



UNIVERSITY *of* WEST FLORIDA

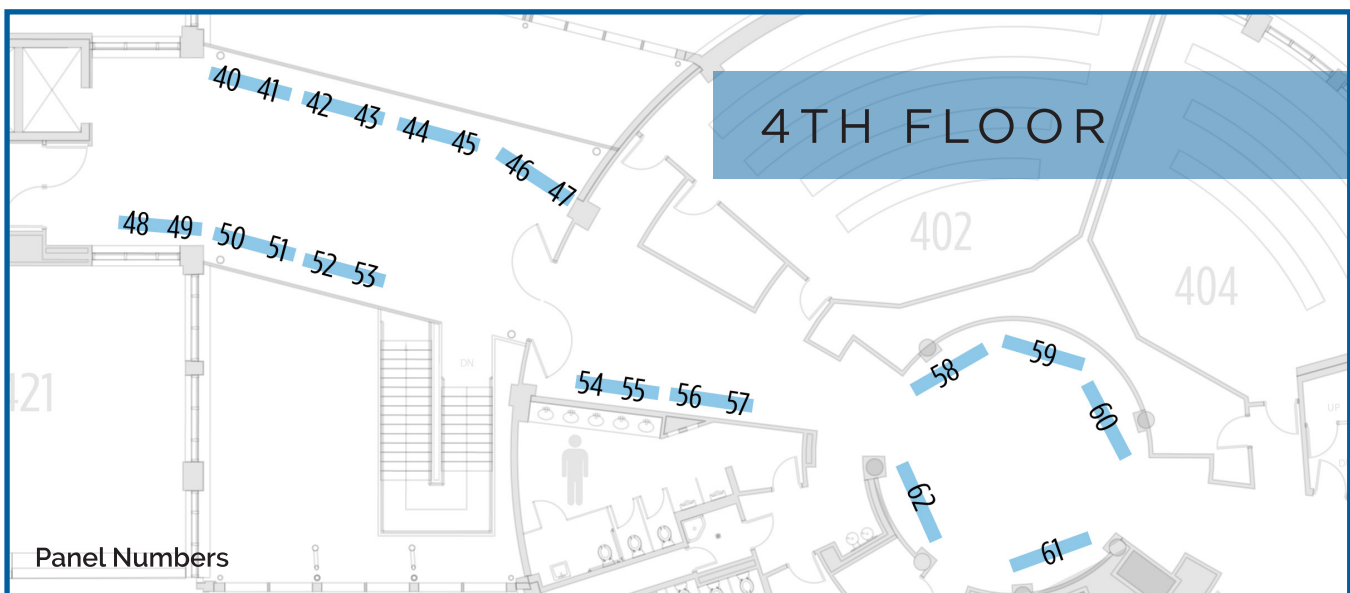
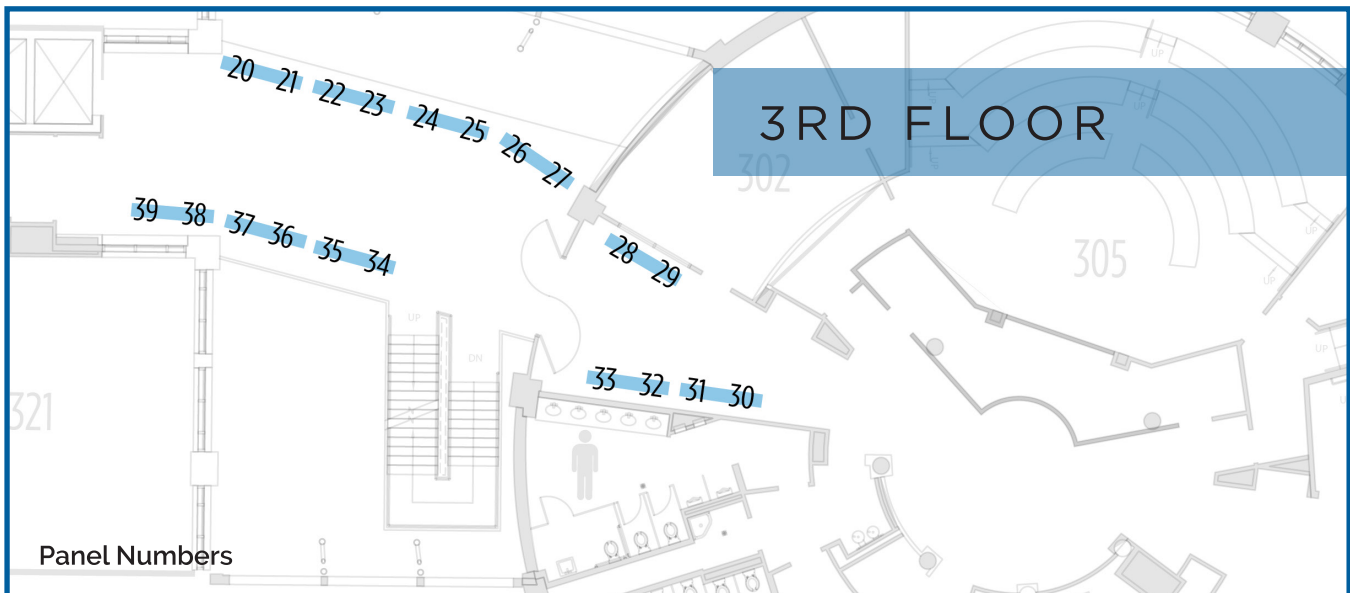
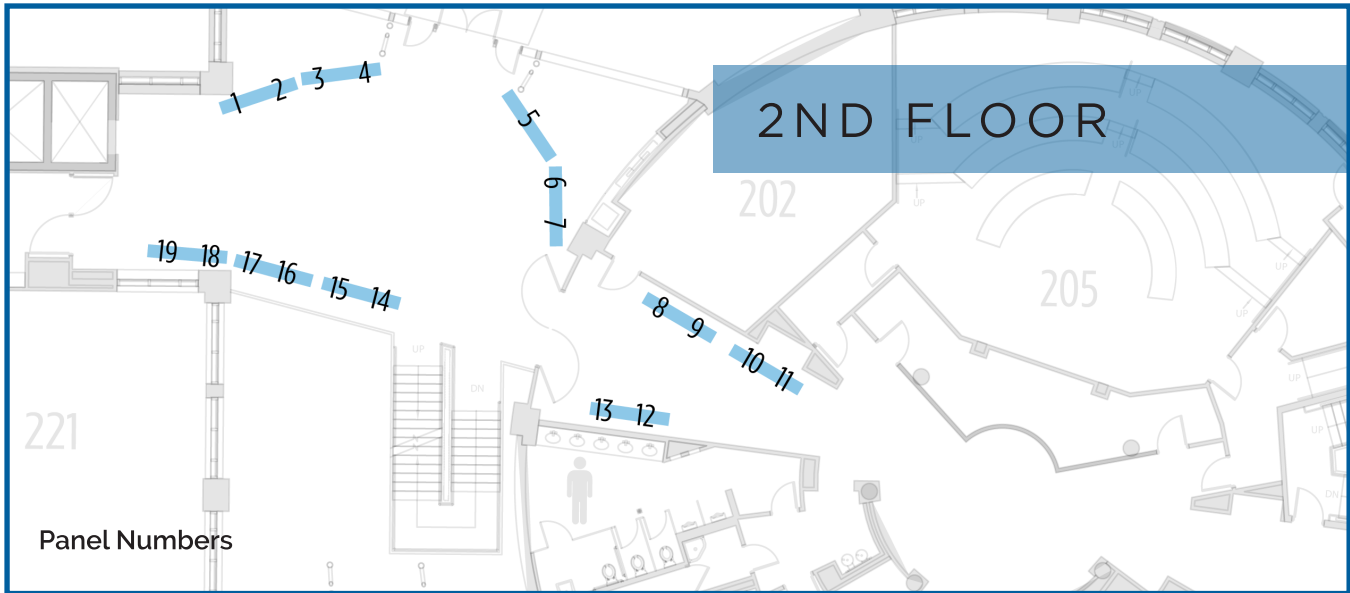
SURP 2022

