



Madonna University Center for Research Presents  
**Symposium for Research,  
Scholarship and Creativity**

**Wednesday, April 20, 2022 • 12–5 p.m.**  
**Franciscan Center Gathering Space**

**Student Recognition Awards Ceremony,  
Research Poster Presentations, Performances,  
MADONNA Talks, Recognition Awards and Networking**

# DIRECTOR'S WELCOME MESSAGE

## 8th Annual Symposium for Research, Scholarship and Creativity



*The Madonna University Center for Research is proud to host **the Annual Symposium for Research, Scholarship and Creativity** in a hybrid format this year. With the return to on-ground learning, we are happy to be able to provide in-person sessions in the Franciscan center as well as a virtual experience hosted on our Blackboard platform this year. By transforming the Symposium to a blended in-person and hybrid event we are able to offer the opportunity for students and faculty to network and experience scholarship and creativity first-hand. In using technology resources, we are able to include all members of our learning communities, online students and distance learners through our interactive blackboard community platform. Last year's virtual Symposium was a resounding success and we are certain, you will enjoy this year's hybrid Symposium event.*

*The Symposium for Research, Scholarship and Creativity has been designed to seamlessly provide students and faculty with the opportunity to showcase their scholarly accomplishments in research, practice, performance and creativity with the entire Madonna University community.*

*The annual Symposium for Research, Scholarship and Creativity is one of the key activities of the Center for Research. Through this event, we continue to provide students with an opportunity to perfect their presentation skills, and share innovative ideas, showcase capstone research, project work, artistic expression, creative performances and many other forms of scholarship. Additionally, **Madonna Talks**, provide a fast-paced update on faculty and student research and scholarship.*

*Grounded by our values, Madonna University promotes scholarly inquiry and creativity not only for advancing one's own knowledge, skills, and understandings but also and more importantly, for the critical contribution of expanding our capacity to serve others and contribute to the greater good.*

*I hope you will attend our on-ground events as well as explore all the sections of our Symposium online blackboard platform to fully experience the scholarly and creative achievements and endeavors of students and faculty presented at our 8th Annual Symposium for Research, Scholarship and Creativity.*

*Dr. Deborah Dunn*

Dr. Deborah Dunn  
Professor  
Director Center for Research  
Dean, The Graduate School

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# MADONNA TALKS



**Jason O. Davis, Ph.D.**

Assistant Professor,  
College of Education and  
Human Development

Graduate Program Director,  
Higher Education  
Administration

## Confronting Islamophobia: Examining the Impact of Dialogue on Understanding

College campuses in America have become increasingly diverse in recent years. The increase in diversity has not resulted in an increase in intergroup dialogue and/or interactions. Campuses have employed a variety of diversity and inclusion programs to foster intergroup relations and improve campus climate. This research study explored the impact of difficult dialogue programs on implicit attitudes towards Islam. I investigated whether participation in a difficult dialogue program led to a change in results on an implicit attitude test of college students. I also explored the views of participants in the program about their views of Islam. The study focused on undergraduate students of a single university. I compared the treatment group of 18 students who participated in a difficult dialogue session to the control group of 15 students who did not participate. Participants from both groups were recruited from courses housed in the same department at the university. Findings revealed that participants in the treatment group had increased their affinity towards Islam to a higher degree than those in the control group, were less likely to have negative associations of Muslims following the difficult dialogue session, and were more likely to recognize discrimination towards Muslims. Finally, the research revealed that participants of difficult dialogue sessions reported an increase in desire for further interactions with Muslims and learning about Islam. The implication of the findings for college campuses is that difficult dialogues on religion can be an effective tool to minimize biases towards religions and interfaith tensions and promote future interactions between faith communities.



**Judy McKenna, DNP, MSN,  
APRN**

Dean, College of Nursing  
and Health

Professor

## The Soul Whisperer: A Concept Analysis of Soul Presence

The Coronavirus disease 2019 (COVID-19) continues to impact lives worldwide. To contain the transmission of the virus, patients were placed in isolation, with minimal human contact and interaction. The older adult population is most affected by these measures as they depend upon interactions of the nurse and family for personal care, companionship, and communication. Soul-presence is the connection between the patient and another that incorporates the richness of presence and the attributes of the soul to provide the depth and meaning of a caring experience. This concept analysis used Avant and Walker's methodology to identify the core attributes, antecedents, consequences, empirical referents, and implications for nursing practice. The core attributes include time, presence, caring, intentionality, and connecting. Soul-presence is defined as occurring within a caring moment [caring & time], transcending time, space, and physicality [presence] while connecting between the soul of the person and the soul of another human being [intentionality & connecting]. The phenomenon of soul-presence emerged while caring for the older adult during the pandemic. This concept analysis aims to establish the significance of soul-presence to advance the theoretical nursing research about the soul and guide future empirical endeavors.





**Andrew Domzalski Ph.D.**

Professor and Chair,  
Department of Humanities

Director, Animal Studies &  
Center for Humane Studies

Co-Director, Center for  
Catholic Studies and  
Interfaith Dialogue

**Dominion, stewardship or kinship? Relating to animals in Christian theologies**

The presentation explores recent developments in Christian theologies regarding the place and role of non-human animals vis-à-vis humans in creation. The three such paradigms are discussed: Dominion, Stewardship, and Community of Creation, each supported by scriptural and theological resources. The Dominion model, based on the quote from the first story of creation (Gen, 1:26), has dominated Christian teachings over centuries and has served as a religious justification for unmitigated exploitation of non-humans for human purposes. It is exclusively anthropocentric, claiming human uniqueness on the grounds of our rational faculties and moral reasoning. With the rise of environmental awareness in the second half of the twentieth century, the Stewardship model was developed as a response to the Dominion approach. It replaced anthropocentrism with theocentrism and conceptualized the role of humans as caretakers of the Earth and of all its non-human inhabitants based on the divine mandate. This approach has become a mainstream interpretation of the biblical resources, as it allows to replace an unabated exploitation of non-humans with a restricted use. Daniel Horan (2018), a Franciscan scholar, proposes a radically different model, that of the Community of Creation, which he supports with an exegesis of scriptural resources and a plethora of ancient theological writings. The model is theocentric, as it emphasizes that humans and non-humans share the Creator and as co-creatures, both possessing agency to praise God directly. It claims that non-human animals have their own purposes for existence, independent from human needs to use them.



**Elizabeth A. Prough, Ph.D.**

Associate Dean,  
College of Education and  
Human Development

Professor and Program  
Director of Political Science

**Prone to Agreement: Does Context Matter for Men and Women in Political Discussions?**

In contemporary discourse, context matters for how people converse with one another about political topics. Discussion may occur face-to-face or online, topics of conversation may be controversial or less so, and gender dynamics may vary. We argue that men and women are affected differently by various contextual discussion factors; we employ a unique quasi-experiment that varies these factors and use discourse analysis to examine patterns of gendered agreement and disagreement across seven exhaustive categories of response. These factors affect the level of agreement expressed by women and men, though gender-based differences are not dramatic. We do, however, find conditions that make men less agreeable than women. We also identify seven discrete rhetorical approaches to expressing agreement or disagreement in political discussion. Of these, three show evidence of gender-based patterns of usage. These findings have implications for how men and women use agreement to cope with divisiveness in political discussion.

# PERFORMANCE PRESENTATION

## “tethered”

Kayla Antongiorgi and Celeise Porter

Advisors: Susan Panek, Sue Boyd, and Dan Boyd

The vision of this original work was to demonstrate the feeling one has when they are stuck in a situation, pattern, or predicament. Sometimes we find ourselves unable to change our lives or we have trouble moving forward. Perhaps we are convinced we should stay in the same place. However, most importantly, one should realize that they are not alone with their conflict. Everyone experiences feelings of ambiguity and helplessness.

tethered

A student collaboration between Madonna University Dance and Broadcast and Cinema Arts programs.

Directed, shot and edited by the students in BCA Editing 2 class.

Choreographed by Kayla Antongiorgi. Dancers: Alexis Brown, Ellen Houseman, Courtney Payne, and Devin Sergent.

Faculty: Sue Panek, Sue Boyd, and Dan Boyd.



Watch “tethered” by clicking [here](https://madonnauniversity.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=6259fe9a-0fcb-4b20-b800-ae6a0108934c).

<https://madonnauniversity.hosted.panopto.com/Panopto/Pages/Viewer.aspx?id=6259fe9a-0fcb-4b20-b800-ae6a0108934c>

# POSTER PRESENTATIONS

## Undergraduate

### Poster Number: 1

#### **COVID 19 Vaccines and Debunking Myths**

**Jenan Elladan, Somaia Alward, and  
Demetrius Sutarov**

**Advisor: Kathleen Rittenhouse**

COVID-19 runs rampant within the unvaccinated group of individuals, and close communal environments like college campuses only amplify the infection rate. What is the vaccine percentage within a sample of college students? Do myths and false information surrounding the COVID-19 vaccine play a role in the number of unvaccinated college students. The purpose of this study is to determine if educating college students about the myths behind the COVID-19 vaccines, will change their hesitation on getting vaccinated. Method: A presentation was created to interact with a sample of one hundred college students at Madonna University. This presentation included education on COVID-19, ways to prevent the spread, and myths surrounding the three vaccines (Moderna, Pfizer, Johnson & Johnson). A quantitative data sheet was handed out prior to the presentation, in which students answer questions about their vaccine status. After the presentation, the students take another assessment sheet, which rates the likelihood of receiving the vaccine after being educated on the myths. Results: The results showed that out of one hundred sampled Madonna University college students, 76% were already vaccinated prior to the assessment. Out of the remaining 24% of unvaccinated individuals, after the presentation 42% were more likely to receive the vaccine, 12% were mixed, and 46% were unlikely to receive the vaccine. The end results showed that, out of the 24% of unvaccinated individuals, 54% of them had an increase in the likelihood of receiving the COVID-19 vaccines after the presentation.

