2020 VIRTUAL UNDERGRADUATE RESEARCH SYMPOSIUM

Various Zoom sessions from April 6th at 3:35 pm to April 9th at 7:45 pm
Visit the week-long event at bit.ly/URSVIRTUAL.

You are invited to join us throughout the week of April 6 as current undergraduate researchers present their posters virtually for the 2020 Undergraduate Research Symposium! Through the Facebook event page, we will share the time for each presentation session, Zoom event link, and the general area/topic of the presentations so you can watch and support your friends and peers.

Many of our presenters participate in the Undergraduate Research Opportunity Program (UROP), Garnet and Gold Scholar Society, Honors in the Major, and students wanting presentation experience. We will be sharing the Nourishing Creativity performative projects as videos shared in each session.

Program of poster sharing events for Tuesday, April 7th

Monday, April 6th sessions
- 3:30 - 4:35 pm, 1 poster sharing event
- 5:15 - 6:15 pm, 3 poster sharing events
- 6:45 - 7:45 pm, 4 poster sharing events

Tuesday, April 7th sessions
- 3:30 - 4:35 pm, 1 poster sharing event
- 5:15 - 6:15 pm, 4 poster sharing events
- 6:45 - 7:45 pm, 3 poster sharing events

Wednesday, April 8th sessions
- 4:00 - 5:00 pm, 1 poster sharing event
- 5:15 - 6:15 pm, 3 poster sharing events
- 6:45 - 7:45 pm, 2 poster sharing events

Thursday, April 9th sessions
- 10:30 - 11:45 am, 1 poster sharing event
- 12:00 - 1:15 pm, Nourishing Creativity presentations
- 1:30 - 2:45 pm, 1 poster sharing event
- 3:00 - 4:15 pm, 1 poster sharing event
- 3:35 - 4:25 pm, 1 poster sharing event
- 5:15 - 6:15 pm, 4 poster sharing events
- 6:45 - 7:45 pm, 2 poster sharing events
Tuesday, April 7th
3:35 - 4:35 pm
Leaders Hana Grubb & Maria Quintana, Biochemistry

https://fsu.zoom.us/j/970584076
bit.ly/ursababstract20

Academic Development for Black Males in Higher Education
Braidan O'Connor
Research Mentor: Mr. Jesse Ford

Pollination Success and Associational Effects in S. Carolinense
Catherine Lehman
Research Mentor: Dr. Jacob Heiling

Promiscuity in a Marine Snail
Charles Gannon
Research Mentor: Ms. Alexandra Hooks

High-pressure Raman spectroscopic study of 3.65 Å hydrous phase
Christelle Fiorina Bucag
Research Mentor: Dr. Abhisek Basu

The Progress of Writing Composition Over a Year in ESL students Compared To Native English Speakers
Gabriella Oliveira
Research Mentor: Dr. Carla Wood

Gender in Conlanging
Joseph Vincent Hatton Lefler
Research Mentor: Dr. Carolina Gonzalez

The Effect of Compression Socks on Exercise Performance: A Literature Review
Kerstin Castro
Research Mentor: Dr. Dohoun Kim
Utilizing Virtual Reality to Better Understand the Causes of Suicide
Neketa Nesmith & Juliette Ruiz
Research Mentor: Ms. Irene Huang

Bigger Isn't Always Better. The Effect of Colony Size on the Probability of Coral Mortality Following Bleaching
Nyla Johnson
Research Mentor: Dr. Scott Burgess

Understanding Tuberculosis's Membrane Protein
Paul Carpentier
Research Mentor: Dr. Huanjun Qin

Reconstituting Dengue Virus NS2B3 Protease-mcGAS Interaction in Vitro
Ramsey Fadlalla
Research Mentor: Ms. Madhurima Bhattacharya

Barriers and Facilitators to Faculty Grantsmanship: A Systematic Literature Review
Sandhya Yerra
Research Mentor: Dr. Rachel Goff-Albritton