SUMMER UNDERGRADUATE RESEARCH PROGRAM SYMPOSIUM

HAL MARCUS
COLLEGE OF SCIENCE AND ENGINEERING

AUGUST 12 | 10AM - 12PM

POSTER PRESENTATIONS MAP



A woman with short brown hair, wearing a bright pink short-sleeved top and a black choker necklace, is engaged in conversation with an older man with white hair. They are both looking towards the left of the frame. The background is a blurred indoor setting, likely a conference or research event, with other people and a whiteboard visible.

The Hal Marcus College of Science and Engineering (HMCSE) celebrates student-centered research by our faculty and research staff.

The 2022 Summer Undergraduate Research Program (SURP) is the eighth year in which we have invested in an intensive undergraduate research experience requiring selected students to devote 250 or more hours to a research project under close supervision of a faculty mentor.

Additionally, HMCSE faculty mentor undergraduate and graduate students over the summer and throughout the year in other programs, from course-based research to graduate thesis projects. Thank you for joining us for today's celebration of all HMCSE and OUR summer research efforts by our faculty, staff, and students.

SURPRISE & DELIGHT:

Be sure to stop on the first floor lobby to say thank you to the Pensacola Section of the American Chemical Society for providing a special treat from *Smallcakes: A Cupcakery & Creamery* in Pensacola.

Poster Session

10:00 a.m. - 12:00 p.m.

UWF Building 4

Poster presentations are listed by department with the student's **Floor/Panel #** next to their name.

(see map to the left or alphabetical list on the inside back cover)

BIOLOGY

Janiya Belyeu 2/4

Improving phage-based ELISA assays

Co-Author(s): **Enid Sisskin**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Korrie Brown 4/40

Quantifying and Comparing Microplastics in Coquina Clams (*Donax variabilis*) along Northwest Florida Beaches

Co-Author(s): **Natalie Simmons**

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Bethany Davis 4/42

Using DNA Sequencing to Better Understand the Complete Mitochondrial Genome of the Lemon Shark

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Rachel Foretich 2/15

The Effects of Dopamine Receptor Agonist and Antagonist on Neutrophil-like PLB-985 Cell Adhesion

Co-Author(s): **Safa Abdulqawi**

Faculty Mentor(s): Dr. Peter Cavnar, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Molly Hayne 4/43

Untangling the Worms: a revisionary taxonomy study of the marine annelid *Terebellides stroemii* using museum specimens

Co-Author(s): Dr. Viktoria Bogantes

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Angelique Jefferson 4/44

The Abundance of Microplastics in Aquatic Areas Outside of a Nylon Factory versus Recreational Aquatic Areas

