



SPRING ANNUAL RESEARCH CONFERENCE

AGNES SCOTT
C O L L E G E

TUESDAY, APRIL 23, 2024

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Table of Contents

Morning Poster Session, 9:15-10:15am Baker Atrium, Bullock Science Center <i>Participants listed in order of first author's last name</i>	pg 3
Morning Presentation Sessions, 10:20-12:00pm Bullock Science Center <i>Listed in order of time slot and classroom</i>	pg 20
Music Performances, 10:00am-12:00pm Maclean Auditorium, Presser Hall	pg 41
Scottie Math Bowl, 12:00-1:30pm Lower Evans Dining Hall	pg 42
Afternoon Poster Session, 1:30-2:30pm Baker Atrium, Bullock Science Center	pg 42
Afternoon Presentations, 2:30-3:50pm Bullock Science Center	pg 57
Theatre & Dance Performances, 2:30-4:30pm Winter Theatre, Dana Fine Arts Building	pg 71
Student Art Exhibition & Closing Reception, 4:30pm Dalton Gallery, Dana Fine Arts Building	pg 73

** The poster materials for SpARC 2024 are sponsored in part by the Jessie Ball duPont Fund. The Jessie Ball duPont Fund expands the provision of services designed to ensure students in STEM majors have access to support resources and experiences needed to be successful in STEM graduate training and post-graduate careers.*

MORNING POSTER SESSION, 9:15-10:15AM, Baker Atrium, Bullock Science Center
Listed in order of first author's last name

Exploring the window into the mind: Pupillometry's gaze into metacognition

Author(s): Rose H. Amedi, Keren N. Kimani, Katherine C. Mazour, Raja A. White
Advisor: Bonnie Perdue

Abstract: Scientists have long been interested in the relationship between pupil dilation and cognitive processes such as metacognition. We piloted to assess implicit metacognitive measures and pupil dilation in a memory task. We tested college students to assess the feasibility of presenting an eye-tracking task to children using the Tobii Nano Pro eye-tracking device. Participants during the learning phase watched paired associations between animals and objects. Following this phase, a 2-minute OSPAN test was given to participants to serve as a distractor task while experimenters converse to disrupt the participant's memory of the paired associations. Subsequently, in the testing phase, a recall test and confidence judgment scale were given to participants to determine whether the slideshow would prompt or 'trigger' the participants to remember the object paired with the animal previously, and if the associations were remembered correctly the pupils would dilate. The study's results revealed that while there was no significant difference in confidence judgment for remembered to non-remembered items, participants' pupils did significantly enlarge when looking at correctly remembered items rather than incorrectly remembered items. These findings corroborate previous research on the subject and suggest that pupil size is a strong implicit indicator of cognitive abilities before the emergence of explicit cognitive abilities.

More Than Just a Shadow: The Piedmont Henry Internship Experience

Author(s): Kaiya Banks
Advisor: Dr. Shoshana Katzman

Abstract: As a master's student in the Accelerated Medical Sciences program, my goal is to expand and diversify my experiences in the healthcare field so that I can become a more competitive applicant for medical school. During my program, I had the opportunity to internship at Piedmont Henry. I was able to shadow a variety of healthcare professionals and enhanced my skill set in different departments in the hospital. Over the course of 12 weeks, I rotated through different departments every Friday in either 4 hour to 8 hour shifts and had the opportunity to shadow and assist Patient Care Techs (PCTs), nurses, and other healthcare professionals. Before immersing ourselves into our shadowing experiences, we were able to learn and add on to our scope of skills through code blue practice, restraint certification, and effective bedside manner technique. After each rotation, we reflected upon the knowledge and experience we gained from that department by linking what we learned to the competencies provided by the AAMC, that medical schools often look for in prospective medical students. The experiences from the internship has allowed me to enhance a plethora of competencies, most notably my empathy and compassion, teamwork, and communication. By being a part of an internship program, I learned the importance of being open minded to new specialties and pathways to medicine, gaining hands-on experience and direct patient care, embracing the uniqueness and individuality of each patient case, and overall, with every shift rediscovering why I am passionate about pursuing medicine.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

TP53 and TTN Mutations in Ovarian Cancer: Insights and Implications

Author(s): Taniyah Bartley

Advisor: Dr. Jennifer Hurst-Kennedy

Abstract: Ovarian serous cystadenocarcinoma (OSC) represents the predominant subtype of epithelial ovarian cancer, characterized by fluid-filled cysts on the ovary's surface. Extensive research has explored the roles of TP53 and TTN genes in ovarian cancer, including OSC. TP53, a well-known tumor suppressor gene, commonly exhibits mutations across various cancers, impacting tumor progression. Conversely, TTN mutations, also prevalent in muscular disorders, have been identified in ovarian cancer, though their clinical significance remains unclear. Utilizing human OSC patient genomic data from cBioPortal and the Firehose Legacy, an in-depth analysis of TP53 and TTN mutations was conducted to determine the roles of TP53 and TTN in OSC. The findings revealed that missense mutations predominantly drive OSC in TP53, suggesting their central role in the disease process. The Kaplan Meier plots also showed that there was no significance between unaltered patients and those with TP53 and or TTN mutations. Similarly, TTN mutations primarily involve missense alterations, yet their specific impact on OSC remains uncertain. This investigation aims to refine diagnostic and therapeutic strategies for ovarian cancer by leveraging the insights gained from TP53 and TTN mutations. The identification of TP53 mutations as potential early drivers of disease progression and the potential use of TTN mutations as prognostic markers offer promising avenues for personalized treatment approaches.

Morning Poster Session: 9:15-10:15am Bullock Science Center Lobby

Exploring Metacognitive Judgements of Learning in Preschool Children

Author(s): Katy J. Broussard, Kimberly R. Clarke, Sophie N. Harris, Nadia M. Jackson, & Bonnie M. Perdue

Advisor: Dr. Bonnie Perdue

Abstract: Metacognition refers to a person's ability to reflect on and understand their cognitive processes and strategies. This understanding aids in monitoring and regulating cognitive performance. Judgments of Learning (JOLs) refer to the metacognitive prediction or guesses that an individual makes about their ability to recall information. Value-based remembering refers to the ability to prioritize the retention of explicitly valuable information over other types of information. In this study, we explored whether incorporating "high" vs "low" value days would influence memory and confidence judgments. This was accomplished by using a "Popcorn/ Helper Bear" task to assess whether value-based feedback affected the judgment of learning in preschool-aged children, in Decatur, Georgia. We found that value-based feedback had a slight effect on accuracy, use of helper bear, and confidence judgment in preschool children. High-value days led participants to subjectively rate trails as more difficult, had a lower accuracy, and had more uses of helper bear.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Shaping Excellence: A Journey through Clinical Shadowing and the Impact on Pre-Medical Core Competencies

Author(s): Reagen Bruce

Advisor: Shoshana Katzman

Abstract: As a student aspiring to enter the medical field, possessing a diverse set of skills and attributes is crucial for standing out among the competitive pool of medical school applications. As a master of science in Medical Sciences Student, I participated in an internship (MDS-650) experience at Piedmont Henry Hospital in Stockbridge, GA. This internship allowed me to explore various medical specialties, gain insights into the complexities of patient care workflows, and understand the day-to-day operations of the healthcare team. During my time at the facility, I actively observed patient-provider consultations, discovered an array of diagnostic procedures and treatment protocols, and interacted with patients and their families in various departments, ranging from Med-Surg to the Cath-Lab. This experience not only deepened my grasp of medical concepts but also facilitated the development of essential professional attributes including enhancing my interpersonal skills and reaffirming a commitment to lifelong learning and personal development. Overall, this life-changing experience has enhanced my pre-medical competencies and instilled in me a steadfast determination to pursue a career in the medical field.

Tree Biodiversity in Urban and Non-Urban Forests

Author(s): Rowan Christopher, Morgan Daise

Advisor: Jennifer Kovacs

Abstract: As cities continue to expand, established natural forests will grow more urban, and it is important to study the implications of that on the existing ecosystem. Furthermore, in order to protect new and established urban forests, it is imperative to first know how they function. This research examines the differences between growing strategies of tree species in urban forests and nonurban forests. Growing strategies for tree species in urban forests and their nearest National Ecological Observatory Network (NEON) sites were characterized by assigning each species a competitive: stress-tolerant: ruderal (CSR) score. Ternary plots were generated and visually compared between urban forests and their nearest NEON site.

From this data, three conclusions were drawn: species that grow in urban forests are more ruderal, between urban forests, species growing in forests with higher levels of disturbance tended to be more ruderal, and between nonurban forests at increasing latitudes the standard deviation of CSR scores increased. Overall, the research concludes that the growing methods employed by trees in urban forests differ from those in non urban forests due to differences in latitude and disturbance levels. This information can contribute to the understanding of urban forests and this procedure be used in further studies in urban forests and areas of historical disturbance.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Does alteration of either the APC or TP53 genes best predict the survivability in metastatic colorectal cancer?

Author(s): Jamison Darden

Advisor: Jennifer Hurst-Kennedy

Abstract: This study aimed to discover whether alteration of either APC or TP53 genes best predicts survivability in metastatic colorectal cancer (CRC), using CRC patient genomic sequencing data from the 2020 Pan-Cancer Atlas. APC and TP53 were chosen due to having the highest rate of mutations in metastatic CRC. Both genes are tumor suppressors whose normal function negatively regulates cell proliferation. The experimental groups were defined as having one or more mutated genes (TP53, APC, APC+ TP53) and the unaltered group (APCwildtype and TP53wildtype) served as the control. An oncoprint was used to pinpoint the specific mutations in the APC and TP53 genes. The oncoprint showed truncated APC gene mutations were common in CRC likely causing overstimulation of the Wnt signaling pathway resulting in uncontrolled Wnt-mediated gene expression and proliferation. Additionally, missense and truncated TP53 mutations were common in CRC, possibly contributing to metastatic CRC by allowing cells to bypass cell cycle checkpoints causing uncontrolled cell growth. Additionally, a Kaplan-Meier survivability graph was used to compare the rates of survivability between the mutated genes and the unaltered group. Based on the data, APC has a higher survivability compared to TP53. A combination of mutated APC and TP53 has a value of survivability medial to two genes individually. The low p-value suggests statistical significance that APC mutations have a higher chance of survivability than a TP53 mutation. This suggests that for further diagnostic testing and treatment options, TP53 mutations should be targeted first in comparison to APC to increase survivability in patients.

From Homer Simpson to Walter White: The Relationship Between Exposure to Popular Fictional Depictions of Fatherhood and Fatherhood Beliefs and Behaviors

Author(s): Bailee DeShong, Bailee DeShong, Nia Sanders, Tiffany Hernandez-Salinas, and Solveig Svennevig-Brosi, Marls Loyd, Janese Bennett, Amani Smith, Marissa Ryals

Advisor: Stephanie Stern

Abstract: Fathers play a crucial role in shaping both their children's development and the broader societal landscape (Kopystynska et al., 2023). The prevalence of depictions of fatherhood in media significantly influences expectant parents' beliefs, with research suggesting that perceived realism of TV portrayals plays a stronger role in shaping attitudes towards fathers' importance in child development compared to mere exposure to TV fathers, especially among men (Kuo & Ward, 2016). Based on these findings, it is necessary to further develop our understanding of this relationship. This study focused on the relationship between popular fictional depictions of fatherhood and real-world fathering beliefs and behaviors.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

The effects of music exposure on anxiety and depression levels in the SHANK3B mouse model for ASD

Author(s): Tess Dishaw, Myah Hasan, Rebecca Littlehale, Marls Loyd, Jennifer Larimore PhD

Advisor: Dr. Jennifer Larimore

Abstract: Autism Spectrum Disorder (ASD) has been diagnosed in approximately 1% of people worldwide and is characterized by repetitive and/or restrictive behaviors; and social interaction, learning, and memory alterations. The primary cause of ASD is not well understood. The SHANK3B mice serve as a mouse model of ASD and have a SHANK3 gene deletion. SHANK3B is a gene that is important in linking ionotropic NMDA receptors to metabotropic mGlu5 receptors, and this linkage is a necessity for proper neuroplasticity and synapse formation. SHANK3B mice demonstrate impaired social interaction, communication deficits, and repetitive behaviors. Music that has been used as a holistic treatment for a variety of conditions, including anxiety disorders. Through the use of SHANK3B and control (C57/B6) mice, biological behaviors will be analyzed with forced swim and open field tests to determine if these mice, when exposed to music of a specific frequency, demonstrate any significant changes in anxiety and depressive symptoms. It is predicted that exposure to music will decrease levels of anxiety and depression evidenced by the open field test and forced swim test, respectively, in the SHANK3B mice in comparison to C57/B6 mice.

Annotation of Widerborst in *D.albomicans*

Author(s): Morgan Durham, Kaoutar Elasri, Mira Katt

Advisor: Srebrenka Robic

Abstract: Gene annotation is the process of understanding the structure and function of a genome. The gene our team was tasked with annotating is Widerborst in recently sequenced fruit fly species *D. albomicans*. The Widerborst gene in *D. melanogaster* is associated with a subunit of phosphatase 2A, an enzyme involved in glycolysis. Thus, this gene is involved in the determination of adult lifespan, negative regulation of lipid storage, and regulation of signal transduction. Additionally, this gene is orthologous to PPP2R5E in humans, known to code for the B' subunit of phosphatase 2, part of the insulin signaling pathway. Though identified in *D. melanogaster*, little work has been done identifying this same gene in our fruit fly of interest, *D.albomicans*. As part of the Genome Education Partnership Pathways Project, utilizing NCBI Blast and the UCSC genome browser, we compared the known Widerborst gene in *D.melanogaster* to a suspected ortholog in *D.albomicans*. We were able to identify an orthologous gene on the 2R chromosome in *D.albomicans*. While annotating the structure, using data from Gene Record Finder, we found that this gene contains seven isoforms and seven exons. One of the isoforms is significantly different from the others, which brings us to the conclusion that we are annotating two isoforms instead of seven.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Define Doctor: Empathy and Compassion

Author(s): Selina Gerdes

Advisor: Dr. Shoshana Katzman

Abstract: As a student in the Master of Science in Medical Sciences Program at Agnes Scott College, I participated in an internship MDS-650. at Piedmont Henry Hospital. This internship aims to provide an immersive experience to introduce students to the real world of medicine. During the internship, I rotated in various hospital departments and observed different healthcare team members, ranging from Certified Nursing Assistants (CNA) to Physicians. To gain as much from this experience as possible, before starting my internship, I set a goal to enhance two core competencies that medical schools evaluate in their candidates, as stated in the AAMC pre-medical guidelines. These competencies include empathy, compassion, and communication.

During my rotations, I comforted patients' families who were in distress, conversed with patients who just needed some distractions, and sat with patients who were vulnerable and alone. While observing different departments in the hospital and learning about the care different levels of healthcare workers provide, I learned to become confident when answering or asking questions when interacting with staff members during busy times. When communicating with patients, I learned to talk sincerely, empathetically, and informatively to avoid miscommunication or misinterpretation. During those experiences, I strengthened my abilities in the areas of empathy, compassion, and communication, which are important for me to have as a future doctor. These experiences have confirmed my desire to become a doctor and my abilities as a future physician.

The effect of Linalool lavender essential oil on female SHANK3B mice

Author(s): Sophie Gregoretti, Shaky'ra Blades, Lilly Brandt, Isis Franklin

Advisor: Jennifer Larimore

Abstract: The connection between autism spectrum disorder (ASD), depression, and anxiety is complex and varies from individual to individual. Research suggests that individuals with ASD may be more susceptible to these mental health challenges than the general population. (Hollocks et al., 2019). Previous studies have shown that inhalation of the active ingredient in lavender essential oil, linalool, has anxiolytic effects on male swiss mice (Chicoa et al., 2013). In an effort to ameliorate symptoms of depression and anxiety in the SHANK3B mouse model of ASD, we investigated the impact of inhalation of linalool in lavender oil in female SHANK3B mice. We conducted both open-field tests (OFT) and forced swim tests (FST) to measure anxiety-like and depression-like behaviors, respectively. We predict the linalool essential oil to decrease anxiety and depressive-like behaviors observed via FST and OFT in female SHANK3B mice. These data could lead to novel therapeutic interventions in neurodevelopmental disorders.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Rare grassland plant surveys and seed collection in the Georgia Blue Ridge and Ridge and Valley Regions

Author(s): Isabelle Grovenstein

Advisor: Jennifer Kovacs

Abstract: In 2023, I volunteered with the Southeastern Grasslands Institute (SGI) to fulfill the objectives of the Marie Mellinger Field Botany Grant awarded by the Georgia Botanical Society. There were two goals for the grant: surveying and seed banking rare plants of Northwest Georgia. I led surveys for *Solidago porteri*, a species for which there are only 4 known occurrences, one of which was recently extirpated. The purpose of the seed collections is to preserve the genetic integrity of rare and declining grassland plant populations in the Southeast in SGI's Conservation Seed Bank. We targeted rare species that were, to our knowledge, either not represented in any seed banks or whose ecotypes are not represented in seed banks. We determined sampling locations by working with other botanists, including those at Georgia Department of Natural Resources (GA DNR), to locate the appropriate habitats for surveys and collecting locations. For seed collections, we followed protocols adhering to best practices set forth by the Center for Plant Conservation. We combed six locations with suitable habitat for *Solidago porteri*. We did not find any new occurrences of the species, but we hope to continue these surveys in the future. We collected seeds from eight of the twelve target species we had permits for collecting. Many of the Georgia populations of these species were previously unrepresented in seed banks. We also uncovered a new population of the federally endangered species *Xyris tennesseensis* on protected property, the first newly recorded occurrence in fifteen years. The funding from Georgia Botanical Society provided a great opportunity for me, an undergraduate student, to engage in hands-on plant conservation work.

