Showcase of Undergraduate Research Excellence

Celebrating Undergraduate Research and Creativity Across the Curriculum

2017

Presented by the Division of Teaching and Learning

Thursday, April 6, 2017
WELCOME TO THE 14TH ANNUAL SHOWCASE OF UNDERGRADUATE RESEARCH EXCELLENCE

The Showcase is a poster-based forum for University of Central Florida undergraduates to present their research and creative projects to the university community. Undergraduates from all disciplines are encouraged to present current or recently completed academic projects showcasing the diversity of topics, approaches, and interests at UCF. The Showcase serves as a resource for undergraduates not yet engaged in research and creative pursuits to learn how fellow students have developed their intellectual interests, current projects, and faculty connections. The Showcase also demonstrates to students, faculty, staff, alumni, and the Central Florida community that student research builds upon and enriches the UCF undergraduate experience. The Showcase is sponsored by the Office of Undergraduate Research, which is a unit of the Division of Teaching and Learning. For more information about undergraduate research, please visit www.our.ucf.edu.

The Showcase is part of the 2017 Research Week at UCF.

www.showcase.ucf.edu
UNIVERSITY OF CENTRAL FLORIDA | ORLANDO, FLORIDA

SHOWCASE OF UNDERGRADUATE RESEARCH EXCELLENCE
Celebrating undergraduate research and creativity across the curriculum.

OFFICE OF UNDERGRADUATE RESEARCH
DIVISION OF TEACHING AND LEARNING

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POSTER SESSION I
(Pegasus Ballroom) ................................................................. 12 - 1:30 P.M.

PRESENTER RECEPTION
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POSTER SESSION II
(Pegasus Ballroom) ................................................................. 2:30 - 4 P.M.

AWARDS
(Cape Florida Ballroom) .......................................................... 4:30 - 5 P.M.

John C. Hitt
President

Elizabeth Dooley
Vice Provost of Teaching and Learning
Dean of Undergraduate Studies

2017 UCF STUDENT RESEARCH WEEK
SHOWCASE BENEFACTORS

Through the generosity of the following organizations and individuals, substantial scholarships will be awarded to students judged to have the best projects presented at the Showcase. The Office of Undergraduate Research and the planners of 2017 Student Research Week are grateful to these benefactors for their encouragement and support of student research at UCF.

We are especially appreciative to the UCF Student Government Association for their generous contribution.

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College of Nursing
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John (Rick) Schell
Kimberly Schneider and Kenneth Fedorka
The faculty is a university’s paramount asset, and the Office of Undergraduate Research recognizes the following UCF faculty mentors who have advised, counseled, tutored, and encouraged students presenting at today’s showcase.

Kareem Ahmed
Jared Allen
Kelly Allred
Deborah Altmare
Georgios Anagnostopoulos
Claudia Andl
Uluc Aysun
Alexander Balaeff
Jack Ballantyne
Sarah Barber
Stacy Barber
Melanie Beazley
Aniket Bhattacharya
Christopher Blackwell
Richard Blair
Patrick Bohlen
Julia Bowsher
Candice Bridge
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Michael Callaghan
Shannon Carter
Robert Cassanello
Debopam Chakrabarti
Ratna Chakrabarti
Lisa Chambers
Debashis Chanda
Reshawna Chapple
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Latarsha Chisholm
Hyoun Cho
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Wingyan Chung
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Ilenna Colon Mendoza
Joshua Colwell
Geoffrey Cook
Alcija Copik
Leslee D’Amato-Kubiet
Tuinh Das
Andrew Dickerson
Donovan Dixon
Aristide Dogariu
Thomas Dolan
Chuanzi Dong
Amy Donley
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Adrienne Dove
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Stephen Florczyk
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Andrea Gelfuso
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Ali Gordon
Donita Grissom
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Kerstin Hamann
Michael Hampton
Peter Hancock
Joseph Harrington
Alícia Hawthorne
James Hickman
Melanie Hinojosa
Elizabeth Hoffman
Eric Hoffman
Kathleen Hohenleitner
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Qun Huo
Woo Hyoung Lee
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Travis Jewett
Yeonceong Jung
William Kaden
Karl Kai McKinstry
Hyeran Kang
Jeffrey Kauffman
Saiful Khakdaker
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Joo Kim
Yoon-Seong Kim
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Barbara Kinsey
Jonathan Knuckey
Dmity Kolpashchikov
Alice Korosky
Alla Kourova
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Victoria Loerzel
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Doan Modianos
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Olga Molina
Sean Moore
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Saleh Naser
Mark Neider
Megan Nickels
Reed Noss
Elsie Olsen
Nina Orlovskaya
Anthony Pak-Hin Kong
Christopher Parkinson
Griffith Parks
Marisol Parra-Tatge
Melissa Pompos
Jonathan Powell
Guo-Jun Qi
Susan Quelly
Seetha Raghavan
Wanda Rainmundi-Ortiz
Swaminathan Rajaraman
Amy Reckdenwald
Debra Reinhart
Beatriz Reyes-Foster
Fernando Rivera
Heejung Ro
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Kyle Rohde
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Suren Tatulian
Laurene Tetard
Kenneth Teter
Jayan Thomas
Jacqueline Towsen
Maria Toyne
Charlotte Trinquet
Nizam Uddin
Natalie Underberg-Goode
Fernando Uribe-Romo
Rani Vajravelu
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Subith Vasu
Christos Velissaris
Konstantin Vodopyanov
Laurence von Kalm
Ezekiel Walker
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Joseph Wang
John Weishampel
Stephanie Wheeler
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Bruce Wilson
Pamela Wisniewski
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Margaret Zaho
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Lei Zhai
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Tithonas Davis
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Samuel Deane, Michael Sedlack
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Nathalie Fernandez
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Krystal Folkes
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Ari Hadar
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Erik Ninnemann
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Alexander Olvera
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Alex Rodriguez
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Trevor Starling
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Olivia Kondos
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Rebecca Manske
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David Phan
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Ana Torres, Stephanie Smith
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Ryan Woodmansee
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David Abad Venegas
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Sarah Abdelhameed
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Laurie Agosto
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Nicole Armand
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Mentor: Jennifer Elliott (Biology)