Identification of Sexually Dimorphic Genes in Drosophila Melanogaster
Tracy Pham
Research Mentor: Mr. Kevin Doheny

C84Y Mutation in Cardiac Troponin C Influence on Cardiomyocyte Nuclear Structure
Tyler Reinoso
Research Mentor: Dr. P. Bryant Chase
Tuesday, April 7th
5:15 - 6:15 pm
Leaders Sarah Sullivan & Morgan Morrow & Emma Masters, Environment & Ecology

https://fsu.zoom.us/j/419115199
bit.ly/ursababstract20

Climate Change Readiness in Lagos, Nigeria: Current Impacts and Prospects
Abril Hunter
Research Mentor: Dr. Yana Bebieva

Effects of the "Leave No Trace" Ordinance on Sea Turtle Nesting Patterns in Northern Florida
Alex Rebimbas
Research Mentor: Dr. Matthew Ware

Dendrochronological Analysis of Longleaf Pines in Florida
Arianna Wittic
Research Mentor: Ms. Nicole Zampieri

Cataloging biopsy and blood samples of marine turtles from different areas in Florida
Ashley Jackson
Research Mentor: Dr. Mariana Fuentes

The Effect of Hydraulic Fracturing on Oklahoma
Hanna Franz
Research Mentor: Mr. Robert Powers

Mind(fulness) over Matter
Jonathan Black
Research Mentor: Ms. Diana Carbonell
Hurricane Evacuation History
Jordan Daly & Melissa Geiger
Research Mentor: Dr. Tinting Zhao

The Least Invasive Methods for Blood Collection on Florida Native Sea Turtle Species
Maya Tiseth
Research Mentor: Dr. Mariana Fuentes

The Effects of Climate Change on Karenia brevis
Nolan Hartz
Research Mentor: Ms. Tristyn Bercel

Metal Silicides in Aluminum Flux
Susan Morales
Research Mentor: Dr. Susan Latturner

Hermit Crabs Personality, Size, and Habitat
Yousi Español Rincón
Research Mentor: Dr. Emily DuVal

Acoustic Telemetry and Sex-specific movements of Ariopsis felis
Zoe Moore
Research Mentor: Mr. Barry Walton
Tuesday, April 7th
5:15 - 6:15 pm
Leaders Grace Nystrom & Caroline Deyoe, Food and Nutrition Science/Dietetics

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bit.ly/ursabstract20

**Differential Vulnerability to Tornado Impacts in Communities of the Rural U.S. South**
Allison Keeling
Research Mentor: Dr. Tisha Holmes

**Ending the Youth HIV Epidemic**
Alyson Urbaniak
Research Mentor: Dr. Meardith Pooler-Burgess

**Student Disability Registration and Migration Data at Institutions with Autism Specific Programs**
Carly Fulcher
Research Mentor: Dr. Bradley Cox Project MED
Madison Hedge
Research Mentor: Dr. Scott Pickett

**SMILES: Statistical Modeling and Integration of Large-Scale Single-Cell RNA Sequencing Data**
Madison Layfield
Research Mentor: Dr. Julia Wang

**Epistemic Empathy within Science and Mathematics Classrooms**
Mary Dixon Wigginton
Research Mentor: Dr. Lama Jaber
Optimization of Glycoprotein Staining and Stain-free Gel Preparation
Megan Appelbaum
Research Mentor: Dr. Qinchun Rao

3D Photogrammetry for Coral Reef Reconstruction
Monet Cisneros
Research Mentor: Ms. Abigail Engleman

Unmaking Plastics: Recyclable Rubbers through Depolymerization
Olivia Binner
Research Mentor: Dr. Justin Kennemur

A Nutrition Related Serious Game for Children in Immigrant Families
Ravza Cayir
Research Mentor: Dr. Jessica Wendorf Muhamad

Analyzing Blood Clam Images using ImageJ and Fast Fourier transform
Rosangel Salazar
Research Mentor: Dr. P. Bryant Chase