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Sierra Landreth 4/57

Comparing Seasonal Occupancy and Diel Patterns of Sea Turtles at the Navarre Beach Fishing Pier Using Photograph Identification

Faculty Mentor(s): Dr. Susan Piacenza, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

J.J. Lane 4/56

Identifying the Signaling Pathway of Defense-Related Proteins in *Dioscorea bulbifera* (air potato)

Faculty Mentor(s): Dr. Theodore Fox, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Allie Linkous 2/1

Identifying Phage Specific to the Neuropathology of Alzheimer's Disease

Co-Author(s): **Maddy Scott, Sydney Truax, Enid Sisskin**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Liz McConnell 2/18

Metastasis Prevention with Phage Technology

Co-Author(s): **Enid Sisskin, Stephanie Jones**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: CASSH

Kathleen McCrea 4/58

Estimating Sea Turtle Biomass at local artificial reefs using a swimmable stereo-video camera

Co-Author(s): **Emma Roberto**

Faculty Mentor(s): Dr. Susan Piacenza, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE



Simon Talcott collects zebrafish DNA samples through anesthesia. (2/16)



Molly Hayne and Dr. Vik Bogantes looking at preserved specimens of marine annelids. (4/43)

MAGIC MOMENT

My SURP magic moment was when we were out snorkeling at Shoreline Park doing some seagrass surveys and we had found flower blooms on the *Thalassia*. Our mentor, Dr. Caffrey, had never seen these flowers in person, so it was really neat to share that experience with the her and the research team. This moment showed me that even years into studying something, you can always experience something new and exciting!

– Madison Harvey (CEDB)

Alexis Mitchem

4/45

Inventorizing elasmobranchs in the lower Pensacola Bay system utilizing environmental DNA metabarcoding

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Daniel Neidigk

2/19

Exercise Therapy as Treatment for Alzheimer's Disease in Drosophila

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Hailee Nigro

4/41

*The complete mitochondrial genome of the Frog crab, *Raninoides louisianensis* (Arthropoda: Raninidae)*

Co-Author(s): **Natalie Simmons**

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Sarah Rabinowitz

4/47

The University of West Florida Campus Ecosystem Study: variation of soil microbiome with forest stand type

Co-Author(s): **Elizabeth Hargis, Leo Sweet, Brenton Davis, Joe Moss**

Faculty Mentor(s): Dr. Frank Gilliam, HMCSE-Biology

Funding or other research support: Willis and Victoria Mullet Innovation

Student College: HMCSE-Marine Biology

Isea Ray

4/46

Citizen Science: Lesson Plan Development for Florida's Diverse Classrooms

Co-Author(s): **Nathan Harris**

Faculty Mentor(s): Dr. Alexis Janosik, HMCSE - Biology

Funding or other research support: OUR

Student College: HMCSE

Maddy Scott

2/2

Modulating Calpain Activity by LSEAL

Co-Author(s): **Allie Linkous, Sydney Truax, Lauren Kemp, Enid Siskin**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Simon Talcott

2/16

*Determining the Mechanisms through which miR-18a Regulates Retinal Photoreceptor Regeneration in *Danio rerio**

Faculty Mentor(s): Dr. Scott Taylor, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE-Marine Biology

Minh Khuyen Tran

2/14

Characterization of dopamine expression in neutrophil-like PLB-985 cells thorough western blot analysis

Faculty Mentor(s): Dr. Peter Cavnar, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Sydney Truax

2/3

Utilizing phage display to identify biomarkers of Alzheimer's Disease with phosphatase elution strategy

Co-Author(s): **Allie Linkous, Kevin Williamson**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

Abby Williamson

2/17

Early Biomarker detection of Alzheimer's Using Sumoylation of Tau Protein

Co-Author(s): **Christina Kilpatrick**

Faculty Mentor(s): Dr. Rodney Guttman, HMCSE-Biology

Funding or other research support: OUR

Student College: HMCSE

CEDB

Alyssa Cotten 4/62

Variability of microbial biofouling communities on different plastics in northern Gulf of Mexico

Co-Author(s): **Kaia Czerwinski**

Faculty Mentor(s): Dr. Wade Jeffrey, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Kaia Czerwinski 4/62

Variability of microbial biofouling communities on different plastics in northern Gulf of Mexico

Co-Author(s): **Alyssa Cotten**

Faculty Mentor(s): Dr. Wade Jeffrey, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Madison Harvey 2/6

Comprehensive Monitoring of Total Suspended Solids and Salinity in Seagrass Beds in Pensacola Bay System

Co-Author(s): **Isabella Orrantia**, Barbara Albrecht, **Rick O'Connor**

Faculty Mentor(s): Dr. Jane Caffrey, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Danielle Huntinghouse 4/54

Sanitization for the Control of Human-Associated Microbiota at the University of West Florida Health, Leisure and Sports

Faculty Mentor(s): Dr. Joe Lepo, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Isabella Orrantia 2/5

The Removal and Reintroduction of Symbiodiniaceae in Montipora carpicornis

Co-Author(s): **Madison Harvey**, Barbara Albrecht, **Rick O'Connor**

Faculty Mentor(s): Dr. Jane Caffrey, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Cassie Owens 4/55

Surveying Lipid-Dependent Yeast, Malassezia spp. that are Present in a Human Population

Faculty Mentor(s): Dr. Joe Lepo, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

