



MADONNA UNIVERSITY CENTER FOR RESEARCH PRESENTS  
**SYMPOSIUM FOR RESEARCH,  
SCHOLARSHIP AND CREATIVITY**

Wednesday, April 13, 2016 • 12–6 p.m.  
Kresge Hall and the Franciscan Center



# GLOBAL HEALTH SERVICES NETWORK

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# DIRECTOR'S WELCOME MESSAGE



Research plays a critical role in advancing our health, environment security and quality of life by establishing comprehensive, inter-disciplinary solutions to global problems.

As both creators and disseminators of knowledge, we aim for our students to be discoverers of knowledge, not passive educational tourists.

As society and higher education experiences challenges in securing funding to support activities like the arts and research, it is important for us to be bold, diverse, adaptive, inventive, and strategic with our research and creative endeavors.

Our research efforts are grounded in the notion of “Meaningful Research that Matters.” Within our institution, our research activities are infused into our teaching to create an experiential learning experience. Student proficiencies are enriched; we aim to equip our students with transferable skills to ensure they are more competitive in the job market. Crucially, our research has relevance beyond the confines of the university.

I invite you to explore the faculty, staff and students’ meaningful endeavors at our 2nd annual Symposium for Research, Scholarship and Creativity.

Phillip Olla, Ph.D.  
Director, Center for Research  
Madonna University

# SCHEDULE OF EVENTS

12 p.m.	<p>Welcome</p> <p>Musical Performance</p> <p>President Welcome</p> <p>Research at Madonna</p> <p>Student Recognition Ceremony</p> <p>College of Arts and Humanities</p> <p>School of Business</p> <p>College of Education</p> <p>College of Nursing and Health</p> <p>College of Science and Math</p> <p>College of Social Sciences</p>	<p>Kresge Hall</p> <p>Mark Istrate Linette Popoff-Parks</p> <p>Michael Grandillo, Ph.D.</p> <p>Phillip Olla and Deepinder Uppal</p> <p>Lewis Walker</p> <p>Kathleen Edelmayer</p> <p>Cleamon Moorner</p> <p>Karen Obsniuk</p> <p>Deborah Vargo</p> <p>Ted Biermann</p> <p>Karen Ross</p>
12:55 p.m.	End of Ceremony	Phillip Olla
1:00 p.m.	Poster Presentations Open	Franciscan Gathering Space
1 — 2 p.m.	<p>Animal Law: Past, Present, and Future</p> <p>Keynote Speaker: Paul Waldau</p>	S100
2 — 3 p.m.	<p>E-NABLE Interactive Session: Build a Hand 3D Printing Prosthetics Assembly</p> <p>Lift a Print: Forensic Science Demonstration</p> <p>Informational Session: Coherence, an Interdisciplinary Journal of Social Justice</p>	<p>Franciscan Gathering Space S102</p> <p>S105</p> <p>Franciscan Gathering Space</p>
3 — 4 p.m.	<p>Global Health Nursing Innovators Session</p> <p>Guest Speaker: Joyce Durham</p> <p>Panel Speakers: Phyllis Brenner and Susan Hasenau</p>	S100
4:30 p.m.	<p>Refreshments and Networking</p> <p>Poster Award Ceremony and Prize Draw</p>	<p>Franciscan Gathering Space</p> <p>Phillip Olla and Lewis Walker</p>

# KEYNOTE SPEAKER



**Paul Waldau , Ph.D., J.D.  
Canisius College, Professor and Director  
Religion and Animals Institute, President**

Paul Waldau is an educator, scholar and activist working at the intersection of animal studies, law, ethics, religion, and cultural studies. A Professor at Canisius College in Buffalo, New York, Paul is the Director of the Master of Science graduate program in Anthrozoology for which he has been the lead faculty member since the program's founding in 2011. Paul has also taught Animal Law at Harvard Law School (2002-2014) and courses regarding ethics and animals in Harvard's Summer School since 2009, where this summer he will teach "Animal Studies—An Introduction." The former Director of the Center for Animals and Public Policy at Tufts University School of Veterinary Medicine, Paul taught veterinary ethics and public policy for more than a decade. He has completed five books, the most recent of which are *Animal Studies—An Introduction* (2013 Oxford University Press) and *Animal Rights* (2011 Oxford University Press). He is also co-editor of *A Communion of Subjects: Animals in Religion, Science, and Ethics* (2006 Columbia University Press) and *An Elephant in the Room: The Science and Well-being of Elephants in Captivity* (2008 Center for Animals and Public Policy). His first book was *The Specter of Speciesism: Buddhist and Christian Views of Animals* (2001 Oxford University Press).