Food Availability and Size-Specific Annual Growth Rates in Sea Urchins
Sofia Perez
Research Mentor: Dr. Daniel Okamoto

Evaluating Taste-Evoked Activity in the Gustatory Cortex
Sonal Hirani
Research Mentor: Dr. Roberto Vincis

Melatonin Protects Against Deafferentation-Induced Cell Death in Chick Cochlear Nucleus
Tiana Pham
Research Mentor: Dr. Richard Hyson
Tuesday, April 7th
5:15 - 6:15 pm
Leaders Elias Larralde & Sergio Carlos Tamez, Humanities

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bit.ly/ursabstract20

**Perspectives of SLPs on Friendship Maintenance and Development for Clients with Aphasia**
Alexa Flores
Research Mentor: Dr. Michelle Therrien

**Social Media as a Parenting Support Tool: A Scoping review**
Amber Hedquist
Research Mentor: Dr. Vanessa Dennen

**Better Dead Than Red: A Twentieth Century Crusade for Christ and Against Communism**
Cassidy Taylor
Research Mentor: Dr. Daniel Wells

**Analyzing the Portrayal of Hitler and the Nazis in Media**
Cullen Bolkey
Research Mentor: Dr. Nathan Stoltzfus

**Geomapping the John House Stereograph Collection**
Emily Oxford-Pickeral
Research Mentor: Mr. Chase van Tilburg

**Archaeological Findings from the Cosa Bath House**
Jace Cookson & Angeles Urtubey
Research Mentor: Ms. Allison Smith
Homerica': A Digital Humanities Project in Python
Nathan Lesser
Research Mentor: Dr. Allen Romano

"Fortress for Freedom: The American Ground Crew Experience During the Combined Bomber Offensive"
Noah Silverstein
Research Mentor: Mr. (Major) John Prince

"Who's There?" Speaking First in Early British Drama
Roxy Rico & Samantha Paradela Research
Mentor: Dr. Michael Wagoner
Tuesday, April 7th
5:15 - 6:15 pm
Leaders Maegan Nation & Jennifer Poggio, Social Sience & Psychology

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bit.ly/ursababstract20

Application of Machine Learning Models on MRI Data in Assessment of Peripheral Arterial Disease
Antoinette Gladney
Research Mentor: Ms. Anahid Ehtemami

Career Adaptability, Dysfunctional Career Thoughts, and Athletic Identity among college student Athletes
Avery Knipfing
Research Mentor: Mr. Ryan Sides

College Affinity Groups and the Effects on Mental Health
Bernadyne Thelemaque
Research Mentor: Dr. Karen Oehme, J.D.

The Role that Reward Value of Food Has on Size and Frequency of Binge-eating Episodes in Women
Elizabeth Holton
Research Mentor: Dr. Pamela Keel

Gentrification in Atlanta's LGBTQ Community Joandy Vega Research Mentor: Ms. Rachael Cofield Analyzing the Relation Between Visual Food Cues and Decision Making
Joseph Arnold
Research Mentor: Dr. Rachel Bailey
The Interpersonal Core of Conscientiousness: Mechanisms And Partner Effects That Promote Healthier Cognitive Aging And Reduce Risk of Alzheimer's
Judalyn Arthoro
Research Mentor: Hannah Lovett

Developing an Understanding of how Couples Interact in the Context of Problem Solving
Kara Brizendine
Research Mentor: Dr. Andrea Meltzer

Effects of Nature Exposure on Perceptual-Cognitive-Motor Performance
Karla Rivaflecha
Research Mentor: Ms. Stinne Soendergaard

Direct Democracy and Social Policy Outcomes: Marijuana Legalization in the States
Kendall Roy Research Mentor: Ms. Kelley Doll

City Council Turnover and Recycling Rate and How They Are Influenced by Sustainability
Lillian Savage
Research Mentor: Dr. Richard Feiock