Hue Worrells 2/7

Hypoxia tolerance of the ctenophores Beroe ovata and Mnemiopsis leidyi

Co-Author(s): **Crystal Prevost**, **Madison Harvey**, **Isabella Orrantia**

Faculty Mentor(s): Dr. Jane Caffrey, HMCSE-CEDB

Funding or other research support: OUR

Student College: HMCSE

CHEMISTRY

Corey Akerson 3/36

Synthesis of a Metalloenzyme Mimic with Unsymmetrical Polyamine

Co-Author(s): **Josh Lagaspi**, **Jason Neidigk**

Faculty Mentor(s): Dr. Ajay Lajmi, HMCSE -Chemistry

Funding or other research support: OUR

Student College: HMCSE

Tori Costilow 3/23

Wheating Out the Differences: Mineral and Fat Comparisons Between Cereal Partners Worldwide (CPW) Distributors

Co-Author(s): **Megan Brown**, **Gabrielle Young**, **Flavia Miccolis**

Faculty Mentor(s): Dr. Karen Barnes, HMCSE-Chemistry

Student College: HMCSE

Kate Harper 3/26

Lunar Basil: An Analysis of Basil by Inductively Coupled Plasma Optical Emission (ICPOES) and Solid-Phase Microextraction to Gas Chromatography Mass Spectrometry (SPME-GCMS)

Co-Author(s): **Nikkolette Kriegel**, **Flavia Miccolis**, **Gabrielle Young**

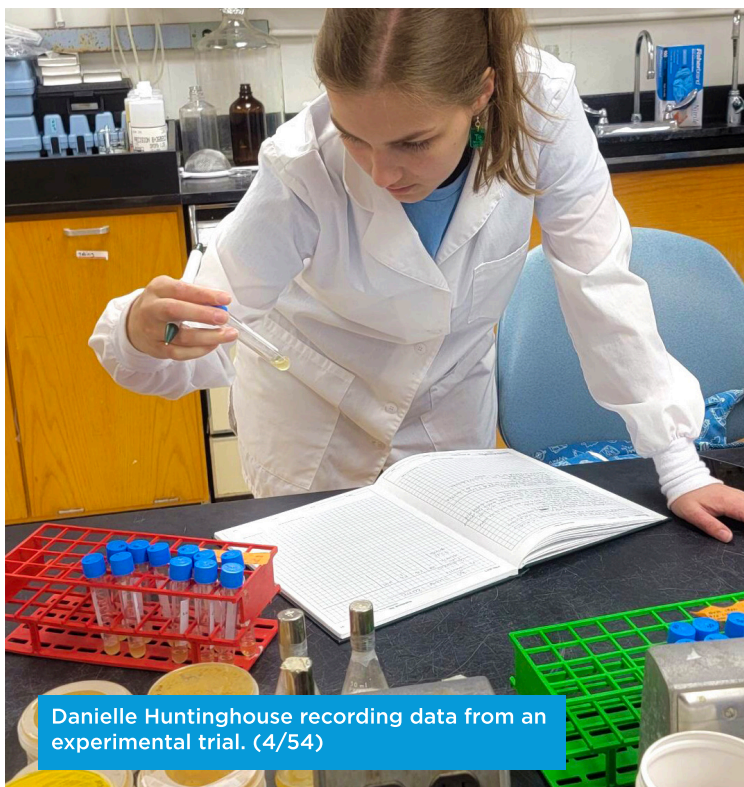
Faculty Mentor(s): Dr. Karen Barnes, HMCSE-Chemistry

Student College: HMCSE

MAGIC MOMENT

My SURP magic moment was when I first found meaningful results from data that took weeks to collect. Prior to this moment, I felt discouraged since previous attempts to interpret results seemed to yield nothing. These results were a compilation of hands-on water collection, extraction and concentration of pollutants, method development with the aid of Dr. Barnes and Dr. Benz, multiple runs, and troubleshooting. Finding tangible directions to move forward with the project provided the confidence I needed as a researcher.

– Flavia Miccolis (Chemistry)



Danielle Huntinghouse recording data from an experimental trial. (4/54)

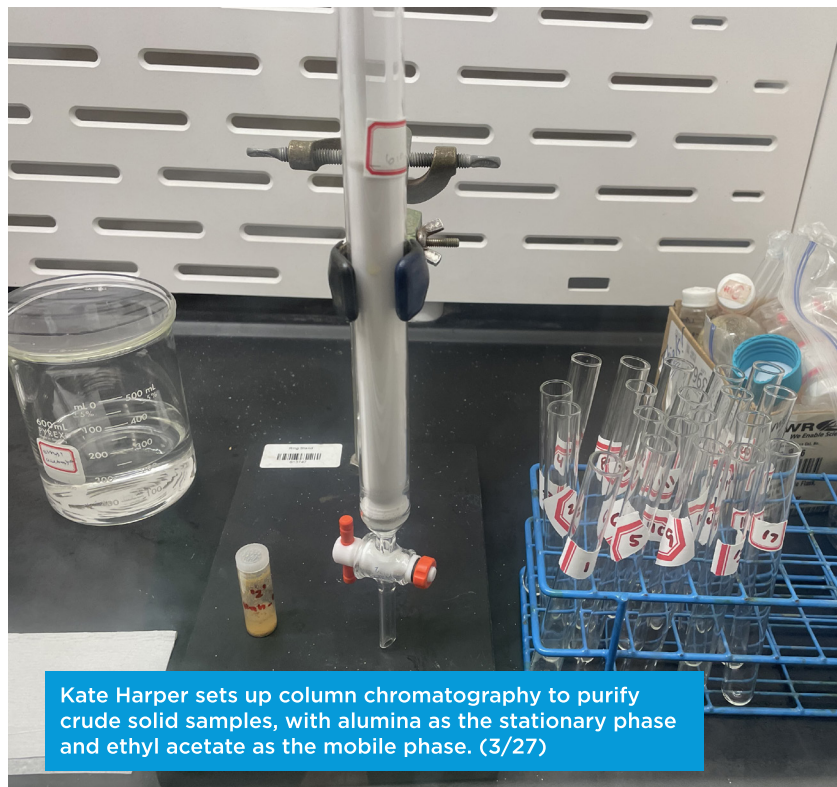
Kate Harper **3/26**
Synthesis of Luminescent Lanthanide Ion Complexes for Arsenic Detection
 Faculty Mentor(s): Dr. Patrick Barber, HMCSE-Chemistry
 Funding or other research support: Willis and Victoria Mullet Innovation
 Student College: HMCSE