Samuel Harris
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Mentor: Dr. Ratna Chakrabarti (Biomedical Sciences)

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Mentor: Dr. Dinender Singla (Biomedical Sciences)

Emily Karwacki
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Nickolas Kessler
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Mentor: Dr. Sean Moore (Biomedical Sciences)

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*Mentor:* Dr. Laurence von Kalm (Biology)

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Suitability of UCF’s Natural Lands as a Wildlife Corridor
*Mentor:* Jennifer Elliott (Biology)

Miguel Gil
Characterization of *Plasmodium falciparum* PfMRK, a CDK-like Kinase
*Mentor:* Dr. Debopam Chakrabarti (Biomedical Sciences)

Connor Harris
Characterization of *Staphylococcus aureus* Protein A Expression Levels in Differing Growth Conditions
*Mentor:* Dr. Amy Cole (Molecular Biology and Microbiology)

Heather Holman
Targeted Delivery of a Therapeutic Protein for Neurodegenerative Diseases
*Mentor:* Dr. Kiminobu Sugaya (Biomedical Sciences)

Nikki Huynh
The New Penicillin?
*Mentor:* Dr. William Self (Biomedical Sciences)

Elizabeth Abney
MHC Class I and Susceptibility to Fibropapillomatosis in Green Turtles (*Chelonia mydas*) and Loggerhead Sea Turtles (*Caretta caretta*)
*Mentor:* Dr. Anna Savage, Dr. Kate Mansfield (Biology)
Sara Khederzadeh  
The Effects of Media-Derived Tumor Exosomes on the Expansion and Cytotoxicity of Natural Killer (NK) Cells  
*Mentor:* Dr. Alicja Copik (Biomedical Sciences)

Katelyn Lanctot  
Wildlife Corridors: Evaluating Organismal Movement Between Fragmented Habitats  
*Mentor:* Dr. Christopher Parkinson (Biology)

Brittany Lebert  
Assessing Genetic Differentiation to Infer Invasion History of *Megabalanus coccopoma*  
*Mentor:* Dr. Eric Hoffman (Biology)

Zachary Loeb  
A Comparison of BPA Alternatives with Endocrine Disrupting Compounds in Waste Water Effluent on the Embryonic Development of *Oryzias latipes*  
*Mentor:* Dr. Donovan Dixon (Chemistry)

Jasmine Lopez  
DNA/RNA Co-Extraction Method Development for Use in Mrna Profiling Assays to Aid in Body Fluid Identification  
*Mentor:* Dr. Jack Ballantyne, Dr. Erin Hanson (Chemistry)

Maria Mas  
A De Novo Transcriptome Assembly of *Lithobates sphenocephalus* and Comparative Gene Expression to Understand Pathogen Effects  
*Mentor:* Dr. Anna Savage (Biology)

