Award Type	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor Department	Project Title
Salary Award	Asad	Abbas	Biomedical Engineering (BMED)	Wilbur	Lam	Biomedical Engineering	Cytoskeletal restructuring in the margination of neutrophils
Salary Award	Tarab	Ajjan	Chemistry (CHEM)	Erin	Buckley	Biomedical Engineering	Development of Enhanced Optical Sensors for Sickle Cell Disease
Salary Award	Maithili	Appalwar	Industrial Engineering (IE)	Jennifer	Singh	History, Technology, and Society	Mental Health Literacy in India
Salary Award	Anneke	Augenbroe	Biomedical Engineering (BMED)	Costas	Arvanitis	Biomedical Engineering	Ultrasound liquid biopsies in brain tumors
Salary Award	Deborah	Baker	Computational Media (CM)	Lisa	Yaszek	Literature, Media, & Communication	Science Fiction Podcast Research and Expansion
Salary Award	Anthony	Barnum	Mechanical Engineering (ME)	Frank	Hammond	Mechanical Engineering	Locking Mechanism for Robotic Joints
Salary Award	Mary-Catherine	Bryant	Biomedical Engineering (BMED)	Levi	Wood	Mechanical Engineering	Characterizing heme signaling in glial cells and neurons in Alzheimer's disease
Salary Award	Alicia	Caughman	Biology (BIO)	Frank	Stewart	Biological Sciences	Coral microbiome changes during a diel cycle
Salary Award	Yana	Charoenboonvivat	Aerospace Engineering (AE)	Narayanan	Komerath	Aerospace Engineering	The Glitter Belt
Salary Award	Piero	Chiappina	Physics (PHYS)	Dragomir	Davidovic	Physics	Investigation of Multipartite Entanglement in Itinerant Ferromagnets
Salary Award	Christie	Choi	Electrical Engineering (EE)	Ayanna	Howard	Electrical and Computer Engineering	Development of a Smart Infant Toy to Encourage Rolling Movements for Infants at Risk of CP
Salary Award	Noel	Csomay-Shanklin	Mechanical Engineering (ME)	Aaron	Young	Mechanical Engineering	Continuous Walking Parameter Estimation Using Multi-Data Sensor-Fusion
Salary Award	Rishabh	Datta	Mechanical Engineering (ME)	Peter	Loutzenhiser	Mechanical Engineering	CHARACTERIZATION OF REDOX-ACTIVE DOPED PEROVSKITE MATERIALS FOR HIGH-TEMPERATURE SOLAR THERMOCHEMICAL PROCESSES
Salary Award	Andrew	Denig	Nuclear and Radiological Engineering (NRE)	Dan	Kotlyar	Mechanical Engineering	ADDRESSING PRACTICAL CONCERNS REGARDING LOW ENRICHED NUCLEAR THERMAL PROPULSION ENGINES FOR DEEP SPACE EXPLORATION
Salary Award	Emily	Eastburn	Materials Science and Engineering (MSE)	Nick	Willett	Biomedical Engineering	Effects of compressive loading on microvasculature in vitro
Salary Award	Casey	Erb	Environmental Engineering (ENVE)	Kostas	Konstantinidis	Civil and Environmental Engineering	Quantifying the pathogen load in the air of Atlanta year-round
Salary Award	Kristin	Gao	Biomedical Engineering (BMED)	C. Ross	Ethier	Biomedical Engineering	Determining Neuroprotection in Glaucoma by Assessing the Efficacy of Genipin as a Crosslinking Agent in Scleral Stiffness
Salary Award	Ethan	Gray	Nuclear and Radiological Engineering (NRE)	Dan	Kotlyar	Mechanical Engineering	Cheap and Efficient Conversion of Radioactive Heat to Electricity
Salary Award	Karen	Gu	Biochemistry (BCHM)	Patrick	McGrath	Biological Sciences	Improved System for Measuring Bower-Building Behavior of Lake Malawi Cichlids using Kinect Xbox One Technology