Josh Legaspi **3/31**
Synthesis and Characterization of a Metalloenzyme Mimic
 Co-Author(s): **Corey Akerson, Jason Neidigk**
 Faculty Mentor(s): Dr. Ajay Lajmi, HMCSE -Chemistry
 Funding or other research support: OUR
 Student College: HMCSE

Eli Mayo **3/34**
Analysis of Acetaminophen Using Cyclodextrin Enhanced Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry
 Co-Author(s): **Victoria Drake, Rosemary Nguyen, Mikayla Porter**
 Faculty Mentor(s): Dr. Karen Molek, HMCSE-Chemistry
 Funding or other research support: Willis and Victoria Mullet Innovation
 Student College: HMCSE

Flavia Miccolis **3/24**
High Impact Practices in Analytical Chemistry
 Co-Author(s): **Aubrey Ross**
 Faculty Mentor(s): Dr. Karen Barnes, HMCSE-Chemistry
 Student College: HMCSE

Flavia Miccolis **3/24**
Investigation of Pollutants in the Julian Mill Creek System
 Co-Author(s): Dr. Karen W. Barnes
 Faculty Mentor(s): Dr. Pamela Benz, HMCSE-Chemistry
 Funding or other research support: OUR
 Student College: HMCSE



Kate Harper sets up column chromatography to purify crude solid samples, with alumina as the stationary phase and ethyl acetate as the mobile phase. (3/27)

Rosemary Nguyen **3/35**
Analysis of Quinine Using Surface-Assisted Laser Desorption/Ionization Mass Spectrometry
 Co-Author(s): **Michelle Lapak, Taylor Best, Victoria Drake, Leia Fannin, Mikayla Porter**
 Faculty Mentor(s): Dr. Karen Molek, HMCSE-Chemistry
 Funding or other research support: HMCSE
 Student College: HMCSE

Ian Ramirez **3/38**
Efficiency of the GlucateII Chromogenic Assay Kit in filtration of Beta-Glucan Buffer Solution
 Faculty Mentor(s): Dr. Ajay Lajmi, HMCSE -Chemistry
 Funding or other research support: Willis and Victoria Mullet Innovation
 Student College: HMCSE

Kayla Spencer **3/21**
Determining the Hydroxyl Radical Production and Metal Contaminants in Marinas near Downtown Pensacola
 Co-Author(s): **Anne Harper, Kalani Dempsey, Josh Pfneisel**
 Faculty Mentor(s): Dr. Pamela Benz, HMCSE-Chemistry
 Funding or other research support: OUR
 Student College: HMCSE

Maddie Tarrance **3/20**
Determination of Minerals and Heavy Metal Content in Age Related Macular Degeneration Vitamins
 Co-Author(s): **Gabrielle Young**
 Faculty Mentor(s): Dr. Karen Barnes, HMCSE-Chemistry
 Student College: HMCSE

Victoria Hennick **3/22**
Spilling the Beans on Caffeine Content in Coffee
 Co-Author(s): **Jennifer Willis, Gabrielle Young, Flavia Miccolis**
 Faculty Mentor(s): Dr. Karen Barnes, HMCSE-Chemistry
 Student College: HMCSE

COMPUTER SCIENCE

Bea Almonte 3/28

Evaluating the effectiveness of Internet of Things Protocols For Secure Communication in Consumer Electronic Devices

Faculty Mentor(s): Dr. Amitabh Mishra, HMCSE-Computer Science

Funding or other research support: OUR

Student College: HMCSE

Jason Banuelos 3/29

Combining Language Models With Tree Search to Plan to Write Entire Programs From Natural Language Instructions

Faculty Mentor(s): Dr. Sikha Bagui, HMCSE-Computer Science

Funding or other research support: OUR

Student College: HMCSE

CEPS: CRIMINOLOGY

Laylah Curran 4/60

The Significance of the Decriminalization of CSEC Victims and the Methods to Legal Advocacy