Disproportionate Representation: Speech & Language Impairment Rates in Florida Schools
Lindsey Wood
Research Mentor: Dr. Shannon Hall-Mills

Leadership Learning Project
Megan Black & Milagros Jerez Research Mentor: Dr. Kathy Guthrie
Tuesday, April 7th
6:45 - 7:45 pm
Leaders Kelly Kaps & Adrian Othon & Anastasia Stichter, Exercise Psychology

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The Role of NADPH Oxidase in Endothelial Function
Amber Dudek
Research Mentor: Dr. DoHoun Kim

Effect of Word Instruction on English-Learner Students
Andrea Aguirre-Becerra
Research Mentor: Ms. Kristina Bustamante

A Systematic Review of the Literature on Social Stigma and Violence Against Transgender Sex Workers in Low- and Middle-Income Countries
Andrew Brasington
Research Mentor: Dr. Seyram Butame

Supports and Constraints in Classroom Engagement: An Examination of the Discursive Moves of Two Girls' Sensemaking Endeavors in Science
A'Rawni McPhee
Research Mentor: Dr. Jennifer Schellinger

Associations Between Social Determinants of Health, Perceived Discrimination, and Body Mass Index on Symptoms of Depression among Young African American Mothers
Brenda Leon
Research Mentor: Ms. Rachel Harris
Do Character Strengths Predict Long-term Survival in Patients after Open Heart Surgery?
Caitlin Blanchard
Research Mentor: Dr. Amy Ai

Measure Up: Size and Bleaching Severity in Pocillopora Corals?
Chani Kotscher
Research Mentor: Dr. Scott Burgess

Research Methods of the Gustatory System
David Ackart
Research Mentor: Dr. Alan Spector

Ergonomic Test Protocol
Isabel Maya
Research Mentor: Dr. Meredith McQuerry

Null Results: What Are We Missing and Where Do We Find Them?”
Jacob Yap
Research Mentor: Dr. Nicholas Ruhs

Health Benefits of Dried Plum Consumption
Joseph Brunner
Research Mentor: Ms. Elizabeth Foley

Effects of Bmal Gene on Circadian Rhythms Jun Ho Research Mentor: Dr. Choogon Lee Synthesis of Metal Silicides
Kyle Findlay
Research Mentor: Dr. Susan Latturner

Spatial Relationships of French Monasteries in the 12th Century Through Chapters
Lauren Becker
Research Mentor: Dr. Kyle Killian Depression
Religious Coping, and Perfusion time Predicted Postoperative Functioning in Older Patients Undergoing Open-heart Surgery
Morgan Neal
Research Mentor: Dr. Amy Ai

Niang Dim
Research Mentor: Prof. Hye Ryung Won

Implicit Suicidal Cognitions: A New Approach to the Death Implicit Association Test
Sarah Ferguson
Research Mentor: Mr. Austin Gallyer

Pilot Study: The Effect of Acute 5-Day Creatine Supplementation on Macrovascular Endothelial Function in Older Adults
Thomas Dool
Research Mentor: Dr. Dohoun Kim

Teleological Essentialism and Boundary Intensification
Vanessa Welch
Research Mentor: Dr. David Rose
Tuesday, April 7th
6:45 - 7:45 pm
Leaders Kemp Gonzalez-Xu & Justin Stow, Hard Sciences

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**A Realistic Chandrasekhar Mass White Dwarf Model from a Binary Evolution**
Abelardo Riojas
Research Mentor: Dr. Tomasz Plewa

**The Blockchain Network Caswell King Research Mentor: Dr. Michael Meth Bipedal Robot Slippage Prediction and Friction Test**
Chase Toepp
Research Mentor: Dr. Christian Hubicki

**Peeking into the icy-giant planets: A high pressure-temperature study of hydrocarbons**
Christina Schiffert
Research Mentor: Dr. Abhisek Basu