Identity Orientation and Color-Blind Racial Attitudes

Author(s): Sophia C. Hom, Peeper McDonald, and Taylor Jaczko, Dr. Peeper McDonald, Taylor Jaczko

Advisor: Dr. Peeper McDonald

Abstract: This study explored the relationship between racial identity, identity orientation, and color-blind racial attitudes. Investigation of these topics is critical because it helps us better understand the complexities of racial colorblindness and address it as a social justice issue. 805 participants between the ages of 18 and 78 ($M = 32.73$, $SD = 10.411$) completed a remote, virtual survey containing the Color-Blind Racial Attitudes Scale (CoBRAS; Neville et al., 2000; $M = 57.173$, $SD = 10.359$) and the Aspects of Identity Questionnaire-IV (AIQ-IV; Cheek & Cheek, 2018; $M = 36.363$, $SD = 6.75$). Our sample was collected through convenience and snowball sampling. An independent samples t-test and a Pearson's r correlational analysis were used to analyze the data in this study. The difference in mean CoBRAS sum scores between White participants ($M = 58.973$, $SD = 9.802$) and Black, Indigenous, and People of Color (BIPOC) participants ($M = 52.356$, $SD = 10.291$) was statistically significant, $t(803) = 8.407$, $p < .001$, $d = 0.666$. There was a significant positive correlation between CoBRAS scores and AIQ-IV scores for White participants, $r(586) = .357$, $p < .001$, and there was a significant negative correlation between the two variables for BIPOC participants, $r(219) = -.252$, $p < .001$. The findings from this study provide helpful insights for individual anti-racism work, ideas for further research on racial colorblindness, and potential anti-racism learning opportunities for graduate students or professionals in the field of psychology.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

How Trans and Gender-Expansive Youth Describe Psychological Safety: A Qualitative Content Analysis

Author(s): Sophia Hom, Megan Patrick, Jennifer Fulling-Smith, Taylor Jaczko
Advisor: Jennifer Fulling-Smith

Abstract: Psychological safety, defined as feeling safe enough to take interpersonal risks without fear of backlash, is a concept that has not been adequately addressed when it comes to transgender and gender-expansive youth (TGEY). TGEY tend to face increased difficulties in multiple areas of life when compared to peers, such as not feeling accepted and dealing with increased mental health issues, meaning that they likely have a specific definition of psychological safety. The present study used purposive and snowball sampling to collect participants who identified as TGEY. Data was collected via interviews, and analyzed through relational content analysis, from nine participants. Five factors were identified as being facilitators of psychological safety, while three factors were identified as being barriers to psychological safety. The facilitative factors included: (a) demonstration of allyship and support, (b) commonalities, (c) respect, (d) unconditional love and support, and (e) internal factors (as facilitators). The three factors that posed barriers included: (a) lack of unconditional love and support, (b) unfair treatment, and (c) internal factors (as barriers). This study helped to determine how best to support TGEY so that they feel psychologically safe in various aspects of life. Implications include working to demonstrate and verbalize their acceptance and support for TGEY clients, advocating for TGEY in family counseling, and continuously maintaining confidentiality and fighting legislation that attempts to prevent them from doing so.

Impact of Instrumental Music on Anxiety-like Behavior in SHANK3B and C57/B6 mice

Author(s): Laila James, Lila McMaster, Rachel Hill, Rachel Mabrey
Advisor: Jennifer Larimore

Abstract: Anxiety is an involuntary response to stimuli that stems from the anticipation of some form of danger. Prior research has shown the benefit of exposure to music in reducing anxiety-like behaviors in C57/B6 mice, but no research has explored the impacts of specifically instrumental music on SHANK3B mice. In this study, we exposed both C57/B6 and SHANK3B mice to instrumental music over a period of two weeks for one and a half per day. After a two-week time period, the forced swim test and open field test was performed on both groups of mice. These results may demonstrate the therapeutically beneficial effect of instrumental music on autistic individuals.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

The Impact of Nebular Line Emission on SED-Derived Galaxy Properties

Author(s): Grace Krahm, University of Florida, Desika Narayanan

Advisor: Paul Wallace

Abstract: Spectral energy distribution (SED) modeling is commonly used in observational studies to estimate the stellar mass of a galaxy. However, this method relies on several sets of assumptions in the radiative transfer process such as the galaxy's star formation history and its impacts on the dust and gas in the galaxy. Nebular line emission from the HII regions around young stars can be an unexpected source of detected flux from the galaxy which impacts the SED modeling. Observationally detecting these nebular lines can be very time-intensive and often impossible for galaxies that are farther away. We construct synthetic SEDs with and without nebular lines using the Powderday radiative transfer code on galaxies from the SIMBA hydrodynamical simulations. By backwards modeling and fitting the SEDs with Prospector, we can quantify to what extent nebular lines impact estimated stellar masses throughout cosmic time.

Investigating Mipp2: Annotated Insights into its Role in the Insulin Pathway of *Drosophila biarmipes*

Author(s): Anjali Kunnatha, Ndongwa Pemba

Advisor: Srebrenka Robic

Abstract: The insulin signaling pathway is crucial to animal development and metabolic homeostasis. The pathway is well-researched and known to be highly conserved throughout the fruit fly *Drosophila* genus. Various genes are involved in this pathway; one of which is Multiple inositol polyphosphate phosphatase (Mipp2), which is suggested to enable inositol polyphosphate phosphatase activity which is critical in the regulation of the insulin pathways in *D. melanogaster*. However, the structure of this gene in other species is uncertain. Here, we annotated Mipp2 in *D. biarmipes* in order to construct an orthologous gene model to gain a better understanding of the evolution and function of genetically regulatory regions involved in the insulin pathway. Using a variety of bioinformatic tools, such as NCBI BLAST, the UCSC Genome Browser, and the Gene Model Checker we were able to determine the structure and coding sequence coordinates of Mipp2 in our target species, *D. biarmipes*. Through this gene annotation project, we were able to add to the existing body of knowledge regarding the insulin pathway in *Drosophila* Genus. Future work is necessary to further validate this gene model and expand our knowledge of the conservation of this gene in other species.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

A Community-Engaged Approach to Measure Preferences and Accessible Marketing Strategies of HIV Medications for Black Women

Author(s): Leyoncé Latus, Dominique Guillaume, Judy Tan, Rashidat Ayantunji, Rasheeta Chandler
Advisor: Amy Patterson

Abstract: Despite being highly effective in reducing HIV transmission, PrEP uptake among Black cisgender women remains alarmingly low. Visibility and marketing strategies further hinder accessibility to PrEP. This research delves into the perceptions and experiences of Black cisgender women in the southeastern United States regarding HIV prevention, particularly focusing on PrEP preferences. Through interviews with participants, the study investigates factors influencing PrEP adoption, such as age, location, race, gender, and mobile phone ownership. Recruitment methods included social media, fliers, and snowball sampling. Thematic coding of interview transcripts revealed disparities influenced by race, gender, age, and social determinants of health, emphasizing the need for tailored PrEP modalities and marketing strategies. Participants expressed a preference for daily pills over injectable options. The study highlights the importance of inclusive PrEP marketing featuring diverse Black women to enhance reliability and accessible messaging.

How Trans and Gender Expansive Youth Experience Safety in Relationships: A Phenomenological Study

Author(s): Jacky Lopez, Erika McLeod
Advisor: Dr. Jennifer Fulling-Smith

Abstract: The experiences of transgender and gender-expansive youth (TGEY) in relationships are examined in this study, filling a significant gap in literature. Important issues covered are sex/dating education, TGEY in schools, support networks, and social interpersonal relationships. Since it clarifies the difficulties they confront and emphasizes the value of fostering inclusive environments to support their well-being, the research is essential. Using purposive and snowball sampling techniques, data were gathered from nine participants in this phenomenological research. The results demonstrated the following themes: the value of inclusive education, gender-affirming language, family acceptance, trust-building, empowerment, and supporting networks in promoting TGEY safety and well-being in relationships. The study has broad implications that will impact community programs, policies, treatments, and practices in order to better serve TGEY and advance inclusivity and understanding in society. Through the examination of these fundamental themes and the lived experiences of TGEY, this research makes a significant contribution to the field and promotes significant changes in the way marginalized youth populations are supported and included.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Tactile Sensitivity Differences Between People's Assigned Sex

Author(s): Marls Loyd, Dr. Barbara Blatchley

Advisor: Dr. Blatchley

Abstract: The present research consists of viewing how a person's assigned sex at birth can be a sign that they might have a higher tactile sensitivity. After considering the multitude of diverse experiments that correlate to the current study, the aim here is to learn more about how tactile sensitivity cannot only be unrelated between AFAB and AMAB people but can also give a deeper look at how this can provide knowledge into people's health. To test this, the Von Frey Hair test will be used on the participant's shoulder and hand. Twenty participants—10 being assigned female at birth (AFAB) and 10 being assigned male at birth (AMAB)—will go through multiple trials to see if they can feel the Von Frey Hair on their skin. With the data being collected from the trials a t-test will assist if there is a difference between assigned sex at birth within the two groups provided. All of these factors contribute to findings of whether there is a significant difference between AFAB and AMAB tactile sensitivity levels.

Queer Identity and social media identity distress

Author(s): Paxton Martin, Peeper McDonald, Taylor Jaczko

Advisor: Peeper McDonald

Abstract: Social media has become an incredibly common tool used in identity development or validation, especially in queer identities. The Social Media Identity Distress Scale (SMIDS) measures identity distress created when a person uses social media for identity development. Comparing the scores between those who identify as both heterosexual and cisgender to those who identify as queer can illustrate if social media causes identity distress within queer social media users. 775 participants were recruited through social media and personal networks and took an online survey. Participants were encouraged to share the survey with others. Independent t-tests were conducted comparing the mean SMIDS score between participants who identified as heterosexual and cisgender (Group 1) to those who identified as transgender/gender-expansive (Group 2) and those who identified as cisgender and queer in regards to sexuality (Group 3). Participants who identified as heterosexual and cisgender had lower SMIDS scores on average. Another independent t-test was conducted comparing the mean SMIDS scores between participants who identified as queer cisgender men (Group 4) and queer cisgender women (Group 5). Queer cisgender women had a higher SMIDS score on average. The data shows that social media use can induce negative feelings around a person's identity, meaning that social media can recreate societal pressures to conform to socially acceptable presentations of identity. This may cause queer social media users to conform to the most stereotypical version of their identity or hide their identity rather than be denied support from online/offline support networks, limiting identity exploration and development.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

An Internship Experience

Author(s): Kobi McConico

Advisor: Shoshana Katzman

Abstract: An Internship Experience

I am a student in the Master of Science in Medical Sciences program at Agnes Scott College. I was recruited for an internship at Divine Dermatology and Aesthetics in Atlanta, GA. While working there, I broadened my skills and knowledge to help me succeed in becoming a knowledgeable future physician. I acted as a medical assistant, helping with the patient's needs and presenting to the doctor why the patient was in the clinic. When starting, I shadowed a certified medical assistant (CMA), a physician assistant (PA), and the doctor herself (MD); shadowing the different levels of medical professionals showed me the importance of having a good team. Through the internship, I gained knowledge and respect for the dermatologist profession. Each patient encounter has made me a better medical assistant, future medical school applicant, and person. Each patient I have encountered has come from a different walk of life with unique problems, and during the internship, I collaborated with the doctor on a specialized plan to fit their needs. The internship has shown me (and others) that I am passionate about becoming a physician and continuing to strive to enhance my capabilities. During this internship experience, I was able to develop and master skills such as growing, commitment to learning, and oral communication, which are core competencies that medical schools assess in their applicant pool.

Exploring the COCONUT Database for Natural Anti-inflammatory Molecules: A Ligand-Protein Interaction Study of COX-1

Author(s): Kayla Melton

Advisor: Yakini Brandy

Abstract: The COX-1 enzyme is expressed in almost all tissues and is the 'housekeeper' maintaining normal body functions, especially in the stomach, intestines, and blood platelets. Some traditional Non-steroidal Anti-Inflammatory Drugs (NSAIDs) unwantedly inhibit COX-1 causing stomach ulcers and hemophilia-like conditions. COX-1 is only one of the two types of COX enzymes; COX-2, its isozyme responsible for inflammation, shares a similar structure with a variation in just one amino acid. Because of their sizeable structural similarity, inhibiting one without affecting the other is challenging. Our long-term goal is to identify selective COX-2 inhibitors (anti-inflammatory drugs) from natural compounds. We initiated this work by screening natural molecules in COX-1 and studying the interactions between the best-bound molecules and the active site. In future work, the binding interactions will be compared to those in the COX-2 site to predict selectivity. Ultimately, bioanalysis will confirm if the binding interactions between the isozymes correlate to their selective inhibition.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Ambivalent Roommates in College/University and Academic Outcomes

Author(s): Jessica E. Pinsker, Jenesis M. Narcisse, and Jennifer L. Hughes, Jenesis Narcisse
Advisor: Dr. Jennifer Hughes

Abstract: This study sought to fill a gap in previous research by investigating ambivalent roommate relationships. We predicted that academic wellbeing would be lower and the intention to quit the college/university would be higher with a perceived ambivalent roommate as compared to a perceived supportive roommate. Our study consisted of 215 participants who took an online survey. Through independent samples t tests, we found that those with perceived ambivalent roommates did not report feeling less connected to their college/university, $t(201) = .33$, $p = .74$, less gratitude for being in college/university, $t(201) = .82$, $p = .42$, less academic satisfaction, $t(200) = .08$, $p = .94$, or less academic efficacy, $t(200) = -1.01$, $p = .32$. They also did not report wanting to quit college/university at a higher rate, $t(199) = .63$, $p = .53$. Our hypotheses were not supported. There was no statistical difference between the perception of having an ambivalent roommate versus a supportive roommate with academic wellbeing or with the intention to quit the college/university.

Investigating the Effects of SHANK3B Mouse Model on Dysbindin Protein Level

Author(s): Irma Ramirez Rodriguez, Yunshan Zhou, Lil Gehner, Gabby Hall
Advisor: Dr. Larimore

Abstract: Dysregulation of the endosomal pathway has been linked to various neurodegenerative diseases, such as autism and schizophrenia. SHANK3B mutation has been detected in patients with Autism Spectrum Disorder (ASD).

Dysbindin, encoded by the DTNBP1 gene, has been proposed to associate into multiple complexes with alternative binding partners, and one of its functions is trafficking of glutamate and dopamine receptors. This research aims to examine the alteration of Dysbindin protein levels in the SHANK3B mouse model through the use of immunoblotting and immunofluorescence. We expect a difference in dysbindin levels between the SHANK3B mutant mouse and the C57/B6 control group. Dysbindin's impact on glutamate and dopamine receptors may produce results that show cognitive impairment, which may be associated with both schizophrenia and ASD. It is important to learn the effects of SHANK3B mutant mice on Dysbindin because it has never been done before. Because a mouse is so genetically similar to a human, it can aid the advancement of research on humans with ASD. Understanding the molecular pathways seen in neurological disorders such as schizophrenia and ASD will allow for possible translational research in clinical practice.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Analyzing the Racial Disparities in Sarcoma Cancer Incidence

Author(s): Icis Richmond, Jennifer Hurst-Kennedy

Advisor: Jennifer Hurst-Kennedy

Abstract: Sarcomas are rare cancer growths compared to other cancers that originate from various connective tissues and have differences in their impact across different racial groups. The goal of this research is to investigate the racial distribution of sarcoma patients and determine how that information might potentially affect treatment strategies. The research question can be answered by utilizing patient tumor genomic sequencing data from a study published in Nature Communications in 2022 by researchers affiliated with the Memorial Sloan Kettering Cancer Center (MSK) and analyzed using cBioPortal. Patient sarcoma samples were divided into experimental groups based on race. Data was analyzed by using Kaplan-Meier (KM) survivability and genetic alterations graphs to analyze patient survival and genomic profiles. The analysis of the data revealed a racial disparity among sarcoma patients. While the study included a higher proportion of white patients, Native Americans exhibited the highest occurrence of genetic alterations across various genes, except for Kit mutations, which were more prevalent in black patients. These findings showcase the importance of addressing racial disparities in cancer research and treatment. The data raise questions regarding community outreach program effectiveness in minority communities and the overall likelihood of participation in cancer screening and treatment among non-white racial groups that is critical in increasing the survivability of the patients. Tailoring cancer treatment approaches based on the specific genetic alterations observed in different racial groups may help improve outcomes for minoritized patients and reduce disparities in cancer care.

Comparative Analysis of TP53 and MUC16 Mutations on Survivability in High-Grade Serous Ovarian Carcinoma

Author(s): Keyaira Singleton

Advisor: Jennifer Hurst-Kennedy

Abstract: Ovarian cancer, exceptionally high-grade serous ovarian carcinoma (HGSOC), remains a leading cause of cancer-related mortality among women worldwide, with TP53 and MUC16 mutations playing pivotal roles in its prognosis. The ability to predict survivability at an early stage could induce initial aggressive treatments by distinguishing the specific mutation causing the diagnosis. Mutated TP53 has a broad indication of cancer diagnosis in many cell types, causing it to be a predominant genetic alteration in cancer cells. However, the transmembrane glycoprotein CA-125, encoded by the MUC16 gene found in serum, has been used to diagnose individuals with epithelial ovarian cancers. Previous studies compare the poor survivability of TP53 wild-type and mutated TP53 and differentiate the effects of different types of mucin mutation in the epithelial. In this study, we analyzed the TP53 and the MUC16's contrasting progression regarding survivability by using HGSOC patient tumor genomic data from the 2020 Pan-Cancer Atlas from cBioPortal. Individual data samples were placed in groups indicating the presence of mutated TP53, MUC16, or both and an unaltered group on Kaplan-Meier survivability charts. In conclusion, there was no significance in patient survivability between the mutated TP53 and the MUC16 groups, which indicates that both genes contribute to the poor prognosis and survivability of HGSOC, without one being more noteworthy than the other. Even though there were no significant probabilities from this data set, continuing to uncover the genes that can alter the survivability of individuals with serous ovarian carcinoma.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

The Contribution of Demographic factors on the Survival Rate of Head and Neck Squamous Cell Carcinoma (HNSCC) Associated with HPV

Author(s): Cayla A. Skinner

Advisor: Jennifer Hurst-Kennedy

Abstract: Head and Neck squamous cell carcinomas (HNSCCs) are the most common, malignant cancer in the world. It affects thousands of people in the United States annually. 10,000 deaths are reported, and more young people are becoming diagnosed at higher rates. Head and Neck cancers develop from the mucosal epithelium in the oral cavity, larynx, and pharynx. Studies have shown that a viral agent, HPV, is a major contributor to the development of HNSCC. HPV is a circular DNA virus that is sexually transmitted from person to person. It infects the epithelial tissue of the oropharynx causing HNSCC of the oropharynx. African Americans are more likely to become diagnosed at a younger age and have the worst disease outcomes and higher mortality rates compared to other races.

Therefore, this study aims to bring awareness to racial disparities amongst minorities diagnosed with HNSCC. The HNSCC patient genomic data from the 2020 Pan-Cancer Atlas was used to collect the genetic alterations and overall progression-free, disease-free, and disease-specific survivability. The data showed that African Americans were less likely to survive HNSCC caused by HPV and had the highest genetic alterations of TP53 and CDKN2A. In the future, genetic differences should be studied more amongst racial groups to determine the cause of aggressive mutations in African Americans, so more cancer treatments can target those specific mutations.

The Expression of AP-3 in SHANK3B Mice

Author(s): Nadia Small, Parker Carter, Yvonne Williams

Advisor: Jennifer Larimore

Abstract: The AP-3 protein is a vesicle trafficking protein. The correlation between the SHANK3B mutation and AP-3 protein levels is currently unknown. SHANK3B mice experience a disruption in synaptic transmission (Balaan, et al 2019). Hippocampal lysates were used as samples to perform Western Blots to measure AP-3 levels and brain slices were imaged using immunofluorescence. We hypothesized that there is a difference in the amount of AP-3 protein in SHANK3B heterozygous mice compared to C57/B6 mice.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

Annotation of the Pi3K21B Gene of the *D. rhopaloa* Species

Author(s): Kilee Thomas, Amani Singleton

Advisor: Srebekna Robic

Abstract: Genomic annotations play a pivotal role in deciphering the functional significance of genes, providing insights into their roles in various biological processes. In this study, we present the results of annotating the Pi3K21B gene in recently sequenced fruit fly species *Drosophila rhopaloa* using a comprehensive suite of bioinformatics tools and databases, some of which include Genomics Education Partnerships web tools and BLAST NCBI. Through a multi-faceted approach, we characterized the genomic neighborhood, genomic features, regulatory elements, protein domains, and evolutionary conservation patterns associated with *Drosophila* species, specifically comparing it to *Drosophila melanogaster*. Our findings reveal structural and functional attributes, shedding light on its potential roles in intracellular signaling pathways that regulate cell growth, proliferation, differentiation, motility, survival, and intracellular trafficking. Furthermore, we elucidate putative regulatory networks and protein-protein interactions involving *D. rhopaloa*, providing a foundation for further experimental investigations. Overall, our study highlights the importance of integrative genomic annotations in determining the functional landscape of genes, with implications for understanding biological pathways and disease pathogenesis.