Faculty Mentor(s): Dr. Hasan Buker, CEPS - Criminology & Criminal Justice

Funding or other research support: OUR

Student College: CEPS

ENGINEERING

Charles Hostick 4/59

mmWave Radar Sensor Application Research

Faculty Mentor(s): Dr. Tarek Youssef, HMCSE-Electric & Computer Engineering

Funding or other research support: OUR

Student College: HMCSE

Bernardo Barreto Torres 2/9

Reusing PLA Plastic for 3D Printing Filament Material

Co-Author(s): **Murillo Basso, Nick Carsow**

Faculty Mentor(s): Dr. Brad Regez, HMCSE-Mechanical Engineering

Funding or other research support: Willis and Victoria Mullet Innovation

Student College: HMCSE

Trent Booker 3/32

Propeller-Motor Matching for Radio-Controlled Aircraft

Co-Author(s): **Caleb Opava**

Faculty Mentor(s): Dr. Carolyn Mattick, HMCSE-Mechanical Engineering

Funding or other research support: Willis and Victoria Mullet Innovation

Student College: HMCSE

Caleb Opava 3/32

Propeller-Motor Matching for Radio-Controlled Aircraft

Co-Author(s): **Trent Booker**

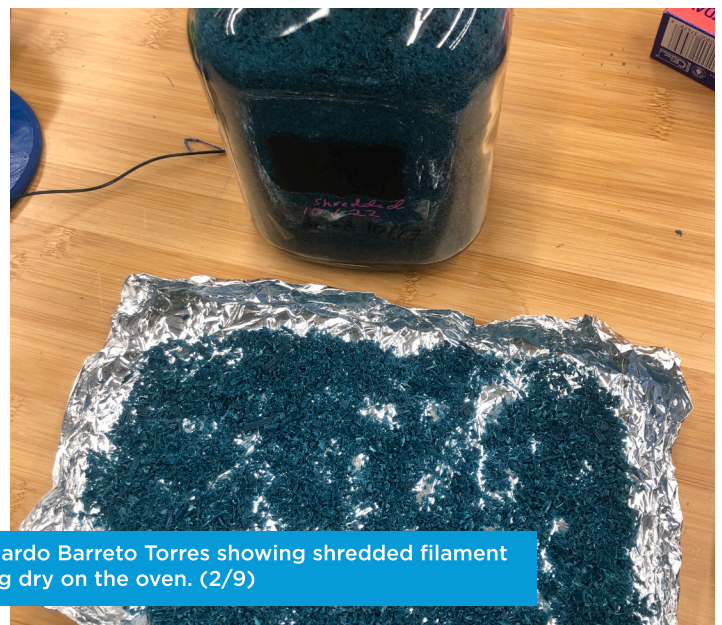
Faculty Mentor(s): Dr. Carolyn Mattick, HMCSE-Mechanical Engineering

Funding or other research support: Willis and Victoria Mullet Innovation

Student College: HMCSE



Kelly Kennedy testing drifter units in the Gulf. (4/51)



Bernardo Barreto Torres showing shredded filament being dry on the oven. (2/9)

EARTH & ENVIRONMENTAL SCIENCES

Liliana Blouin 4/50

Nesting Preferences of Sea Turtles Based on Beach Geomorphology in Pensacola, Florida

Faculty Mentor(s): Dr. Phillip Schmutz, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE

Jada Gruwell 4/49

Analyzing Interviews for the North Port St. Joe Oral History Project

Faculty Mentor(s): Dr. Kwame Owusu-Daaku, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE

Kelly Kennedy 4/51

Water Column Measurements on Pensacola Beach

Faculty Mentor(s): Dr. Phillip Schmutz, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE

Kinsley Pendleton 4/53

State Politics and Biofuel Use Across the U.S.

Faculty Mentor(s): Dr. Zhiyong Hu, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE

Justin Rahn 4/52

Assessment of Lichen Abundance as an Indicator of Air Pollution

Faculty Mentor(s): Dr. Zhiyong Hu, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE

Gabe Small 4/48

Creating a site pine tree chronology of University of West Florida campus west

Faculty Mentor(s): Dr. Jason Ortegren, HMCSE-Earth & Environmental Sciences

Funding or other research support: OUR

Student College: HMCSE



FINANCIAL ASSISTANCE

With the support of endowments provided by our generous donors, we are able to give our students valuable, hands-on experiences. Being able to provide the undergraduate research students a stipend along with materials and supplies needed to do their research is an invaluable resource.

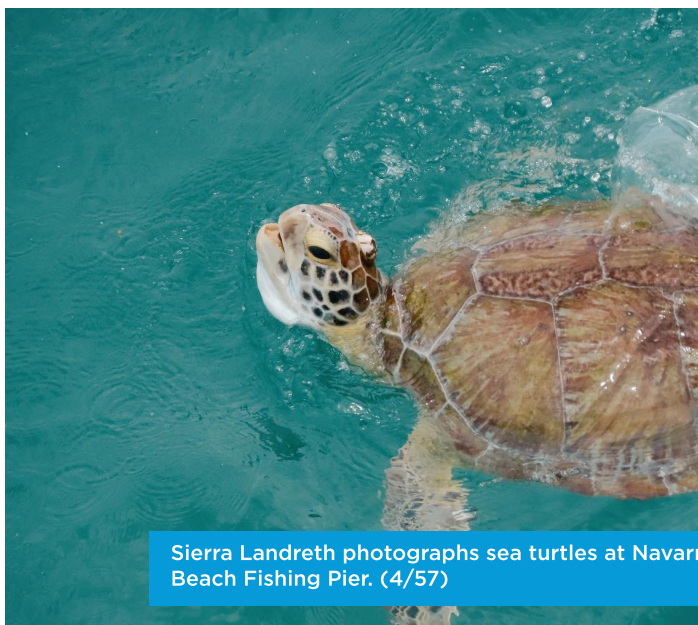
“It is our family’s hope that this gift further’s the University’s stature in the education community and attracts high quality students, so that together we can acheive something for the greater good.”