## **Summary**

### **Animal Law: Past, Present and Future**

The future possibilities of animal law can be explored best if one notices and takes seriously both (i) our complex heritage anchored in past legal approaches and (ii) contemporary debates over animal protection in the form of legislation shielding our companion animals, litigation seeking legal personhood for chimpanzees and dolphins, and expanding concern to develop effective protection frameworks for wildlife and food animals.

# GUEST SPEAKER



## JOYCE DURHAM, RN, AIA GHSN Executive Vice President and Senior Partner

As a registered nurse and registered architect, Joyce Durham brings a unique background of both clinical and architectural expertise to her clientele and projects. As would be expected, Durham focuses her professional practice on developing operationally efficient systems for the delivery of health care in the optimal configuration of space. During her over 25-year career in consulting, Durham has directed the development of numerous operational analyses, facility master plans, and detailed functional and space planning engagements. Durham has extensive experience helping to develop lean hospitals and healthcare systems, consulting on existing or new hospital and healthcare systems, and creating full report briefs with recommendations and plans of action. She has particular expertise in inpatient facility design and key clinical areas, including emergency department, surgical suite, imaging and obstetric departments. To Durham, a successful project challenges the status quo, integrates innovative operational concepts, and maximizes the use of space. With every project, her goal is to create a safe, efficient space that provides a high level of satisfaction to patients, their families and staff.

Durham has extensive experience with major healthcare projects internationally, including a medical campus development in central Vietnam, a medical city in central Vietnam, a 350-bed rehabilitation hospital in China, a conceptual, functional, and space program for a women and children's hospital in the United Arab Emirates, a 300-bed hospital in Bangladesh, a 150-bed hospital in Nigeria, and a major public hospital in Chile. Additionally, Durham has worked on many projects within the US, including Stanford Hospital & Clinics in Palo Alto, California, New York Presbyterian Healthcare in New York City, New York, and Tampa General Hospital, in Tampa, Florida.

Durham has a Masters in Architecture from the University of Michigan, a Bachelors in Architecture from the University of Michigan, and a Bachelor of Science in Nursing from the University of Michigan. She is a member of the American Institute of Architects, a founding member of the Nursing Institute for Healthcare Design (NIHD) and current Board member, a Sigma Theta Tau National Honor Society of Nursing member. She is a registered nurse and architect in Michigan and has received her Evidence-Based Design Accreditation and Certification (EDAC). Durham also enjoys presenting and publishing on both the national and international level. Most recently, she has presented on lean prototypes in healthcare design, critical care units, improving quality and efficiency in hospital design, creative reuse of hospital and clinic spaces.

Recently, Durham served on the editorial board and was a contributing author to the recently published book, entitled "Nurses as Leaders in Healthcare Design: A Resource for Nurses and Interprofessional Partners". She authored the chapter entitled "Nurse-Led Innovation in Healthcare Design".

## Global Health Nursing Innovators

Why does every project start with the goal of creating something new, different and better but so few ends up with something new, better of different? This question led me to my study of nurse innovators and how they achieved innovative solutions to a particular problem. In this short presentation, I would like to share with you what I found to be the reasons that innovation is so difficult for nurses and what we can do about it. Then, I would like to present what I found to be three common characteristics of nurse innovators, who led building design projects, which resulted in enduring, sustainable, and innovative changes to the way patient care is delivered.

Next, based on this information, we will shift the focus to how innovative thinking can be used to deliver patient care in developing communities throughout the world. The discussion will include how learning from other cultures can inspire innovation. Projects in Vietnam, the UAE and Ethiopia will be highlighted.



