engineering (BMED)	Gang	Bao	Engineering	Biomedical Engineering
Student Salary	Object Discovery Services for CCFS	Priya	Bajaj	Electrical Engineering (EE)	Dr. John	Copeland	Engineering	Electrical and Computer Engineering
Student Salary	$\Delta 7$ rrrn E. coli cloning by PCR	Amrita	Banerjee	Biochemistry (BCHM)	Loren	Williams	Sciences	Chemistry and Biochemistry
Student Salary	Spin Extraction Model for Ferromagnet/Insulator/Semiconductor Structure	Alex	Cardwell	Electrical and Computer Engineering (ECE)	Azad	Naeemi	Engineering	Electrical and Computer Engineering
Student Salary	Reduction of Pro-Inflammatory Factors in Human Platelets	Elizabeth	Carpenter	Biomedical Engineering (BMED)	Philip	Santangelo	Engineering	Biomedical Engineering
Student Salary	Understanding how Expectations Impact Automation Usage	Evelyn	Chang	Psychology (PSY)	Wendy	Rogers	Sciences	Psychology
Student Salary	Robust Optimization in Power Reduction Scheduling with Demand Response Strategy	Hongfan	Chen	Industrial Engineering (IE)	Xu (Andy)	Sun	Engineering	Industrial and Systems Engineering
Student Salary	Study of Kinematics and Fluid Mechanics behind Prey-Capturing Motion of Amphibians	Hyun	Choe	Mechanical Engineering (ME)	David	Hu	Engineering	Mechanical Engineering
Student Salary	A Simulation Approach to Coronary Heart Disease	John	Chow	Industrial Engineering (IE)	Turgay	Ayer	Engineering	Industrial and Systems Engineering
Student Salary	Perception of natural whisker and artificial optogenetic stimulation in the thalamocortical circuit of the awake behaving rat	Kasey	Clark	Biomedical Engineering (BMED)	Garrett	Stanley	Engineering	Biomedical Engineering
Student Salary	A Characterization of the Relationship Between Amyotrophic Lateral Sclerosis and Frontotemporal Dementia	Grant	Coan	Biochemistry (BCHM)	Cassie	Mitchell	Engineering	Biomedical Engineering
Student Salary	Effects of High-Energy Radiation Exposure of the Dielectric and Piezoelectric Response of Relaxor-Ferroelectric Single Crystals	Aida	Cortes-Pena	Mechanical Engineering (ME)	Nazanin	Bassiri-Gharb	Engineering	Mechanical Engineering
Student Salary	Swirl Heat Release Distribution for Liquid Fueled High Shear Swirler Configurations	Katherine	Durden	Aerospace Engineering (AE)	Tim	Lieuwen	Engineering	Aerospace Engineering
Student Salary	Efficacy of Interleukin-4 Protein	Kyle	Dymanus	Biomedical Engineering (BMED)	Ravi	Bellamkonda	Engineering	Biomedical Engineering
Student Salary	Identification of differences in structural gene expression between soft and stiff human mesenchymal stem cells sorted by a microfluidic separation device	Christine	Garcia	Biomedical Engineering (BMED)	Todd	Sulchek	Engineering	Mechanical Engineering
Student Salary	Probing the past atmospheric density of Mars: An experimental and field investigation of volcanic impact features.	Andrew	Gase	Earth and Atmospheric Sciences (EAS)	Josef	Dufek	Sciences	Earth and Atmospheric Sciences
Student Salary	Dynamic Fall Absorption in Humanoid Robots	Ravi	Haksar	Mechanical Engineering (ME)	Jun	Ueda	Engineering	Mechanical Engineering
Student Salary	A Study on the Thickness of Pore Layers in Porous PEEK Samples and Its Effect on Osseointegration and Strength	Haley	Harris	Biomedical Engineering (BMED)	Kenneth	Gall	Engineering	Materials Science and Engineering
Student Salary	Framework for Optogenetic Control of Neural Activity in a Cortical Network Model	William	Hendry	Biomedical Engineering (BMED)	Garrett	Stanley	Engineering	Biomedical Engineering
Student Salary	Nonlinear wave propagation in acoustic metamaterial	Neal	Jean	Electrical and Computer Engineering (ECE)	Ali	Adibi	Engineering	Electrical and Computer Engineering

Student Salary	Surface Modification for Improved Electrochromic Stability	Keith	Johnson	Materials Science and Engineering (MSE)	John	Reynolds	Sciences	Chemistry and Biochemistry
Student Salary	Non-uniformly Quantized Control of a Robotic Arm Using SMA Actuators for Generation of Human-Like Motion during Planar Reaching Tasks	Rohan	Katoch	Mechanical Engineering (ME)	Jun	Ueda	Engineering	Mechanical Engineering