- Tim Burr

The impact this funding has on our students to do undergraduate research is transforming and provides an opportunity to make them more competitive when they graduate.

We are very grateful to have the Hal Marcus Endowment, the John Thayer and Joan Ames Burr Undergraduate Endowment, the Willis and Victoria Mullet Innovation Endowment as well as the Office of Undergraduate Research in providing the financial assistance needed to make SURP a successful endeavor for our students.

Photo above: **Alexis Mitchem collects a water sample from Pensacola Bay that will be analyzed for eDNA. (4/45)**



Sierra Landreth photographs sea turtles at Navarre Beach Fishing Pier. (4/57)

MATH & STATISTICS

Ihsan Buker

2/11

Jackknife Variance Estimator for Multiply Imputed Response Variables Under Uncongeniality: A Monte Carlo Simulation Study

Faculty Mentor(s): Dr. Samantha Seals, HMCSE-Mathematics & Statistics

Funding or other research support: OUR

Student College: HMCSE

Kevon Kidd

2/10

The Effect of Non-Need Based Aid on Academic Success

Faculty Mentor(s): Dr. Anthony Okafor, HMCSE-Mathematics & Statistics

Funding or other research support: Hal Marcus Endowment

Student College: HMCSE

UKCOH: NURSING

Melissa Corns

3/39

What (barriers) prevent the mother from being able to access prenatal care?

Faculty Mentor(s): Dr. Cynthia Smith-Peters, UKCOH-Nursing

Funding or other research support: OUR

Student College: UKCOH

PHYSICS

Lavender Allen

2/8

Polarization Sensitive Low Frequency Vibrational Spectra of a Crystal with Cubic Symmetry

Faculty Mentor(s): Dr. Laszlo Ujj, HMCSE-Physics

Funding or other research support: OUR

Student College: HMCSE

Joshua Simes

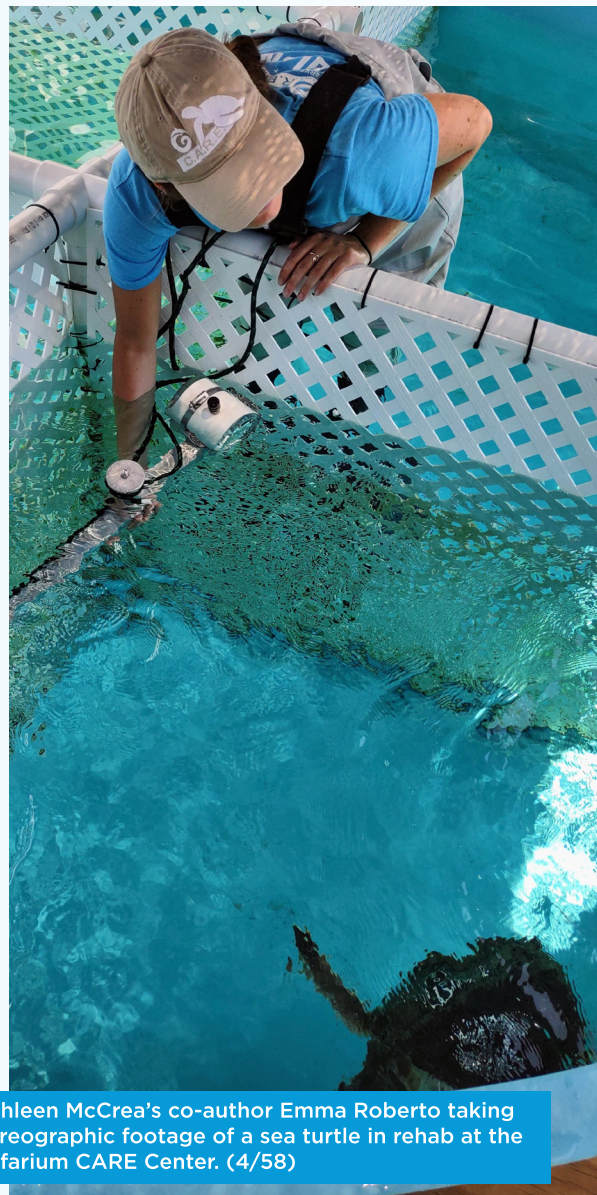
4/61

Building and Characterizing an Adaptive Pulsed LED Source for Use in Flash Visual Evoked Potential P2 (FVEP-P2) Studies

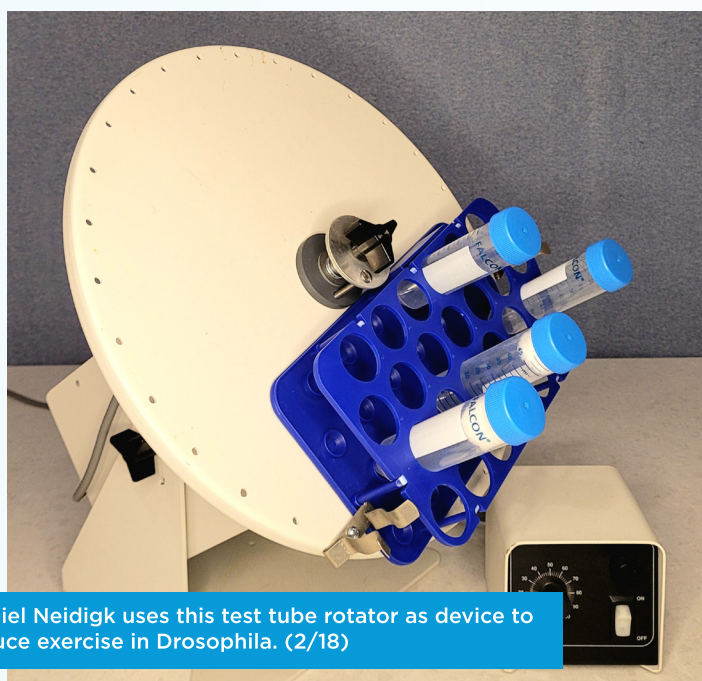
Faculty Mentor(s): Dr. Aaron Wade, HMCSE-Physics