# POSTER PRESENTATIONS

## Undergraduate

### Poster Number: 1

#### The Effect on the Physical and Satiety properties of Chocolate Chip Cookies Using Fresh Avocado and Tahini Sesame Paste Randa Abdallah

Advisor: Dr. Karen Schmitz

With the rise in numbers of health conscious consumers, the food industry must adapt to consumer needs. Providing consumers with appealing snack foods such as a chocolate chip cookie with increased nutritive properties can be a promising and profitable venture. Research in the literature shows that polydextrose, Oatrim®, applesauce, mung bean, and okra gum were some of the fat replacers that have been tested in baked products. Avocado has been used as a 75% fat replacement in baked products. The objectives for this experiment, were to evaluate the physical and sensory properties of a control chocolate chip cookie made with butter and experimental cookies where the butter was replaced with 100% fresh avocado or 100% tahini paste to increase healthier fat intake. Diameter and height measurements were used to evaluate the physical qualities of the cookies. A sensory panel was used to assess consumer acceptance for the color, hardness, moisture, and preferred flavor of the three different samples. Of the panelists, 44% preferred the cookie made with butter, 44% preferred the cookie made with avocado, and 12% preferred the cookie made with tahini. The cookie made with tahini scored highest in overall hardness, while avocado scored highest in softness and smoothness. The results showed that cookies made with tahini or avocado had relatively equal diameters and height measurements. Furthermore, it can be concluded that the use of fresh avocado or tahini in chocolate chip cookies is promising in relation to contributing healthier fat and protein in the consumer's diet.

### Poster Number: 2

#### The Effect of Deep Frying French Fries in Avocado, Coconut, and Peanut Oil

Lorraine Bonkowski

Advisor: Dr. Karen Schmitz

Deep frying has been a popular form of food preparation both at home and in the foodservice industry for many years. There are a number of oils that can be used for deep frying but one must be careful in choosing oils that are stable at high temperatures in order to prevent oil oxidation. Oil oxidation can lead to oxidative rancidity which is the development of off flavors and odors in fats, resulting from the uptake of oxygen and formation of peroxides, hydroperoxides and many other compounds. The objectives of this study were to measure the oxidation of avocado, coconut and peanut oil and the sensory characteristics of the French fries placed in these oils, when deep fried at 375F for 8 minutes. In general,

peroxide values are an indicator for the level of oil oxidation, therefore the peroxide values of all three oils before and after deep frying were evaluated. Also, a sensory panel was used to assess the crunchiness and overall taste preference of French fries deep fried in avocado, coconut, and peanut oil. The results showed the peroxide values were highest in the avocado oil samples and the French fries deep fried in the avocado oil were the most crunchy and least preferred. The peroxide values were lowest in the peanut oil after deep frying and its French fries were the least crunchy and were the most preferred.

### Poster Number: 3

#### Uses and Benefits of Mobile Devices in Healthcare Melissa Chebli

Advisor: Dr. Asaad Istephan

Mobile device technology and software applications (apps) are penetrating the lives of healthcare professionals and patients, revolutionizing the delivery of healthcare. Consumers have become increasingly attached and reliant on mobile technology and smart-phone apps for all their personal and professional needs. Smart-phones have allowed healthcare professionals (HCP) the ability to integrate technology into their clinical practice, simplifying many aspects of clinical practice while enhancing patient monitoring and diagnosis. The rate of proliferation for health related apps is nearly exponential and projected to rapidly progress in the future. This paper examines the uses, benefits and challenges of mobile devices and apps as well as its future integration into healthcare. It is clear that mobile devices and apps have had an overall positive impact on consumer health, however, its future integration in healthcare is not without limitations. Quality and regulatory control standards and policies must be put in place before full and successful integration into healthcare can be complete.

### Poster Number: 4

#### Student Evaluation of SEFI (Student Evaluation of Faculty Instruction)

Bryan Day

Advisor: Dr. William Kasperski

The research was done to survey Madonna University students on their opinions/feelings towards the questions that are asked in the SEFI, as well as the format for its distribution. The goal was to see what factors may influence completion; such as distribution method, feelings towards instructors, age/gender, academic level, etc. The overall goal was to see what conclusions could be drawn in order to improve the overall distribution method, completion rate, and to give insight into additional concerns/findings that may be useful to faculty and administration to improve the process.



