FLORIDA ATLANTIC UNIVERSITY

Harriet L. Wilkes
Honors College

Medallion Ceremony 2024

Thursday, May 2, 2024
Florida Atlantic University | John D. MacArthur Campus

Medallion Ceremony Program 2024

Order of Ceremony:

Processional

WELCOME ADDRESS: Justin Perry, Ph.D., Dean

UNIVERSITY AWARDS: Justin Perry, Ph.D., Dean

STUDENT RECOGNITION AWARDS:
Warren McGovern, Ph.D.

GRADUATION ADDRESS: Emma Leonardo Solórzano

PRESENTATION OF MEDALLIONS:
Justin Perry, Ph.D., Dean

WILKES HONORS COLLEGE 2024 DISTINGUISHED ALUM: Noemi Coltea Bruce, Ph.D. '05

CLOSING REMARKS: Justin Perry, Ph.D., Dean

Recessional

Noemi Coltea Bruce, Ph.D. '05

Noemi Coltea Bruch, Ph.D. graduated from the Harriet L. Wilkes Honors College of Florida Atlantic University in 2005 with a concentration in Economics. She served as Student Body Governor ('03-'05) then on Florida Atlantic's Graduate and Professional Student Association Executive Board while continuing her graduate studies at FAU. She earned her Master of Public Administration ('09) and Doctor of Philosophy ('14) degrees. In recognition of her university and community leadership, Coltea was the recipient of the 2017 Florida Atlantic Alumni Association's Distinguished Alumni award.

She is the co-founder and Chief Strategy and Operations Officer of MDS on Demand - a regional strategic planning, branding and project management firm - serving Palm Beach, Greater Orlando and the Treasure Coast. Her investment in the community are reflected in her board service of multiple organizations including Sunfest, Place of Hope, Impact 100 of The Palm Beaches and Leadership Palm Beach County. She served as the 77th President of the Junior League of the Palm Beaches and statewide chairwoman of Leadership Florida Connect.

Coltea is recognized for her leadership and service as winner of the prestigious Athena Young Professional Award ('18) by the Chamber of Commerce of the Palm Beaches and the Emerald Awards Young Philanthropist Award ('19) by the Girl Scouts of Southeast Florida. She currently resides in North Palm Beach and Orlando, as well as Victor, Idaho with her husband, Derek.

Celebrating

1999 | 2024

25 YEARS OF Honors

SAVE THE DATE

Thursday, Nov. 14
The Pelican Club, Jupiter

List of Graduates 2024

Briana Abraham

CONCENTRATION: Biology

ADVISOR: Catherine Trivigno, Ph.D.

THESIS: The Impact of Neuronal IL-1R1 on Neural Stem Cell Proliferation in the Dentate Gyrus of the Hippocampus

While it has been long accepted that neurons could not regenerate in the adult brain, recent research has not only suggested the existence of ongoing neurogenesis, but that the process is imperative in specific brain regions such as the dentate gyrus (DG) of the hippocampus. Through the utilization of EdU proliferation assay to visualize adult hippocampal neurogenesis in mice, studies have explored the impact of various factors on brain plasticity. An understudied factor is the pro-inflammatory cytokine Interleukin 1 (IL-1) and its signaling through neuronal IL-1 receptor (IL-1R1). Understanding the effect of that signaling on adult hippocampal neurogenesis could aid in understanding and potentially treating neurogenerative disorders. In this study, IL-1 was delivered into the hippocampus of mice expressing IL-1R1 only in neurons. Hippocampal sections were collected and stained with EdU. A total count of EdU+ cells in the DG was quantified and compared between IL-1 injected mice and controls.

FAVORITE HONORS COLLEGE MEMORY: Going on late night walks with my friends.

AFTER GRADUATION PLANS: Graduate school as part of an engineering program.

Sienna Aguiar

CONCENTRATION: Marine Biology

ADVISOR: James Wetterer, Ph.D.

THESIS: Evaluating Various Enrichment Methods on the Impact of Sloth Bear Pacing at Zoo Miami

Sloth Bear pacing at Zoo Miami has been a recent and concerning issue. This experiment sets out to introduce enrichment items that would mimic behaviors they would exhibit in the wild in order to positively impact their lives. We found a successful introduction of certain enrichment items decreased their pacing in their exhibit.

FAVORITE HONORS COLLEGE MEMORY: Playing Volleyball and going to the beach for the sunset.

AFTER GRADUATION PLANS: I plan to hopefully attend a doctoral program at the University of Miami or intern at the dolphin research center performing behavioral research there.

Carlos Vaca Angus

CONCENTRATION: Neuroscience and Environmental Studies

ADVISORS: William O'Brien, Ph.D.

THESIS: Expert Representative Democracies: Ecological and Psychological Implications

Need for probability sampling in democracies, stratified sampling for selection of experts. Will ensure representative and research backed policies.

FAVORITE HONORS COLLEGE MEMORY: The nights I've spent playing games and listening to music with my friends and my partner at our dorm.

AFTER GRADUATION PLANS: Going to apply to an MD-Ph.D. program or an environmental master's degree program.

Nishi Anthireddy

CONCENTRATION: Cellular Neuroscience

ADVISOR: Monica Maldonado, Ph.D.

THESIS: Quantifying the Probability of Meal Initiation in Drosophila melanogaster using the Fly Liquid-Food Interaction Counter (FLIC),Äã

We use a fly food interaction device to measure food intake in control and taste-blind flies on high and low sucrose diets in order to find insights into the roles of taste perception and nutritional reward in feeding behavior regulation.

FAVORITE HONORS COLLEGE MEMORY: Spring Formal

AFTER GRADUATION PLANS: I will be attending medical school, starting this fall.

Anna Armbrust

CONCENTRATION: Ecology and Conservation

ADVISOR: James Wetterer, Ph.D.

THESIS: Flora of Halpatiokee

Halpatiokee Regional Park is located in Stuart, Florida. This study surveys and lists the flora of Halpatiokee Regional Park using iNaturalist as a data source, as well as personal observation. During this research, I observed a critically endangered Florida ground orchid, Eltroplectris calcarata. This study goes further into depth on the northward spread of this specimen.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory has to be hiding in a bush with Sienna Aguiar during a game of manhunt.

AFTER GRADUATION PLANS: This summer I will be traveling with my family.

Mya Arscott

CONCENTRATION: Psychology

ADVISORS: Laura Vernon, Ph.D.

THESIS: Ketamine's Therapeutic Potential: A Literature Review

The increasing prevalence of treatment-resistant depression (TRD) calls for the overwhelming need for alternative treatments. Ketamine therapy has been considered a novel treatment alternative for those with TRD. My thesis will examine the benefits and limitations of ketamine therapy in terms of being a treatment alternative for depressive disorders.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory to look back on from the HC is sitting on the SR lawn with my roommates, looking up at the stars, and talking about our future goals. It makes me nostalgic looking back on it, seeing how far all of us have came.

AFTER GRADUATION PLANS: I plan on continuing my education and attend a graduate program for Social Work after graduating. I also will be working as Case Manager for local a non-profit mental health organization.

Bryan Aviles-Lopez

CONCENTRATION: Data Analytics

ADVISOR: Bharat Verma, Ph.D.

THESIS: A Survey on Enhancing Dialogue State Tracking with Large Language Models

Dialogue State Tracking (DST) is a fundamental part of conversational AI in both Task-Oriented and Open Domain dialogues. However, there remains a significant gap in understanding the dynamic nature of human conversation and effectively integrating contextual cues and user preferences into the dialogue state. This paper provides a comprehensive overview of current DST methodologies and the limitations in traditional approaches and the emerging solutions offered by Large Language Models.

FAVORITE HONORS COLLEGE MEMORY: Eating grilled chicken at the dining hall.

AFTER GRADUATION PLANS: MS in AI.

Morgan Balsley

CONCENTRATION: Business

ADVISOR: Kanybek Nur-tegin, Ph.D.

THESIS: Natural or Noxius: An Extensive Look into Greenwashing and Other Deceptive Marketing Techniques

This thesis examines greenwashing and other deceptive marketing techniques in the two respective realms of environmental concern and healthy living. This study ultimately contributes a better framework for understanding common specious claims used in the all-natural, organic, and sustainability fields in order to encourage consumers to reevaluate their purchasing decisions and hold major corporations more accountable to their promises of improvement.

FAVORITE HONORS COLLEGE MEMORY: Playing ultimate frisbee every week and meeting some of my best friends.

AFTER GRADUATION PLANS: My plan right now is to gain more experience in the marketing field and then eventually use that knowledge to either help non-profits expand their outreach or advocate for businesses that create genuine positive change in the sustainability and health spheres.

Benjamin Bargeron

CONCENTRATION: Cellular Neuroscience

ADVISOR: William O'Brien, Ph.D.

THESIS: Methods and Procedures for Drosophila Connectome Analysis

My thesis describes the different analytical procedures and techniques that I learned while studying fruit fly locomotion. The aim of my paper is to inform others of useful research strategies in the growing field of Drosophila connectomics.

FAVORITE HONORS COLLEGE MEMORY: The day I moved into the dorms the Fall of my freshman year.

AFTER GRADUATION PLANS: I will be attending medical school in pursuit of an M.D. in neurosurgery after taking a gap year from academia. During my break, I will be working as an EMT to gain clinical exposure and valuable experience for my future career.

Olivia Benson

CONCENTRATION: Environmental Studies

ADVISOR: William O'Brien, Ph.D.

THESIS: How Anthropocentrism Shaped Florida

My thesis provides a comprehensive history of human development in Florida and the rapid and intense changes that have occurred within the last century. Detailing the environmental degradation the state has faced through a philosophical lens, I discover the motivations behind human-centered behavior that's transformed our state and its ecology.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory would be spending Halloween with my friends at the Halloween Ball.

AFTER GRADUATION PLANS: After graduation, I plan on building my career to help preserve and protect local lands. I'd like to find a job that allows me to work outside and further my knowledge of our environment and how it works.

Mark Berrios

CONCENTRATION: Environmental Science

ADVISOR: William O'Brien, Ph.D.

THESIS: Assurance in the Appalachians: Evaluating crime and injury amongst thru-hikers along the Appalachian Trail

The Appalachian Trail is one of the more well-traversed long distance backpacking trails in the world. By providing an analysis on crime and injury along the trail, two of the most profound worries of hikers, this can better mentally and physically prepare prospective thru-hikers who choose to embark on the Appalachian Trail or similar long-distance trails.

FAVORITE HONORS COLLEGE MEMORY: My favorite honors college memory is taking Dr. O'Brien's Parks and Preservation course as his passionate and knowledgeable lectures quite literally changed the trajectory of my life.

AFTER GRADUATION PLANS: Do some backpacking around the United States and in Europe for a few years. Once done with that, I will pursue my career goal of enlisting in the Air Force.

Nicholas Borges

CONCENTRATION: Biological Chemistry

ADVISOR: Chitra Chandrasekhar, Ph.D.

THESIS: Synthesis and Evaluation of Novel MT1-MMP Inhibitors

Current research suggests that matrix metalloproteinase 14 (MMP-14) plays a critical role in the process of metastasis, as abnormal expression of this protein allows cells to gain the ability to digest the extracellular matrix and invade distant body tissues, which often carries lethal consequences. In this study, we aim to produce a selective MMP-14 inhibitor, which should be able to minimize the progression of metastasis in the body with little to no adverse side effects, thereby increasing the survival rate of various types of cancer.

FAVORITE HONORS COLLEGE MEMORY: My favorite honors college memory comes from my sophomore year. I was studying for my organic chemistry II final with my roommate. While we quizzed each other on practice problems from the textbooks on our laptops, music was playing in the background, and copious amounts of junk food and energy drinks entered our stomachs. Although it was stressful at the time, it is one of my most cherished memories.

AFTER GRADUATION PLANS: I plan to attend graduate school at the Boca Raton campus of FAU in order to obtain an MS degree in Biomedical Science, then I will apply to other schools to obtain an MD/Ph.D. degree.

James Branca

CONCENTRATION: Interdisciplinary Mathematical Sciences

ADVISOR: Warren McGovern, Ph.D.

THESIS: Semi-Complemented Group Rings

Within mathematics, the field of algebra focuses primarily on preserving symmetry and structure within a set. This thesis focuses on a given group G over a (commutative) ring R, also referred to as the group ring R[G]. Elements within R[G] are finite formal sums of elements of G with coefficients from R. A class of reduced rings that generalizes integral domains is that of complemented rings. We will discuss new subcategories of complemented rings; semi-complemented and almost complemented rings. Since R[G] is a ring itself, we would like to find when R[G] is complemented or perhaps only semi or almost complemented. We will discuss small examples such as Z2[D3] and Zk[Cn].

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory was leading a lecture in Honors Calculus I as a Learning Assistant.

AFTER GRADUATION PLANS: I will be joining the Ph.D. program in Biomathematics at Florida State University this Fall.

Drew Burgess

CONCENTRATION: Biology

ADVISOR: Catherine Trivigno, Ph.D.

THESIS: You Feel What You Eat: Exploring How Culture and Food Access May Shape Mental Health via the Gut Microbiome

Previous research implicates the gut-brain axis in mental health, and this thesis aims to investigate cultural factors and other factors, including seasonal and economic conditions, that may influence diet and therefore, the gut microbiota, and in turn, the gut-brain axis. Using what is known about the gut microbiome and how food access may shape its composition, this thesis proposes recommendations for mental health professionals, public health policy, and future research to effectively support the mental health of individuals with conditions, such as anxiety and depression, with the respect and mindfulness they deserve.

FAVORITE HONORS COLLEGE MEMORY: As someone who thoroughly enjoys the thrill of the prospect of winning bingo, my favorite Honors College memory is going to Grocery Bingo.

AFTER GRADUATION PLANS: After graduation, I will be applying to medical school with aspirations to become a pediatrician. In the meantime, I plan to become a medical scribe and shadow other physicians.

Ariely Burgos

CONCENTRATION: Interdisciplinary Mathematical Sciences

ADVISOR: Terje Hill, Ph.D.

THESIS: Storm Prevention: Flooding and High Wins in Coastal Regions of Florida

In recent years, Florida has faced significant economic losses due to its hurricane season, totaling over $115 billion in damages. The most destructive elements of these storms include flooding and high-speed winds. However, advancements in structural design offer promising solutions for mitigating such devastation. Innovations such as enhanced framing, truss systems, and gutter designs bolster home resilience against hurricanes. These developments stem from lessons learned after the devastating Hurricane Andrew in 1992, prompting the implementation of stricter building codes. These codes, informed by mathematical models like Copula Function and Nataf transformation, provide smarter approaches to withstand powerful winds and minimize flood damage. We discuss some of these structural precautions that help to save billions in future hurricane-related losses and ensure the safety of countless residents.

