

# 9th Annual Undergraduate Research Symposium

## Poster Presentation Winners

### *Category: Basic Sciences I*

**First Place:**

***Dalia Soueid***

Project Title: "Engineering of Novel Matriptase Inhibitors Based on Eglin C Core Structure"

FAU Mentor: Maciej Stawikowski

College: Charles E. Schmidt College of Science

**Second Place:**

***John Pearl, Peter Ramdhan***

Project Title: "Inhibition of Matriptase at the Cell Surface: Modeling and Synthesis of Membrane-anchored Matriptase Inhibitors"

FAU Mentor: Maciej Stawikowski

College: Charles E. Schmidt College of Science

### *Category: Basic Sciences II*

**First Place:**

***Lana Ilazarova, Luis Campos, Merna Mankarious, Julie Yassa***

Project Title: "Identification of Amphid Neurons Where Autophagy Acts to Control *C. elegans* Development"

FAU Mentor: Kailiang Jia

College: Charles E. Schmidt College of Science

**Second Place:**

***Alexis Martin***

Project Title: "Optimized Protocols for Extraction of Microbial Natural Products"

FAU Mentor: Diane Baronas-Lowell

College: Charles E. Schmidt College of Science

### *Category: Basic Sciences III*

**First Place:**

***Daniella Ospina***

Project Title: "Immigration, Education and Cognitive Performance in Elderly Bilingual Adults Who Are Cognitively Normal, MCI and Dementia"

FAU Mentor: Monica Rosselli

College: Charles E. Schmidt College of Science

**Second Place:**

***Maria Fernandez***

Project Title: "Quantifying Genetic Differentiation Among *Gopherus Polyphemus* Populations in South Florida to Guide Translocation Efforts"

FAU Mentor: Evelyn Frazier

College: Charles E. Schmidt College of Science

*Category: Behavioral, Educational & Social Sciences I*

**First Place:**

***Nicole Fitzgerald, Kayla Burd***

Project Title: "Examining Affective Exchanges in Therapy Sessions with Substance Abuse Clients"

FAU Mentor: Paul Peluso

College: Charles E. Schmidt College of Science

**Second Place:**

***Kelly Thomas***

Project Title: "The Relevance of Cultural Commonality Based Relationships Developed Between Teachers and Students with Emotional and Behavioral Disorders"

FAU Mentor: Lisa Finnegan

College: College of Education

*Category: Behavioral, Educational & Social Sciences II*

**First Place:**

***Alyssa Alvarez, Nikole Holness***

Project Title: "What is the Public's Perception of Welfare in America?"

FAU Mentor: Monica Escaleras

College: College of Business

**Second Place:**

***Kimarah Lamothe***

Project Title: "Interactions of the Nucleus Reuniens of the Thalamus and Hippocampus in Elapsed Time"

FAU Mentor: Robert Vertes

College: Charles E. Schmidt College of Science

*Category: Behavioral, Educational & Social Sciences III*

**First Place:**

***Nadine Akin***

Project Title: "EEG and FMRI Data Analysis"

FAU Mentor: Emanuelle Tognoli

College: Charles E. Schmidt College of Science

**Second Place:**

***Stefani Moccia***

Project Title: "AI-based Feedback for Prevention of Body-focused Repetitive Behaviors"

FAU Mentor: Elan Barenholtz

College: Charles E. Schmidt College of Science

*Category: Business, Marketing, Finance and Public Administration*

**First Place:**

***Sydney Elney***

Project Title: "The Effects of Infrastructure Service Disruptions and Socio-Economic Vulnerability on Hurricane Recovery"

FAU Mentor: Monica Escaleras

College: College of Business

**Second Place:**

***Daphnie Dilus, Jazmin Velasco***

Project Title: "Social Media's Affect on Self-Esteem"

FAU Mentor: Monica Escaleras

College: College of Business

*Category: Classroom Research Project/Assignment*

**First Place:**

***Austin Silverstein***

Project Title: "Effect of Student Dissatisfaction of On-Campus Food Services Causing Students to Prefer Eating Off-Campus"

FAU Mentor: Pradeep Korgaonkar

College: College of Business

**Second Place:**

***Lee M. Sanchez Lucas***

Project Title: "Rapid Method for Human Health Risk Assessment in the Swash Zone (Wet Beach Sand) of South Florida Beaches"

FAU Mentor: Esiobu Nwadiuto

College: Charles E. Schmidt College of Science

*Category: Cross Disciplinary Projects*

**First Place:**

***Kristen Crawford***

Project Title: "All Ears: Can Ear Recognition Software be a Solution for Mobile Phone Security?"

