

## Celebration of Student Achievement (COSA)

### COSA 2019 Biology Majors Poster Presentations

Student(s)	Faculty Mentor	Poster Title
Marissa Pugliese, Erica Levin	Curt Elderkin	Analyzing Temperature Tolerance Using Cardiovascular Stress of <i>Elliptio Complanata</i>
Gokul Murugesan, Riana Joseph	Dennis Shevlin	Species verification of the obligate grass parasitic fungi <i>Sporisorium ellisii</i> and <i>S. everhartii</i> using rDNA ITS region sequences and SEM ultrastructure
Hershil Patel, Dongmin Kim, Nikita Patel	Dennis Shevlin	Exploring the utility of ScoT primers in evaluating the population genetics of the obligate fungal parasite <i>Sporisorium ellisii</i> on its host plant, <i>Andropogon virginicus</i>
Yash Kansara, Rujuta Patel	Dennis Shevlin	A comprehensive analysis of the genetic structure of the obligate, fungal parasite, <i>Sporisorium ellisii</i> on its host plant, <i>Andropogon virginicus</i> from three geographically isolated populations A
Mary Kate Hatch, Priya Sinha, Sai Chandra, David Ruff	Don Lovett	Optimization of qPCR Parameters for Monitoring FAOMeT Expression in <i>Carcinus maenus</i> in Respose to Salt Stress
Kerstin Baran	Gary Dickinson	Biomechanical and structural characterization of the coral <i>Lophelia pertusa</i> collected from sites with varying seawater chemistry
Shrey Patel	Gary Dickinson	Effects of salinity and ocean acidification over two generations in the barnacle <i>Amphibalanus amphitrite</i>
Vaishnavi Rao	Gary Dickinson	Characterization of shell plate ultrastructure and elemental composition in the barnacle <i>Amphibalanus Amphitrite</i>
Ahmed Mahmoud	Gary Dickinson	Effects of Ocean Acidification on Exoskeleton Mechanical Properties of the Snow Crab, <i>Chionoecetes opilio</i>
Alyssa Webster	Gary Dickinson	Morphology changes and mechanical differences in <i>C. sapidus</i> raised in a low-pH environment
Teresa Dinh	Gary Dickinson	Lobster exoskeleton structure and mechanical properties are robust to ocean acidification
Abdul Kazi	Howard Reinert	Spatial Ecology of Red Cornsnakes ( <i>Pantherophis guttatus</i> ) in the New Jersey Pine Barrens
Alina Osborn	Howard Reinert	A Diet Assessment of the Red Cornsnake, <i>Pantherophis guttatus</i> , in the New Jersey Pine Barrens
Alison Stapel	Howard Reinert	Substrate Preferences of the Red Cornsnake ( <i>Pantherophis guttatus</i> )
Evan Cruz	Howard Reinert	Analysis of <i>Peromyscus leucopus</i> Densities and Habitat Preference in the Pinelands of New Jersey
Katelyn Hode	Howard Reinert	Shelter Selection by the Red Cornsnake, <i>Pantherophis guttatus</i>
Sai Batchu	Janet Morrison	Comparison of genetic variation between smutted and healthy populations of <i>Andropogon virginicus</i>
Sharwani Kota	Jeffery Erickson	Comparison of two EUS guided Liver biopsy techniques that Utilize 19g CORE biopsy needle to Obtain Optimal Core Specimen in Benign Disease
Aalicia Illian	Jeffery Erickson	1-week oral (gavage) pilot toxicity study with a 1-week recovery in male rats with invasive telemetry
Ally Vassalotti	Jeffery Erickson	Creating a she-1 mutant in <i>C. briggsae</i> and Determining the Gene Interactions Involved in Germ Cell Fate in the Hermaphroditic Species of <i>Caenorhabditis</i>
Amar Desai	Jeffery Erickson	Examination of a Novel Immunoregulatory Marker in Kidney and Lung Transplant Recipients
Avneet Randhawa	Jeffery Erickson	Drug Abuse Paterns in Medication-Assited Programs
Emily George	Jeffery Erickson	Culmination of performance evaluation, user-ability, and character analysis studies of fibrin sealant XX
Jack Trubiano, Muhammad Siddiqui	Jeffery Erickson	Respiratory Response of 5HT-Deficient Pet-1 Knockout Mice to Hypercapnic Challenge Following Developmental Exposure to Nicotine
Michael Osei	Jeffery Erickson	The Effect of Central Serotonin Deficiency on Maternal Care and Pup Ultrasonic Vocalization
Tiffina Benhamou	Jeffery Erickson	A transit peptide analysis pipeline based on Venus expression in <i>Chlamydomonas reinhardtii</i>