FAVORITE HONORS COLLEGE MEMORY: One of my favorite memory has to be during freshmen year when I met my three best friends, one of our first ever memories was us all playing the trivia event program board hosted. We all were a team together, and we ended up winning the entire competition and dancing to Mamma Mia afterwards. This was the start of an amazing 4 year friendship and more to come.

AFTER GRADUATION PLANS: I plan to attend Florida Atlantic University for my master's in mechanical engineering.

Adam Burjan

CONCENTRATION: Biological Chemistry

ADVISOR: Fily Yaouen, Ph.D.

THESIS: Optimization of Lead Compounds Targeting RNA CUG Repeats Causing Myotonic Dystrophy Type 1

I utilized computational simulations to expedite the process of optimizing a compound known as I27 that could potentially be used to treat Myotonic Dystrophy. Using a combinatorial method to generate new versions of I27, I found that several thousand compounds were predicted in simulations to be more effective at binding to the disease target than I27.

FAVORITE HONORS COLLEGE MEMORY: The FAU Splash Bash

AFTER GRADUATION PLANS: I will continue to conduct research at the Yildirim RNA Dynamics Lab and pursue an M.S. in AI or Computer Science at FAU.

Ally Canavan

CONCENTRATIONS: Cellular Neuroscience and Biochemistry

ADVISORS: Erik Duboué, Ph.D. and Eugene Smith, Ph.D.

THESIS TITLE An Analysis of the Evolution of Neuropeptides in the Brain Using Astyanax

My thesis uses blind mexican cavefish as a model to analyze the evolution of neuropeptides in the brain. By identifying changes in neuropeptides, we are able to identify their role in behavior.

FAVORITE HONORS COLLEGE MEMORY: Meeting my closest friends.

AFTER GRADUATION PLANS: I am enrolled at in the Physician Assistant program at Nova Southeastern University in Fort Lauderdale.

Ianis Ciolacu

CONCENTRATION: Biology

ADVISOR: Catherine Trivigno, Ph.D.

THESIS: Identifying Effective Immunotherapy Targets on the Triple-Negative Breast Cancer Cell Surface

Triple-negative breast cancer (TNBC) is the most aggressive form of breast cancer. There is only one FDA-approved TNBC immunotherapy that targets one checkpoint regulator. Few other immune checkpoint regulators are drug development targets. We identified the leptin receptor and the erythropoietin receptor as candidate immunotherapy targets. We aim to elucidate the roles of these receptors in mouse TNBC. The expression of each receptor was reduced in EO771 mouse TNBC cells using RNA-interference. The loss of either receptor reduced certain markers of cancer progression, lending evidence to their validity as immune checkpoint regulators. More studies must be done to fully validate these receptors as immunotherapy targets in TNBC.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is the study abroad program in Madrid from the summer of 2022. The immersion in Spanish culture was an eye-opening experience.

AFTER GRADUATION PLANS: After graduation, I will take the next year to apply to medical schools. In that year, I will also gain valuable work and leadership experience as an assistant to the Madrid study abroad program this summer. I also have plans to live in Spain for most of the next year developing my Spanish-speaking ability and learning about the differences between the American and European lifestyles and how they relate to each region's respective styles of healthcare.

Jessica Cordiner

CONCENTRATION: Law and Society

ADVISOR: Mark Tunick, Ph.D.

THESIS: Disparities in Punishment For Drunk Driving and Cellphone Use Driving

In the United States, driving with a blood alcohol concentration (BAC) of at least .08% is regarded as one of the most serious offenses threatening road safety; meanwhile, driving while using a cellphone (CUD) is considered to be significantly less serious. Whether or not an accident occurs, the BAC .08% driver may face punishment, including jail time, while the CUD merely faces fines at most. Both offenses risk harm to others, but only the BAC .08% drivers offense is taken seriously. I argue that, assuming both are equally culpable and risk equivalent harm, both drivers should face equal punishment, and punishment should not depend on the driver actually causing an accident because punishment should not depend on moral luck.

FAVORITE HONORS COLLEGE MEMORY: My favourite Honors College memory is all the faculty and students I have established relationships with.

AFTER GRADUATION PLANS: After graduation I intend to attend Law School. I want to become a Lawyer, specialising in either Criminal or Family Law.

Juliana Coronado

CONCENTRATION: Behavioral Neuroscience

ADVISOR: Lucia Carvelli, Ph.D.

THESIS: Analysis of Neuronal Activity in Context-Dependent Feeding Behavior

Development of a generic calcium imaging signal extraction processing pipeline with the aim of studying the correlative and causal links between neural circuit dynamics in the insular cortex and feeding behaviors on different internal states.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memories are the times I've spent with friends and the unique experiences I had on my Study Abroad trip in Japan.

AFTER GRADUATION PLANS: After graduating, I want to pursue a career in pharmaceutical research.

Katrina Dearman

CONCENTRATION: Law and Society

ADVISOR: Mark Tunick, Ph.D.

THESIS: Models of Advocacy in Dependency Cases: A Multidisciplinary Perspective

My thesis provides an examination of the child's wishes and best interests models of advocacy in dependecy cases before arguing for the use of a third model. The third model is a best interests-based multidisciplinary team that utilizes both an attorney and an advocate in representing a child in dependency court.

FAVORITE HONORS COLLEGE MEMORY: My favorite honors college memory is meeting lifelong friends at Kingdom Club!

AFTER GRADUATION PLANS: After graduation, I plan to return to my home town, continue my work as a volunteer Guardian Ad Litem, and pursue a career as a community social worker. I hope to prevent underprivileged families from entering the dependency system due to a lack of resources. It takes a village - and I want to be part of that village!

Paige DeForest

CONCENTRATION: Cellular Neuroscience

ADVISOR: David Cinalli, Ph.D.

THESIS: The Effects of Targeted Memory Reactivation on the Consolidation of Episodic Memories

We investigated the effects of precisely targeting auditory stimulation to specific patterns of brain activity during non-REM sleep. The findings revealed that, under certain conditions, this treatment can significantly improve memory consolidation. Our results hold promise for contributing to a deeper understanding of memory consolidation processes and potentially offer a novel approach to ameliorating memory-related disorders.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory is FAU supporting me in having an emotional support cat, Cheddar, on campus. I loved being able to bring friends over to meet him when we were stressed with homework and exams. It was so special to watch him grow up as I progressed through my degree.

AFTER GRADUATION PLANS: I will be applying to get my M.D. degree. I hope to continue neuroscience research and go into the field of neurology, specifically studying and treating memory disorders.

Jourdan DeFrain

CONCENTRATION: Biological Anthropology

ADVISOR: Jacqueline Fewkes, Ph.D.

THESIS: Two Disciplines Are Better Than One: Neuroscientific Approaches to Biological Anthropology Research in Primate Brain Evolution

Applying neuroscientific approaches in biological anthropology research on primate brain evolution has allowed biological anthropologists to propose new theories of how modern humans,Äô cognitive abilities advanced throughout hominin evolution. These approaches include investigating with a perspective that attributes specific behaviors to biological/neural mechanisms, investigating how modern humans' brains physically compare to extinct and extant hominids by utilizing various neuroimaging techniques, and determining if differences in our brains can explain differences in hominid species,Äô behaviors. In addition, the proinflammatory cytokine interleukin-1 beta's (IL-1Œ≤) effect on serotonin neurons in the dorsal raphe nucleus is one relationship between the innate immune system and central nervous system that is a research interest of neuroscientists and the effects of a dysregulated serotonergic system in the dorsal raphe (possibly due to IL-1Œ≤) on the amygdala is of interest to biological anthropologists. I include a neuroscience research study I worked on in the Blakely lab that characterized the expression of the immune receptor for the proinflammatory cytokine interleukin-1 beta, IL-1R1, on serotonin neurons in the dorsal raphe nucleus and analyzed for any sexual dimorphism in this expression.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is presenting research I worked on in the Blakely lab at the Wilkes Honors College Research Symposium in 2023.

AFTER GRADUATION PLANS: I aim to pursue more research opportunities where I can learn more about neuroscience and psychology.

Roselyn Diaz

CONCENTRATION: Cellular Neuroscience

ADVISOR: Julie Earles, Ph.D.

THESIS: Effects of Actor Gender and Verbal Reminders on Event Memory

My thesis research seeks to test and verify the effects that verbal reminders and changes in actor gender have on event memory. It was designed to examine the role verbal reminders play in the consolidation or interference of a memory. The findings of this research can be applied in real-world settings specifically in eyewitness testimony.

FAVORITE HONORS COLLEGE MEMORY: Loud conversations in the study rooms and yoga in the Burrow.

AFTER GRADUATION PLANS: I plan on studying for the MCAT and preparing for my application into medical school. I also plan on taking up a medical assistant position, however, do not know exactly where. I am currently interning at VIPediatrics.

Rebecca Dibicco

CONCENTRATION: Neuroscience

ADVISOR: Erica Young, Ph.D.

THESIS: Cell-Type-Specific Consolidation of Learned Motor Memories in the Neocortex

This project investigates how two cell types in the mouse neocortex are involved in the consolidation of motor memories by quantifying immediate early gene (IEG) expression. Our analysis revealed a higher IEG+ ratio in both cell types one hour after motor learning when compared to the three-hour post-learning condition, indicating activity-dependent expression. However, the proportion of IEG+ cells appears uncorrelated to learning performance on the final day of training. Future steps may involve blocking IEG expression to assess its cell-type-specific impact on learning or examining molecular signatures across cell types after different learning conditions. By combining these approaches, we aim to understand how neocortical cell types contribute to motor skill consolidation, with the hopes of shedding light on motor memory neural circuitry and diseases.

FAVORITE HONORS COLLEGE MEMORY: My fondest memory of my time at the Honors College is my first poster presentation at a symposium. This special moment encapsulated the support and love that fueled my journey in neuroscience because I felt unwavering encouragement from my professors and mentors, and my family was able to witness my hard work come to life.

AFTER GRADUATION PLANS: I will be continuing my research at Max Planck next year in preparation for a Ph.D. program in neuroscience.

Alyssa DiGiovanna

CONCENTRATION: Psychology

ADVISOR: Laura Vernon, Ph.D.

THESIS: The Impact of Adventure Therapy on Veteran Openness to Treatment, Social Connectivity and Coping Ability

Many veterans struggle with their mental health but stigma prevents them from seeking treatment. Unconventional, veteran specific interventions are necessary to bypass the current stigma and allow veterans to receive treatment. Our study worked with a non profit veteran organization, Huts for Vets, to investigate whether participation in an adventure program would report relatively high treatment seeking willingness and sense of social connection as well as improvement in and continuation of the use of coping measures for veterans.

FAVORITE HONORS COLLEGE MEMORY: Getting to know other students and professors and collaborating on projects with them. I was able to learn so much from everyone I met and worked with at the Honors College!

AFTER GRADUATION PLANS: I will be attending graduate school to pursue a masters in mental health counseling. Still waiting to hear back from schools so I am not sure where yet.

Allison Dobuler

CONCENTRATION: Neuroscience, Cognition and Behavior

ADVISOR: Shaina Rowell, Ph.D.

THESIS: Does Signaling Mitigate the Seductive Details Effect?

In class lectures, teachers and professors sometimes include fun facts or interesting details that are only slightly related to the main ideas of a lecture in an effort to gain and hold student attention. The seductive details effect describes how including interesting, yet only tangentially related, material in educational text may hinder the learning of key concepts. However, educators may still want to include such material in order to maintain student interest. This requires a mitigating factor of the seductive details effect. This study evaluated signaling, or including questions that target main ideas before each section of text, as a possible mitigator of the seductive details effect. Students who participated in the study read two texts with or without signaling, one of which had seductive details and one of which did not. While the transfer assessment students took did not yield statistically significant results, students assigned to the no signaling condition performed worse when there were seductive details present than when seductive details were not present. Furthermore, students in the signaling condition with seductive details performed just as well as those in the signaling condition without seductive details.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is hiding an Owlsley drawing on campus for the first time. During Fall 2021, I created an Instagram account called @fauwhcaffirmations. One day, I decided to draw a little doodle of Owlsley on a flashcard, and then thought it would be funny if I hid it on campus and posted hints on the affirmations account so that other students could find it. I decided to hide the card underneath the cushion of a chair right outside my dorm room in RH2, and posted a cryptic series of clues that led to this location. I initially did not know if anyone would actually try to find it, but later that day I received a photo from five students holding the Owlsley drawing and smiling. I was impressed that they had found it so fast, and it made me so

happy that they were that excited about finding a silly little drawing that took me five minutes to draw. This is my favorite Honors College memory because it showed me that I had the ability to improve someone's day by doing something very simple, and it also showed me how awesome the people I go to school with are. With every drawing of Owlsley that I hid and every Wilkes Honors College-related affirmation I posted, I felt more and more connected to the Wilkes Honors College and my peers, who I am now proud to call friends. Running the affirmations account has been the highlight of my Honors College experience, and I am beyond grateful for all of my fellow Owls who have made it what it is today.

AFTER GRADUATION PLANS: I will be attending graduate school at the FAU Boca campus to earn my Master's degree in Communication Sciences and Disorders. I plan on working as a speech language pathologist in the public school system after I graduate. I later would like to earn my Doctorate so that I can become a professor in the field, so if the Honors College ever decides to add on a concentration for Communication Sciences and Disorders, I kindly request that they give me a call.

Jordan Doyle

CONCENTRATION: Data Analytics

ADVISOR: Laura Vernon, Ph.D.

THESIS: The Effect of Environmental Stressors on Eating Disorder Symptom Severity

From 2019 to 2020, Florida Atlantic University participated in two waves of the Healthy Minds Study (HMS), which examines mental health. Participants completed the HMS in the Winter of 2019 and in the Spring 2020. This study examined data related to COVID-19, other environmental stressors (e.g., financial, employment, and interpersonal), and eating disorder symptom severity.

FAVORITE HONORS COLLEGE MEMORY: Studying abroad in Guatemala.

AFTER GRADUATION PLANS: Master's degree in Artificial Intelligence at Florida Atlantic and working full time.

Matthew Drummond

CONCENTRATION: Data Analytics

ADVISOR: Bharat Verma, Ph.D.