Amirah Mathin  
Development of Antimetastatic Motuporamine Derivatives Which Target Actin Filament Assembly  
*Mentor:* Dr. Hyeran Kang (Biomedical Sciences), Dr. Otto Phanstiel (Medical Education)

Julia Matlash  
Regulation of the tRNA-dependent Pathway for Lipid Aminoacylation in *Enterococcus faecium*  
*Mentor:* Dr. Herve Roy (Biomedical Sciences)

Jaice Metherall  
Dietary Preference of the Blue Crab *Callinectes sapidus* in Choice Trials with Invasive and Native Mussels  
*Mentor:* Dr. Linda Walters (Biology)

Bailey Mourant  
Targeting Fatty Acid Synthase-II Protein Interactions as a New Way to Kill TB  
*Mentor:* Dr. Kyle Rohde (Biomedical Sciences)

Abed Elrahman Naser  
Isolation and Characterization of Embryonic Stem Cells Derived Exosomes  
*Mentor:* Dr. Dinender Singla (Biomedical Sciences)

Ebraheem Naser  
A Novel Molecular Multiplex PCR for Rapid Detection of *Mycobacterium avium* Subspecies paratuberculosis and Other Pathogens in Crohn's Disease  
*Mentor:* Dr. Saleh Naser (Biomedical Sciences)

Amna Naser  
Osteocalcin Supports a Role for *Mycobacterium avium* Subspecies Paratuberculosis (MAP) in Crohn's Disease  
*Mentor:* Dr. Saleh Naser (Biomedical Sciences)

Melinda Paduani  
Life in the Wrack - Evaluating Effects of Coastal Wrack on Invasive Brazilian Pepper and Native Black Mangroves  
*Mentor:* Dr. Linda Walters (Biology)

Keisha Persaud  
Measuring Real Time Contractile Function of In-Vitro Myocytes on Cantilever Chips in Microfluidic System Through a Non-Invasive Methodology  
*Mentor:* Dr. James Hickman, Dr. Carlota Sancho Oleaga (Chemistry)

Vi Pham  
Evaluation of the Degree of Preservation of Ancient Human Remains Using Bone Crystallinity Index and Carbonate-Phosphate Ratio  
*Mentor:* Dr. Marla Toyne (Anthropology)

KeTaira Phillips  
Measuring Artificial Light Levels on Florida Sea Turtle Nesting Beaches from 1992 to 2013 Using Satellite Data  
*Mentor:* Dr. John Weishampel (Biology)

Michelle Prophete  
Effect of K562 Plasma Membrane-bound Interleukin-2 Protein on the Proliferation of Natural Killer Cells and Their Cytotoxicity Against Cancer Cells  
*Mentor:* Dr. Alicja Copik (Biomedical Sciences)

Yvelande Raymond  
Urbanization is a Buzz Kill: Urban Environments on Bee Species Activity and Diversity  
*Mentor:* Dr. Patrick Bohlen (Biology)

Brenda Rivera  
Monitoring *Batrachochytrium dendrobatidis* and Ranavirus Infection in Multiple Frog Species Across Jekyll Island, GA  
*Mentor:* Dr. Anna Savage (Biology)

Paola Rodriguez Morales, Ashni Persad  
Pathological Alterations in the Failing Heart  
*Mentor:* Dr. Dinender Singla (Biomedical Sciences)

Cedric Roudebush  
The Role of Activin A in the Inflammatory Response Caused by Gastric Reflux and In Esophageal Carcinogenesis.  
*Mentor:* Dr. Claudia Andl (Biomedical Sciences)
Peter San Pedro
Cardiotrophin-1 Increases Astrocyte Proliferation in Neural Stem Cells and Oligodendrocyte Progenitor Cell Cultures
Mentor: Dr. Stephen Lambert (Biomedical Sciences)

Ariella Saslafsky
Analysis of a Mutant Paramyxovirus as a Vector for Tumor Specific Killing
Mentor: Dr. Griffith Parks (Biomedical Science)

Benjamin Schachner
Evaluating the Function of the Oxytocin Receptor in Ovarian Cancer Cells to Determine If Oxytocin Can Induce an Anti-Inflammatory Response
Mentor: Dr. Armando Mendez (University of Miami)

Ashelyn Sidders
Expanding the Genetic Toolbox for Mycobacteria: Constructing the pheS Counterselection Marker
Mentor: Dr. Kyle Rohde (Biomedical Sciences)