### Poster Number: 2

#### **In 25-35 year old Mothers, How Does IVF Compare to Natural Fertilization on Influencing PPD after Delivery?**

**Summer Mitchell, Natalia Matusiewicz,  
Katelyn Hoffman, and Melanie Porter**

**Advisor: Dr. Adlah Hamlan**

A descriptive comparative design was used to identify the indicators of PPD in 25-35 IVF Vs natural fertilization clients. The projects recruited

12 participants and the data were collected by using the social media to access the IVF mother's forum and the "uncensored Pregnancy and Birth" Forum. The participants we asked to answer questions of a survey that includes questions about the client characteristics, obstetric History and the signs and symptoms that considered indicators of the PPD. The survey was created and adopted from Edinburg Postpartum Depression Scale. The results showed that the IVF clients presented with high percentage of complication during pregnancy (83%) Vs (33%) for natural. The client with IVF showed higher percentage of most of the signs and symptoms of PPD in comparison to natural fertilization. The results didn't support the significance differences between these two groups because the analysis was a descriptive just. The project has a limitation of very small sample size related to inability to access the clients and limited time of data collection. The project emphasizes the need to focus on the psychological aspects of postpartum care with consideration to the fertilization method.

### Poster Number: 3

#### **The Effects of Soil PH on Decomposition**

**Kayla Morgan**

**Advisor: Dr. Elizabeth Peckham**

Decomposition rates increase and decrease due to many different factors. Some of those factors include temperature, burial depth, microbial content of the soil, soil moisture, etc. One of the main factors that hasn't been widely tested is soil pH. Soil pH can affect decomposition by increasing or decreasing the rate. In this paper, I will explain how my hypothesis was not supported, comparing acidic soil vs. basic soil. There were 10 pigs that were being tested in 2 different environments: temperatures and soil pH. There was some data that was lost, due to a malfunction in the cold room. The results gave clarity on the effects of basic pH vs. acidic pH. Acidic pH conserved the pigs in the soil for a longer period, over the course of four months there was still soft tissue on the pigs. The basic pH degraded the soft tissue of the pigs at a superabundant rate. During the final check at 4 months, the pigs were almost completely skeletonized. This four-month process did not support my hypothesis that acidic soil would degrade the soft tissue at a faster rate. It does demonstrate that basic soil pH increases the rate of decomposition, while acidic soil pH decreases the rate of decomposition.

**Poster Number: 4**  
**The Best Years of Your Life? An Examination of Student Satisfaction at a Small, Private University**  
**Elizabeth Profit**  
**Advisor: Dr. Kenneth Thiel**

Institutions of higher education are routinely interested in determining factors that relate to student recruitment and retention. To this end, student satisfaction within the institution may be a critical component. Many previous studies that have systematically investigated student satisfaction have been conducted at large, public universities; however, the findings from these studies may not generalize to students who attend smaller universities. Therefore, the present study examined which aspects of the academic experience are most important to students at a small, private university, as well as how satisfied they were with the university's attention to those aspects. The results demonstrated that the three aspects of the academic experience rated most important were campus climate, student life, and instructional effectiveness. Of these, only the campus climate factor demonstrated a significant positive correlation between how important the factor was to the students and how satisfied they were with the university meeting their expectations. Several moderating factors, such as spirituality, religious affiliation, gender identification, sexual orientation, and living status are also in the process of being examined. Continued research must be completed to determine what factors directly lead to increased satisfaction among university students.

**Poster Number: 5**  
**Methods to Enhance and Preserve Blood Impressions from the Skin of Decedents During the Early Stages of Decomposition**  
**Kristen Szabelski and Sarah Holton**  
**Advisor: Jessica Zarate**

Homicides and violent crimes often result in bloodshed; the constant substrate involved in physical altercations in the commission of violent crimes is human skin. Yet, skin is one of the least studied substrates in the impression discipline. This project provides a comparative analysis between dye stains, Amido Black and Hungarian Red and Zar-Pro™ Fluorescent Blood Lifters to enhance blood impressions in situ on decedent skin during the early stages of decomposition.

**Poster Number: 6**  
**A Discrete SQEIRS Optimal Control Problem**  
**Joel Twitchell**  
**Advisor: Dr. Ryan Nierman**

This paper constructs and analyzes an optimal control problem for a discrete epidemiological model over a finite time horizon. The paper focuses on a Susceptible/Quarantined/Exposed/Infective/Removed/Susceptible (SQEIRS) model, where S, Q, E, I, and R represent the different subpopulations. An algorithm for finding the optimal solution to a cumulative cost function is explored in which a cost is associated with each new infectives and a second cost is associated with the cost of administering the control (i.e., the vaccine). The model allows for a changing population (due to natural births/deaths and immigration/emigration), homogenous mixing, no spontaneous infection, and the ability for individuals to quarantine (individuals in the quarantined class cannot contract the disease). Finally, the program utilizes a strategic pruning technique in order to prevent an exponential growth of the search space. A series of numerical results are presented to demonstrate the effectiveness of the algorithm and the effect of changing parameters. The program begins with a binary control problem in which the optimal control program chooses to either administer the full rate of vaccination or no vaccination at each time step. Then, the research is expanded to study the effects of increasing the granularity of the control to allow for partial levels/rates of control. Additionally, the effects of increasing the rate of quarantine and the effect of increasing the deadliness of the disease are studied. An increase of granularity led to a smoother infective graph and lower final population of infective individuals. Additionally, increasing the rate of quarantine or deadliness of the disease decreased the need for control, since the infective population declined; thereby, controlling the spread of the disease. Areas for further research include applying the model to specific diseases and compare the results based on real data. Further research could also delve into expanding the cost function to account for the cost for quarantining individuals, sustained infectives, or removal of individuals due to death.



**Poster Number: 7**  
**Challenges Associated with Ancient DNA Analysis and Authentication of Endogenous DNA in Various Sources from 2nd Century Roman Samples**  
**Alessandra Zieleniewski**  
**Advisor: Dr. Jodi Lynn Barta**

Working with ancient DNA has long presented challenges when trying to prevent contamination and authenticate endogenous DNA extracted and amplified from samples that are hundreds or even thousands of years old. Although biological remains and other samples can harbor ancient DNA, this does not ensure preservation nor prevent degradation of the DNA over time. In this study, femoral, molar, and soil samples were analyzed from within the grave of an individual excavated from a 2nd Century Roman cemetery at Vagnari. DNA sequencing of the Polymerase Chain Reaction (PCR) amplicons exhibited some contamination with modern DNA despite being processed in a clean-room environment. As a result, many measures were taken to rectify this situation such as, UV-irradiating all materials for a longer duration, as well as utilizing new reagents for PCR. Research on this project is ongoing and reactions prepared with new reagents will be compared to the previous results to ensure that contamination issues were eliminated. Future work on this project will attempt to determine the maternal ancestry of the individual found within the Roman grave.

## Graduate

**Poster Number: 8**  
**The Beat Goes On With a Healthy Heart**  
**Denisha Adams, Haifa Alrawi, and Stephanie Dillworth**  
**Advisor: Dr. Tracey Chan**

Heart failure (HF) occurs because of a ventricular filling defect and a depressed ejection fraction leading to a decrease in cardiac output and inadequate perfusion (Dlugasch et al., 2021; Groenewegen et al., 2020). HF is still one of the major burdens on the United States (US) health care system due to the cost of services, medications, and loss of productivity. The Centers for Disease Control and Prevention, (CDC) reports approximately about 6.2 billion adults in the US with HF with an estimated cost of care of \$30.7 billion in 2012 (CDC, 2020). HF readmissions are the number one cause of readmissions (CDC, 2020). Evidence demonstrates that adhering to the American Heart Association (AHA) guidelines reduces readmissions. This project evaluated compliance with the AHA

guidelines for HF. The three process indicators were as follows: were Angiotensin-Converting Enzyme (ACE) inhibitors OR Angiotensin Receptor Blocker (ARBs) ordered on admission and discharge, were Beta Blockers (BB) ordered on admission and discharge, and documentation of education regarding a 2-gram Na diet restriction. The outcome indicator was to reduce hospital readmissions within 30-days. A retrospective chart review of 60 electronic medical records at 3 different facilities that met the inclusion criteria was analyzed using descriptive statistics.

**Poster Number: 9**  
**Beers Criteria related to Falls in the Elderly**  
**Leila Ayoub, Angela Shaeena, and Sahar Taleb**  
**Advisor: Dr. Claude Lauderbach**

Inappropriate prescribing is particularly common in older adults and is associated with adverse drug reactions and increased risk for falls and fall related injuries. Falls are responsible for 70 percent of accidental deaths in ages 65 or older (Fuller, 2000). They account for more than 95 percent of hip fractures (CDC, 2021). Elderly individuals who survive a fall experience significant morbidity. Polypharmacy is a significant factor associated with falls (Fuller, 2000). The American Geriatric Society published the Beers Criteria on Potentially Inappropriate Medication (PIM) use, that contains a list of medications that should be used with caution in the elderly because of their negative health outcomes (Walker et al., 2019). his quality improvement project will evaluate compliance with evidence-based recommendations of the Beers Criteria in high fall risk populations ages 65 or older. This project looks at two process indicators: medication reconciliation utilizing the Beers criteria on all patients 65 years or older at every primary care visit and prior to hospital discharge who presented for a fall-related injury; and documentation of thorough medication reconciliation including medications taken, removed, adjusted or added at every patient encounter for those 65 years or older. Twenty random medical records will be examined in a retrospective review. The expected outcome will be a reduction in falls and fall related injuries. The data will be analyzed using descriptive statistics. The role of the APRN is to prevent falls with proper medication reconciliation using guidelines from the Beers Criteria in the elderly population.

**Poster Number: 10**  
**Analysis of Tax Liabilities as Predictors for 2015-2021 NHL Team Performance**  
**Kyle Barry**  
**Advisor: Dr. Jacob Frimenko**

The National Hockey league imposes a hard salary cap among its 31 active franchises. The intent of the salary cap is to develop the sports competitive landscape among teams whilst not considering independent income tax liabilities assessed to each team based upon their location. This paper evaluates predictability among personal income tax rates as it pertains to team performance in the National Hockey League (NHL) over the most recent five seasons (2015-2021) by utilizing a fitted regression analysis model. Additional independent variables that attribute to team performance are incorporated setting critical boundaries within the study to draw meaningful conclusions. Of the observed sample size, the results indicate modest correlation in that teams operating in low income tax regions will experience greater team performance than those operating in higher income tax regions.