Color Perception Abilities and Practical Color Experience

Author(s): Natalie Trimble

Advisor: Barbara Blatchley

Abstract: Several factors influence how humans perceive color; in this study, practical experience with color as determined by the Art Experience Questionnaire (Chatterjee et al., 2010) and ability to distinguish minute differences among colors as determined by an online version of the Farnsworth Munsell 100 Hue test were examined. Participants were sorted into the artist or non-artist group based on their practical experience with color. Using these two groups in an independent samples t-test, the relationship between color experience and accurate color perception was analyzed. Based on previous research, it was deemed likely that participants who scored higher on the Art Experience Questionnaire would also score higher on the Farnsworth Munsell 100 Hue test and vice versa, meaning that there may be a direct relationship between color experience and color perception that develops uniquely in a person as a result of practice. In agreement with the hypothesis, participants who scored higher on the Art Experience Questionnaire (Chatterjee et al., 2010) also performed better on the online Farnsworth Munsell 100 Hue test.

MORNING POSTER SESSION, 9:15-10:15AM, CONTINUED

How Seasonality and Environment affect the Gut Microbiome of Honeybee Colonies

Author(s): Mykle Williams, Erica Harris, Kai Brady, Jennifer Kovacs

Advisor: Jennifer Kovacs

Abstract: Pollinators like honeybees play a crucial role in countless ecological relationships for both plant and animal species. As we understand more about honeybee interactions in their environment, it is important to look at their microbiota. The gut microbiome has been shown to influence neurological health, immune stimulation, pathogenic parasite defense, detoxification, and growth in honey bees. The goal of this study is to determine whether seasonality and/or local environment affected the microbiome of a colony. To do this, honey and adult worker bees were collected from research hives maintained at two locations in Georgia. At each location we sampled 2 hives in both the fall and the spring. One site was from downtown Atlanta, Georgia from the campus of the Georgia Institute of Technology, which serves as a highly urbanized location. Samples were collected from a second site in Athens, Georgia from the State Botanical Gardens (Booger Hill), which serves as a more rural setting. Ten adult worker bee guts were sampled from each colony, along with 10g of honey extracted from each colony. Mid and hind guts were dissected and gut microbiome DNA was isolated using a Qiagen DNeasy Kit. Illumina 16s sequencing was used to analyze the honeybee microbiome. Bioinformatics was done with Geneious, and all other analyses were done in R. Preliminary results show a correlation between the microbiota of the individual colonies across seasons and suggest that both seasonality and the urban/rural environment play a large role in the development of these gut bacterial communities.

Availability Heuristics in Social Media Consumption: Understanding Decision-Making Patterns

Author(s): Joey Wilson, Chakeria F. Harris, Alayshia D. Grisham

Advisor: Brielle James

Abstract: Availability biases, which are informed by availability heuristics, describe when people incorrectly estimate the frequency or probability of an event occurring by how easily that event comes to mind. This project will explore the availability bias by studying social media use and beliefs about world topics and events such as COVID-19. Undergraduate students at Agnes Scott College completed an online survey. Participants read a short vignette about a student who is invited to a party by a classmate. The student knows that the classmate usually throws parties for 30 people and overheard this classmate talking to a friend about taking a COVID Test. Participants then had to respond to how many people they believed would contract COVID at the party. Results showed that participants who spent the least amount of time on social media believed that fewer people would contract COVID ($M = 10.6$, $SD = 5.5$), than those who spent the most amount of time on social media ($M = 12.5$, $SD = 8.3$). Analysis of a one-way ANOVA showed these results were not statistically significant. The results of this study broaden the scope of research about availability biases to better align with modern topics and methods of communication such as social media, as opposed to the focus on older forms of media in previous studies.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER

10:20-10:40am Bullock 102W

Connecting Womanhouse with Disability Studies in Art History: Contemporary Intersections in Marginalized Identities

Author(s): Asher Tures

Advisor: Katherine Smith

Abstract: This presentation will re-interpret Womanhouse (Los Angeles, 1972) through disability studies. Womanhouse tackled aspects of female identity and social roles through installations that confronted larger social assumptions about women's innate abilities and purposes and challenged perceptions of social expectations and daily realities. This project, a series of public installations and performances by the Feminist Art Program at CalArts, has most often been approached through narratives of oppression. The intersection between the misogyny women faced in the 1970s and the ableism disabled people have faced for years exposes an unexamined intersection in the perspectives of women and disabled individuals. Recent work in disability studies and theory offers a framework with which to reconsider formal and thematic choices in Womanhouse, such as fragmentations and deformities of represented bodies that reflect cultural standards of normalcy and the harm that disgust regarding bodily difference and autonomy holds for marginalized groups. The lack of acknowledgement of the activist message of 1970s second-wave feminist projects reflects in the core themes that challenge contemporary disability studies movements in the context of art history.

10:20-10:40am Bullock 103W

GIS for Everybody: Predicting Cicada Emergences with Mapping

Author(s): Esther Okamoto

Advisor: Dr. Jennifer Kovacs

Abstract: The "Making Meaningful Maps: GIS for Everybody" bootcamp, led by Dr. Jennifer Kovacs during the Peak Week—a designated period for student development through Applied Career Experiences (ACEs)—provided an immersive, week-long learning experience focused on Geographic Information Systems (GIS). This initiative introduced students to the critical thinking required to understand the implications, messages, and ethics behind map-making. Leveraging ArcGIS Online, participants engaged with tutorials to grasp the fundamentals before embarking on independent projects. A notable project involved mapping the periodic emergence of 17-year and 13-year cicadas, utilizing data exported from iNaturalist. Through this exercise, students were able to identify correlations between soil textures, particularly Silt Loam, and the emergence hotspots of cicadas in 2021, thereby making predictions for the 2024 emergence. This bootcamp not only equipped students with valuable GIS skills but also encouraged them to consider the broader impacts and ethical considerations of their work in mapping and data analysis.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:20-10:40am Bullock 112W

The Intersection of Slavery and Sex Education & Decolonizing Sex Ed

Author(s): Kiaya Pierson

Advisor: Amy Patterson

Abstract: The lasting impact of slavery in the American South shapes social, economic, and educational landscapes. Slavery's legacy fuels racial disparities and influences conservative-driven sex education, often lacking vital information. This worsens health disparities, especially for Black communities, impacting access to comprehensive sexual health education. This presentation aims to explore these historical intersections and advocate for inclusive sex education in the South.

10:20-10:40am Bullock 209W-A

"The Terror of a Misunderstanding Entered my Soul": Translating Marcelle Tinayre's *Hellé* from French to English

Author(s): Grace Ashton

Advisor: Julia Knowlton

Abstract: This presentation examines the process of literary translation through the example of translating Marcelle Tinayre's novel *Hellé* from French into English. This 1898 novel, winner of the Prix Montyon de l'Académie française, is a bildungsroman about the titular character's quest to choose her life partner in the context of her unusual classical education and its implications for marriage and married life. This novel is part of the turn-of-the-century French discourse about the evolving place of women and the purpose of women's education. The presentation will delve further into the significance of this novel and the purpose behind translating it into English. It will also include a discussion of the challenges of creating this translation, the considerations necessary for literary translation, and the theories and methodologies that shaped it.

10:20-10:40am Bullock 209W-B

Of Wolves and Men: Social Darwinism and Animal Fiction

Author(s): Rafael Albizu Santos

Advisor: Charlotte Artese

Abstract: Animal Fiction - fiction solely from the perspective of animals- has long been used to teach and interpret the natural world . But science, conservation, and biology are not morally neutral disciplines. Their modern origins were steeped in beliefs of the inherent inferiority of any group outside of the ideal body. The same groundbreaking work that supported evolution, natural selection, and concern over nature also justified the horrors of eugenics. Animal Fiction exists in a difficult place regarding this history. This presentation explores its connection with Social Darwinism, relevant examples, and Animal Fiction's role in shaping our relationship to what is "natural".

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:20-10:40am Bullock 210E

How is Gentle Parenting Perceived in The Black Community?

Author(s): Cameron Glasscho, Rue Randall

Advisor: Douglas Falen

Abstract: This paper is a meta-analysis of the research literature on childhood development, parenting styles, and attachment theory within the context of black American families and black American culture. Our study takes a trauma-informed approach to the correlations between child psychology, the needs of black children, intergenerational trauma, the effects of socioeconomic and environmental factors, and whether or not black families are beginning to rethink cultural norms surrounding child-rearing. We have found that scholarship provides theories and analysis on subjects like slavery's impacts on parenting in the present, racialized responses to corporal punishment, and what it means to raise children under oppressive power structures. Evidence suggests that key factors such as gendered parenting, history of trauma within parental figures, as well as the ability to meet basic physiological needs are foundational to understanding black parenting. Research further suggests that trauma is typically passed down within the black community, commonly through mediation such as depression and post-traumatic stress. Intervention and therapy can lead to positive parenting outcomes, leading to more gentle parenting, which is found to overall strengthen personal and bodily autonomy and encourage healthy boundaries within children of all ages. However, much of the research surrounding gentle parenting fails to investigate its presence in black families. All sources in this review seek to understand what parenting styles are most prevalent in black families, as well as what external and internal factors come into play when utilizing various parenting methods and forming opinions on gentle parenting in black spaces overall.

10:20-10:40am Bullock 308

An Exploration of the Psychological Well-Being and Identity Development of Dual-Minoritized Multiracial Individuals

Author(s): Kendall Riley, Taylor Jaczko, C. Peeper McDonald

Advisor: C. Peeper McDonald

Abstract: This presentation examines the psychological development of individuals with a Multiracial identity-- an emerging racial identity of the latter half of the 20th century. Multiracial identity has served as a disruptor of the conventional ideas about racial classification and the shaping of identity, leading to changes in how society perceives and understands race. Multiracial individuals develop their identities in nuanced ways, influenced by their unique composition within the broader Multiracial identity that has yet to be investigated. This study consisted of 179 Multiracial individuals, ages 18 to 68. The participants were divided amongst two subgroups, dual-minoritized and White-minoritized, in order to examine potential disparities in their identity development, integration, and psychological well-being resulting from distinct experiences. The purpose of this presentation is to provide an essential viewpoint on dual-minoritized Multiracial individuals.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:40-11:00am Bullock 102W Graphic Recording at Agnes Scott

Author(s): Tallulah Stroud
Advisor: Nell Ruby

Abstract: During the Fall of 2023, Professional Graphic Communication artist Matt Sullivan (founder of Studio Groundworks) trained a group of advanced Digital Processes students in the professional skill of graphic recording. Our group of 5 (7?) worked with Sullivan to interpret ideas during sessions of the Global Women's Leadership Conference and create dynamic interactive boards in the halls outside the conference to extend, expand, and document the most resonant ideas. This presentation will define graphic recording, illustrate our experience as designers to embolden ideas through graphic representation, and show the potential of graphic imaging to extend, expand and enrich ideas.

10:40-11:00am Bullock 103W Complete residue systems in second-order linear recursive sequences mod p

Author(s): Edie Irwin, Aye Moe
Advisor: Alan Koch

Abstract: This work is a study of the behavior of sequences that follow a second-order linear recurrence relation. Such sequences $\{a_n\}$ are given by initial conditions $a_0 = 0$, $a_1 = 1$, and the recurrence relation $a_n = c_1a_{n-1} + c_2a_{n-2}$. Given a prime p , we investigate whether $\{a_n\}$ contains a complete residue system mod p , that is, whether there exists a_{n_i} such that $a_{n_i} \equiv i \pmod{p}$ for all $0 \leq i \leq p-1$. Such sequences are necessarily periodic modulo p , and using number theory and finite field theory we show that the existence of a complete residue system depends only on the period length. Explicit examples will be given. Finally, we will investigate the proportion of sequences which are periodic for a fixed prime p .

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:40-11:00am Bullock 112W

What Qualifies You as an American? -Research Completed By An 'African' American

Author(s): Danielle Holliday

Advisor: Autumn Cockrell-Abdullah

Abstract: My topic surfaces the issues that stem from the term 'African American', and how this particular ethnic term further bridges the gap between Black and White people that were born in the U.S. Black people are still considered as foreigners rather than as fellow Americans. My research will answer "Does the term "African-American" insinuate that Black people, the descendants of enslaved Africans, are foreigners residing in the U.S.?" The label 'African American' serves as a dividing factor that muddles every black citizen in the U.S as one conscious being. For the research I will be diving into the different terms that people have referred to black people to show how they all just continue to segregate the population. I will bring up how the term can be a positive move in the right direction by acknowledging the fact that some black people accept the term and how it is better than the other terms used to describe black people. I would like to thoroughly describe the differences between nationality and ancestry. I am studying race concerning how Black people identify themselves nationally and how certain terms can lead to othering. My method is qualitative with the help of established theories. I believe this is a significant issue because I am not the only person who has questioned the term "African-American" and I assume that I won't be the last.

10:40-11:00am Bullock 209W-A

Cold War "Zoofare": A Study of the Berlin Zoos

Author(s): Eliza Anderson

Advisor: Kristian Blaich

Abstract: Cold War "Zoofare": A Study of the Berlin Zoos is an investigation into how conservation-focused institutions engage in animal diplomacy during politically tense times. The paper focuses specifically on how such political tension results in the political symbolization of animals and the people involved with these institutions. This research captures how a love of animals and zoos can affect historical events based on how they influence the public. Focusing on the two Berlin Zoos from 1945 until 1990—in close proximity in a divided city—the paper explores the ideas of animal diplomacy and the creation of "charismatic megafauna," explaining how animals were deployed in the relationship between the western Berlin Zoological Garden and the eastern Tierpark Berlin.

This research is particularly relevant in light of the current Cold War emerging between the United States and China. Panda diplomacy between the US and China has dissolved, as the giant pandas living in DC returned to China late last year. The project would compare current and historical events, impacting the audience's view on the importance of this history. Now, as talk of the possible return of the pandas grows, it is essential to recognize the role of animals as a source of propaganda throughout history and how this can instruct current zoo practices when engaging in contemporary animal diplomacy.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:40-11:00am Bullock 209W-B

The Feminine Body and Illness as a Negotiation of Time, Space, and Authority in Katherine Anne Porter's "Pale Horse, Pale Rider"

Author(s): Carsun Neubauer

Advisor: Charlotte Artese

Abstract: The 1918 influenza pandemic is largely underrepresented in literature and its influence is understated in the formation of the modernist tradition. Katherine Anne Porter's "Pale Horse, Pale Rider," published in 1939, demonstrates a unique perspective on the 1918 influenza pandemic that centers illness, womanhood, and the effects of societal and personal loss during World War I. I argue that Porter's work demonstrates a complex understanding of illness and illness politics that offers an essential understanding of what it means to sit at the intersection of woman, medicalized object, and survivor through her use of modernist techniques. I will specifically be drawing the intersections between illness/disability studies, women's studies, and modernism to explore how Porter negotiates time, space, and authority in the medicalization and liminalizing of women's bodies, over which they themselves lack control. Many scholars who have dissected Porter's work or other female modernists' work have taken a feminist perspective, whereas, scholars who have dissected more general works about influenza have used psychoanalysis. I am looking to fill the gap in the research that fails to pull these disciplines together to investigate the larger effects on the genre of modernist literature. Though "Pale Horse, Pale Rider" was written over eighty-four years ago and the events of the novel take place over a century ago, its similarities to our current moment (a global pandemic) and the lack of discussion surrounding women and illness emphasize the relevance of such scholarly work.

10:40-11:00am Bullock 210E

Do You Belong Here? Understanding Student Belonging Through Politics & Values

Author(s): Destiny Tisdale

Advisor: Doug Falen

Abstract: This study examines how student experience on campus may vary given their political ideologies and stances on social issues. This research involved survey collection and in-person interviews to measure students' sense of belonging and the current social climate of the college. I argue that student belonging is affected by a student's stance on social issues and political values. Moderate and Conservative students in particular, experience a lower sense of belonging. At Agnes Scott, liberals hold a dominant position compared to other groups which allows them to determine what social issues are permitted and advocated for, producing a sense of exclusion. Durkheim's theory of structural functionalism explains that when there is already a standard set in place, those who do not fit the standard are ostracized for deviance and then forced to conform. Through symbolic interactionism, we see that labels and meaning assigned to different groups, i.e. those who are not progressive has a negative connotation forcing students in those groups to be identified with the dehumanizing stigma. This research can serve as a method of measuring how effective the current practices of the college are in supporting the varying opinions on political and social issues. As an applied study, the results can be utilized by the Gay McDougall Center for Global Diversity and Inclusion and the Office of Student Affairs to assess and possibly redirect how the campus culture expresses the concepts of inclusion and belonging.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

10:40-11:00am Bullock 304E

Benefits of Measurement-Based Care for Pediatric Patient Populations from Low-Income Communities

Author(s): Jaya Vivian

Advisor: Amy Patterson

Abstract: This presentation assesses the efficacy of three common psychometrics, SFSS, PHQ-9, and the ACE test in terms of their ability to improve mental health treatment outcomes when implemented by a therapist. Psychometrics are defined as tests used to quantify psychological data to measure and assess psychological symptoms. The implementation of these metrics in the context of therapy is known as measurement-based care. This study involved a measurement-based care intervention for psychiatrists serving primarily low-income and at-risk youth. This group of patients was selected because of the acute demand for efficient mental-health treatment in low-income youth, particularly because of their high premature drop-out rate. I will discuss the results of the intervention on psychometric outcomes, and the implications of the results in how we evaluate traditional approaches to care.

10:40-11:00am Bullock 308

What are Students Doing About Sleep?: An Exploratory Study

Author(s): Ai'isha Mosby & Louis Sarris, Carmen A. Carrion PhD

Advisor: Dr. Carmen A. Carrion

Abstract: There are controversial opinions as to whether sleep patterns affect one's daily functioning performance. Previous research has studied the habits and wellness of medical students and undergraduates (e.g., Jalali, Khazaei, Paveh, Hayrani, & Menati, 2020) and showed inconclusive results on the correlation between sleep quality and performance. This repeatable study aims to investigate sleep quality, daily habits, and overall well-being in a post-baccalaureate student population at a small, urban liberal arts college. A two-part study of descriptive questionnaires was used to survey students to correlate academic performance and overall well-being to sleep habits and daily pattern.

