

2023

**INNOVATION, INQUIRY
AND CREATIVITY
SYMPOSIUM**

APRIL 21, 2023 • 12PM - 5PM

**CLICK THE LINK BELOW TO WATCH
THE SYMPOSIUM LIVE VIA ZOOM:**

[HTTPS://WWW.BRENAU.EDU/ACADEMICS/IIC-SYMPOSIUM/](https://www.brenau.edu/academics/iic-symposium/)



Brenau
UNIVERSITY

**BRENAU DOWNTOWN CENTER
RENAISSANCE BUILDING
LIVE VIA ZOOM**

TWELFTH ANNUAL RESEARCH SYMPOSIUM

TWELFTH ANNUAL RESEARCH SYMPOSIUM
FRIDAY, APRIL 21, 2023
BRENAU DOWNTOWN CENTER, RENAISSANCE CENTER
AND LIVE VIA ZOOM | GAINESVILLE, GEORGIA

HISTORY AND VISION FOR THE BRENAU UNIVERSITY RESEARCH SYMPOSIUM

The Brenau University Research Symposium has its roots in both the College of Health Sciences and the Phi Kappa Phi Honor Society Research celebrations. In 2009, the College of Health Sciences began to host a research poster presentation after its graduate hooding event each April. The events were held in the Burd Center or Trustee Library. Phi Kappa Phi continued its focus on supporting both undergraduate and graduate research by hosting research poster events near graduation.

In 2012, the College of Health Sciences hosted the first Brenau University Research Symposium, which was open to all but focused primarily on both undergraduate and graduate research within the college. With the advent of the Sidney O. Smith Jr. Graduate School, it seemed time appropriate to pull all the research events being held in April into a university-wide research event. In 2013 the Research Symposium held its inaugural university-wide event. The keynote address was shared by all colleges and featured a faculty presenter from each. The topic was novel approaches to problems in health care. Over 60 papers were presented representing disciplines from across the university.

The twelfth annual Brenau University research symposium has been renamed to better reflect and encourage a broader notion of inquiry beyond traditional research. This year's event, renamed the Innovation, Inquiry, and Creativity Symposium, features undergraduate, graduate and faculty from across the university and spans disciplines as diverse as education, clinical psychology, art and cross-cultural awareness. This year has an international flavor as one of our keynote speakers and some of the faculty and student presentations are from the Universidad Especializada de las Americas in Panama.



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TABLE OF CONTENTS

2023 INNOVATION, INQUIRY AND CREATIVITY SYMPOSIUM.....	4
MODERATOR.....	5
KEYNOTE SPEAKERS.....	6
SCHEDULE.....	8
CREATIVITY.....	9
INNOVATION.....	24
INQUIRY.....	44
POSTER.....	79
INDEX.....	119

(Click on a line in the Table of Contents to be taken to that page in this program)

Why did we change the name of the Brenau University Research Symposium?

In 2023 the Research Symposium Committee made the decision to change the name of the Brenau University Research Symposium to the Innovation, Inquiry and Creativity Symposium.

The committee made this decision for a number of reasons, including the following:

- To emphasize the importance of the creative arts and welcome a larger number of researchers from the Visual Arts, Music, Theater and Interior Design departments.
- To embrace a definition of research which focuses on innovation and scholarly inquiry.
- To align the symposium more closely with the type of research currently being undertaken at Brenau.

Why did we craft a new definition of research for the 2023 symposium?

When the committee decided to change the name of the symposium, we also decided to craft a new definition of research for the purposes of the 2023 Innovation, Inquiry and Creativity Symposium.

Broadly, that definition of research includes the following types of projects:

- Projects that involve work with existing research or other texts, presenting original analysis, critique and argumentation, but no original data.
- Projects that involve critical analysis of the body of scholarship written about a particular subject area.
- Projects that result in original creative expression based on critical analysis and study of existing work.
- Projects that involve systematic collection and analysis of data.

We are pleased to say that you will find each of the types of research above in the 2023 Symposium.

MODERATOR



Barbara Steinhaus, DMA, C-AIM began her vocal training in Atlanta, Georgia, though a native of Madison, Wisconsin. She won honors, scholarships, and degrees:

a Bachelor's in Music from Georgia State University, a Master's in Music from the University of Illinois, and a Doctor of Musical Arts from the University of Georgia. Articles based on her doctoral thesis, "*An Investigation of Marian Anderson's Interpretation of Black Spiritual Art Songs in Selected Recording,*" have been published in journals such as the *NATS Journal of Singing*. Highlights as a professional soprano include Steinhaus singing with Georgia Opera and Atlanta Opera Studio; in Francis Poulenc's *Gloria* at Carnegie Hall, New York City in 1990; and in art song recitals with John Wustman at the piano. She is in her 14th year as Chair of the Department of Music at Brenau University in Gainesville, Georgia, teaching Applied Voice, Opera Workshop and Vocal Pedagogy. One of

her students was awarded a solo performance with the Georgia Symphony Orchestra in 2021, and others have successfully completed graduate degrees from the Manhattan School of Music, the San Francisco Conservatory of Music, and Syracuse University. In 2015, Steinhaus completed a Graduate Certificate in Arts in Medicine from the University of Florida and began a bedside music practice at the Northeast Georgia Medical Center. Nationally, she serves as President, having been a founding board member, for the National Organization for Arts in Health. Steinhaus was the lead author for the white paper, *Burnout, Research, Public Health: Critical Issues and Action Plans* and wrote *Impact of Arts on Health and Well-being: Health Research Summary for Advocates and Decision Makers*, commissioned by the Texas Cultural Trust. Her Brenau University course in Arts in Health Care serves both Fine Arts and Health Science majors, where she is initiating collaborative inquiry among these disciplines.

KEYNOTE ADDRESS

The 2023 Innovation, Inquiry and Creativity Symposium will begin with dual keynote speakers. Our first keynote speaker, Jenny Baxley Lee, MA, BC-DMT will speak on the topic of research in the arts and healthcare. Internationally, artists facilitate arts engagement with individuals with palliative care needs in a range of settings such as hospitals and hospices. This concept, though widely acknowledged, lacks systematic description or investigation. Evidence linking arts engagement with individual and population-level health and well-being is rapidly expanding. Our second keynote speaker, Jay Jesus Molino, Ph.D., Dean of the Faculty of Biosciences and Public Health at the Universidad Especializada de las Américas, Panama will speak on the topic of *Health Challenges and opportunities: The case of Panama*.

KEYNOTE SPEAKER



Jenny Baxley Lee, MA, BC-DMT
Director of the University of Florida Health Shands Arts in Medicine program

Jenny Baxley Lee, MA, BC-DMT, serves as Director of the University of Florida Health

Shands Arts in Medicine program as well as Senior Lecturer and a Board Certified Dance/Movement Therapist with the University of Florida's *Center for Arts in Medicine* in the College of the Arts. Since 2002, Jenny has dedicated her efforts to exploring the capacity of the arts, and more broadly the creative process, to impact the health and well-being of people of all ages and abilities both to enhance quality of life and to enhance care at the end of life.

Jenny co-founded the graduate degree and certificates in the Center for Arts in Medicine and is an instructor in the Master's degree program. From 2012 to 2019, she directed an annual study abroad course based in Belfast, Northern

Ireland entitled *Arts for Health, Peace and Community Engagement in Northern Ireland*. Jenny is affiliated faculty with the *School of Theatre and Dance* and the *STEM Translational Communication Center* and has served on the Research and Curriculum Committees in the *College of the Arts*. Jenny is an active member of the *American Dance Therapy Association* and served on the Editorial Board of the *American Journal of Dance Therapy* as Book and Film Review Editor from 2013-2016.

Jenny's current research focus is on artists' working with individuals with palliative and end of life care needs. She has practiced telehealth-based dance/movement therapy with veterans and their families at the Malcom Randall VA Medical Center and dance/movement therapy with University of Florida Health Shands Arts in Medicine working with children and adults with acute and chronic health issues. Jenny facilitated theatre and dance for health education and promotion among middle school and high school students in schools, juvenile justice and other community settings from 2012-18.

KEYNOTE SPEAKER



Jay Jesús Molino, PhD.
Dean of the Faculty of Biosciences and Public Health at the Universidad Especializada de las Américas, Panama.

Jay Jesús Molino is the Dean of the Faculty of Biosciences and Public Health at the Universidad Especializada de las Américas (UDELAS), located in Panama. Dr. Molino received his BSc in Mechanical Engineering in 2007 from John Brown University and his Ph.D. in Human Engineering and Environmental Studies from the University of Tokyo in 2014. He subsequently conducted Research at the Dairuji Laboratory of Thermal Engineering, Department of Mechanical Engineering, University of Tokyo, as a postdoctoral researcher. In 2016 he became Professor of Physics at the Specialized University of the Americas (UDELAS) in Panama.

Molino's research collaborations focus on the

research of micro/nanocontainers, interfacial processes, polymer physics, biomolecules, biological rheology and applied research in medical engineering and social dynamics. His work spans the understanding of self-assembling structures, the development of analytical theories and, more recently, computer simulations, applied to a wide range of systems. Dr. Molino's work has aided in the development of chemical data relevant to manufacturing processes. Also, together with other colleagues, he has been working to find solutions to mitigate the impact and proliferation of SARS-CoV-2 and other diseases. He is also a senior member of the IEEE Engineering in Medicine and Biology (EMBS).

In addition to his research activities, Dr. Molino is a strong advocate for the democratization of science and technology and off-grid development for Panama's most vulnerable communities. He is also the author of two books, father of a young scientist and passionate about legos and amateur rocketry.

SCHEDULE

RESEARCH SYMPOSIUM AT A GLANCE (Click on session names to be taken to applicable session)

CONCURRENT SESSIONS BY LOCATION

12 P.M.	DOWNTOWN CENTER THEATER Keynote Session								
1-1:50 P.M.	THEATER Creativity 1	MEETING ROOM A Innovation 1	MEETING ROOM B Creativity 2	MEETING ROOM C Inquiry 1	ROOM 240A Inquiry 2	ROOM 241B Creativity 3	ROOM 236 Innovation 2	ROOM 235 Inquiry 3	
2-2:50 P.M.	THEATER Creativity 5	MEETING ROOM A Inquiry 4	MEETING ROOM B Innovation 3	MEETING ROOM C Inquiry 5	ROOM 240A Inquiry 6	ROOM 241B Creativity 6	ROOM 236 Innovation 4	ROOM 235 Inquiry 7	
3-3:50 P.M.	RENAISSANCE BUILDING STUDENT LOUNGE Creativity 4	THEATER Inquiry 8	MEETING ROOM B DOWNTOWN CENTER ATRIUM Poster 1	MEETING ROOM B Inquiry 9	MEETING ROOM C Inquiry 10	ROOM 240A Inquiry 11	ROOM 241B Inquiry 12	ROOM 236 Innovation 5	ROOM 235 Inquiry 13
4-4:50 P.M.	THEATER Innovation 6	MEETING ROOM A Poster 2	MEETING ROOM B Creativity 7	MEETING ROOM C Innovation 7	ROOM 240A Inquiry 14	ROOM 241B Inquiry 15	ROOM 236 Inquiry 16	ROOM 235 Innovation 8	

CONCURRENT SESSIONS BY TITLE

1 – 1:50 P.M.

CREATIVITY 1

Theater

INNOVATION 1

Meeting Room A

CREATIVITY 2

Meeting Room B

INQUIRY 1

Meeting Room C

INQUIRY 2

Room 240a

CREATIVITY 3

Room 241b

INNOVATION 2

Room 236

INQUIRY 3

Room 235

2 – 2:50 P.M.

CREATIVITY 5

Theater

INQUIRY 4

Meeting Room A

INNOVATION 3

Meeting Room B

INQUIRY 5

Meeting Room C

INQUIRY 6

Room 240a

CREATIVITY 6

Room 241b

INNOVATION 4

Room 236

INQUIRY 7

Room 235

3 – 3:50 P.M.

CREATIVITY 4

Renaissance Bldg.
Student Lounge

INQUIRY 8

Theater

POSTER 1

Meeting Room C

Downtown Center
Atrium

INQUIRY 9

Meeting Room B

INQUIRY 10

Meeting Room A

INQUIRY 11

Room 240a

INQUIRY 12

Room 241b

INNOVATION 5

Room 236

INQUIRY 13

Room 235

4 – 4:50 P.M.

INNOVATION 6

Theater

POSTER 2

Meeting Room C

CREATIVITY 7

Meeting Room B

INNOVATION 7

Meeting Room A

INQUIRY 14

Room 240a

INQUIRY 15

Room 241b

INQUIRY 16

Room 236

INNOVATION 8

Room 235

CREATIVITY

CREATIVITY 1 *1-1:50 p.m., Theater*

HOW DID I SING THAT NOTE

POSTER/PANEL/PRESENTATION: Operetta

PRESENTER(S): Dr. Barbara Steinhaus, Mr. Ben Leaptrott, Morgan Johns, Sarah Delay, McKenzie Carr, Iceley Self

COLLEGE: College of Fine Arts and Humanities - Music

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Barbara Steinhaus

ABSTRACT:

The students in Brenau University Opera Workshop, Spring 2023, have studied the required vocal techniques, interpretive styles, and the mechanics of notes, words, and rhythms; to reproduce an actual live performance of scenes from *Die Fledermaus* (Johann Strauss), an operetta first produced in 1874, depicting lives of aristocrats in Viennese society. The music is light-hearted yet demanding in range. The students have had to think ahead about using and remembering artistic decisions as they created their character. They also have found that new things happen in live performance and one must then make on the spot decisions about new choices.

CREATIVITY 2 *1-1:50 p.m., Meeting Room B*

DESIGN OF A COST-EFFECTIVE SWIMMING PROSTHESIS FOR TRANSTIBIAL AMPUTEE PATIENTS

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Rodriguez Milky, Dr. Jay Molino, Maybellis Cárdenas

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Jay Molino

ABSTRACT:

A swim fin prosthesis has been manufactured for a transtibial amputee patient by 3D printers using glycol-modified polyethylene terephthalate associated with a video recording analyzer that allows the measurement of the angles of the participant's residual limb. The data provided by the study indicate that the knee flexors present, according to Daniel's scale, the strength of 3.5, the knee extension (quadriceps-rectus femoris) a strength of 4, and the adductors (adductor medius) and abductors (gluteus medius, tensor fascia lata) a strength of 4. Mathematical modeling was performed to determine the critical loading conditions, considering some parameters that affect the mechanics of the transtibial amputee's kick, such as the angular velocity of the kick, drag force, and flipper geometry. Similarly, the mechanical strength of the prosthesis was evaluated by finite element analysis, and it was determined that given the angular velocity of the prosthesis, the maximum stress Von Miss 31.78MPa. In tests, the equipment operated at a pressure of 6.1 kPa.

CREATIVITY 2 *1-1:50 p.m., Meeting Room B*

DEVELOPMENT OF A FUZZY LOGIC BASED MECHANICAL VENTILATOR'S ELECTROPNEUMATIC FLOW CONTROLLER.

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Lina Gonzalez, Dr. Alfredo Lescher, Issa Griffith, Dr. Jay Molino

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Alfredo Lescher

ABSTRACT:

This project consists of the evaluation of the implementation of artificial intelligence (fuzzy logic) in the flow control system of a mechanical lung ventilator, which will be oriented to study and analyze the control system through fuzzy logic and thus be able to compare it with the PID control. With this comparison, it is expected to find the automation of mechanical ventilation flow control, thus benefiting people undergoing respiratory treatments, as well as optimizing the life support of patients in the ICU (Intensive Care Unit) and facilitating, the medical personnel in charge, the functions of monitoring respiratory parameters. The main objective of this project is the design of an algorithm for a flow controller of an electropneumatic system of a mechanical lung ventilator based on fuzzy logic. Different measurements will be carried out under different conditions to verify the correct operation of the sequential instructions defined for fuzzy logic flow regulation.

CREATIVITY 2 *1-1:50 p.m., Meeting Room B*

DESIGN OF A PROTOTYPE OF A 3D PRINTED MYOELECTRIC PROSTHESIS THAT CAN PERFORM CYLINDRICAL GRASPING FOR CHILDREN BETWEEN 1 AND 2 YEARS OF AGE WITH AGENESIS OF THE UPPER LIMB

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Augusto Perez, Milky Rodriguez, Dr. Jay Molino

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Jay Molino

ABSTRACT:

The present investigation proposes the evaluation and development of a prototype of myoelectric prosthesis manufactured by means of 3D printing; with the purpose of giving a better quality of life to patients with agensis of the upper limb and therefore to their families; by providing a technologically functional prosthetic limb; helping to develop skills and the execution of activities in daily life and that in addition to having an affordable cost thanks to the implementation of 3D printing and optimizing resources due to the design of EMG activation capture systems.

The prototype proposes the implementation of electromyography signals; which in conjunction with Arduino for signal processing; will allow the actuation of the prototype actuators to be carried out.

The results of the uptake obtained by the proposed EMG system were contrasted with studies carried out with commercial sensors, obtaining similar results.

CREATIVITY 2 *1-1:50 p.m., Meeting Room B*

CARACTERÍSTICAS CIRCADIANAS DEL SUEÑO EN PERSONAS ADULTAS DE PANAMÁ

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Medianero Gabriel L., Dr. Araùz Biseth

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Araùz Biseth

ABSTRACT:

The importance of chronobiological and homeostatic studies is associated with the importance of describing the behavioural patterns of organisms according to the geophysical changes of earth in its 24 hours cycle. This paper focuses on the sleep patterns of young Panamanian undergraduate students, which makes it possible to know their sleeping periods and the sleepiness index of this group by sex. Questionnaire was administered to 350 undergraduate students within the age range of 17 to 26 years. 74% of participants were women, 26% were men, and 67% were between the age range of 17 to 25 years. A battery of test was applied consisting of the Stanford sleepiness test (SSS) and the Epworth Sleepiness Scale (ESS). Questions were extracted from the Pittsburg questionnaires (PSQI). A sleepiness index (ESS) of 6.83 and 8.16 was obtained for students from 17 to 20 years and students from 21 to 24 years old, respectively. The results suggest significant differences between the sleep patterns by sex and age.