Funding or other research support: OUR

Student College: HMCSE



Kathleen McCrea's co-author Emma Roberto taking stereographic footage of a sea turtle in rehab at the Gulfarium CARE Center. (4/58)



Daniel Neidigk uses this test tube rotator as device to induce exercise in Drosophila. (2/18)

LAST	FIRST	FL/Panel #	LAST	FIRST	FL/Panel #
Akerson	Corey	3 36	Lane	J.J.	4 56
Allen	Lavender	2 8	Legaspi	Josh	3 37
Almonte	Bea	3 28	Linkous	Allie	2 1
Banuelos	Jason	3 29	Mayo	Eli	3 34
Barreto Torres	Bernardo	2 9	McConnell	Liz	2 18
Belyeu	Janiya	2 4	McCrea	Kathleen	4 58
Blouin	Liliana	4 50	Miccolis	Flavia	3 24
Booker	Trent	3 32	Mitchem	Alexis	4 45
Brown	Korrie	4 40	Neidigk	Daniel	2 19
Buker	Ihsan	2 11	Nguyen	Rosemary	3 35
Corns	Melissa	3 39	Nigro	Hailee	4 41
Costilow	Tori	3 23	Opava	Caleb	3 32
Cotten	Alyssa	4 62	Orrantia	Isabella	2 5
Curran	Laylah	4 60	Owens	Cassie	4 55
Czerwinski	Kaia	4 62	Pendleton	Kinsley	4 53
Davis	Bethany	4 42	Rabinowitz	Sarah	4 47
Foretich	Rachael	2 15	Rahn	Justin	4 52
Gruwell	Jada	4 49	Ramirez	Ian	3 38
Harper	Kate	3 26	Ray	Isea	4 46
Harvey	Madison	2 6	Scott	Maddy	2 2
Hayne	Molly	4 43	Simes	Josiah	4 61
Hennick	Victoria	3 22	Small	Gabe	4 48
Hostick	Charles	4 59	Spencer	Kayla	3 21
Huntinghouse	Danielle	4 54	Talcott	Simon	2 16
Jefferson	Angelique	4 44	Tarrance	Maddie	3 20
Kennedy	Kelly	4 51	Tran	Minh Khuyen	2 14
Kidd	Kevon	2 10	Truax	Sydney	2 3
Landreth	Sierra	4 57	Williamson	Abby	2 17
			Worrells	Hue	2 7

MAGIC MOMENT

Thanks to the SURP program, I've been able to lead and work on my own research project all summer and dedicate all my time to it without being distracted by other work. Because of the freedom that the SURP program has given me, I've developed skills that I wouldn't have been able to develop in a classroom or in any other job, skills which directly relate to what I want to do with my career as a researcher. I couldn't be more grateful to the SURP program and to the donors who fund it, as this is an opportunity that seemed almost too good to be true, and I hope to find more opportunities like it as I progress with my career.

– Jason Banuelos (Computer Science)

MORE MAGIC MOMENTS

My SURP magic moment was when one of my mentors in the research team trusted me with organizing an outreach activity plan for the Watershed Alliance table, to teach K-12 kids about seagrass beds, water quality and microplastics. Then later congratulated me for the microplastics activity which had a lot of attention not just for the kids but adults too. She mentioned that the activity could be taken a step further to better help non-science folks how microplastics and water quality affects many organisms in the ocean.

– Isabella Orrantia (CEDB)

I was able to get a function I had been working on for some time to run without any errors and produce results consistent with what my mentor and I had been expecting. Seeing the code compile without any issues, after having worked on it for so long, made me feel incredibly proud of myself and believe I could be a researcher. This magic moment took place in no short thanks to my mentor, Dr. Seals, and the SURP family, who have been there every step of the way.

– Ihsan Buker (Mathematics & Statistics)

My SURP magic moment was some time at the beginning of last summer. I had been in the lab for a few months at that point, and my mentor chose me to train the new people starting the summer SURP program. It made me feel really empowered because it meant he trusted my knowledge and lab skills to introduce these people to a brand new lab setting. Being able to see them grow from my training gave me a lot of self-confidence because it meant I knew what I was doing. I see this example as a mastery experience because it meant I could finally and confidently do things on my own.

– Allie Linkous (Biology)

My SURP magic moment was when my mentor asked me to develop the procedure for purifying our final compounds. This has increased my confidence in the lab, knowing that my mentor asked me to take on this task rather than other members of the lab that have been in the lab longer than I have. I believe that the reason for this is because my mentor knew I could take on the task even with the amount that still needs to be completed.

– Josh Legaspi (Chemistry)