Study one was an exploratory study administered in May and August 2023, with study two revised and administered in December 2023 and April 2024, to compare students' responses of sleep and wellness at the start of their program and the conclusion of the school year. Aside from questions personally curated, more stemmed from the DBAS Survey, ASKME Survey, and Epworth Sleepiness Scale. Study one indicated that technology use has positively impacted class performance, and further results showed a decrease in sleepiness levels. Study two examined sleep habits deeper, revealing a variety of sleep patterns and no decrease in sleep in December. The vast majority were found to have high levels of self worth and confidence, yet their future was often in question. This study shows the possibility for improvement in the overall well being of post-baccalaureate students and future healthcare professionals. Further studies should be conducted with sleep education interventions included for direct correlation.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:00-11:20am Bullock 102W

Dancing Again: The Steps Between Injury and Re-Entry to Dance

Author(s): Sophia C. Hom

Advisor: Bridget Roosa

Abstract: This research project investigates the experiences of injured dancers and their re-entry to dance after injury. This project is two-fold and begins with a review of the literature, highlighting the role of athletic identity, as well as other dance-specific psychosocial factors, in dancers' post-injury psychological experiences. This is followed by an exploration of the researcher's own experiences recovering from a sports injury and returning to dance, modeled after a case-study approach to qualitative research. These reflections on the researcher's personal journey highlight their experiences with mental health challenges after injury, the specific modifications made to dance class and performance in order to improve accessibility in the dance studio, as well as post-injury mental barriers and how to overcome them when re-entering the dance space. Implications for injured dancers, dance teachers, and the broader dance community are discussed.

11:00-11:20am Bullock 103W

Oxygen Atom Vacancy Formation via HAT on Calix Substituted Polyoxovanadate

Author(s): Maddy Buisch

Advisor: Dr. Ruth Riter

Abstract: The hydrogenation of metal oxides has a wide range of applications ranging from desalination and purification of water to creating more efficient organic solar cells. Our group uses polyoxovanadates (POVs) to model these heterogeneous surfaces to better understand the mechanism by which oxygen atom vacancies form. Previous studies have shown hydrogen atom uptake on terminal vanadyls form an intermediate aquo moiety that is displaced by the solvent. Reduced solubility of a tertbutyl calix arene substituted cluster resulted in THF exclusive chemistry which allowed for hydrogen bond stabilization of a VIII-OH₂. This allowed for subsequent studies for hydrogen atom transfer (HAT) to and from the parent cluster.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:00-11:20am Bullock 112W

Converging Interests: Analyzing Affirmative Action Through Supreme Court Cases

Author(s): Marcelle Brooks

Advisor: Dr. Autum Cockrell Abdullah

Abstract: This presentation takes a deep dive into the Supreme Court higher education affirmative action cases, examining the conflicting interests of Blacks, Whites, and Asian Americans. It uses Interest Convergence theory, as coined by critical race theorist Derrick Bell, as a framework to discuss the occasions when the different agendas of these three racial groups converge. Through this analysis, the presentation endeavors to explore whether legal activism can be employed as a tool to achieve racial equality in the United States.

11:00-11:20am Bullock 209W-A

"Germs Go About in Herds": The 1909 Agnes Scott College Typhoid Outbreak and the Negotiation of Health and Community"

Author(s): Isabella Cordell

Advisor: Mary Cain

Abstract: This presentation examines the manner through which Agnes Scott College students advocated for their own interests and maintained social continuity through a 1909 typhoid epidemic. In Fall 1909, typhoid bacteria (*Salmonella typhi*) breached the most popular well at Agnes Scott College. Together, the women's college, which had only been formally accredited three years prior, and the girls' academy, which served high school aged students, had approximately 30 to 40 confirmed typhoid cases out of a student body of 144. Simultaneously, the college campaigned in the local community for supplemental endowment funding, appealing to rhetoric that connected white women's education to the South's post-Reconstruction identity. Due to Agnes Scott's position within the New South movement, the epidemic intertwined with the concerns of a white upper class Atlanta, who intended to supplement cultural capital in the city through developing educational centers. Affected by the social developments of the college's surroundings, the student, faculty, and administration response to the 1909 typhoid epidemic at Agnes Scott College negotiated each party's priorities and interests. The research presented will evaluate student experience, analyzing primary source documents recording student community building and social activity in the midst of this medical and financial crisis. Students utilized the uncertainty of the epidemic to obtain certain privileges, while contending with student departures. Nevertheless, through advertising hygienic measures against typhoid, and promoting endowment funding, students also played an integral part in the college's continuation.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:00-11:20am Bullock 209W-B

Annalise Keating's Blackness is "The True Villain of the story; Deconstructing race, sexuality, and gender in How To Get Away With Murder"

Author(s): Jada Beasley

Advisor: Charlotte Artese

Abstract: How To Get Away With Murder created TV history. Before HTGAWM was aired on ABC's Thursday lineup, the show was spoken of as a new never-done before diverse television. It had social media praising HTGAWM during its first season for paving the way for diversity in television and claiming that the show is normalizing diversity. Unfortunately with further examination, the image of a groundbreaking diverse, and inclusive show is only surface level and HTGAWM perpetuates harmful stereotypes that further stigmatize black women. Using the character Annalise Keating, a black attorney and law professor from How To Get Away With Murder, to display how the intersection of her race, gender, and sexuality contributes to the villainization of her character throughout the show and how her depiction is reminiscent of historical representations of black women in media.

11:00-11:20am Bullock 210E

Exploring the Compatibility of Womanist Christian Theology and Lesbian Feminism

Author(s): Kennedi Malone

Advisor: Yvonne Newsome

Abstract: This research interrogates the potential for a Christian faith that supports queer politics by exploring the compatibility of Womanist Christian theology and lesbian feminism. As a young Christian woman, my (left-leaning) politics and activism are firmly rooted in the love-one-another values I learned in church; however, I understand that Christianity has long been weaponized to justify forms of systematic exclusion, including gender and sexual oppression. In an effort to imagine a site for collaboration between the Christian faith and queer politics, this paper reviews lesbian feminist commentaries and Womanist Christian anthologies to identify and reconcile the central tenets of lesbian feminist discourse and Womanist Christian teachings. My research has found that an affront to racism, an undermining of androcentric heteropatriarchy, and the centering of embodied female experiences are shared values among both Womanist Christian theology and lesbian feminism. In this way, the seemingly oppositional relationship between Christianity and queerness is challenged; harmonization between the two is possible along these values.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:00-11:20am Bullock 304E

Food As Medicine Movement: Findings from a Literature Review

Author(s): Lae' Anna Drummond, Mihret Maxwell, Grace Walker, Rayah Wilson

Advisor: Dr. Erin Bradley

Abstract: The "Food as Medicine" (FAM) movement, also referred to as "Food is Medicine," is gaining momentum as a way to address barriers to healthy eating and combat diet-related chronic diseases. The movement focuses on the relationship between diet and health, emphasizing the preventive and therapeutic potential of nutrition interventions. Our literature review focuses on Food as Medicine as a movement, including the various ways it has been implemented in the healthcare field. Common FAM interventions include: medically tailored meals, medically tailored groceries or food pharmacies, and produce prescriptions. By integrating nutrition into healthcare, FAM initiatives aim to improve health outcomes and reduce healthcare costs associated with chronic diseases like cardiovascular disease and diabetes. Our presentation provides an overview of FAM interventions and their potential impact on public health.

11:00-11:20am Bullock 308

Is Lion's Mane mushroom effective in treating anxiety-like behaviors in mice?

Author(s): Shaky'ra Blades and Ayanna Williams, Ayana Williams

Advisor: Dr. Stacey Dutton

Abstract: The Lion's Mane (*Hericium erinaceus*, HE) mushroom is known to be used in Asian cultures for treating diseases. It contains the active components hericenones and erinacines that stimulate nerve growth factors and therefore has the potential to treat neurological diseases. Affective disorders, also known as mood disorders, can be defined as psychiatric disorders that change a person's mood that can range from moderate to severe scale - including anxiety. In 2020, roughly 15.6% of Americans were diagnosed with anxiety. This number has only increased due to recent world events. Previous studies have shown that the fruiting body of HE is effective in decreasing anxiety-like behaviors in adult mice. For humans, this mushroom could be a promising treatment option for anxiety-related disorders. In the current study, we investigated the effects of the HE mushroom in a mouse model of stress to determine if it is effective in decreasing anxiety-like behaviors. Results from this study are of value as they provide support for the growing use of adaptogenic mushrooms in the treatment of stress-related conditions.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:20-11:40am Bullock 102W

Exploration on Film Editing

Author(s): Lydia Holland

Advisor: Dr. Willie Tolliver

Abstract: For most people when watching a movie, it is easy to recall the cinematography, mise-en-scene, and sound, but people rarely remember how a movie is cut or the particular transition between scenes. The technical development of mainstream movies has favored a seamless viewing experience where continuity through scenes and shots is prioritized. This choice results in a film's editing going overlooked. Through a video essay and short discussion, this presentation explores how editing, compared to more apparent elements, affects the final iteration of a film. By showing multiple edits of the same scene, it challenges the idea that a film's final form is the "right" or most obvious version. Bringing attention to the myriad of editing choices available to filmmakers, this presentation will help audiences be more conscious of the editing the next time they are watching a film.

11:20-11:40am Bullock 103W

An in-silico study: The search for selective natural Cyclooxygenase-2 (COX-2) inhibitors to treat inflammatory diseases

Author(s): Zaina Chagani

Advisor: Yakini Brandy

Abstract: Cyclooxygenase-2 (COX-2) catalyzes the conversion of Arachidonic Acid to prostaglandins, inducing inflammation, while COX-1 produces prostaglandins with protective functions. This research aims to identify small, selective COX-2 natural inhibitors by observing their ligand-protein interactions through a molecular docking study compared with some reference drugs: Celebrex[®], Vioxx[®], Aspirin, and Aleve[®]. So far, 6 molecules have been identified based on comparable ligand-residue interactions with the reference drugs, including 3 with higher Glide docking scores (G-scores) in COX-2 than COX-1. Active ingredients in Penganum Harmala and Red Algae showed thrice and twice as high G-scores, respectively, in COX-2 than in COX-1. Conversely, the active ingredients of Smilax Bracteata, Ranunculus Ternatus, and Fitzroya cupressoides showed slightly higher G-scores in COX-1 than in COX-2. All hit molecules exhibited similar or better binding interactions than the reference drugs, while some showed more binding interactions in COX-2 than COX-1, implying their potential as selective COX-2 inhibitors.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:20-11:40am Bullock 112W

Move or Be Moved: How Police Militarization Suppresses Public Dissent

Author(s): Sanaa LaCore

Advisor: Eleanor Morris- IR/Political Science

Abstract: The Atlanta City council and current Democratic Mayor Andre Dickens' decision to not only support, but financially aid the construction of 'Cop City' stands as a message to the citizens of Atlanta: move or be moved. 'Cop City' protestors and various Atlanta community advocacy groups have questioned the true intentions of further equipping and expanding the police force considering the majority of popular public opinion ("Atlanta City Council Approves," 2023) condemns the employment of police in systematically disenfranchised areas and neighborhoods that have been predominantly occupied by people of color in the past few decades following previous white flight periods. There have also been concerns that land being used as the base for the creation of the \$90 million facility impedes upon the safety and peace of the natural environment and neighborhoods that surround the park ("Cop City and Public Safety," 2023).

It must be acknowledged that creating a militarized Atlanta police force will further perpetuate a neoliberal police state that will ultimately only protect the interests of a small elite group, namely corporate executives and the highest echelon of Atlanta's wealthy population, which is not representative of the population of Atlanta or the broader U.S. By applying the case of Atlanta's current 'Stop Cop City' movement, I will explore the implications of funding and endorsing the militarization of the police and how it will be used as a technique to suppress public dissent.

11:20-11:40am Bullock 209W-A

Beasts of Burden: Invasive Species of the Sugar Industry in Puerto Rico

Author(s): Rafael Albizu Santos

Advisor: Mary Cain

Abstract: The Colombian Exchange was a massive trade of non-native species across the Atlantic Ocean. Many of these species became tools in the colonization of the land and its people. Puerto Rico has long been the site of experimentation in many ways, chief among them being the cultivation of cash crops. Sugarcane came to dominate the island's lowlands, but with the cane came a cascade of invasive species, and attempts to control an island planters did not understand. This presentation follows the history of those species, and the context of imperialism under which they were introduced."

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:20-11:40am Bullock 209W-B

Patriarchal Creations: Art and If Beale Street Could Talk

Author(s): Jasper Potts

Advisor: Robert Meyer-Lee

Abstract: This project analyzes Baldwin's use of art and artistic identity in his novel *If Beale Street Could Talk*. I focus on the artistry of Fonny and compare his artistic possibilities to those of Tish. I draw on the ideas of Frantz Fanon and Henry Louis Gates to establish the importance of art to liberatory struggle and future building, as well as to establish a framework through which to analyze Black American art. Fonny's art has the power to advance the community, and therefore he must be saved from a white supremacist penal system. After establishing his revolutionary potential, I turn to how women are constructed in relation to this portrayal. The women of the novel must take on the responsibility of saving the Black male artist, but are not allowed the creativity that he is. Tish's contribution to the liberatory struggle is her childbearing, which is biologically mandated rather than creative. This is important to an understanding of Baldwin's vision of the future: while art and the Black male artist assume a vital and autonomous role in the creation of a new Black future, women are merely supporters of men as they build this world.

11:20-11:40 Bullock 210E

Journeys: Global Perspectives on Theatre

Author(s): Students in Journeys, Section J, Kylah Adams, Ashlyn Bryant, Harper Dutton, Zainab Ghannoum, Grace Gipson, Zadeea Graham, Naomi Griffin, Nevaeh Harris-Redd, Zara Johnson, Rediet Kifle, Faith Love, Allison Meyer, Zanna Nguyen, Sam Phillips, Sahadjine Pierre, Camille Roberts, Sophia Totten, Titilayo Waithe

Advisor: Toby Emert

Abstract: Drawing from "data" they collected as they journaled during Peak Week, as well as course readings and conversations, the students in Journeys: Global Perspectives on Theatre devised a short performance piece that reflects elements of their experience. The 12-minute "play" offers the audience a glimpse into who the class is and how they have responded to aspects of the course. The performance will be prefaced with a short description of the process of creating the "play" and will be followed by a short question and answer session.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:20-11:40 Bullock 210E

Journeys: Global Inequality and Religious Tourism in Benin

Author(s): Leah Frankel and Georgia Rice

Advisor: Doug Falen

Abstract: This presentation reflects on the Journeys Benin travel experience, and how it sheds light on ethical questions related to tourism. The presenters explain how religious tourism and global interactions have the potential for both cultural theft and the creation of tolerance amidst the economic and racial inequalities of a postcolonial nation.

11:20-11:40am Bullock 304E

Developing an Evaluation Plan for Grady Hospital's Food As Medicine Program

Author(s): Michelle Martinez, Bailey Ledbetter, Aster Hawkins, Fabiola Garcia, Komal Barbar

Advisor: Erin Bradley

Abstract: The purpose of this public health capstone project was to develop a program evaluation plan for Grady Hospital's Food As Medicine program. The Food as Medicine program at Grady Hospital aims to integrate nutritional interventions into patient care, aiming to enhance health outcomes and overall well-being. The Culturally Responsive and Equitable Evaluation (CREE) framework was used to develop an evaluation plan that would be implemented by the Food as Medicine team. CREE is a holistic approach that emphasizes the integration of diversity, inclusion, and equity principles into all phases of evaluation. By employing the CREE approach, our focus is on ensuring that the evaluation process is culturally sensitive, equitable, and responsive to the needs and perspectives of both patients and staff involved. Through this framework, our evaluation plan is designed to capture the diverse experiences and outcomes associated with the Food as Medicine program, allowing targeted improvements and optimizations.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:20-11:40am Bullock 308

Association of Forebrain Parenchyma Volume with Self-Reported Depression and Anxiety in Epilepsy Presurgical Workup

Author(s): Tess Dishaw, Kelsey Hewitt PsyD, Adam Dickey MD, Ranliang Hu MD, Daniel Drane PhD, Ekaterina Staikova PhD, David Loring PhD, Cady Block PhD

Advisor: Dr. Jennifer Larimore

Abstract: Epilepsy is a chronic neurological disease, and surgery is a common treatment option for persons who do not respond to medication. When surgery is offered, neuropsychology plays an important role in the epilepsy presurgical workup, characterizing the cognitive and behavioral functioning of persons with epilepsy. Emotional functioning is also important to assess, as rates of disorders such as anxiety and depression are higher than in the general population. Prior research has implicated the forebrain plays a major role in these psychiatric conditions. In this cross-sectional design, we sought to examine the predictive relationship between forebrain volume and anxiety and depression in a sample of persons with epilepsy undergoing presurgical workup.

A total of 56 clinical patients underwent a presurgical epilepsy workup at a US academic medical center. Self-reported anxiety and depression scores were taken from two measures that are standard to neuropsychological evaluations, the (BAI) and (BDI). These, along with NeuroQuant bilateral forebrain parenchymal volume scores (cm³), were analyzed using a series of linear regression analyses. A significant predictor of BDI raw scores was total left forebrain parenchyma volume (BDI (2, 53)=2.30, $p<.04$, $R^2=.28$, and $\beta=-2.07$, $p<.04$). Total left and total right forebrain parenchyma volume did not predict BAI raw scores. These findings support prior research of the prefrontal cortex's relevance where this study specifically expands upon the significance of depression and the left forebrain parenchyma. Findings continue to stress the importance of gathering emotional functioning in epilepsy presurgical neuropsychological evaluations as well as support inclusion of NeuroQuant volume scores.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 102W
Restructuring and Repainting the White Walls:
Expanding a Practice of Informed Accessibility in Museum

Author(s): Asher Tures
Advisor: Nell Ruby

Abstract: Because museums are educational spaces that can influence and shape public interest in science, history, and art, it is important to examine the ways these institutions determine and manage social standards of acceptance and access. As museums have focused on access to rented wheelchairs, ASL tours on demand, tactile objects, and sensory and social maps, they have improved standards of acceptance and integrations of accommodations for disabled individuals. Yet there is still a diverse range of individuals who remain unintentionally excluded from and unsupported by these spaces (due to a current monolithic perception of disability).

The aim of this presentation is to create a more nuanced understanding of accessibility needs and to suggest additional strategies for more diverse accommodation. The current practices of the museum should be continued and expanded upon to integrate accessible practice into gallery installations and various forms of daily programming. Understanding definitions of disability as a seemingly monolithic structure, and then proceeding to push against these definitions, creating techniques embedded in the museum that promote the inclusion and recognition of all individuals, will allow for the field of museum studies to continue to develop in ways that increase equity. The two artifacts I plan to present are a physical installation in the halls of the Dana Fine Arts Building, and a blog expanding on existing information on the sensory needs of the museum and experimenting with digital formatting to be adopted by educational institutions in the promotion of access.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 103W

Can an interactive Science intervention affect a student's understanding of scientific inquiry?

