2017 Florida Academy of Sciences
Student Award Recipients

AGRICULTURAL AND NATURAL RESOURCES

**Outstanding Oral Presentation, Graduate**—Debalina Saha, University of Florida,
   “Assessing herbicide formulation and activation moisture on weed control in landscape planting beds”

**Outstanding Oral Presentation, Undergraduate**—Alex Deimlio, Indian River State College,
   Biological and molecular characterizations of Xanthomonas fragariae bacteriophages”

**Outstanding Poster Presentation, Undergraduate**—Chris Lordola, Indian River State College,
   “Contrasting effects of vermiculture-based fertilizers on development of *Eruca sativa*”

ANTHROPOLOGICAL SCIENCES

**Outstanding Oral Presentation, Graduate**—Samantha Coberly, University of Florida,
   “Commonly found household chemicals and their effect on deciduous and permanent teeth”

**Outstanding Poster Presentation, Graduate**—Jaime Sykes, University of South Florida, “The need for skeletal surveys in child death investigations: A case study from Pasco County”

**Outstanding Poster Presentation, Undergraduate**—Heather Draskovich, University of South Florida, St. Petersburg, “Investigating Safety Harbor Pottery Function Within the Weeden Island Site (8PI1)”

ATMOSPHERIC AND OCEANOGRAPHIC SCIENCES

**Outstanding Oral Presentation, Graduate**—Xiao Ma, Florida Institute of Technology,
   “Selective avoidance by copepods grazing on bloom-forming algal species in the Indian River Lagoon”

**Outstanding Poster Presentation, Graduate**—Lauren Goldsworthy, Florida Atlantic University, “Eight-Year Manatee Survey Looking at Seasonal Patterns of Frequently Observed Individuals in the Harbor Branch Channel Using Photo-Identification Techniques”
BIOLICAL SCIENCES SECTION

Outstanding Oral Presentation, Graduate—Louis Penrod, Florida Institute of Technology,
“Thermally induced shift in feeding mode may contribute to the invasion success of lionfish”

Outstanding Oral Presentation, Undergraduate—Valentina Alvarez, University of Florida,
“Conservation genetic status of the Florida bonneted bat (Eumops floridanus)”

Outstanding Oral Presentation, Undergraduate—Margaret Little, Saint Leo University,
“Potential effects of activin receptor-like kinase 1 (ALK1) and endoglin expression on tumor angiogenic factors”

Outstanding Poster Presentation, Graduate—Lauren Bates, Florida Institute of Technology,
“Isolation of proteins that interact with PLCγ during fertilization in the starfish”

Outstanding Poster Presentation, Undergraduate—Michael Fernando, St. Thomas University,
“The role of putative stem and neural progenitor cell populations following traumatic brain injury in adult zebrafish”

Honorable Mention Oral Presentation, Undergraduate—Kelly Fryar, University of Tampa
“Pathogenic Bacteria in Hillsborough River Oysters”

Honorable Mention Oral Presentation, Undergraduate—Stephanie Pascual, University of Tampa,
“Grooming behaviors and morphology in brachyuran crabs: stone crabs groom more than blue crabs and have the morphology to support the behaviors”

Honorable Mention Poster Presentation, Undergraduate—Hunter Lanovoi, Rollins College,
“Genetic variation of the green anole in Central Florida”

COMPUTER AND MATHEMATICAL SCIENCES

Outstanding Oral Presentation, Undergraduate—Joshua Rentrope, Florida Polytechnic University,
“Optimizing Molecular Geometry Based Positioning Applications for UAV Networks”

Outstanding Poster Presentation, Undergraduate—Kyle Cook, Florida Polytechnic University,
“Introduction to Singular Value Decomposition and Image Compression”
**Outstanding Poster Presentation, Undergraduate**—Alex Durante, Florida Polytechnic University, “MIMIC-III: A Use Case”

**ENGINEERING SCIENCES**

**Outstanding Oral Presentation, Graduate**—Langley Payton, Florida Polytechnic University, “Maximizing Donor Conversions: A QGIV Case Study”

**Outstanding Oral Presentation, Undergraduate**—Michael Sanchez, Florida Polytechnic University, “Pulse Oximetry”

**Outstanding Poster Presentation, Undergraduate**—Brady Powers, Florida Institute of Technology, “Testing of Shock Absorbing Bulkheads for Membrane Hull Technology Recreational Boats”