Suranjana Thakuria	Jeffery Erickson	Attaining the recombination of plasmid genes from the AdEasy Adenoviral Vector System
Nikhila Veguru	KT Elliott	Investigating the functions and interactions of two highly conserved neighboring genes, yqgE and yqgF, in large scale deletions and growth rates
Camille Huynh	Keith Pecor	Hereditary Trends of Behavioral Responses to Predatory Cues in Daphnia
Jessica Hwang	Leeann Thornton	Characterizing the role of CYP72A enzymes in maize in response to combined stress
Namal Seneviratne	Leeann Thornton	Structure-Function Analysis of CYP72A26 and CYP72A349 in Zea mays
Niha Mamillapalli	Leeann Thornton	Investigating the defensive role Of CYP72A enzymes using Arabidopsis thaliana mutants under combined stresses
Reema Shah	Leeann Thornton	Characterizing the role of CYP72A enzymes in Arabidopsis Thaliana under cold and bacterial stress
Alyssa Gargagliano	Luke Butler	Does feather quality depend on timing of molt in the Carolina Chickadee?
Danyelle Underdue	Manuel Figueroa	The effect of a surface pretreatment on the contact angle of silicone hydrophobic coatings used in biofouling studies
Alizeh Shamshad, Zahra Memon	Marcia O'Connell	Analyzing Isoforms of the Translational Regulatory Protein ElrA in Early Zebrafish Development
Brianna Wallace, Wardah Bajwa	Marcia O'Connell	Effects of zsqid proteins in the embryogenesis of zebrafish
Maureen Haque, Riana Joseph, Abigail Amponsah	Marina De Souza	Quality of Life of Caregivers of Older Adults in Brazil
Anshel Bright	Matthew Wund	Cryptic Genetic Variation
Olivia Davis	Matthew Wund	Do threespine stickleback use social cues to learn about predation risk?
Olivia El Naggar, Mari Angel Rodriguez	Matthew Wund	Contemporary Evolution of Threespine Stickleback Fish ( <i>Gasterosteus aculeatus</i> ) from Cheney Lake, Alaska
Anurag Polkampally, Vineeth Amba	Melkamu Woldemariam	Catabolism of Indole-3-carbinol in Arabidopsis thaliana
Madhav Patel	Melkamu Woldemariam	Differential Defense Responses in NAM lines of Z. mays in Response to Insect Herbivory
Rooshna Mohsin, Constantine Stavrianidis	Melkamu Woldemariam	The Role of the IAA-Amidase gene in Jasmonic Signaling Pathways in Maize Plants
Bhumi Shah, Mehdi Lemdani	Nina Peel	Glutamylolation aids cold and colchicine tolerance in C.elegans
Ian Dominic de los Reyes, Sharwani Kota	Nina Peel	The Effect of Glutamylolation on Cell Division in C. elegans
Jessica Dominguez	Nina Peel	Characterization of redundancy in the C. elegans deglutamylating enzymes
Thomas Oliver	Nina Peel	Characterization of the deglutamylating enzyme CCPP-1 in C. elegans
Avi Shah	Sudhir Nayak	SlimShadey
Dennise Cortes, Krystle Vera	Sudhir Nayak	The effects of chronic metal stress on the longevity of C. elegans
Adriana Mendizabal, Jessica Kopew	Tracy Kress	Investigating the Role of Histone H4 Acetylation in RNA Splicing in Saccharomyces cerevisiae
Lawrence Palfini	Tracy Kress	The Histone H4 acetyltransferase NuA4 is required for appropriate RNA splicing in Saccharomyces cerevisiae
Aaron Lee	Wendy Clement	Exploring the evolutionary history of the CUP-SHAPED COTYLEDON (CUC) gene family in the honeysuckles (Lonicera, Caprifoliaceae) and relatives
Hiba Rahman-Vyas	Wendy Clement	Isolation and phylogenetic reconstruction of CUP-SHAPED COTYLEDON (CUC) in honeysuckles (Lonicera)
Labeeqa Khizir	Wendy Clement	Solving the Plastid Puzzle: De Novo Assembly of Viburnum using next generation sequencing
Linda Zhang	Wendy Clement	The Art of Architecture: Evolution of Leaf Fusion and Inflorescences in Honeysuckle (Periclymenum, Lonicera)
Nicole Tineo	Wendy Clement	Assessing the Species Boundaries of the Lonicera alpigena Species Complex Using Species Distribution Modeling