



16th Annual Student Research Symposium

A showcase of innovative research and creative work produced by
USF St. Petersburg students
with the guidance and support of university faculty.

Co-sponsored by:
Honors Program
Office of Research
Academic Affairs
Department of Psychology

Special Thanks:
Matthew Spetka
Veronica Matthews
Sudsy Tschiderer

Brianna Peterson, Hannah Crawford (Criminology): “Patterns

Shoplifting/Retail Thefts in St. Petersburg”

Faculty Sponsor: William Ruefle

Megan Reilly, Nicholas Chirinchigno (Criminology): “Patterns of

Murder—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Khendal Robinson, Samantha Ortiz (Criminology): “Patterns of Crime and Disorder of Juvenile Arrestees—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Iliana Simo, Shana Manoj (Biology): “CD82 changes CD151 surface expression in metastatic prostate cell lines”

Faculty Sponsor: Suganthi Sridhar

Gowsalya Sothy, Brooke Glover, Kiara Centeno, Orlando Perdomo (Biology): “Molecular dynamics associated with different inhibitor-protein complexes for the enzyme Telomerase”

Faculty Sponsor: Leon Hardy

Zachary Stahl, Dalia Mejia Saavedra (Criminology): “Homeless Arrests—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Lauren White, Jessica Thornton (Criminology): “Trends of Female Arrestees—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Pieter Wiemken, Nicholas D’Souza, Michael Nickas, Corell Kimer, Yana Sirotkin, James McHale(Psychology): “Infant Emotion Regulation during Triadic Interactions with Both Parents at 3 and 12 months”

Faculty Sponsor: James McHale

Individual

Alexandra Liss, Deby Cassill, Noel Takeuchi, Alison Gainsbury
(Psychology): “The One-Half Rule: A Study of Mammary Glands in Rodents”

Faculty Sponsor: Alison Gainsbury

Shelby Mahank, Natalie Sawaya, Nava Baran, Debbie Lindell, Mya Breitbart (Biology): “Perfecting the Polony Method to Quantify Marine Viruses”

Faculty Sponsor: Mya Breitbart

Veronica Marcano, Ciara Jackson (Criminology): “Analysis of Quality of Life Offenses—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Alan Mathon, Alen Amentovic (Biology): “Zika Virus Protease Inhibition Through Oprozomib”

Faculty Sponsor: Leon Hardy

Crystal McClendon, Christine Joyner (Environmental Science): “The Melrose Lead Site Mystery”

Faculty Sponsor: James Ivey

Kristen McVey, Allyson Pickering (Criminology): “Domestic vs Dating Violence in St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

James Onufrak, Dr. Lindsey Rodriguez, Dimitra Dimopoulos (Psychology): “State Emotion Regulation as a Mediator of the Relationship Between State Attachment Security and State Mindfulness”

Faculty Sponsor: Lindsey Rodriguez

Verna Peddi, Ashley Schipae, Alexis Slacum, Yvonne Solis (Anthropology): “A Family Broken but Unbowed: The Lynching of

Frazier B. Baker”

Faculty Sponsor: Anna Dixon

Christina Agard (Biology): “Shell Shocked! Factors Involved in Green Turtle Fibropapillomatosis”

Faculty Sponsor: Deby Cassill

Deanna Amos (Biology): “Smoking is Out”

Faculty Sponsor: Deby Cassill

Tyler Anthony (Biology): “Operant conditioning: Hoops for Kale ”

Faculty Sponsor: Deby Cassill

Daniela Arenas (Biology): “Population Explosion: Factors of Overpopulation”

Faculty Sponsor: Deby Cassill

Alexis Bailey (Biology): “University of South Florida St. Petersburg Students: Factors Involved in Anxiety”

Faculty Sponsor: Deby Cassill

Innara Basria (Biology): “Norovirus Outbreak in Different Countries”

Faculty Sponsor: Deby Cassill

Alyssa Bates (Biology): “Just squirreling around”

Faculty Sponsor: Deby Cassill

Abigail Blackburn (Marine Biology): “Diatoms Diversity on Red Mangrove Prop Roots”

Faculty Sponsor: Deby Cassill

Marissa Bornhauser (Biology): “Are men more likely to develop Hodgkin’s Lymphoma”

Faculty Sponsor: Deby Cassill

Renee Brenzo (Biology) “Is Climate Change Real?”