Student Salary	ECONOMIC GROWTH AND POPULAR SUPPORT FOR MARKET- AND STATE-BASED ENVIRONMENTAL REGULATORY POLICY	Raghav	Kaul	Economics (ECON)	Vicki	Birchfield	Ivan Allen Liberal Arts	International Affairs
Student Salary	Studying Brain Activity during Optogenetic Stimulation Using Electroencephalography Data	Ankit	Kaushik	Biomedical Engineering (BMED)	Robert	Gross	Engineering	Biomedical Engineering
Student Salary	F-Actin Arrangement as an Indicator of Stiffness in Undifferentiated hMSCs	Jacob	Kazlow	Biomedical Engineering (BMED)	Todd	Sulchek	Engineering	Mechanical Engineering
Student Salary	Exploring Robotic Task Planning and Learning in Lego Assembly	Andrey	Kurenkov	Computer Science (CS)	Andrea	Thomaz	Computing	Computer Science
Student Salary	Improving the Efficiency of the CRISPR/Cas System and TALENs in Different Cell Types	Ang	Li	Biomedical Engineering (BMED)	Gang	Bao	Engineering	Biomedical Engineering
Student Salary	Predicting patient-specific osteoporotic potential through analysis of proteolytic and bone-resorbing activity of patient monocyte-derived osteoclasts	Gande	Li	Chemical and Biomolecular Engineering (CHBE)	Manu	Platt	Engineering	Biomedical Engineering
Student Salary	Magnetic Particle Detection of Tongue Movement for Speech Recognition	Helen	Li	Electrical and Computer Engineering (ECE)	David	Anderson	Engineering	Electrical and Computer Engineering
Student Salary	Aerodynamic-Dynamic Interaction of Bluff Bodies	Brandon	Liberi	Aerospace Engineering (AE)	Narayanan	Komerath	Engineering	Aerospace Engineering
Student Salary	Wireless Battery-Free Strain/Crack Sensor Project	Jiawei Lin	Lin	Civil Engineering (CE)	Yang	Wang	Engineering	Civil and Environmental Engineering
Student Salary	Efficient Algorithm to Calculate Percolation Threshold in Conductive Polymer Nanocomposites	Hannah	Littmann	Mechanical Engineering (ME)	Raghu	Pucha	Engineering	Mechanical Engineering
Student Salary	Manage Heat Stress on Construction Site with Monitor-Alert Technology	Hoang	Luu	Building Construction (BC)	Xinyi	Song	Architecture	Building Construction
Student Salary	Characterization of Caffeine Degradation Pathways in Bacteria from Lake Lanier	Gina	Maresca	Environmental Engineering (ENVE)	Kostas	Konstantinidis	Engineering	Civil and Environmental Engineering
Student Salary	Optimization of Propeller Efficiency for Minimized Power Consumption in Aircraft Through the Use of Variable Pitch Propellers	Lloyd	Maza	Aerospace Engineering (AE)	Eric	Feron	Engineering	Aerospace Engineering
Student Salary	The Influence of the Creole Tradition on the Works of Simone Schwarz-Bart	Michelle	Melear	International Affairs and Modern Language (IAML)	Nora	Cottille-Foley	Ivan Allen Liberal Arts	Modern Languages
Student Salary	Novel Strategy for Paclitaxel Cancer Therapy using Superparamagnetic Iron Oxide Nanoparticle Carriers	Priya	Mohindra	Biomedical Engineering (BMED)	Gang	Bao	Engineering	Biomedical Engineering
Student Salary	Characterization of LNA probes for intracellular post-transcriptional regulation towards therapeutic aims	Kathryn	Murray	Biomedical Engineering (BMED)	Philip	Santangelo	Engineering	Biomedical Engineering
Student Salary	NaIC Batteries: towards cheap energy storage	Georges	Nassif	Materials Science and Engineering (MSE)	Gleb	Yushin	Engineering	Materials Science and Engineering
Student Salary	Do Peroxisomes Interact with Phagosomes in Macrophages?	Tatiana	Netterfield	Biomedical Engineering (BMED)	Melissa	Kemp	Engineering	Biomedical Engineering
Student Salary	Processing and Characterization of Exfoliated Graphite Nanoplatelets/Polylactide Fibers	Yun Ju	Oh	Mechanical Engineering (ME)	Kyriaki	Kalaitzidou	Engineering	Mechanical Engineering
Student Salary	Veering Behavior of Haptically Linked Human Dyads	Tyler	Piccinni-Ash	Biomedical Engineering (BMED)	Lena	Ting	Engineering	Biomedical Engineering
Student Salary	Creation of Transgenic Constructs for Selective Ablation of Pancreatic Cells and Chemical Screening for Beta Cell Regeneration	Deeti	Pithadia	Biochemistry (BCHM)	Chong	Shin	Sciences	Biology
