



9th Annual Undergraduate Research Symposium

Oral Presentation Winners

Category: Basic Sciences

First Place: Joubin Jebelli

Project Title: "Assessing the Therapeutic Potential of Novel Marine Products and Very Low Dose Radiation in Prostate

Cancer"

FAU Mentor: Lyndon West

College: Charles E. Schmidt College of Science

Second Place: Deborah Thomas

Project Title: "Synthesis and Characterization of Novel Fluorescent Probes for Visualization of Biological Membranes"

FAU Mentor: Maciej Stawikowski

College: Charles E. Schmidt College of Science

Category: Behavioral, Educational & Social Sciences I

First Place: Jeffrey Coltman-Cormier

Project Title: "Desperate Times Call for Desperate Measures: How Border Fortification Intensifies Transnational

Insurgents' Violence Against Civilians"

FAU Mentor: Angela Nichols

College: Dorothy F. Schmidt College of Arts and Letters

Second Place: Cassidy Brydon, Aubrey Jones and Elizabeth Lanzon

Project Title: "Online or Offline: Expressive Writing Administration Preferences for Non-Treatment-Seeking College

Students"

FAU Mentor: Laura Vernon

College: Harriet L. Wilkes Honors College

Category: Behavioral, Educational & Social Sciences II

First Place: Abbey Peterman

Project Title: "Uncovering Methods of Coercion through the Rhetorical Criticism of the Communist Manifesto"

FAU Mentor: Andrew Tinker

College: Dorothy F. Schmidt College of Arts and Letters

Second Place: Alexandria Remillard

Project Title: "Defining Hate: A Content Analysis of the Nation's Hate Crime Laws"

FAU Mentor: Seth Fallik

College: College for Design and Social Inquiry

Category: Business, Marketing, Finance and Public Administration

First Place: Alejandra Rodriguez and Anthony Vultaggio

Project Title: "Political Divide and its Influence on Civic Engagement"

FAU Mentor: Monica Escaleras
College: College of Business

Second Place: Laura Bautista and Julia Gaglio

Project Title: "Do Americans Feel Comfortable with the Advancements In Self-Driving Car Technology?"

FAU Mentor: Monica Escaleras College: College of Business

Category: Engineering I

First Place: Genevieve Kunkel and Rosa Walls

Project Title: "Carbon Dioxide and Ethanolamine Injection for Enhanced Oil Recovery"

FAU Mentor: Myeongsub Kim

College: College of Engineering and Computer Science

Second Place: Daniel Carvalho

Project Title: "Micro-particle Laser Trapping for Optical Tweezers"

FAU Mentor: Grigoriy Kreymerman

College: Charles E. Schmidt College of Science

Category: Engineering II

First Place: Vithulan Suthakaran

Project Title: "Developing a Biologically Based Artificial Leaf to Filter and Transform Carbon Dioxide Emissions into Oxygen

via Photosynthesis"

FAU Mentor: Peng Yi

College: College of Engineering and Computer Science

Second Place: Matthew Trask, Kristian Murphy and Art Rozenbaum

Project Title: "Pi VizuWall: A Low-cost, Parallel Compute Cluster"

FAU Mentor: Elan Barenholtz

College: Charles E. Schmidt College of Science

Category: Environmental, Ecological and Marine Sciences

First Place: Kaitlin Grell

Project Title: "The Effect of High Nest Temperatures on the Growth Rates of Loggerhead Sea Turtle (Caretta caretta)

Embryos and Hatchlings"

FAU Mentor: Sarah Milton

College: Charles E. Schmidt College of Science

Second Place: Brian Lages and Alexander Shaw

Project Title: "Nickel Nanoparticles-assisted Monoethanolamine for Carbon Capture"

FAU Mentor: Myeongsub Kim

College: College of Engineering and Computer Science

Category: Health and Medical Sciences

First Place: Mary Minore

Project Title: "Synthesis of Glycosylated Amino Acids Bearing Tumor-Associated Carbohydrate Antigen"

FAU Mentor: Mare Cudic

College: Charles E. Schmidt College of Science

Second Place: Michael Correa

Project Title: "Effects of Resistance and Aerobic Training on Growth Factor Expression and B-amyloid in a Murine Model

of Alzheimer's Disease"

FAU Mentor: Michael Whitehurst College: College of Education

Category: Music, Art, Literature, Theater, History and Philosophy I

First Place: Elizabeth Siwica

Project Title: "Abdul Ghaffar Khan and the Partition of India"

FAU Mentor: Douglas McGetchin

College: Dorothy F. Schmidt College of Arts and Letters

Second Place: Nicholas Weid

Project Title: "Autobiographical Video Games: Essayistic, Independent, and Empathetic"

FAU Mentor: Stephen Charbonneau

College: Dorothy F. Schmidt College of Arts and Letters

Category: Music, Art, Literature, Theater, History and Philosophy II

First Place: Yuri Sachnowski

Project Title: "The Place of the Body in Vladimir Solovyov's The Meaning of Love"

FAU Mentor: Richard Shusterman

College: Dorothy F. Schmidt College of Arts and Letters

Second Place: Hannah Garcia

Project Title: "Zen and American Pragmatism: Western Individualist Misperceptions of Zen-Buddhist Ritual"

FAU Mentor: Kenneth Holloway

College: Charles E. Schmidt College of Science





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

<u>First Place:</u> 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: "Al-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

<u>Second Place:</u> 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

<u>Second Place:</u> 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