**How Torque and Minimum Control Effort affect Sit-to-Stand**
Dylan Ma
Research Mentor: Dr. Oscar Chuy Jr

**Right-Angled Artin Groups and their Kernels**
Enrique Barquiner
Research Mentor: Dr. Lorenzo Ruffoni

**Developing the High Granularity Calorimeter for CERN Large Hadron Collider**
Giovanni Good
Research Mentor: Dr. Ted Kolberg
Improving Sensitivity of High Frequency Electron Magnetic Resonance
Harrison Santiago
Research Mentor: Dr. Johan van Tol

Qualitative Analysis of the Rock-Paper-Scissors Mathematical Model
Jaclyn Pascual
Research Mentor: Dr. Nick Cogan

How has the location of the Bermuda High affected the path of major landfalling hurricanes in the United States across the past 30 years?
Jordan Tweedie
Research Mentor: Dr. Mark Bourassa

Predicting Canopy Level Tropical Forest GPP with Thermal Imaging Using Deep Learning
Kathryn Brill
Research Mentor: Dr. Trina Merrick

Reality Bytes
Lucas Wilson
Research Mentor: Prof. Robert Curran

Monte Carlo Particle Detector Simulation of the Reaction Proton + Photon -> Omega + Proton
Ryan Goodrich
Research Mentor: Mr. Edmundo Barriga

Study on the Reaction Photon + Proton -> eta' + Proton
Shelby Arrigo
Research Mentor: Mr. Edmundo Barriga

Reverse Engineering with Ghidra
Supriya Palli
Research Mentor: Dr. Charalambos Konstantinou
Tuesday, April 7th
6:45 - 7:45 pm
Leaders Jon Peterson & Brittany Ernst, Pre-med & Athletic Training

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**Review of the Development of Thermal Manikins**
Cary Wong
Research Mentor: Dr. Meredith McQuerry

**Analysis of Benthos Survivablity on Artificial Substrates in Carrie Bow Cave, Belize**
Chaitanya Vibhute
Research Mentor: Ms. Abigail Engleman

**Implicit Language Bias: How To Unconsciously Learn a Second Language**
Darice Nicolas
Research Mentor: Dr. Shaofeng Li

**The Too Soon Effects of Returning to Work Postpartum in African American Households**
Deidra Edouard
Research Mentor: Dr. Joseph Grzywacz

**Obesity and Its Relationship to Medication and Dietary Supplement Use**
Elizabeth Steidley
Research Mentor: Dr. Zhe He
Assessing Patterns of Seagrass Communities as Indicators of Carbon Storage Potential
Jakob Barzak
Research Mentor: Ms. Jennifer McHenry

Ending the Youth HIV Epidemics
Jordan Jankowski
Research Mentor: Dr. Meardith Pooler-Burgess

Kate Fitts
Research Mentor: Prof. Hye Ryung Won

Promiscuity in a Marine Snail
Madison DeWitt R
Research Mentor: Ms. Alexandra Hooks

Exercising Mind-Body: Adopting a Healthy Lifestyle to Cope with Stress
Nangelis Rivera
Research Mentor: Ms. Hilla Sharon-David

The Relationship Between Depression, Anxiety, and Cognitive Functioning: A Cross-sectional and longitudinal study
Niah Washington
Research Mentor: Dr. Julia Sheffler

Examining the Factors that Affect Structural Repetition in Question Answering
Nicole Coca
Research Mentor: Dr. Michael Kaschak
Racial Minorities at Colleges with Autism Specific Support Programs
Olivia Griffing
Research Mentor: Dr. Bradley Cox

Mind(fulness) over Matter
Preston Hall
Research Mentor: Ms. Diana Carbonell

Suicidal Ideation, Suicide Attempts, and Suicide Death among Veterans and Service Members: A Comprehensive Meta-Analysis of Risk Factors
Summer Fulcher & Gabriela Herrerias
Research Mentor: Ms. Katherine Musacchio Schafer

Ontogenetic Diet Shifts within Northern Abalone
Trevor Alspach
Research Mentor: Dr. Daniel Okamoto