CREATIVITY 3 *1-1:50 p.m., Room 241b*

REPRESENTING GEORGIA WOMEN: Campaigning to be Georgia's First Female Governor

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Grace Darden, Abigail Wilks

COLLEGE: College of Fine Arts and Humanities - Dance

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kelley Brock-Simmons

ABSTRACT:

As part of HN220, Our fictional campaign will explore the intricacies of running for the office of Georgia Governor. In the past, Georgia has been more right-leaning and male centric. As both women and democrats, we hope to break Georgia's political norms and the glass ceiling in one piece. We will take the stance of women's rights through the issues of education, healthcare, and the economy. We hope that through our research, we inspire other potential candidates to run for office and to not shy away on the basis of gender.

CREATIVITY 3 *1-1:50 p.m., Room 241b*

COULDN'T ESCAPE IF I WANTED TO: Cyclical Fashion Trends as explained through ABBA

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): T'liia Franklin

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Charity Armstead

ABSTRACT:

This presentation covers historically-influenced designs, focusing on the 70s and 80s through the further influence of the band ABBA. It features a handful of designs created through research and passion, and will touch upon where such style is seen today. All designs are heavily influenced by ABBA's concert costumes, and subsequently altered to better suit the current market while still reflecting the aesthetic of the time. This research looks at how the cyclical nature of time is heavily prevalent in fashion, which in turn unites the past and the present. The chosen time period is the 1970s and 80s, when bands were really exploring their identities and how they present themselves on stage. It was chosen due to the recent influx in popularity for the colours and prints of the time. The presentation shows the importance of understanding the past as well as how to take old designs and turn them into inspiration for modern garment design. The research put into this project reflects both performance garments and everyday ready-to-wear items, as well as how designers handle the pendulum swing of fashion trends.

CREATIVITY 3 *1-1:50 p.m., Room 241b*

CREATING LINGERIE: A Slip through time

POSTER/PANEL/PRESENTATION: Other Media (Studio Art, Theater, Dance, etc.)

PRESENTER(S): Aloe Sanders

COLLEGE: College of Fine Arts and Humanities - Theatre

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Charity Armstead

ABSTRACT:

My goal in this project is to research and understand the history behind making and wearing lingerie. By the end of my research, I want to be able to utilize understanding in designing and building three historically inspired lingerie pieces. I will be using written sources such as the 1991 edition of Singer's "Sewing Lingerie" and the 1988 edition of Singer's "Sewing Update" and historical patterns from the 30s, 40s, and 80s to accurately understand and plan out sewing methods to use in the final production of the lingerie pieces. The project will be planned out over several phases, starting with the research, and understanding phase. This will be typed up into an introduction for the presentation. The next phase will be designing and writing detailed steps for creating the pieces. Next, I will pattern make, draft with muslin, and do fittings. After the drafts have been adjusted and tailored to fit the measurements accurately, the production of the actual piece will begin.

CREATIVITY 3 *1-1:50 p.m., Room 241b*

FREAK DU GOTHIQUE

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Billie Clifton

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Charity Armstead

ABSTRACT:

The Gothic subculture is an extremely creative and versatile collective of different aesthetics and forms of art, but yet is so frequently diminished to a certain idea of a person. The history of the culture is so varied and wonderful. This presentation will do three things: explain the history of the Gothic subculture, dispel common stereotypes of the subculture, and discuss eight of the most popular subcultures either under the Gothic umbrella or slightly outside of it.

CREATIVITY 4 *3-3:50 p.m., Renaissance Building Student Lounge*

HUMANITIES IN DPT EDUCATION

POSTER/PANEL/PRESENTATION: Poetry Reading

PRESENTER(S): Abby Barnett, Mattie Crain, Anna Good, Andrew Huang, Marissa Gatto, Dillon Gooch, Kaylee Jones, Andrea Schalburg, Mark Trimble, Makayla Favors, Carmella Neal, Jessica Streuer, Caroline Upton, Phila Bryant, Zachary Cao, Christian Echols, Daniel Son, Sutton Stuart, Sarah Ayoade, Emily Dailey, Rachel Johnson, Daniel Stuart, Lauren Sullivan, Kaitlyn Cook, Emma Muckenfuss, Caroline Pope, Julie Tran, Hunter Cavanaugh, Dominick Garcia, Megan Logeais, Katelyn Mettelle, Madeline Olson, Malgorzata Barrow, Adira Chakonal, Katelyn Champion, Kelsey Mieldezis, Anthony Peterson, Alec Whitley, Kendall Bragg, Dorothy Cook, Ricquavious Moore, Tristan Powell

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jeananne Elkins

ABSTRACT:

The first year in a DPT program is stressful and anxiety laden for most students. However the first year of the DPT program is where the foundational skills are learned. These skills include empathy for oneself and empathy for others. Students are required to write reflections after labs and activities. To be more inclusive for those who prefer another form of communication Dr. Elkins allows creative expression for reflections. Students can use poetry, drawing, sketching, videos, dance, etc. The creative expression is not limited to specific genres. This presentation will focus on the impact of creative expression.

CREATIVITY 5 *2-2:50 p.m., Theater*

4 M GERIATRICS PROJECT

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Abigail Stacy, Ellie Askew, Tripp Maloy, Sean Masterson, Aleksandra Parkinson, Ashley Peck, Chris Nozum, Victoria MacLean, Anna Grace Key, Ansley Coles, Blake Pullen, Madison Tankersley, Oketade Zainab, Alexis Kent, Auston Deneve, Jazmin Nunez, Kaitlyn Howell, Megan Moore, Shelby Crane, Jack Gallagher, Renz Marson, Melanie Banzon, Eric Dean, Elaina Gruver, Hannah Mills, Rebecca Brigdon, Trevor Christensen, Adrian Vazquez, Jordan Wisenbaker, Katie Simon, Madison Cronic, Matthew Dillard, Chelsey Bell, Daniela Cayetano Gonzalez, Hunter Pauley, Ian Magandy, Kyle Kurzeja, Abigail Jones, Emily Coleman, Mercedes Washington, Taylor Ford

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jeananne Elkins

ABSTRACT:

From the The Institute for Healthcare Improvement: There were more than 43 million people in the US over age 65 in 2012. This number is expected to double by 2042 to more than 83 million people. However healthcare systems, pharmacies, the lived environment have failed to prepare adequately for this population. Age-Friendly Health Systems is an initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI), in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA), designed to meet the challenge of the increasing population of older adults. Age-Friendly has 4 foci: mobility, mentation, medication and what matters.

Student project groups developed a “case” based on the ICF model to use in this project. The case patient is then engaged in accessing healthcare, healthcare services or the environment. The focus of the project is to use the 4 M’s to examine the barriers to care, to develop solutions and to implement physical therapy interventions for their case.

CREATIVITY 6 *2-2:50 p.m., Room 241b*

LIFE, DEATH, AND PRESERVATION IN A VIRTUAL LANDSCAPE: The Life Cycle of the MMORPG

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Ian Peters

COLLEGE: College of Business and Mass Communication - Mass Communication

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Over the past several decades, the Massively Multiplayer Online Roleplaying Game (MMORPG) has established itself as one of the most enduring genres in the gaming landscape. Unlike most other types of games, MMORPGs have a limited lifespan that is dependent upon the continued operation of servers that host these virtual landscapes. Studies, such as U Illinois' 2010 "Preserving Virtual Worlds" initiative, explored the technical possibilities for preserving fragments of a game's code and the theoretical context surrounding those choices. Since preserving an entire virtual world is impossible, curatorial choices must be made. Additionally, a key aspect of these games (their communities) cannot be preserved. Consequently, whatever remains is only a shadow of what came before. In the years since this study was published, numerous efforts by fans emerged where they attempted to preserve fragments of MMORPGs that are no longer in operation. This presentation examines those efforts and proposes that preservation efforts should build upon the works conducted by historic home museums and living historians. A life cycle of these games is also proposed to provide a framework for such initiatives as archivists strive to preserve these important objects in gaming history. MMORPGs have played an increasingly important socio-cultural role since the onset of the COVID-19 pandemic, with these virtual spaces operating as a safe alternative where players can socialize while distancing. With this in mind, it is more important than ever to consider how we can preserve these games in some form for future generations to learn from.

CREATIVITY 6 *2-2:50 p.m., Room 241b*

CULTURALLY RESPONSIVE CURRICULUM: Lessons from the Initial Brenau University Global Cohort

POSTER/PANEL/PRESENTATION: Panel Discussion

PRESENTER(S): Dr. Mary Johnson, Mrs. Pennie Pinkerton, Dr. Elizabeth Conoley, Dr. Kyrus Patch, Dr. Calpernia Charles, Ms. Micki Waldrop

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

PROJECT FACULTY ADVISOR: Dr. Mary Johnson

ABSTRACT:

Through a panel discussion, members of Brenau's first Global Cohort will discuss the lessons learned in adapting curriculum to broaden students' understanding of their cultural identities while gaining appreciation of the cultures of others. The importance of designing courses that are inclusive and engaging for all students and techniques to achieve this will also be included.

CREATIVITY 7 4-4:50 p.m., Meeting Room B

“SPRING AWAKENING”: A Directing Study and Presentation

POSTER/PANEL/PRESENTATION: Acting and Directing

PRESENTER(S): Sarah Kay

COLLEGE: College of Fine Arts and Humanities - Theatre

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Wen Guo

ABSTRACT:

To analyze a show, one must ask seemingly endless questions, but for the sake of conciseness, only one question will be posed; What was the world that this story was created for and how do I translate it to a modern lens as a director? In addition to literary and historical analysis, I will research Frank Wedekind’s life to find context as to why he wrote this piece.

One of the main themes I plan to focus on is the dichotomy of gender during this time period. Prior to the publication of the play, an ideology surrounding femininity, called the “Cult of True Womanhood” was running rampant. This ideology is centered in Christian ideas of women being pious and submissive. On the other side of the spectrum, anxious masculinity is pervasive within the script. Within “Spring Awakening, both cult-like femininity and anxious masculinity rear their heads to the detriment of the characters. As adults pursue perfection, they perpetuate traumatic cycles within their children. With this research, I hope to show connections between these themes within the play.

The other aspects of this project that I plan to focus on are the elements having to do with execution of a piece. In this, I plan to research blocking and directing strategies to convey power imbalances and elevate storytelling. In addition to that, I plan to do basic design concepts for the show. For the presentation, I would do a shortened synopsis of my research and present a scene from the show.

INNOVATION

INNOVATION 1 *1-1:50 p.m., Meeting Room A*

AN ENTREPRENEURIAL QUAGMIRE: The role of Age, Gender, Race, and Personality and their impact

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Renee Just, Dr. Shatrela Washington-Hubbard

COLLEGE: College of Business and Mass Communication - Business Administration

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

The workforce of today has experienced tremendous changes in recent decades. According to the Small Business Administration (2020) the small business sector employs over 48% of U.S. workers or approximately 60.6 million employees. The SBA defines a small business as having fewer than 500 employees. Small businesses created 1.6 million new net jobs in 2019 and overall, 5.2 self-employed individuals are minorities. The growth of the small business environment is critical to the economy. Small business environments are comprised of four distinct generational cohorts, each possessing different backgrounds, experiences, and styles. There is a gap in the literature regarding the personality traits of an entrepreneur and their commonalities and or differences. There is also a gap in the literature as to the gender and race of entrepreneurs. The SBA reports, entrepreneurship is a multi-faceted career path bridging disciplines such as psychology, business, strategy, economics, environmental, and sociology; spanning industries from healthcare, food services, retail, technology, transportation, real estate, and arts, to name a few. Understanding of personality traits of entrepreneurs would allow for focused mentoring, academic pursuits, and insight into potential growth areas as well as close the gap in the literature. Further, understanding influences such as personality on entrepreneurship and its impact on career development provides a better understanding of future expansion. To understand and close the gap, we must examine personality characteristics and differences between gender. In examining the literature, this is the first proposal aiming to identify gender, personality (HEXACO-PI-R), race, age cohort/generation, and education on entrepreneurship.

INNOVATION 1 *1-1:50 p.m., Meeting Room A*

INTELLECTUAL HOSPITALITY REFLECTED IN LEWIS'S AN EXPERIMENT IN CRITICISM AND THE PERSONAL HERESY

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Ms. Linda Kern

COLLEGE: Trustee Library

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Although intended to generate community, for some, the academic environment can be a fearful experience threatening their intellectual safe havens. Instead of a fellowship of acceptance, trust, and caring, encounters may be shaped by enmity and rancor.

However, when conflict is productively negotiated, ideas and conclusions can be voiced without fear of recrimination; the other's perspective is respectfully appreciated. Insights can be evaluated and one's own understanding may be corrected or enhanced. From its origins of *hostis* and *hospes*, hospitality evokes the confluence of host and guest and friend and stranger and enemy. As an act of welcome, hospitality engenders the prospect of action tempered by the tension inherent in befriending a stranger. Intellectual hospitality extends welcome into the academy. It is an aggregation of cognitive and affective dispositions supporting transformational learning. As a praxis of shared intellectual space, its hallmarks are welcome, openness, sharing and receiving, reciprocal engagement, and respect. C. S. Lewis provides a fascinating exemplar of intellectual hospitality. When informed by Lewis's perspective in *An Experiment in Criticism* and his example from *The Personal Heresy*, the intentional, continuous practice of hospitality offers the possibility of lifelong transformational learning and mutual growth, a concrete path forward in a world riven by discord and uncertainty.

INNOVATION 2 *1-1:50 p.m., Room 236*

PREDICTING RESILIENCY FROM COPING MECHANISMS IN SURVIVORS OF HUMAN TRAFFICKING

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Amanda Miller, Keri Ray, Mahnum Iqbal

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Margie Gill

ABSTRACT:

Human trafficking has become an increasingly prevalent problem in the United States affecting people coming from a multitude of demographic backgrounds, including, but not limited to age, race, ethnicity, and socioeconomic status. Human trafficking can take a multitude of forms, with the most common being labor and sex trafficking. Being a survivor of any kind of human trafficking can result in biocultural and psychosocial complications, and survivors often adopt different methods of coping with the consequences of being trafficked. Resiliency is a person's ability to persist in the face of adversity. In order to cope with the negative effects of sex trafficking, a survivor needs to be resilient. From the perspective of Maslow's Hierarchy of Needs, survivors of sex trafficking often have unmet foundational needs, which ultimately result in engagement in maladaptive coping mechanisms. Engagement in maladaptive coping mechanisms is a significant determinant in the development of resilience in individuals. In order to better understand the healing process of sex trafficking survivors, it is vital to look at the coping mechanisms of the survivors as a predictor of resiliency.

INNOVATION 2 *1-1:50 p.m., Room 236*

APPLICATION AND ASSESSMENT OF ACTING TECHNIQUES

POSTER/PANEL/PRESENTATION: Acting Techniques

PRESENTER(S): Noelle McIntyre

COLLEGE: College of Fine Arts and Humanities - Theatre

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Ms. Gay Hammond

ABSTRACT:

This research serves as a medium to test the strength and historical success of differing acting techniques. Famous acting teachers include the work of Sanford Meisner, Uta Hagan, and Konstantin Stanislavski, all of which provide great bases for a complex and developed acting regiment. Understanding the differentiations of acting nuance and approach allows for the actor to achieve a true neutral and to create a chameleon of themselves. The research found that utilization of one's core memories and experiences aids the contextualization of a scene greatly when compared to lesser preparation. Historically speaking, there are certain trends that justify the validity of an acting style based on the cultural context. In modern terms, realism and naturalism are valued higher than a more classical acting style, when looking at film. This research vindicates filmic acting as opposed to a more theatrical approach, however, the discoveries are applicable to both. This is an ongoing process, as the conditions of theatre and film acting criteria change according to societal regulations and preferences.

INNOVATION 2 *1-1:50 p.m., Room 236*

ADOLESCENT ATTACHMENT STYLE AND ITS INFLUENCE ON DEPRESSION AND ANXIETY THROUGH SOCIAL MEDIA USE

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Amber McCarthy, Taylor Hawley, Monique Rhymer, Taria Langston

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Lucinda Grapenthin

ABSTRACT:

Adolescence is a critical developmental stage where repercussions of attachment style formed in infancy begin to influence emotional and behavioral patterns. As people enter adolescence, several physical, cognitive, and social changes occur, the most vital of which involves the shift in focus from parent-child relations to peer relationships. Insecure attachment styles (anxious, disorganized, and avoidant) in childhood impact these peer relationships, which may result in higher rates of anxious and depressed symptomatology. Adolescents may seek out social media more frequently to replace the face-to-face connectedness they often struggle with, and research has shown that more adolescents are using social media than ever. Additionally, rates of depression and anxiety among this age group have also been increasing for years. There is also a well-established positive correlation in past research between levels of social media use and anxious and depressive symptoms. However, much of the existing literature examines older social media platforms, such as Facebook, which is being replaced with newer social media platforms such as TikTok. There is a gap in the literature regarding adolescent attachment and new social media platforms, especially TikTok, and no such study has examined adolescent attachment, social media, anxiety, and depression. This study also seeks to explore attachment style as a potential mediator in the relationship between social media use and symptoms of anxiety and depression.

INNOVATION 2 *1-1:50pm, Room 236*

HISPANIC WOMEN IN HOLLYWOOD

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Stephanie Rangel Santos

COLLEGE: College of Business and Mass Communication - Mass Communication

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Anna Deeb

ABSTRACT:

Hollywood is the symbol we know when we talk about entertainment. For years the portrayals of Hispanic women have changed, but has it changed for the better? Stereotyping is a consequence of the representation of groups of people through film. Although the Hispanic world has been growing in representation stereotyping still affects the image of Hispanic women in the world of cinema, causing many people to create different perspectives on the matter. The wrong assumption that people tend to make is that Latinas always get roles like servants, prostitutes, and stealing boyfriends, among others. In addition to getting low parts, they are also considered voluptuous because of their bodies. If they don't have curves or aren't sexually attracted to Hollywood standards, they're unlikely to get a decent role.