Faculty Sponsor: Deby Cassill

Bethany Brittingham (Anthropology): “Ancient Arguments: The Authentication of the Grolier Codex”

Faculty Sponsor: Gabrielle Vail

Michelle Burklund (Biology) “Alcohol And Cars Don't Mix: DUI Statistics”

Faculty Sponsor: Deby Cassill

Jacob Butler (Biology) “Just Friends”

Faculty Sponsor: Deby Cassill

Kayla Byrd (Biology): “How ‘Right’ Are We About Canine Paw Dominance?”

Faculty Sponsor: Deby Cassill

Magali Capano (World Languages and Culture): “Can Machines Speak? Impact of Technological Advances in the Field of Translating and Interpreting”

Faculty Sponsor: Frederic Leveziel

Kiara Centeno (Biology): “Student GPA: Factors Involved in Students Success”

Faculty Sponsor: Deby Cassill

Cailee Cinko (Biology): “Are Animal Morals Better than Ours?”

Faculty Sponsor: Deby Cassill

Dylan Clausen (Biology): “Manatee Mortality: Most Common Manatee Deaths in Pinellas County, FL”

Faculty Sponsor: Deby Cassill

Alec Colarusso (Anthropology): “Elite Ideology and a Comparison of the Maya”

Faculty Sponsor: Gabrielle Vail

Marcia Gralha, Dimitra Dimopoulos, Emmalene Robinson, Klejdis Bilali, Sarah Lopez, Lindsey Rodriguez (Psychology): “Bare Your Heart or Bottle it Up? The Impact of Emotional Suppression and Ambivalence on Well-being and Relationships”

Faculty Sponsor: Lindsey Rodriguez

Emma Guyette, John Shuford (Psychology): “Intuition vs Statistics: A historical look at clinical prediction”

Faculty Sponsor: Mark Pezzo

Eric Hernandez, Madison Delgado, James Ivey: “Robot Lawn Mower”

Faculty Sponsor: James Ivey

Alison Hunt, Samantha Booth, Lindsey Rodriguez (Psychology): “Mental Health and Relationship Well-Being: Associations between Relationship Functioning and Depression Moderated by Attachment Anxiety”

Faculty Sponsor: Lindsey Rodriguez

Sean Johnson, Mario Makram (Criminology): “Analysis of Juvenile Arrests in St. Petersburg, Florida from 2014-2018”

Faculty Sponsor: William Ruefle

Claire Kinney, Wendy Rote, Ashley Chapman, Renee Patrick (Psychology): “Experienced versus Desired Levels of Helicopter Parenting: A Latent Profile Analysis”

Faculty Sponsor: Wendy Rote

Adam Lashley, Michael Avery, Jen Ramsdell, Wendy Rote (Psychology): “Student Perceptions of Helicopter Parenting Motivations”

Faculty Sponsor: Wendy Rote

Yesi Dominguez, Chandler Cone (Criminology): “Analysis of Incidents and Arrest Reports on 34th Street St. Petersburg, FL from 2014-2018”

Faculty Sponsor: William Ruefle

Nicholas D’Souza, Pieter Weimken, Michael Nickas, Eric Umlah, Kendall Barrios, Yana Sirotkin, James McHale (Psychology): “Infant Emotion Regulation during Triadic Interactions with Their Unmarried Parents”

Faculty Sponsor: James McHale

Elena Duarte, Jeffrey Waitkevich (Criminology): “Patterns of Shoplifting Crime from 2014-2018 in St. Petersburg, FL”

Faculty Sponsor: William Ruefle

Genevieve Embrey, Giselle Ycaza (Criminology): “Analyzing Patterns of Domestic Violence Incidents and Arrests”