Ryan Skelly
Commensal Bacterium Effect on Staphylococcus aureus
Mentor: Dr. Amy Cole (Biomedical Sciences)

Tyler Steidl, Sophia Bertot
A Deoxyribozyme Sensor for the Quantification of the Stability of Oligonucleotide Secondary Structure
Mentor: Dr. Dmitry Kolpashchikov (Chemistry)

Tyler Stuck
Development and Comparative Analysis of a Novel Frog Population Bioacoustics Monitoring Technology
Mentor: Dr. Anna Savage (Biology)

Joanne Tejero
Examining the Effects of Cigarette Smoke Extract on Effector CD4 T Cell Activation and Function
Mentor: Dr. Kai McKinstry (Biomedical Sciences)

Heidi Waite
Indian River Lagoon through a Microscope: Microplastics in the Organic Tissues of Oysters and Crabs
Mentor: Dr. Linda Walters (Biology)

George Walters-Marrah
Investigating the role of the Dosrs and Phop 2-Component Systems in the Pathogenesis Of Mycobacterium abscessus
Mentor: Dr. Kyle Rohde (Biomedical Sciences)

Trellane Willis
The Effects of E-cigarettes and Nicotine on Cell Signaling in Esophageal Cancer
Mentor: Dr. Claudia Andl (Biomedical Sciences)

Natalie Wilson
Identifying the Effects of a Human Dynein Mutation on GFP-Rab7 Axonal Transport in Embryonic Mouse Neurons
Mentor: Dr. Stephen King (Biomedical Sciences)

Angela Corrigan
Novel Platforms for Understanding Intercellular Nanoparticle Interactions
Mentor: Dr. Laurene Tetard (Physics)

Theodore Cox
Collisions of Lennard-Jones Clusters
Mentor: Dr. Aniket Bhattacharya (Physics)

Behnaz Davoudinasab
Using Low-Coherence Interferometry to Monitor Cell Invasion in an In Vitro Model System
Mentor: Dr. Aristide Dogariu (Optics)

David Fairchild
Synthesis of Metal Organic Frameworks Utilizing Highly Insoluble Components
Mentor: Dr. Fernando Uribe-Romo (Chemistry)

Lauren Gandy
Mechanistic Investigations on Organic Color Spot Tests for Smokeless Powders
Mentor: Dr. Candice Bridge (Chemistry)

Houssine Ihklef
Molecular Diagnostics of Pathogens
Mentor: Dr. Dmitry Kolpashchikov (Chemistry)

Jeslin Kera
Micro-Spectroscopy of Bio-Assemblies at the Single Cell Level
Mentor: Dr. Alfons Schulte (Physics)

Ali Khater
Graphene Based Lithium-Ion Battery Efficiency at Extreme Conditions
Mentor: Dr. Lei Zhai (Nanoscience)

Nicholas Kosan
Focusing Light on the Nano-Scale
Mentor: Dr. Stephen Kuebler (Chemistry)

Vanessa Lowry
The Inner Shell Ionization of Magnesium Atoms by a Single Photon
Mentor: Dr. Hari Saha (Physics)

Christopher Martin
Electrochemical Detection of Mycobacterium Tuberculosis Using a Four-Way Junction DNA Stem-Loop Probe
Mentor: Dr. Karin Chumbimuni-Torres (Chemistry)

Madeira Mas
A Retrospective Look at Survival Times of Canine Cancer Patients Treated with Hyperthermia Technology
Mentor: Dr. Nizam Uddin (Statistics)
Samantha Mensah
Smart Tattoos for Continuous Electrochemical Monitoring of Biomarkers in Sweat
*Mentor*: Dr. Joseph Wang (University of California, San Diego)

Tatiana Molden
General Method for Visual Detection Based on the Change from Liquid to Gel Phase
*Mentor*: Dr. Dmitry Kolpashchikov (Chemistry)

Sophia Morrell, Coral Nimz, Oluwakemi Adeagbo, Niabelle Thelemaque, Owen Thomas
Cholera in Haiti: A Map to the Cure
*Mentor*: Dr. Zhisheng Shuai (Mathematics)

Michael Navarro
The Safer and Scalable Mechanochemical Synthesis of Edge Chlorinated and Fluorinated Few-Layer Graphenes
*Mentor*: Dr. Richard Blair (Physics)

Harika Panuganty, Iman Squires
Structural Changes in Unmodified and Pyroglutamylated Amyloid B Peptides during Fibrillogenesis
*Mentor*: Dr. Suren Tatulian (Physics)