I hope to find a better understanding of why Hispanic women are portrayed the way in film and television. This project will be based on trying to demonstrate how the image shown in theaters can affect people's perception of members of culture on and off the screen, giving rise to many stereotypes. On the other hand, while not all stereotypes are good, they may not be all bad either. This project is based on movie examples such as "this movie" and this "tv show", featuring Hispanic actors such as Salma Hayek who always implies having a curvy body, and Sofia Vergara who always has a very extravagant attitude, among other celebrities. My point is to show that not everything about Hispanic women is true and we should take it as a potential to create false stereotypes. We should find ways to avoid these false assumptions such as giving a little more history about the world and not just about a country. I hope to provide suggestions for better and more accurate representations of Hispanic women in film.

INNOVATION 3 *2-2:50 p.m., Meeting Room B*

“RESPIRATORY MULTIPARAMETER,” A MODULAR MONITOR ADAPTABLE TO ICU MECHANICAL VENTILATORS TO IMPROVE THE CARE OF PATIENTS WITH SEVERE ACUTE RESPIRATORY SYNDROME.”

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Jesús Lemus, Dr. Jay Molino, Jose Walter Valverde, Ernesto Ibarra, Dr. Alfredo Lescher, Asdrual Rojas, Svetlana de Tristán

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Alfredo Lescher

ABSTRACT:

In the current scenario of the pandemic caused by SARS-CoV-2, the countries of the world are facing a highly dangerous virus, which has caused the collapse of several health systems. In this situation, invasive pulmonary ventilation procedures are required, making the mechanical ventilator a valuable and scarce resource for patients suffering from this pathology. Experience has shown that this collapse is due to the lack of prepared hospitals with sufficient supplies, medical equipment, and specialized human resources. Those countries with limitations in their industrial manufacturing activities, such as Panama, have a challenging path to achieve efficient medical solutions against COVID-19, since if there were an uncontrolled increase in cases, the existing ventilators would not be enough. The main objective of the project is the design and implementation of a Respiratory Parameters Monitor to expand the functionality of mechanical ventilators that do not have these features, to improve the care of patients with severe acute respiratory syndrome, in a scenario where high-end equipment is not available. The system that is expected to be developed consists of a data acquisition block made up of sensors designed in the laboratory, the subsequent processing and handling of the information, and a man-machine interface for the communication of the information obtained. Validation and testing of Precision and accuracy will be carried out using certified analyzers, in combination with the use of a COVID-19 mechanical ventilator and specialized medical advice.

INNOVATION 3 *2-2:50 p.m., Meeting Room B*

DEVELOPMENT OF 3D SCAFFOLDING FROM AGRICULTURAL WASTE FOR BIOMEDICAL APPLICATIONS

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Gabriel Moreno, Dr. Diego Reginensi, Dr. Jay Molino

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Diego Reginensi

ABSTRACT:

The ceramic supports used for bone regeneration in Biomedicine are usually synthesized from very expensive silanes, such as: tetra-ethoxy-silane and derivatives, which are not very affordable for their implementation in health centers in developing countries. For this reason, the search for new innovative and economically sustainable solutions is relevant for countries in the process of technological development, such as Panama, and also for the homogeneous integration of these innovative technologies in low-income populations. In this sense, being Panama one of the main rice producers in the region, it is necessary to obtain technologies that manage to give an efficient and innovative use to the waste that is produced as a consequence of its agricultural industrialization. Based on what was previously indicated, our proposal aims to develop mimetic materials, of silicic origin, from rice waste as a potential strategy for use in the area of biomedicine.

INNOVATION 3 *2-2:50 p.m., Meeting Room B*

SHOULDER EXOSKELETON TO ASSIST THE ADULT POPULATION

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Mario Pitti, Librada Villarreal, Milky Rodriguez

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

ABSTRACT:

In the present investigation, a prototype of an exoskeleton focused on assisting shoulder mobility was designed and built. An evaluation of the breaking points of the device was also made by finite element analysis, applying loads of 77 N and 177 N for flexion and abduction movements, presenting for flexion a maximum effort point of 6.268 MPa and 14.41 MPa, respectively, and a minimum of 0 MPa; while for abduction we obtain that the maximum effort point is 61.81 MPa and 115.6 MPa, and as a minimum point, 1.269E-20 MPa and 1.196E-20 MPa, respectively. Likewise, an analysis of the biomechanics of the prototype was carried out using Kinovea software to determine the maximum angle and the complete trajectory of each movement. In addition, the fabrication process is mentioned, where 3D printing with PLA filament was used as a method of manufacturing the parts of the device.

INNOVATION 3 2-2:50 p.m., Meeting Room B

STUDY OF THE FEASIBILITY OF PRODUCTION OF ESSENTIAL OILS (EA) FROM COMMERCIALY GROWN CITRUS PEELS IN PANAMA.

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Albano Diaz, Rene Rivera

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s) and Faculty

ABSTRACT:

A study was developed to determine the feasibility of producing Essential Oils (AEs) from the peels of the species *Citrus limon* (Creole, Persian, sweet), *Citrus sinensis* (Creole), *Citrus reticulata* (Creole mandarin).

The yield (v/m) of the extracts of each of the citrus fruits studied was evaluated, as well as the chromatographic profile and production data of these at the national level.

The extraction of essential oils was carried out using the hydrodistillation method with a “Clevenger” system and the chromatographic profile using the gas chromatography technique.

The Creole orange peel presented the highest extraction yield (5.91% v/m), followed by the mandarin with (3.89% v/m), the lowest yield was obtained from the mandarin lemon (1.28% v/m).

The chemical characterization showed that the highest relative concentration of Limonene is present in Creole orange (94.85%) and the lowest in Creole lemon (50.80%). Regarding the number of compounds identified, the result was the opposite, with Creole lemon being the highest (38 compounds) and Creole orange the least (7 compounds).

The results of this study indicate that it is feasible and competitive to produce essential oils from the peel produced in the citrus industry in Panama.

Keywords: Essential oils, citrus, limonene, Clevenger, hydrodistillation, chromatography.

INNOVATION 4 2-2:50 p.m., Room 236

BEYOND WAKING AND WALKING. Intensive rehabilitation in patients requiring extended durations of advanced mechanical circulatory support: A case series

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Katelyn Whitlock

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Background: Physical therapy (PT) utilization in patients requiring mechanical circulatory support (MCS) and extra- corporeal membrane oxygenation (ECMO) has been reported; however, little is known about intensive rehabilitation and associated outcomes in patients requiring extended complex MCS and/or ECMO support.

Purpose: Authors sought to explore safety, feasibility and outcomes associated with active rehabilitation in patients requiring prolonged advanced MCS/ECMO support.

Research Design: Single-center retrospective series evaluated functional, clinical, and longitudinal outcomes of sample of eight critically ill, adult (≥ 18 years of age) patients who underwent a intensive rehabilitation while receiving prolonged MCS/ ECMO through advanced configurations including: venovenous (VV-ECMO), venoarterial (VA-ECMO), oxygenator with right ventricular assist device (Oxy-RVAD) and right ventricular assist device (RVAD).

Data Analysis: 406 sessions were conducted; 246 during provision of advanced MCS/ECMO support.

Results: Incidence of major adverse events-accidental decannulation, migration of cannulas, circuit failure, hemorrhage, major flow limitations, and major hemodynamic instability-was 1.2 events per 100 sessions. None of reported major adverse events impeded longitudinal ability to participate in PT. Increased time to PT initiation was associated with a statistically significant increase in intensive care unit (ICU) length-of-stay ($\beta 1$ 1.93, CI 0.55–3.30) and reduced ambulatory distance during last session on MCS/ECMO ($\beta 1$ -47.64, CI - 93.93, 1.66). All patients survived to hospital discharge and 12 months from sentinel hospitalization. Amongst those patients discharged to an inpatient rehabilitation center (n = 4), all were discharged home within 3 months.

Conclusion: Findings support the safety and feasibility of active rehabilitational PT in patients requiring extended durations of advanced MCS/ECMO support. Moreover, it highlights potentially associated benefits of this degree of intensive re- habilitation for these unique patients. Further investigation is needed to identify associations with longitudinal clinical outcomes, as well as predictors of success in this population.

INNOVATION 4 *2-2:50 p.m., Room 236*

APPLIED LEARNING IN A GRADUATE ONLINE BUSINESS

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Dr. Shatrella Washington-Hubbard, Andre' Williams

COLLEGE: College of Business and Mass Communication - Business Administration

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Shatrella Washington-Hubbard

ABSTRACT:

Applied learning is a teaching practice that allows students to combine theory and application for a practical learning experience. Online asynchronous graduate programs may limit a student's opportunity to gain practical experience. Thus, this research explored opportunities to use applied learning techniques in an online asynchronous graduate business class. The research documented the students' abilities to apply theoretical concepts from the course to developing a change intervention plan for an organization. This session will highlight the instructor's approach to using applied learning techniques in the course and one of the students' experience. The student will explain how the culminating applied learning project resulted in a change intervention plan used in a consulting project for an organization.

INNOVATION 5 3-3:50 p.m., Room 236

EXPERIENTIAL LEARNING FOR DPT STUDENTS IN COMMUNITY WELLNESS; EVERYONE BENEFITS

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Jim Lewis, Dr. Stacey Hoffman

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Promoting health and wellness in middle-age adults has been shown to lower medical costs and decrease the development of chronic illnesses. Health promotion and wellness programs typically encourage behavior changes in physical activity, make dietary recommendations, and promote smoking cessation. Unfortunately, such programs fail to reach thousands of consumers. There is evidence demonstrating individuals are significantly more likely to be successful in behavior changes across multiple domains when they are supported by others.³ By pairing DPT students with community members, this study was able to measure the impact of a HPW intervention on the health metrics of adult volunteers. We also evaluated the impact of experiential learning on student's self-efficacy.

Community volunteers (N=42) were recruited to work with DPT students in Brenau University's Health Promotion and Wellness class. This ongoing program began in 2020. Data from 3 cohorts is included in this analysis.

The results of this experiential learning opportunity, embedded in a Health Promotion and Wellness class, indicate interventions designed and implemented by DPT students, after assessment of adult health behaviors, had a positive impact on the health metrics on the adult volunteers. Students also reported significant improvements in self-efficacy. Further research is indicated to better understand the impact of this experiential learning on retention of material taught in the class as well as long-term health impacts on the participants.

INNOVATION 5 3-3:50 p.m., Room 236

THE POSITIVITY EFFECT AND OLDER ADULTS: What we need to know and what it means for optimizing healthy aging.

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Kay Graham

COLLEGE: Ivester College of Health Sciences - Occupational Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

When compared to younger adults, older adults consistently show a preference to the positive in their attention, memory, and choices (Carstensen & DeLiema, 2018). This positivity effect is not associated with cognitive decline or dementia (Ruthig, Poltavski, & Petros, 2019). Recently, researchers found that older adults recalled and agreed with more positively framed COVID-related statements than did middle age groups (Alzpurua, Migueles, & Aranberri 2021). Explanations for this well-researched effect often include the decreasing time horizons put forth in the socioemotional selectivity theory. This theory posits that older adults show a shift from a negative to positive bias with increasing age due to changing goals based on perceptions of decreasing time living (Carstensen & DeLiema, 2018). While the reason behind the effect is still being debated, older adults' prioritization of more emotional goals should be considered in messaging and communications. For successful communications with older adults, Carstensen and Hershfield (2021) recommended emphasizing positive rather than negative messages and using more emotional and in the moment type of messages. Interactions that highlight individual resilience and strength may also be more successful than fear-based or negative communications. Attendees will hear about recent research on the positivity effect in aging and suggested communication strategies to optimize interactions with older adults.

INNOVATION 6 *4-4:50 p.m., Theater*

NEW DIRECTIONS IN BIOSCIENCES AND PUBLIC HEALTH

POSTER/PANEL/PRESENTATION: Panel Discussion

PRESENTER(S): Dr. Jay Molino, Dr. Heather Ross, Dr. Jim Lewis, and Dr. Greg Marshall.

COLLEGE: Universidad Especializada de las Américas, Panama and Ivester College of Health Sciences

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

This panel discussion will explore contemporary themes in biomedical sciences, regenerative medicine and public health. Technologies and approaches such as microcapsules, cell transplant therapies, technologically advanced prosthetics & orthotics, and pharmacogenetics (and many others) have the potential to shape the future of the healthcare field. The panel will entertain the possibilities of this exciting frontier, and ponder how to be a judicious trained researcher, health care provider, and patient when assessing the state of the field.

INNOVATION 6 *4-4:50 p.m., Theater*

ADVANCEMENTS IN RESEARCH AND EDUCATION IN BIOTECHNOLOGY, BIOSCIENCES, AND SUSTAINABLE EDUCATION IN PANAMA: UDELAS' CASE

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Jay Molino

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE/GRADUATE/FACULTY: Faculty/Staff

ABSTRACT:

This presentation will highlight advancements in university research and education related to Biotechnology, Biosciences and sustainable education at Universidad Especializada de las Américas, Panama.

INNOVATION 7 *4-4:50 p.m., Meeting Room A*

MEDIATION AND PSYCHOLOGY: The Benefits of Attending to Research

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Dr. Kenneth Frank, Dr. Mary Lou Frank

COLLEGE: College of Fine Arts and Humanities - Humanities

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Because mediation is a relatively new addition to the processes available to persons with disputes, there has not been much emphasis on research on the impact of mediator styles. Research is now becoming available on disputant satisfaction and long term resolution of the problem. Because mediation plays such a large role in dispute resolution (in some jurisdictions, 98% of cases filed in courts do not go to trial) it is important to understand the efficacy of the approaches being used. Research results indicate that a transformative style of mediation leads to greater disputant satisfaction with the mediation process and long term resolution of the problem.

INNOVATION 7 4-4:50 p.m., Meeting Room A

IT'S NOT "ONE SIZE FITS ALL": Generational differences among online students suggest the need for adaptable instructional strategies

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Dr. Billi Bromer

COLLEGE: College of Education

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Students from different generations are often enrolled in online education. They can represent Generation Z (born after 1995), Millennials/Generation Y (born between 1982-2995), Generation X (born between 1961-1980), Baby Boomers (born between 1945-1960), and maybe even older learners who were born before 1945 (Dimock, 2019; McCrindle & Wolfinger, 2010; Parker & Igielnik, 2020).

John Ebersole first identified the term "post-traditional" students (Soares, 2013) to differentiate learners in any of the above generations from traditional students who attend college full time after high school. Learner preferences can vary among different generations of post traditional students. These differences may include expectations for access to instructors, expectations for real-world application of what is being learned, interest in online learning versus in-person experiences, and the role of prior learning experiences (Montgomery College, n.d.). It is important to realize that....post-traditional students demand flexibility, differing formats, shorter courses, and a host of other delivery options....(Aslanian & Fischer, 2020).

The varied preferences among learners from different generations may suggest a need for online instructors to develop an adaptable instructional framework to better address student needs. [Post-traditional students] are also, like most students, in need of career services, library services, advising and other student services... (Aslanian & Fischer, 2020). The differences among learners from different generations might also suggest the need for online instructors to better understand generational differences that may be reflected in online student behavior (Harvey, A. 2021).

INNOVATION 8 *4-4:50 p.m., Room 235*

CRITICAL ANALYSIS

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Amber Arnold, Danielle Baroody, Kailey Bilbrey, Katelyn Blanchard, Taylor Borst, Daniel cisco, Alex Crittle III, Morgan Daniels, Darci Dow, Corinne Empleo, Austin Gragg, Matthew Hale, Cody Helgeland, Katlin Hemphill, Lo

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jeananne Elkins

ABSTRACT:

Each student developed a critical analysis of a PT practice and a critical analysis of a PT topic. These projects are intended to promote meta-cognition.

INQUIRY

INQUIRY 1 *1-1:50 p.m., Meeting Room C*

EXERCISE SCIENCE SENIOR RESEARCH PROJECT PRESENTATIONS

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Mitchell Alex, Cindy Bonila, Katherine Fourie, McKenzie McRee, Koraima Rodas

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Timothy Tolbert

ABSTRACT:

Exercise Science is a broad field with research spanning many subdisciplines. The research projects the students are completing are 1) the effects of music tempo on running speed, 2) the effects of arousal on the 1 repetition max test, 3) the levels of stress and anxiety in NAIA collegiate athletes, 4) the effects of wrist position on wrist injury in collegiate golfers, and 5) the effects of past ankle injuries on balance.

INQUIRY 2 *1-1:50 p.m., Room 240a*

IDENTITY AND ECONOMIC CHOICE: Exploring the Connection between One's Sense of Self and Economic Interaction

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Fassil Fanta

COLLEGE: College of Business and Mass Communication - Business Administration

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

In this paper, we explore how one's perceived identity affects economic interaction and outcomes. We argue that a person's sense of self is dynamic and changes through time. Personal identity takes different forms and shapes depending on current dominant life circumstances and the environment within which the person operates. We also argue that personal identity dictates the economic choice we made and our social interactions. The idea of 'Identity Economics' first emerged from the work of George A. Akerlof and Rachel E. Kranton in the Quarterly Journal of Economics in August 2000. We briefly review their work on the topic. Moreover, we discuss the concept of identity more thoroughly including the sources of our identity and how we identify with them. We ask and address the following important questions (1) how do we understand personal identity beyond the psychology and sociology of identity? (2) Can a better conception of who we are lead to making better economic decisions?

INQUIRY 2 *1-1:50 p.m., Room 240a*

AGENCY, NOT BLAME: An African Perspective on the African Participation in the Transatlantic Slave Trade

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Gnimbin Outtara

COLLEGE: College of Fine Arts and Humanities - Humanities

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

In his rough draft of the US Declaration of Independence, Thomas Jefferson outlined what he perceived was the lack of African agency in the British slave trade. For him, the British King George III was to blame for “wag[ing] a cruel war against [...] a distant people who never offended him, captivating & carrying them into slavery in another hemisphere....” In 1969, W. E. B. Du Bois praised Jefferson for correctly blaming King George III for his unjust war on a helpless African people. In a 2010 Op-Ed titled, “Ending the Slavery Blame-Game,” however, Henry Louis Gates Jr. cited American historians John Thornton and Linda Heywood who estimated that African slavers were responsible for selling 90 percent of the enslaved people in the New World to European traders. In support of Thornton and Heywood, Gates also quoted the ultimate African American scholar of the Antebellum period, Frederick Douglass, who blamed “[t]he savage chiefs of the western coasts of Africa, who for ages ha[d] been accustomed to selling their captives into bondage and pocketing the ready cash for them....” How can an African historian reconcile these intrinsic contradictions within the American historiography on the African participation in the transatlantic slave trade? This paper seeks to answer this question by not only incorporating new evidence of African agency from the Portuguese slave raiders, but also by moving the debate on African participation in the transatlantic slave trade from the current search for blame to that of agency.