Author(s): Megan Wright, Olivia Tefft, Carmen A. Carrion, PhD

Advisor: Carmen A Carrion, PhD

Abstract: While many accept that both scientific inquiry and literacy are critical, many school settings do not offer a curriculum that engages students while encouraging scientific inquiry. Hands-on activities have been shown to improve a student's attitude towards scientific learning (Mulyeni et al., 2019). The current study poses the following question: Will hands-on explicit science lessons improve a student's understanding of science? The science intervention in this study included hands-on, group activities and student access to iPads. The topic of the intervention was seventh grade genetics. With this intervention, the expectation was to see growth in how students critically think while also creating a learning environment that enhances the students' understanding of science (Güngören & Öztürk, 2021). Students' scientific inquiry skills were measured with the survey, Views About Scientific Inquiry (VASI); this survey consists of seven open-ended questions. (Lederman et al, 2014).

Overall, findings for the intervention group demonstrate that there was a decrease in the amount of naive responses after the intervention experience. Additionally, post-test findings from the intervention group show that the majority of student responses were either mixed or informed, demonstrating an improvement from pre-test findings. Furthermore, the comparison group posttest responses did not increase from the pretest, there was almost no change in informed responses. These findings may be used to support that hands-on activities encourage scientific inquiry and learning in students. A limitation of this study is that there was a decrease in student responses on the post tests, making analysis more complicated.

11:40am-12:00pm Bullock 112W

Spring Lobby Weekend 2024: An Exploration of Lobbying, Leadership, and Indigenous Justice

Author(s): Kat Janssen, Kylah Adams, Stephania Covarrubias-Gachuz, Amari Kedar

Advisor: Blayne McDonald

Abstract: This presentation explores the impact of Spring Lobby Weekend (SLW) 2024 as it relates to the development of leadership skills through lobbying and learning about Indigenous justice. First, the presentation explains the purpose of SLW 2024, discusses S.1723/H.R. 7227: Truth and Healing Commission on Indian Boarding Schools, and analyzes the strategies used throughout SLW 2024 to lobby for the Truth and Healing Commission's establishment. Then, students who lobbied on Capitol Hill during SLW will share how the experience contributed to their leadership development and informed their understanding of Indigenous justice in the U.S. Overall, the presentation aims to illustrate SLW as an opportunity for leadership development through civic engagement and an emphasis on the values of truth, healing, and justice.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 209W-A

Ravensbrück: The Survival and Sacrifice of Women During the Holocaust

Author(s): Zoe Flowers

Advisor: Kristian Blaich

Abstract: Ravensbrück concentration camp, open between 1939 and 1945, was a place of misery and pain for the prisoners forced to work at the facility. With a population of exclusively women, Ravensbrück was unique for the era, and the women there even more so as they struggled to keep their life and sense of identity during the Holocaust. Through examining the organization of Ravensbrück and the experiences of the women there, we can see patterns of both a community too diverse to connect and a group of women so desperate to live that they supported each other in a system that set it apart from other Nazi camps and facilities of its era because Ravensbrück itself was unique in housing the people most equipped to survive: women.

11:40am-12:00pm Bullock 209W-B

Gendered Language and Iphis

Author(s): Anna Hillesheim

Advisor: Clayton Schroer

Abstract: The myth of Iphis in Ovid's *Metamorphoses* approaches gender in a way that has previously been largely discussed through the lens of the modern gender binary. Iphis' story provides a tale of non-normative gender expression well before our modern times. The two main ways of looking at the myth, either as Iphis as a proto-lesbian focusing on love for a woman or as a trans man struggling with gender dysphoria, are both flawed because they fail to take into account aspects of the opposing point of view. This presentation strives to move beyond the binary way of looking at the myth by analyzing the Latin as well as comparing and contrasting the text with two English translations. This interpretation shows that the binaristic discourse around the myth is steeped in our modern world and leaves out the important ways in which these two views coexist.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 210E
Agnes Scott From the Archives to Oral History

Author(s): Virginia MacArthur, Abby Bracewell, Lily Grosshans, Mari Radtke, Mary Shawhan, Joey Wilson

Advisor: Lorrie King

Abstract: This project aims to capture and archive the diverse experiences and perspectives of the Agnes Scott community. Our goal is to collect the stories that have often gone unheard, shedding light on the college's complex history and its impact on individuals and the broader community. Through interviews with individuals and analysis of those interviews, we identify central themes and make connections between participants' stories. These steps are followed by a chance for the researcher to reflect on the analysis process, acknowledging any questions, assumptions, or realizations that have occurred.

We also use Agnes Scott's archives to fill in gaps from recordings, giving context to the stories. By looking through McCain Library's digital collections, we are able to find records of the people, places, and experiences that have made our campus what it is today. Interesting facts can reveal themselves in unassuming documents, like a detail in the brochure for the Dedication Ceremony of the Alston Campus Center which mentioned hand-carved church pews made by the Amish community. Our findings are shared in a digital map serving as a virtual campus tour.

In summary, our project serves as a testament to the richness and complexity of the Agnes Scott community's stories, shedding light on its historical significance and contemporary relevance. Through methodical approaches and innovative techniques, alongside reminders of the unexpected joys of interview and archival research, we invite audiences to join us in this journey of discovery and reflection.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 304E

Exploring the Data: Ruminant Animal Exposure and Salmonella Cases in Georgia from 2016 to 2022

Author(s): Lily Olander

Advisor: Amy Patterson

Abstract: Background

Salmonella is a reportable disease in the state of Georgia, meaning that each diagnosis is reported to the Department of Public Health (DPH) for follow-up. The questionnaire which DPH uses to follow up with Salmonella groups certain exposure questions. Question 53 in particular asks “[Did the case] have contact with cattle, goats, or sheep?” This question doesn’t capture important and specific exposure data and it is unknown if intervention efforts are being appropriately tailored for this exposure group. The purpose of this project was to uncover data not explicitly from question 53, such as which animal exposure was most frequently reported.

Methods

The State Electronic Notifiable Disease Surveillance System (SendSS) was queried for all cases of Salmonella from 2016 to 2022. SendSS reported that there were 17,083 total cases, 253 of which reported ruminant exposure. After the data were cleaned, 102 cases were left in the ruminant sample. Control and ruminant cases were then compared across demographic and exposure related variables.

Results

The gender distribution across both samples was a near even split. Race and ethnicity mostly represented white non-hispanic individuals. However, there were fewer African American/Black cases in the Ruminant Sample. Goats were the most frequent ruminant animal exposure reported. Most exposures took place at a farm or ranch and at home.

Discussion

The results show that questions which group more than one exposure to a potential disease vector can hide important data. This hidden data is useful to explicitly collect to accurately inform intervention development.

MORNING ORAL PRESENTATIONS, BULLOCK SCIENCE CENTER, CONTINUED

11:40am-12:00pm Bullock 308

Emotional awareness, self-concept clarity, and self-stability as factors in trauma resilience

Author(s): Brigid Bowman, Sheriefa Braswell, Victoria Colon Lopez, Chloe Hall, Miranda Hodgson-Weed, Nadia Jackson, Reese Mendenhall, Meleah Oliver, Meredith Scadifi, Mari Walsh, Raja White, and Joel Thomas

Advisor: Joel Thomas

Abstract: Background: Researchers approximate that 90% of the world population experiences a traumatic event in their life and that number is increasing. An important resilience factor in coping with the effects of trauma is the capacity to construct a stable sense of self. However, the self has been underrepresented in the empirical literature.

Objective: To develop preventative and therapeutic interventions that decrease the impact of trauma on adult functioning, it is important to examine the relationship between factors such as emotional awareness, self-concept clarity, and self-stability.

Method: We utilized mediation analyses to determine whether: (1) body awareness mediates the relationship between emotional awareness and body coordination; (2) self-concept clarity mediates the relationship between self-esteem and pupil dilation, and (3) self-concept clarity and self-stability mediate the relationship between emotional awareness and psychological wellbeing.

Conclusions: Findings will be discussed that suggest that emotional awareness, self-concept clarity, and self-stability can be measured experimentally in innovative ways. These constructs may be useful in investigating the effects of trauma on self-development.

MUSIC PERFORMANCES, 10:00am-1:00pm, Maclean Auditorium, Presser Hall

10:00am, Senior Recital

Róisín Hagel, Soprano

Wooyoung Kwon, piano

Rosie is from the studio of Dawn-Marie James

11:00am, Chamber Ensembles

Lindsey Berry, Flute

Iz Camp, Oboe

Ansley Franklin, Viola

Cleo Kleinfelter, Clarinet

Sydney Queen, Horn

Jeanna Shorokhova, Violin

Mari Walsh, Violin

Under the direction of Professor Miranda Dohrman, Professor Qiao Chen Solomon, and Professor James Zellers

MUSIC PERFORMANCES, 10:00am-1:00pm, Maclean Auditorium, Presser Hall

12:00pm, Senior Recital

Styx Buzhardt

Elena Dorozkhina (Pianist)

Styx is from the studios of Rebecca Duren (Vocal) and Miranda Dohrman (Woodwinds).

SCOTTIE MATH BOWL, 12:00-1:30pm, Lower Evans Dining Hall

Exponential hilarity abounds in this game-show style math competition hosted by the wittiest department on campus. Count on the math professors for countless laughs! Grab your lunch and join us in Lower Evans- unquantifiable fun for participants and spectators!

AFTERNOON POSTER SESSION, 1:30-2:30pm, Baker Atrium, Bullock Science Center

Listed in order of first author's last name

Visual Attention and Stock Trading : The Difference Between Genders

Author(s): Leslye Alvarez-Gamez

Advisor: Li Qi

Abstract: This research project explores how visual attention differentially impacts the trading behavior of men and women. In the laboratory, eye-tracking technology measures information gaze during a sequential trading game in which participants are asked to buy or sell an asset. Before making a decision, traders receive information on the trading decisions of other participants (others' decisions) and the redemption value of the asset (private information). Research documents differences in attention across genders, with women having better ability to understand social cues. In this study, women give heightened attentional priority to the decisions of others, a social cue, as compared to men. We conclude that attentional priority is a cognitive mechanism that can account for the increased tendency of women, compared to men, to follow the behavior of others in certain conditions.

Annotation of Cyclin G in *Drosophila elegans*

Author(s): Chayse Busby, Amelia Lorenzo

Advisor: Dr.Robic

Abstract: This presentation focuses on analysis of unknown parts of the recently sequenced *Drosophila elegans* genome. In collaboration with the Genomics Education Project, we focus on annotating the gene cyclin G a in *D. elegans*. Cyclin G regulates growth and metabolism in *Drosophila* and is imperative to growth.

To do this we conducted a series of searches using BLAST (Basic Local Alignment Search Tool) comparing our query against known *D. melanogaster* genome/sequences. By contributing we are able to expand genomic databases and allow for further examination of evolutionary processes.

AFTERNOON POSTER SESSION, continued

Honey fingerprinting using low field, 60 MHz NMR spectroscopy

Author(s): M. Irène Chapeau, Esther Okamoto, Rowan Christopher

Advisor: Dr. John Pilger

Abstract: The Scottie Bee Palynology Project investigates honeybee foraging behavior and floral preferences in the Decatur, Georgia area. Other aspects of the project address the isolation of pollen grains from pollenkitt, and the construction of a pollen atlas from local flora and other pollen sources.

This portion of the research project is focused on the use of low-field, 60 MHz NMR spectroscopy to characterize botanical markers in local honey and on assessing the knowledge of NMR and general research techniques among STEM and non-STEM undergraduate students.

Scanning electron microscopy (SEM) is the standard method used to obtain images of pollen morphology for identification of honey samples, but it is expensive and requires a high level of expertise to use. High-field NMR analysis can be used to verify the botanical origins of honey. However, routine access to costly superconducting instruments is limited. Low-field NMR instruments are more cost effective and accessible for undergraduate students and smaller research programs. This makes it an attractive technique for undergraduate labs and interdisciplinary research.

Extracts of polyfloral honeys from local hives were prepared using established procedures and analyzed using low-field, ¹H NMR techniques. The resulting spectra were then visually compared to determine differences between extracts made from distinct honey samples. Throughout the project, undergraduate students from a variety of educational and research backgrounds worked in the laboratory to prepare and run NMR samples, and participated in the development of laboratory protocols. Students were tested on their knowledge of SEM and NMR techniques before and after their involvement in the project to determine the efficacy of the project in increasing student understanding.

The initial research concluded that at 60 MHz, samples of local honey, which were expected to have similar, though not identical spectra, were visually distinguishable. As the goal is not to identify all of the resonances within the complex spectrum, but to generate a library of standard pollen-based spectra for matching to new samples, this protocol is an effective way to differentiate between unique honeys and grant undergraduate students early experience in an interdisciplinary and growing field.

AFTERNOON POSTER SESSION, continued

The Presence of Rab11 in Hippocampus Neurons in the Shank3B Autism Mouse Model

Author(s): Rowan Christopher, Dani Khan, DJ Sherwin

Advisor: Jennifer Larimore

Abstract: This poster examines the presence of Rab11 in hippocampus cells from wild type mice and the Shank3B mouse autism model using Western Blots and Immunofluorescence. It was hypothesized that there will be lower levels of Rab11 protein in Shank3B mice because there is synaptic dysfunction in Shank3B mice, and Rab11 is involved in vesicle formation in synapses. We predicted that there will be a less concentrated bar of Rab11 proteins in the Shank3B mouse model than the C57/Bl6 mouse model in the Western Blot, and the immunofluorescence should reflect this.

This research is significant because it offers a deeper understanding of the association between the presence of Rab11 and autistic characteristic behaviors in Shank3B mice. Because Shank3B mice serve as a model for autism in humans, it offers the scientific community a deeper understanding of the condition. Previous research implicated impaired Rab11 function in individuals with autism, as well as conditions such as Alzheimers disease, Parkinson's disease, and Huntington's disease, which are associated with altered neural function. Any improved understanding of this protein has the potential to open up more treatment pathways and coping strategies.

Exploring Professional Dynamics in Hospital Settings: Insights from an Internship Experience

Author(s): Christine Chun

Advisor: Dr. Katzman

Abstract: As a student in the master of science in medical sciences program, I had the opportunity to complete an internship at Piedmont Henry Hospital. Initially, I anticipated relying solely on empathy and compassion, qualities honed from previous clinical encounters. However, this internship surpassed expectations by immersing me in the intricacies of professional healthcare practice. Shadowing patient care technicians, nurses, and physicians across various units provided invaluable insights into the critical importance of effective oral and written communication, as well as teamwork and collaboration.

Witnessing patient care technicians and nurses demonstrating genuine empathy and compassion towards patients in a large hospital environment was particularly impactful, especially given my prior exposure only to clinics. Observing providers establish personal connections with each patient in a fast-paced environment was truly remarkable. Active participation in interdisciplinary interactions highlighted the essential role of clear communication in delivering quality patient care. Whether in radiology, emergency departments, med-surge units, PACU, dialysis, or outpatient surgery, each setting underscored the necessity of concise communication in managing complex healthcare scenarios.

Furthermore, the internship underscored the importance of teamwork and collaboration in achieving optimal patient outcomes. Collaborating with diverse team members demonstrated the power of collective effort, emphasizing role adaptation, information sharing, and mutual support in healthcare delivery. Witnessing providers' empathy and compassion towards patients has left me feeling empowered. These experiences enhanced my abilities in oral and written communication, as well as teamwork and collaboration, crucial for my growth as a prospective medical school applicant and future physician.

AFTERNOON POSTER SESSION, continued

How does a school garden affect students understanding of science and nature?

Author(s): Abigail Danastor

Advisor: Carmen Carrion

Abstract: As time goes on, the need for innovative methods for teaching has become more of a prevalent topic in modern education. Informal settings can be viewed as an extension of the traditional classroom, e.g., a school garden, museum, or aquarium. These informal settings have the potential to foster learners' abilities to construct real-life associations with science content due to engagement, free exploration, and scientific investigation. Researchers and educators alike understand that school science should not be limited or constrained to inside school classroom settings (Sacco, Falk, & Bell, 2014; Tal & Dierking, 2014). A garden intervention was conducted in a seventh- grade life science class that focused on explicit understandings of genetics, ecosystems and engineering. The intervention spanned a total of 6 weeks at a suburban middle school. It consisted of 5 lessons that covered the topic of garden engineering. There were surveys conducted to assess the progress and thoughts of the students in the intervention group and those outside of the intervention group. An ANOVA was conducted on the statistics to assess if the differences found were significant. The findings showed that were significant findings between both the pre-test and post-test scores (<0.01). Then a T test was conducted to assess how the groupings of the student (intervention students vs. regular students) affected the scores. Mean scores were closer together in the pre-test between the two groups. However in the post-test grouping there was a significant increase in the difference of scores between the intervention students and regular students.

LAMP1 Protein Presence in Mouse Model for ASD

Author(s): Tess Dishaw, Ndongwa Pemba, Rebecca Harshman, Jennifer Larimore PhD

Advisor: Dr. Jennifer Larimore

Abstract: Autism Spectrum Disorder (ASD) has been diagnosed in approximately 1% of people worldwide and is characterized by repetitive and/or restrictive behaviors; and social interaction, learning, and memory alterations. The primary cause of ASD is not well understood. The SHANK3B mice serve as a mouse model of ASD and have a SHANK3 gene deletion. These mice demonstrate impaired social interaction, communication deficits, and repetitive behaviors. Through the use of SHANK3B and control (C57/B6) mice, hippocampus samples will be analyzed and compared through western blot and immunofluorescence to determine if LAMP1 protein levels are upregulated in SHANK3B mice. LAMP1 is a lysosomal protein marker that plays a role in lysosome biogenesis, lysosomal pH regulation, autophagy and cholesterol homeostasis. It is predicted that LAMP1 will be upregulated in the SHANK3B mice in comparison to C57/B6 mice. Understanding molecular mechanisms of Autism Spectrum Disorder will lead to potential new therapies.

AFTERNOON POSTER SESSION, continued

Decolonizing Activism: Examining NGO Strategies for Women's Rights in Algeria's Historical Context

Author(s): Julia Franck

Advisor: Autumn Cockrell-Abdullah

Abstract: This presentation explores how non-governmental organizations (NGOs) recognize and consider the post-colonial effects on Algeria when crafting strategies for gender equality. It challenges the conventional understanding of NGO advocacy for women's rights within the post-colonial Algerian context, arguing that existing frameworks do not fully capture the complexities of gender policies and practices shaped by colonial histories. This presentation raises important considerations about the balance between international NGO support and the genuine engagement of grassroots movements in promoting gender equality and feminist consciousness in post-colonial settings. It entails moving beyond mere legislative reforms to address the root causes of gender inequality through culturally sensitive and historically informed development policies.