Francisco Poller
Au/Ta(110) as an Efficient Electro-Catalyst for the Oxygen Reduction Reaction in Hydrogen Fuel Cells
*Mentor*: Dr. William Kaden (Physics)

Joshua Rabanal
Fourier Analysis of the Piano at Middle C
*Mentor*: Dr. Christos Velissaris (Physics)

Thomas Rechtman
Effects of Outgoing Longwave Radiation on Climate Change and Ecology
*Mentor*: Dr. Ram Mohapatra (Mathematics)

Cody Schultz
Structural and Mechanical Properties of Thermal Cycled Asteroid Regolith Simulant
*Mentor*: Dr. Daniel Britt (Physics)

Darian Smalley
Field Orientation Independent Convective Flows in Quasi 1D Magnetic Fluid Driven by Horizontal Magnetic and Temperature Gradients
*Mentor*: Dr. Weili Luo (Physics)

Nathaniel Smith
A Temporal and Spatial Model of Cholera Spread Through Haitian Water Systems
*Mentor*: Dr. Zhisheng Shuai (Mathematics)

Elizabeth Wait
Combustion Reactions Catalyzed by Carbon Dioxide: Quantum Chemical Study of the Potential Energy Surfaces
*Mentor*: Dr. Artem Masunov (Chemistry)

Marcy Yi, Cristian Lacera
Exploring the Volume Of Polymers at the Nanoscale with Novel Microscopy Techniques
*Mentor*: Dr. Laurene Tetard (Physics)

Valentina Zaffino, Michael Antia
Low Dose 60Co Gamma-Irradiation Effects on Electronic Carrier Transport and DC Characteristics of AlGaN/GaN High-Electron-Mobility Transistors
*Mentor*: Dr. Elena Flitsiyan (Physics)

Peace Adetula
Exploring Messages about Interracial Families Within Children's Books
*Mentor*: Dr. Anne Bubriski-McKenzie (Women's and Gender Studies)

Angela Bardwell-Owens
Predictors of Academic Achievement of Nontraditional College Students: Opportunities to Catch-up and Succeed
*Mentor*: Dr. Doan Modianos (Psychology)

Kallie Callaway
Perception of Authority: Age and Gender?
*Mentor*: Dr. Amy Reckdenwald (Sociology)

Jaileen Cruz, Christopher Santiago, Lessie Nieves-Paugh, Michelle Benetti
False Recognition Driven by Orthographic Similarities Across Languages
*Mentor*: Dr. Marisol Parra-Tatge (Psychology)

Sarah Daabies
Biosocial Milk Sharing Study
*Mentor*: Dr. Shannon Carter (Sociology)

Melissa Dabydeen, Victoria Pineda
The Effects of Fitness and Technological Experience on Cognitive Ability
*Mentor*: Dr. Janan Smither, Dr. Daniel Mcconnell (Psychology)

Kristina Davis
Gender Variance and Perceptions of Gendered Privilege
*Mentor*: Dr. Amy Donley (Sociology)

Erin Doucet, Amber Goerner
Temporal Effects: How Economic Decision Making Takes Shape with Time and Experience
*Mentor*: Dr. Nichole Lighthall (Psychology)

Jacquelyn Fernandez
So Many Millennials, So Little Votes: Insight from Millennials on Post-Election America
*Mentor*: Dr. Amy Donley (Sociology)

John Granger, Natalie Alessi
Trends in Workload and Performance: An Analysis of Three Instructional Strategies Within a Virtual Environment
*Mentor*: Dr. Crystal Maraj (Simulation and Training)
Kayla Johnson
Undergraduate Social Work Students’ Knowledge and Perceptions on Male Victims of Female Perpetrated Domestic Violence
Mentor: Dr. Olga Molina (Social Work)

Valerie Kessler
Spatial Cognition in Dancers: “Is Dancing Good for Your Brain?”
Mentor: Dr. Valerie Sims (Psychology)

Camille Kreider
Marijuana’s Effect on Social Well-Being
Mentor: Dr. Amy Reckdenwald (Sociology)

Kayla LaDez
The Effect of Controlling Messages on Doctor-Patient Communication
Mentor: Dr. Valerie Sims (Psychology)

Grayson Lanza
Contemporary Analysis of Kurdish Nationalism in Iraq
Mentor: Dr. Houman Sadri (Political Science)

Bernice Lauredan
Women’s Sexual and Reproductive Health in Sub-Saharan Africa
Mentor: Dr. Stacy Malaret (Higher Education and Policy Studies)