INQUIRY 3 *1-1:50 p.m., Room 235*

LESSONS LEARNED: Secondary data analysis of Stroke Recovery in Underserved Populations

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): 3rd Year Physical Therapy Students: Jeffrey May, Joshua Jamiah, Clayton Cofer, Samantha Dike, Evan Mask, Hunter Floyd, Analee Bradach, Katelyn Howard, Morgan Singleton

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jeananne Elkins

ABSTRACT:

Using the publicly available data from The Stroke Recovery in Underserved Populations 2005-2006 study student groups developed research questions and completed statistical analysis to understand stroke recovery in underserved populations. During the 2 semester process students met in focus groups and identified 8 primary themes from the project. These themes ranged from the challenge of the age ranges included in the study to the lack of inclusion of people of color in the participants to the lack of inclusion of people with low educational levels. Each theme was developed using peer reviewed publications. The developed themes lead to an understanding that the data and the intended purpose of the study were not congruent.

INQUIRY 4 *2-2:50 p.m., Meeting Room A*

A COLLABORATIVE APPROACH TO ADAPTIVE APPAREL DESIGN IN THE CLASSROOM

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Sarah Pullani, Dr. Charity Armstead

COLLEGE: Ivester College of Health Sciences - Occupational Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s) and Faculty

ABSTRACT:

The purpose of this project was to facilitate the collaboration of occupational therapy students and fashion design students in designing adaptive apparel for adult clients with physical disabilities. Literature review revealed that there is a gap in studies involving a collaboration between fashion design and occupational therapy students. Prior to beginning the project, both groups of students were asked to fill out a survey to determine their existing knowledge of the other field as well as their knowledge of various disabilities. Students were divided into teams consisting of one fashion student and 5-6 OT students, with each team working with one client with physical disabilities. Students were asked to use the FEA model of apparel design (Lamb & Kallal, 1992) and the Canadian Occupational Performance Model (Law & Canadian Association of Occupational Therapists, 2014) to design and construct one apparel ensemble for each client. Fashion students also taught workshops on handcrafts to the OT students for use in therapeutic activity. Occupational therapy students taught fashion students about the concepts of occupational therapy and how a craft might be used as a meaningful activity to address goals in fine motor and executive functioning skills in adults with disabilities.

References

Lamb, J. M., & Kallal, M. J. (1992). A Conceptual Framework for Apparel Design. *Clothing and Textiles Research Journal*, 10(2), 42–47. <https://doi.org/10.1177/0887302X9201000207>

Law M. & Canadian Association of Occupational Therapists. (2014). *Canadian occupational performance measure (copm) (5th ed.)*. Canadian Association of Occupational Therapists (CAOT).

INQUIRY 4 *2-2:50 p.m., Meeting Room A*

“INCLUSIVITY, THE VALUE FOR THE ORGANIZATIONAL ‘BOTTOM LINE’.”

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Ted Garner

COLLEGE: College of Business and Mass Communication - Mass Communication

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Organizations often see inclusivity as a problem to be overcome with negative budgetary impacts. This paper reviews recent research indicating the opposite can be true. With cultural understanding and emphasis upon the value of diversity, an organization can enhance the work place experience and expand the capabilities of both management and workers. As globalization advances and migrant populations grow, a commitment to inclusivity can also greatly expand and broaden an organization’s marketplace penetration.

INQUIRY 5 *2-2:50 p.m., Meeting Room C*

ACTIVATING TRANSNATIONAL ADVOCACY NETWORKS: Ida B. Wells and Mainstreaming Antilynching

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Anna Deeb

COLLEGE: College of Business and Mass Communication - Mass Communication

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Antilynching activists in the United States have agitated to establish criminal civil rights violations for lynching for more than a century. Ida B. Wells, a renowned antilynching activist, tapped into and expanded upon existing transnational advocacy networks to mainstream antilynching rhetorics across borders in the late nineteenth century. This essay analyzes Wells's dispatches to the Chicago Daily Inter-Ocean during her 1894 transatlantic antilynching tour. I argue that Wells provides an example of how rhetors can mainstream social justice issues through transnational advocacy networks by refuting and recirculating key arguments, which in turn amplifies them to exert pressure on potential change agents. As activists work to stem modern-day violence that persists with frightening similarities to the lynching violence of the 1890s, Wells's strategy of amplification provides further insight into transnational rhetorical movement and efforts to mainstream social justice issues across borders. I derived the content for this presentation from my article that will be published in the Rhetoric and Public Affairs journal this spring.

INQUIRY 5 *2-2:50 p.m., Meeting Room C*

INTERIOR DESIGN RESEARCH PURPOSE AND EXAMPLES

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Dr. Margaret Serrato

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Research methods in interior design usually involve case studies, user surveys and design projects that are historical or action-oriented. This presentation showcases recent MFA interior design thesis research projects.

INQUIRY 6 *2-2:50 p.m., Room 240a*

PREDICTING INTENT TO CONTINUE EDUCATION FROM SCHOOL-BASED MENTORSHIP PROGRAMS AND PROSOCIAL BEHAVIORS IN AT RISK HIGH SCHOOL STUDENTS

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Christy Tran, London Cochran, Sarah Mayfield, George Johnson

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Julie Battle

ABSTRACT:

Our tentative abstract reads as follows: High school dropout rates have remained high over the last decade. Those who do not complete high school are at greater risk for unemployment, arrest, and lower mortality. Data from the past several years tells us that the days where one can earn a livable wage on a high school diploma are steadily decreasing in number. The current economy is accelerating the shift to more jobs requiring postsecondary education. This requirement is of particular importance among academically at risk students. These students face many obstacles on their journey to continued education. School based mentorship has been a well-documented intervention to help students do better in school, graduate, and continue education after high school. Much of the data on school based mentorship programs evaluates variables such as academic performance, anxiety, and self-efficacy, however very little is known about the role of pro-social behaviors in the context of mentorship. Of the documentation that does exist, pro-social behaviors such as trust, empathy, and volunteerism appear to have a positive relationship with high school graduation and intent to continue education. This study focuses on predicting intent to continue education from pro-social behaviors and length of time spent in a school-based mentorship program.

INQUIRY 6 *2-2:50 p.m., Room 240a*

STIMULANT MEDICATION AND CREATIVITY IN ADULTS WITH ATTENTION DEFICIT HYPERACTIVE DISORDER (ADHD)

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Sarah Fritz, Zahra Henkel, Dominique Davis, Cydney Jones

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Josh Hall

ABSTRACT:

Attention-deficit/hyperactivity disorder (ADHD) is a neurodevelopmental disorder characterized by deficits in executive functioning. Adults with ADHD suffer from job performance issues and interpersonal difficulties disproportionate to their non-ADHD peers. However, there is growing evidence that ADHD may be connected to increased creative abilities. Creativity is a meaningful skill that can be applied across multiple settings and is often considered a personal strength. As several facets of creative processes are tied to some of the symptomatology of ADHD, it is also essential to understand how the primary interventions for ADHD may impact creative cognitions. Psychostimulants tend to be the primary means of ADHD treatment, but the relationship between creativity and stimulant use remains unclear. From a neurocognitive perspective, it is critical to understand how a cognitive strength like creativity may be impacted by the primary means of treatment. There may be a significant level of untapped potential for innovation and contributions of individuals with ADHD, allowing for decreased stigmatization and increased life/career satisfaction. The proposed study intends to add to existing literature supporting the connection between creativity and ADHD and explore the relationship between stimulant medication and creativity in adults with ADHD.

INQUIRY 6 *2-2:50 p.m., Room 240a*

A COMPARATIVE ANALYSIS OF MEDIA MESSAGING AND ITS IMPACT ON POTENTIAL BIAS OF AFRICAN AMERICANS IN POLITICS

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Ar'Chardonnay Morgan

COLLEGE: College of Education

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kelly Brock-Simmons

ABSTRACT:

Overall, African Americans and other women of color have accomplished so much. We have marched for rights we do not believe in like the march for George Floyd. What is being said is that everything in this project is about how the media portrays African Americans and events that lead up to the point where women of color make a difference.

INQUIRY 6 *2-2:50 p.m., Room 240a*

HEALTHCARE PROVIDERS' PERCEPTIONS: Follow-up as an intervention for fall prevention

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Kay Graham, Student Authors/Not Presenters: David Bergen, Kristen Easley, Bailey Waters, Kaycie Oakley

COLLEGE: Ivester College of Health Sciences - Occupational Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Introduction: With one out of four older people falling each year, carrying out a follow-up plan is integral. Research on healthcare providers' perception of follow-up as an intervention is lacking.

Purpose: Exploring healthcare providers perceptions of follow-up as an intervention for fall prevention.

Methods: One semi-structured interview and two focus groups consisting of 12 healthcare providers (OT, PT, RN), within inpatient, outpatient, home health, and SNF. Data was analyzed using line by line coding to identify common themes

Findings: While follow-up looks different in every setting and depends on the certain discipline, all healthcare providers (HCP) had the same goal: to prevent future falls. Occurred in interactions while being a patient and after discharge.

Discussion/Conclusion: There is no standardization of care regarding follow-up. Although these HCP treat falls as a universal precaution, there is a need for more education on the specifics of follow-up.

INQUIRY 7 *2-2:50 p.m., Room 235*

PROJECTS FROM HN 240W: Honors Seminar in Scientific and Analytic Curiosity

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Dr. Anne Skleder, Ava Russell, Bernica Torralba, Maddie Watts

COLLEGE: College of Fine Arts and Humanities - Humanities

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Anne Skleder

ABSTRACT:

During this classroom presentation students enrolled in Brenau's HN 240 W: Research and Scientific Curiosity course will explore the following research questions:

What is the effect of age on juror decision-making?

What characteristics are common among people where the Pomodoro timer study method is effective?

Do psychedelic drugs increase creativity?

INQUIRY 8 *3-3:50 p.m., Theater*

ISRAEL AND MEXICO: A Cultural and Reflective Lens

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Dr. Renee Just, Dr. Irma Alvarado, Briona Bierkamp, Melanie Perez, Willow Hill, Camila Olivar, Melanie Workman, Zytoria Jenkins

COLLEGE: College of Business and Mass Communication - Business Administration and the Ivester College of Health Sciences - Department of Occupational Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Renee Just and Dr. Irma Alvarado

ABSTRACT:

Six Brenau University, Miller Institute scholarship recipient students traveled over spring break to Israel (Dr. Just) and Mexico (Dr. Alvarado) to explore the cultural aspects of each country, from social impact, historical and socio-political matters, daily life, and traditions.

They spent one hour each day reflecting and scribing in their journals. They used the Community Wheel as a starting point for their reflection. They were asked to consider the following:

Reflection with Intention

- Cultural Awareness
- Reflection of Self
- Food
- Dress
- Traditions
- Historical
- Socio-Political
- Cultural Bias
- Perception vs. Reality
- Cultural Humility
- Taking a Step Back...
- What you thought vs. What you experienced

INQUIRY 9 *3-3:50 p.m., Meeting Room B*

ENVIRONMENTAL CHARACTERIZATION OF THE ESTUARINE ZONE OF THE GULF OF MONTIJO, PROVINCE OF VERAGUAS, PANAMA.

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Dr. Ana García, Diana Arauz, Eridna Martínez, Dr. Jay Molino

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

The study was performed in the Republic of Panama. Panama has a coastline of 2,988.3 km, of which 1,700.6 km corresponds to the Pacific coast. Most of the coast is flat, and several geomorphological features characterize the Panamanian coastal sector, such as the Gulf of Montijo, which is located towards the west of the Panamanian Pacific coast in the province of Veraguas. The Gulf is a remarkable ecosystem of mangroves well preserved and internationally recognized as a Ramsar area. It represents the buffer zone of Coiba Island (Coiba National Park). Sixteen sampling stations were established along the coast to analyze the vertical and spatial variability of physical and chemical parameters (temperature, salinity, dissolved oxygen, pH, and conductivity). The quality of unexposed marine sediment was evaluated in four samples from the western sector of the Gulf of Montijo. The marine sediment samples were collected with a Dietz-LaFond Snapper dredge, between 1.5 and 3.0 m depth. Physical and chemical observations and marine sediment sampling were carried out during high tide +4 to low tide +3, in negative syzygy phase tide. The analysis of the oceanographic conditions, especially the physical and chemical properties of the water along with the longitudinal profile, showed a conservative distribution increasing gradually towards the outer region in an approximately linear way due to the dilution and mixing processes, both in the surface layer and at the bottom, and a not very developed vertical gradient, with slight stratification. The results of heavy metal analyses in marine sediments report high cadmium concentrations along the west coast, with concentrations above the limit levels of the Canadian marine sediment quality guidelines.

INQUIRY 9 *3-3:50 p.m., Meeting Room B*

EVALUACIÓN DE LA CALIDAD DE HARINAS PRODUCIDAS DE FUENTES DE PROTEÍNA DE BAJO COSTO PARA SER UTILIZADAS EN SUPLEMENTOS ALIMENTICIOS PARA LA INDUSTRIA ACUÍCOLA.

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Flor Morales

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Ana Luisa García

ABSTRACT:

La alimentación es parte vital de los seres humanos, por consiguiente, es fundamental que toda persona sin importar su clase social o económica tenga acceso a alimentos con una buena calidad e inocuidad alimentaria, garantizándole una buena nutrición. La acuicultura es considerada uno de los sectores alimentarios que presenta la mayor tasa de crecimiento en todo el mundo, debido al constante aumento en la demanda de productos pesqueros, asociado al aumento de la población y al conocimiento que se tiene sobre las características nutricionales y beneficios de estos productos, los convierte en una alternativa a la demanda de alimentos saludables. El proyecto busca realizar un suplemento alimenticio para peces cultivados con materia prima de bajo costo, como lo es la Macroalga del género Sargasso y semillas de zapallo que pueden aportar las proteínas que requiere el alimento.

INQUIRY 9 *3-3:50 p.m., Meeting Room B*

PERCEPTION OF ENTOMOPHAGY AS A HEALTHY FOOD ALTERNATIVE IN PANAMA

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Paola Hernández, Milagros Vaña, Rubén Collantes

COLLEGE: Universidad Especializada de las Américas, Panama

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Dr. Milagros Vaña

ABSTRACT:

A non-probabilistic sampling was carried out, aimed at 100 people between the ages of 18 and 65, with a complete secondary level of education onwards, a 1:1 ratio for men and women, residents of urban and peri-urban areas, 44% being public servants. They were shared an electronic form with the following questions: which insects do you know are edible? What benefits do you know of eating insects? Have you ever eaten insects? Would you include insects in your diet? Why yes? or would not include them? Data were analyzed with Microsoft Excel and PSPP programs. results. 58% of those surveyed knew that crickets and grasshoppers are edible; 45% recognized proteins and other nutrients as healthy benefits of eating insects, but a similar percentage is unaware of these benefits; 20% claimed to have ever eaten insects and 25% would include them in their diet. Culture, disgust and lack of interest were the main reasons why most dismissed the consumption of insects, while those who would consume insects would do so to improve their health, to try new things and if they are well prepared. The cluster analysis of K means formed 11 groups, highlighting group 9, as the ideal consumer. conclusions. To improve the perception of entomophagy as a healthy food alternative in Panama, it is necessary to better enlighten people and innovate in the processing of food prepared with insects.

INQUIRY 10 *3-3:50 p.m., Meeting Room A*

EXPERIENTIAL LEARNING IN AN UNDERGRADUATE HUMAN RESOURCE MANAGEMENT COURSE: AN EXPLORATORY CASE STUDY

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Dr. Shatrela Washington-Hubbard, Ann Almengor, Egypt Byrd, London Clark, Jasmin Mitchell, Brooklyn Oliver, Great Ozioma, Nyla Parker, Angelica Richards, JohnNya Taylor-Mckensie

COLLEGE: College of Business and Mass Communication - Business Administration

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Shatrela Washington-Hubbard

ABSTRACT:

Experiential learning is an instructional method that provides students with hands on learning experiences. This research project exposed students to the various functions of human resource management and provided an opportunity to gain hands on experience with solving human resource issues for an industry partner. As part of the research study, students engaged in self-reflection and documented their experiences. The session will summarize the instructor's approach to incorporating experiential learning in the course and the students' perceived learning experiences.

INQUIRY 11 *3-3:50 p.m., Room 240a*

COMMUNICATION EXPECTATIONS OF CHINESE UNDERGRADUATE STUDENTS SUPPORTING THEIR SUCCESS IN US ONLINE COURSES

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Amanda Bartell

COLLEGE: College of Education

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. David Barnett

ABSTRACT:

Chinese students struggle to communicate in online courses at American universities. English as a Second Language and cultural differences influence how Chinese students interact with instructors and classmates. Educational systems in China and the US differ from Chinese student expectations and instructional modes. This study investigates Chinese students' perception of the dissonance experiences between expected communication and teaching methods, and those experienced when taking online courses at US higher education institutions. A phenomenological study using 15 students investigates Chinese undergraduate students' self-reported experiences in online learning. Convenience sampling with consideration for infinite confounds as well as external and extraneous factors establishes multiple focus groups. Anticipated data collection and response analysis results showed that Chinese students engaged in online learning felt less connected to the course, classmates, and the instructor due to multivariate barriers in communication. These perceptions present new challenges for online class instructors to foster Chinese students' participation and communication while reducing their reliance on email. Using modern social media for communication comes with access difficulties due to various internet blocks. Chinese students must receive improved orientation programs to help them bridge the gap between American and Chinese educational culture and traditions. Further research must go beyond sampling only undergraduate students and small focus groups, which helps overcome the limited external validity inherent in the present small-group study.