Salary Award	Sophia	Guldberg	Biochemistry (BCHM)	MG	Finn	Chemistry and Biochemistry	Antibody targeted delivery of pro-drug converting enzymes using virus-like particle platform for cancer therapy
Salary Award	Rebecca	Hardie	Biomedical Engineering (BMED)	Rudolph	Gleason	Mechanical Engineering	Biomechanical Study of Lymphatic Vessels
Salary Award	Asimm	Hirani	Mechanical Engineering (ME)	Thomas	Kurfess	Mechanical Engineering	Development of Digital Manufacturing Sensors for Machine Coolant Quality Monitoring
Salary Award	Shirley	Huang	Chemical and Biomolecular Engineering (CHBE)	Gleb	Yushin	Materials Science and Engineering	Effect of Thin Metal Oxide Layer on Lithium Solid State Electrolyte-Li Metal Interface
Salary Award	Justin	Johnson	Aerospace Engineering (AE)	Mitchell	Walker	Aerospace Engineering	Thermal Induced Cracking of Boron Nitride
Salary Award	Jhazzmyn	Joiner	Literature, Media, and Communication (LMC)	Rebecca	Burnett	Literature, Media, & Communication	Bridging the Gap: Visual Narrative and Policies
Salary Award	Tamara	Kapetanovic	Psychology (PSY)	Tracy	Mitzner	Psychology	Expanding Social Relationships in Older Adults Using Personalized Technology
Salary Award	Mark	Keenum	Chemical and Biomolecular Engineering (CHBE)	Krishnendu	Roy	Biomedical Engineering	Improving PLGA Vaccine Production and Enhancing Vaccine Response
Salary Award	Lauren	Kelly	Biochemistry (BCHM)	M.G.	Finn	Chemistry and Biochemistry	Eliminating Peptide Extension Cleavage of Virus-like Particles in Storage
Salary Award	Nicholas	Klavohn	Chemical and Biomolecular Engineering (CHBE)	Mark	Prausnitz	Chemical and Biomolecular Engineering	Optimization of homogenization techniques to determine the oral bioavailability of nanoparticle encapsulated biologics
Salary Award	Patrycja	Kotowska	Physics (PHYS)	Jennifer	Curtis	Physics	Hyaluronan's Role in Varying Migration Speed of Breast Cancer Cells
Salary Award	Kshitij	Kulkarni	Electrical Engineering (EE)	Erik	Verriest	Electrical and Computer Engineering	Fourier Expansion of Periodic Orbits and Elimination Theory in Dynamical Systems
Salary Award	Kristine	Lacek	Biology (BIO)	Melinda	Millard-Stafford	Biological Sciences	Is there evidence for a male athlete triad? A prospective study to prevent overuse injury in endurance runners
Salary Award	Andrew	Lail	Biochemistry (BCHM)	Vinayak	Agarwal	Chemistry and Biochemistry	Crosstalk between Halogenases and Carrier Proteins in Polyhalogenated Pyrrole Biosynthesis
Salary Award	Tonghun	Lee	Industrial Engineering (IE)	Natashia	Boland	Industrial and Systems Engineering	Decomposition Branching and its Application to the Traveling Salesman Problem
Salary Award	Peilin	Lu	Materials Science and Engineering (MSE)	Gleb	Yushin	Materials Science and Engineering	Highly Porous Carbon Nanofibers with Ionic Liquid for Flexible Supercapacitors
Salary Award	Zijin	Luo	Computer Science (CS)	Mark	Riedl	Interactive Computing	Video Game Action Recognition using Transfer Learning
Salary Award	Fanzhe	Lyu	Computer Engineering (CMPE)	Patricio	Vela	Electrical and Computer Engineering	Uncertainty and Prediction for Visual Navigation by Mobile Robots in Dynamic Settings