Faculty Sponsor: William Ruefle

Emery Gibson, Jalisa Linares (Anthropology): “What Could Have Been Left Behind”

Faculty Sponsor: Anna Dixon

Briana Gomez, Julian Ramirez Ayala (Criminology): “Patterns of Opioid Arrests from 2014-2018, St. Petersburg, FL”

Faculty Sponsor: William Ruefle

Claire Graham, Deandra Williams (Biology): “The Effect of Herbicides on Species Richness on Insects”

Faculty Sponsor: Deby Cassill

Sharnese Collier (Psychology): “To Kill or Not to Kill? Capital Punishment”

Faculty Sponsor: Anna Dixon

Nicholas Cropper (Biology): “Florida Man Goes to Tallahassee: Elections in Pinellas County” and “Bird Brain?: Tool Use in 2 Families of Birds”

Faculty Sponsor: Deby Cassill

Luke Cross (Journalism/Honors) “Analyzing the Sentiment of the New York Times”

Faculty Sponsor: Thomas Smith

Rachel Cruz (Biology/Honors): “Linear reintegration process of foreign attendings into American Healthcare”

Faculty Sponsor: Richard Smith

Trang Dang (Biology): “The Influence of Artists Under 21”

Faculty Sponsor: Deby Cassill

Thayanne DaSilva (Biomedical Sciences): “Global Maternal Mortality Rates (MMR)” and “Influence of Tobacco on Periodontal Disease”

Faculty Sponsor: Deby Cassill

Ivan Diaz Leon (Biology) “Daredevil Goslings”

Faculty Sponsor: Deby Cassill

Gabrielle Donald (Anthropology): “Interaction Between Mesoamericans and Native Americans During the Post-Classic”

Faculty Sponsor: Gabrielle Vail

Emma Doyle (Biology): “Building a Monomer from a Capsid Protein in Tobacco Mosaic Virus (strain vulgare)”

Faculty Sponsor: Leon Hardy

Yulia Drung (Psychology): “False Consensus and Taking Offense”

Faculty Sponsor: Mark Pezzo

Quinn Dudley (Marine Biology): “What's Killing Our Manatees? A Study of Manatee Carcasses Recovered in Florida”

Faculty Sponsor: Deby Cassill

Adam Feldman (Biology): “What To Pour Up In a Red Solo Cup?”

Faculty Sponsor: Deby Cassill

Bianca Ferrara (Biology): “Majestic swimmers of the Oceans: Manta Rays”

Faculty Sponsor: Deby Cassill

Tiffany Fieldhouse (Biology): “Dancing to Impress”

Faculty Sponsor: Deby Cassill

Sarah Files (Biology): “Child mortality in the world by HIV/AIDS”

Faculty Sponsor: Deby Cassill

Georgia Flanagan (Marine Biology): “Tantalizing Tentacles:

Environmental influences in *Octopus vulgaris* growth”

Faculty Sponsor: Deby Cassill

Nicole Forsgren (Marine Biology): “Not All Heroes Wear Capes”

Faculty Sponsor: Deby Cassill

Domonique Gillen (Biology): “Galloping Flamboyant Cuttlefish”

Faculty Sponsor: Deby Cassill

Andriy Glushakov (Biology): “War and Conflict and its Implications in Ukraine”

Faculty Sponsor: Deby Cassill

Claire Graham (Biology): “Comparison of Pesticide Levels in Sediments in Jobos Bay, Puerto Rico Pre- and Post- Hurricane Maria”

Faculty Sponsor: Henry Alegria

Christianna Concilio, Rachel Ramos (Criminology): “Possession of Controlled Substance Arrests—St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Sara Cooke, Amanda Ballenger (Criminology): “Patterns of Stimulants (Cocaine and Meth) - St. Petersburg, FL 2014-2018”

Faculty Sponsor: William Ruefle

Alexandria Corona, Adam Lashley, Josh Nebeker, Brittany O’Sick, Wendy Rote (Psychology): “Variations in Conflict and Guilt Topics

Between Mothers and Teens”