**Outstanding Poster Presentation, Undergraduate**—Laura Wemple, Florida Polytechnic University, “Effectiveness of doping agents on the photocatalytic oxidation of organic pollutants”

**Al Hall Memorial Award**—Dieff Vital, Florida Polytechnic University, “Global Particulate Matter Characterization for Gasoline and Diesel Filters”

**ENVIRONMENTAL CHEMISTRY AND CHEMICAL SCIENCES**

**Outstanding Oral Presentation, Graduate**—Anad Afhaima, Florida Institute of Technology, “Interaction between fragments of tau protein investigated by force spectroscopy using AFM”


**Outstanding Poster Presentation, Undergraduate**—Kelly O’Reily, St. Thomas University, “Nitrogen Determination in Organic Soil-Treated with Fertilizer Using Kjeldhal Method”

**Honorable Mention Oral Presentation, Undergraduate**—Amel Garbou, University of Central Florida “Comparative study for the dechlorination of pentachlorophenol using activated magnesium treatment systems in an acidified ethanol”
Honorable Mention Oral Presentation, Undergraduate—Gabriel Blanco, Miami Dade College, “Towards Carbon Based Nanotechnology: Vertical Translocation of Potassium Cations Through a Three-Dimensional Graphene Pillar”

GEOLOGY AND GEOGRAPHIC SCIENCES

Outstanding Oral Presentation, Graduate—Kyle Flanagan, University of South Florida St. Petersburg, “Stream Fractal Analysis of SWAT Automatic Delineation and Digitized Reaches”

MEDICAL SCIENCES

Outstanding Oral Presentation, Graduate—Zin Htun, University of Central Florida, “Pre-existing IFNGR1 mutation increases susceptibility to Mycobacterium avium subspecies paratuberculosis infection and Crohn’s disease development”

Outstanding Oral Presentation, Undergraduate—Casey Lamb, Indian River State College, “Alterations in blood pressure during an ultramarathon”

Outstanding Poster Presentation, Undergraduate—Milagros Mulero, St. Thomas University, “Using human neural progenitor stem cells and gene silencing to study the role of DLGAP1 transcripts in autism”

PHYSICS AND SPACE SCIENCES

Outstanding Oral Presentation, Undergraduate—Marshall Smith, Florida Polytechnic University, “Going with the Proton Flow—Generating Fusion Power in the Van Allen Belt”

Outstanding Poster Presentation, Graduate—Coleman Cariker, University of Central Florida, “Calculation of the attosecond transient absorption spectrum of argon”

Honorable Mention Oral Presentation, Undergraduate—Matthew Bomberger, Florida Institute of Technology, “Mechanical design and stress analysis of a large-area gas electron multiplier”

Honorable Mention Oral Presentation, Undergraduate—Mehdi Rahmani, Florida Institute of Technology, “Quality control tests for efficient GEM detector production”
SCIENCE TEACHING

*Outstanding Poster Presentation, Graduate*—Bryce Carsone, Nova Southeastern University, “Neuroanatomy: curriculum development and learning outcomes via virtual dissection”

SOCIAL SCIENCES

*Outstanding Oral Presentation, Graduate*—Kristopher Kindle, Florida Polytechnic University, “State Liberalization of Cannabis Restrictions and Traffic Fatalities: Two Decades of Evidence”

*Outstanding Poster Presentation, Graduate*—Ilona Nemeth, University of South Florida St. Petersburg, “Task-dependent Fluency and the Devaluation of Gender Ambiguous Faces: The Effects of Categorization Disfluency on Hireability”

*Outstanding Poster Presentation, Undergraduate*—Jaclyn Dell, University of South Florida St. Petersburg, “Value learning modulates early visual processing”

*Honorable Mention Poster Presentation, Undergraduate*—Seiichi Villalona, University of South Florida, “Professional Patients”

HAYS TRAVEL AWARDS

Timothy Haire – Florida Institute of Technology
Fitzroy Nembhard – Florida Institute of Technology
Debalina Saha - University of Florida
Kalifa Shabazz – Barry University
Luna Ugrenovic – Barry University