Salary Award	Niyati	MacLeod	Biomedical Engineering (BMED)	Mark	Prausnitz	Chemical and Biomolecular Engineering	Treatment for Glaucoma Using Collagen Stiffening Agents
Salary Award	Marc	Marone	Computer Science (CS)	Jacob	Eisenstein	Interactive Computing	Document Level Language Modeling
Salary Award	Basil	McIntosh	Biomedical Engineering (BMED)	Wilbur	Lam	Biomedical Engineering	Noninvasive, Inexpensive Smartphone App for Detecting Anemia
Salary Award	Braxton	Moore	Industrial Engineering (IE)	Milton	Mueller	Public Policy	Investigating the Intersection of Blockchain Technology and Governmental Regulation in the Fintech Industry
Salary Award	Gabriel	Nakajima An	Computer Science (CS)	Evangelos	Theodorou	Aerospace Engineering	Methods for Combining Model-Based and Model-Free Reinforcement Learning
Salary Award	Catriana	Nations	Biomedical Engineering (BMED)	Andres	Garcia	Mechanical Engineering	Synthetic Hydrogels for Maturation of Human Pluripotent Stem Cell-Derived Beta Cells
Salary Award	Holly	Nichols	Biology (BIO)	Brian	Hammer	Biological Sciences	Spatial Segregation Saves E. coli from Type VI-Mediated killing by V. cholerae
Salary Award	Lara	Orlandic	Electrical Engineering (EE)	Omer	Inan	Electrical and Computer Engineering	Signal Quality Assessment of Joint Acoustical Emissions for a Joint-Health-Monitoring Knee Brace
Salary Award	Marie	Ozenua	Industrial Engineering (IE)	Natashia	Boland	Industrial and Systems Engineering	Improving mobility for commuting of warehouse workers
Salary Award	Andrew	Pan	Biomedical Engineering (BMED)	Todd	Sulchek	Mechanical Engineering	Assessing the Effect of Enzyme-Bound Janus Particle Velocity on Enzyme Catalysis
Salary Award	Harsh	Patel	Chemical and Biomolecular Engineering (CHBE)	Nian	Liu	Chemical and Biomolecular Engineering	A microfluidic electrochemical cell for understanding the flow of phase-separated Br charge products in Zn-Br flow batteries
Salary Award	Riddhi	Patel	Materials Science and Engineering (MSE)	Blair	Brettmann	Materials Science and Engineering	Interactions of Multivalent Ions with Polyelectrolyte Brushes
Salary Award	Jasmine	Pillarisetti	Biomedical Engineering (BMED)	David	Hu	Mechanical Engineering	Mimicking Elephant Olfaction
Salary Award	Dhruv	Purushotham	Aerospace Engineering (AE)	Joseph	Oefelein	Aerospace Engineering	Multiphysics Code Acceleration on Advanced CPU-GPU Computer Architectures
Salary Award	Kira	Pyronneau	Materials Science and Engineering (MSE)	Mark	Losego	Materials Science and Engineering	Properties of Polymer Fabrics Infused with Inorganics via Vapor Phase Infiltration
Salary Award	Varun	Ramachandran	Computer Science (CS)	Hang	Lu	Chemical and Biomolecular Engineering	Detecting and Tracking C. elegans in Microfluidic Devices
Salary Award	Celina	Russo	Environmental Engineering (ENVE)	Joseph	Brown	Civil and Environmental Engineering	A study of enteric pathogens detected in bulk stool versus rectal swabs
Salary Award	Lily	Sandler	Earth and Atmospheric Sciences (EAS)	Jennifer	Glass	Earth and Atmospheric Sciences	Nitrous Oxide Production by Mn3+: A New Source of Greenhouse Gas?