Selena Leonardo
Behavioral Interventions for Smoking Cessation Used by Daily Smokers
Mentor: Dr. Julia Soulakova (Biomedical Sciences)

Allison Long
Do People with Different Personality Types Differ in Levels of Confirmation Bias?
Mentor: Dr. Shannon Whitten (Psychology)

David Lowe
Visual and Proprioceptive Integration of Virtual Reality Input Devices and Interfaces
Mentor: Dr. Daniel McConnell (Psychology)

Paulina Maxim, Ariana Velasquez
The Relationship Between Interviewer’s Technique and Eyewitness Recall
Mentor: Dr. Mustapha Mouloua (Psychology)

Barbara Mendez Campos
Use of a Music and Memory Program by Dementia Caregivers
Mentor: Dr. Denise Gammonley, Dr. Tracy Wharton (Social Work)

Jacqueline Meyer
Are We Producing Society-Ready Foresters? Evaluating Disparities In Forestry Education
Mentor: Dr. Peter Jacques (Political Science)

Yu Miao
Relationships Between Religiosity, Political Ideology, and Parenting Style
Mentor: Jason Chesnut (Psychology)

Alexis Miller
Parental Guidance Advised: The Role of Personality, Parental Closeness, Control, and Decision Making in Parent-Child Relationship Quality among College Students
Mentor: Dr. Grace White (Psychology)

Sydney Murchison-Stricker
The Role of Personality and Low-Perceived Control in Parent-Child Interaction
Mentor: Dr. Valerie Sims (Psychology)

Heidi Obediente
It’s Not Men or Women, It’s Balance
Mentor: Dr. Kerstin Hamann (Psychology)

Karen Ochoa, Betsali Cintrón-Vargas, Lizette Herrera
Teacher Implementation of the VST-GE16 Protocol: Undergraduate Researchers Collaborating Around Measure Administration, Measure Coding, and Measure De-Identification
Mentor: Dr. Linda Rosa-Lugo, Dr. Barbara Ehren (Communication Sciences and Disorders)

Andres Padilla
Understanding Business Crowd-Funding
Mentor: Jared Allen (Management)

Natalie Ramos
From Liberal to Restrictive: The 1992 Asylum Policy Change in Germany
Mentor: Dr. Barbara Kinsey (Political Science)

Lauren Reynolds
The Evolution of the Republican Party Platform Regarding Environmental Policies
Mentor: Dr. Peter Jacques (Political Science)

Kellan Ritter
Conflict Recurrence in Rwanda and Burundi
Mentor: Dr. Jonathan Powell (Political Science)

Sandy Rodriguez
World War C: How Climate and Conflict are Interrelated
Mentor: Dr. Peter Jacques (Political Science)

Andia Ruiz Payne Narics
Never Can Say Goodbye: Personality Correlates of Self-Critical Rumination and Need for Closure in Close Relationships
Mentor: Dr. Grace White (Psychology)

Renee Sahatdjian
Effects of Number of Distractors and Divergent Distractor Motion on Collision Detection
Mentor: Dr. Mark Neider (Psychology)

Angel Sanchez
Florida Dept. Of Corrections Systematically Undercounts Hispanics: an Empirical Estimate Of Hispanics In FDOC And its Impact On Felony Disenfranchisement
Mentor: Dr. Bruce Wilson (Political Science)

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Mentor: Dr. Bruce Wilson (Political Science)
Danielle Sapp
How Quality of Life Among Those with SPI Impacts Their Relationships
*Mentor:* Dr. Reshawna Chapple (Social Work)

Samantha Shepard
Escapist Texting: The Role of Personality and Social Anxiety
*Mentor:* Dr. Valerie Sims (Psychology)

Jessica Shoemaker
Case-Specific Counterterrorism Policies for ISIS
*Mentor:* Dr. Houman Sadri (Political Science)

Omari Stringer
The Sound of Politics: Political Orientations and Music Preferences Among College Aged Adults
*Mentor:* Dr. Chrysalis Wright (Psychology)

Sarah Sukhai
Making a Trustworthy Robot
*Mentor:* Dr. Peter Hancock (Psychology)

Sonali Tewatia
Under Cover: A Study of Emotions Vulnerable and Veiled
*Mentor:* Dr. Grace White (Psychology)

Tessa Treadwell
African American Mothers’ Perceptions of Breastfeeding Information and Support from Healthcare Providers
*Mentor:* Dr. Shannon Carter (Sociology)