**Poster Number: 11**  
**The Effect of Anxiety on Collegiate Athletes Performance Examining Madonna University's Women's Lacrosse Team**  
**Christy Battersby Bashir**  
**Advisor: Dr. Jacob Frimenko**

College students today appear to be more stressed and anxious than ever before. Anxiety is very common among college students and even more so for student athletes. Elevated levels of anxiety in an athlete can affect the athlete's performance. Although anxiety and sports performance may appear to be a simple and restricted issue, more than 40 years of study shows that the problem is far more complicated. While worry can cause major performance declines in sports, other athletes claim that while competing under high anxiety-inducing strain, they are able to perform very well, sometimes providing their greatest performances ever. As a result, anxiety reactions among athletes appear to be linked to individual variations (Raglin & Hanin, 2000). This study examines the levels of anxiety among female collegiate athletes from Madonna University Women's Lacrosse team and analyzes its relationship to athletic performance. The athlete's anxiety was measured before two different games using the Anxiety Symptoms Questionnaire (Baker, Simon, Keshaviah, 2020) which was then linked to each player's performance. The athletes' game performance

was measured using a player productivity matrix containing 7 statistics, goals, assists, shots, ground balls, turnovers, caused turnovers, and missed shots. Each category was weighted based on their impact on performance. This study aims to uncover the complex relationship between anxiety and athletic performance and display the effects high levels of anxiety have on performance.

**Poster Number: 12**  
**The Impact of Oncotype DX Scoring in Early Stage Invasive Breast Cancer**  
**Sarah Bryden**  
**Advisor: Dr. Tracey Chan**

Breast cancer is one of the world's most commonly diagnosed cancers and until recently, decisions for adjuvant chemotherapy have been left to guesswork. Genomic testing on tumor tissue has been utilized more and more by oncologists over the past decade. Oncotype DX testing has proven to not only take the guesswork out of breast cancer treatment, but it also improves survival rates and patient outcomes. In this paper the benefits of utilizing Oncotype DX testing in ER/PR+, HER2- breast cancer patients with no lymph node involvement will be discussed. Evidence based practice and literature reviews will be referenced to support the use of this testing and to outline the significance it has in breast cancer treatment.

**Poster Number: 13**  
**Statin Use to Reduce LDL-C with or without Diabetes Mellitus**  
**Jaime Chalmers, Suraya Chamseddine, and Jessica Reynolds**  
**Advisor: Dr. Patricia Clark**

High cholesterol is a worldwide concern. In the United States, approximately 94 million adults have a cholesterol level higher than 200 mg/dL and twenty-eight million have total cholesterol levels over 240 mg/dL (CDC, 2022). Hyperlipidemia is asymptomatic initially and increases an individual's risk for heart disease and stroke, leading causes of death in the country (CDC, 2022). Statin use for LDL reduction with diabetes as a comorbidity, looks at two process indicators: in diabetic patients aged 20 and older, LDL is documented annually and in diabetic patients aged 20 and older a documented discussion regarding risk/benefit of statin therapy will occur. 60 medical records will undergo a retrospective review in addition to real-time medical record review. The expected outcome is that all patients aged >20 with a documented history of diabetes are on statin therapy and all patients between the ages of 20-75 with LDL-C > 190 and with a documented history of

diabetes are on high-intensity statin, if the patient is not on recommended therapy, documentation should indicate why.

The data is analyzed using descriptive statistics representing a sample of a population. The role of the APRN in this population is to assure all patients in sample are on an appropriately dosed statin to reduce the risk of adverse cardiovascular events.

**Poster Number: 14**  
**Relationship Between Mental Health and Exercise**

**Kelly Cooney**

**Advisor: Dr. Jacob Frimenko**

This study is looking at the relationship between mental health and exercise. The dependent variables are overall mental health, stress, anxiety and depression. The independent variables are exercise frequency and intensity level. The purpose is to determine if exercise helps increase an individual's mental health. If so, what intensity level should one exercise in order to decrease levels of anxiety, depression and stress.

**Poster Number: 15**  
**Beliefs College Students have about Caffeine**

**Stephanie Delly**

**Advisor: Dr. Karen Schmitz**

Taste was the most common cited reason for consuming caffeinated drinks and food (Li, Guo, Bingshu, Zhu, and Wang 2021). This study explores the beliefs and attitudes that college students have about caffeine consumption. Caffeinated products such as tea, coffee, and energy drinks are consumed worldwide by college students, however some college students chose to not consume these products as well. The study targeted college students attending colleges in Macomb, Oakland, and Wayne county in Michigan. The study was for individuals ages 18 and up, and the research was carried out using a survey conducted through Qualtrics. The survey included questions regarding the reason that products containing caffeine are purchased, and the individual perceptions of that caffeine. The survey questions ask the participants what they believe to be the advantages and disadvantages of consuming and purchasing caffeinated products. In total 420 people took the survey. The results of the survey questions were used to understand the linkage of the beliefs and attitudes of college students towards caffeinated products. The most frequent response to the question the most common reason an individual consumes caffeine was for the taste. The most popular

response (349 responses or 41%) to what caffeinated products, a college student was most likely to buy was coffee. The most common belief participants had on advantages of caffeine was that it reduced fatigue (233 responses or 55%).

**Poster Number: 16**  
**Sports Nutrition Knowledge and Food Choice Motives Among Female Weightlifters**

**Nicole Derderian**

**Advisor: Dr. Karen Schmitz**

Studies on nutrition knowledge among collegiate athletes have been conducted to determine where the gaps in nutrition knowledge lie. Survey research has shown that collegiate athletes are lacking nutrition knowledge related to their sport. The purpose of this research was to assess young adult, female, weightlifters' knowledge about sports nutrition, identify where they are getting most of their sports nutrition knowledge, and to help determine the motives behind their food/meal choices. Survey links were sent via Instagram and Facebook to female weightlifters who live in the Southeastern, Michigan area and 101 responses were obtained. The results indicated that 78.5% of participants were able to correctly answer basic sports nutrition information, most of the participants find sports nutrition related information from Instagram (43.5%), research studies (48.5%), dietitians (41.5%), and other (48.5%), and participants were neither likely or unlikely (33%) or somewhat likely (33%) to believe what they see/read/hear about sports nutrition on social media. A total of 58% of respondents make food choices based on how they want to look and 42% make food choices based on how they want to perform in the gym. A correlation between age and food choice motive was analyzed and there was no correlation between the two variables. The results of this survey indicate that dietitians and other nutrition professionals should continue to share science-based information and research studies with their community/followers, via social media, to educate female weightlifters about sports nutrition.

**Poster Number: 17**  
**Dietary Supplement Usage Among Young Adult Athletes**

**Hannah Disbrow**

**Advisor: Dr. Karen Schmitz**

The purpose of this research was to further understand the use of dietary supplements among young adult athletes. With the continual growth of dietary supplement usage there is a need for proper education



on these products. According to several researchers, the primary source of young adult athletes' information about dietary supplements is obtained from the internet, friends, or store nutritionists (El Khoury et al., 2019). Participants in the study included athletes, ages 20 to 29 in Southeastern Michigan who meet both the aerobic and muscle-strengthening physical activity guidelines. Data was collected through an online survey that consisted of 15 questions. The survey aimed to assess the frequency of supplement use, types of supplements used, and the reason for use along with the source of the participants' knowledge about dietary supplements. Results revealed that the most common type of dietary supplement used was caffeine, 80.3% (n=58). A correlation test examined the relation between gender and likelihood of continuing supplement use even if there were negative side effects. Individuals who stated they would still use supplements, despite negative side effects, were more likely to be male,  $r = -0.36$ ,  $p < 0.01$ . The study also revealed that 57% of participants received their information about dietary supplements from the internet. These findings could prove useful for healthcare professionals and coaches to help improve their methods of education. These results can also be used on a federal level by enforcing stricter regulations regarding manufacturing, sales, and usage of these supplements.

**Poster Number: 18**  
**Strategies for Supporting Children's Emergent Writing**  
**Tarya Dishmon**  
**Advisor: Dr. Sue Ann Sharma**

Young children ability to communicate their ideas in writing is stymied due to the lack of eye-hand coordination skills. In particular, they struggle to form letters and hold their pencil correctly. Mastery of the objects and tools of writing are developed as they strengthen their fine motor skills and eye-hand coordination. The objective of this project was to identify what support children's writing development Early writing plans was implemented in a preschool of six children, tow four-year-old boys and four four-year-old girls. The focused was on providing multiple writing opportunities over the course of four weeks during small group time. Activities included free journal writing, writing letters, forming letters and drawing. Data was collected through various assessment including lesson plans, writing sample, observation notes, photos of writing activities, pre and post interviews. The basic findings were interview questions that were asked and the results tallied. The questions were "Do you like writing?", "How do you feel about writing. The findings were responses for "Do you like writing", shows 17% improvement that liked writing. The responses for "How do you feel about writing", shows 33% positive responses

and was improved to 83% positive responses. As a result, students' feelings about writing positively change, they were no longer discourage about writing. Specific help and scaffolding were needed to improve children's writing skills. For example, proper their finger pencil grasp and letter formation. This provided more learning opportunities in writing, letter knowledge, and prints concepts for children to enhance their early writing skills.

**Poster Number: 19**  
**Stop the Clot, Give the Shot**  
**Danielle Gendron and Caryn Burke**  
**Advisor: Dr. Susanna Sirianni**

Venous thromboembolism (VTE) is a common complication of hospitalization. Intensive care unit (ICU) patients are more prone to VTEs due to immobility, vasopressor use, renal and hepatic failure, and mechanical ventilation, all of which are known risk factors for developing VTE (Ejaz, et. al, 2018). Up to 47% of ICU patients may develop a VTE directly related to a trauma, recent surgery or immobilization, with a higher incidence in the Caucasian population and those aged 70-79 (White, 2003). Despite practice guidelines, the use of VTE prophylaxis has been found to be as low as 50% in surgical patients (Cohen, et al., 2008). The Joint Commission and the National Quality Forum recommend administration of appropriate VTE prophylaxis or documentation of contraindication to VTE prophylaxis within 24 hours of admission (Ho, Chavan, & Pilcher, 2011). This quality improvement project will evaluate the compliance with VTE prophylaxis in the Surgical ICU patient according to the seventh American College of Chest Physicians conference guidelines. A retrospective electronic medical record review of forty patients admitted to the Surgical ICU will be completed. Process indicators will include VTE prophylaxis order placed within 24 hours of ICU admission, administration and documentation of VTE prophylaxis within 24 hours of admission, and documentation of contraindication for VTE prophylaxis if applicable. The outcome indicator will be development of a VTE during their ICU stay. The data will be analyzed using descriptive statistics. Objectives: (1) Evaluate the timing of administration of VTE prophylaxis that is recommend in the surgical intensive care patient population; (2) Discuss the significance of the use of VTE prophylaxis and mortality/morbidity risk if delayed in surgical intensive care unit patient population; and (3) Discuss the role of the APRN in the management of the surgical intensive care patient, as it relates to the prevention of VTE development.