INQUIRY 11 *3-3:50 p.m., Room 240a*

RAINBOW CAMOUFLAGE: How Queer People Identified Each Other So Others Could Not

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Danny Doyle

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Charity Armstead

ABSTRACT:

This paper discusses the hidden languages, both verbal and non-, of the queer community throughout the 20th century. During the early 20th century, and even into the 70's, the punishment for being homosexual or "transsexual" (the phrase that originally described transgender individuals) was incarceration within a jail or mental institute, if one was so lucky, on the other hand, the unlucky would lose their lives. Through use of academic journals, articles, historic pamphlets, and even interviews with queer people who lived through the time period, this paper overviews the clever ways in which the LGBTQIA+ community hid in plain site, and later, flaunted their pride.

INQUIRY 11 *3-3:50 p.m., Room 240a*

IS BODY NEUTRALITY POSSIBLE IN DANCE?

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Chloe Thorne

COLLEGE: College of Fine Arts and Humanities - Dance

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Madia Cooper Ashirifi

ABSTRACT:

As body positivity and neutrality become more mainstream, their place in the dance world needs to be examined. These concepts have certainly been incorporated in 21st-century entertainment styles, as seen in the performances of pop stars and new-age companies, but is the same acceptance of diversity possible in older styles of dance like ballet? Traditional dance has been structured around cohesiveness and body standards that create a visual experience that cannot be matched by straying away from those expectations. While diverse casts and representation are important for inclusivity, some styles of dance are too rigid with their requirements to allow for body neutrality and diversity while upholding the same aesthetic goals.

INQUIRY 11 *3-3:50 p.m., Room 240a*

HISTORICAL TRANSFORMATION OF MEN'S SUITS (1940S)

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Michalea Cope

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s) and Faculty

PROJECT FACULTY ADVISOR: Ms. Claudia Wilburn

ABSTRACT:

The 1940s was a raging year for society, especially for men. This is around the time that World War II has begun which influenced the changes of fashion, including clothes, accessories, hairstyles and fabric choices. Men's wear was inspired by tv shows and movies to continue on with their fashion style of suits, so that society would not decline in its production of men's apparel. This research project chronicles the historical period of men's apparel and perspective on suits in the 1940s, while also exploring many different styles and silhouettes of a men's suit. In this research project, I am discussing the history of this specific topic and the importance of the development of men's suits in the 1940s compared to the modern fashion styles of suits. For example, I am using the article, "Gentleman's Gazette", to identify the men's apparel from the 1940s society, while also using the article, "Sex and Suits", to identify the modern fashion of men's suits. These two articles are used to make a compare and contrast statement to show the growth of men's apparel within suits and its generations. This topic has impacted the modern fashion of today's society in all age ranges and genders. Suits allow anyone that wears them to have a high status of confidence and attraction brought towards them, but men have a historic story to tell behind the creations of suits and their status.

INQUIRY 12 *3-3:50 p.m., Room 241b*

THE INFLUENCES OF PERCEIVED RISK OF DISEASE, FAMILY AND CULTURE, AND BODY IMAGE PERCEPTION AND SATISFACTION ON THE INTENTION TO EAT A HEALTHY DIET AMONG YOUNG ADULT AFRICAN AMERICAN WOMEN

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Ms. Chuntiel James, Dr. Mei-Lan Chen

COLLEGE: Ivester College of Health Sciences - Nursing & Georgia State University
Byrdine F. Lewis College of Nursing and Health Professions

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Obesity is prevalent among all United States populations but is much higher for African American (AA) women compared to women of other racial and ethnic groups. Obesity can lead to chronic conditions such as cardiovascular disease and diabetes, which affect AA women at a higher rate compared to women of other racial and ethnic groups. Eating a healthy diet is necessary to lose and maintain a healthy weight. The purpose of this study is to explore the relationship between perceived risk of disease related to weight status, family and cultural influences, and body image perception and satisfaction with the intention to eat a healthy diet among young adult AA women. This cross-sectional, descriptive correlational study will use survey instruments to gather data about the participant's perceived risk of disease and body image perception and satisfaction. Qualitative questions will be used to identify how family and culture influences the participant's intention to eat a healthy diet. The sample will include college aged AA women. The expected outcome of this study is that there will be an explanation of the relationship between perceived risk of disease, family and cultural influences, and body image perception and satisfaction on the intention to eat a healthy diet. An implication of this study is that clinicians can use this information to develop tailored interventions to address obesity in this population. Addressing the health disparity of obesity prevalence among young adult AA women can help decrease their risk of chronic conditions in middle and older adulthood.

INQUIRY 12 *3-3:50 p.m., Room 241b*

JUNETEENTH: HISTORY, OPPORTUNITY, AND CONTROVERSY

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Gnimbin Uttara

COLLEGE: College of Fine Arts and Humanities - Humanities

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

On June 10, 1865, Gen. Gordon Granger, a veteran of the Mexican-American war, was made Union commander of the Department of Texas. Less than two weeks later on June 19, he delivered the news of the 1863 Emancipation Proclamation to the enslaved people in Galveston, Texas—two years after President Abraham Lincoln had issued this Executive Order of Emancipation. For six weeks, Gen. Granger visited African American churches and other public places with the good news on Ezra-like parchments to be read and posted. The joy of the newly freed African Americans was boundless. On January 2, 1866, *Flake's Bulletin*, a Galveston newspaper, wrote a colorful report about the first Juneteenth or Emancipation Celebration held the previous day. This celebration grew over the years, but so did the controversy. Although Texas declared June 19 “Emancipation Day in Texas” in 1979, sparking a movement to make Juneteenth a federal holiday, many voices rose in opposition to any such holiday. In the end, the proponents of Juneteenth national holiday prevailed. On June 17, 2021, Juneteenth officially became the 11th federal holiday—“Juneteenth National Independence Day.” How did this holiday bubble up to the national scene? What implications does this new federal holiday have for the country in general and for African Americans in particular?

INQUIRY 13 *3-3:50 p.m., Room 235*

AMERICAN LITERATURE AFTER 1865

POSTER/PANEL/PRESENTATION: Classroom Presentation

PRESENTER(S): Dr. Wen Guo, Esther Adegbola, Anna Beringer, London Clark, Izzy Evangelista, Jayla Johnson, Kaylee Grace Lucas, Angelica Mallak, Olivia McIlwain, Sydney Patterson, Sarah Wages

COLLEGE: College of Fine Arts and Humanities – Humanities

UNDERGRADUATE/GRADUATE/FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Wen Guo

ABSTRACT:

This survey of American literature examines authors and their works from the time of the Civil War to the present. Students will explore works by major writers and newly recognized voices. In addition to reading important literary works, students will continue to develop their oral and written communication skills.

INQUIRY 14 4-4:50 p.m., Room 240a

THE UTILITY OF THE BRIEF-2 AND CONNERS 3 IN DIAGNOSING PEDIATRIC BIPOLAR DISORDER

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Abby McKinney, Madeline Weiss, Amaya Garcia, Sally Pittman

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kristin Green

ABSTRACT:

There is a prevalence of Pediatric Bipolar Disorder (PBD) among children aged 3-17. There are many nuances when it comes to diagnosing PBD properly. There are diagnostic differences between PBD and Bipolar Disorder (BD) in adults. Additionally, Disruptive Mood Dysregulation Disorder (DMDD) has taken over a PBD diagnosis. Due to the similarities between PBD and Attention Deficit Hyperactivity Disorder (ADHD), this study will be looking at using two assessments used to diagnose ADHD to aid in providing a PBD diagnosis. The Behavior Rating Inventory of Executive Functioning 2nd edition (BRIEF-2) is used to examine executive dysfunction. The BRIEF-2 Cognitive Regulation Index (CRI) contains Working Memory, Plan/Organize, Initiate (Parent/Teacher only), Task Completion (Self-Report only), Task-Monitor (Parent/Teacher only), and Organization of Materials (Parent/Teacher only) scales. The Conners 3 is a multi-informant assessment that is used to evaluate ADHD and related issues, and it has been helpful to identify BD comorbid with ADHD. The BRIEF-2 and Conners 3 assess symptomatology similar to those found in PBD. Further research is needed for standardization of diagnosis for PBD, prevention of misdiagnosis, and to determine whether these measures can be used together to assist in reaching a reliable PBD diagnosis.

INQUIRY 14 *4-4:50 p.m., Room 240a*

A LOOK INTO BARBIE: FOOTLONG FASHION

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Elizabeth Pope

COLLEGE: College of Fine Arts and Humanities - Art and Design

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Charity Armstead

ABSTRACT:

Barbie, under the maintenance of Mattel, has been one of the most successful doll companies of all time. This toy stands at a height of just under a foot at eleven point five inches. I have grown up loving this doll, along with my mother. Passed down through a generation, I have kept the majority of her collection of clothes and dolls. The quality and styles have changed wildly throughout our age gap. This research showed how the clothes have changed, how the values fluctuate, and how the clothing can affect children. Throughout the years, Barbie has gone through many changes and careers. Something also undergoing change constantly was her clothes. From the quality to the styles, it has debatably gone downhill. I believe this is important to talk about as Barbie is one of the most influential toys to young girls and impacts their self-image. Though these garments are primarily marketed to children, I believe that the quality should not be compromised. I will be executing this project by taking the garments from my collection and reviewing them. I will also be using many different sources to find information about the creators of these clothes and placing it into PowerPoint.

INQUIRY 14 4-4:50 p.m., Room 240a

THE IMPACT OF SKIN TONE ON BLACK WOMEN'S ASPIRATIONS TO THE "THICK IDEAL"

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Ashley Pettway, Jasmine Martin

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Venecia Pearce-Dunbar

ABSTRACT:

Historical studies done on female body image have revolved around upper-class White women and Eurocentric standards of thinness (Cassidy et al., 2015). This is problematic as studies have repeatedly shown that Black women are more likely to aspire towards more voluptuous body types, which has been dubbed the "thick ideal" (Awad et al., 2015). Therefore, the historical focus on thinness as a determinant of body satisfaction within body image research may have resulted in an overestimation of rates of body satisfaction among Black women. Body dissatisfaction among female populations has been shown to correlate with negative outcomes and dysmorphic perceptions of self, which can lead to the development of disordered eating (Rothstein et al., 2017) and depressive symptomatology (Johnson & Wardle, 2005). Studying this "thick" ideal of beauty within the context of Black cultural standards would allow for a more accurate and nuanced portrayal of Black women's body image within psychological research. Additionally, it is critical that other factors that may influence body satisfaction rates in relation to more voluptuous standards of beauty are examined, specifically skin tone. Skin tone has not been thoroughly looked at in relation to the satisfaction Black women have with their body types (Hill, 2002; Mathews & Johnson, 2015) nor has it been studied in relation to the "thick" ideal of beauty. The aim of the study is to examine the potential relationship between skin tone and body satisfaction and whether the aspiration toward the thick ideal differs based on skin tone in Black women.

INQUIRY 14 *4-4:50 p.m., Room 240a*

UNDERSTANDING THE ADOLESCENT DEVELOPMENTAL STAGE: INTERVIEW-BASED OBSERVATION

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Yxera Alexis

COLLEGE: Ivester College of Health Sciences - Nursing

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Wen Guo

ABSTRACT:

This paper discusses the experience of two adolescents through observed and interview-based questionnaires. Because the hypothesis involved the understanding of how trauma may affect individuals within a developmental stage, the study called for two siblings, male, and female, to be interviewed. Questions regarding their relationships with family members, romantic partners, friends, occupations, and aspects of the world to help intake their mental status and see if their appropriate developmental stage aligned with it. In addition, this paper involved the discussion of the findings within the interview and how trauma may or may not affect the human mind. Finally, this paper is only a segment of the overall analysis of developmental stages.

INQUIRY 15 4-4:50 p.m., Room 241b

ESG (ENVIRONMENTAL, SOCIAL, AND GOVERNANCE) CONTROVERSY AND TOTAL SCORES AND FIRM PERFORMANCE. A case study of US firms.

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Dhruba Banjade, ESG

COLLEGE: College of Business and Mass Communication - Business Administration

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

This paper examines the impact of Environmental, Social, and Governance (ESG) controversy and total combined scores on firm performance. We use a data set of US firms for the period from 2002 to 2016. Our results show that ESG controversy scores are associated with the lower firm value measured by Tobin's Q. We did the sample split analysis and check whether similar results hold if we regress firm performance on ESG controversies for new economy firms. We find that the impact of ESG controversy is more on new economy firms as compared to old economy firms. Similarly, we observe the balanced board structure policy help to mitigate the effect of ESG controversies. We find that balanced board structure policy help to minimize the impact of ESG controversies on firm performance.

INQUIRY 15 4-4:50 p.m., Room 241b

PERSPECTIVES OF DPT STUDENTS ATTENDING AN INTERDISCIPLINARY SERVICE-LEARNING EXPERIENCE: THE FARM WORKER FAMILY HEALTH PROGRAM

POSTER/PANEL/PRESENTATION: Oral Presentation

PRESENTER(S): Dr. Roberto Cantu, Dr. Tamara Buck, Dr. Stacey Hoffman

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Interdisciplinary service-learning (IDSL) has become a staple of healthcare education over the last two decades as a mechanism of training students to provide cohesive, team-based health care in a complicated and sometimes fragmented health care system. This case study describes the perceived learning of doctor of physical therapy (DPT) students from Brenau University who attended a week-long interdisciplinary, interuniversity service-learning trip in rural Georgia. Qualitative data from two consecutive year teams (n = 26) were collected via surveys and focus groups and thematically analyzed for motivation to attend the trip and perceived learning. Intrinsic motivation to “give back” and desire to hone professional skills were the primary drivers for desiring to attend the trip. Three themes of perceived learning that emerged were 1) impact on core values, 2) perceived improvement in para-clinical (soft) skills including interdisciplinary fluency and cultural competence, and 3) improvement of clinical (hard) skills. The dominant theme was the impact the trip had on students’ core values. The learning occurred predominantly in Bloom’s affective domain and aligned with the physical therapy profession’s Core Values and Code of Ethics documents.

INQUIRY 16 4-4:50 p.m., Room 236

MEDICAL PROFESSIONALS AND DEMENTIA FAMILY CAREGIVERS: CARE, SUPPORT, AND COLLABORATION CURRICULUM

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Vickie Clay

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Bonnie Kin

ABSTRACT:

This curriculum project and paper will provide an understanding of what dementia family caregivers need from medical professionals. Researchers are working to cure dementia; however, what is needed now is care and guidance for dementia families by the medical community. My research into this problem has offered past, present, and limited scope studies, with programs and assessments that are provided to medical professionals caring for dementia patients, yet not always used efficiently. With dementia family caregiver interviews completed, my research provides that further education is needed for medical professionals on the care of the caregivers. Medical professionals are not always aware of the needs of family caregivers, nor are they aware of how important integration of these caregivers into the care will be. The family caregiver is the primary daily care for dementia patients, which offers a crucial role for medical professional assistance. Medical professionals frequently do not know of the community, state, and national support for caregivers, which causes pause in assistance the caregiver needs. This presents gaps in care for dementia patients, often given by untrained, burdened caregivers. Though the family caregiver is not the professional's patient, implementation of these caregivers into the scope of care is not only wanted, but it can also set practices apart for family-focused care and is ethically necessary for care of dementia patients. Using this information, I am creating a curriculum for medical professionals caring for dementia families in hopes to bridge the gaps in care and support of family caregivers.

INQUIRY 16 4-4:50 p.m., Room 236

A NARRATIVE REVIEW OF THE COGNITIVE BENEFITS OF EXERCISE ON REDUCING THE RISK OF ALZHEIMER'S DISEASE

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): Geordan Waldman

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Bonnie Kin

ABSTRACT:

This narrative review aims to summarize current literature regarding the neuroprotective effects of physical exercise on the development of Alzheimer's disease. Lifestyle factors are modifiable habits of life that can influence wellbeing and health, in which exercise can have some of the biggest effects on overall health. Alzheimer's disease is a progressive neurodegenerative disorder that impairs cognitive function often in late adulthood. The progression of this disease is associated with impaired memory, changes in personality, difficulties with cognitive tasks, increased social burden, and increases in morbidity and mortality within the elderly. Treatment for this disease has mixed effectiveness and the average patient with Alzheimer's disease survives anywhere from 3 – 11 years after the diagnosis. Exercise is a lifestyle factor that can modify the risks of getting the most common form of dementia, Alzheimer's disease, and may slow the progression of the disease once diagnosed. Exercise improves working memory, hippocampal volume, and delay the progression of further decline. Aerobic exercise is the most studied form of exercise and its link to dementia, but even anerobic exercise show neuroprotective effects. Long-term exercise interventions are associated with the improvement of several neurological systems in the brain and shows the greatest benefits for those who have a genetic predisposition for the disease.

INQUIRY 16 4-4:50 p.m., Room 236

UNDERSTANDING HOSPICE CARE

POSTER/PANEL/PRESENTATION: Live via Zoom

PRESENTER(S): April Andrews

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Bonnie Kin

ABSTRACT:

I'm currently working on a project that I'm so passion about. Hospice Care is very important and there are so many misconceptions as to what Hospice Care is and what they do. I want to bring insight on the care we provide and services. When it comes to this project will provide a better understanding and clear up the misconception when it comes to hospice care and services. I will be working a power point to show levels of care that is provide and how to cope with losing a loved one in death. Shedding light on this project will help everyone to have an understanding that hospice is to support every patient and family member. I decided to do this project because I had a personal experience when it comes to hospice care and the services they offered. I saw this project as encouragement to help others to feel at ease when inquiring of these services. My hope is that this project will show that hospice care is not a bad thing at all. This project will be a guide to help others who may have no idea what hospice care is. However, will be explained in a way that hospice care services will focus on the patient (s) and their family. Hospice care is a support system with trained healthcare professionals. In conclusion this project will be a source of encouragement for all our patient (s) and their family who may choose to use our services.