THESIS: Analyzing the Efficacy of COVID-19 Containment Strategies: A Data-Driven Investigation into the Impact on Infection Rates

Utilizing python, sql, and other coding methods to discover hidden metrics and values which may shed light on the different covid numbers between states. It heavily focuses on using regressions to find these numbers.

FAVORITE HONORS COLLEGE MEMORY: Playing volleyball with my friends.

AFTER GRADUATION PLANS: I do not have anything lined up but I plan to do a summer internship after I graduate.

Sophia Dsouza

CONCENTRATION: Neuroscience

ADVISOR: Shaina Rowell, Ph.D.

THESIS: Unraveling the Self: A Replication Study of Autobiographical Memory's Role in Self-identity

Autobiographical memories are memories of personally significant past events. These memories shape an individual,Äôs perceptions, beliefs, and sense of self. This thesis is a replication study of Charlesworth (2016) aims to show how autobiographical memory retrieval contributes to the construction and maintenance of self-identity.

FAVORITE HONORS COLLEGE MEMORY: Meeting amazing people who I know will be lifelong friends.

AFTER GRADUATION PLANS: I will be continuing my education and working towards becoming a Physician's Assistant.

Gavin Dunsby

CONCENTRATION: History and Spanish

ADVISOR: Christopher Ely, Ph.D.

THESIS: Francisco Franco and ETA: A Cycle of Terror, Repression, and Retaliation

From 1939-1975, General Francisco Franco controlled Spain through violence and repression. In 1959, Euzkadi ta Askatasuna (ETA), a Basque independentist organization, was formed and in 1968, began using terrorism against the Spanish state. From that point, the government and ETA fought each other. In their fight, the Spanish government and ETA created a cycle of violence, terror, and repression that intensified with every attack.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory is when for Halloween in my junior year, I ordered two extra large pizzas and shared them with friends. It was a fun evening of talking, laughing, and eating.

AFTER GRADUATION PLANS: After graduation, I plan on applying to a variety of graduate programs that focus on Spanish history. My goal is to achieve a Ph.D. and further the research I did for my undergraduate thesis.

Gabrielle Fagundes

CONCENTRATION: Biological Studies

ADVISOR: Nicholas Baima, Ph.D. and Chitra Chandrasekhar, Ph.D.

THESIS: Biological Warfare: Can a War be Justly Fought Using Biological Weapons?

Biological agents and toxins have been used as weapons offensively as early as 1320 BC. Modern ability to manipulate and control biological materials has raised concerns as to how wars will be fought in the future. Although the use of biological weaponry has been banned for almost a century, government and non-government funded research in the area has not ceased. Because of this it is important to continue researching the ethics of biological weaponry use according to modern science. The Geneva Protocol of 1925 and the subsequent Geneva Conventions have clearly determined biological warfare as unethical and illegal due to the devastating effects it has on both combatants and noncombatants. The International Humanitarian Laws, based on the fourth Geneva Convention, are used as guidelines for fighting just and legal wars. After having compared modern biological advancements to these laws, the use of biological weaponry still cannot be justified in war.

FAVORITE HONORS COLLEGE MEMORY: Late night hangouts with my freshman year roommates and friends.

AFTER GRADUATION PLANS: I plan on doing a Masters Program in 2025 then apply to medical school in 2026.

Damon Farrell

CONCENTRATION: Cellular Neuroscience

ADVISOR: Sarah Malanowski, Ph.D.

THESIS: Genetic Doping, Enhancement, and Therapy: An Ethical Analysis in the Context of Competitive Sport

In the world of sports, cheating is universally condemned, extending beyond traditional methods like drugs to include gene doping, which involves altering genes to enhance performance. Despite being banned by sports agencies, there are arguments for considering and even ethically approving genetic enhancement in certain scenarios. This analysis explores the ethical implications, considering fairness and health in sports, and proposes a divisional solution to address the issue.

FAVORITE HONORS COLLEGE MEMORY: Meeting and spending 4 years with my soulmate Brooklyn Cruz.

AFTER GRADUATION PLANS: Applying to Medical School.

Joseph Farrell

CONCENTRATION: Interdisciplinary Mathematics

ADVISOR: Warren McGovern, Ph.D.

THESIS: Hearts that Beat the Odds: An Analysis of the Fontan Procedure

My research explores the Fontan cardiovascular procedure, analyzing its historical context, statistical data, and long-term effects. Investigating approximately 50,000 cases worldwide, it delves into success rates, complications, and patient demographics, while also developing a digital platform to spread information about the procedure.

FAVORITE HONORS COLLEGE MEMORY: Senior year—we came into college during COVID so this group of seniors have become more friendly towards each other and feel a greater sense of community being together all four years!

AFTER GRADUATION PLANS: I will go into Web Development with my internship supervisor's company GAM Information Systems.

Nell Robert Faveur

CONCENTRATION: Biochemistry

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Investigation of Bacterial Horizontal Gene Transfer Within the Fecal Microbiome of The Gopher

The bacterium of interest was Clostridium butyricum, a butyrate-producing bacteria that has been safely used as a probiotic for decades. In a previous study a substantial concentration of Clostridium butyricum was discovered within the Gopher tortoises in the abacoa greenway. The study was designed to investigate the possible presence of horizontal gene transfer of BoNT/E a gene that codes for botulinum toxin, in the Abacoa Greenway.

FAVORITE HONORS COLLEGE MEMORY: I absolutely treasure all the interactions I have had with the students and faculty of this college. Each and everyone further broadened my perspective by talking about their own career goals. Though, I am particularly happy about the time I was able to fix the circuitry via soldering within my computer in Dr. Eugene Smiths lab.

AFTER GRADUATION PLANS: After graduation, I plan to take a year before further pursuing a Doctor of Osteopathic Medicine (DO) program. I aim to enhance my experience and broaden my horizons by engaging in volunteer work and shadowing with Palm Beach Orthopedic Institute.

Daniel Fernandez

CONCENTRATION: Psychology

ADVISOR: Kevin Lanning, Ph.D.

THESIS: The Advers Behavioral and Cognitive Effects of Heavy Metal Contamination on the Neurodevelopment of Children

This thesis will survey the literature elucidating the damaging effects of arsenic, lead, and mercury toxicity on the cognitive and behavioral functioning of adolescents. Additionally, it will analyze in-utero effects of heavy metal poisoning, the different biomarkers (i.e., differences between analyzing blood lead levels and bone lead levels) used in measuring levels, the effectiveness of various treatment methods (chelation, diet, and medicine), and the threshold for the adverse effects of lead poisoning.

FAVORITE HONORS COLLEGE MEMORY: Participating and winning the Spring 2024 RecFest tournament.

AFTER GRADUATION PLANS: I plan to apply for the USF accelerated nursing program for the Fall semester. Additionally, I am applying for the Trinity College medical school, which does not require an MCAT through the Atlantic Bridge Program.

Thamara Fernandez Martinez

CONCENTRATION: Cellular Neuroscience

ADVISOR: Catherine Trivigno, Ph.D.

THESIS: Social Buffering of Fear in Two Mouse Models of Autism Spectrum Disorder

Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder characterized by impaired social interactions and repetitive patterns of behaviors, symptoms which manifest differently among individuals. This is due to ASD being caused by a complex interaction of genetic and environmental factors. Although ASD is not caused by a single factor, various risk genes have been identified that are associated with particular phenotypes. Among these genes are the Phosphatase and tensin homolog (PTEN) and the Dual-specificity tyrosine phosphorylation-regulated kinase 1A (DYRK1A) genes, both of which are involved in many important cellular processes that affect cell division, brain growth, and neurodevelopment. Macrocephaly and microcephaly are symptoms displayed in approximately 20% and 15% of individuals with autism, respectively, and in these same population subsets, mutations in PTEN and DYRK1A occur at a greater frequency than in the general population. Two mouse models of ASD associated with PTEN mutations (Pten haploinsufficient mice) and DYRK1A mutations (Dyrk1a conditional heterozygous (Dyrk1a cHet) mice) display deficits in social and sensorimotor behaviors; however, the phenomenon of social buffering has not been yet studied in these models. Social buffering is a phenomenon in which the presence of a conspecific diminishes the negative effects of stressors. The objective of this project is to identify if Pten haploinsufficient and Dyrk1a cHet mice experience social buffering by measuring freezing time compared to controls. Based on social interaction deficits displayed by both models, we hypothesize that these animals will be refractory to the effects of social buffering. Testing this hypothesis is the goal of the project, which we anticipate will lead to a deeper understanding of social behavior in two models of autism and macrocephaly caused by PTEN mutations, and autism and microcephaly caused by DYRK1A mutations.

FAVORITE HONORS COLLEGE MEMORY: All the amazing learning alongside friends and great faculty!

AFTER GRADUATION PLANS: I will be taking a gap year to work as a medical assistant at a neurology practice, afterwards I will apply to medical school!

Aethena Fitzgerald

CONCENTRATION: Chemistry

ADVISOR: Chitra Chandrasekhar, Ph.D.

THESIS: Are Electric Cars Really More Carbon Efficient Than Gasoline Cars?

Comparing and contrasting gas and electric cars in terms of fuel, accessibility and pollution to see which one is better for the environment overall.

FAVORITE HONORS COLLEGE MEMORY: Participating in Student Government for the past 2 years.

AFTER GRADUATION PLANS: I will be going to University at Buffalo for a PhD in Chemistry in Fall 2024.

Luna Forero

CONCENTRATION: Biological Chemistry

ADVISOR: Chitra Chandrasekhar, Ph.D.

THESIS: Development of Recombinant Protein Models to Evaluate Chemical Probes for Cysteine Oxidation

Reactive oxygen species (ROS) can react within cells to oxidize nucleic acids, lipids, and amino acids. Occasionally, they are useful in signaling pathways, but generally, an imbalance of ROS leads to oxidative stress. Interestingly, cysteine is a conserved amino acid in many antioxidant proteins that can trigger detoxifying activity when it is oxidized post-translationally. Unfortunately, there is a lack of vetted, well-validated proteins to test and evaluate chemical probes. Our work uses site-mutagenesis to produce HsPARK7, HsPRDX6, and ScGPx3 recombinant plasmid DNA with altered cysteines to generate a 'protein-suite' to study the cysteine redoxome.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is tabling for HOSA at Club Fest!

AFTER GRADUATION PLANS: After graduation, I plan to gain experience in the healthcare field by working as a phlebotomist or as a medical assistant. Eventually, I hope to attend PA school and become a physician assistant, possibly specializing in emergency medicine.

Jovan Fuller

CONCENTRATION: Computer Science

ADVISOR: Annina Ruest, Ph.D.

THESIS: Elyrion's Harmony

'Elyrion's Harmony,' is a 2D side-scrolling game in the fantasy genre. It takes place on the planet Elyrion. Elyrion is home to multiple countries including Earth, Water, and Fire. The player plays as Lyra, a citizen of Earth who witnesses her village's destruction by the malevolent sorcerer, Malachor. Seeking to tear the world asunder, Malachor's chaos disrupts the once-harmonious planet. As Lyra, players navigate diverse landscapes and battle elemental challenges to save her world.

FAVORITE HONORS COLLEGE MEMORY: Making memories with friends.

AFTER GRADUATION PLANS: I have some jobs lined up.

Ibrahim Gheit

CONCENTRATION: Cellular Neuroscience

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Novel Small Molecule miR-544 Inhibitors to Prevent Breast Cancer Metastasis and Relapsen

We examined the effects of a novel small molecule that targets miR-544, a microRNA that is upregulated in Triple Negative Breast Cancer (TNBC). We did this by implanting various subtypes of TNBC in mice and administering various therapeutic strategies using the novel inhibitor.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory at the Honors College was shooting a Day in the Life YouTube video for the WHC, knowing that it could help future generations make an informed decision to attend this beautiful school.

AFTER GRADUATION PLANS: I will be pursuing an M.D. with an interest in the field of hematology/oncology or neurology.

Daniela Garcia-Moreno

CONCENTRATIONS: Behavioral Neuroscience and Spanish

ADVISORS: Monica Maldonado, Ph.D. and Carmen Cañete Quesada, Ph.D.

THESIS: Behavioral Neuroscience Group Perception During Learning Tasks of Underrepresented Students

Investigated the role of Social Identity Theory (SIT) in shaping how individuals in STEM perceived their groups, particularly considering gender and ethnic backgrounds. The focus of the current study was to assess group dynamics during a collaborative task affected these perceptions. It was expected that group perceptions would vary if groups were composed of underrepresented minorities in STEM. The findings from this research could inform strategies to enhance learning environments by fostering more inclusive and effective interactions.

Spanish Feminismo y Teoria Queer en España: Los casos de Victorina Duran (1899-1993) y Gloria Fuertes (1917-1998)

Review of the authors Gloria Fuertes and Victorina Duran and their works, Lo que pasa es que te quiero: Cuentos de amor (y desamor) and the Mi Vida Autobiographical Trilogy of books. Focusing on their experiences as queer women throughout the Franco dictatorship and their use of feminist and queer theory in their writings. As well as discussing their impact on Spanish queer society and on lesbian visibility in Spain.

FAVORITE HONORS COLLEGE MEMORY: My favorite honors college memory is just every time I come into the burrow and get to interact with prostaff like Sabrina and the OMs and my friends.

AFTER GRADUATION PLANS: I will be attending Graduate school, still waiting to hear back from multiple programs.

Anthony Giguere

CONCENTRATION: Business

ADVISOR: Keith Jakee, Ph.D.

THESIS: Washington Needs its Debt Obsession: The Mounting Pressure of the National Debt and Deficits

Utilizing the works of Buchanan, Jakee, and Turner in the fields of public choice and fiscal policy, we critique the position held by Jason Furman and Lawrence Summers in their "Who's Afraid of Budget Deficits?: Why Washington Should End Its Debt Obsession". From the mounting pressure of increasing entitlement spending to the general attitude of the current American constituent towards fiscal policy, it is clear that now is not the time to brush off the debt and deficit as mere annoyances. Contrary to Furman and Summers, who hold that current issues such as educational inequality and global warming are more important to tackle, we feel that unless the increasing debt and yearly deficits are reduced and maintained at a much lower level, those other issues will simply add to the pressure of the debt and deficit on the economic health of the U.S.

FAVORITE HONORS COLLEGE MEMORY: Being able to look back after my 4 years here and realizing how much I've grown as a person, from personal aspirations to the friends I've made and will keep for years to come.

AFTER GRADUATION PLANS: Pursue my career with The Home Depot, where I'm currently working as a department supervisor for Plumbing, Electrical, and Kitchen/Bath.