**Poster Number: 20**  
**Graduate Nurse Nursing Perception in**



## Registered Nurses with One or More Years of Experience Working at the Bedside

Christine Georgy

Advisor: Dr. Jacob Frimenko

The time when an individual transitions from college into the workplace setting can be one of the most stressful times in an individual's life. For the graduate nurse, this is no exception as they must develop their own way of nursing practice, incorporate the knowledge they learned while in school and establish new relationships with their patients, fellow nurses, and physicians. During this time, there may be different perceptions that are being exchanged between these nurses and their patients, fellow nurses and physicians which can also affect the way that they may view themselves. This paper will analyze the perception of graduate nurses with less than one year of experience in contrast to nurses who have been working at the bedside for more than a year regarding the way they are being treated by patients, fellow nurses, and physicians. This study took place in a hospital in Dallas, Texas where registered nurses working at the bedside were asked to fill out surveys anonymously. The results concluded that graduate nurses currently have high perceptions of themselves regarding their nursing confidence and pride regardless of the number of years they have been a bedside nurse which was a different perception than graduate nurses in the past who may have felt anxious, nervous and had low self-esteem. The results from this study can be useful to those who are in leadership roles as well as in educator roles to see where they can help graduate nurses transition from a student role to a registered nurse and where teaching can be provided by experienced staff members and management.

Poster Number: 21

## Have You Had Your CHAD2DS2-VASc Today?

Lisa Gostiaux and Jenny Healy

Advisor: Dr. Susanna Sirianni

Atrial Fibrillation (AF) occurs when there are structural and/or electrophysiological abnormalities to the atria of the heart promoting abnormal impulse formation and propagation. The risk of developing AF increases with age and patients who have been diagnosed with AF have an increased risk of stroke, heart disease, dementia, and mortality (January et. al, 2014). The CHAD2DS2-VASc scoring tool is the most widely used scoring system for the stratification of stroke risk associated with AF and patients who score greater than two on this scale are indicated to receive

direct oral anticoagulants (DOAC), (Alshehri, 2019). While risk versus benefits must be assessed in each individual patient, the CHAD2DS2-VASc continues to guide clinicians when prescribing DOACs to patients with AF.

This quality improvement project will evaluate if a CHAD2DS2-VASc score is documented in patients with a diagnosis of AF in both the hospital and primary care setting, and if DOAC should be either ordered or administered in AF patients with CHAD2DS2-VASc scores >2. A retrospective review of 60 electronic medical records will be reviewed. The expected outcome for this study is that patients, after diagnosis and treatment of AF, will not develop a thromboembolic event during hospitalization. No thromboembolic events within a time frame of 6 months to one year of diagnosis of AF will occur as well as encountering a thromboembolic event since their last primary care visit within one years' time. The data will be presented using descriptive

Poster Number: 22

## The Effectiveness of Patient Engagement Tools of Patient Anxiety Levels

Kristen Gough

Advisor: Dr. Jacob Frimenko

Preoperative consultation for patients lacks effective interventions for reducing anxiety levels, leading to improved surgical outcomes. This study investigated the effectiveness of patient engagement tools on patient anxiety levels. The hypothesis of this study was: Patient engagement tools effectively reduce patient anxiety levels. An experimental pretest/posttest control group study was chosen to evaluate the effectiveness of a virtual reality patient engagement tool (intervention). The study was conducted with voluntary participants scheduled for outpatient surgery at the department of surgery at Michigan State University Health Care. Consenting participants (n=31) were randomly assigned to an experimental (n=20) or a control group (n=11). Anonymous pretest/posttest questionnaires were collected from both groups on the day of their outpatient surgery appointment. Pretest questionnaires were given to both groups before they consulted with the surgeon. The control group was given the posttest questionnaire after consulting with the surgeon. The experimental group was given access to a virtual reality patient engagement tool (video), consulted with the surgeon, and then gave the posttest. Data collected were analyzed using t-tests to assess the treatment. An independent t-test compared the posttest scores between the control and experimental groups yielding a significant finding in this study ( $t=2.04$ ,  $p < 0.05$ ); a significant finding indicated the proposed intervention slightly increased anxiety scores, refuting the hypothesis. Increased

anxiety scores may be due to study participation on the day of surgery. Implications of this study suggest additional studies on virtual reality tools for reducing patient anxiety levels.

**Poster Number: 23**  
**Assessing the Knowledge, Beliefs and Source of Sports Nutrition from Collegiate Runners and Field Athletes**  
**Mackenzie Gurne**  
**Advisor: Dr. Karen Schmitz**

Collegiate cross country and track & field programs across the United States show an unequal distribution and accessibility of professional sports nutrition sources for student-athletes. These student-athletes maintain a basic level of sports nutrition knowledge from introduction nutrition classes and sources such as coaches, athletic trainers, and non-reliable websites. Evidence shows that collegiate runners and field athletes need further sports nutrition education to understand how it plays a key role in performance. 1 This study analyzes Michigan cross country and track & field athletes' attitudes toward sports nutrition and which sources they rely on the most. A survey of 28 questions was advertised on multiple social media platforms and emailed to coaches from Division I, II, III, and NAIA level collegiate cross country and track & field programs throughout the state of Michigan. This survey assessed the athletes' knowledge, sources, beliefs, and significance of sports nutrition impact on performance. A sum of 50 student-athletes indicated the survey and 48 completed it. Almost 97% of participants agreed that nutrition reflects on performance. In addition, only 58.33% of athletes stated that their preferred way to receive nutrition advice is from a Registered Dietitian Nutritionist (RDN). These results indicate that more research is needed to gain insight into sports nutrition knowledge levels, beliefs, and sources from collegiate runners and field athletes. This suggests that RDNs should be more accessible to student-athletes so they can understand the role of RDNs in athletics, improve their beliefs, and gain more nutrition knowledge.

**Poster Number: 24**  
**The Importance of Employee Loyalty and The Different Factors Affecting It**  
**Reem Hamsho**  
**Advisor: Dr. Jacob Frimenko**

For any organization employee loyalty is an essential concern. This study is dealing with "The Importance of Employee Loyalty and The Different Factors Affecting It." The study will focus on many variables, the concept of employee loyalty, ethical leadership,

relationships among coworkers and leaders, physical benefits and development opportunities. This topic will be discussed because of the high priority of employee loyalty for all kinds of business. Most companies or organizations are always trying to improve their employees' knowledge and experience, through many seminars and courses. This process is costing the company a lot, so when an employee is just leaving, the company is paying more costs through the process of rehiring other employee for the same position. Also, the experience that the previous employee has, needs a long time to be gained with the new employee.

**Poster Number: 25**  
**Treatment of Hypertension in Blacks**  
**Mynhia Her**  
**Advisor: Dr. Patricia Clark**

Hypertension occurs when the pressure needed to move blood to the body is increased causing vascular resistance. Risk factors of hypertension include unhealthy diet, physical inactivity, obesity, alcohol use, smoking and family history. Hypertension affects one billion adults worldwide and is estimated to increase to 1.5 billion in 2025 (Iqbal & Jamal, 2021). Hypertension affects about 54% of non-Hispanic blacks, placing them at higher risk for stroke, heart disease and failure, and end stage renal disease (Whelton et al., 2017). The 2017 American College of Cardiology and American Heart Association Guidelines for the Prevention, Detection, Evaluation and Management of High Blood Pressure in Adults recommend a thiazide-type diuretic or calcium channel blocker as first line agent in managing hypertension in blacks (Whelton et al., 2017). This quality improvement will evaluate compliance with guidelines for management of hypertension in blacks. A concurrent chart review of twelve patients diagnosed with hypertension will be analyzed. Process indicators include diagnosis of hypertension with two separate visits with a blood pressure greater than 130/80, documentation of thiazide-type diuretic or calcium channel blocker or other antihypertensive, documentation of follow-up after one month and if blood pressure control is achieved of less than or equal to 130/80. The role of the advanced practice nurse will be discussed.

**Poster Number: 26**  
**Telecommuting and Perceptions on Promotions in the New Work from Home World**

**Kyle Hermann**

**Advisor: Dr. Jacob Frimenko**

Prior to 2020, working remotely was more often than not a privilege to those who had earned the right by proving their work ethic. Research on the effectiveness of remote work was largely limited to corporations who offered remote work situations and were often positive about the benefits and committed to making it work. Over the last two years, millions of employees were forced to work from home whether they had earned the right or not. As the weeks turned to months, and the months turned to years, corporations that shifted their employees to remote work situations began to scrap plans for a full scale return to working from the office. Almost immediately, the traditionally researched remote work questions of whether or not workers could self-motivate and be productive from home and whether or not they could remain engaged in their work were began to arise. For those early in their career, the researcher included, questions of career advancement arrived. Even before the pandemic, a lack of promotional opportunities was often cited as one of the biggest factors against remote work. With millions of Americans split on their willingness to return to the office, this research dives into how people feel about their work situations and answer if people perceive working from home, or in a hybrid setting, is a detriment to their promotional opportunities. The research has been complete and analysis is currently taking place and will be done by 4/20/22.

**Poster Number: 27**  
**Is Employee Mental Health Impacted by Time Spent in the Office?**

**Samantha Hoffman**

**Advisor: Dr. Jacob Frimenko**

Since the COVID-19 pandemic began, there has been a significant increase in telework. Telework is a great method of work that allows employees to increase their productivity and flexibility. Research was conducted to investigate the relationship between telework and employee mental health. The working models assessed included fully remote (0% in office), hybrid (1-33% in office, 34-66% in office, and 67-99% in office), and 100% in office. Mental health was measured with the WHO-5 and CES-D mental health questionnaires. A survey was distributed, and answered by over 250 participants. Statistically, it was found that employee mental health was not

impacted by the amount of time (%) spent in the office. However, the hybrid working models did in fact show the lowest sample means, indicating that a hybrid working model, did in fact produce the lower, i.e. best mental health score across the participants in the study.