POSTER

POSTER 1 3-3:50 p.m., Meeting Room C

PATIENT DEPENDENT PREDICTORS OF COMPLICATIONS AND MORTALITY IN EMERGENCY GENERAL SURGERY: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Jason Champ

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Julie Keena

ABSTRACT:

Background

In order to improve the quality of care for emergency general surgery (EGS) patients and decrease overall healthcare costs, the goal of this study is to analyze emergency general surgery conditions and their surgical outcomes in order to determine predictors of complications, morbidity, and mortality for the standardization of EGS guidelines.

Methods

The data for this review were compiled from MEDLINE by EBSCOhost, Cochrane database of scientific reviews, and PubMed databases from January 2022 to April 2022. Eligible studies were identified through inclusion and exclusion criteria for results on patient predictors and EGS surgical outcomes.

Results

There were 115 total identified articles initially which were narrowed to 6 final articles that met inclusion and exclusion criteria. Numerous patient dependent factors contribute to an increased or decreased risk of mortality and complications in emergency general surgery patients. The studies within this review displayed that these predictors span across various patient dependent domains such as gender, age, race/ethnicity, income, insurance, social habits, chronic conditions, medications, and preoperative bloodwork.

Conclusions

Future studies are necessary to further examine all significant EGS patient predictors and their diverse effects on mortality and complications to produce a risk-stratification tool. This tool could be utilized by surgeons and providers from any medical field to calculate the perioperative and postoperative probabilities of morbidity and mortality to enhance medical assessment, surgical decision making, and clinical management of EGS patients.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

ASSIGNED FEMALE AT SCHOLARSHIP: An exploration of positionally versus identity through art

POSTER/PANEL/PRESENTATION: Studio Art

PRESENTER(S): Aeden Rowell

COLLEGE: College of Fine Arts and Humanities - Theatre

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Megan Clark

ABSTRACT:

My portfolio illustrates being torn between two worlds- one I am forced into by society and one which I choose. This collection uses mixed media, including but not limited to found art, acrylic paint on canvas, paint pen on mixed media paper, colored pencil on paper, and blackout poetry. Overarching themes include subversion of traditional gender roles using language, body shape, and color, education, gender dysphoria, identity vs. positionality, stagnancy vs. change, and internal conflict.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

**OPIOID PR VERSUS OPIOID/NALOXONE PR IN REDUCING PAIN WHILE
MINIMIZING RISK OF CONSTIPATION: A SYSTEMATIC REVIEW**

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Logan Crumley

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR:

ABSTRACT:

The combination therapy of opioid/naloxone (ONX) can effectively provide adequate analgesia to variety of patient populations. ONX also reduces opioid induced constipation which translates to a reduction in hospitalizations, a reduction in costs both to the patient and to the hospital, and an increase in patient quality of life. ONX could potentially increase the rate of tapering opioids indefinitely.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

EFFECTIVE AND INEFFECTIVE TEACHING AND LEARNING STRATEGIES FOR EVOLVING DPT STUDENTS

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Dr. Ashley McCall, Dr. Karen Burgbacher

COLLEGE: Ivester College of Health Sciences - Physical Therapy

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Successful progression through the rigor of a Physical Therapy curriculum requires a standard performance, by the learner, in various assessment styles. How the student transitions from undergraduate to graduate level studies varies, and performance at the undergraduate level does not always correlate with academic performance at the graduate level. The purpose is to identify effective teaching and learning strategies within this curriculum and to assess if approaches to learning differ among DPT students with varying levels of academic performance. This project uses qualitative analysis on student reported strategies thought to be effective for studies and teaching. This project will eventually link this qualitative analysis to objective data including student academic performance. These results will be utilized to inform faculty in instruction and advisement of students to optimize academic performance.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

ASSESSING THE IMPACT OF THE COVID-19 PANDEMIC ON NURSE PRACTITIONERS' PROFESSIONAL QUALITY OF LIFE

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Dr. Noushin Noushin, Dr. Amelia Malcom

COLLEGE: Ivester College of Health Sciences - Nursing

UNDERGRADUATE / GRADUATE / FACULTY: Faculty/Staff

ABSTRACT:

Background: The COVID-19 global pandemic has put healthcare professionals under immense pressure and hindered their ability to provide quality services.

Purpose: This study aimed to examine the professional quality of life among Georgia nurse practitioners during the COVID-19 global pandemic.

Methodology: The Professional Quality of Life 5 (ProQOL) survey was distributed to nurse practitioners in Georgia by the professional organization's listserv. Multiple ANOVA analyses were performed to assess differences between employment settings, geographic location, and other relevant demographic qualifiers and levels of compassion satisfaction, burnout, and secondary traumatic stress.

Results: 100 NPs (n=100) responded to the survey. 92% were female ages 26-45. Males showed higher rates of compassion fatigue and secondary traumatic stress.

Conclusions: A ProQOL survey demonstrated increased burnout and secondary traumatic stress among frontline practitioners in Georgia due to increased workloads, feelings of inadequacy, fear of being infected by the virus, and prolonged exposure to deaths.

Implications: Ensuring effective communication, team collaboration, adequate staffing, and psychological support can help reduce compassion fatigue among NPs.

Keywords: professional quality of life, COVID, nurse practitioners, burnout

Learning Objectives:

1. Discuss stress related to nurse practitioners during COVID.
2. Examine differences among settings, gender, and employment settings and professional quality of life.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

IMPACT OF FISH TANK LIGHTING ON GOLDFISH GROWTH AND BEHAVIOR

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Joanna Razo

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Karine Tornieri

ABSTRACT:

Various fish species have adaptations that allow them to develop in the absence of light and in low-light conditions. Published literature has primarily focused on the influence of strobe light on fish population density and in some cases on the effects of fish tank background color. By evenly distributing twelve comet goldfish into tanks with multicolor light, white light, and direct sunlight, this study aims to establish a connection between fish tank light sources and comet goldfish growth and behavior. It is hypothesized that if comet goldfish are kept in a tank with LED lights, then they will experience more growth and behavioral changes than those kept in tanks with natural lighting. To establish this connection, fish behavior will be monitored with a camera while growth will be measured with a ruler. Expected results include comet goldfish in LED light tanks experiencing increased growth and being more active than those in natural light tanks. It is also expected that comet goldfish kept in multicolor LED tanks will experience more behavioral changes.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

EFFECTS OF WHOLE FOOD-PLANT BASED DIET (WFPBD) ON THE GMB (GMB) AND THE MECHANISM IN WHICH IT AFFECTS OBESITY: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Cameron Wortham

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Greg Marshall

ABSTRACT:

The gut microbiome can directly impact obesity through various mechanisms. This systematic review covers how a whole food plant based diet can alter the gut microbiome and lead to a decrease in obesity. Abstract

1. Background & Objectives - Obesity was thought to be caused by caloric intake exceeding expenditure. However, new research suggests the gut microbiome (gMB) largely impacts obesity. A whole food plant-based diet (WFPBd) has been shown to decrease obesity. The goal of this review is to understand what and why changes of the gMB occur on a WFPBd, and gMB mechanisms affecting obesity.
2. Methods - A systematic review of the literature for clinical studies was conducted using the Brenau Library, PubMed, and EBSCOhost. Risk of bias and the intervention's statistical significance were assessed to qualify for this review.
3. Results - The search yielded 108 articles without duplicates. 12 studies consisting of three cross-sectional studies, three case-control studies, three cohort studies, and three randomized control trials met the eligibility for this review. Research showed that consistent changes to the gMB occurred when a WFPBd was introduced to the host. The changes were shown to be mechanistically favorable to decrease obesity in the subjects.
4. Conclusions - As seen in epidemiological studies, controlled intervention of a WFPBd consistently created population shifts within the gMB that were associated with decreased obesity. Outcomes of the gMB related to obesity were superior in a WFPBd when compared all other diet interventions. This is due to the breakdown of nutrients by ideal gMB populations that decrease obesity through metabolic processes. Future research is needed to better understand the mechanisms of the gMB, both symbiotically and directly on obesity.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

POLITICAL THEATRE AS EDUCATION IN THE DEMOCRATIC PROCESS.

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Zoë Metelerkamp

COLLEGE: College of Fine Arts and Humanities - Humanities

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kelley Brock-Simmons

ABSTRACT:

As part of the Honours Seminar 2302_HN220W class, and through research on current political issues this presentation simulates a mock election where I am a candidate running for the position of President of the United States. In order to make my stance on issues clear to the electorate, my research covers an analysis of all viewpoints with attention paid to how individuals are affected by the issues I am campaigning for and how my position attempts to help the people. Furthermore, the project illuminates the campaign process and is preparation for active involvement in the shaping of the future.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

LGBT YOUTH DEPRESSION DURING COVID-19 PANDEMIC: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Alexis Heartsfield

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Ms. Colleen McCoy

ABSTRACT:

Background: COVID-19 pandemic related safety strategies such as social distancing, self-isolation and global shutdowns are worsening mental illness within the LGBT youth community. Online support services and modalities are more frequently used by LGBT youth to help maintain connections and improve the perception of depression during the pandemic.

Objective: This systematic review sought to evaluate how mental health and depression changed for LGBT youth members during COVID-19 restrictive government mandates and whether online support modalities improve their perception of depression during the pandemic.

Methods: A systematic review was conducted by searching PubMed, Cochrane, and MEDLINE to identify studies published during the COVID-19 pandemic, (2020-current), that focused on LGBT youth mental health and the benefits online support and harm reduction during COVID-19 lockdown measures. Risk of bias was assessed using the CASP (Critical Appraisal Skills Programme) checklist.

Results: The search of databases yielded seven articles that met inclusion criteria. In general, all seven studies showed that the COVID-19 pandemic mandates caused a general feeling of disruption to mental health. Half of the studies also showed that there was an improvement in the perception of mental health and depression with the use of online support modalities.

Conclusion: Online support modalities decrease depression in LGBT youth, especially during the COVID-19 pandemic. However, current studies have high quantities of perception and sample bias. Well-designed longitudinal studies are necessary to better understand the intricate interaction between LGBT mental health, online support resources, and COVID-19 mandated restrictions.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

EFFECTIVENESS OF ALOE VERA IN COMPARISON TO STERILIZED TILAPIA SKIN FOR THE TREATMENT OF HEALING SECOND-DEGREE BURNS: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Molly Musselwhite

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Allen Butts

ABSTRACT:

Background: Second-degree burns affect two-thirds of the burn population. Silver sulfadiazine (SSD) cream is the most common topical treatment utilized for second-degree burns; however, it delays healing. Due to this adverse effect, alternative treatment options are continuing to be searched for that enable faster healing time.

Objective: This systematic review sought to evaluate the healing time of second-degree burns like using alternatives such as aloe vera versus tilapia skin dressing.

Methodology: A systematic review of PubMed, Medline, and Cochrane was performed to find articles published in the last fifteen years that focused on the efficacy of aloe vera and tilapia skin dressing regarding the promptness of healing of second-degree burns. All articles that met the inclusion criteria were screened and analyzed.

Results: A total of five articles were assessed and included in this review. Two trials compared aloe vera to SSD cream, and three compared tilapia skin dressing to SSD cream. All articles demonstrated aloe vera to benefit healing second-degree burns over SSD cream. Two of three articles suggested tilapia skin dressing improved wound healing over SSD cream.

Limitations: The tilapia skin trials were unblinded, contained no long-term follow-up, and had publication bias. In the aloe vera trials selection bias was present and a small sample size.

Conclusion/Implications: The articles reviewed showed aloe vera and tilapia skin dressing to be statistically superior to SSD cream, however there is not a concrete answer discerning the two interventions. Future studies should contain extended length of follow ups for delayed healing and include a larger sample size.

POSTER 1 *3-3:50 p.m., Downtown Center Atrium*

IS IL-2 ESSENTIAL TO THE MULTIMODALITY TREATMENT OF HIGH-RISK NEUROBLASTOMA PATIENTS – A SYSTEMATIC REVIEW

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Spencer West

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Greg Marshall

ABSTRACT:

While neuroblastoma is one of the most common cancers in the pediatric population, the high risk subtype, roughly 50% of those diagnosed according to DuBois et al. (2022), has poor prognosis. This ushered in the inclusion of new and novel therapies including monoclonal antibodies (mAb) as a component to complex treatment cocktails in these patients. However, now that the use of mAb is justified, cocktail optimization needs evaluating. One of the components under examined is IL-2 due to its side effect profile in an already systemically sick patient. This systematic review across five databases (ScienceDirect, Cochrane Library, PubMed, EBSCO, Google Scholar) performed prior to 07Nov2022 yielded 98 publications from which four were ultimately included in the qualitative evaluation – one current review of monoclonal antibody products being used, two randomized controlled trials (RCT), and one controlled study performed in mice with human transplanted neuroblastoma cells. One of the two RCT's demonstrated preliminary promising improvement when IL-2 was omitted including decreased hospitalization and pain, as well as a 14% improvement in overall survival when compared to the control. The mouse study suggested that IL-15 could both improve immune activity and response without some of the more serious complications of IL-2 (i.e. capillary leak syndrome). In spite of these results, there is not sufficient evidence to suggest that IL-2 be removed from the immunotherapy multi-modality treatment in high-risk neuroblastoma patients due to insufficient available data. However, there are some initial studies that suggest, in isolated instances, the decision to use IL-2 or not may be left to the discretion of the provider.

POSTER 1 *3-3:50 p.m., Meeting Room C*

A SYSTEMATIC REVIEW OF THE USE OF INTRANASAL CALCIUM CHANNEL BLOCKER, ETRIPAMIL, AS A TREATMENT FOR PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Bryce Cardin

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Heather Brown

ABSTRACT:

Paroxysmal supraventricular tachycardia (PSVT) is currently lacking effective noninvasive treatment for acute symptoms. Recent studies suggest that an intranasal calcium channel blocker, Etripamil, may serve as a safe and effective treatment for acute PSVT, reducing the need for more invasive methods. This systematic review seeks to assess the efficacy of Etripamil in converting PSVT to normal sinus rhythm. A systematic search was conducted over five databases to retrieve all articles reporting data on the use of Etripamil for the treatment of PSVT. Forty-four articles were found within the search parameters and were reviewed to determine their relevance to the study, resulting in five articles meeting the inclusion and exclusion criteria. The included articles were required to be evidence-based peer reviewed articles published within the last ten years. The inclusion criteria for the study required patients with a documented history of SVT, poor conversion rates with standard of care, and over the age of 18. Patients with rare occurrences of SVT were excluded from the study. The results of the study showed statistically significant conversion rates when using 70mg and 140mg doses of Etripamil compared to placebo. Limitations of this study are the low number of participants and the incomplete studies which are awaiting results. Based on the available Phase III data, Etripamil is considered a safe and effective treatment option for SVT in a clinically supervised setting. The implications of this study may result in fewer hospitalizations and improved quality of life in patients with PSVT.

POSTER 1 *3-3:50 p.m., Meeting Room C*

READY, SET, RUN!

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Siera Saldana, Imani Tornes

COLLEGE: Ivester College of Health Sciences - Psychology

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kelley Brock-Simmons

ABSTRACT:

Participation in the government is a central part living in America. At local, state, and national levels, millions of people vote every year and a large number of them have strong, political opinions and ideas on what they want to see happen with them yet when it comes to running to for office, many people never even consider it. Running for office, seems complex, daunting, and overwhelming but it can be broken down into a series of small steps and tasks that make it possible for any voter to do.

POSTER 1 3-3:50 p.m., Meeting Room C

EFFICACY OF FIXED-DOSE, SINGLE-PILL, TRIPLE ANTIHYPERTENSIVE TREATMENT VERSUS STANDARD OF CARE: A SYSTEMATIC REVIEW

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): James Cutts

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Julie Keena

ABSTRACT:

Hypertension is a leading disease around the world, with the majority of patients requiring at least three medications to get blood pressure under control (<140/90 mmHg) (Düsing et al., 2017). This systematic review investigates the efficacy of fixed-dose, single-pill, triple antihypertensive therapy as compared to standard of care.

This review focuses on the following objectives: (1) determine blood pressure control ability of each 3-in-1 combination pill; (2) comparison to SOC; (3) determine most efficacious 3-in-1 combination.

Four electronic databases were searched from inception to July 2022. Studies were selected if they were available in English, at least observational level of study, had at least 10 participants, included patients with hypertension, made a comparison to standard of care, and investigated treatment with a triple-pill combination. The search identified 65 articles, with five meeting inclusion criteria.

Four of the five studies had p-values <0.05. There was significant evidence that multiple triple-pill combinations were more efficacious than the current standard of care, especially the Telmisartan/HCTZ/Amlodipine combination, which had the greatest control rate (p = 0.022). However, this review was limited by the lack of a meta-analysis, one statistically insignificant study, and the age of some of the studies dating back to 2012.

Three-in-one antihypertensive medication is more effective than standard of care and should be considered for treatment of hypertension. With hypertension treatment being a trial-and-error base, and the advent of pill burden, the results of this review are clinically relevant and could ease the difficulty of gaining control of BP.

POSTER 1 3-3:50 p.m., Meeting Room C

BORIC ACID THERAPY FOR BACTERIAL VAGINOSIS: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Alison Welty

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

Bacterial vaginosis is a common disease that affects patients with a vagina and often results in recurrent infections. The environment of a vagina contains natural bacteria, lactobacilli, that produce lactic acid that helps to protect from infection. When the natural flora is disturbed then facultative anaerobic bacteria can grow, forming a biofilm (Muzny et al., 2019). The etiology of the anaerobic bacteria that disrupts the microbiome is still under investigation, but a major culprit is *Gardnerella vaginalis*. The disruption of the flora will cause women of childbearing age (15-44) to experience malodorous vaginal discharge and vaginal itching. Clinicians diagnose bacterial vaginosis using Amsel's criteria. The criteria is satisfied if there is watery discharge present, increased vaginal pH (greater than 4.5), clue cells seen under microscopy and a positive whiff test (Redelinghuys et al., 2020). The objective of this review is to determine if patients with bacterial vaginosis will exhibit lower rates of reinfection when treated with boric acid suppositories compared to metronidazole therapy. The six articles included in this review composed of 3 retrospective chart reviews, two clinical trials and one review. The results of the data did not conclusively state whether the boric acid could be utilized instead of metronidazole. In the future clinical trials would help determine the most effective treatment regimen.