Salary Award	Benjamin	Seleb	Mechanical Engineering (ME)	David	Hu	Mechanical Engineering	Consistently Exhaling and Inhaling Bubbles Underwater
Salary Award	Scott	Shaeffer	Biomedical Engineering (BMED)	S. Balakrishna	Pai	Biomedical Engineering	A Study of the Effects of Torisel and β-aminopropionitrile (BAPN) on Human Triple Negative Breast Cancer in vitro
Salary Award	Vishwa	Shah	Computer Science (CS)	Mark	Riedl	Interactive Computing	Creative Invention Benchmark
Salary Award	Alexandra	Sitar	Environmental Engineering (ENVE)	Annalisa	Bracco	Earth and Atmospheric Sciences	Freshwater forcing to the ocean submesoscale circulations
Salary Award	Micaiah	Smith-Pierce	Aerospace Engineering (AE)	Narayanan	Komerath	Aerospace Engineering	Low-Density Ultralight Aircraft
Salary Award	Lee-Kai	Sun	Biomedical Engineering (BMED)	Gabriel	Kwong	Biomedical Engineering	Thermogenetic Cancer Immunotherapy via Heat-Induced IL-2 Expression in Engineered T Cells
Salary Award	Kevin	Tao	Biomedical Engineering (BMED)	Gabe	Kwong	Biomedical Engineering	Integrating Engineered Aptamers into DNA Gated Sorting for Viable Downstream Analysis
Salary Award	Hisham	Temmar	Biomedical Engineering (BMED)	Maysam	Nezafati	Biomedical Engineering	Multiscale Entropy Analysis of fMRI
Salary Award	Sanjana	Tewathia	Aerospace Engineering (AE)	Brian	Gunter	Aerospace Engineering	Final Prototyping, Integration and Testing of the TARGIT Mission's Tether System
Salary Award	Xueqiao	Wang	Materials Science and Engineering (MSE)	C.P.	Wong	Materials Science and Engineering	Developing Stretchable and Electrically Conductive PDMS Based Adhesives with Silver Fillers
Salary Award	Alexis	Wilkinson	Chemical and Biomolecular Engineering (CHBE)	Levi	Wood	Mechanical Engineering	PD-1 Activation as a Novel Strategy for Modulation of Macrophage and Microglial Polarization
Salary Award	Lovelyn	Wirian	Materials Science and Engineering (MSE)	Joshua	Kacher	Materials Science and Engineering	The Effects of Microstructures on the Corrosion Rate of 302 Stainless Steel
Salary Award	Matthew	Wyatt	Chemical and Biomolecular Engineering (CHBE)	Andreas	Bommarius	Chemical and Biomolecular Engineering	Characterization of Lignin Extracted by 1-Methylimidazole in Lignin Value Prior to Pulping (LVPP)
Salary Award	Oguzhan	Yilmaz	Electrical Engineering (EE)	Gregory	Durgin	Electrical and Computer Engineering	SW/HW Framework for Exploiting Vulnerabilities on IoT Devices
Salary Award	Nathan	Zavanelli	Electrical Engineering (EE)	Woonhong	Yeo	Mechanical Engineering	A Smart, Wearable EMG Device for Human Computer Interfacing
Salary Award	Alice	Zhang	Electrical Engineering (EE)	Woon-Hong	Yeo	Mechanical Engineering	Fabrication and Characterization of a Conductive and Magnetic Nanocomposite for Soft Flexible Electronics
Travel Award	Neel	Atawala	Neuroscience (NEURO)	Lewis	Wheaton	Biological Sciences	Neurobehavioral encoding of action intent and organization across development
Travel Award	Sarah	Burch	Materials Science and Engineering (MSE)	Seung Soon	Jang	Materials Science and Engineering	Molecular Dynamics Simulation of Quaternary Ammonium Polycation Exchange Membrane Fuel Cell: Nanophase-Segregated Structure
Travel Award	Shuangyi	Cai	Biomedical Engineering (BMED)	Manu	Platt	Biomedical Engineering	Characterizing the Morphology in the Common Carotid Arteries of a Transgenic Mouse Model of Sickle Cell Disease
Travel Award	Charles	Caliendo	Materials Science and Engineering (MSE)	Seung Soon	Jang	Materials Science and Engineering	Molecular Dynamics Simulation of Modified Nafion 117 Based Anion Exchange Membrane Fuel Cell: Transport and Nanophase-Segregated
Travel Award	Victor	Chen	Computer Science (CS)	Thad	Starner	Interactive Computing	ScratchVR: Low-Cost, Calibration-Free Sensing for Tactile Input on Mobile Virtual Reality Enclosures