**Poster Number: 28**  
**Antibiotic Adherence to Rhinosinusitis Clinical Guidelines in the Outpatient Setting**

**Monika Holubowski, Alexandra Hamway, and Shelby Thornton**

**Advisor: Dr. Tracey Chan**

In the United States approximately 1 in 8 adults are affected by Rhinosinusitis, resulting in over 30 million annual diagnoses (Rosenfeld et al., 2015). Acute rhinosinusitis is the cause of millions of patients seeking medical attention from their provider for symptom relief resulting in inappropriate prescription of antibiotics. For the purpose of this study, 60 random medical records will be examined in retrospective. The population examined will be adult patients 18 years or older presenting to the outpatient care setting with symptoms consistent with acute rhinosinusitis. The process indicators that will be included are accurate documentation of symptom severity, accurate documentation of symptom timing/onset, and the initiation of antibiotic prescription. The expected outcome is for adult patients with appropriately diagnosed viral URI to receive supportive care measures for symptoms unless their symptoms persist past 10 days with no improvement or symptoms are severely worsening after 4-5 days.

**Poster Number: 29**  
**Church Attendance Trends in Christianity**

**Michael Kanitra**

**Advisor: Dr. Jacob Frimenko**

Christianity has played a major role in a lot of people's lives and continues to be a major influence in families. Knowing the positivity traits of active members of the Christian church will cause concern for a decline in attendance. As faith and attendance at church continues a downward spiral more and more parts of society fall with it. Many factors are leading to this with advancements in technology, busy lifestyles, lack of religious affiliation, and a lack of parental guidance for the younger generations. Many Christians are leaving the church service and are either using technology to church shop or using it to do their own spiritual fulfillment, while others simply state that their beliefs are not inline with the churches anymore. It is important to note societal pressures



of today's world such as work, school, competition, continual training and family life. Almost every single second of the day requires work to be done and with technology advancements there is no differentiation between work and home meaning people are putting a high importance on life and steering away from church. To combat this the church must focus on the times and adjust their processes to fit the needs of the people. Without the intervention of the church and parents to grow the younger generations in a Christian community the church will face a day where they will have almost no members and will fade out.

**Poster Number: 30**  
**Nurse Perception of Central Venous Catheter (CVC) Indications and Necessity**  
**Karolina Kaser**  
**Advisor: Dr. Jacob Frimenko**

According to the Centers for Disease Control and Prevention (CDC), "A central venous catheter, also known as a central line, is a tube that doctors place in a large vein in the neck, chest, groin, or arm to give fluids, blood, or medications or to do medical tests quickly. These long, flexible catheters empty in or near the heart, allowing the catheter to give the needed treatment within seconds. You may be familiar with standard intravenous lines (IVs). Central lines are much different from standard IVs that are used to give medicine into a vein bear the skin's surface, usually for short periods of time. A central venous catheter can remain for weeks or months, and some patients receive treatment through the line several times a day. Central venous catheters are important in treating many conditions, particularly in intensive care units (ICUs)." CVCs can be associated with infections that happen in a patient's bloodstream. Presence of CVCs increase the risk of bloodstream infections. Ultimately, reducing the usage of CVCs can lead to reduction of bloodstream infections. The objective of this study is to compare the knowledge of nurses on appropriate use of CVCs with evidence-based guidelines and policies. The goal is to determine if we as an institution have an opportunity to be more proactive in advocating for reduction of usage of CVCs. Study analysis and interpretations are in progress and will be completed by April 30, 2022.

**Poster Number: 31**  
**Nurse Perceptions of Complementary and Alternative Medicine to Treat Viral Illness**  
**Daniel Konja**  
**Advisor: Dr. Jacob Frimenko**

Every year millions of people around the country contract some type of viral illness. Medical professionals typically suggest generic options such as resting, staying hydrated, and using over the counter medications for treatment of such viral illness. Although timespan of viral illness varies, symptoms may last for up to two weeks. The average American has several responsibilities in their life, which makes being sick a nuisance. Are there other treatment methods that have been useful in treatment of viral illness such as the common cold, influenza, or the coronavirus? If there are other useful treatment options than listed above, do nurses recommend them to their patients? If a nurse has minimal knowledge of complementary and alternative medicine (CAM), would they be interested in continuing education opportunities to better understand these? The researcher hypothesizes that there is positive research regarding treatment of CAM and nurses would be interested in learning these strategies which includes acupuncture, aromatherapy, and vitamin/herbal supplementation. The independent variable is the type of nurse (registered nurse and advanced practice registered nurse). The dependent variable is the perception of nurses on utilizing complementary and alternative medicine to treat viral illness.

**Poster Number: 32**  
**An Analysis of U.S. Nursing Retention Rates Over the Past Five Years (2017-2022)**  
**Eric Lash**  
**Advisor: Dr. Jacob Frimenko**

This study involves a survey investigation of nurses of all levels across all departments in the United States. The purpose is to better understand what aspects of work, aside from the hazardous work environment brought on by COVID-19, factor into nurses' decisions to stay with their current employer, or seek employment elsewhere in the U.S. The study will compare nurses across all departments by age, gender, and seniority level. The intention of this study is to better equip hospital administrators with the information they need to make informed hiring and retainment decisions as it pertains to their hospital's nurse population/workforce, especially at a time when many nurses are leaving their nursing profession altogether.



**Poster Number: 33**  
**Correlation of Caffeine Consumption and Performance and Productivity Enhancement**

**Pejman Latify**  
**Advisor: Dr. Jacob Frimenko**

Caffeine is one of the most used substances globally and this compound's effect on consumers varies depending on user's caffeine sensitivity as well as other applicable factors in their lifestyle such as stress, anxiety, pace, work environment, and mental state. This research performed a deep-dive into benefits and adverse effects of caffeine, while investigated the correlation of caffeine consumption and effects of it on performance and productivity increase obtained from consumption of caffeine. Method used to obtain information was to collect anonymous surveys among adults 18 years old and older. Researcher unexpectedly found a noticeable gap between consumers with average of one caffeinated drink per week with any consumers whom drank anywhere between two to plus eight beverages per week on average. One caffeinated drink per week on average showed a significance compared to the rest of the surveyed. Due to the big difference between number of people whom drank one caffeinated drink with the rest of participants, another important finding from this research was to conclude a more balanced sample of surveyed would make the outcome of research much more tangible for both researcher and audience.

**Poster Number: 34**  
**Predictability of Collegiate Basketball Players and Their Draft Rank Based on Their Collegiate Level of Experience**

**Christopher Lewan**  
**Advisor: Dr. Jacob Frimenko**

I have used a publicly available dataset to develop a predictive equation to understand my dependent variable (NBA draft pick) and its relation to a specific set of independent variables. Those include field goal percentage, minutes played, points per game, number of years played and number of games played. Using five regression models, I was able to determine significant independent variables (field goal percentage & games played) and use the values to develop a predictive equation. The remainder of the data is still under review and will be completed by April 20th.

**Poster Number: 35**  
**How Sweet is Too Sweet? Evaluation of Hyperglycemia Management in the Critically Ill**

**Kelsey Littman and Brittney George**  
**Advisor: Dr. Jennifer Reynolds**

Critically ill patients admitted to the intensive care unit frequently experience hyperglycemia as an adaptive metabolic response to acute stress, regardless of diabetic status. Hyperglycemia, hypoglycemia, and glycemic variability have been found to be independent risk factors for increased mortality in this patient population (Ormsbee et al., 2021). Hyperglycemia in hospitalized patients is associated with an increase in morbidity and mortality of up to 31% in patients admitted with need for surgical intervention, sepsis, congestive heart failure, myocardial infarction, and stroke (Godinjak et al., 2015). Multiple clinical trials have demonstrated maintenance of glycemic control in critically ill patients control during their hospitalization decreases the risk of multi-organ failure, systemic infections, length of stay, and cost. However, insulin therapy is associated with increased risk of hypoglycemia. This quality improvement project will evaluate compliance with evidence-based guidelines for critically ill patients admitted to the SICU supporting documentation of a hemoglobin A1c on all patients with diabetes or hyperglycemia, and initiation of insulin therapy for persistent hyperglycemia to decrease morbidity, mortality, and length of stay. A concurrent data collection on patients admitted to the SICU over a 3-month period will be completed. Process indicators will include documentation of blood glucose monitoring ordered on critically ill patients admitted to the SICU and documentation of hemoglobin A1c ordered on all patients with known diabetes or hyperglycemia admitted to the hospital if not performed in the prior 3 months. The data will be analyzed using descriptive statistics. The role of the advanced practice nurse will be discussed.

**Poster Number: 36**  
**Sources of Nutrition Information and Confidence Levels in their Accuracy in Adults of Southeast Michigan**

**Marina Loutts**  
**Advisor: Dr. Karen Schmitz**

A demand for nutrition information was increased due to the prevailing sedentary lifestyle during the COVID-19 pandemic. It is crucial to realize what sources people use to obtain nutrition advice and whether they are satisfied with their accuracy. This study focused on sources adults of Southeast

Michigan use to obtain nutrition information and their confidence level in the correctness of the information. The researcher hypothesized that Southeast Michigan residents were very confident in the accuracy of their sources of nutrition information. The survey powered by Qualtrics was distributed through social media and communities of Southeast Michigan and involved 158 residents 18 years or older. It consisted of thirteen questions and included Likert, traditional rating, rank order, and verbal frequency scales. Respondents ranked registered dietitians as the first and most trustworthy source of nutrition information. Participants were very confident in the correctness of nutrition information in 40.38% of cases and were somewhat confident in 39.42%. Participants' confidence levels in the correctness of nutrition information were positively correlated (correlation coefficient = 0.453818) with their assurance in knowing where to find the information and negatively correlated (correlation coefficient = - 0.00584) with levels of agreement that nutrition information should be science-based. Results of the study show that the importance of evidence-based nutrition information should be conveyed to populations. Additional studies should be conducted to investigate a qualitative aspect of nutrition information obtained by Southeast Michigan residents.

**Poster Number: 37**  
**The Use and Effects of Entresto in the Treatment of Congestive Heart Failure**  
**Elizabeth Malinowski**  
**Advisor: Dr. Tracey Chan**

In the United States, 6.2 million adults have been diagnosed with heart failure (CDC (Centers for Disease Control), 2020). It continues to be a life-altering disease that affects people both physically and emotionally. It is the leading cause of hospitalization in people over 65, causing shortness of breath, swelling in the legs, and rapid or irregular heartbeats (Cleveland Clinic, 2022). Heart failure can be a scary and uncertain diagnosis. Still, patients should know that it can be manageable with the right lifestyle changes and optimal medication regimen and, to an extent, reversible. Specific medication regimens have been proven to reduce remodeling of the heart muscle and improve EF (Almufleh et al., 2017). One medication that is new to the market and treatment of congestive heart failure (CHF) is Entresto. This paper intends to look at the data in the clinical setting supporting the use of Entresto in the treatment of CHF and its effect.