Beatrice Gil

CONCENTRATION: Art

ADVISOR: Dorotha Lemeh, Ph.D.

THESIS: EXPLORING THE LANDSCAPE: The Role of Art in Environmental Protection

With a focus on 19th-century artists in the United States, this thesis explores how landscape art has paved the way for conservation and environmental protection. While studying the direct impact of landscape art on the establishment of early environmental protection, I analyze the techniques of these 19th-century artists - aiming to deduce how their artistic methods helped shape the American perspective towards the environment and, in turn, advocate for conservation. Studying this history not only allows us to attain a deeper understanding of those who surveyed and depicted the land, but it will also allow artists to gain a deeper understanding of how the art we create can positively influence the world around us.

FAVORITE HONORS COLLEGE MEMORY: The Trans-disciplinary Art Program at the Honors College provided me with the exact experience that I was looking for when applying to undergraduate programs - the ability to combine my interest in the arts, sciences, and humanities together. The interdisciplinary courses that focused on the intersection between art and science, such as Scientific Illustration, have been some of the most rewarding and interesting classes I have taken. Professor Lemeh has done a phenomenal job of highlighting the importance of art in the sciences and providing students with the confidence to explore their creativity and expand their knowledge in the arts.

AFTER GRADUATION PLANS: I currently work as a photographer for a marketing agency, MasterWing Creative Agency, in Delray Beach, FL. As I continue my work as a photographer, I am building my portfolio with the aim to attend graduate school for a MA Fine Art Program in the coming years.

Meira Gildin

CONCENTRATION: Medical Humanities

ADVISOR: Jacqueline Fewkes, Ph.D.

THESIS: Difficulties and Disparities Women Face While Seeking Reproductive Healthcare

Past medical practices and studies have often been either exclusively or primarily focused on how male bodies react to different circumstances. This disparity in research has caused a lack of complete understanding of female systems reactions to medication, as well as other topics being understudied when pertaining to women. Along with medical studies, female reproductive and sexual healthcare is not at a standard that is to be accepted while seeking medical assistance. From trying to figure out ways of lowering the maternal death rate in America to bettering the diagnostic criteria for female-related diseases and aiding in educating the general population, many things can be improved upon by expanding research. This thesis explores current holes in scientific literature and tries to bring awareness to these issues

FAVORITE HONORS COLLEGE MEMORY: Visiting the Abacoa Green Market on Wednesdays after class with friends over the years.

AFTER GRADUATION PLANS: Go to Medical school to become a reconstructive plastic surgeon.

Amparo Godoy Pastore

CONCENTRATION: Interdisciplinary Mathematical Sciences

ADVISOR: Terje Hill, Ph.D.

THESIS: Exploring Deep Learning Approaches to Medical Image Analysis: A MATLAB “Cookbook”

The ability to extract meaningful insights from medical images is paramount in healthcare. We introduce some of the MATLAB ,Äúhow-to,Äù recipes, aimed for researchers, students, developers, and practitioners in the field of medical image analysis. Modern approaches to medical image analysis will be illustrated using MATLAB,Äôs Medical Imaging Toolbox, Image Processing Toolbox, and Computer Vision Toolbox, among others. By leveraging modern examples from machine learning and artificial intelligence, specifically deep learning, the overarching goal is to empower future users with the skills to navigate the modern applications of medical image analysis, contributing to the broader discourse on the application of computational tools in the healthcare domain.

FAVORITE HONORS COLLEGE MEMORY: One of the most memorable moments during my time at the Honors College was watching Argentina win against the Netherlands during penalties in the quarter-finals of the Qatar 2022 World Cup. We gathered with friends in an empty SR building classroom and watched the match on a big screen. It was a moment of shared joy and celebration that I will always cherish.

AFTER GRADUATION PLANS: After graduation, I plan to pursue an MS in Computer Science at FAU’s College of Engineering and Computer Science.

Larah Gorayeb

CONCENTRATION: Biology

ADVISORS: Tracy Mincer, Ph.D. and Kelsie Bernot, Ph.D.

THESIS: Detection and Prevalence of Hemolivia Haemoparasite within the Gopherus Polyphemus Population

The gopher tortoise (Gopherus polyphemus) serves as a vital keystone species in its ecosystem, benefiting various other animals, yet faces threats from environmental changes, human activities, and haemogregarine parasites, notably Hemolivia from the Apicomplexa phylum, impacting reptile species globally. This study investigates the prevalence and impact of haemogregarines, particularly Hemolivia, in gopher tortoise populations at the Abacoa Greenway and Florida Atlantic University Preserve (FAUP) in Jupiter and Boca Raton, FL, respectively. By employing techniques including DNA isolation, quantification, PCR, and gel electrophoresis, we aim to analyze the 18S rDNA region of Hemolivia and elucidate its relationship with other known species infecting gopher tortoises. Through this research, I aim to address current gaps in understanding haemogregarine infections and contribute to the broader comprehension of parasite dynamics within gopher tortoise populations.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory in the Honors College was when me and my friends got together for Power Point Night. Being together with the people that have helped me grow as a person and make college life a little less challenging in a fun and creative way will always be my favorite memory.

AFTER GRADUATION PLANS: After college, I plan on getting my masters on M.S. in Biomedical Sciences and continue working as a medical scribe.

Noah Gorman

CONCENTRATION: Marine Biology

ADVISOR: Jon Moore, Ph.D.

THESIS: Preliminary Assessment of Boat-Generated Wake Influence on the Ecological Structure of a Seagrass Meadown

Seagrass meadows are crucial coastal ecosystems for countless marine fauna and flora: with the decline of these ecosystems at home and abroad, understanding the array of threats they face represents the first step in mitigating further destruction and establishing effective restoration efforts. To this end, the purpose of this thesis was to provide a baseline dataset and preliminary assessment of the scale and intensity of boat-generated wakes on a severely reduced shallow-water seagrass meadow along a high-traffic recreational boating area. Baseline data provides novel insight into the potential influence of boat-generated wakes on the changing structure, ecological health, and diversity of the seagrass meadow.

FAVORITE HONORS COLLEGE MEMORY: Picking one memory is impossible! But if I had to pick it would be all the times I watched movies with my friends and fellow students.

AFTER GRADUATION PLANS: I will be attending FAU'S Marine Science and Oceanography Master's program (MS) in Fall 2024 where I will be conducting research in the Laboratory of Integrative Marine and Coastal Ecology under my Graduate advisor Dr. Andia Chaves Fonnegra. I intend to pursue a career in conservation following the completion of my Masters degree.

Michelle Gras

CONCENTRATION: Biological Chemistry

ADVISOR: Catherine Trivigno, Ph.D.

THESIS: Elucidation of the Relationship Between Intracellular Membrane-type 1 Matrix Metalloproteinase (MT1-MMP) and Hypoxia Inducible Factor-1Œ± (HIF-1Œ±) in Pancreatic Cancer

Pancreatic cancer is one of the deadliest cancers with few treatment options. Proteins like membrane type 1-matrix metalloproteinase (MT1-MMP) and hypoxia-inducible factor 1-alpha (HIF-1Œ±) have previously been found to be responsible for invasion, metastasis, and low-oxygen regions characteristic of hard-to-treat cancer. These proteins were found to cross-stabilize each other, allowing for differential co-expression, thus making the cancer more resistant to treatments and inducing an environment favorable to uncontrolled proliferation and metastasis. Despite the knowledge that HIF-1Œ± is responsible for maintaining low-oxygen regions in difficult-to-treat cancers, results show equal expression of the protein in average levels of oxygen when compared to low-oxygen regions. Surprisingly, MT1-MMP levels were found to soar in low-oxygen regions, suggesting a reason that pancreatic cancer is challenging to treat. These findings imply a potential breakthrough therapy: targeting MT1-MMP in low-oxygen zones to prevent cross-stabilization with HIF-1Œ±.

FAVORITE HONORS COLLEGE MEMORY: Eating donuts in the lab office with Maiya at 5:00 a.m.

Attending conferences in Seattle, Washington DC, and New York City to present scientific research or international relations competitions.

AFTER GRADUATION PLANS: I will be conducting research at the Clinical Center of The National Institutes of Health in Maryland on hematologic diseases and blood cancers.

Amanda Guevara

CONCENTRATION: Psychology

ADVISOR: Sondra Washington, Ph.D.

THESIS: A Review of Applied Behavior Analysis, Effectiveness and Ethical Implications

Autism is a developmental disorder that is on a spectrum, meaning that its symptoms vary in each individual. There are a variety of interventions that treat autism, the most practiced being Applied Behavior Analysis, a form of behavior therapy that uses a variety of techniques to improve one,Äôs symptoms. Although this therapy is highly recommended, there have been ethical questions raised on whether it,Äôs used to benefit the individual or help society by masking their symptoms. There have also been concerns on whether this therapy is truly effective based on its original model, created by Ivar Lovaas. This project aims to review the literature discussing ABA and whether it should continue to be used.

FAVORITE HONORS COLLEGE MEMORY: Going to CarnivOWL

AFTER GRADUATION PLANS: I plan to go to graduate school to get my master's in Applied Behavior Analysis.

Blake Habay

CONCENTRATION: International Studies

ADVISOR: Christopher Ely, Ph.D.

THESIS: The Achille Lauro Hijacking: A Series of International Implications

My thesis discusses the hijacking of the Italian cruise ship "Achille Lauro" on October 7th, 1985. It provides context as to why the event occurred by examining the Israeli-Palestinian conflict and the Palestine Liberation Organization (PLO), and explains how the event was viewed on the international stage.

FAVORITE HONORS COLLEGE MEMORY: Learning about anthropology for the first time, as it has drastically changed the way I view interactions between individuals/groups and human culture as a whole.

AFTER GRADUATION PLANS: I will be going on the Study Abroad Program to Madrid in July. Afterwards, I plan on looking for a job, although I am unsure exactly where I will work or what I will do as of now.

Braden Haggart

CONCENTRATION: Marine Biology and Environmental Studies

ADVISOR: Andia Chaves Fonnegra, Ph.D.

THESIS: Kinship and Dispersal Capability of a Sponge Bioeroder within Caribbean Reefs

Excavating sponges are a group of species which bore into and kill coral colonies throughout the Caribbean. We collected and analyzed DNA samples from sponges across three reef sites to describe their fine-scale population structure. We found an unexpectedly low kinship level, but our results suggest short dispersal distances and larval cohesion among sponge siblings.

FAVORITE HONORS COLLEGE MEMORY: Hanging out in the dorms with my best friends. Love you guys!

AFTER GRADUATION PLANS: I will be pursuing a graduate degree in marine biology.

Kevin Halpern

CONCENTRATION: Biology

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Examining the Potential Prevalence of Herpesvirus within Gopherus Polyphemus in Abacoa

My thesis focused on detecting if the herpesvirus, which thrives in small, condensed areas such as Abacoa, is present within the gopher tortoise population. PCR, gel electrophoresis, and Sanger Sequencing were used to determine prevalence.

FAVORITE HONORS COLLEGE MEMORY: Spending this entire adventure with Ianis Ciolacu.

AFTER GRADUATION PLANS: Will be attending Lincoln Memorial University College of Osteopathic Medicine in the Fall.

Katherine Mali Hanner

CONCENTRATION: Business

ADVISOR: William O'Brien, Ph.D.

THESIS: The Influence of Victory Gardens in WWII and their Impact on Marketing Sustainable Practices Today

An analysis from a business psychology perspective of how the United States promoted victory gardens as a war effort to supplement food rationing and boost morale. The techniques employed then are compared to relevant sustainability marketing techniques in the 21st century.

FAVORITE HONORS COLLEGE MEMORY: Out of all the memories made at the Honors College, my favorites by far are the spontaneous moments in-between life and school. Forming a bond with fellow residents through one spontaneous Tea Time in the dorms, going geocaching late at night as a means of procrastination, playing Dutch Blitz for hours in the middle of the RH3's second floor lounge... these are the core WHC memories that made my college experience mine.

AFTER GRADUATION PLANS: Traditional MBA at Florida Atlantic.

Quinn Jacobs

CONCENTRATION: Medical Humanities

ADVISOR: Monica Maldonado, Ph.D.

THESIS: A Comparison of Lunches in Public Elementary Schools

In this thesis, the histories of lunch programs established in several public elementary schools around the world are discussed.

FAVORITE HONORS COLLEGE MEMORY: The amazing people that I have met here.

AFTER GRADUATION PLANS: I will be attending graduate school.

Westin Johnson

CONCENTRATION: Interdisciplinary Math and Science Honors with focus in Ocean Engineering

ADVISOR: Terje Hill, Ph.D.

THESIS: Development and Testing of a Small WEC for Numerical Simulation Validation

Wave energy converters (WECs) are marine renewable energy devices designed to harness the potential and kinetic energy present in waves and convert it into electrical energy. In my thesis, I discuss the development of a small-scale (~2m diameter) wave energy converter designed to gather open-water performance data for validating the numerical simulation of a 4-body oscillating body type WEC design.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memories are competing in ResFest every year, playing Ultimate Frisbee every week, and playing campus-wide Manhunt.

AFTER GRADUATION PLANS: After graduating, I will be working a summer internship at Mainstream Engineering before returning to FAU in the fall to earn my Master's Degree in Ocean Engineering.

Liberty Juno

CONCENTRATION: Cellular Neuroscience and Marine Biology

ADVISORS: Jon Moore, Ph.D. and Erik Duboué, Ph.D.

THESIS: The Life History, Morphometrics, and Neuroanatomy of Slickhead Leptochilichthys in the Gulf of Mexico

Leptochilichthys is a rare genus of deep-sea fish with three currently accepted species. In my thesis, I explore the neuroanatomy and sensory modalities of these fish using reconstructed micro-CT images of the brain. I also present morphometric comparisons between the three known species and a recently discovered, possibly new species, found in the Gulf of Mexico. I provide an in depth analysis on the life history and possible behaviors Leptochilichthys may be participating in at depth.

FAVORITE HONORS COLLEGE MEMORY: Study sessions in Abacoa with my friends that later turn into more hanging out than studying! #WHCBoba

AFTER GRADUATION PLANS: I plan on continuing to work at my position as Medical Assistant and Medical Scribe at Neurology Specialists of the Treasure Coast before moving to Tucson, Arizona to complete a MD/PhD dual degree program in the future. I hope to specialize in neonatology as a physician and continue research in the field of neuroscience.

Kathaleen Kelly

CONCENTRATION: Law and Society

ADVISOR: Mark Tunick, Ph.D.