POSTER 1 *3-3:50 p.m., Meeting Room C*

THE EFFECT OF TIRZEPATIDE VS. SEMAGLUTIDE IN KEEPING HEMOGLOBIN A1C BELOW 7% AMONGST TYPE 2 DIABETIC PATIENTS: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Ramsha Khan

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jerry Erickson

ABSTRACT:

Both semaglutide and tirzepatide have been shown to be effective at lowering HbA1C in Type 2 Diabetes Mellitus (T2DM) patients. The objective of this systematic review is to determine whether semaglutide or tirzepatide has better efficacy at keeping HbA1C below 7% in patients with T2DM.

This review was based on the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines. Four literature databases were searched for publications: Pubmed, ScienceDirect, and Medline by EBSCOHost. Articles were selected based on an electronic search of the following terms and their combinations: tirzepatide, semaglutide, type 2 diabetes, and hemoglobin. Eligibility criteria included studies with patients age 18 and older with T2DM who were not previously taking injectable therapy, the use of semaglutide or tirzepatide as an intervention, and HbA1C outcomes. All articles had to provide a free abstract, be in English, published in the last 6 years, and were either a systematic review, peer-reviewed article, or randomized controlled trial. All articles were screened for duplicity. The CASP checklists for randomized control trials and for systematic reviews were used to determine risk of bias within each individual study.

148 articles were identified through initial database research. After excluding duplicated articles and those that did not meet the eligibility criteria, 10 articles were selected for quantitative synthesis. Both semaglutide and tirzepatide have been shown to successfully keep T2DM patients' HbA1C below 7%. However, 15mg of tirzepatide has been shown to be most effective in keeping HbA1C <7%.

POSTER 1 *3-3:50 p.m., Meeting Room C*

PERMETHRIN TICK REPELLANT AND EFFICACY IN PREVENTING TICK-BORNE ILLNESSES: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Jacob Wolfe

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kyrus Patch

ABSTRACT:

Tick-borne illnesses are on the rise in the United States, costing the healthcare system millions every year. However, there is no clear consensus of a recommended regimen to prevent tick-borne illness infection. Multiple strategies are suggested by various governmental bodies but ambiguity remains as to which methods should be the foundation of prevention. The aim of this review is to analyze the use permethrin specifically and its efficacy in preventing infection of tick-borne disease. Data from multiple randomized control trials comparing permethrin to control groups and outcomes were analyzed. All of the studies showed statistically significant decrease in the number of tick bites reported in groups treated with permethrin compared to the control groups. There was not enough data to definitively say that disease outcomes were prevented due to the low number of subjects in each individual study. While we are unable to conclude that permethrin does prevent tick-borne illness, the reduction in tick bites alone suggests this to be a promising method of prevention when used alone are in conjunction with other preventative tactics.

POSTER 1 *3-3:50 p.m., Meeting Room C*

EFFICACY OF FOOD PRESERVATION METHODS IN MICROORGANISMS GROWTH

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Ylenia Alcibiade Bennasar

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Undergraduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Karine Tornieri

ABSTRACT:

Food preservation methods are necessary to keep microorganisms away from food for as long as possible using different methods. Human health can be harmed if food preservation is not done properly so more research is being done. The goal of this research project is to demonstrate that salt, sugar, or vinegar work as food preservatives in the conservation of broth. To demonstrate the effectiveness of these preservatives, the broth is going to be used. The broth is going to be separated into different flasks to have a certain amount of broth used as the control group, so no preservatives will be added. The other flasks are going to contain the same amount of broth but a specific amount of salt, sugar, and vinegar will be added. Agar plates are used to streak them with the different solutions. Different plates are streaked on days one, three, and seven, considering day one the day the broth was prepared. Each day the plates are placed in the incubator so bacteria can grow, and after one or two days of being inside the incubator, they are taken out and placed in the fridge. Bacterial colonies are going to be counted and results are going to be evaluated according to the difference in colonies between the control and the preservatives. The hypothesis is that vinegar will be the best preservative because its acidity can keep bacteria from not growing.

POSTER 1 *3-3:50 p.m., Meeting Room C*

VALACYCLOVIR AS TREATMENT FOR CMV IN PREGNANCY

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Mikaela Worley

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

With cytomegalovirus being the leading nongenetic cause of congenital sensorineural hearing loss the need for definitive treatment guidelines is great. A previous systematic review conducted supports the treatment of Cytomegalovirus with Valacyclovir or VACV. With a limited number of trials conducted up to that point, the systematic review called for more research. I used PICO format to create search terms to browse five different electronic databases for articles published after 01 January 2020. The five studies available since January 2020 supported the previous systematic review published, “Management of cytomegalovirus infection in pregnancy: Is it time for valacyclovir?” by Zammarchi. Based on the evidence presented in this systematic review Valacyclovir should be used to treat expectant mothers with CMV

POSTER 1 3-3:50 p.m., Meeting Room C

COMPLEMENTARY AND ALTERNATIVE TREATMENTS VS. CORTICOSTEROIDS IN THE REDUCTION OF SYMPTOMS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A SYSTEMATIC REVIEW

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): D'Angel Brooks

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Ms. Colleen McCoy

ABSTRACT:

- Background Corticosteroids are used as a mainstay for the treatment of systemic lupus erythematosus (SLE), however, the efficacy of complementary and alternative treatments have not been systematically analyzed.
- Objectives The aim of this study was to perform a systematic review encompassing the outcomes associated with the use of complementary and alternative treatments in those with systemic lupus erythematosus and compare with those found with the use of corticosteroids.
- Methodology A systematic review of the literature was performed based on a selective search of Cochrane Library, PubMed, and Medline databases. Inclusion criteria required that participants were clinically diagnosed with SLE, and included complementary and alternative treatments, vitamin D, omega-3, and acupuncture. Studies were excluded if participants were not clinically diagnosed with SLE, younger than 10 years old, published before 2010, written in any other language than English, or if the source was a systematic review.
- Results Of the ten articles used for this systematic review, eight found that the use of complementary and alternative treatments demonstrated the reduction of disease activity and symptoms associated with SLE.
- Conclusion Complementary and alternative treatments appear to reduce the symptoms associated with systemic lupus erythematosus however, further studies are needed to confirm the effectiveness of these treatments compared to that of corticosteroids.

POSTER 1 *3-3:50 p.m., Meeting Room C*

THE ASSOCIATION BETWEEN HYPERTENSION AND COGNITIVE DECLINE

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Deshun Mccluskey

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Ms. Colleen McCoy

ABSTRACT:

Worldwide there are currently over 55 million people living with dementia. There is no cure for this condition. However, it may be possible to prevent or delay its progression. This systematic review examines data to determine if people with hypertension are less likely to develop dementia or cognitive decline if they maintain control over their blood pressure. The following databases were searched by combining keywords with the Boolean operators Medline, PubMed, and Trip database. The search results were filtered by publication date, language, topic relevance, and duplication, and must be a systematic review. A total of two reviews comprising eight studies examined the link between hypertension and cognitive decline. Accumulated data indicates that by maintaining blood pressure below a certain threshold an individual can reduce their likelihood of developing cognitive decline as they age. However, collected data showed no consensus on this threshold.

POSTER 1 *3-3:50 p.m., Meeting Room C*

FMT EFFECT ON ALCOHOL CESSATION

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Blake Doerr

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kyrus Patch

ABSTRACT:

The research of Fecal Microbial Transplant as a therapy for alcohol cessation is relatively scarce, however through the current research available the potential applications are apparent. Alcohol addiction negatively impacts millions of lives across the globe, leading to depression, anxiety, and medical ailments. Like most addictions, alcohol abstinence can be a lifelong struggle with relapse almost guaranteed. Studies tested various effects of alcohol utilizing control and experimental groups from both human and mice trials undergoing fecal transplant as adjunct to aid in cessation. In this review, Fecal Microbial Transplant cut cravings by 90% within humans and significantly reduced anxiety, and alcohol consumption in mice trials. Although this review shows limited results, it demonstrates new implications for fecal microbial transplant outside of its original scope and the need for further research.

POSTER 1 *3-3:50 p.m., Meeting Room C*

COMBINED KETAMINE AND DIET THERAPY FOR PAIN WITH OPIOID DEPENDENCE

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Savannah Jones

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jerry Erickson

ABSTRACT:

Opioid dependent patients with acute, chronic and post-operative pain have been treated with traditional methods. However, the treatment of both physiological and psychological symptoms of pain in opioid dependent patients with combined ketamine and diet therapy have not been systemically analyzed. This systematic review analyzes the outcomes associated with the use of combined ketamine and diet therapy in those with opioid dependence in acute, chronic or post-operative pain. It was performed based on a selective search of Cochrane Library, PubMed, and Medline databases. Inclusion criteria required that participants were experiencing acute, chronic, or post-operative pain with opioid use disorder, and included studies that compared ketamine or diet therapy to traditional methods for treating acute, chronic and postoperative pain in opioid dependent patients. Studies were excluded if participants were diagnosed with acute, chronic or post-operative pain without opioid dependence, compared other modalities other than ketamine or diet therapy, published before 2016, or written in any other language than English. Of the six articles used for this systematic review, three found that the use ketamine in acute, chronic and post-operative pain patients showed a reduction in opioid use during and after treatment along with reduced withdrawal symptoms. Three articles found that diets enriched with polyunsaturated helped reduced opioid cravings and usage in participants exposed to opioids. Therefore, combined ketamine and diet therapy appear to reduce pain and opioid cravings, however further studies are needed to confirm the effectiveness of these treatments compared to traditional methods such as buprenorphine and methadone.

POSTER 1 *3-3:50 p.m., Meeting Room C*

UNDERSTANDING HEALTH OUTCOMES FOR WEANING INFANTS FOLLOWING A BABY LED WEANING OR TRADITIONAL SPOON-FEEDING APPROACH: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Emily Jones

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

The purpose of this systematic review was to compare the effects baby-led weaning (BLW) and traditional spoon feeding (TSF) on health outcomes such as nutrition, weight, and safety (i.e., choking). An electronic database search was conducted using PudMed, MEDLINE and Cochrane Library, resulting in a total of five articles meeting inclusion criteria for this review. Study types included in this analysis were longitudinal questionnaires, randomized controlled trials, and cross-sectional studies that specifically focused on the comparison of BLW and TSF. The results from these studies suggest there are advantages to BLW, such as better self-regulation of dietary intake and a reduced risk of obesity. There was no statistical difference in the nutritional status and frequency of choking episodes when comparing the two weaning methods. This review illustrates the risks and benefits of both BLW and TSF. Clinicians can use this information to provide education to the parents of pediatric patients when the transition to solid foods begins.

POSTER 2 *4-4:50 p.m., Meeting Room C*

DIAGNOSTIC ACCURACY OF THE INSOMNIA SEVERITY INDEX ACROSS CLINICAL SETTINGS: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Ashley Mata

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Heather Brown

ABSTRACT:

Introduction: Despite the negative impact of insufficient sleep on health, insomnia is not routinely screened for in clinical settings. The Insomnia Severity Index (ISI) is a patient-reported questionnaire that may be an efficient tool for screening patients. The goal of this systematic review was to evaluate the diagnostic accuracy of the Insomnia Severity Index as a screening tool for adults in clinical settings compared to a clinical interview and evaluation. The outcome measures are (1) sensitivity, (2) specificity, and (3) optimal cutoff score.

Methods: Cochrane Database of Systematic Reviews, Medline, and PubMed databases were used in the literature search. This systematic review was conducted using the Preferred Reporting Items of Systematic Reviews and Meta-Analyses (PRISMA) guidelines. The Critical Appraisal Skills Programme (CASP) checklist was used to review each study critically.

Results: Five validation studies (1,144 patients) met the inclusion criteria. The ISI achieved diagnostic validity of at least moderate in all the studies. There was also significant variation in optimal cutoff scores amongst clinical populations.

Discussion: Overall, the results support the diagnostic validity and clinical utility of the ISI, though more validation studies are needed to support the potential for widespread clinical use and to determine the optimal cutoff scores in specific clinical populations and settings. The low specificity found in one study indicates the potential for a high number of false positives.

POSTER 2 4-4:50 p.m., Meeting Room C

PROSTATE CANCER TREATMENT IN MEN OVER 65-YEARS OF AGE IN CORRELATION TO QUALITY OF LIFE: A Systemic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Lauren Bierschenk

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Heather Brown

ABSTRACT:

Prostate cancer is the second most common cancer in men and the fifth most common cause of cancer related death in men globally according to the Center for Disease Control. In the United States, prostate cancer is the most common cause of cancer and the second leading cause of cancer related deaths in men. It is commonly said by medical specialist that many men “die with prostate cancer and not from prostate cancer.” But not until recently were health-related quality of life included in the medical decision-making process. In response to previous studies, the aim of this systemic review is to determine if males over 65-years-old who are diagnosed with prostate cancer should receive treatment due to the chance of quality of life being reduced significantly since according to urology and oncology medical professionals, more men die with prostate cancer than from prostate cancer? The databases searched were Medline, ProQuest, and Science Direct which contain academic articles from July 2022 to current date. Articles were selected using a set of inclusion and exclusion criteria. When determining the eligibility criteria for this systemic review, using the rationale of “If males over 65-years-old who are diagnosed with prostate should receive treatment due to the chance of quality of life being reduced significantly since more men die with prostate cancer than of prostate cancer?” was used to determine if other studies were included or excluded from the review. The overall trend indicated that quality of life in the males who received prostate cancer treatment depended on primary treatment modality. The correlation between prostate cancer survivors’ and their quality of life were dependent upon symptom control prior to treatment, primary treatment, and socioeconomic factors. Men who had symptoms prior to primary treatment continued to have poor symptoms control and ultimately needed additional treatment courses after the primary treatment (Donnelly et al., 2019). The primary treatment options studied were radical prostatectomy, radiation therapy, androgen deprivation therapy, brachytherapy, focal irreversible electroporation, high intensified ultrasound, and observation. Whether the patients’ received radiation therapy, radical prostatectomy, androgen deprivation therapy, or were just being observed, fatigue and insomnia symptoms were always found in prostate cancer survivors regardless of the primary treatment modality (Drummond et al., 2015). Overall, the findings indicate that men with prostate cancer who are wanting to seek treatment should be informed of a multitude of factors during the medical decision-making process between a clinician and a patient since each determinate has a correlation on the patients’ quality of life.

POSTER 2 *4-4:50 p.m., Meeting Room C*

PLANT EXTRACTS AS AN ALTERNATIVE ALTERNATIVE TREATMENT FOR VAGINITIS: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Ashley Boyce

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

Background: Vaginitis is a common gynecological complaint among women. There is a need for alternative treatments to vaginitis due to increase drug resistance and the need for less adverse side effects. In addition, certain plant extracts can be found commonly in developed and underdeveloped countries, plant extracts could be a cost-effective alternative.

Objectives: The objective of this systematic review is to investigate the use of medicinal plant extracts as alternative treatments for women who experience vaginitis compared to the current standard of care.

Methods: Types of articles that were selected were randomized controlled trials from January 2000 to August 2022, regardless of language and publication status. Eligibility criteria for articles selected were women that experienced bacterial vaginosis or candida albicans and were being treated with a form of plant extracts that compared to a current recommended treatment. Articles selected had outcomes that measured the effectiveness of plant extract vs standard treatment and adverse events from medicinal plants.

Results: Randomized studies were included in the selection criteria and nine studies consisting of 1,704 patients met the inclusion criteria of this systematic review. Of the selected studies, four focused on the treatment of candida vaginitis, three focused on the treatment of bacterial vaginosis, and two were combined for candida and bacterial vaginosis. Results showed that certain plants extracts were able to effectively treatment bacterial vaginosis and candida vaginitis.

Conclusion: Plant extracts may offer a promising alternative treatment for vaginitis, but more studies need to be conducted due to the limitations of the studies.

POSTER 2 *4-4:50 p.m., Meeting Room C*

KETAMINE AS AN ALTERNATIVE TO ELECTROCONVULSIVE THERAPY IN PATIENTS WITH TREATMENT RESISTANT DEPRESSION; A SYSTEMATIC REVIEW OF CLINICAL TRIALS.

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Joshua Mullaney

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Jerry Erickson

ABSTRACT:

-Background: Ketamine has been shown to be effective in reducing depressive symptoms, but its potential as an alternative to Electroconvulsive Therapy (ECT) for Treatment Resistant Depression (TRD) remains unclear.

-Objectives: To examine the efficacy of Ketamine and its viability as an alternative to ECT in the treatment of TRD.

-Data Sources: Electronic searches of PubMed, Medline, and Cochrane Database of Systematic Reviews were conducted with additional studies identified through manual screening of bibliographies and interlibrary loan system.

-Study Selection: Selection included randomized controlled trials, non-inferiority clinical trials, and open-label clinical trials published within the last 10 years. Participants of any age with a diagnosis of MDD receiving treatment with either ketamine or ECT were included. Outcomes consisted of post-intervention depressive symptoms quantified using a variety of standardized clinical rating scales. Other outcomes included therapeutic response, remission rates, and suicidality measured at subsequent follow-up.

-Results: A total of seven studies were identified for inclusion, all of which indicated that both ECT and Ketamine have substantial antidepressant effects. However, the results were mixed regarding comparable efficacy, onset of action, and long-term viability between these two modalities. The side effect profile of ketamine was generally found to be more favorable when compared to ECT.

-Limitations: Significant limitations were identified including variation in study design, treatment protocols, and outcome measures. Potential confounding variables such as comorbidities, concurrent medication use, and social/environmental factors were not appropriately controlled or addressed.

-Conclusion: Although ketamine has potential as an alternative therapy for TRD, ECT remains the best available treatment due to its established efficacy and safety profile. Further investigation into optimal regimens and long-term outcomes for ketamine is necessary before sound clinical recommendations can be made.