**Poster Number: 38**  
**The Full-Time Nurses' Perception of Hospital Administration During the COVID-19 Pandemic**  
**Michael Mannina**  
**Advisor: Dr. Jacob Frimenko**

The COVID-19 pandemic has been nevertheless difficult for nurses. In addition to the strenuous and burdensome work environment that nurses had to face, the burnout rate and staffing shortages have shown to be a new challenge that was forced upon already overworked nurses. Hospital administration have focused their efforts on providing a solution for the current staffing crises and ever-increasing burnout. The plausible solution to this problem was to contract more travel nurses (TN) to hospitals struggling with staffing shortages. TN are contracted for hospitals to fill these immediate staffing shortages, in increasing amounts. The long-term effects of this decision are unknown, whether it will have a positive or negative impact on the already strained hospital nursing staff. This study examined the perceptions of full-time nurses (FTN) towards their hospital administration, and whether FTN's feel supported by their administrative staff during this pandemic, or if the decisions of hospital administrators have inadvertently led to increased burnout. A survey was conducted to 25 registered nurses in the Intensive Care Unit (ICU) at Henry Ford Hospital Detroit Campus. The survey assessed the perceptions of the FTN towards hospital administration and the relationship to burnout experienced due to the current working environment. In conclusion, full-time nurses who were between the ages of 20-30 and had 1-5 years of work experience reported a low view of their hospital administration which correlated with a moderate level of perceived stress or burnout. There was not a strong correlation of hospital administration and perceived stress or burnout regarding males or females.

**Poster Number: 39**  
**Time is Tissues: Door to ECG Times in the Emergency Department**  
**Nekia Martin**  
**Advisor: Dr. Susanna Sirianni**

Heart disease remains one of the biggest health issues for Americans in the United States. The Centers for Disease Control and Prevention, (CDC), states that one American has a Myocardial infarction (MI) every 40 seconds, which equates to approximately 805,000 MIs annually, of which 600,00 are a first time MIs (CDC, 2021). The death rate in 2013, in the US was 116,793 with 57% of the deaths occurring in men and 43% occurring in women (Akbar et al.,

2021). A quick diagnosis of a ST segment elevation myocardial infarction (STEMI), is made solely by Electrocardiogram (ECG), which should be obtained within 10 minutes of arrival to the Emergency Department (ED), (American Heart Association, 2017). Obtaining an ECG quickly allows for prompt initiation of primary percutaneous coronary intervention (PCI). PCI done within 90 minutes has been associated with improved patient outcomes, including reduced mortality (McNamara et al., 2006). This quality improvement project will evaluate compliance with evidence-based guidelines for obtaining and reviewing an ECG within 10 minutes of ED arrival in patients who have chest pain or other symptoms of acute coronary syndrome (ACS). Concurrent data for fourteen patients admitted to the ED will be obtained. Process indicators will include documentation of door to ECG time, administration of Aspirin, and time to PCI if indicated. The data will be analyzed using descriptive statistics. The role of the advanced practice nurse in managing a patient with ACS will be discussed.

**Poster Number: 40**  
**Demographic Factors that Influence E-Commerce Usage and Adoption Rates in a Post-Pandemic Landscape**

**Trevor McCann**

**Advisor: Dr. Jacob Frimenko**

E-Commerce is a critical and rapidly expanding market segment that has become central to commerce in the global economy. The COVID-19 pandemic has accelerated the adoption of E-commerce as a result of government restrictions and consumers' changing mindsets. The study used quantitative analysis of survey data to build on prior E-Commerce literature. Previous studies focused heavily on online data collection methods such as surveys, questionnaires, and data mining. This study compared the results of both online and in-person survey responses to examine the validity of using only online data collection methods. The study investigated demographic factors that influence E-Commerce usage and adoption rates in a post-pandemic landscape to highlight the impact COVID-19 had on usage and adoption rates in three sectors of E-Commerce; home goods, electronics, and online grocery shopping. The study intended to determine if age, gender, ethnicity, work status and location, and social media usage affected the rates of E-Commerce adoption and usage. The study found no significant difference between online and offline survey responses, justifying the prior literature' use of online-only data collection methods. Age was the most significant factor in determining both times of adoption and usage rate for all three E-Commerce sectors. The study also found that social media usage

was a significant determinate of usage rate. While gender, ethnicity, work status, and work location had no significant impact on E-commerce usage and adoption rates.

**Poster Number: 41**  
**Reducing Food Waste in Private Households Utilizing a Meal Delivery Service**

**Deanna McClellan**

**Advisor: Dr. Karen Schmitz**

Upwards of 40% of food was wasted in 2010 among retail and consumer levels, equaling 161 billion dollars.<sup>1</sup> Food waste in private households has been less researched for its overall impact. This research study aims to find if utilizing meal delivery services can help reduce food waste within private households. A study was conducted comparing the weekly household food waste of 11 participants in Southeast Michigan (N=11, Meal Service Na = 6, Non-Meal Service Nb = 5). Food waste was measured for 7 days in 1/4, 1/2, 3/4, and 1 cup measurements. Food waste data was collected by participants for each day of the week. Excel and IBM SPSS Statistical Analysis systems were used to analyze the mean amount of food waste and standard deviation (Na = 11.14 cups ± 6.5, Nb = 22.45 cups ± 9.81), correlation between using meal delivery services and producing less food waste (P = 0.048), and the frequency of food waste based on the day of the week. A significance value of 95% was set and results showed there is a statistically significant correlation between utilizing meal delivery services and decreased food waste. Overall, the use of meal delivery services may help private households slightly reduce overall food waste based on data from this study. Larger study groups and longer durations of data collection would help solidify if there is a significant difference between meal service users and non-users.

**Poster Number: 42**  
**"Is Bleeding Risky?" Quality Analysis of Anticoagulation in Older Adults with Atrial Fibrillation**

**Amanda McNeff and Kimberly Miller**

**Advisor: Dr. Patricia Clark**

Atrial Fibrillation (AF) is the most common arrhythmia in adults > 65 years old and requires lifelong oral anticoagulation to lower ischemic stroke risk. However, anticoagulation requires a thorough risk benefit analysis to delineate absolute risk of hemorrhage and cardioembolic stroke. Surprisingly, reports indicate patients discharged from the hospital have discordant anticoagulation treatment due to



variables such as gender, diabetes, hypertension, vascular disease, and coronary artery disease (Kartas et al., 2018). The American Heart Association, American College of Cardiology, and the Heart Rhythm Society (2019) recommend anticoagulation in AF patients with CHA<sub>2</sub>DS<sub>2</sub>-VASc score of > 2 in men and > 3 in women should be managed with warfarin, dabigatran, rivaroxaban, apixaban, or edoxaban. Furthermore, anticoagulation therapy is individualized with shared decision-making between patient and provider. Discussion includes absolute and relative risks of stroke and bleeding in conjunction with patients' values and preferences. This quality improvement project will evaluate compliance with evidence-based guidelines in the hospitalized AF patients > 65 years old with appropriate anticoagulation. A retrospective chart review of forty patients admitted with AF will be completed. Process indicators will examine documentation of CHA<sub>2</sub>DS<sub>2</sub>-VASc score, oral anticoagulation prescribed for CHA<sub>2</sub>DS<sub>2</sub>-VASc score >2 in men or >3 in women, home dose anticoagulation continued on admission, and anticoagulation continued upon hospital discharge. Charts will be examined for documentation of ischemic stroke and abnormal bleeding. The role of the advanced practice nurse will be discussed. Analysis and interpretations in progress.

**Poster Number: 43**  
**Nurses' Perspectives on Handoff Process**  
**Swati Nagar**  
**Advisor: Dr. Jacob Frimenko**

A research project that focused on one aspect of patient safety, the handoff process. The handoff process is when one nurse transfers care to another nurse. The purpose of this study was to explore the handoff process and identify existing problems within the process on a medical-surgical unit in a local hospital. The nurses completed a 22-item questionnaire and answered 3 demographic questions. The data was compared and analyzed. This research project is still in progress and the analysis and interpretations are in progress but will be completed by April 20th.

**Poster Number: 44**  
**Personal Trainers Perception of Sugar Consumption in Weight Loss Clients**  
**Sarah Neville**  
**Advisor: Dr. Karen Schmitz**

Studies on sugar consumption and rates of obesity have been done to determine the role sugar plays in weight loss. It has been shown that an increase in sugar intake has a positive correlation with rates of obesity (Siervo et al., 2014). A sample of personal trainers was surveyed to determine their knowledge of sugar and the consumption of sugar in their personal training clients. A 13-question peer reviewed survey link was distributed via the Change Lives Academy Facebook group that contains personal trainers attempting to grow their business. Personal trainers in the Change Lives Academy are located throughout Canada and the United States. Of the 114 surveyed, 45 did not have any nutrition training and 66 responded that they did. Of the 114 surveyed, 100 responded that they believed there are unhealthy forms of sugar. Of the surveyed trainers, 81 discussed sugar with their clients, but only 16 gave their clients daily sugar limits. A correlation was done on the number of years a participant had been a trainer and whether they discussed sugar with clients and no correlation was found. The results of this study show that nutrition information regarding sugar consumption in weight loss clients is lacking. Dietitians should continue to provide sugar related information to individuals struggling with weight loss.

**Poster Number: 45**  
**Physician Perception of and Experience with Alerts in the Electronic Medical Record**  
**Rachel Pawlowski**  
**Advisor: Dr. Jacob Frimenko**

Electronic medical records (EMR) are, along with other functions, used to support healthcare workflows to help users be more efficient and make patient care safer. Disruptive pop-ups and alerts are built into EMR systems to provide clinical users with helpful information, warnings, reminders, and clinical decision support. This research attempted to understand the extent to which Internal Medicine physicians feel that alerts produced by the EMR positively or negatively impact patient safety, user efficiency, and clinical usability. A mixed qualitative/quantitative study using a questionnaire tool was performed to survey physicians at a large teaching hospital. Results showed that, concerning patient safety, respondents reported overall neutral sentiments. Regarding both clinical usability and user



efficiency, respondents reported overall neutral or negative sentiments. The study revealed that there is much opportunity to improve EMR alert functionality so that systems function to their fullest potential. EMR administrators should actively engage with physicians, who are valuable clinical content experts, to collect important feedback regarding system alerts while designing and maintaining electronic medical record systems.