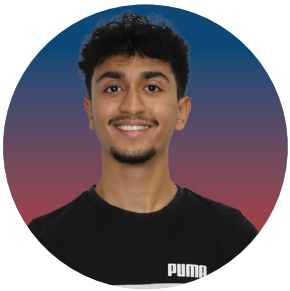
THESIS: Faith and Governance: Balancing Religious Expression and Government Neutrality in Democratic Republics

In my thesis, I examine democratic republic nations and their power to limit public religious displays on government-owned land. I argue that in democratic republics with laws upholding the separation of church and state, the government should not allow religious displays on public, government-owned land by examining John Rawls' theory of liberal pluralism and applying its principles to case studies in the United States and Italy.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory at Florida Atlantic was when Nadia Miranda-Sifuentes and I traveled to Washington, D.C., to meet with members of Congress to discuss our university last April. I loved talking about the fantastic opportunities the Honors College has provided us.

AFTER GRADUATION PLANS: I have accepted a position as Outreach Coordinator at the American Legislative Exchange Council in Arlington, Virginia.

Ritvik Kesharaju



CONCENTRATION: Biological Chemistry

ADVISOR: Chitra Chandrasekhar, Ph.D.

THESIS: The Acute Effects of Graphene Nanoflakes on Whole Cell Cholesterol

Graphene is a novel nanomaterial with great potential in biomedicine owing to its high electron mobility, thermal conductivity, and mechanical strength. The lack of understanding about graphene-plasmalemma interactions inspired this mechanistic study. Based on published work from our lab about graphene,Äôs chronic effects on cell growth, we used graphene nanoflakes and examined their acute effects on cell cholesterol.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is playing basketball on campus with friends.

AFTER GRADUATION PLANS: I will be in the NIH IRTA Post-Bac Program and then attend medical school after.

Jenna Leali

CONCENTRATION: Data Analytics

ADVISOR: Warren McGovern, Ph.D.

THESIS: Investigating Dynamic Pricing in Miami's Brickell and Coral Gables Neighborhoods

The central research question examines the prevalence of dynamic pricing in this hotel sector and attempts to identify the most cost-effective time to book hotel rooms in these neighborhoods. The initial hypothesis sought to be proven or disproven is that dynamic pricing is widely used in the hotel industry, meaning there will be a specific time for cost-effective bookings. Moreover, this thesis sought to uncover how hotels in these neighborhoods set their prices for select dates and attempt to categorize them by revenue management techniques.

FAVORITE HONORS COLLEGE MEMORY: Meeting my Freshman year roommate, Ally Papa.

AFTER GRADUATION PLANS: After graduation, I will conclude my accelerated 4+1 degree program in Information Technology and Management, with a concentration in Data Analytics, at the FAU Graduate College.

Mei Ling Leon-Guim

CONCENTRATION: Biology

ADVISOR: James Wetterer, Ph.D.

THESIS: Avian Rehabilitation Success at Busch Wildlife Sanctuary

This thesis analyzes the success of avian rehabilitation at Busch Wildlife Sanctuary from 2020 to 2023. Reasons for admission and the criteria for euthanasia are also discussed in this thesis.

FAVORITE HONORS COLLEGE MEMORY: Getting to meet my roommates.

AFTER GRADUATION PLANS: I am working as a Wildlife Vet Tech at Busch Wildlife Sanctuary.

Emma Leonardo Solórzano

CONCENTRATIONS: International Studies and Economics

ADVISOR: Timothy Steigenga Ph.D.

THESIS: Colonial Legacies, Modern Woes: A Study of Guatemala's Battle With Corruption

The governance of the Guatemalan state, shaped by its history, fosters a conducive environment for government corruption. A historical analysis finds that the independent state continued to operate on colonial era systems, building upon and drawing from these structures during the Liberal era and civil war years. This thesis also explores the relationship between public perception levels of corruption and regime changes since the signing of the Peace Accords in 1996. The significance of this report lies in its ability to inform anti-corruption efforts moving forward, especially in the current Arevalo administration, to undo colonial structures still in place and help create a more-equal society in Guatemala.

FAVORITE HONORS COLLEGE MEMORY: Traveling to D.C. and New York with FAU's Leon Charney Diplomacy program and participating in the National Model United Nations conference.

AFTER GRADUATION PLANS: I will be traveling during the summer with the Guatemala study abroad program and working as the program assistant. I plan to take a gap year, spend time with family, travel and apply for graduate school programs with a focus in International Development.

Keedon Lewis

CONCENTRATION: Biology

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Molecular Detection of an Unidentified Hepatozoon Species in South Florida Gopher Tortoises (Gopherus Polyphemus)

I attempted to molecularly identify an unknown species of blood pathogen that has previously been seen to infect gopher tortoises.

FAVORITE HONORS COLLEGE MEMORY: The time when I won the Halloween Ball costume contest when I came dressed up as Randolph.

AFTER GRADUATION PLANS: For my post graduation plans I plan on applying and hopefully attending medical school by Fall 2025. In the meantime, while I study, I will continue to work at my current job as a clinical technician at Cleveland Clinic Martin South Hospital.

Marissa Lippinkhof

CONCENTRATION: Neuroscience

ADVISOR: Monica Maldonado, Ph.D.

THESIS: Studying the Lateralization of the Murine Insular Cortex during Conditioned Taste Aversion

The insular cortex is a region of the brain found bilaterally in both rodents and humans. Usually, we expect that bilateral brain regions would have similar functions,yet, human brain imaging research has revealed that the insular cortex tends to be more active on one side under specific circumstances.

FAVORITE HONORS COLLEGE MEMORY: The Madrid study abroad program at the Universidad de Complutense led by Dr. Cañete-Quesada.

AFTER GRADUATION PLANS: I will be applying to medical school and moving to Spain for my gap year to teach English.

Sebastian Lozano-Villada

CONCENTRATION: Cellular Neuroscience

ADVISOR: Lucia Carvelli, Ph.D.

THESIS: A Single-Neuron Approach to the Transcriptomic Mechanisms of Learning and Memory

Understanding the intricacies of cellular function is imperative for advancing our comprehension of biological processes. This paper outlines single-cell transcriptomics as a powerful tool to unravel the nuances of gene expression and elucidates the implications for understanding both aging and long-term memory (LTM) storage. By scrutinizing the transcriptomic profiles of Aplysia californica neurons, particularly L7MN, we illuminate the impact of aging on these cells in learning and memory. Our findings reveal progressive impairments in transcriptional plasticity during aging and give insight into the previously unknown role of L11 and R2 neurons in this process. Furthermore, this paper describes a future application of single-cell transcriptomics to explore the mechanisms of retrograde transport in LTM formation. Investigating the regulation of dynein-dynactin complexes in pre- and post-synaptic neurons, we set the stage for groundbreaking insights into activity-regulated retrograde transport and the biology of memory. The significance of these applications extends beyond this paper, emphasizing the critical role of single-cell analysis in shaping the future of transcriptomics, and scientific discovery as a whole.

FAVORITE HONORS COLLEGE MEMORY: When my experiments worked in the chemistry labs! Also, playing air hockey in the Burrow when there was time in between classes.

AFTER GRADUATION PLANS: Following my graduation in December 2023, I have continued working in the laboratory of Dr. Sathya Puthanveetil at UF Scripps and aim to pursue a one-year Post-Baccalaureate program starting in June. Simultaneously, I am applying for MD-PhD programs across the country with aspirations to become a physician-scientist focused on neuropsychiatric disorders. I envision a career where I can apply my interests in neuroscience not only through clinical research but also by incorporating basic science techniques across organisms to uncover neural mechanisms and develop therapeutics. I seek to one day incorporate these endeavours and the associated discoveries into advanced, state-of-the-art patient care.

Josue Maldonado-Zelaya

CONCENTRATION: Psychology

ADVISOR: Kevin Lanning, Ph.D.

THESIS: Using SNAP for Early Behavioral Intervention

Research has shown that adolescents and young adults who become serious, violent, and repeat offenders typically begin their delinquent behavior as young adolescents and even in childhood. Whether it's because of Adverse Childhood Experiences, such as victims of bullying, living in low-income households, or victims of physical, emotional, and/or sexual abuse, these early life stressors and types of environments can influence children to go down a path of delinquency. Children who carry such behaviors into adulthood can cause long-term life-stress and harm the health of both themselves and families. To combat childhood delinquency and maladaptive behavior, institutions offer behavioral intervention services, designed to stop problem behaviors by rewarding good behaviors, such as prosocial behavior. For nearly a year I have been interning at a children,Äôs mental health clinic where I help assist offering a behavioral intervention program known as SNAP. My thesis will explore early childhood experiences, development of delinquent and maladaptive behaviors, and review the effectiveness of SNAP as a behavioral intervention program.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory is when program board brought in the waterslide and obstacle courses for events.

AFTER GRADUATION PLANS: I would like to continue working where I'm currently interning as a full time employee. After about a year I would like to pursue my masters in clinical psychology.

Tyler Martin

CONCENTRATION: Mechanical Engineering

ADVISOR: Terje Hill, Ph.D.

THESIS: Impact of Solar Energy

As energy consumption increases, the need for an efficient, cheap-to-make, and low-maintenance power converter is increasingly sought after. Solar energy has the potential to fill all these requirements as it is not only the most abundant source of energy on the planet, but the devices themselves require little to no cost post-installation.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory was during a Halloween event, with the obstacle course and potato sack racing, when a couple of my friends and I decided to see how fast we could clear them.

AFTER GRADUATION PLANS: I will be going straight into Graduate school at FAU for a Master's in Mechanical Engineering.

Anushka Mandalapu

CONCENTRATIONS: Cellular Neuroscience and Medical Humanities

ADVISORS: Monica Maldonado, Ph.D. and Wairimũ Njambi, Ph.D.

THESIS 1: Neuronal Control of Backward Walking in Drosophila

Previous works in Drosophila have identified a set of neurons responsible for backward walking, the "moonwalker" descending neurons (MDN). Using the recent fly connectome, we discovered a pair of descending neurons (MDN-L) that morphologically resemble MDN, yet whose somas are located more laterally in the brain. After using a combination of intersectional genetics, optogenetic manipulation and behavioral screening, our preliminary data suggest a role of MDN-L in walking initiation and potentially in backward walking. The goal of this study was to further investigate the MDN-L neurons, their connectivity in the fly brain, and their effect on fly locomotion. We identified two genetic lines which label our neuron of interest, which were used to conduct behavioral assays to observe how activation of MDN-L affects walking behavior. Additionally, computational experiments were conducted utilizing the fly-brain connectome to further understand MDN-L's relationship with currently known locomotion neurons and visual input neurons.

THESIS 2: STEM-Feminism: Implementing Feminist Ideals in Science and Medicine

The perception of science and medicine as inherently liberal and free from racism and sexism is a common misconception. This affects not only the progress of scientific discoveries but also the delivery of healthcare. In this thesis, I briefly describe the historical feminist movement and define feminism and its importance in science and medicine. I explore how social constructs such as race, gender, and sexuality present themselves in science. Then, I discuss notable times in history where such constructs have implicated the delivery of healthcare and the progression of scientific discoveries. Additionally, I outline "STEM-Feminism," an act of challenging scientific habits and language to destabilize oppressive social constructs.

Finally, I propose ways in which members of medical and scientific communities can continue to challenge systems of oppression and foster a more inclusive environment for future generations of healthcare providers, scientists, and feminists.

FAVORITE HONORS COLLEGE MEMORY: Memory board program!

AFTER GRADUATION PLANS: Attending UT Southwestern Medical School.

Laura Martinez

CONCENTRATION: Cellular Neuroscience

ADVISOR: William O'Brien, Ph.D.

THESIS: Maternal Depression and Oxytocin,Äôs Predicted Influence on a Mother-Infant Bond

Maternal factors during pregnancy are thought to program fetal regulatory tendencies and shape early postnatal interactions between a mother and her infant. However, depression and oxytocin levels are also believed to hold a meaningful relationship with and potentially predicting early mother-infant attachment. This study specifically explores (1) the correlation between maternal prenatal and postnatal neurohormonal levels oxytocin and its association with maternal depression; and (2) the influence of these factors on attachment formation. Links between prenatal hormones and maternal mental health are important to examine as their effects likely will illuminate the biological foundations of socio,Äìemotional development.

FAVORITE HONORS COLLEGE MEMORY: My favorite honors college memory was going to the beach before and after class.

AFTER GRADUATION PLANS: I will be attending graduate school to complete a Masters of Arts in Special Education with a Concentration in Applied Behavior Analysis. Right now I have a couple schools I am applying for one of them being Arizona State. Currently I do have a job as a Registered Behavior Technician working with special needs kids at an Early Intervention Center. After graduate school, I plan on taking my BACB board exam with the goal of becoming a Board Certified Behavior Analyst.

Carolyn Mas

CONCENTRATION: Neuroscience

ADVISOR: Mark Tunick, Ph.D.

THESIS: Loot Boxes and Gambling

My thesis evaluates the neuroscience behind addiction concerning gambling and loot boxes in gaming. It expands on what defines gambling and the possible vulnerabilities that problem gamblers and adolescents may face with impulsivity, risk, and addictive mechanisms. It suggests federal regulation and reform that minimizes risk and promotes healthy gaming habits.

FAVORITE HONORS COLLEGE MEMORY: I enjoyed spending time at the Halloween Ball, hosting ART club, and drinking boba.

AFTER GRADUATION PLANS: I am pursuing a future career in the medical field with an emphasis in psychology.

Julia McDuffee

CONCENTRATION: Cellular Neuroscience

ADVISOR: Bethany Stanhope, Ph.D.

THESIS: Characterization of Fluorescence for Improved STED Microscopy Resolution and Deconvolution Processing

Improving resolution through investigation of dye specific response to stimulated emission depletion (STED) microscopy and system specific laser properties. Understanding the characteristics of fluorescent dyes when used with STED microscopy allows for optimal dye selection and microscope settings. Quantifying laser properties is essential in the post imaging processing that can further improve resolution.

FAVORITE HONORS COLLEGE MEMORY: Building LEGOs in the dorms with Sofia and Karis.

AFTER GRADUATION PLANS: FAU Biomedical Engeneering Master of Science

Ishama Medilien

CONCENTRATION: International Studies

ADVISOR: Timothy Steigenga, Ph.D.

THESIS: Critiquing the Religious Economic Model: Re-Evaluating Factors Behind the Catholic Church's Actions during the Dictatorships of Argentina, Chile, and Brazil during the 1970s

By analyzing the three case studies of Argentina, Chile, and Brazil during their dictatorships in the 1970s, I provide both a critique of the religious economy model and offer additional explanatory variables that help us to understand Church-State relations.