Employees with Ambivalent Supervisors: Perceived Support and Job Satisfaction

Author(s): Chloe M. Hall, Trinitii V. Baggett, and Jennifer L. Hughes

Advisor: Jennifer L. Hughes

Abstract: Based on the SAD model presented by Holt-Lunstad and Uchino (2019), this research project sought to investigate ambivalent supervisors' roles in perceived organizational and supervisor support, job satisfaction, and intentions to quit for employees. We formulated two hypotheses. First, we predicted that perceived organizational support and perceived supervisor support would be lower for those with ambivalent supervisors as compared to supportive supervisors. Second, we predicted that job satisfaction will be lower and intention to quit will be higher for those with ambivalent supervisors as compared to supportive supervisors. We conducted an online survey and collected data from two hundred and fifty participants who were employed with a direct supervisor. Both of our hypotheses were supported. Individuals with supportive supervisors reported greater supervisor support, organizational support, and job satisfaction than those with ambivalent supervisors. They reported less intention to quit as well. This means that type of supervisor an employee has can affect the way they feel about their supervisor, the organization, and their job.

AFTERNOON POSTER SESSION, continued

Fall 2023 ASC Science Sprint for Urban Heat and Climate Resilience

Author(s): Zuri Harris

Advisor: Jennifer Kovacs

Abstract: How can the city of Decatur prepare for and mitigate high summer heat events that are likely to increase in the coming years due to our changing climate? The Fall 2023 ASC Science Sprint for Urban Heat and Climate Resilience was a one-day research project that aimed to provide baseline information to the city of Decatur to begin to answer this question. Heat sensors placed around the city and on campus collected data on air temperature, soil temperature, soil moisture, and canopy coverage over a one-year period. These sensors will continue to collect data through at least 2025. Science Sprint participants cleaned up, analyzed, and visualized the data from the sensors using R. Overall, the Science Sprint participants found that there was a strong positive correlation between soil moisture levels and canopy coverage, as well as a positive correlation between soil moisture levels and air temperature levels. This data can be used to predict areas that are more susceptible to higher heat anomalies during periods of high heat and to determine feasible solutions to alleviate urban heat island effects.

Employees' Engagement, Commitment, and Organizational Citizenship Behaviors with Ambivalent Supervisors

Author(s): Tiffany A. Hernandez-Salinas, Isabel A. Ley, and Jennifer L. Hughes
Advisor: Jennifer Hughes

Abstract: We compared ambivalent relationships with supervisors and their resulting impact on job engagement and organizational commitment. Kumari (2011) found that individuals experiencing lower job satisfaction, often a consequence of ambivalent interactions with their supervisors, exhibited higher levels of ambivalence towards their jobs. Our first hypothesis was: Organizational engagement, job engagement, and organizational commitment will be lower for those with ambivalent supervisors as compared to supportive supervisors. Lim (2021) demonstrated how supervisors expressing emotional ambivalence introduced unpredictability into the workplace, resulting in decreased task engagement among subordinates. Our second hypothesis was: Organizational citizenship behaviors will be lower for those with ambivalent supervisors as compared to supportive supervisors. We recruited 250 participants who were employed with a direct supervisor to take our online Qualtrics survey. We were not able to recruit enough indifferent and aversive supervisors for our analyses, so we evaluated only ambivalent and supportive supervisors. Using t tests, we found that employees with supportive supervisors reported greater organizational engagement ($M = 20.65$, $SD = 4.95$) than those with ambivalent supervisors ($M = 17.16$, $SD = 5.32$). They also reported greater job engagement ($M = 17.15$, $SD = 3.38$) than those with ambivalent supervisors ($M = 16.11$, $SD = 3.45$). Additionally, they reported greater organizational commitment ($M = 22.08$, $SD = 4.76$) than those with ambivalent supervisors ($M = 18.20$, $SD = 5.31$). Therefore, our first hypothesis was supported. However, our second hypothesis was not supported. The means were not significantly different for organizational citizenship behaviors for individuals ($p = .63$) and organizational citizenship behaviors for the organization ($p = .16$).

AFTERNOON POSTER SESSION, continued

Effects of Lion's Mane on Memory in Mice

Author(s): Laila James and Sofia Barrett, Sofia Barrett
Advisor: Stacy Dutton

Abstract: Background: *Hericium Erinaceus* (Lion's Mane), an edible adaptogenic mushroom, has been a topic of interest for researchers due to the neuroprotective properties of its active compounds. One of which is the enhancement of implicit memory, a form of long-term memory that occurs primarily in the amygdala and reflex pathways that deal with the emotional responses and habituation of recent experiences and behavior into memory.

Objective: This study explored the therapeutic potential of *Hericium Erinaceus* (HE) for memory and cognitive support in a rodent model. Researchers hypothesized that supplementation of the fruiting body of HE would improve implicit memory in mice.

Method: Twenty C57BL/6 mice (ten males and ten females) were randomly assigned to the HE group or the control group. Mice were subjected to a chronic stress paradigm and then placed on a 2 mg/kg HE-supplemented diet for two weeks. The effects were investigated via the object recognition behavioral test.

Conclusion: The findings of this study provide evidence for the potential use of this adaptogenic mushroom in relieving impairments in memory caused by stress.

Examining Socioeconomic Status as a Predictor of Sunk Cost Fallacy

Author(s): Silmi Kanji, Caroline Dana, Mia Garner
Advisor: Brielle James

Abstract: Sunk cost fallacy occurs when an individual continues to invest in a course of action regardless of whether the current cost—which often takes the form of money, effort, and time—outweighs the benefits. This research project sought to draw correlations between socioeconomic status (SES) and likelihood of committing sunk cost fallacy within Agnes Scott College students. To examine the relationship between these two variables, undergraduate students at Agnes Scott College completed an online survey.

Participants answered a series of demographic questions to determine their SES and read a short vignette describing a scenario in which a fictitious undergraduate student was faced with the choice of replacing a broken laptop or continuing to pay for repairs. The vignette included either a high or low cost condition by manipulating the repair fee to be \$20 or \$75. Participants were randomly sorted into one of the two conditions and asked to choose which option they believed to be most logical given the information provided. Results did not support the hypothesis that there would be a significant correlation between SES and likelihood of committing sunk cost fallacy. Future research should focus on a larger and more diverse sample size (e.g. community college/ public university) to create more variability within SES groups. Additionally, demographic determinants should be expanded to create more accurate score groups and categorizations of SES.

AFTERNOON POSTER SESSION, continued

Feelings of Anxiety, Discomfort, and Unsupportiveness Resulting from Ambivalent Roommates

Author(s): Alina Kuperminc, Katherine E. Cox, and Jennifer L. Hughes, Katherine Cox

Advisor: Jennifer Hughes

Abstract: According to the SAD model developed by Holt-Lunstad and Uchino (2019), relationships can be categorized as supportive, aversive, ambivalent, or indifferent. An ambivalent relationship is defined as one that is high in both positive and negative aspects. We hypothesized that among college roommates, an ambivalent relationship would lead to lower perceived support, lower comfort and higher interaction anxiety. We recruited 215 respondents to take our online survey, which included adapted items from the Perceived Supervisor Support scale, the Social Relationships Index, and the Interaction Anxiousness Scale. Independent samples t tests were run to compare the respondents who reported ambivalent and supportive relationships. All hypotheses were supported: perceived support and comfort were indeed lower and interaction anxiety higher for ambivalent roommates. We are interested in exploring the impacts of roommate ambivalence on physical as well as mental health in future research.

A Community-Engaged Approach to Measure Preferences and Implications of Accessible & Inclusive Marketing Strategies of HIV Medications for Black Women

Author(s): Leyoncé Latus, Dominique Guillaume, Judy Tan, Rasheeta Chandler

Advisor: Rasheeta Chandler

Abstract: Despite being highly effective in reducing HIV transmission, PrEP uptake among Black cisgender women remains alarmingly low. Visibility and marketing strategies further hinder accessibility to PrEP. This research delves into the perceptions and experiences of Black cisgender women in the southeastern United States regarding HIV prevention, particularly focusing on PrEP preferences. Through interviews with participants, the study investigates factors influencing PrEP adoption, such as age, location, race, gender, and mobile phone ownership. Recruitment methods included social media, fliers, and snowball sampling. Thematic coding of interview transcripts revealed disparities influenced by race, gender, age, and social determinants of health, emphasizing the need for tailored PrEP modalities and marketing strategies. Participants expressed a preference for daily pills over injectable options. The study highlights the importance of inclusive PrEP marketing featuring diverse Black women to enhance reliability and accessible messaging.

AFTERNOON POSTER SESSION, continued

Digital Anchors: The Impact of Credibility and Social Influence on Decision Making

Author(s): Leyoncè M. Latus, Safiyah Shah, Katherine C. Mazour

Advisor: Brielle James

Abstract: Anchoring effects are when there is an overreliance on the first piece of information given, which becomes a bias in decision making. Current research suggests that anchoring effects continue to be a phenomenon in cognitive psychology, impacting various aspects of decision-making across different contexts. Credibility is defined as how trustworthy a source can be perceived. This project aims to explore the effect credibility can have on price anchoring through a vignette about buying concert tickets from a credible site, TicketMaster, and a non-credible site, Reddit. Undergraduate students at Agnes Scott College completed an online survey in which a vignette was presented. The vignette included either a high or low anchor by manipulating the initial cost of the ticket before a discount to be either high (\$600) or low (\$200). Participants then had to respond with a price they think is worth paying. Results highlighted a significance between main effects seen with high and low anchors, but there was no significant main effect between reliable and unreliable sources. The results of this study indicated when participants were given a low anchor, participants are likely to provide a lower answer; the same is found with high anchors as participants gave higher answers. However, whether a source was reliable or not did not influence a participant's responses. Future researchers should continue to research the influence of credibility in separate contexts, especially with a more varied sample size and incomes to implement into future marketing strategies.

The Role of Horizontal Gene Transfer in Antibiotic Resistant Genes in Human, Animal and Environmental Health

Author(s): Chloe Lin, Brittany Hagar, Kobi McConico, Julia Jozefowicz, Omolewa Akinropo, Christina Beavers, Destiny Farmer, Charlie Morris, Soteria Jones and Erica Harris, PhD

Advisor: Erica Harris

Abstract: Animals are associated with beneficial complex microbial communities that aid in parasitic resistance. These once beneficial microbes can become harmful through the exchange of genetic material via horizontal gene transfer (HGT). HGT is the primary mechanism for antibiotic resistance to develop in microbial community members and has many human health implications. Therefore, analyzing microbial genomes for HGT is necessary to better understand antibiotic resistance. We used the framework of the One Health Initiative to compare antibiotic resistant gene sequences collected from either human, animal or environmental sources. All antibiotic resistant genes were collected from the National Database of Antibiotic Resistant Organisms (NDARO). We aligned and compared genomes using the statistical package software, R. We found that antibiotic resistant genes from pathogenic *Escherichia coli* were present in human hosts, animal hosts and environmental samples. We also found an overlap in the presence of antibiotic resistant genes in our animal and human samples supporting the movement of genes across species.

AFTERNOON POSTER SESSION, continued

Uncovering the Relationship between the U.S. History Education and Racial Bias

Author(s): Marls Loyd, Marls Loyd, Janese Bennett, Amani Smith, Marissa Ryals, Bailee DeShong, Nia Sanders, Tiffany Hernandez-Salinas, Solveig Svennevig-Brosi and Sophie Gregoretti

Advisor: Stephanie Stern

Abstract: The purpose of this study was to evaluate the relationship between the education of United States history and racial bias. Research shows that engaging deeply about race within a classroom creates an opportunity for students to research and retain culturally unfamiliar materials and that the way an educator teaches U.S. history is essential to how students create their beliefs on the subject and that dictates the strength of the racial bias they hold (Copenhaver, 2000). However, less is known about the actual relationship between the educational practices being implemented in classrooms across the country and the racial bias held by students. In the present study, participants completed assessment scales to measure their experience learning about US history and the racial bias that students hold.

What is a cult? What differentiates a cult from a religion.

Author(s): Sanatu Musah

Advisor: Abraham Zablocki

Abstract: This project delves into how we define and determine that a religious group, movement, or set of beliefs is categorized as a cult. It attempts to define and break down what a cult is and is not. In an attempt to answer the central question - What is a cult?- this project also explores definitions of religion, which is an ongoing debate among scholars in the field of Religious Studies. In order to understand what a cult is, we must identify and analyze its unique aspects in addition to determining how they differ from prevailing definitions of religion . In an attempt to understand this complex subject this project employs case studies from the present century.

Annotating the gigas Gene in *Drosophila ficusphila*

Author(s): Sage Pasquale, Isabelle Grovenstein

Advisor: Srebrenka Robic

Abstract: The Genomic Education Partnership (GEP) Pathways Project is investigating the evolution of the insulin signaling pathway using genomes from the fruit fly genus *Drosophila*. As part of this project, we annotated the gigas gene in *D. ficusphila*, a gene that is well-characterized in *D. melanogaster* and plays a role in the insulin pathway and regulating the cell cycle. We used the coding sequence from the gigas gene in *D. melanogaster* to locate the ortholog of this gene in *D. ficusphila*, following annotation protocols set by GEP and using the GEP UCSC Genome Browser. We examined the gene structure and genomic neighborhood of the gigas gene in *D. melanogaster*. Then, we identified the genomic location of the ortholog in *D. ficusphila*, examined the genomic neighborhood and determined the gene structure in the target species. We found precise genomic coordinates in *D. ficusphila* for all 16 coding regions of two isoforms of the gigas gene conserved from *D. melanogaster*. The annotated gene will be submitted to the GEP Pathways Project to contribute to the broader understanding of the evolution of metabolic pathways.

AFTERNOON POSTER SESSION, continued

Anxiolytic Effects of Linalool in Male SHANK3B Mice

Author(s): Grace Phillips, Sophie Boilard, Jewel Hanks, Anjali Kunnatha

Advisor: Jennifer Larimore

Abstract: Around 40% of individuals diagnosed with Autism Spectrum Disorder (ASD) present with comorbid anxiety disorders. This study aims to investigate the potential anxiolytic effects of linalool, a terpene alcohol in lavender extract, odor exposure in the SHANK3B autism mice model. Previous studies have demonstrated that certain natural plant extracts, like rosemary, citrus, and lavender produce anxiolytic effects. In our study, male mice were exposed to linalool odor for 30 minutes and then subjected to an open-field test to measure their levels of anxiety-like behavior. We observed an increase in x/a decrease in y after exposure. The results of this study have strong implications for the therapeutic potential of natural compounds in the treatment of comorbid anxiety in individuals with ASD.

Planning Ahead: Prospective Metacognition in Children's Maze Task

Author(s): Leila Reed, Aarti Kakkad, Andrew J. Kelly, Bonnie Perdue

Advisor: Dr. Perdue

Abstract: Metacognition is best defined as thinking about the act of thinking about one's own cognitive abilities. Prospective metacognition is understood as evaluating one's cognitive abilities at a future time (Dautriche et al., 2022; Grainger et al., 2016; James et al., 2021; Oguz & Sahin, 2011; Paulus et al., 2013; Wojcik et al., 2014). Most research has focused on judgments of learning at the present time or retrospective judgments. In contrast, research on future-oriented, or prospective metacognition is limited. It is generally observed that young children display more overconfidence in metacognitive tasks than older children (Lipowski et al., 2013; Schneider et al., 2000; Van Loon et al., 2017). The current study explores how well 3-5-year-old participants assess their future cognitive abilities. Participants underwent a multi-day program in the completion of numberlink mazes with manipulation of the number of stimulus pairs (2 v. 3) and the feasibility of maze completion (solvable v. impossible). If children were evaluating the future outcome of mazes before selecting, it was predicted they would choose the 'correct' maze.. Results from this research provide insight into understanding if children in this age group have developed future-oriented cognition. We hypothesized that participants would select the solvable maze options because of the utilization of future cognition. In addition, we predicted that the participants would select a solvable maze with fewer animal stimuli over a solvable maze with more animal stimuli. In trials with a true "correct" response, participants were significantly greater than chance performance, meaning participants were assessing their ability to solve a problem at a future time by utilizing future oriented cognition.

AFTERNOON POSTER SESSION, continued

Glioblastoma and its relation to survivability and age

Author(s): Anya Riggins

Advisor: Jennifer Hurst-Kennedy

Abstract: Glioblastoma, although rare, is a relatively fast-acting cancer. The responsiveness of the cancer to therapies and the outcome of the patient is based on multiple factors. Some of these include environmental, genetic, and exposure to carcinogenic chemicals. In this study, age as a contributing factor for diagnosis will be investigated. This will be done by analyzing glioblastoma patient tumor genomic sequencing data with the help of the program cBioPortal to examine the impact of age of diagnosis on patient survivability. Kaplan-Meier Survival graphs showed there was a clear correlation between age and survival, showing that patients diagnosed at an older age had a poorer chance of survival as compared to someone diagnosed when younger.

The American Christian Deconstruction Movement

Author(s): Jardyn Robinson

Advisor: Abraham Zablocki

Abstract: This presentation analyzed the Christian Deconstruction movement from various perspectives. It began by introducing and defining deconstruction from an American Christian and non-Christian perspective. Then, it delved into postmodernism and its role in deconstructing religion. Next, it examined the different benefits of Christian Deconstruction. The presentation discussed how deconstructing religion can lead to a deeper understanding of Christianity. To do this, it examined the book Churchmorph by Eddie Gibbs. It then went into the impact of deconstruction on personal religious experiences. The presentation discussed how deconstructing Christianity can lead to newer ways to practice religion. This section referenced the essay "Deconstruction and Christian Cultural Theory: An Essay on Appropriation" by Merold Westphal to develop this argument further, examining how including things from outside Christianity can create a unique experience for those who choose to do so as well as the risks and benefits of practicing that way. The presentation then discussed how people who are genuinely engrossed in their devotion to Christianity will not be so easily influenced to leave their religion, using the book Between Philosophy and Theology: Contemporary Interpretations of Christianity by authors Lieven Boeve and Christophe Brabant. It then concludes with questioning the movement further. Some of the questions pertained to topics like the future of Christianity, whether or not deconstruction can be applied to other religions, and examining if American Christianity is unique compared to different faiths regarding Christianity.

AFTERNOON POSTER SESSION, continued

Colored Light Filters to Mitigate Light Sensitivity in Post-Concussion College Students

Author(s): Jaelyn Romans

Advisor: Barbara Blatchley

Abstract: The present study compares the extent to which different colored light filters on a laptop screen mitigate the post-concussion symptom of light sensitivity in college students. Participants who have had a concussion within the past two years were asked to adjust the brightness on a MacBook Air to a brightness at which they could read a given sample essay. This was repeated eight times, once with no filter, and seven additional times using various colored light filtering screens. These light filtering screens were made of cellophane and were the size of the entire 13-inch MacBook screen. The brightness sustained was measured by counting the number of bars on the brightness scale, a part of the display settings, and then later recoded to “nits,” a standard unit for measuring screen brightness. Based on previous research findings showing that blue light filters mitigate light sensitivity the best, followed by green, red, and purple, in that order, those colors were predicted to allow participants to sustain the highest brightness while reading the sample essay. The main focus of this study was to determine which colors would best prevent light sensitivity symptoms to allow post-concussion college students to complete activities online with little or no light sensitivity relating to their concussion. Though a difference was found, there was no significant difference determining which colored light filter best mitigated light sensitivity. This result may be further examined in a larger population, and could be further explained through examining the psychological soothing effects of color.