**Poster Number: 46**  
**Handy Hacks for When the Math Isn't Mathin': Peer-Reviewed Theories on How Montessori-Inspired Manipulatives Can Positively Affect Math Study for Learners, Including Adults**  
**Rodina Peace**  
**Advisor: Dr. Sue Ann Sharma**

Using my own past experience as a pre-k Montessori Teaching Assistant, there was a curiosity to see how Montessori-Inspired Sensory Manipulatives could help adults more efficiently learn and understand math more efficiently. Using a long history of having difficulty with math concepts as a backdrop, there was a personal discovery: using the Montessori sensory math manipulatives helped me to understand a unique way of how math could be learned with the hands in contrast with more traditional methods of instruction that usually involves books and paper dittos and worksheets. With this research, six other adults who identify as "not being good in math" participated in exploratory exercises that utilized Montessori-inspired manipulatives that were designed to express abstract math concepts using physical representations that were meant to be touched and handled by the study participants. An objective of this study was to find out if the study participants would be able to understand complex math concepts using physical 3-D objects and would their self-esteem and confidence concerning math be improved by working with the manipulatives.

**Poster Number: 47**  
**Glycemic Control in Noncritical Hospitalized Patients with Type 2 Diabetes Mellitus**  
**Brooke Roberts**  
**Advisor: Dr. Patricia Clark**

Type 2 diabetes occurs when blood glucose levels are elevated because the pancreas is not making enough insulin or insulin that is available is not being utilized (National Institutes of Diabetes and Digestive and Kidney Diseases, NIDDK, 2017). The American Diabetes Association (ADA, 2021) recommends that

noncritical hospitalized patients with good nutritional intake receive basal, prandial, and correction insulin. The population studied are noncritical, hospitalized adults 45 years and older with type 2 diabetes consuming a normal diet.

The method of study includes 20 random medical records examined in a retrospective review and data is analyzed using descriptive statistics. In the chart review of patients who received the recommended guidelines from the ADA, documentation will include blood glucose levels of 140-180 mg/dL and no incidence of hypoglycemia (< 70 mg/dL) or hyperglycemia (>180 mg/dL) within 24-72 hours of starting a basal-bolus regimen. This paper will examine the advanced practice registered nurse's (APRNs) role to promote glycemic control in hospitalized patients with type 2 diabetes by following the ADA guideline.

**Poster Number: 48**  
**The APRN Role in the Prevention of CLABSI in the ICU Setting**  
**Abbigail Salogar and Kristine Reyes**  
**Advisor: Dr. Jennifer Reynolds**

According to the Center of Disease Control and Prevention (CDC), an estimated 80,000 central line-associated bloodstream infections (CLABSI) still occur in the intensive care units and hospital wards in the U.S. (2015). CLABSIs have been shown to increase length of stay, the cost of care, and rates of hospital deaths (Frost et al., 2016). APRNs play a significant role in the prevention of CLABSIs, by determining the need for a central line and the ongoing assessment of the need for the central line. This responsibility of the APRN can lead to life saving measures as the Agency for Healthcare Research and Quality (AHRQ), found that for every 100 CLABSI prevented, 12-25 deaths were prevented (2013). This paper aims to discuss the role of the APRN in preventing the occurrence of CLABSIs in the ICU through daily assessment and documentation of the ongoing need for a central line.

**Poster Number: 49**  
**Levels of Adaptive Leadership and Its Effect on Voluntary Turnover at a Small, Private University**  
**Karen Sanborn**  
**Advisor: Dr. Jacob Frimenko**

Madonna University, a small, private University in Livonia, Michigan, has witnessed 286 staff employees voluntarily leave their jobs from 2018-2021. Of the various determinants of voluntary turnover, this research sought to determine if there was a relationship between the level of adaptive leadership

style of supervisors and the employee voluntary turnover rate. This loss of employees has cost the University time and money to recruit, interview, hire, and train new employees; time and money that could be invested in other areas of the University. The research measured the level of adaptive leadership style (the independent variable) of Madonna leaders with two or more direct reports, using the Adaptive Leadership Questionnaire, (Huckabee, M.J., 2018). A regression analysis was used to compare the level of adaptive leadership style to the employee voluntary turnover data (dependent variable). Unfortunately, due to sample size limitations, there is insufficient evidence to show a correlation between the level of adaptive leadership style and the rate of employee voluntary turnover. However, the fact remains that employees are leaving Madonna University at a concerning rate, and further research would assist the Human Resources Department in determining how to curb the turnover.

**Poster Number: 50**  
**Conscious Sedation in Ring and Tandem Brachytherapy**  
**Nicole Sonnenberg**  
**Advisor: Dr. Claude Lauderbach**

Cervical cancer (CC) is a neoplasm with vast potential for prevention, but is still considered a significant public health problem in the majority of developing countries (Pellizzon, 2018) as the fourth leading cause of cancer-related deaths in females worldwide (Chen et al., 2021; Mahapatra et al., 2021). The American Brachytherapy Society (ABS) recommends brachytherapy a necessary element of the definitive radiation therapy for cervical carcinoma (Nag et al., 2000) and the Cervical Cancer Committee for Guideline Development affirms the essential curative role of tandem-based brachytherapy (BT) in the management of locally advanced cervical cancer (Chino et al., 2020; Viswanathan et al., 2012). Unfortunately, anesthesia during high-dose-rate (HDR) BT is not justly reported in the literature, and the modalities implemented in practice differ greatly. According to the ABS, HDR BT for cervical carcinoma ought to utilize conscious sedation whenever feasible (Bhanabhai et al., 2013; Nag et al., 2000). This quality improvement project will assess conformity with evidence-based guidelines for conscious sedation in women receiving tandem-based brachytherapy in an outpatient radiation oncology clinic. A retrospective chart review of twenty patients undergoing brachytherapy will be completed. Process indicators will look at documentation of patients who receive conscious sedation and those who do not. Outcome indicators will assess overall experience, including pain and anxiety levels, and anticipated completion of treatment in the control group of

women not receiving conscious sedation. The data will be examined using descriptive statistics. The responsibility of the nurse practitioner in radiation oncology will be considered.

**Poster Number: 51**  
**Chronic Low Back Pain: Do nonpharmacological interventions make a difference?**  
**Navneet (Bhangu) Strickland, Katterinne Hildago, and Natalie (Smith) Engel**  
**Advisor: Dr. Claude Lauderbach**

The diagnosis of chronic low back pain (CLBP) is widely prevalent in healthcare and makes up 80% of healthcare costs in the U.S. (Physiopedia, 2022). The population that will be discussed in this project will be adult patients in the United States that have been diagnosed with CLBP. In addition, this project assesses two process indicators. The first process indicator being that a proportion of adult patients with chronic low back pain who received education (verbal or written) from their primary care provider about appropriate nonpharmacological interventions for low back pain (exercise, heat or ice therapy, physical therapy) within 1 day of meeting with primary care provider. The second process indicator being that a proportion of adult patients with chronic low back pain will receive physical therapy referrals in the primary care setting at the office visit with the primary care provider for the complaint of chronic low back pain. Approximately 60 random medical records will be examined in a concurrent review. The expected outcomes of this review is to see if adult patients will attend physical therapy within six months of meeting a primary care provider for chronic low back pain and adult patients will report relief of chronic low back pain after trying nonpharmacological interventions (exercise, heat/ice, or physical therapy referral) within one year. Data will be analyzed by gathering data from the data collection tool and reported as descriptive statistics.

**Poster Number: 52**  
**Adherence to VVOID-19 Guidelines: Monoclonal Antibodies and Remdesivir Treatment**  
**Marwa Takkush, Musa Hazemy, and Yvonne Zaher**  
**Advisor: Dr. Patricia Clark**

COVID-19 continues to be a primary health concern in the United States. There are over 72 million positive cases, more than 4.2 million hospitalizations, and nearly 1 million deaths related to Covid-19 (Centers for Disease Control and Prevention [CDC], 2020).

Adults aged  $\geq 18$  accounts for 83% of all COVID-19 positive cases, and 99.8% of all COVID-19-related deaths. The National Institutes of Health published guidelines for treating COVID-19 positive adult patients (NIH, 2020). This project will evaluate adherence with evidence-based guidelines for the treatment of COVID-19 positive hospitalized patients treated with monoclonal antibodies (mAB) to decrease the need for supplemental oxygen and death by day 29, and hospitalized patients treated with Remdesivir to reduce the need for supplemental oxygen and length of stay prior to day 15. It will also evaluate adherence for the treatment of non-hospitalized COVID-19 patients treated with mAB to lower the risk of disease progression or death by day 29.

A retrospective chart review of sixty random records will be completed dating back to January 01, 2022. Process indicators will include referral documentation of mAB for COVID-19 positive patients with mild symptoms for 10 days or less, documentation of mAB for adults presented with a diagnosis other than COVID-19 and who tested positive for COVID-19 in 10 days during hospitalization, and documentation of Remdesivir treatment for inpatients diagnosed with COVID-19 in 10 days and required nasal cannula supplemental oxygen. The data will be analyzed using descriptive statistics. The role of the advanced practice nurse will be discussed.

**Poster Number: 53**  
**Understanding Outcomes of Childhood**  
**Jalen Thomas**  
**Advisor: Dr. Karen Schmitz**

Background: Athletes' ability to fuel properly can be linked to their nutrition knowledge. Athletes competing without proper nutrition could be putting themselves at a disadvantage.<sup>1</sup>

Purpose: To assess the knowledge of baseball players on proper fueling. Methods: A population of male Madonna University and male teenage baseball players were given a 20 question survey. The purpose of the survey was to determine college and youth baseball players' knowledge on proper fueling techniques, identify the types of ways they currently fuel, and determine whether which group is more willing to change their food consumption to enhance athletic performance. The survey consisted of a variety of questions (dichotomous, Likert scale, short answer) touching topics on the foods they currently consume daily, their willingness to change current food consumption, and the foods they eat to fuel before an athletic event and after for recovery. Results: The 28 athletes that completed the survey understood that foods in which they consume could affect how they perform on the field and that eating a light meal 30 mins before a game would provide a quick

energy boost. 10 athletes from Madonna agreed that supplements help enhance athletic performance and 4 agreed from the 13/14 year old group. Conclusion: The findings indicate that nutritional knowledge between college athletes and youth athletes can be relatively similar. As factors that contribute to food choices range, understanding environmental factors that affect food choices can lead to better understanding of why specific foods are consumed by athletes.