FAVORITE HONORS COLLEGE MEMORY: Getting to travel to Japan for my study abroad as it had been my dream destination for years.

AFTER GRADUATION PLANS: I will be attending a graduate program to get my Master's in International Relations. I am currently applying to FIU and American University, though I have not been accepted yet.

Victoria Mensah

CONCENTRATION: Behavioral Neuroscience

ADVISORS: Kelsie Bernot, Ph.D. and Tracy Mincer, Ph.D.

THESIS: Sequencing the Dopamine 2 Reception (DRD2) in Gopherus Polyphemu

The purpose of my project was to confirm the presence and sequence of DRD2 gene in gopher tortoises and provide evaluation on sequence variations with other tortoise species..

FAVORITE HONORS COLLEGE MEMORY: Board game nights with friends on the third floor of RH1.

AFTER GRADUATION PLANS: Current plan is to take an internship position in neuroscientific research for a year before attending graduate school.

Nadia Miranda-Sifuentes

CONCENTRATION: Biochemistry

ADVISOR: Monica Maldonado, Ph.D.

THESIS: Biochemical Interaction Of Anticancer Drug Combination Treatment Sulindac And Doxorubicin On Pancreatic And Breast Cancer Cells

The chemotherapy drug Doxorubicin (Dox) is widely used to treat cancers but is associated with organ toxicity due to elevated reactive oxygen species production causing oxidative stress. The non-steroidal anti-inflammatory drug, Sulindac, enhances cancer cell death in the presence of an oxidative agent via its cox-independent mechanisms. We predict that Sulindac will enhance the killing of cancer cells while protecting normal cells from Dox toxicity through modulation of mitochondrial function. In this study, we tested low doses of Dox and Sulindac on pancreatic and breast cancer cell lines. The results showed enhanced killing of pancreatic cancer cells but minor improved killing of breast cancer cells. These studies present both a reduction in tumor burden and protection against cardiotoxicity in cancer patients.

FAVORITE HONORS COLLEGE MEMORY: Eating Papakwans‚Äô acai bowls at Juno Beach with my girls.

AFTER GRADUATION PLANS: I plan on working at a forensic laboratory and getting my Masters in Forensics. Eventually, the goal is working for the FBI Crime Lab.

Emily Overfield

CONCENTRATION: Psychology

ADVISOR: Laura Vernon, Ph.D.

THESIS: Clothing and Perception: What We Wear Changes What We Think

Clothing appears to have an effect on perception. Not only does the type and/or style of clothing affect how the wearer perceives themselves, but also how others perceive them. There are several elements of clothing that can affect perception, such as style, color, and formality. These changes in perceptions are due to the stereotypes and norms associated with the clothing items, as the wearer is perceived to have the traits associated with them.

FAVORITE HONORS COLLEGE MEMORY: Living in the dorms with my amazing roommates and spending time with my friends.

AFTER GRADUATION PLANS: I will be working for a year while I study/take the GRE and begin applying for grad school.

Argia Papas

CONCENTRATION: Biology

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: A New Non-Invasive Tool of Testing *Mycoplasma agassizii* in Gopher Tortoises

This study aimed to develop a new non-invasive testing method for *Mycoplasma agassizii* in gopher tortoises. Previous studies at the Abacoa site used ELISA testing, which does not detect active infections. This study used a simple, non-invasive sampling method and optimized molecular test conditions to identify the presence of the bacterium. A fragment of the 16S rRNA gene was amplified using specific primers on eight tortoises. Results showed the presence of *Mycoplasma agassizii* in one tortoise, which had clinically active symptoms. The proposed molecular test has significant potential for disease surveillance and management, particularly in the fields of health and conservation. This method could be used to determine the peak season of *M. agassizii* infections and isolate potentially infected individuals to reduce pathogen spread. The successful demonstration of the proposed non-invasive molecular testing method for *M. agassizii* in gopher tortoises paves the way for further optimization and implementation of the technique.

FAVORITE HONORS COLLEGE MEMORY: After we finished our thesis class, Dr. Bernot welcomed everyone in to her home for a pool party at her house to celebrate our accomplishments.

AFTER GRADUATION PLANS: After graduation, my plan is to pursue further education in graduate school. I am considering various paths, including law school, medical school, or a Physician Assistant program.

Brianna Parsons

CONCENTRATION: Interdisciplinary Business

ADVISOR: Kanybek Nur-tegin, Ph.D.

THESIS: COVID-19 Pandemic Aftermath: Disproportionate Effects on Labor Force Participation Across Demographic Groups

The labor force participation dropped across all demographic groups at the start of the COVID-19 pandemic. Understanding the reasoning behind these declines is pertinent, as it is such an important macroeconomic indicator. Also understanding why certain groups were unequally affected helps us to prevent such disproportionate affects in the future.

FAVORITE HONORS COLLEGE MEMORY: The orientation games and group introductions.

AFTER GRADUATION PLANS: I want to pursue my MBA. I am currently moving up in management with Outback Steakhouse and intend to pursue district management.

Julia Pasquale

CONCENTRATION: Biology

ADVISOR: Dean Perry, Ph.D.

THESIS: Human Peripheral Blood Mononuclear Cells Loaded for 4 hrs with CD3-directed Lentivectors Produce CAR Positive Tscm Cells with NK-like Features

For CAR-T therapies to be effective, genetically modified T cells need to robustly expand and proliferate following adoptive transfer. CD8+ T Memory-Stem cells (Tscm) represent a rare population of memory T cells capable of self-renewal into the full spectrum of memory and effector T cells. The ability to generate novel CAR-T therapies by effectively gene modifying CD8+ T cells to CD8+ Tscms with CARs holds the potential to significantly improve current treatments. In this paper, it is proven that CAR+, CD8+ Tscms, with NK like features can be developed from the transduction of PBMCs by lentiviral vectors. Not only do the CAR T CD8+ cells exhibit Tscm markers, but a majority of them exhibit the marker for a natural killer (NK) cell. This is an attractive feature for the CAR T cell because NK cells lower the threat of cytokine release syndrome.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory was obtaining an internship at Scripps Research during my Sophomore year here. In high school I dreamt of working in a laboratory at Scripps, as well as wearing their official lab coat. Since this was my first laboratory experience, I was able to build the foundation for my career in biomedical research. Working directly on cancer therapy research, specifically immunotherapy, was also one of my goals. After I interned at Scripps, I obtained an paid internship at EXUMA Biotechnology, which specializes on a specific type of immunotherapy called CAR T Cell therapy. Not only did I get to work side by side with incredible scientists and learn how a biotechnology company works, but I got the opportunity to complete my thesis research here.

AFTER GRADUATION PLANS: After I graduate, I will be working in the laboratory of Dr. Kodadek at The Herbert Wertheim UF Scripps Institute for Biomedical Innovation & Technology doing translational drug discovery research. I aim to obtain my Ph.D. and continue my career in biomedical research.

Zoe Payner

CONCENTRATION: Biological Anthropology

ADVISOR: Rachel Corr, Ph.D.

THESIS: Human Remains: Proper Versus Improper Stewardship and the Conflict of Benefits and Ethics

I will present specific benefits of the study and exhumation of human remains in forensic investigations, specifically in cases of mass genocide and missing persons. Public health and educational advantages, both in the museum and university setting, will also be examined as examples of benefits provided by the use of human remains. I will weigh these benefits against the common ethical hesitations of the use and handling of human remains, and I will argue that the forensic, public health, and educational values they provide, in both the university and museum setting, as well as otherwise, greatly outweigh the associated cultural sensitivities, as well as the ethical and moral hesitations.

FAVORITE HONORS COLLEGE MEMORY: The thesis process

AFTER GRADUATION PLANS: I will either be attending Ross University or St. George's University for my Doctorate in Veterinary Medicine with the goal to work as a Veterinarian with a specialization in Shelter Medicine.

Ashley Perry

CONCENTRATION: English Literature

ADVISORS: Sondra Washington, Ph.D. and Wairimũ Njambi, Ph.D.

THESIS: "You Can Be Anything"? Interrogating Postfeminist Girl Power in the Barbie Animated Films

Since her plastic debut in 1959, Mattel's Barbie has become both a beauty symbol and object of feminist criticism. More than simply a doll, she has starred in 42 animated films targeted towards young children. In my thesis, I argue that the Barbie animated movies embody the concept of postfeminism, limiting, rather than expanding, the choices available to young girls through a narrow conception of beauty, sexuality, and femininity. By closely analyzing four animated, family-friendly Barbie films throughout the icon,Äôs history and contrasting them with the live-action, PG-13 rated, and liberal feminist Barbie (2023), I demonstrate that cinematic Barbie has failed to be a true feminist role model for young children. While the Barbie animated films might seem to challenge gender structures by granting female characters great abilities, they actually reinforce patriarchy by suggesting feminism has achieved its aims and that all women are equal in society.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory was the Universal Studios field trip with my HC family.

AFTER GRADUATION PLANS: Beginning Fall 2024, I will be joining FAU's Master's in English program, with a concentration in science-fiction/fantasy. I have also been awarded a Graduate Teaching Assistantship and Arts and Letters Fellowship. I will be responsible for instructing two English Composition classes in both the fall and spring semesters, furthering my dreams of becoming an English professor.

Arielle Perry

CONCENTRATION: Environmental Science

ADVISOR: William O'Brien, Ph.D.

THESIS: Charting a Sustainable Course: A Deep Dive into Cruise Line Sustainability Policies

In my thesis, I analyze the second largest cruise company in the world, Royal Caribbean Group (RCG), and its initiatives to reduce its marine environmental impact. Using the United Nations,Äô Sustainable Development Goal 14: Life Below Water as a guide, I rate and critique the effectiveness and commitment of RCG towards mitigating its marine pollution and supporting practices that conserve the oceans and its resources. I conclude that while meaningful progress has been made in conservation efforts and waste reduction, more attention must focus on other marine pollution sources caused by daily cruise ship operations.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is the Universal Studios/Islands of Adventure Trip in 2023. I had such a great time with my friends!

AFTER GRADUATION PLANS: Since graduation, I have been working as a Resilience and Sustainability Specialist for the Palm Beach County Office of Resilience, where I assist the County in its resilience and sustainability initiatives. Beginning Fall 2024, I will be joining FAU's Environmental Science Master's Program as a graduate research assistant for the Center for Environmental Studies.

Sophia Pregadio

CONCENTRATION: Psychology

ADVISOR: Kevin Lanning, Ph.D.

THESIS: Social media and negative psychological health outcomes among adolescents: A review and examination of possible mechanisms

My thesis is about how constant exposure to idealized representations on social media can fuel upward social comparisons, leading to lower self-esteem, body dissatisfaction, disordered eating behaviors, and reduced life satisfaction among adolescents.

FAVORITE HONORS COLLEGE MEMORY: Meeting my friends that I will keep for the rest of my life.

AFTER GRADUATION PLANS: I will pursue my master's in social work and work my way up to become a clinical psychologist. I plan to enroll at the University of Georgia in 2025. In the meantime, I plan on finding an internship at a facility in Georgia specializing in eating disorders.

Avanthi Puvvala

CONCENTRATIONS: Cellular Neuroscience and Global Health

ADVISOR: Monica Maldonado, Ph.D.

THESIS: Investigating the Mechanism Behind RORŒ±, Repression of IFNŒ≥ in Face of Limited Hospital Care Amidst Natural Disasters in Puerto Rico

Interferon-gamma (IFNŒ≥) is a cytokine essential in regulating innate and adaptive immunity. Upon activation, CD8+ T cells produce and secrete IFNŒ≥ as part of the adaptive immune response. Previous immune system studies found that IFNŒ≥ production in CD8+ T cells is enhanced in mice deficient in the nucleoreceptor RORŒ±. However, the exact mechanism governing this effect remains elusive. RORŒ± is related to many auto-immune conditions and cancers. Understanding the transcriptional mechanism behind its effect on IFNŒ≥ allows us to better develop therapies and treatments against related conditions. In natural disasters, auto-immune conditions require effective drug treatment and resilient healthcare systems,Äîa review of the conditions faced in Puerto Rico after Hurricane Maria was also completed.

FAVORITE HONORS COLLEGE MEMORY: There are many. One of my favorites is throwing a football with friends, running around campus after class, or just laying on the lawn as a study break. The weather is really nice on campus and I love spending time outside when I can!

AFTER GRADUATION PLANS: I will be attending Medical School.

Ahnaf Rahman

CONCENTRATION: Biology

ADVISOR: James Wetterer, Ph.D.

THESIS: Genome-informed Pharmacy Practice: The Efficacy of Pharmacogenomic Integration for Personalized Medication

Improve patient outcomes through the introduction of Genomics into pharmacy software to tailor patient medication regimen.

FAVORITE HONORS COLLEGE MEMORY: Friend group dressing up as Avatar the last Airbender characters for Halloween Ball.

AFTER GRADUATION PLANS: Master's in Bioinformatics at Nova.

Priya Raju

CONCENTRATION: Cellular Neuroscience

ADVISOR: Monica Maldonado, Ph.D.

THESIS: Optimizing iTRF for Maximum *Drosophila melanogaster* Lifespan Extension

Intermittent time-restricted feeding (iTRF) shows promise in managing obesity and aging-related diseases. This study aims to further understand iTRF by examining various parameters like sucrose or protein concentrations during fasting and adjusting fasting and feeding window durations in Drosophila, which could optimize its therapeutic potential.

FAVORITE HONORS COLLEGE MEMORY: Going to Universal with my friends.

AFTER GRADUATION PLANS: I will attend Case Western Medical School.

Camila Rimoldi Ibanez

CONCENTRATION: Marine Biology

ADVISORS: Andia Chaves Fonnegra, Ph.D. and Yaouen Fily, Ph.D.

THESIS: Sound Emission and Perception in Corals

Sound is a highly efficient method of exchanging information signals widely used across several phyla for various purposes, including in coral reefs. In this project, the aim was to visually and audibly understand adult coral acoustics by observing the response of Goniopora corals to light and feeding. Sound spikes from the corals were recorded and specific behaviors observed. To further support findings, genes associated with sound emission and perception were tested for presence in corals. Four of the six candidate genes were found present in the coral genome.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is Tea Time. In freshman year, friends and strangers came together over a nice cup of tea as we all got to know each other and build long-lasting friendships. This weekly occurrence became quite popular and was a lot of fun every time.