POSTER 2 *4-4:50 p.m., Meeting Room C*

USING LITHIUM CARBONATE TO REDUCE SUICIDE RISK IN PATIENTS WITH BIPOLAR DISORDER

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Hannah David

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Ms. Colleen McCoy

ABSTRACT:

Rates of suicide are increasing in patients with mental illness, especially in patients with bipolar disorder diagnoses. Lithium carbonate is used as one of the oldest treatments for mood regulation but does current evidence support its continued use for reducing suicidal ideation in those with bipolar disorder? The purpose of this systematic review was to examine if current literature supports lithium carbonate as an effective treatment that reduces suicide risk in patients diagnosed with bipolar disorder. The research was conducted with a key-word search of three online databases. This systematic review found that in the context of clinical practice, the current research does not support monotherapy of lithium carbonate to reduce suicidal behavior in patients with bipolar disorder. For primary care practitioners, this would mean that other treatment modalities should be considered either alongside lithium carbonate therapy or another mood-stabilizer therapy could be more beneficial in reducing suicidal outcomes.

POSTER 2 *4-4:50 p.m., Meeting Room C*

DEMENTIA-FRIENDLY COMMUNICATION: Strategies for Improved Communication

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Anne Kirslis

COLLEGE: Ivester College of Health Sciences - Mathematics and Science

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Bonnie Kin

ABSTRACT:

Dementia is a progressive neurodegenerative condition affecting millions of people globally. With increased human longevity, these numbers are predicted to continue to rise. This neurological disease affects cognitive and functional abilities, including communication. As dementia progresses, problems with communication increase. It is one of the most significant obstacles to effective caregiving for individuals with dementia. These obstacles can be lowered by understanding the communication issues involved, and by using strategies for dementia-friendly communication. This poster presents dementia-friendly communication strategies from a qualitative study that explored the communication challenges faced by individuals with dementia and their caregivers. The study revealed several communication challenges, including language, memory, and social interactions. To help caregivers overcome these challenges, a range of communication strategies can be tailored to the individual's unique needs and preferences. The poster presentation will provide an overview of the communication challenges and offer potential solutions for caregivers to consider. Effective communication strategies include verbal strategies, and nonverbal strategies in communication such as body language, facial expression, touch, and tone of voice. Examples of assistive technologies and resources that can aid communication will be demonstrated. This study underscores the importance of a person-centered approach to communication in dementia care, which recognizes the uniqueness of the individual.

POSTER 2 4-4:50 p.m., Meeting Room C

CHOLINESTERASE INHIBITORS VS PSYCHOTHERAPY IN ALZHEIMER'S DISEASE:

A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Alhana Khobeir

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Greg Marshall

ABSTRACT:

Alzheimer's disease (AD) is a common neurodegenerative disorder affecting over 40 million people across various populations of individuals across the world. Current research promotes plaque formation and neurofibrillary tangles, as well as a decline in acetylcholine production in an aging population, as the underlying cause behind this pathology. This systematic review aims to examine the effectiveness of treatment modalities of cholinesterase inhibitors versus that of psychotherapy in retaining memory function in elderly patients with AD. Utilizing the CASP checklist, 194 articles were initially obtained across three databases (PubMed, Medline, Cochrane) from July 10-August 13, with 6 articles meeting the inclusion criteria. Selection was composed of synthesized evidence of cholinesterase inhibitors and/or psychotherapy slowing down memory impairment in the selected population. While the data indicated a positive effect on memory function with the utilization of cholinesterase inhibitors, a higher likelihood of side effects was observed, presumably due to medicinal noncompliance. Interestingly, psychotherapy as the primary treatment modality did result in a greater efficacy in long-term memory benefit. While this systematic review presented is limited by a lack of meta-analysis, it is clear that continued psychotherapy treatment would greatly impact memory decline progression and serve as a benefit of quality of life in those with AD. However, future research examining the concurrent use of both treatment options as well as the continued development of novel pharmaceutical agents would expand our capacity to treat cognitive impairment and improve quality of life for these patients.

POSTER 2 4-4:50 p.m., Meeting Room C

PYRROLOBENZODIAZEPINE DIMER ELB-21 IN THE TREATMENT OF METHICILLIN RESISTANT STAPHYLOCOCCUS AUREUS AS COMPARED TO VANCOMYCIN A SYSTEMATIC REVIEW

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Jairius Mayweather

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Greg Marshall

ABSTRACT:

Background & Objectives

Methicillin-resistant *Staphylococcus aureus* (MRSA) infections are one of the most largely studied infections in medicine. Vancomycin has been the standard antibiotic of choice but there have been no newly developed antibiotics in many years, so there are growing concerns as we see Vancomycin resistance slowly increase. We performed a systematic review of current literature to assess the efficacy of antitumor Pyrrolbenzodiazepine (PBD) analog ELB-21 as a treatment for MRSA as compared to standard concentrations of Vancomycin.

Methods

A systematic review was conducted through PubMed, Academic Search Complete, MEDLINE, and Cochrane Database of Systematic Reviews. Bias was assessed via the Critical Appraisal Skills Program (CASP). No meta-analysis was performed.

Results

The search included 139 unique articles, of which 4 were included after criteria was applied. Bias is of concern due to the proprietary ownership of ELB-21 by Spirogen Ltd and each article containing an author who is affiliated with said company. Largely, ELB-21 acts as a potent antibiotic with minimum inhibitory concentrations (MICs) far lower than the standard for Vancomycin.

Conclusions

ELB-21 has MICs lower than those for Vancomycin in each of the included studies. However, sample size and ownership by one organization are large concerns for bias. There are also concerns due to the in vitro nature of current research, mainly due to the unknown effects of ELB-21 on living tissue even at such low concentrations. Progression to models and randomized controlled trials are imperative to the understanding of ELB-21 and its future as an antibiotic option.

POSTER 2 *4-4:50 p.m., Meeting Room C*

THE EFFECTS OF A MEDITERRANEAN DIET ON WOMEN WITH POLYCYSTIC OVARIAN SYNDROME: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Sara Hammond

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

Polycystic ovarian syndrome (PCOS) is an endocrinology disorder causing abnormal hormone levels. It is recommended that the first line treatment for PCOS is weight management. The Mediterranean diet is considered one of the healthiest diets and the aim of this systematic review is to determine if the Mediterranean diet has an impact on the effects of PCOS. Databases were searched until July 15, 2022. Articles were included if they evaluated weight, hormonal parameters, or severity of symptoms in patients diagnosed with PCOS

POSTER 2 *4-4:50 p.m., Meeting Room C*

HORMONE REPLACEMENT THERAPY (HRT) AND DECREASED FRAGILITY FRACTURE RISK IN POST-MENOPAUSAL WOMEN: A systematic review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Elizabeth Johnson

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

Postmenopausal women are at an increased risk for developing osteoporosis (Hajcsar et al., 2000). The increased risk is due to a decrease in estrogen. After comparing studies to determine whether HRT or bisphosphonates increased BMD (bone mineral density) in post-menopausal women, there are a few conclusions to consider. Treating post-menopausal women with HRT does decrease non-traumatic fracture risk when compared to baseline. Ultimately increasing BMD in postmenopausal women results in better health outcomes later in life.

POSTER 2 *4-4:50 p.m., Meeting Room C*

ENHANCING DIGESTIVE TRACT MICROBIOME AND THE IMPACTS ON SIGNS AND SYMPTOMS OF CELIAC DISEASE COMPARED TO STANDARD THERAPY: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Sarah Price

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Greg Marshall

ABSTRACT:

Background & Objectives

For patients with celiac disease, the gluten free diet is the standard of care, however patients following a strict gluten free diet still experience gastrointestinal symptoms. This could be due to the alteration of the intestinal microbiome that occurs from following the gluten free diet.

This review sought to determine if among patients with celiac disease, are therapies to enhance the gut microbiome (fecal transplant, probiotics) effective at reducing signs or symptoms of celiac disease compared to standard therapy alone.

Methods

A systematic review was conducted by searching PubMed, Cochrane, and MEDLINE to find studies published between 2016-2022 that focused on patients with celiac disease who received probiotics or a fecal transplant. Bias was assessed using the CASP (Critical appraisal Skills Programme) checklist.

Results

After assessing articles for eligibility 6 articles met criteria. The overall bias was high in all articles. The intervention of probiotics in the randomized control trials showed statistically significant improvement of gastrointestinal symptoms. The one case study found complete recovery of duodenal villi after a fecal microbiota transplant. The three systematic reviews showed alterations of the intestinal microbiome that improved gastrointestinal systems.

Conclusion

The articles reviewed showed statistically significant improvements in gastrointestinal symptoms as well as positive enhancement of the microbiome however more research on the long-term effects of probiotics, additional randomized control trials with larger sample size, and more research on fecal microbiota transplants are necessary.

POSTER 2 4-4:50 p.m., Meeting Room C

OUTCOME MEASURE COMPARISON BETWEEN ANTEROLATERAL EXTRA-ARTICULAR GRAFTING TECHNIQUES IN CONJUNCTION WITH INTRA-ARTICULAR GRAFTING TECHNIQUES AS COMPARED TO ISOLATED INTRA-ARTICULAR GRAFTING TECHNIQUES IN ACL REVISION SURGERY: A systematic review.

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Michael Benfield

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Heather Brown

ABSTRACT:

This is a systematic review designed to look at the effectiveness of the use of extra-articular grafting techniques in combination with isolated ACL reconstruction compared to the use of isolated ACL reconstruction in patients undergoing ACL revision surgery. Ninety-five articles found across three different search engines were reviewed to determine their relevance to the outlined subject resulting in a total of 10 articles meeting the inclusion and exclusion criteria. The articles included all had to be evidence-based peer reviewed articles published within the last ten years. The inclusion criteria included subjects who have a previously failed ACL reconstruction surgery and currently have an intact PCL. For the purposes of this systematic review, articles that included patients who have other ligamentous injuries of the knee were excluded from the study. Measures used to determine the effectiveness of the use of extra-articular grafting are failure rates, negative pivot shift test, and subjective and objective IKDC scores. Based on the studies provided, it is concluded that there is a positive correlation between the use of extra-articular grafting techniques and a reduced failure rate as well as a negative pivot shift test. The IKDC scores did not show any significant difference between the patients who received the extra-articular grafting techniques in combination with the isolated ACL reconstruction and those that didn't. It can be concluded that the use of extra-articular grafting techniques shows an increase in rotational stability, decreasing the likelihood of failed ACL reconstruction.

POSTER 2 *4-4:50 p.m., Meeting Room C*

MEDICATION ABORTION WITHOUT PRIOR ULTRASONOGRAPHY: A Systemic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Reyd Strickland

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erica Parks

ABSTRACT:

Background

The current standard of care for abortion treatment includes the use of ultrasonography to confirm the existence of a pregnancy. Recent studies show that omission of the pre-abortion ultrasound does not affect the safety and/or efficacy of medical abortion.

Objectives

This study aims to perform a systemic review of all relevant literature addressing the omission of ultrasonography before initiation of medical abortion.

Methodology

Online databases Cochrane Library, PubMed, and ScienceDirect were searched to perform this systemic review. Inclusion criteria were: published in the last 5 years, available in the English language, articles were either clinical trials, meta analyses or randomized controlled trails; and addressed medical abortion. Sources were excluded if they addressed the issue of surgical/procedural abortion.

Results

Of 2,366 articles that resulted from the initial search, nine were included in this systemic review on medication abortion.

Conclusion

It appears that ultrasonography is not necessary before initiation of most medication abortions. Thorough screening questions should be used to determine if a woman is a candidate for medication abortion without ultrasonography.

POSTER 2 4-4:50 p.m., Meeting Room C

USE OF CSII VS MDII IN PREGNANT T1DM FEMALES FOR A SUCCESSFUL NON-COMPLICATED DELIVERY: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Rosemary Melendez

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Kyrus Patch

ABSTRACT:

Background: Type 1 diabetes mellitus (T1DM) is an autoimmune endocrine disorder resulting in a permanent defect in the body's insulin production. Pregnant females are categorized as high risk therefore optimization of glucose control is imperative to both the life of mother and infant. Prevention of both hyperglycemia and hypoglycemia can increase the likelihood of a successful non-complicated delivery.

Objective: The aim of this study is to show whether or not the new generations of continuous subcutaneous insulin injection (CSII) impact on glucose regulation for pregnant T1DM can result in successful, non-complicated delivery as compared to multiple dose insulin injections (MDII).

Search Strategy: All articles reviewed were obtained from Cochrane Review, PubMed, and EBSCO computerized literature databases.

Selection Criteria: Excluded articles included non-peer reviewed, opinion based, and studies with inclusion criteria that were not clear or specific.

Main Results: Women with type 1 diabetes mellitus were deemed eligible from ages 18-40 years old, >12 months of pre-existing diabetes, a singleton pregnancy confirmed by ultrasound, and were using either an insulin pump or multiple daily injections of insulin. Studies have shown that CSII versus MDII reduced hyperglycemia, had less glucose variability, and ultimately led to reduction in HbA1c levels. In these studies, we found that deliveries in women who used CSII have less probability of delivering a LGA infant, decreased incidence of neonatal hypoglycemia, lesser chance of neonatal intensive care admission, and decreased overall stay post delivery.

Overall, this systematic review can aid physicians and advanced practicing providers in their care plan for pregnant women with T1DM. The results yield no significant regard towards either CSII vs MDII in regards to improved maternal and neonatal outcomes. Providers can now tailor their plan based on the mother's lifestyle and preferences.

Funding: None

POSTER 2 *4-4:50 p.m., Meeting Room C*

THE IMPACT OF MATERNAL/PARENTAL LEAVE ON CHILDREN'S COGNITIVE DEVELOPMENT: A Systematic Review

POSTER/PANEL/PRESENTATION: Poster Presentation

PRESENTER(S): Lajuana Osbourne

COLLEGE: Ivester College of Health Sciences - Physician Assistant Studies

UNDERGRADUATE / GRADUATE / FACULTY: Graduate Student(s)

PROJECT FACULTY ADVISOR: Dr. Erika Parks

ABSTRACT:

From the ages of birth to five years old, there is a considerably amount of development, especially cognitive development, that a child undergoes. Thus, the amount of time a parent can spend with their child during these years is extremely crucial. The aim of this study was to perform a systematic review surrounding the impact of maternal leave on a child's cognitive development from newborn to five years old and compare it to a child whose mothers did not have maternal leave. A systematic review of the literature was performed based on a selective search of JSTOR, PubMed, Wiley Online Library, and Cochrane databases. Inclusion criteria required studies to assess cognitive development in participants from ages zero to five years old whose parents either had maternal or paternal leave. Studies were excluded if they were published before 2006, assessed physical development, or if the studies were not published in English. Out of 13 studies used, five found that maternal leave has a positive, but not necessarily significant impact on cognitive development. In effort to understand the depths of maternal leave's impact, further studies are needed to confirm the influence of maternal leave on other types of development in young children.

PRIMARY AUTHOR INDEX

LAST NAME OF PRIMARY AUTHOR AND ABSTRACT PAGE NUMBER

A lcibiade Bennasar, Ylenia...97	F anta, Fassil.....43	M ata, Ashley.....104	R angel Santos, Stephanie...30
Alexis, Yxera.....73	Frank, Kenneth.....38	Mayweather, Jairius.....111	Razo, Joanna.....85
Andrews, April.....78	Franklin, T'liia.....14	McCall, Ashley.....83	Rodriguez, Milky...11, 13, 33
Askew, Emelia.....20	Fritz, Sarah.....52	McCarthy, Amber.....29	Rowell, Aeden.....81
		Mccluskey, Deshun.....100	
B anjade, Dhruva.....74	G arcía, Ana.....59	McIntyre, Noelle.....28	S aldana, Siera.....92
Bartell, Amanda.....63	Garner, Ted.....48	McKinney, Abby.....70	Sanders, Aloe.....17
Benfield, Michael.....115	Gonzalez, Lina.....11	Medianero, Gabriel L.....14	Serrato, Margaret.....52
Bierschenk, Lauren105	Graham, Kay.....36, 47	Melendez, Rosemary.....117	Simmons, Kelley..15, 64, 87, 92
Biseth, Dr. Araúz.....14		Metelerkamp, Zoë.....87	Skleder, Anne.....57
Boyce, Ashley.....106	H ammond, Sara.....112	Miller, Amanda.....27	Steinhaus, Barbara.....10
Bromer, Billi.....39	Heartsfield, Alexis.....88	Molino, Jay.....11, 12, 13, 31, 32,39, 40, 59	Strickland, Reyd.....116
Brooks, D'Angel.....99	Hernández, Paola.....61		
		Morales, Flor.....60	T horne, Chloe.....65
C antu, Roberto.....75	J ames, Chuntiel.....67	Moreno, Gabriel.....32	Tolbert, Timothy.....45
Cardin, Bryce.....91	Johnson, Elizabeth.....113	Morgan, Ar'Chardonnay.....55	Tran, Christy.....53
Champ, Jason.....80	Johnson, Mary.....20	Mullaney, Joshua.....107	
Clay, Vickie.....76	Jones, Emily.....103	Musselwhite, Molly.....89	W aldman, Geordan.....77
Clifton, Billie.....53	Jones, Savannah.....102		Washington-Hubbard,
Cope, Michalea.....66	Just, Renee.....23	N oushin, Noushin.....84	Shatrela.....25, 36, 62
Crumley, Logan.....82		O sbourne, Lajuana.....118	Welty, Alison.....94
Cutts, James.....93	K ay, Sarah.....21	Outtara, Gnimbin.....47, 68	West, Spencer.....90
	Kern, Linda.....24		Whitlock, Katelyn.....35
D arden, Grace.....14	Khan, Ramsha.....95	P erez, Augusto.....13	Wolfe, Jacob.....96
David, Hannah.....108	Khobeir, Alhana.....110	Peters, Ian.....21	Worley, Mikaela.....98
Deeb, Anna.....49	Kirslis, Anne.....109	Pettway, Ashley.....72	Wortham, Cameron.....86
Diaz, Albano.....32		Pitti, Mario.....33	
Doerr, Blake.....101	L emus, Jesús.....29	Pope, Elizabeth.....71	
Doyle, Danny.....64	Lewis, Jim.....35	Price, Sarah.....114	
		Pullani, Sarah.....49	
E lkins, Jeananne....17, 18, 45			

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