Faculty Sponsor: Wendy Rote

Kaci Crook, Taylor Reilly (Criminology): “Analysis of Firearm Crimes - St. Petersburg, FL 2013-2017”

Faculty Sponsor: William Ruefle

Emily Cunnigham, Natalie Hawkins, Laneisha Jeans, Daniel Miller (Environmental Science): “We Drew a Map to a Better Place”

Faculty Sponsor: Anna Dixon

Emily Cunnigham, Emme Donnelly, Alyson Nelson, Carsten Nohrden, Gordon Rojo, Audranay Wilson (Anthropology): “A History of Hatred:

The Frazier B. Baker Case”

Faculty Sponsor: Anna Dixon

Dimitra Dimopoulos, James Onufrak, Michael Avery, Samantha Booth, Marcia Gralha, Lindsey Rodriguez (Psychology): “The Big Five as Predictor for Resilience: Moderated by Mindfulness”

Faculty Sponsor: Lindsey Rodriguez

Bharat Bharat, Dimitra Dimopoulos (Psychology): “Rhythmic Complexity and Preference for Tempo”
Faculty Sponsor: William Ruefle

Troy Bielicki, Bogomil Mihaylov (Criminology): “Patterns of Auto Theft Arrests & Incidents in St. Petersburg, FL 2014-2018”
Faculty Sponsor: William Ruefle

Klejdís Bilali, Marcia Gralha, Emmalene Robinson, Sarah Lopez and Lindsey Rodriguez (Psychology): “Why Don’t Victims of Abusive Relationships Just Leave”
Faculty Sponsor: Lindsey Rodriguez

Luke Brantley, Joshua Ciccone (Criminology): “DUI Arrest Data: St. Petersburg, FL 2014-2018”
Faculty Sponsor: William Ruefle

Avary Bristol, Emily Varley (Criminology): “Opioid Arrests in St. Petersburg 2014-2018”
Faculty Sponsor: William Ruefle

Mary Byrnes, Corey Shrader (Biology): “Amyloid Beta protein & Alzheimer's Disease”
Faculty Sponsor: Leon Hardy

Taylor Clements, Emmalene Robinson, Marcia Gralha, James Onufrak, Lindsey Rodriguez (Psychology): “Career and Relationships: Romantic Conflict Spillover”
Faculty Sponsor: Lindsey Rodriguez

Jasmine Cloutier, Deborah Andrango, Alexis D'Amour, Melissa Cloutier (Biology): “Is Habitat Heterogeneity Related to Bird Diversity”
Faculty Sponsor: Alison Gainsbury

Araseli Guerrero (Biology): “Pick-up Lines or SUVs? USA Top-Selling Vehicles 2018”
Faculty Sponsor: Deby Cassill

Augustine Haile (Anthropology) “Chichén Itzá’s Unique Role in the Maya Landscape”
Faculty Sponsor: Gabrielle Vail

Olivia Hanson (Biology) “Cure-All Concoctions of the Past: Patent Medicines at the Gamble Plantation”
Faculty Sponsor: Anna Dixon

Michaella Hayes (Biology): “Do Elephants Mourn?”
Faculty Sponsor: Deby Cassill

Briana Heptner (Biology): “Trash Talk”
Faculty Sponsor: Deby Cassill

Natalie Howard (Biology): “Global Shark Attacks from January to June 2018”
Faculty Sponsor: Anna Dixon

Gabrielle Jalo (Biomedical Sciences): “Manipulating the Manipulative Disease: Clinical trial on Lyme disease treatment”
Faculty Sponsor: Deby Cassill

Natalie Jesski (Biology): “The Migrants Above: A North American Shorebirds Investment” and “I am a Dolphin. So Now What?”
Faculty Sponsor: Deby Cassill

Jeffrey Jia (Biology): “What properly invested Health Care does”
Faculty Sponsor: Deby Cassill

Hannah Knauf (Biology): “A Decline of Resources for Mental Health”
Faculty Sponsor: Deby Cassill

Marvin Lawrence (Biology): “Cirrhosis: Morbidity Rating and Mortality Assessment in America”

Faculty Sponsor: Deby Cassill

Chandler Lazear (Anthropology): “Rise of the Aztec State”

Faculty Sponsor: Gabrielle Vail

Brian Lee (Honors): “A Job for You and What you Need to Know”

Faculty Sponsor: Deby Cassill

Bianca Leon (Biology): “Manatee Death in Florida in the Year of 2016 Due to Red Tide”

Faculty Sponsor: Deby Cassill

Marc Leroux (Biomedical Sciences): “Obesity: Us or Them?”