AFTER GRADUATION PLANS: I am planning on taking a gap year to gain some more experience before pursuing a Master or PhD program. I currently work at Loggerhead Marinelife Center as a Marine Science Educator and will continue in this position until October 2024. After this, I plan on traveling back to Argentina to visit my family and road trip through the Patagonia. Then, by the start of 2025 I plan on participating in a fellowship either in the Florida Keys, doing coral restoration, or in Washington DC, doing ocean conservation advocacy.

Mackenzie Roberts

CONCENTRATION: Psychology

ADVISOR: Julie Earles, Ph.D.

THESIS: The Effects of Deep Brain Stimulation on the Non-Motor Symptoms of Parkinson's Disease

Electrical stimulation of the brain via implants, also called deep brain stimulation, has been shown to decrease the tremors associated with Parkinson's. However, due to the complex nature of the disease there are many non-motor symptoms that are less noticeable like behavioral changes, sleep disturbances, and social maladjustment. This thesis reviewed studies on the non-motor symptoms to see how quality of life as a whole was improved in patients with Parkinson's after deep brain stimulation.

FAVORITE HONORS COLLEGE MEMORY: When someone I'd never met showed me where all the frogs hung out on campus. There must have been at least ten of them in this broken electrical box in the ground. Welcome to the HC!

AFTER GRADUATION PLANS: I will be attending FAU's graduate program in the Fall to receive a Master's of Science in Communication Sciences and Disorders to prepare for a career in Speech-Language Pathology and specialize in movement disorders. Currently I am working as a Speech-Language Pathology Assistant in a pediatric clinic.

Celia Roberts

CONCENTRATION: Political Science

ADVISOR: Timothy Steigenga, Ph.D.

THESIS: Pentecostalism and Populism: The Evolution and Political Implications of Religious Change in Costa Rica and autocorrection.cancel

The growth of religious pluralism in Latin America has long been a topic of scholarly debate. Driven primarily by the growth of Pentecostal Protestantism and charismatic forms of Catholicism, scholars have disagreed about the political implications of religious change. Early studies posited that Pentecostalism was part of a North American strategy to undermine Liberation Theology in the region. Additional research soon debunked this assertion while documenting the diversity of political tendencies among Pentecostals and Charismatic Catholics. This thesis explores the relatively new phenomenon of populist coalitions of Protestants and Catholics coalescing around social morality issues like gay marriage and abortion. By comparing the cases of Costa Rica and Guatemala, I argue that because Charismatic Catholics and Pentecostal Protestants share a common set of conservative religious beliefs, populist politicians in both countries have discovered that they can be mobilized around issues of social morality.

FAVORITE HONORS COLLEGE MEMORY: Going on a study abroad to Antigua, Guatemala to study immigration and transnationalism, as well a participating in the Leon Charney Diplomacy Program, Morton Research Forum, and representing the Wilkes Honors College at the American Moot Court Association regional competition.

AFTER GRADUATION PLANS: After graduation I will be interning with Congress in Washington DC and applying to law school to earn a JD. I hope to pursue a career in immigration or international law.

Gabrielle Ruiz

CONCENTRATION: Biology

ADVISOR: Kelise Bernot, Ph.D. and Tracy Mincer, Ph.D.

THESIS: Change of Bacterial Diversity Within the Fecal Samples of *Gopherus polyphemus* Over a Period of One Month

I am studying the microbiome of the Gopher tortoise. More specifically, I am observing how natural factors impact the bacterial diversity in their fecal samples over a period of one month.

FAVORITE HONORS COLLEGE MEMORY: Tabling for the Pre-Vet club at CarnivOwl.

AFTER GRADUATION PLANS: I will be attending Cornell University College of Veterinary Medicine in Ithaca, New York to seek my Doctor of Veterinary Medicine degree. I am planning to pursue large animal surgery with a specialty in equine sports medicine.

Maria Saavedra

CONCENTRATION: Psychology

ADVISOR: Julie Earles, Ph.D.

THESIS: The Effects of Exercise on Anxiety: A Correlational Study

FAVORITE HONORS COLLEGE MEMORY: My time is Dr.youngs classes, because she was an amazing teacher. As well as all the events hosted on campus to bring people together.

AFTER GRADUATION PLANS: Prepare for Medical school, while shadowing a pediatrician and working in healthcare.

Claire Sanford

CONCENTRATION: Neuroscience - Neuroscience, Cognition, and Behavior

ADVISOR: Nancy Aaron Jones, Ph.D.

THESIS: Emotional Development in Infants 6 thru 10 Months Old

This study aims to investigate fear in infancy through understanding individual variation in brain waves and the differences in right frontal EEG asymmetry at-rest and when infants are presented with fearful events. Fear is an adaptive response under conditions of danger yet it is important to observe how fear changes in individuals throughout development and in response to experiences as heightened fear is a precursor for anxiety. Infants were assessed in the lab at 6-, 8- and 10-months. The infant's vocalization behaviors during spider and stranger-approach conditions are being coded for level of distress. Frontal lobe EEG activation is also measured at-rest and during the conditions. Our analysis is designed to examine a suspected correlation between emotional responses and changes in functional brain patterns in individual infants as they development. The findings have the potential to enable the identification of emerging risk factors for anxiety during development.

FAVORITE HONORS COLLEGE MEMORY: When I bought Staci the mannequin for Program Board for Halloween Ball in 2022. I never thought she would become a staple in the burrow and HC lore.

AFTER GRADUATION PLANS: My plans are to continue my studies in psychology/neuroscience to eventually get a Ph.D. in clinical psychology.

Richa Saxena

CONCENTRATION: Cellular Neuroscience

ADVISOR: Monica Maldonado, Ph.D.

THESIS: A Comparative Analysis of Global Healthcare Systems and Mental Healthcare

Healthcare systems can vary significantly between regions and countries, influenced by external factors such as economic, social, political, and cultural effects. Access to mental healthcare is a critical component of healthcare systems globally, nonetheless disparities in services and accessibility persist and can pose significant challenges for individuals seeking treatment. This literary analysis thesis aims to investigate and compare the healthcare access differences, specifically in mental health care services.

FAVORITE HONORS COLLEGE MEMORY: I loved the SG x Aatish x ISA Diwali event we did on the Rec field. I had so much fun choreographing, practicing, and performing our cultural dances with everyone. Spending time with our friends that night was so fun!

AFTER GRADUATION PLANS: I will be attending the Wake Forest University School of Medicine.

Ashley Schiffman

CONCENTRATION: Economics

ADVISOR: Kanybek Nur-tegin, Ph.D.

THESIS: A Brief Overview of the Evolution of Payment Systems

Transitioning from a barter society to modern times, the number of technological advancements in the market for payment methods has seen dramatic growth, resulting in a wide array of options available to consumers. By looking at the evolution of payment forms, this paper will provide a framework for understanding how the introduction of new payment systems filled a void in that market and what effect the new options had on the previous market leader.

FAVORITE HONORS COLLEGE MEMORY: Transitioning from a barter society to modern times, the number of technological advancements in the market for payment methods has seen dramatic growth, resulting in a wide array of options available to consumers. By looking at the evolution of payment forms, this paper will provide a framework for understanding how the introduction of new payment systems filled a void in that market and what effect the new options had on the previous market leader.

AFTER GRADUATION PLANS: After graduation, I plan to move to New York City to explore a career in corporate finance.

Rachel Semenchuk

CONCENTRATION: Biochemistry

ADVISOR: Monica Maldonado, Ph.D.

THESIS: How Can Diet Influence Epigenetic Modifications, Affecting Inflammation and Cytokine Production During Menopause?

Diet and nutrition lead to transgenerational and intergenerational inheritance. Compared to fertile women, there is an alteration in the body's immune system, leading to elevated levels of pro-inflammatory cytokines. Epigenetic mechanisms, such as DNA methylation and histone modifications can modulate gene expression without altering the underlying DNA sequence. I really wanted to explore how menopause differs across multiple generations of women and how diet affects these women's' epigenomes.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory is always finding a piano to play, especially the grand piano that was in the auditorium that I played after dinner with my friends.

AFTER GRADUATION PLANS: I plan to apply to FAU's 4+1 Bioengineering Masters Program, and continue to volunteer at the Muscular Dystrophy Association every Summer. I'm always on the lookout for internships that reflect my creativity and passion for Biotechnology!

Emily Serrano

CONCENTRATIONS: Biological Anthropology and Neuroscience

ADVISOR: Jacqueline Fewkes, Ph.D.

THESIS: Anthropological Perspectives on Zika: Investigating Virus Impact, Maternal Health, and Fetal Development in Brazil and Colombia

An anthropological study and thesis investigating the impact of the Zika virus (ZIKV) epidemic on maternal health, fetal development, and cultural perceptions in Brazil and Colombia. By synthesizing existing literature and employing published ethnographic research, it delves into ZIKV's origins, global dissemination, and outbreak dynamics, while examining its effects on fetal brain development and the placental barrier. Through the lens of maternal, caregiver, and healthcare worker perspectives, the study uncovers diverse cultural reactions to ZIKV-related fetal abnormalities. This research offers valuable insights into the interconnected dynamics of health, culture, and disease amidst the Zika epidemic.

FAVORITE HONORS COLLEGE MEMORY: During my time at the Honors College, I actively sought diverse experiences to grow personally. Highlights include studying abroad in Guatemala, representing FAU at the 2023 National Model United Nations Competition in Washington, D.C., leading the SCUBA & Snorkel Club, and competing in the International Submarine Races with the Human-Powered Submarine Team with FAU's College of Engineering & Computer Science.

AFTER GRADUATION PLANS: During my gap year in Panama City Beach, FL, I'll be exploring the healthcare field to gain valuable experience before grad school. I'll also be volunteering to support marginalized communities and help out with feline welfare organizations.

Maiya Singer

CONCENTRATION: Cellular Neuroscience

ADVISOR: Lillian Onwuha-Ekpete, Ph.D.

THESIS: Correlation of Membrane Type 1 Matrix Metalloproteinase (MT1-MMP) Expression to Invasive Potential and Survival of Pancreatic Cancer

Pancreatic cancers are projected to cause 8.3% of cancer related deaths in the US this year. Poor prognosis is associated with difficulty in detection and insensitivity to conventional therapies; both events are linked to the enzyme membrane type-1 matrix metalloproteinase (MT1-MMP). The extracellular component of MT1-MMP is associated with invasion linked to the expression of TKS5, whereas the intracellular domain has been implicated in the regulation of Hypoxia. Hypoxic niches exist in the tumor microenvironment and are known to be resistant to apoptosis. This study seeks to correlate flow cytometric quantification of MT1-MMP expression to TKS5 protein expression determined by western blot analysis among pancreatic cancers exposed to hypoxia. The data herein presented suggests MT1-MMP surface expression increases under hypoxic influence, however this trend is not observed in TKS5 expression. Furthermore, reoxygenation stress did not alter the apoptotic indicator, Caspase 3, but it did unexpectedly increase cellular viability.

FAVORITE HONORS COLLEGE MEMORY: Eating donuts with Michelle at 5am in the lab office, taking Morphology and Function with Kathryn Martin and going to Hawaii for Spring Break.

AFTER GRADUATION PLANS: I will be perusing a career in medicine and plan to get a medical degree in the near future.

Jillian Siverly

CONCENTRATION: Behavioral Neuroscience

ADVISOR: Laura Vernon, Ph.D.

THESIS: Cultural frame switching: The role of language and culture in attitudes towards mental illness

There is a growing body of evidence that the beliefs of bilingual individuals vary based on the language used, in a phenomenon known as cultural frame switching. The current study investigated the influence of language and culture on attitudes towards mental health using the Language Experience and Proficiency Questionnaire, Beliefs Towards Mental Illness Scale, Treatment Seeking Behavior Scale, Abbreviated Multidimensional Acculturation Scale, and Religious Mental Health Stigma Scale. Participants completed the survey in English or Spanish based on their self-reported language proficiency, with Spanish-English bilinguals being randomly assigned to one of the two conditions. The impacts of survey language administration on each of the scales will be examined to either support or negate the theory of cultural frame switching.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory is meeting my boyfriend Jonny and my roommate Ashley. My favorite memory with them is hanging out in the Burrow before the late night breakfast junior year.

AFTER GRADUATION PLANS: I am planning to apply to M.A. programs in Clinical Psychology before pursuing a PhD in Clinical Neuropsychology.

Christian Soares De Oliveira

CONCENTRATION: Data Analytics

ADVISOR: Annina Ruest, Ph.D.

THESIS: Invictus: Nigredo & Calcinatio

A virtual reality game made to engage players in alchemical thinking through processing both what they read in the game and how they progress through the various puzzles.

FAVORITE HONORS COLLEGE MEMORY: Walking down to the beach, staring up at the sky, waiting for our eyes to adjust so we can see the stars. Chatting each other up on science topics from every field of study.

AFTER GRADUATION PLANS: I plan on beginning my career climb to becoming a creative director for a game development company.

Natalie Souza

CONCENTRATION: Biology

ADVISOR: Randy Blakely, Ph.D.

THESIS: Exploring the Role of Inflammatory Cytokines and p38Œ± MAPK in Autism Spectrum Disorder: Implications for Serotonergic Signaling

Exploring the link between Autism Spectrum Disorder (ASD) and hyperserotonemia, my thesis investigates the role of serotonin regulation, focusing on the SERT Gly56Ala mouse model to understand biochemical parallels and potential therapeutic interventions targeting the p38 MAPK pathway.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory revolves around the incredible people I had the privilege to meet and build lasting friendships with. Joining this community has been pivotal in my personal growth, owed much to the inspiring students and faculty I've gotten to know. Sharing these experiences with others has had a significant impact on who I am today, leaving behind sweet and indelible memories.

AFTER GRADUATION PLANS: After graduation, I aspire to attend PA school in Florida, though the specific institution is yet to be determined. My ultimate goal is to specialize in psychiatry, combining my passion for healthcare and mental wellness.

Leighton Stack

CONCENTRATION: Biological Anthropology

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Presence Of Nematodes in Gopherus polyphemus in the Abacoa Greenway

My thesis research used a molecular genetic approach to test Gopherus polyphemus DNA from the gopher tortoises inhabiting the Abacoa Greenway in Jupiter, Florida, for the presence of endo-parasitic nematodes. Nematodes infect the gastrointestinal tract and cause diseases that negatively affect the health of their reptile host. Since gopher tortoises are recognized as a threatened species in the United States and require state-level protection in Florida, knowledge of parasitic prevalence in this isolated population is important in understanding Nematode‚Äôs contribution to the threats facing gopher tortoises.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory is intramural beach volleyball where I played my favorite sport with some of my closest friends.