**Poster Number: 54**  
**Understanding Outcomes of Childhood**  
**Albert Ujkaj**  
**Advisor: Dr. Jacob Frimenko**

The research was a 27 question survey that was collected from adults that utilize a community center in the Flint, Michigan area. The participants were random and anonymous and were read a script prior to participating in the research and offered a 24-hour period prior to responding. This research was being conducted to add to previous research in the areas of adverse childhood experiences and how those experiences are linked to adulthood. This research will also attempt to contribute to further research into the understanding of trauma and improvement of outcomes in the areas of resiliency. The analysis and interpretations are still in progress and will be completed by 4/30/2022.

**Poster Number: 55**  
**Panic Buying during COVID-19: The Cause of Supply Shortage and High Demand Products Rising**  
**Tashsa Young**  
**Advisor: Dr. Jacob Frimenko**

The primary purpose of this study is to examine whether COVID 19 will continue to influence consumers to panic buy which has caused supply shortages and high demand products to rise. Also, another aim of the study is to reveal if business owners has overcome supply shortage and if they are the reason for the supply shortage and price gouging during COVID 19. In the study, it has been tried to conclude whether the factors mentioned above differ significantly according to demographic variables. For this purpose, two online surveys were conducted in the study one survey was for business owners/managers and the second survey is for consumers.



# Demonstration Posters

**Poster Number: 56**

## **The Lack of Spanish in ESL Setting**

**Gina Dossantos**

**Advisor: Dr. Elizabeth Goulette**

I will be demonstrating the lack of resources for native Spanish speakers in the K-8 ESL learning setting. During my time as a tutor for ESL students within my service learning class, I have noticed a significant struggle surrounding the students who do not speak English or are in the early stages of learning English. This lack of resources, along with the issue of learning in a virtual setting, has made the transition process from a Spanish speaking education system to an English speaking education system very challenging, more than it should be with the presence of ESL. This is troubling because of the fact that ESL's purpose is to be the primary aid to Spanish speaking students. My goal from this demonstration is to bring about awareness and reformation for ESL systems within K-8 education as well as resources outside of the education system that can be used for other students who are in a similar position.

**Poster Number: 57**

## **Spanish ESL Tutoring**

**Megan Hibbs**

**Advisor: Dr. Elizabeth Goulette**

Spanish Service Learning: I created an infographic explaining the lessons, obstacles, hurdles, and benefits of online tutoring for ESL students. My classmates and I worked with students from a local charter school on their curriculum. We were able to work with heritage learners and practice our Spanish while assisting them with their studies.

**Poster Number: 58**

## **Navigating Virtual Learning as a Tutor and as a Student**

**Nicole Jones-Watkins**

**Advisor: Dr. Elizabeth Goulette**

The pandemic created a lot of changes and new avenues for people throughout the world; this is especially true for educators and learners. People had to learn to adjust to how they received and retained information. As virtual learning took on a new form, the educational aspect became less personal and instead developed, in my opinion, into independent studying. While some individuals flourished during this time, others struggled to keep pace with their schooling and to preserve the, at times, rapid influx

of information. Virtual learning also created a delay in how students and educators communicated. A student could once instantly ask their teacher in class for help with a difficult subject or choose to email them later. Yet, this changed during the pandemic, as electronic communication became their only option. Another difficulty of virtual learning presented itself in the shape of technology. Without reliable internet, computers, tablets, or, in some cases, cell phones meant having incomplete work. And I can only imagine the number of students and educators that had to struggle to complete their already strenuous tasks with poor-performing technology, making learning inconvenient. As a service-learning tutor, I witnessed first-hand the impacts online instruction had on students during the pandemic and how well they received their education. Although in-person instruction is resuming, many students battled to learn independently for two years. Ultimately, learning to navigate virtual learning led me to ponder the long-term consequences of the only alternative during the global crisis that impacted our lives.



# FORD COMMUNITY CORPS



Since 2011, Madonna University has partnered with Ford Community Corps (FCC) to connect students to nonprofit organizations around Greater Detroit. Under the guidance of organizational staff and MU faculty mentors, FCC students bring their unique skills and interests to these partnerships. Together they craft projects that help advance the mission of each community partner. These projects in turn bolster our core values at Madonna: respect for the dignity of each person, peace and justice, reverence for creation, and education for truth and service.

The 2021–2022 academic year presented countless novel challenges to our FCC projects and teams due to the ongoing pandemic. The MU Office of Service–Learning & Civic Engagement wishes to thank each of our community partners, as well as all of our faculty mentors and MU students, for their hard work and flexibility in making each of these projects happen.

## Ford Community Corps Projects



**Site Lead:** Juana Woodson

**Faculty Mentor:** Veronica Riha, PhD,  
Professor of Biology

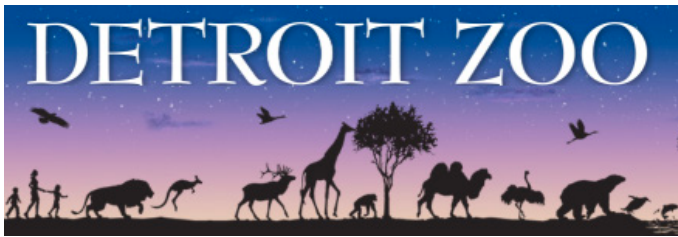
**Student Team:** Xuan-Vinh Ho and Lucas Eccleton

**Community Partner Mission:** Pingree Farms, situated on the southwest corner of I-75 and 7 Mile Road, is a 501c3 nonprofit dedicated to neighborhood revitalization and youth education through urban agriculture. It seeks to turn vacant and blighted land into an urban food oasis while providing meaningful educational opportunities for Detroit’s young people.

**Community Partner Website:** [www.pingreefarms.org](http://www.pingreefarms.org)

**Project Summary:** In partnership with Pingree Farms, MU students are learning the ins and outs of urban farming from a biological and social perspective. Students have helped take care of horses, chickens, goats, and cows, and will soon begin work on the Pingree Farms greenhouse. The farm provides fresh vegetables for the surrounding neighborhood, making it a vital part of local food infrastructure—and helping students tie their work to the core MU value of reverence for creation.





### Detroit Zoo – Project 1: Kangaroos/Wallabies

Faculty Mentor: Andrew Domzalski, PhD  
Student Team: Cassidy Curtis, Hailey Davis, Kylie Redmond, Angelina Sorel, and Hailey Wilson

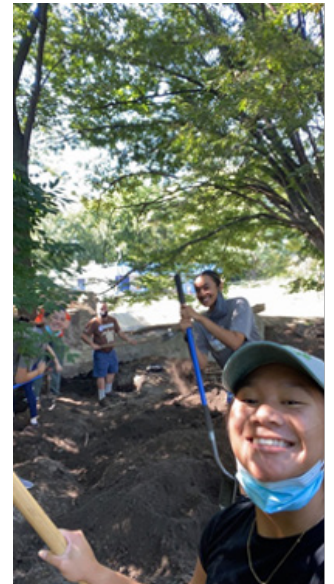
Habitat improvements for red kangaroos/red-necked wallabies: removing thorny foliage; cleaning under overhangs; adding sand and sod; raking and resetting sand bed area.



### Detroit Zoo – Project 2: Aardvarks

Faculty Mentor: Andrew Domzalski, PhD  
Student Team: Natalie Billings, Nicholas Caruana, Jamie Ciacico, Ann Quinlan, and Madyson Roover

Nest tube installation for aardvarks: Installing three new culverts (painting first) in the yard; raking out and digging in yard as needed.



### Detroit Zoo – Project 3: American Pelicans

Faculty Mentor: Andrew Domzalski, PhD  
Student Team: Hailey Donnellon, Marco McMann, Riley McParland, and Ann Marie Millazzo-Simone

Water platform construction for American pelicans: creating new platforms for the pool in the indoor habitat and building other enrichment items.



**Livonia Public Schools – Randolph Elementary**  
**Faculty Mentors: Karen Obsniuk, PhD and Sue Ann Sharma, PhD**  
**Student Team: Taylor Vittori and Brianna Rice**

Over six months, our Ford Community Corps team worked closely with first-grade students at Randolph Elementary School to teach them the 7 Leader in Me Habits of an Effective Citizen. Madonna University Education students dedicated around 60 hours of preparation and planning to facilitate lessons based on these habits, including hands-on activities and a read-aloud. First-grade students strengthen literacy development and apply these habits to real-life experiences through participation in group activities and connecting habits to books, which display a new Leader in Me habit. Ford Community Corps team developed lessons using through a pre-assessment approach to assess students' knowledge of the habit before reading to them, by recording student responses on a posterboard; we also recorded students' understanding after the reading and activity. At the end of the six months, a take-home activities was designed to foster the home-school connection and deepen their learning. First-grade students were able to create connections between the text and the habit learned as they focused on each lesson over the course of the time with the Ford Community Corps team. This evidence demonstrates the development in the students' understanding of the habits taught. Through the Ford Community Corps teaching grant, we learned how to appropriately plan instructional practices and strategies when working with young children and elicit responses to their thinking. This opportunity allowed us to gain confidence in the classroom setting and learn the importance of explaining words clearly with accompanying examples.



# Symposium for Research, Scholarship and Creativity Awards

## College of Arts and Sciences

### Research and Scholarship

Alessandra Zieleniewski – Undergraduate Recipient

Hannah Disbrow – Graduate Recipient

## School of Business

### Michael F. McManus Jr. Award for Leadership and Scholarship

Brooke Bruletti - Undergraduate Recipient

Rachel Pawlowski – Graduate Recipient

## College of Education and Human Development

### Learning Outcome Assessment Project (LOAP) Award – Fall 2021

Alyssa Fessenden

Mikenna Manick

### Learning Outcome Assessment Project (LOAP) Award – Winter 2022

Jamie Borkowski

Erica Robinson

## College of Nursing and Health

### Sigma Theta Tau – Kappa Iota Chapter Outstanding MSN Student Award

Mynhia Her

### Sigma Theta Tau – Kappa Iota Chapter Outstanding DNP Student Award

Jennifer Lewis



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## Thank you to our poster presentation judges

Diane Burgermeister

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Matilda Isaac-Mustapha

Karen Obsniuk

Susan Panek

Elizabeth Prough

Elena Qureshi

Roxanne Roth

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To encourage multi-disciplinary research, scholarship and creative endeavors that benefits the University's faculty, staff, students, alumni and community members.