Eleni Triantafyllopoulo
The Effect of Social Media on Attention Span
*Mentor:* Dr. Peter Hancock (Psychology)

Kaitlyn Villalobos
Hospitality Job Interviews: What Hiring Managers Look For
*Mentor:* Dr. Heejung Ro (Hospitality Services)

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**UNIVERSITY OF CENTRAL FLORIDA LIBRARIES**

Annual Award for Excellence in Undergraduate Research Publishing in the *University of Central Florida Undergraduate Research Journal*

The University of Central Florida Libraries is pleased to announce Casey Craig, Courtney Buck, Chelsea Landau, and Jordan Filipponi, “The Impact of Crown Conch on Intertidal Oyster Populations in Mosquito Lagoon” have won the 2017 Award for Excellence in Undergraduate Research Publishing.

Congratulations to the authors and their mentor Dr. Linda Walters!
The University of Central Florida Undergraduate Research Journal (UCF URJ) encourages, recognizes, and rewards the intellectual scholarship of undergraduate students by providing a peer-reviewed forum to share their research. The journal accepts student articles, essays, and adapted thesis projects from all majors. Students who publish their work gain valuable academic experience, preparing them for future success. Collaborative research is always welcomed.

The UCF URJ showcases articles of exemplary works from a wide range of student scholarship in all fields. The journal seeks outstanding research submitted by undergraduate students who have been involved in faculty-mentored research projects and activities related to scholarship.

The UCF URJ is on display at www.urj.ucf.edu.

Emily Simpson, Joshua Duarte, Brianna Bishop
When Moms Say Bad Words: Family and Peer Influence on the Frequency of Swearing
Faculty Mentor: Dr. Chrysalis Wright

Melissa Ariella Paduani
Small Mammal Response to the Gunnison’s Prairie Dog Reintroduction
Mentor: Stephanie Baker, University of New Mexico

Ryan Hammond
Parks as Places of Public Solace: The Perception of Parks after 9/11
Mentor: Dr. Peter Jacques

William Butler
Mathematical Modeling in Law and Political Science: Learning from Public Health
Mentor: Dr. Zhisheng Shuai

Jared Muha
Mexico in 1999: Taking back the UNAM
Mentor: Dr. Ezekiel Walker

Rebekah Kanefsky
Perceived Locus of Control in the Children of Military and Civilian Families Affected By Deployment and Divorce
Mentor: Dr. Sandra Neer

Analise McGreal
The Self-Reference Effect, Emotion, and Self Esteem
Mentor: Dr. Wei Wang

Martin Coleman
Determining Tidal Elevations in Dry Elements Within a Coastal Salt Marsh Model
Mentor: Dr. Stephen Medeiros

Emily Thomson
“Not to Die, but to Survive”: The Construction of Female Voice in Isabel Allende’s The House of the Spirits
Mentor: Dr. Cecilia Rodríguez-Milanés

Natasha Vashist
The Effect of Misogynistic Humor on Millennials’ Perception of Women
Mentor: Dr. Chrysalis Wright

Naomi Ringer
The Use of Mobile Applications in Preventive Care and Health-Related Conditions: A Review of the Literature
Mentor: Dr. Leslee D’Amato-Kubiet
In January 2010, the Student Undergraduate Research Council, in collaboration with the Office of Undergraduate Research, developed DURA, formerly known as the Undergraduate Research of the Month program. Each month a new student is honored with the award. The following students were recognized in 2016.

**Brach Champion**  
Research Project: Correcting Medicaid Enrollment Underreporting: A Stochastic Frontier Analysis  
*Mentor*: Dr. Richard Hofler (Economics)

**Lacie Anderson**  
Research Project: Quantifying the Success of Eastern Oysters in Brevard County  
*Mentor*: Dr. Linda Walters (Biology)

**Melissa Paduani**  
Research Project: How “Natural” are Shoreline Plant Communities in Constructed Storm-Water Ponds?  
*Mentor*: Dr. Patrick Bohlen (Biology)

**Jessica Chambers**  
Research Project: Flame Turbulence Interaction for Deflagration to Detonation  
*Mentor*: Dr. Kareem Ahmed (Mechanical Engineering)

**Kathryn Cline**  
Research Project: Microenvironment Changes in the Pancreatic Stroma Induced by Inflammation  
*Mentor*: Dr. Deborah Altomare (Biomedical Sciences)

**Joey Valez-Ginorio**  
Research Project: Deep Learning Methods for Dynamic Brain Connectome Prediction  
*Mentor*: Dr. Guo-Jun Qu (Computer Science)