Travel Award	Kristin	Gao	Biomedical Engineering (BMED)	Ross	Ethier	Biomedical Engineering	Modeling Glaucomatous Damage in the Trabecular Meshwork with Oxidative Stress
Travel Award	Sarah	Ghalayini	Chemistry (CHEM)	Mostafa	El-Sayed	Chemistry and Biochemistry	Investigating the Interactions of Gold Nanoparticles with Biological Systems
Travel Award	Kirit	Joshi	Mechanical Engineering (ME)	Matthew	McDowell	Mechanical Engineering	Controlling Interfacial Properties of Solid-State Lithium Batteries Using Atomic Layer Deposition
Travel Award	Adam	Kinsel	Electrical Engineering (EE)	Gregory	Durgin	Electrical and Computer Engineering	Haiti RELAY: A Cost-Effective and Portable Solar Home System for Rural Haitian Regions
Travel Award	Pratik	Kunapuli	Computer Engineering (CMPE)	Aaron	Young	Mechanical Engineering	Neural Network Based Estimation of Gait Phase in a Powered Hip Exoskeleton
Travel Award	Ye Lim	Lee	Biomedical Engineering (BMED)	Todd	Sulchek	Mechanical Engineering	Isolation of single cells based on their secretion using heteofunctional particles
Travel Award	SeungMin	Lee	Materials Science and Engineering (MSE)	Seung Soon	Jang	Materials Science and Engineering	Dissipative Particle Dynamics Simulation of Reactant Transport through Multicompartment Micelle Nanoreactor
Travel Award	Siyi	Li	Biomedical Engineering (BMED)	Michael	Davis	Biomedical Engineering	3D Bioprinting a Multilayer Heart Valve Scaffold by Mimicking Leaflet Microstructure

Award Type	First Name	Last Name	Major	Mentor First Name	Mentor Last Name	Mentor Department	Project Title
Travel Award	Bria	Matthews	Electrical Engineering (EE)	Maryam	Saeedifard	Electrical and Computer Engineering	Haiti RELAY: A Cost-Effective and Portable Solar Home System for Rural Haitian Regions
Travel Award	Keely	Mruk	History, Technology, and Society (HTS)	Chelsea	Murdock	Literature, Media, & Communication	Citizen Storytelling and Active Centership
Travel Award	Juanita	Pardo	Biology (BIO)	Emily	Weigel	Biological Sciences	Performance, Prediction, and Preparedness: Do Biology-Major-Specific Course Provide an Advantage?
Travel Award	Robert	Petrie	Materials Science and Engineering (MSE)	Mark	Losego	Materials Science and Engineering	Exploration of Crystalline Transformations in TiO2 Thin Films Deposited Through ALD Reactions Between TDMAT and Water
Travel Award	Charu	Thomas	Industrial Engineering (IE)	Thad	Starner	Interactive Computing	RF-Pick: Comparing Order Picking Using a HUD with Wearable RFID Verification to Traditional Pick Methods
Travel Award	Alok	Tripathy	Computer Science (CS)	Oded	Green	Computational Science & Engineering	Scaling Betweenness Centrality in Dynamic Graphs
Travel Award	Maitreya	Venkataswamy	Aerospace Engineering (AE)	Suresh	Menon	Aerospace Engineering	Investigation of effects equation of state and differential diffusion on fully developed stratified turbulent channel flow
Travel Award	Meaghan	White	Materials Science and Engineering (MSE)	Seung Soon	Jang	Materials Science and Engineering	Molecular Dynamics Simulation of Quaternary Ammonium Polycation Exchange Membrane Fuel Cell
Travel Award	Julia	Woodall	Biomedical Engineering (BMED)	Wilbur	Lam	Biomedical Engineering	Real-time Visualization of Shear-dependent Erythrocyte Deformation into Schistocytes using Single Micron Microfluidics
Travel Award	Jingwei	Xie	Chemical and Biomolecular Engineering (CHBE)	Christopher	Jones	Chemical and Biomolecular Engineering	Investigation of Inter- and Intramolecular Cooperativity Effects in Alkanolamine-based Acid-Base Heterogeneous Organocatalysts
Travel Award	Yuan	Xu	Biochemistry (BCHM)	Manu	Platt	Biomedical Engineering	Optimizing activation and purification for cathepsin proteases from engineered cell lines
Travel Award	Nathan	Zavanelli	Electrical Engineering (EE)	Woonhong	Yeo	Mechanical Engineering	A Smart, Wearable EMG Device for Human Computer Interfacing