Announcement of Undergraduate Research and Innovation
Student Seed Grant Winners

We are pleased to announce the recipients of Undergraduate Research and Innovation Student Phase-1 and Phase-2 Grants. A total of 22 URI Student Seed Grants have been awarded in Fall 2015 ranging from $500 to $3,000 per project. These 22 projects involve 40 undergraduate students advised by 20 faculty from different departments at NJIT.

The Undergraduate Research and Innovation (URI) program has evolved as an integral and important part of the undergraduate academic experience at NJIT. The URI website http://centers.njit.edu/uri/ summarizes undergraduate research and innovation opportunities and provides information about resources and competitions.

Students submitted their written proposals which were reviewed by the executive committee of the URI External Advisory Board (EAB). After scoring the written proposals, selected proposals were presented to EAB members at the URI Workshops. With the recommendations from the EAB, based on the combined scores of written proposals and oral presentations, Phase-1 and Phase-2 Student Seed Grants are awarded to the following undergraduate research and innovation projects.

Congratulations to all winners!

Fall 2015 URI Phase-1 Student Seed Grant Winners

Mohammed Elassa (BME), William Lau (BME), Matthew Maisonet (BME), Jigar Shah (BME)
Project: GenoS: Mechanical Tongue Stimulation Device
Faculty Advisor: Mesut Sahin, Department of Biomedical Engineering

Zohour Hassan (BME), Raeesa Soomar (BME), Richard Vincent (BME), and Christine Kurian (BME)
Project: Carribo: Automated CPR Machine
Faculty Advisor: William Hunter, Department of Biomedical Engineering

Nooruddin Hashmi (BME), Jose Rodriguez (BME), Bijin Vadaserril (BME) and Noor Shahin (BME)
Project: Hematocrit Reader
Faculty Advisor: Max Roman, Department of Biomedical Engineering

Victor Aladele (EE)
Project: Tabla MIDI Controller
Faculty Advisor: Durga Misra, Department of Electrical and Computer Engineering

Andrea Cano (CE), Maira Valencia (BioChem), Mehnaz Moon (CE)
Project: Microbial fuel cells-powered lighting systems for mobile toilets
Faculty Advisor: Wen Zhang, Department of Civil and Environmental Engineering

Libertad Harris (Arch)
Project: Energy Production in Micro-Algae Enabled Architectural Facades
Faculty Advisor: Martina Decker, School of Architecture

Heidi Hussa (Arch)
Project: Spatial Soundscaping: Reverberation as a Wanted Noise
Faculty Advisor: Daniel Kopec, School of Architecture

Assma Itani (Biology), Anmol Mittal (Biology), Hardik Darji (ME & Applied Math)
Project: Role in locomotion of specific inhibitory motoneurons in C. elegans examined via microfluidics, tracking, and optogenetics
Faculty Advisor: Gal Haspel, Department of Biological Sciences

Stefani Kocevska (ChE)
Project: Destruction of Freons in Non-Thermal Plasma
Faculty Advisor: Lev Krasnoperov, Department of Chemistry and Environmental Science

Carlos Morillo (Biology)
Project: Compact Food Composter
Faculty Advisor: Jay Meegoda, Department of Civil and Environmental Engineering

Omar Qari (Biology)
Project: Neural System and Connectivity of Midwater Amphipod Phronima
Faculty Advisor: Daphne Soares, Department of Biological Sciences

Tarj Shah (EE), David Chege (EE), and Erole Alexandre (EE)
Project: Magnetic Sensing of Physiological Parameters (MEG) for Drowsy Driver Detection System
Faculty Advisor: Ed Niver, Department of Electrical and Computer Engineering

Michael Tadros (LTC)
Project: Exploratory investigation on possible explanations leading to the lack of voting participation amidst an age specific group; the demographic of 18 to 24 year olds.
Faculty Advisor: Elizabeth Petrick, Department of History

Monica Torralba (ChE)
Project: µFILMS – Micro Total-Analytical System for studying Polymeric Film-Based Drug Delivery System
Faculty Advisor: Sagnik Basuray, Department of Chemical, Biological and Pharmaceutical Engineering

Ali Yuksel (EE)
Project: Thermal Decomposition of H2O Through Focused Solar Energy
Faculty Advisor: Marek Sosnowski, Department of Electrical and Computer Engineering
Jose Rodriguez (BME)
Project: PET to MRI Pathway
Faculty Advisor: Bharat Biswal, Department of Biomedical Engineering

Fall 2015 URI Phase-2 Student Seed Grant Winners

Sahitya Allam (BME)
Project: Fabrication of a Conducting Scaffold for Peripheral Nerve Regeneration
Faculty Advisors: Bryan Pfister, Michael Jaffe, Department of Biomedical Engineering

Mawuli Allorbi (EE)
Project: Interfacing Fast Energy Delivery and Green Energy Sources with Slow Charging Energy Storage
Faculty Advisors: Roberto Rojas-Cessa, Haim Grebel, Department of Electrical and Computer Engineering

Marah Angelica Magpile (CE)
Faculty Advisor: Wen Zhang, Department of Civil and Environmental Engineering

Kabir Mitra (ChE)
Project: Carbon Nanotube Enhanced Membrane Distillation for Generating Pure Water from Waste Heat in Power Plants
Faculty Advisor: Somenath Mitra, Department of Chemistry and Environmental Science

Hathija Noor (ChE), Nida Riaz (ChE), Victoria Harbour (ChE)
Project: Micro Total Analytical Neurological System (μTRANS): A Dynamic Approach to Studying the Blood Brain Barrier
Faculty Advisor: Sagnik Basuray, Department of Chemical, Biological and Pharmaceutical Engineering

Chrsytoff Camacho (ME)
Project: Aerial Reforestation Capsule
Faculty Advisor: Nancy Jackson, Department of Chemistry and Environmental Science