The Effects of Dietary Consumption of Lion’s Mane on Depression-Like Behaviors in Mice

Author(s): Amani Singleton & Kristen Gilbert

Advisor: Stacey Dutton

Abstract: Depression is a prevalent mental health disorder with complex etiology, necessitating reliable animal models for research and therapeutic development. Lion's Mane mushroom (*Herichium erinaceus*, HE) has garnered attention for its potential neuroprotective and antidepressant properties. This study aimed to investigate the efficacy of Lion's Mane mushroom extract in measuring depression-like behaviors in mice. Nineteen adult mice (nine female and 10 male) mice were randomly divided into two groups: control, Standard diet (no dose HE extract) & Experimental (HE) at 2 mg/kg. To induce depression-like behaviors, mice were subjected to a 24-hour stress period where they were placed into a ventilated enclosed tube within their cages and not able to access food or water. Depression-like behaviors were assessed using the forced swim test (FST). The findings suggest the potential for HE in treating symptoms associated with depression. Further investigation into the underlying mechanisms and clinical applications of Lion's Mane mushroom in depression management is warranted.

AFTERNOON POSTER SESSION, continued

Unveiling the Possibilities of Meta Quest 3 VR Headsets and Organon Software in Human Anatomy & Physiology Laboratories: A Qualitative Exploration

Author(s): Danielle Thomas, Joseph Fernandez & Carmen A. Carrion, PhD

Advisor: Dr. Carmen Carrion

Abstract: With the advancement of technology, there is an interest in utilizing virtual reality (VR) as an educational tool. The Meta Quest 3 VR headset remains explored to a limited extent alongside the Organon software app. In this qualitative exploratory study, the role of the Organon software combined with the Meta Quest 3 VR headsets was examined to explore its functionality, utility, and suitability for amplifying learning experiences. With this integration, the VR headset and Organon app can be potentially utilized in Human Anatomy & Physiology Laboratories to aid students with visualizing, learning, and understanding the complex body systems and concepts.

Through tedious exploration the following results were found. 1. Pulling apart the body systems to observe certain body parts. 2. Using the ultrasound function to look at the abdominal cavity and heart. 3. Applying certain diseases and conditions to body parts to look at its effect. However, a few challenges presented themselves, such as its technical limitations. For instance, the app has certain functions which are available only to upgraded/premium versions. Additionally, technical issues occasionally arose during the simulated ultrasound and the interactive quizzes.

Meta Quest 3 VR headsets in conjunction with the Organon app is a practical learning tool for anatomy and physiology students which allows them to gain better insight into the human body and its systems.

How Minority Students Connect with Nature and Science

Author(s): Elise Tookes, Megan Wright, Olivia Tefft & Carmen A. Carrion PhD

Advisor: Carmen A. Carrion

Abstract: Research has shown that children who feel disconnected with nature will grow up more likely to engage in behavior that will have a negative impact on the environment in their adulthood (Price et al, 2022). Additionally, it has been found that nature connectedness is positively correlated with positive affect and life satisfaction (Nisbet et al, 2011). Promoting a connectedness to nature can depend greatly on the setting in which a child is exposed to. A greater accessibility to natural elements may play a role in nurturing a child's relationship with nature (Keith et al, 2022). The current study investigates how adolescents in a suburb of a southern U.S. metropolis view and interact with nature.

Students in this study answered a survey over their understanding of science inquiry, views on nature, and their science identity. For this investigation we specifically focused on four questions: 1) Where do you feel most connected with nature? 2) List 5 words that describe nature to you. 3) What does environmental stewardship mean to you? 4) Do you think you are a scientist? Student responses were thematically analyzed between pretest and posttest surveys. The results of the study revealed that students who participated in the intervention had a more positive view of science and a more explicit connection to nature.

AFTERNOON POSTER SESSION, continued

Gut microbiome of Shank3B Mice

Author(s): Finley Turner

Advisor: Dr. Kovacs

Abstract: This research compares the gut microbiome of wild-type mice and heterozygote Shank3B mice. Certain Shank3B mutations have been associated with autism spectrum disorder (ASD) in humans. The Shank3B mice have been bred to have these mutations. Our data displays an observable difference in the populations of the gut microbiomes of these mice. While a similar number of bacteria types were found in all types of mice, comparing the proportions produced an interesting result. In the wild-type mice, there was one dominant family of bacteria, Lactobacillaceae, with a second type, Turicibacteraceae, appearing in some populations as a distant second. The remaining types were found in very small amounts. The same was true in the female Shank3B mice, with Lactobacillaceae displaying an even more pronounced dominance. However, in the male Shank3B mice, there was a more equal proportion of the diversity of bacteria present. While Lactobacillaceae remained the most common, multiple other types were found in significant amounts. While the consequences of this distinction are not known, identifying differences of this kind can help researchers dig deeper into the possible physiology of ASD.

How Racial Miscategorization Affects Self-Identification, Perception, and Lived Experience

Author(s): J'Lynn Vellon, Peeper McDonald, Taylor Jaczko, Taylor Jaczko, Dr. Peeper McDonald

Advisor: Dr. Peeper McDonald

Abstract: Previous studies investigating racial incongruence have focused primarily on comparing Multiracial populations to Monoracial populations. This study instead compares individuals who experience racial incongruence with individuals who do not in the contexts of identity distress due to social media usage, utilization of color-blind racial ideologies, and individuals' importance of race as a part of their identity. A survey was administered to 805 participants through faculty at the researchers' college, colleagues across the U.S., and peers. The survey contains items from the Social Media Identity Distress Scale (SMIDS), Color-Blind Racial Attitudes Scale (CoBRAS), and Aspects of Identity Questionnaire (AIQ-IV). We hypothesized that participants who experience racial incongruence would score high on the SMIDS, low on the CoBRAS, and low on the AIQ-IV compared to those who experience racial congruence. While we did not find statistically significant support for any of our hypotheses, these results could potentially be an accurate representation of the impact racial incongruence has in environments that mirror the sample used for this study. Racial identities are a complex facet of identity and, therefore, have various implications for different groups of people depending on the contexts they are in.

AFTERNOON POSTER SESSION, continued

Tracking by Annotation: Investigating the Evolutionary Trail of Pi3K21B in *Drosophila.miranda*

Author(s): Yunshan Zhou, Taylor Green

Advisor: Srebrenka Robic

Abstract: In *Drosophila*, commonly known as fruit flies, Pi3K21B is one of the genes that is responsible for insulin secretion, and if affected, can lead to a variation of diabetes type 2 in humans and fruit flies. Tyrosine kinase receptors can also control cell survival and proliferation in the insulin pathway.

The insulin signaling pathway, which is highly conserved among species, provides a suitable target to investigate the evolutionary pattern of regulatory regions of genes such as Pi3K21B.

In this project, *Drosophila.melanogaster* serves as a template species, and the orthologous region of Pi3K21B is annotated in the target species, *Drosophila.miranda*. By utilizing genomic tools such as GEP UCSC Genome Browser and NCBI BLAST, multiple lines of evidence are used to evaluate the conservation of this gene. As the target species is not a close neighbor to *D.melanogaster* on the phylogenetic tree, we expect a changed orthologous gene while some of its characteristics should be conserved.

Annotation of Pi3K21B allows for an understanding of how it functions in relation to *D. melanogaster*, which provides an insight into how evolution occurs in two species that are relatively evolutionary distant from each other.

AFTERNOON PRESENTATIONS, 2:30-3:50pm, Bullock Science Center

2:30-2:50pm Bullock 102W

Exploring Social Accessibility in the Center for Writing and Speaking

Author(s): Research Committee, Reese Mendenhall, Anjali David, Arabella Lewis, Hannah Porch, Mary Shawhan

Advisor: Imani Young Bey

Abstract: In this presentation, the Research Committee of the Center for Writing and Speaking will detail a brief overview of the center, discuss a prevalent issue of social accessibility in the relationship between tutors and tutees, and explain the research involved in studying this issue. Social accessibility will include student perception of the center, the services offered, and the tutors as well as analyzing how to better accommodate neurodiverse students and their needs. The presentation will argue that changes could be made to better accommodate student needs and will detail specific plans that have been presented to the leadership of the Center in order to better reach these needs.

AFTERNOON PRESENTATIONS, continued

2:30-2:50pm Bullock 103W

Behavioral Insights: A Campus Ecosystem Study on Honey Bee Activity

Author(s): Esther Okamoto, Lauren Weldy, Oona Varga, Alejandra Herrejon, Kamaria McCrary, Irene Chapeau

Advisor: Dr. John Pilger

Abstract: This study, funded by the Ecological Society of America, aimed to enhance student engagement in research across disciplines by exploring the ecosystem of a campus and its surrounding neighborhood, with a focus on understanding pollination patterns and the behavior of campus honey bees. Under the mentorship of Dr. Pilger, this student-led project sought to enrich research experience and comprehend the campus's ecological diversity. Our investigation centered on determining the pollination locations of campus honey bees, identifying the pollen grains in campus-produced honey, and analyzing the seasonal activity patterns of worker bees. We hypothesized that by analyzing pollen grain variation and bee activity, we could deduce the pollination sources and, hence, the biodiversity of Decatur's ecosystem. Our approach included analytical chemistry of honey using NMR techniques, video analysis of hive activity, and microscopy for pollen morphology. Preliminary results indicated a seasonal variation in bee activity, with a higher ratio of pollen-carrying workers during colder months. These findings contributed to creating an atlas of pollination patterns for campus honey bees and provided younger students with their first hands-on research experience, fostering the development of necessary skills for conducting laboratory research.

2:30-2:50pm Bullock 112W

A New Enlightenment: Christian Nationalism as a Religious Idol for the Right

Author(s): Aurora Roberts

Advisor: Autumn Cockrell-Abdullah

Abstract: This presentation overviews how Christian Nationalism has become a religious idol for the right-wing of America. The specific group the study focuses on is the far-right republicans of America, commonly known as MAGA Republicans. It argues that Christian Nationalism has expanded from more than just a political ideology into an idol of religious worship. This is seen through the movement's uncharacteristic devotion to their political beliefs, the idea of a "Christian America," and displayed behaviors similar to worship. Through deep literature review and political research, this study will explain how and why the movement has evolved into this along with the political ramifications it holds for our country.

AFTERNOON PRESENTATIONS, continued

2:40-2:50pm Bullock 209W-A
Journeys Atlanta: A Journey of Communities

Author(s): Meitte Dufera
Advisor: Daisy Astudillo, Imani Young Bey

Abstract: n/a

2:40-2:50pm Bullock 209W-A
Journeys Navajo Nation: A Brief Look Into the History of Native Americans and US Military Service

Author(s): Zuri Harris
Advisor: Tracey Laird

Abstract: This mini-documentary delves into the history of Indigenous involvement in the United States military in multiple capacities: a general overview of the history, the experiences of soldiers and their communities present and past, and the exploration of the complex reasons for as to why Native Americans enlist and serve in the military.

2:30-2:50pm Bullock 209W-B
Our Scale Experience at the Emory Winship Cancer Institute

Author(s): Lila McMaster (presenter), Samantha Canela (presenter): Madisyn Porcena (content contributor), Lil Gehner (content contributor), Iris Ray (content contributor)

Advisor: Stacey Dutton

Abstract: This presentation examines our SCALE experience at the Emory Winship Cancer Institute. It gives background information about the origin and current culture of the institute. It describes the SCALE experience of pre-health students at the Emory Winship Cancer Institute with descriptions of volunteer work accomplished and special presentations attended. It uses the Agnes Scott definition of leadership including the "Act, Analyze, Reflect" framework to describe the outcomes of the experience on personal leadership views and career goals. This presentation will give specific insight into how immersive experiences such as SCALE can aid students in forming career goals, ideas, and decisions.

AFTERNOON PRESENTATIONS, continued

11:20-11:40am Bullock 210E

"But the Struggle Continues": Shared Irish-Palestinian Struggle and Occupied Perspectives on Two-State Existence"

Author(s): EV McGovern

Advisor: Dr. Eleanor Morris

Abstract: This presentation examines how a shared struggle between Ireland and Palestine acknowledges the roots of colonization in two-state solutions that would, otherwise, further entrench occupation. This argument draws on three main theories of conflict origin; Identity, Territory, and Autonomy; to discuss both the shortcomings of current literature in understanding the colonial roots and how to fill this gap by recognizing transnational kinships. To do so, a postcolonial framework is first established within which to understand criticisms of Identity and Territory theory before aligning this analysis with Autonomy theory. Ultimately, this presentation claims that shared struggle between Ireland and Palestine is both politically and academically necessary through two conclusions. First, it explains how this solidarity resists the prolonging of conflict perpetuated by two-state solutions. Second, it discusses how recognition of this shared struggle demystifies the literary gap in conflict origin theorizing.

2:30-2:50pm Bullock 308

Socialization and Communication of Formerly Incarcerated Individuals

Author(s): Lunden Birago

Advisor: Ruth Oyelere

Abstract: Incarceration can be a significant life-changing experience and the re-entry process can be challenging. Using data from the Add Health Parent Study surveyed in 2015-2017, this research investigates if there are differences in social interaction for those who were previously incarcerated compared to everyone else. I consider social interactions in four ways; if an individual partakes in community activities, speaking with family, friends, and or neighbors for social visits, how individuals rank themselves as being the life of the party, and gathering with friends and family. To answer my question of interest, I make use of an Ordinary Least Squares (OLS) methodology and control for other factors that affect social interaction.

AFTERNOON PRESENTATIONS, continued

2:50-3:10pm Bullock 102W

Identity, Voice, and Authorship: Benefits on Undergraduate Education of Intentional and Inclusive Course Material Sourcing

Author(s): EV McGovern

Advisor: ER Anderson

Abstract: This research project presents early data on the benefits of intentional and inclusive course material sourcing on undergraduate education. This presentation is the result of a semester-long research internship in partnership with CharisCircle and examines (1) gauge how course materials chosen for classes at Agnes Scott represent the connections between identity, voice, and authorship and (2) understand how events held at Charis Books & More can supplement current course materials. The purpose of this project is to highlight the opportunity to support and value marginalized voices in authorship through intentionally-selected, inclusive course materials. This presentation draws from data reported by both faculty and students to present an analysis of the topic's current status on the Agnes Scott campus.

2:50-3:10pm Bullock 103W

Can a Hands-on Science Intervention Influence Minority Students' Science Identity?

Author(s): Elise Tookes

Advisor: Carmen A. Carrion

Abstract: This research investigates the influence of an active learning intervention that focused on seventh grade genetics. We investigated the development of minority students' learning capabilities in a non-traditional classroom, and how their personal experiences impact their aspirations of becoming a scientist. Understanding the role of an active learning intervention in nurturing scientific interest and understanding is imperative when growing the diversity within the scientific community (Sacco, Falk, & Bell, 2014).

The intervention employed interactive learning by combining traditional lecture style with various group activities such as using iPads to create a video about mitosis and meiosis. The hands-on nature of creating a digital video, provides a unique opportunity for students to be more engaged in their learning and fostering curiosity and critical thinking.

Two seventh grade life science classes participated in this study. Students completed a pretest before the intervention and a posttest afterwards. For this study we are specifically focused on a group of questions that asked students about how they identify with science. Using a thematic analysis approach, common themes were found for each question (Braun and Clarke, 2006).

This research contributes valuable insights into the role of interactive interventions as a catalyst for minority students' interest and participation in science. Understanding personal experiences is crucial for educators and policymakers who are encouraging diversity in the STEM field. (Bell et al., 2009). Emphasizing the need for inclusive educational initiatives that are beyond the traditional classroom are needed to cultivate the next generation of scientists (Lederman et al., 2014).

AFTERNOON PRESENTATIONS, continued

2:50-3:10pm Bullock 112W

China, Islam, and Gender: Analyzing the Power of Muslim Women Through the State's Application of Policies and Messaging

Author(s): Julianna Bragg

Advisor: Dr. Autumn Cockrell-Abdullah

Abstract: Muslim women have a long-standing history of oppression and leadership in China within the mosque both religiously and educationally. It remains unexplored, however, how the Chinese state utilizes Islamophobic messaging and policies to limit the power of and or silence the voices of Muslim feminists. Utilizing the theories of feminism, cosmopolitanism, and intersectionality, this paper aims to understand the relationship between Muslim feminism and the performative actions of the Chinese government to uphold the state's idea of secularism and stability. It contends that, whether directly or indirectly, China continues to weaponize Muslim women and their role within society by "othering" their beliefs and practices. This paper contributes to the current scholarship on Islamic feminism in China by examining the parallels between Muslim women consistently maintaining influence and the state dictating their power through the lens of intersectionality theory.

2:50-3:00pm Bullock 209W-A

GBL Journeys Belize: A Journey of Culture and Identity

Author(s): Maya Copeland

Advisor: James Stamant

Abstract: n/a

3:00-3:10pm Bullock 209W-A

Journeys Bulgaria: Communism and Architecture in Bulgaria: Physical Spaces and National Identity

Author(s): Sadie Berg, Tatiana Coope Soleil Lopez, Dalyn Washington

Advisor: Mina Ivanova

Abstract: This presentation discusses major themes in Communist architecture in Eastern Europe at large, but with particular focus on Bulgaria. Using photos taken during Journeys, this project explores the complex legacy of Communism and the way the period impacted national identity in Bulgaria.

AFTERNOON PRESENTATIONS, continued

2:50-3:10pm Bullock 209W-B Signature FD SCALE Presentation

Author(s): Jennifer Castellanos, Insherah Qazi, Qurban Mahary, Ayechan Moe, Kai Edem

Advisor: Jennifer Hughes

Abstract: This presentation is focused on the knowledge gained during the SCALE immersion experience with SignatureFD. SignatureFD is a financial planning and wealth management firm that curates their clients wellbeing into their financial goals. The SCALE visit to their Atlanta office allowed insight to careers in the financial management field through engagement in conversations with leaders at the site.

2:50-3:10pm Bullock 304E Sun, Sand, and Struggle: Unveiling Puerto Rico's Fiscal Crisis & Mi Patria's Path Forward

Author(s): Victoria Colón Lopez

Advisor: Amy Patterson

Abstract: Amidst a backdrop of fiscal turmoil compounded by natural disasters, political corruption, and gentrification, this presentation delves into the urgent need for comprehensive interventions to address the intersecting challenges facing communities, with a focus on Puerto Rico. Drawing upon real-world experiences, I examine the devastating impact of these crises on the socio-economic fabric and well-being of Puerto Rican residents. At the forefront of this discourse is Mi Patria, an organization dedicated to executing vital programs in housing security, disaster response, and mental health within Puerto Rico. Through a critical lens, I explore Mi Patria's innovative strategies in navigating the complex landscape of community resilience and revitalization in the wake of successive crises. Through an analysis of these structural barriers, we elucidate the imperative of holistic and community-centered approaches in effecting meaningful change and promoting social justice. By amplifying the voices of those most affected, I seek to inspire collective solidarity and action in building a more resilient and equitable future for all Puerto Ricans.