FAU Mentor: William Hahn

College: Charles E. Schmidt College of Science

**Second Place:**

***Christopher Tepetitlan, Tracey Tobkin***

Project Title: "The State of Hummingbirds: The Wingbeats the World Should Know"

FAU Mentor: Dorotha Lemeh

College: Harriet L. Wilkes Honors College

*Category: Engineering*

**First Place:**

***Holly Schlichting, Harrison Rudd, Andreas Noel-Williams, Renata Rigueira***

Project Title: "Algae Neutralizing Cleaning Hybrid Ocean Robot (A.N.C.H.O.R)"

FAU Mentor: Pak Cheung Edgar An

College: College of Engineering and Computer Science

**Second Place:**

***Mary Rasura***

Project Title: "Recognizing the Boiling of Liquids Using CNNs"

FAU Mentor: William Hahn

College: Charles E. Schmidt College of Science

*Category: Environmental, Ecological & Marine Sciences I*

**First Place:**

***Lisa Nguyen***

Project Title: "Water Quality Analysis to Assess Nutrient Loading and Algae Bloom Potential"  
FAU Mentor: William Louda  
College: Charles E. Schmidt College of Science

**Second Place:**

***Zachary Hollendonner, Lovenie Talien***

Project Title: "Using a High-Throughput System to Manipulate Biotic Signaling and Physicochemical Parameters While Screening for Bioactive Molecules"  
FAU Mentor: Nwadiuto Esiobu  
College: Charles E. Schmidt College of Science

*Category: Environmental, Ecological & Marine Sciences II*

**First Place:**

***Lauren Melanson***

Project Title: "A Survey of the Arthropod Species Present in Gopherus Polyphemus Burrows at the FAU Preserve"  
FAU Mentor: Evelyn Frazier  
College: Charles E. Schmidt College of Science

**Second Place:**

***Jennifer Unger***

Project Title: "Analysis of Vertebrate Species of Gopherus Polyphemus Burrows"  
FAU Mentor: Evelyn Frazier  
College: Charles E. Schmidt College of Science

*Category: Environmental, Ecological & Marine Sciences III*

**First Place:**

***Laurent Lorquet***

Project Title: "Rapid Detection G. zonatum in Palm Trees Using qPCR"  
FAU Mentor: Nwadiuto Esiobu  
College: Charles E. Schmidt College of Science

**Second Place:**

***Andrew Balsamo, Tahoe Albergo, Mohamed Abutineh, Milove Jeannot, Amanda Lam, Nicholas Nifakos, Nicholas Pizzo***

Project Title: "Expression of Tardigrade Damage Suppressing Protein (Dsup) Gene in Tobacco Plants"  
FAU Mentor: Xing-Hai Zhang  
College: Charles E. Schmidt College of Science

*Category: Health & Medical Sciences I*

**First Place:**

***Aaron McFarlane***

Project Title: "Transport of a Collagen-Derived Fluorogenic Substrate Across an In Vitro Model of the Blood-Brain Barrier"  
FAU Mentor: Gregg Fields  
College: Charles E. Schmidt College of Science

**Second Place:**

***Sarah Thurlow***

Project Title: "Assessing the Efficacy of Bureaucratic Caring Theory as a Framework for Evaluating Long-Term Care Administrators Description of their Roles and Challenges"  
FAU Mentor: Rose Sherman  
College: Christine E. Lynn College of Nursing

*Category: Health & Medical Sciences II*

**First Place:**

***Sarvika Bommakanti***

Project Title: "The Role of Human Polynucleotide Phosphorylase (hPNPase) in Downregulating Oxidized RNA"  
FAU Mentor: Zhongwei Li  
College: Charles E. Schmidt College of Science

**Second Place:**

***Isabella Velasquez Botero***

Project Title: "Action Research to Benefit Those Who Suffered Loss: Refining a Therapeutic Walking Intervention in a Japanese Garden and Identifying Relevant Outcomes"  
FAU Mentor: Patricia Liehr  
College: Christine E. Lynn College of Nursing

*Category: Health & Medical Sciences III*

**First Place:**

***Rida Altaf***

Project Title: "Irradiation Augmentation of Genistein-Induced Apoptosis in Androgen-Independent DU-145 Prostate Cancer Cells in Vitro"  
FAU Mentor: James Kumi-Diaka  
College: Charles E. Schmidt College of Science

**Second Place:**

***Giselle Shim, Rama Abdin***

Project Title: "Effects of Bath Salts on the Activation of Cortical Neurons Associated with Excited Delirium"  
FAU Mentor: Rui Tao  
College: Charles E. Schmidt College of Science

*Category: Music, Art, Literature, Theater, History & Philosophy*

**First Place:**

***Izabella Hernandez***

Project Title: "Interactions Between Humans and The Public Built Environment: Creating Extensions of the Body Through Bacterial Exchange (A Sculptural Installation)"  
FAU Mentor: Julie Ward  
College: Dorothy F. Schmidt College of Arts and Letters

**Second Place:**

***Jessica Cassandra Young***

Project Title: "Strange Frequencies: Development of a Post-Human Narrative"  
FAU Mentor: Rachel Luria  
College: Harriet L. Wilkes Honors College