

## 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”

## BIOLOGICAL 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 PLC $\beta$ 3 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 Oral Presentation, Undergraduate***—Kassandra Fernandez, Miami Dade College, “Towards Carbon Based Nanotechnology: A Self-Assembled, Supramolecular Dipole Motor from a Zwitterionic Dicyclopenta[b,i]anthracene Betaine Rotor and 18-Crown-6 Macrocyclic Polyether Stator”

***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***—**Iлона 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