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 Amphis 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
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
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