Faculty Sponsor: Deby Cassill

Ariel Lewis (Spanish): “Latin American Films”

Faculty Sponsor: Frederic Leveziel

Emily Lind (Biology): “Factors Associated with Patient Trust in Primary Care Physicians”

Faculty Sponsor: Noel Takeuchi

Alexandra Liss (Biology): “Before Harambe”

Faculty Sponsor: Deby Cassill

Cynthia Lupton (Biology): “Fifty shades of whitetip”

Faculty Sponsor: Deby Cassill

Lexi Mancini (Interdisciplinary Social Sciences): “A Sociological Interpretation of Uniqueness”

Faculty Sponsor: Byron Miller

Laura Manke (Education): “Give Me Liberty or Give Me Death: 5th grade's journey into the American Revolution”

Faculty Sponsor: Heather Duncan

Ashlee Whitman (Biology): “Disintegrating starfish...What is causing this phenomenon”

Faculty Sponsor: Deby Cassill

Mary Winemiller (Biology) “A Preliminary Study of Mental Health and Wellness in Veterinary Field in Pinellas County”

Faculty Sponsor: Noel Takeuchi

Alexander Witherspoon (Biology): “The Fifty Largest Companies in the World: Analyzing Possible Predictors of Success” and “Influence of Bird Type on Hatching Behavior”

Faculty Sponsor: Deby Cassill

Winnie Zheng (Biology): “Factors That Effects Dimensional Accuracy of Alginate Impressions”

Faculty Sponsor: Deby Cassill

Collaborative

Karla Alvarado, Darby Blekicky, Berni Berkower (Biology, Anthropology): “Uncovering Seeds of Sorry: A Tragedy of Lake City, South Carolina ”

Faculty Sponsor: Anna Dixon

Alexandra Bauman, Dimitri Dimopoulos (Psychology): “Does Gender Influence Career Decisions for Dual-Earning Couples?”

Faculty Sponsor: Mark Pezzo

James Berg, Patience Converse (Criminology): “DUI Arrests in St. Petersburg, FL January 2014 - December 2018”

Faculty Sponsor: Mark Pezzo

Chloe Thirion (Honors): “The Way Women Work”

Faculty Sponsor: Rebecca Harris

Madeline Thorpe (Biology): “Study of Sargassum Community Structure”

Faculty Sponsor: Joan Herrera

Nicholas Tijerina (Biology): “State of Breath: Regions Affected by Asthma”

Faculty Sponsor: Deby Cassill

Katherine Timer (Biomedical Sciences): “Child's Best Friend?: A Study of Dog Bites in Children”

Faculty Sponsor: Deby Cassill

Nicole Tran (Psychology): “Recruitment and Retention of Older Adults in Longitudinal Randomized Controlled Trials”

Faculty Sponsor: Jennifer O’Brien

Tuyen Tran (Biomedical Sciences): “Immigration and Outmigration”

Faculty Sponsor: Deby Cassill

Blake Waller (Psychology): “Charting the Dangers of Cataracts”

Faculty Sponsor: Leon Hardy

Elliana Walster (Biology): “Lovers in Paradise”

Faculty Sponsor: Deby Cassill

Thomas Webster (Biology): “Adolescent Obesity: Behavioral Factors”

Faculty Sponsor: Deby Cassill

Nicholas Weibel (Biology): “A Survey of Coffee Consumption”

Faculty Sponsor: Deby Cassill

Kaylee Wells (Biology): “Stop Elephant Poaching”

Faculty Sponsor: Deby Cassill

Billie Mealey (Biology): “Free Willie!”