AFTER GRADUATION PLANS: Following graduation, I am planning to pursue additional education and licensing in the healthcare field of midwifery.

Genevieve Sylvester

CONCENTRATION: Marine Biology

ADVISOR: Jon Moore, Ph.D.

THESIS: Physical Abnormalities Present in *Caretta caretta* (Loggerhead Sea Turtle) and *Chelonia mydas* (Green Sea Turtle) Hatchlings Due to Temperature Conditions in the Nests During Incubation

Sea turtle abnormalities can be caused by increased incubation temperatures. The goal of this project was to test the amount of abnormalities between each year and each incubation period (early, middle, and late) and to test if the mean incubation temperatures between the years were significant. Increasing incubation temperature is just one aspect of climate change that will influence nesting beach habitats and the survivability of sea turtles (Fleming 2019). Data has been compiled from 2018 to 2023 on the type and amount of abnormalities from each clutch that comes into the Florida Atlantic University Marine Lab. Two-tailed T-tests were used to help determine if the differences listed above are significant or not. This study is important of determining if increased temperatures over the years are affecting sea turtle nests and if the increase in abnormalities is affecting the population.

FAVORITE HONORS COLLEGE MEMORY: My favorite memory at the Honors College was when I was hired to work as an operations manager at Burrow. This on-campus job helped me make better connections with students and staff, and I feel it made me a better individual.

AFTER GRADUATION PLANS: Because I graduated in December 2023, I am already a Marine Science and Oceanography (MSO) Master's student at Florida Atlantic University in the FAU Elasmobranch Lab - where we study shark migration. My master's project/thesis will consist of looking at the behavioral responses and kinematics data of different shark species through GoPro footage. I am also a Graduate Teaching Assistant for the College of Science.

Maciej Tadla

CONCENTRATIONS: Biological/Physical Science - Marine Biology

ADVISOR: Jon Moore, Ph.D.

THESIS: Comparing species distribution of barnacles in the intertidal zones at Jupiter Inlet in Jupiter, Florida and North Jetty Beach in Nokomis, Florida

Intertidal organisms are important to the marine ecosystems. Many of these organisms are bioindicators which provide information on changes in the environment. The main organism group that will be monitored are the barnacles in the intertidal zones. Barnacles are filter feeders which grab particles from the water leaving clean water. This study is aimed to determine population distribution and specie richness of different species of barnacles in two different locations, one found on the West coast of Florida and the other location in the East coast of Florida

FAVORITE HONORS COLLEGE MEMORY: Becoming friends with my first roommates during freshman year.

AFTER GRADUATION PLANS: Taking a year off school and helping with the family business.

Michael Thayer

CONCENTRATION: Interdisciplinary Math Science

ADVISOR: Kanybek Nur-tegin, Ph.D.

THESIS: Is Airbnb Impacting Home Prices? Evidence from Fort Lauderdale

This paper assesses the role of Airbnb concentration on home prices in Fort Lauderdale from October 2021 to December 2022 using a first difference fixed effect model and data scraped from the Airbnb website via InsideAirbnb. The results from the model suggest higher Airbnb concentration leads to higher home prices. For a home priced between the 35th and 65th percentile, an additional one percent of Airbnb concentration causes prices to increase by 3.5 percent.

FAVORITE HONORS COLLEGE MEMORY: Winning IM basketball and volleyball tournaments.

AFTER GRADUATION PLANS: I will be going to California to work in data analytics.

Kateryna Tsekhmayster

CONCENTRATION: Political Science

ADVISOR: Timothy Steigenga, Ph.D.

THESIS: The Effects of Sovietization and Russian Powers on Democratic Development: A Study of Belarus and Lithunia

During the Soviet Union, Lithuania maintained its relative cultural heritage and language despite the stern Russification policies of the Soviet regime. Meanwhile, Belarus has been defined as a nation without a nation due to the loss of its cultural identity. The Russification policies which aimed to eradicate cultural differences date back to Alexander II. The policies maintained that Belorussians and Ukrainians are lesser Russians, while Lithuanians are neither Poles nor Russians and must be indoctrinated with Orthodox Christianity. Initial national classifications of Lithuanians and Belorussians caused a strong Lithuanian resistance to the Soviet regime and a weak or indifferent resistance among Belorussians. Due to the lack of national spirit in Belarus, the state has failed to adopt democratic principles in the long run. The people of Belarus continue to live under a nearly Communist government with human rights abuses, while Lithuanian democracy continues to prosper. Russia maintains the current president Lukashenka in power, by increasing lending and investment into the Belorussian regime, which continues to repress its people.

FAVORITE HONORS COLLEGE MEMORY: Participating in the Model United Nations Conferences.

AFTER GRADUATION PLANS: Working for the Mayor of the City of West Palm Beach, while furthering my education with a Masters degree.

Randolph Tubbs

CONCENTRATION: Economics

ADVISOR: Kanybek Nur-tegin, Ph.D.

THESIS: The Effect of Retirees on Palm Beach County Home Pricing

Utilizing econometric analysis to determine whether retirees bid up local prices and by how much.

FAVORITE HONORS COLLEGE MEMORY: Playing Ultimate Frisbee with fellow students and alumni.

AFTER GRADUATION PLANS: Plan on finding a position in local government, either the county or a municipality depending on which has the best offer.

Mia Vila

CONCENTRATION: Cellular Neuroscience

ADVISOR: Erik Duboué, Ph.D.

THESIS: Long-term Behavioral and Neural Impairments in Adult Mice with Pre-natal Oxycodone Exposure

Chronic use of opioids during pregnancy can result in neonatal abstinence syndrome in the newborn, as well as developmental and behavioral deficits during childhood. The long-term consequences during adulthood are unclear but preclinical models suggest enduring cognitive behavioral problems. In a mouse model we identified sex specific heightened impulsive-like behavior in adults with prenatal oxycodone exposure. We hypothesized that this behavioral change is subserved by changes in connectivity of the orbitofrontal cortex (OFC), a brain area implicated in impulse control and value encoding. Using cell type specific retrograde viral tracing method, we characterized brain wide presynaptic partners of the OFC that revealed hyperconnectivity with the basolateral amygdala in adult male mice with prenatal oxycodone exposure. Ongoing research is aimed at determining any relationship between the behavioral and connectivity changes. The findings of this study are providing important insights into the long-term behavioral and neural consequences of prenatal opioid exposure.

FAVORITE HONORS COLLEGE MEMORY: Passing time in the study rooms laughing with my friends.

AFTER GRADUATION PLANS: After graduation I plan on taking a gap year and gain clinical experience before applying to Medical school.

Allen Vo

CONCENTRATION: Political Science

ADVISORS: Mark Tunick, Ph.D. and Christopher Strain, Ph.D.

THESIS: The Internet's Echo Chambers and Their Effect on Violent Radicalization, Information Disorder, and Hate Speech

My thesis aims to investigate Internet, "echo chamber," culture and its effect on information disorder, hate speech, and violent radicalization. I argue that echo chambers expedite the rise of fake news, disorders of information, and hate speech, and promote violent radicalization of targeted groups primarily on social media. An issue I address is whether censorship of echo chamber rhetoric will cause more negative than positive effects within social media communities.

FAVORITE HONORS COLLEGE MEMORY: Getting a cup of coffee in the cafeteria every morning right before class.

AFTER GRADUATION PLANS: Get into Law school in Orlando or Tampa

John Vo

CONCENTRATION: Neuroscience

ADVISOR: Kelsie Bernot, Ph.D.

THESIS: Acute and Chronic Stress: Effects on Mice Feeding Behavior

My project monitors food consumption in response to corticosterone injections. We used immunohistochemistry and imaged the IC to see the effects corticosterone has on cFos neurons; then we used ELISA kits to control for our corticosterone model. We found that by acutely exposing mice to corticosterone, mice ate less than their control counterparts.

FAVORITE HONORS COLLEGE MEMORY: Playing volleyball in the Intramurals.

AFTER GRADUATION PLANS: I plan to gain more research experience as an industry worker in Miami.

Anthony Ward

CONCENTRATION: Biology

ADVISOR: James Wetterer, Ph.D.

THESIS: TA Study of the Mycological Fitness of Fungi in the Abacoa Greenways

I am collecing samples of different species of fungi and recording the environment, soil type, and other notable features about where they were collected. I am then taking the samples and shipping them to the Ohio Mushroom DNA Lab for genetic sequencing. This information is then used to describe what genes may improve or be essential for fitness in the environment of the greenways.

FAVORITE HONORS COLLEGE MEMORY: Freshman year my buddy Rayder and I cooked and passed out free sausages from the grill between RH1 and RH2.

AFTER GRADUATION PLANS: I will be attending the Lloyd L. Gregory School of Pharmacy at Palm Beach Atlantic University to complete my Doctorate in Pharmacy to pursue a job in the phamaceutical sciences.

Mikayla Wiglesworth

CONCENTRATION: Psychology

ADVISOR: Laura Vernon, Ph.D.

THESIS: Examining the Effects of a College Support Program for Foster Youth

Foster children age out of the system at 18 years of age. This is a vulnerable age to be cast out into society without prospects of shelter, food, a job, and education. There are many colleges that provide care for foster youth to help them succeed in society. One of these organizations being Champions Empowering Champions. We will be studying the experiences that foster students at FAU have with Champions Empowering Champions and how this organization truly impacts those that are a part of it.

FAVORITE HONORS COLLEGE MEMORY: My favorite Honors College memory was my last class trip to universal and how it rained the whole day. My boyfriend and I decided to go on the ride (the Hulk) since it finally opened up and we got pelted with rain on the ride that was going 67mph and couldn't open our eyes and we were laughing the whole time.

AFTER GRADUATION PLANS: After graduation, in the fall I will be attending FAU to receive my masters degree in social work. I will also get a job at an organization like Place of Hope with the goal to enter the career field as a licensed therapist, specializing in children and families within the foster care system.

Kaira Yee

CONCENTRATION: Behavioral Neurology

ADVISOR: Shaina Rowell, Ph.D.

THESIS: The Role of Language as an Activator of Cultural Identity in Bilingual Autobiographical Memory

Autobiographical memory, the recall of personal past events, is a crucial cognitive human feature that allows for the formation of personal narratives and self-concept. Culture and language can influence autobiographical memories through the different socialization practices in distinct societies.The cultural expectations of a society shape the cognitive framework through which memories are filtered. In this project, I explore how bilinguals exhibit a dynamic cognitive framework when accessing autobiographical memories, with language serving as a primary activator of cultural identity.

FAVORITE HONORS COLLEGE MEMORY: Any of the spontaneous plans made with my friends will be nostalgic to me. It was very easy to rally friends to go on late night walks around campus or Abacoa and just talk about life. Other times we would make spontaneous food plans. Our favorite place to eat is Aroma, an Indian restaurant. Any moment spent with my college found family was worthwhile and all of the friends that I've made along the way at the HC are very special to me.

AFTER GRADUATION PLANS: I plan to pursue a Master's degree in Forensic Psychology.

Matthew Zoll

CONCENTRATION: Marine Biology

ADVISOR: Jon Moore, Ph.D.

THESIS: An Analysis of the Biodiversity and Vertical Ecology of Scopelarchid and Evermannellid Fishes in the Gulf of Mexico

In my thesis I identified the Scopelarchid and Evermannellid fishes caught by the DEEPEND Project in the Gulf of Mexico. I also determined if any of those species conduct a daily vertical migration.

FAVORITE HONORS COLLEGE MEMORY: Spending time with my friends at events such as Carnivowl. It was fun to play carnival games, ride rides, and just hang out with them and forget about my worries for a while.

AFTER GRADUATION PLANS: I will be taking a gap year or two but afterwards I plan on attending graduate school and working to earn a doctorate. I do not know where yet, but hopefully it would be somewhere I can work in the biological sciences.

Medallion Ceremony Awards 2024

HARRIET L. WILKES HONORS COLLEGE AWARDS

Ishama Medilien
Outstanding Senior

Jacob Carlson
Outstanding Junior

Isabelle Solages
Outstanding Sophomore

Vincent Stafford
Outstanding First Year

Arielle Perry and Ashley Perry
Outstanding Scholars

Camila Rimoldi Ibanez
Distinguished Service Award

Ellie Pfahler
Distinguished Community Service

2024 Outstanding Thesis Awards

Briana Abraham
Advisor: Catherine Trivigno, Ph.D.

Ianis Ciolacu
Advisor: Catherine Trivigno, Ph.D.

Dakota Cogliati
Advisors: Chitra Chandrasekhar and William O'Brien

Allison Dobuler
Advisor: Shaina Rowell, Ph.D.

Gavin Dunsby
Advisor: Christopher Ely, Ph.D.

Luna Forero
Advisor: Chitra Chandrasekhar, Ph.D.

Daniela García Moreno
Advisors: Monica Maldonado, Ph.D. and Carmen Cañete Quesada, Ph.D.

Amparo Godoy Pastore
Advisor: Terje Hill, Ph.D

Braden Haggart
Advisor: Andia Chaves Fonnegra, Ph.D.

Westin Johnson
Advisor: Terje Hill, Ph.D

Liberty Juno
Advisors: Jon Moore, Ph.D. and Erik Duboué, Ph.D.

Jenna Leali
Advisor: Warren McGovern, Ph.D.

Ishama Medilien
Advisor: Timothy Steigenga, Ph.D.

Zoe Payner
Advisor: Rachel Corr, Ph.D.

Arielle Perry
Advisor: William O'Brien, Ph.D.

Ashley Perry
Advisors: Sondra Washington, Ph.D. and Wairimũ Njambi, Ph.D.

Camila Rimoldi-Ibanez
Advisors: Andia Chaves Fonnegra, Ph.D. and Yaouen Fily, Ph.D.

Emily Serrano
Advisor: Jacqueline Fewkes, Ph.D.

Bruna Sharkey

Advisor: Jon Moore, Ph.D. and Dorotha Lemeh, Ph.D.

Jillian Siverly

Advisor: Laura Vernon, Ph.D.

Christian Soares de Oliveira

Advisor: Annina Ruest, Ph.D.

Ritvik Kesharaju

Advisor: Chitra Chandrasekhar, Ph.D.

Notes and Thoughts

Celebrating

1999 | 2024

25 YEARS OF Honors

SAVE THE DATE

Thursday, Nov. 14
The Pelican Club, Jupiter