Student Salary	Design and Testing of 300 GHz Planar Antenna for Chip-to-Chip Wireless Communications	Taylor	Powell	Electrical and Computer Engineering (ECE)	Alenka	Zajic	Engineering	Electrical and Computer Engineering

Student Salary	Study of the electrical and mechanical properties of 3D printed structures using conductive ABS plastic	Waylon	Puckett	Mechanical Engineering (ME)	Rosario	Gerhardt	Engineering	Materials Science and Engineering
Student Salary	Probing Cell Mechanics to Overcome Ovarian Cancer Chemoresistance	Xiaomeng	Qi	Chemical and Biomolecular Engineering (CHBE)	Michelle	Dawson	Engineering	Chemical and Biomolecular Engineering
Student Salary	Analys of Melanoma Sentinel Lymph Nodes	Rahul	Rege	Biomedical Engineering (BMED)	Susan	Thomas	Engineering	Mechanical Engineering
Student Salary	Effect of Precuing on Preparation and Selection of Motor Responses	Heather	Roberts	Psychology (PSY)	Eric	Schumacher	Sciences	Psychology
Student Salary	Examination of the Effects of Cysteine Proteases Cathepsin K, S and V in HIV-transgenic/ Apolipoprotein E null mice to Provide Insight on the Human Immunodeficiency Virus and the Promotion of Atherosclerosis in Humans	LaDeidra	Roberts	Biomedical Engineering (BMED)	Manu	Platt	Engineering	Biomedical Engineering
Student Salary	Enhancing our Understanding of Self-Verification Striving, Job Interviews, and the Transition from College to Work	Jacqueline	Sample	Management (MGT)	Charles	Parsons	Business	Management
Student Salary	Latent Gesture: Active User Authentication through Background Touch Analysis	Premkumar	Saravanan	Computer Science (CS)	Duen Horng "Polo"	Chau	Computing	Computer Science
Student Salary	Orthotic Ankle Constraint Elicits Different Activation Pattern in Distal Muscles Compared to Proximal Muscles	Nafiz	Sheikh	Biomedical Engineering (BMED)	Christopher	Hovorka	Sciences	Applied Physiology (APPH)
Student Salary	A Study in Nanoparticles to Deliver Cancer Treatments using a Layer-by-Layer Technique	Christina	Siegrist	Chemical and Biomolecular Engineering (CHBE)	Julie	Champion	Engineering	Chemical and Biomolecular Engineering
Student Salary	Pteropod Swimming Behavior as a Bio Assay for Ocean Acidification	Anna	Skipper	Environmental Engineering (ENVE)	Donald	Webster	Engineering	Civil and Environmental Engineering
Student Salary	Quantitative Evaluation of Articular Cartilage Changes in a Rat Model of Osteoarthritis in Response to a Novel Therapeutic Approach	Sanjay	Sridaran	Biomedical Engineering (BMED)	Robert	Guldborg	Engineering	Mechanical Engineering
Student Salary	The Effect of Protein Nanoparticles on Immune Response and Route of Antigen Internalization in Dendritic Cells	Samantha	Stadmler	Biochemistry (BCHM)	Julie	Champion	Engineering	Chemical and Biomolecular Engineering
Student Salary	Pre-stimulus activity of memory encoding in healthy aging older adults	Sindhuja	Surapaneni	Psychology (PSY)	Audrey	Duarte	Sciences	Psychology
Student Salary	Tongue Magnet Interface	Pavleen	Thukral	Computer Science (CS)	Thad	Starnier	Computing	Computer Science
Student Salary	Investigating Efficient Inverted Top-Emitting OLEDs	Jonathan	Ting	Electrical and Computer Engineering (ECE)	Bernard	Kippelen	Engineering	Electrical and Computer Engineering
Student Salary	Modeling Specialized Nutritious Foods Supply Chains	Moorissa	Tjokro	Industrial Engineering (IE)	Dima	Nazzal	Engineering	Industrial and Systems Engineering
Student Salary	Enhanced Infrared Molecular Sensing via Localized Surface Plasmon Resonances in Silicon-doped Nanowires	Emily	Tucker	Chemical and Biomolecular Engineering (CHBE)	Michael	Filler	Engineering	Chemical and Biomolecular Engineering
Student Salary	Rigorous Calculations of Permeation in Mixed-Matrix Membranes	Robert	VanDyck	Chemical and Biomolecular Engineering (CHBE)	Sankar	Nair	Engineering	Chemical and Biomolecular Engineering
Student Salary	Self-Adjusting Temperament	Yijie	Wang	Computer Science (CS)	Timothy	Hsu	Architecture	Music
Student Salary	Effects of biofilm production on horizontal gene transfer to Vibrio cholerae	Sarah	Wilson	Biology (BIO)	Brian	Hammer	Sciences	Biology