Faculty Sponsor: Deby Cassill

Justin Morera (Biology): “PA+H to Excellence: A Study of the Mathnasium’s Capabilities”

Faculty Sponsor: Deby Cassill

Courtney Navarrete (Biology): “Game of Tusks”

Faculty Sponsor: Deby Cassill

Brianna Nicholas (Business): “The ‘Golden Retriever’ of Cats”

Faculty Sponsor: Deby Cassill

Rosane Nieves (Biology): “Living with vitiligo”

Faculty Sponsor: Deby Cassill

Nicole Niklasch (Biology): “Killer Kats”

Faculty Sponsor: Deby Cassill

Andrea Orleanski (Biology): “Injuries in Different Sports”

Faculty Sponsor: Deby Cassill

Hunter Osborne (Biology): “Don’t Hate Your Dentist More Than You Hate Having A Bad Smile!”

Faculty Sponsor: Deby Cassill

Orlando Perdomo (Biomedical Sciences): “Top 10 Cities in the World Based on Gross Domestic Product (GDP)”

Faculty Sponsor: Deby Cassill

Joseph Ramsey (Biology): “Do college students drink more coffee?”

Faculty Sponsor: Deby Cassill

Faculty Sponsor: Max Owens

Nathan Reiner (Political Science): “Pods in a Blanket”

Faculty Sponsor: Deby Cassill

Jessica Renaud (Biology): “Emotional Reactivity and Memory Performance”

Andrew Rene (Biology): “Comparison of PAH levels in an urban vs a suburban setting using organic films on windows”
Faculty Sponsor: Henry Alegria

Lisa Richardson (Biology): “RMSD Analysis of Pepsin3a at Varying pH”
Faculty Sponsor: Leon Hardy

Samantha Rivera (Biology): “Analysis of Dental Decays through the Examination of Filling Procedures Among Clearwater”
Faculty Sponsor: Deby Cassill

Leslie Ryals (Biomedical Sciences): “Stressed? Practice Meditation”
Faculty Sponsor: Deby Cassill

Yoscelyn Santos (Biology): “Maternal investment in bats”
Faculty Sponsor: Deby Cassill

Rebecca Sauchuk (Biomedical Sciences): “Population Growth and the Spread of Malaria in Sub-Saharan Africa”
Faculty Sponsor: Deby Cassill

Seamus Schenkenberg (Biology): “Microbial Whiplash”
Faculty Sponsor: Deby Cassill

Alexis Schlueter (Biomedical Sciences): “Does Java Really Make One Jive? Caffeine Intake”
Faculty Sponsor: Deby Cassill

Zianab Shamseddine (Biology): “The Stone Cold Killer: A Study on Cancer Mortality Worldwide”
Faculty Sponsor: Deby Cassill

Brittany Sides (Biology): “The Talkative Cat”
Faculty Sponsor: Deby Cassill

Iliana Simo (Biology): “Application of Sound for Bone Loss Detection”
Faculty Sponsor: Leon Hardy

Kimberly Sprenger (Biology): “Cellular Immunotherapy: Up & coming Applications to Major Neurodegenerative Diseases”
Faculty Sponsor: Hossam Ashour

Diana Stancic (Biology): “Campus Squirrels are Nuts! Anthropogenic Influence on an Urban Adapter”
Faculty Sponsor: Deby Cassill

Nick Stivali (Biomedical Sciences): “The Dietary Composition of the U.S. and Canada in Recent Years”
Faculty Sponsor: Deby Cassill

Abigail Taylor (Biology): “Gators Coming on Strong”
Faculty Sponsor: Deby Cassill

Karly Taylor (Honors): “The Evolution and Future of Access and Support in Diverse Students in Higher Education”
Faculty Sponsor: Thomas Smith

Sierra Taylor (Biology): “Boat vs Manatee: Are Boats the Leading Cause in Manatee Deaths”
Faculty Sponsor: Deby Cassill

Eleni Theocharakis (Biology) “Promiscuity and Sexuality and STIs! Oh My!”
Faculty Sponsor: Deby Cassill