**Michael Lopez-Brau**  
Research Project: Mining Collective Intelligence in Cognitive Radio Networks  
*Mentor*: Dr. Nazanin Rahnavard (Electrical and Computer Engineering)

**Baggio Evangelista**  
Research Project: Alpha-Synuclein: Insight to the Potential Biomarker for Theranostics Involved in Parkinson's Disease  
*Mentor*: Dr. Yoon-Seong Kim (Biomedical Sciences)

**Christy Box**  
Research Project: The Effects of Hegemonic Support of Endangered Languages on Language Ideologies  
*Mentor*: Dr. Beatriz Reyes-Foster (Anthropology)

**Ashelyn Sidders**  
Research Project: Expanding the genetic toolbox for Mycobacteria: Constructing the PheS Counterselection marker  
*Mentor*: Dr. Kyle Rohde (Biomedical Sciences)

Applications are available at [www.our.ucf.edu/accomplishments](http://www.our.ucf.edu/accomplishments).
The Undergraduate Research Council promotes the involvement of undergraduates in the ongoing activities of the UCF research community and advises the Office of Undergraduate Research about policies and programs that pertain to undergraduate research at UCF.

Michael Aldarondo-Jeffries
Ahlam Al-Rawi
Morgan Bauer
Joseph Brennan
Matth Charrabarti
Matt Chin
Latarsha Chisholm
Melissa Dagley
Ed Dandrow
Damian Dechev
Jonathan Decker
Martin Dupuis
Seth Elsheimer
Stephen Florczyk
Emily Flositz
Denise Gammonley
Martha García
Nora Lee García
Enrique Guerra
Debbie Hahs-Vaughn
Richard Harrison
Florencio Hernandez
Bridget Holt
Kevin Jardaneh
Robert Jones
Tammie Kaufman
Jennifer Kent-Walsh
Joo Kim
Lanlan Kuang
Stephen Kuebler
Aubrey Kupelian
Stacey Malaret
Matthew Matusiak
Mike McFadden
Vanessa McRae
Abby Milon
David Mitchell
Liqiang Ni
Christopher Niess
Fidelia Nnadi
Enrique Ortiz
Shelley Park
Laurie Pinkert
Jonathan Powell
Adam Pritchard
Tison Pugh
Shawn Putnam
Andrew Randall
Debra Reinhart
LeeAnn Roberts
Michael Rovito
Bridget Rubenking
Swadeshmukul Santra
Kim Schneider
Zhisheng Shuai
Colleen Smith
Jason Smith
Asli Tasci
Kenneth Teter
Natalia Toro
John Venecak
John Walker
Linda Walters
Ze Wang
Lei Wei
Chrysalis Wright

UCF UNDERGRADUATE RESEARCH COUNCIL

UCF STUDENT UNDERGRADUATE RESEARCH COUNCIL (SURC)

SURC promotes awareness about undergraduate research for students at the University of Central Florida. Students actively engaged in research are selected each year to serve on this council. Through their support, the Office of Undergraduate Research has greater exposure on campus and gets continuous feedback on undergraduate research programs. Their help in promoting and running the Showcase of Undergraduate Research Excellence is greatly appreciated.

Lucy Clement La Rosa
Shelly Gaynor
Sara Khederzadeh
Christina Kursewicz
Grayson Lanza
Michael Lopez-Brau
Rebecca McLean
Kelly Rosch
Samantha Shepard
Leslie Simms
The Office of Undergraduate Research thanks the following individuals and entities for their time, expertise, and support in the planning of today’s event.

Michael Aldarondo-Jeffries
Morgan Casavant
Tinessa Callinan
Sandra Cherepow
Dwight Davis
Elizabeth Dooley
Jack Christensen Fedora
Ryland DeGregory
Emily Flositz
Michelle Fuentes
Emi Gonzalez Luna
Lauren Harr
Richard Harrison II
Jacki Herold
President John C. Hitt
Keisha Hoerrner
Luke Hogue
Valerie Kessler
Vanessa McRae
Christine Rivera
Ricky Rodriguez
Adam Smajstrla
Barbara Smith
Colleen Smith
Jason Smith
Alexandra Stepanov
Brian Strickland
UCF Foundation
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UCF University Marketing
Igor Volkov

PLANNING COMMITTEE

Shannon Colon
Luke Hogue
Kevin Jardaneh
Aubrey Kuperman
Kimberly Schneider
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