Student Salary	A Bayesian Methodology of NCAA Basketball Bracket Prediction Improvement	Haoxiang	Yang	Industrial Engineering (IE)	Joel	Sokol	Engineering	Industrial and Systems Engineering
Student Salary	Effect of Variable Lymphocyte Receptor Protein Valency on Antibody-Antigen Agglutination	Varun	Yarabarla	Biomedical Engineering (BMED)	Todd	Sulchek	Engineering	Mechanical Engineering
Student Salary	Investigations on advanced airfoil and rotors for use in small wind turbine systems	Yao	Zhang	Aerospace Engineering (AE)	Lakshmi	Sankar	Engineering	Aerospace Engineering

Travel	TNF α and Shear Stress Regulation of Cathepsin K activity in the context of Sickle Cell Disease	Suhaas	Anbazhakan	Biomedical Engineering (BMED)	Manu	Platt	Engineering	Biomedical Engineering
Travel	Reflection through Design: Immigrant Women's Self-Reflection on Managing Health and Wellness	Victoria	Ayo	Computational Media (CM)	Rebecca	Grinter	Computing	Interactive Computing
Travel	RFID Powered Event Analytics	Priya	Bajaj	Electrical Engineering (EE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	RFID Powered Event Analytics	Colin	Bookman	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Habits of the Engineering Mind: A Study Abroad Course at Oxford	Jacquelyn	Borinski	Biomedical Engineering (BMED)	Joseph	Le Doux	Engineering	Biomedical Engineering
Travel	RFID Powered Event Analytics	Jordan	Conard	Computer Engineering (CMPE)	Greg	Durgin	Engineering	Electrical and Computer Engineering
Travel	Software in military aviation and drone mishaps: Analysis and recommendations	Veronica	Foreman	Aerospace Engineering (AE)	Joseph	Saleh	Engineering	Aerospace Engineering
Travel	Mapping the Way: Testing Methods to Map Water Points in Developing Countries	Alexandra	George	Civil Engineering (CE)	Laura	Kovalchick	Engineering	Civil and Environmental Engineering
Travel	Habits of the Engineering Mind	Kimberly	Haight	Biomedical Engineering (BMED)	Joe	Le Doux	Engineering	Biomedical Engineering
Travel	Isotropic negative thermal expansion in rock salt ordered mixed metal fluorides M(II)ZrF ₆ (M(II)=Ca, Co, Zn) with a ReO ₃ -type structure	Justin	Hancock	Chemistry (CHEM)	Angus	Wilkinson	Sciences	Chemistry and Biochemistry
Travel	RFID Powered Event Analytics	Sarthak	Jaiswal	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Conformational and thermodynamic study of amyloid beta 40 proto-fibril structure in explicit water using molecular modeling approach	Juho	Lee	Chemistry (CHEM)	Seung Soon	Jang	Engineering	Materials Science and Engineering
Travel	Assessing the Role of the Rare Biosphere in Microbial Community Response to Environmental Perturbation	Gina	Maresca	Environmental Engineering (ENVE)	Kostas	Konstantinidis	Engineering	Civil and Environmental Engineering
Travel	Habits of the Engineering Mind: A Study Abroad Course at Oxford	Elaine	McCormick	Biomedical Engineering (BMED)	Joe	Le Doux	Engineering	Biomedical Engineering
Travel	A Random Forest Method for Real-Time Price Forecasting in New York Electricity Market	Jie	Mei	Electrical and Computer Engineering (ECE)	Thomas	Habetler	Engineering	Electrical and Computer Engineering
Travel	Controlling Degradation and Protein Release in Heparin-containing Hydrogels with Varying Levels of Sulfation	Karthik	Nathan	Biomedical Engineering (BMED)	Johnna	Temenoff	Engineering	Biomedical Engineering
Travel	RFID Powered Event Analytics	Caleb	Purcell	Computer Engineering (CMPE)	Gregory	Durgin	Engineering	Electrical and Computer Engineering
Travel	Goal Orientation and Absorption of Unique Information in Teams	Sidni	Vaughn	Psychology (PSY)	Leslie	DeChurch	Sciences	Psychology
Travel	Protease Feedback Mechanism in Breast Cancer Metastasis	Charlene	Walton	Biomedical Engineering (BMED)	Manu	Platt	Engineering	Biomedical Engineering
Travel	HYDROGEN EMBRITTLEMENT IN THREE BAR STEELS	Gaoxiang	Wu	Environmental Engineering-REP (RENV)	Preet	Singh	Engineering	Materials Science and Engineering
Travel	Stretchable and Transparent Silicone/Zinc Oxide Nanocomposite for Advanced LED Packaging	Xueying	Zhao	Materials Science and Engineering (MSE)	Ching-Ping	Wong	Engineering	Materials Science and Engineering