2:50-3:10pm Bullock 308 Covid-19 Pandemic and Parents' Mental Health in the United States

Author(s): Toni Risker

Advisor: Dr. Ruth Uwaifo Oyelere

Abstract: The COVID-19 pandemic, beginning in 2020, was a global issue that negatively affected many individuals and households. This study investigates the differences in mental health between single mothers and dual-parent households during and after the COVID-19 pandemic, using data from the United States Census Bureau Household Pulse Surveys. Using the OLS regression model, this presentation controls for other factors correlated with mental health to address this question. It examines levels of depression, anxiety, frequency of worrying, and loss of interest as measures of mental health. Based on the analysis using the OLS model, the results suggest that single mothers consistently experienced depression, anxiety, worrying, and loss of interest more than dual-parent households.

AFTERNOON PRESENTATIONS, continued

3:10-3:30pm Bullock 102W

The "Educated Educator": An Ethnographic Womanist Analysis of Black Women Childcare Workers Pursuing Higher Education

Author(s): Rue Randall

Advisor: Yvonne Newsome

Abstract: When it comes to the pursuit of education, its meaning, hold, and significance in the black community are both ancestral and filled with many tribulations. From the literacy tests of the Jim Crow and Civil Rights era to the disparities of inequitable education that we see in predominantly black schools across the United States today, the pursuit of a degree—especially past a high school diploma—has been and is an equally contested and admired process in Black communities and spaces. Black women specifically, especially within educational occupations, make up a large majority of degree holders within their community. This paper is based on an ethnographic study of Black women childcare workers, most of whom work in the Greater Atlanta and Decatur area. The analysis aims to understand how black women succeed and triumph amongst systemic structures that are lined against them and how their "drives" may relate to the womanist ideologies. While there is little research done on the reasoning behind why black women in childcare occupations pursue higher education, this paper will explore possible contributory factors such as a need to succeed, an overall determination to a sense of obligation to want better for themselves and their community, and possible internalization of the "Strong Black Woman" schema.

3:10-3:30pm Bullock 103W

The Math of Fish Tails: An Evolutionary Game Theory Model

Author(s): Sage Pasquale

Advisor: Alan Koch

Abstract: Game theory, a branch of mathematics developed for economics, is often applied to animal behavior and the evolution of behaviors such as cooperation and aggression. Secondary sex characteristics are traits that play a role in attracting mates, such as body coloration or courtship rituals. We develop a model providing insight into maximizing an individual's proportion of total offspring based on the energy invested in a secondary sex characteristic and the benefits to the individual due to the characteristic. We find that when the benefit of the secondary sex characteristic is high enough or low enough, the system will reach a pure equilibrium. We also provide a case study where the system will reach a mixed equilibrium in which each individual employs multiple strategies.

AFTERNOON PRESENTATIONS, continued

3:10-3:30pm Bullock 112W Hindu Goddess Kali Beyond the Stereotypes

Author(s): Kaela Brooks
Advisor: Abraham Zablocki

Abstract: This presentation delves into the multifaceted aspects of the Hindu goddess Kali, aiming to transcend the stereotypical portrayals often associated with her. Drawing from religious texts, cultural interpretations, and contemporary perspectives, the presentation explores the diverse dimensions of Kali beyond her commonly depicted attributes of destruction and ferocity. Kali is often depicted as a fearsome deity associated with destruction, death, and violence. However, this presentation seeks to unveil the deeper layers of her symbolism and significance within Hindu mythology and spirituality.

Through a multidisciplinary approach, including textual analysis, iconography study, examination of cultural narratives, the presentation investigates the various roles and manifestations of Kali in Hinduism. The analysis reveals that Kali embodies a spectrum of attributes and symbolism, including motherhood, empowerment, liberation, and cosmic transformation. By exploring her different forms, myths and cultural interpretations, a richer understanding of Kali emerges, challenging narrow stereotypes. By transcending the conventional portrayals of Kali, this presentation underscores the complexity and depth of Hindu goddess worship. Understanding Kali in her entirety not only enriches our comprehension of Hindu mythology but also offers insights into broader themes of femininity, power dynamics, and spiritual evolution. Ultimately, this exploration encourages a nuanced appreciation of Kali's multifaceted nature, inviting deeper engagement with her symbolism and significance in Hindu religious practices and beyond.

3:10-3:20pm Bullock 209W-A Journeys Paris: Fashion, Ethics, and Capitalism

Author(s): Cadie Cooper, Kieko Bellinger
Advisor: Willie Tolliver

Abstract: Journeys Paris focuses on the fashion system and its interdependent geo-economic organization of production, intermediation, and consumption. The course addresses the social, cultural, political, historical, anthropological, philosophical, and aesthetic issues that are generated by the processes and cycles of fashion. Specifically, Journeys Paris investigates the role of Paris as a fashion capital and as a primary site of fashion creativity, commerce, history, politics, and controversy. This presentation will map the common themes of colonialism, globalization, race, ethics, and power upon the travel experience and the various destinations and encounters in Paris.

AFTERNOON PRESENTATIONS, continued

3:20-3:30pm Bullock 209W-A Journeys Berlin: Decolonizing Berlin

Author(s): Carlen Cannon, Isabelle Cowart, Winnie Lin, Makayla Myles
Advisor: Barbara Drescher

Abstract: Situated against the context of Berlin's memory culture, which focuses on the Holocaust, this presentation proposes to highlight and educate the city of Berlin about the missing memory culture of Germany's colonialism. The scope and purpose of this presentation is to function as a digital submission to the Berlin Senate's 2024 competition that seeks to fund the most innovative and far-reaching project with the purpose of decolonizing Berlin.

3:10-3:30pm Bullock 210E Keeping Up with the Statistics: The Growing Role of Data Automation in Public Health

Author(s): Amelia Enete, LaTonia Richardson
Advisor: Amy Patterson

Abstract: Data automation is typically defined as the use of technology and/or software in automating tasks regarding a set of data. With the growing presence of technology and communication in health, data is being updated constantly, from COVID-19 cases to cardiovascular disease mortality reports. This presentation details the data automation projects completed during a Public Health Bevier internship at the Center for Disease Control's Division of Heart Disease and Stroke Prevention. During this internship, two major projects were completed with the goal of making data easier to access. Firstly, a code was written using R software that would automatically pull cardiovascular disease data from data sources and input them into an annual morbidity and mortality report, which would save researchers time looking for each individual datum. Secondly, R software was used to create the basis for an analytics dashboard that would visualize the report's statistics through graphs and charts. These two projects work to make cardiovascular disease data both accessible and current, so that those who use the data can do so efficiently with less time spent searching for and visualizing statistics. This presentation also examines the potential future applications and benefits of data automation in the public health field.

AFTERNOON PRESENTATIONS, continued

3:10-3:30pm Bullock 304E Economics Senior Seminar

Author(s): Cassandra Calixte
Advisor: Dr.Ruth Oyelere

Abstract: There has been a resurgence in the U.S. government implementing humanitarian immigration policies. Despite the concentrated effort toward humanitarian relief, the U.S. granting of Temporary Protected Status for Haitian immigrants is a significant frame of interest. The concern and discernment in the health welfare of Haitian immigrants under the policy has been understudied in economic literature. My paper intends to fill in this gap by investigating the research question of what are the differences in health and labor market outcomes for TPS-eligible and non-eligible Haitian immigrants in the U.S? To answer this question, I used a Current Population Survey (CPS) 2009-2020 data from IPUMS CPS to look at the U.S. subpopulation of Haitians. To analyze this data I used the Ordinary Least Squares and Probit model to evaluate multiple regressions and ensure robustness. The results showed that being TPS-eligible increase the probability of having health insurance and tend to build more wealth than there non-eligible peers.

3:10-3:30pm Bullock 308 The Intersection between Dyslexia and Spatial Abilities

Author(s): Eliwyn K Carr
Advisor: Bonnie Perdue

Abstract: Dyslexia is a reading disorder characterized by a difference in reading ability without an intellectual deficit. Although many studies have referenced the idea that dyslexics tend to have more difficulty telling left from right (LRD) than non dyslexics, few studies have actually examined this potential relationship. This study predicted that dyslexics and people with more reading difficulties would have a harder time with cognitive tasks relating to spatial abilities, such as left versus right tasks. We used the AHRQ-Brief as well as two self-designed questions to assess perceptions of reading ability. We examined several spatial abilities including left right confusion (via a line motion task), spatial rotation abilities (via a mental rotation task), and brain lateralization (via a dichotic listening task). We used American Psychological Association - Online Psychology Laboratory (APA-OPL) for line motion, mental rotation, and dichotic listening tasks. After the APA-OPL tasks were complete, participants then completed a demographic survey, and were asked about their LRD ability, difficulty navigating to places, if they had ever suspected or been diagnosed with dyslexia, and the AHRQ-Brief. We tested 29 participants, 7 of whom had significant reading difficulties according to the AHRQ-Brief. Data were analyzed using bivariate correlations, and a positive correlation ($p < 0.05$) was found between AHRQ-Brief scores and LRD self report scores. These findings support the idea that there may be a link between reading difficulty/dyslexia and LRD. Future studies should have a larger pool of dyslexic students to further analyze the relationship between dyslexia and spatial abilities.

AFTERNOON PRESENTATIONS, continued

3:30-3:50pm Bullock 102W

Exploring Performative Activism: Analyzing the Uprise in GOP-Introduced Mental Health Legislation

Author(s): Payton Weems-West

Advisor: Autumn Cockrell-Abdullah

Abstract: This research paper delves into the intricate interplay between Georgia GOP introduced mental health legislation and its implications for firearm restriction advocacy, with a focus on elucidating the phenomenon of performative activism. Through a critical analysis of legislative rhetoric, policy frameworks, and socio-political dynamics, I will unveil the underlying motives and consequences of these legislative endeavors. Drawing upon a combination of scholarly research, empirical evidence, and insights gleaned from interviews with lobbyists at Georgia's County Association (ACCG), this study explores the ways in which GOP-sponsored mental health legislation often serves as symbolic gestures, deflecting attention from substantive reforms while exacerbating systemic inequities. Moreover, we investigate the detrimental impact of such legislation on firearm restriction efforts, revealing how misguided policies perpetuate stigmatization, hinder access to mental health care, and impede progress towards evidence-based solutions for mitigating gun violence. By synthesizing diverse perspectives and empirical evidence, this research aims to inform policy discourse, empower advocates, and catalyze meaningful change towards a safer, more equitable society.

3:30-3:50pm Bullock 103W

Waves of Learning: Enhancing Ecology Education through Field Experiences

Author(s): Esther Okamoto, Mari Radtke, Isabelle Grovenstein, Esther Okamoto, Lock Rogers

Advisor: Dr. Lock Rogers

Abstract: In a collaborative effort to enhance hands-on marine science and coastal ecology education, the Agnes Scott College SEEDS Chapter and the Emory Ecological Society, both located in the landlocked city of Atlanta, Georgia, organized a spring break camping trip to the state's coast. This educational journey included a visit to the Skidaway Institute of Oceanography for an immersive learning experience, a behind-the-scenes tour at the UGA Aquarium to explore marine biodiversity, and a practical field data collection exercise on Tybee Island to apply theoretical knowledge in a real-world setting. This initiative not only equipped students with invaluable field experience in marine sciences and coastal ecology but also strengthened the sense of community among participants from both chapters, thereby enhancing diversity in the field of ecology. The project was made possible through the generous support of a grant from the Ecological Society of America, underscoring the importance of hands-on learning and interdisciplinary collaboration in environmental education.

AFTERNOON PRESENTATIONS, continued

3:30-3:50pm Bullock 112W

What's the Rap with Race? : Exploring the Dynamics of Rap Music Perception and Influence

Author(s): Marcelle Brooks

Advisor: Dr. Doug Falen

Abstract: Rap music, originating in the Bronx in the late 1970s, has evolved into a cultural phenomenon deeply intertwined with African American and youth culture. Despite its roots in marginalized identities, rap's influence has gradually permeated mainstream society. This presentation examines the impact of rap music on young adults, focusing on attitudes, racial identity, music exposure, and self-esteem. Drawing on literature examining the attitudes and perceptions of rap, this research consisted of interviews and surveys exploring how rap music is perceived positively and negatively. My findings show that rap music serves as a form of self-expression for some and is criticized for explicit content by others. Additionally, the research finds that rap music can enhance collective identity among marginalized groups while also perpetuating negative stereotypes. Music exposure emerges as a significant factor, showing that the more an individual listens to rap music, the more nuanced their understanding of the genre is. Moreover, rap music consumption is linked to self-esteem, with individuals finding empowerment and connection through the genre. Bourdieu's Habitus theory provides insight into the fluid nature of cultural identity and the influence of social structures on taste and behavior. This research underscores the need for an updated study to reflect current attitudes and behaviors regarding rap music, focusing on diverse samples and modern research methodologies. Understanding the complexities of rap music perception and influence ultimately contributes to broader discussions on culture, identity, and societal dynamics.

3:30-3:50pm Bullock 209W-A

The Impact of Gentrification and the Tourist Economy in Puerto Rico

Author(s): Lizeth Flores, Amelia Langston, Makayla Lewis, Iyanah Marshall, Sara; Rivera, Jane; *Storrs, Sofia Scanlan-Emigh, and Joel Thomas,

Advisor: Joel Thomas

Abstract: The political and economic instability of Puerto Rico derives from the effects of colonization that continue to impact the island. In modern-day Puerto Rico, issues like gentrification and extractive tourism keep the island from flourishing both culturally and economically. This presentation will touch on the impacts of gentrification and the tourist economy, highlighting the long-term disadvantages the native population are left to deal with. It will emphasize the inextricable ties between Puerto Rican cultural identity and the Puerto Rican economy, and the United States' role in affecting this relationship.

AFTERNOON PRESENTATIONS, continued

3:40-3:50pm Bullock 209W-A

Journeys Costa Rica - The Impacts of Social Media on the Globalization of Tourism

Author(s): Lailah King & Lauryn Coleman

Advisor: Dr. Atieno Mboya Samandari

Abstract: Journeys students in the section focused on Sustainability, Travel & Globalization with Costa Rica as a case study. This presentation looks at social media's impacts on the globalization of travel. It examines the pros and cons of using social media to choose a travel destination, and the importance of finding reliable sources when planning travel.

3:30-3:50pm Bullock 308

Queering the Erikson Stages of Psychosocial Development Model

Author(s): Taylor Jaczko

Advisor: Dr Jennifer Fulling-Smith

Abstract: Since its inception and academic debut in the 1950s, Erik Erikson's Stages of Psychosocial Development model has been a guiding light for the way mental health professionals and academics conceptualize our emotional development in the context of fulfilling our socially-bound needs. Despite its wide usage, this model has glaring short-comings: It fails to take an intersectional approach to socioemotional development and does not consider the differences in how people with queer identities develop in the social context compared to their non-queer peers. This presentation will provide an overview of Queer Theory, Erik Erikson's model, the current research literature surrounding the usage of the Erikson model, an in-depth critique of the model's shortcoming, and a recommendation of a revision of the model.

THEATRE & DANCE PERFORMANCES, Winter Theatre, Dana Fine Arts Building

THEATRE PERFORMANCE, 2:30-2:45 pm, Winter Theatre

Don't Hang Up

Author(s): Léane Coudray

Advisor: Dr. Emert

Abstract: This theatrical performance, developed as part of an independent study focused on directing for the stage, features the 10-minute play "Don't Hang Up" by Sam Graber. The play tells the moving story of a teenage girl who calls a product hotline on the eve of being committed to an eating disorder facility. This production contains sensitive content and deals with topics that may be emotionally difficult for some people, such as eating disorders, suicide and grief.

DANCE PERFORMANCES, 3:30-4:30 pm, Winter Theatre

Tethered Hearts

Author(s): Kendall Riley

Advisor: Bridget Roosa

Abstract: "Tethered Hearts" is an exploration of love's resilience, delving into the complex narrative of two souls, bound by a cosmic force, navigating the treacherous waters of vulnerability and past heartaches. The choreography mirrors the tumultuous and sometimes hesitant journey towards accepting love. The piece was inspired by a compelling painting of the same title, created by a fellow Agnes Scott student, visualizing two hearts connected through their veins, a representation of their inextricable link, set against the vastness of a black background that symbolizes the unknown and the fears that accompany opening one's heart again.

Hijinks on the Narrowfeld Tracks

Author(s): Grace Krahm

Advisor: Bridget Roosa

Abstract: Hijinks on the Narrowfeld Tracks is an ensemble work exploring different aspects of a train ride through movement and sound.

Music: Derek Fiechter, Hawksearcher, and Robert W. Smith as arranged by Grace Krahm

Dancers: Gabby Hall, Maggie Harrison, and Audrey Partington

DANCE PERFORMANCES, 3:30-4:30 pm, continued

Leah Lipshutz Choreography II Final

Author(s): Leah Lipshutz

Advisor: Bridget Roosa

Abstract: This piece is inspired by poems by Carole Gilley and Leah Lipshutz. With this piece, I am incorporating my process with the Unravel and Urban Storytelling processes to generate both natural movement and a structured story coming from the respective processes. This piece aims to highlight connection as well as growth between two people as they explore their relationships to themselves and each other.

A Place (title in progress)

Author(s): Maggie Harrison

Advisor: Bridget Roosa

Abstract: Right now, this piece is a dance with the purpose of just dancing that has an element of creative arts collaboration.

N/A

Author(s): Alexandria Corn

Advisor: Bridget Roosa

Abstract: This presentation is about a man named Angel Perez who had a wife and two beloved children. He was a Mexican laborer for the Bracero Program of 1942 until he was deemed with a mental illness. "I see dead people," he said. He was then put in a mental institution and treated horribly. Why, do you ask? Because back then, mental health wasn't important nor cared for. Angel, not being able to see his children he so very loved, was then sent back to Mexico. Where he remained alone. Even died alone. In this piece, you will see a representation of Angel. As well as the ghosts he saw which in this piece represent ghosts of lost potential. None of us deserve to have those ghosts surrounding us on our death bed.

Tender Resilience: Embracing the Passage of Time (TBD)

Author(s): Sofia Tovar

Advisor: Bridget Roosa

Abstract: "Tender Resilience: Embracing the Passage of Time" (title is still TBD) is a dance piece that explores the emotional journey of a caregiver, the patient with Alzheimer's, and their supportive family members. The choreography unfolds as a narrative of love, loss, and acceptance.

DANCE PERFORMANCES, 3:30-4:30 pm, continued

Pieces of the Picture (TBD)

Author(s): Audrey Partington

Advisor: Bridget Roosa

Abstract: This is a three-person piece with dancers Gabby Hall, Maggie Harrison, and Grace Krahm. The work explores themes of depersonalization, romance, and detached storytelling.

N/A

Author(s): Harper Will

Advisor: Bridget Roosa

Abstract: This piece is an exploration of the relationships, emotions, struggles, and triumphs I've experienced over the past year. I intend to share a work that is visually beautiful and evokes feelings of longing, joy, and nostalgia.

STUDENT ART EXHIBITION & CLOSING RECEPTION, 4:30pm, Dalton Gallery, Dana Fine Arts Building

Come celebrate the talent and hard work of our art students- nearly a hundred works from all class levels will be on display in the Dalton Gallery. Stick around for snacks and turn in your SpARC passport for the raffle drawing!