**Poster Number: 5**  
**A Model for Refugee Relocation and Support**  
**Catherine Sulich**  
**Advisor: Dr. Susan Toma**

To understand the current refugee crisis better, the Madonna modeling team (MMT) has created a model to assess this issue using quantitative procedures. This model uses parameters that are representative of the country's ability to handle the amount to which refugees can be added. A greater ability yields a higher capacity score. The GNI per capita stress factor was used to determine how robust a country's economy is. It factors in GNI rather than the typically used GDP because it is a measure of net economic growth. In other words, net economic growth shows a surplus, this is indicative of a country's ability to operate effectively. The social unrest stress factor accounts for the percentage of refugees in a country's population. Because most refugees are of a different cultural area, this factor was created to keep the balance of new individuals with the preexisting population. A plot of land can only hold so many people before it ceases to be sustainable, because of this, population density is vital for assessing the holding capacity. The population density stress factor is utilized to ensure that the number of people per square kilometer does not grow to be too large. The unemployment stress factor ensures that a refugee will have a fair shot of obtaining a job upon entry to their host country. It also indicates a country's ability to maintain an employed population, a crucial factor for its economic sustainability. These four factors give a capacity score that will indicate the ability of a country to accept a refugee. The parameters were modeled using matrices that correlated with three-dimensional vectors. When the vectors were plotted, the visual representation showed eight quadrants. The first quadrant is the one where a country needs to be in order to take on refugees. If the vector falls anywhere but the first quadrant, it does not have the capacity. The second part of the model utilized analyzing trend line data from monthly refugee countries. The ratio of a country's capacity score over all passing country's scores designates the exact number of refugees to be used as a quota that can then be filled. In terms of policy, two were created, called the C.A.R.E. and V.I.S.A. plan. The C.A.R.E. plan stands for capacity, allocation of resources, refugee flow, and evaluate. This describes the cyclic process needed to determine where refugees need to go. The V.I.S.A. plan describes the R of the C.A.R.E. plan. It stands for verify, issue, stamp, and account. This describes the plan to track and record refugee movement. Each refugee will apply where the UN will verify their identity and issue them a booklet. The booklet will have their initial EU entry point, and a stamp for every country afterwards that they travel through to their end destination. This data will be recorded and with everyone accounted for, the UN will be able to utilize the MMT team's model to make more accurate predictions for the next year.

**Poster Number: 6**  
**Khat: The Plague of Yemen**  
**Jowhara Zindani**  
**Advisor: Dr. Asaad Istephan**

A major public health issue that contributes to the poor living

conditions in Yemen is the chewing of the *Catha edulis* (Khat) plant. Khat is composed of cathinone (C<sub>9</sub>H<sub>11</sub>NO), cathine (C<sub>9</sub>H<sub>13</sub>NO), and norephedrine (C<sub>9</sub>H<sub>13</sub>NO); chemical structures that resemble the structure and function of amphetamine (C<sub>9</sub>H<sub>13</sub>N). Amphetamines work in the brain by increasing the release of dopamine into the synapse and then blocking its reuptake into the presynaptic neuron. As a direct result, amphetamines continue stimulating the postsynaptic neuron, giving the amphetamine user continued feelings of pleasure. Several studies have likened Khat's addictive effects to that of amphetamine drugs. According to the Diagnostic and Statistical Manual of Mental Disorders, Khat often leads to substance dependence. Khat is chewed daily by about 90% of people in Yemen. Its growing popularity continues to increase despite having negative economic, agricultural, and health consequences. Some negative health impacts of Khat include: euphoria, mild depression, hallucinations, loss of appetite, constipation, withdrawal symptoms, slight tremors, an increased risk for an acute myocardial infarction, higher blood pressure, and negative sexual side effects. Due to its addiction, some will prefer Khat to food, contributing to malnutrition and stunted growth among Yemenites. Understanding the factors that promote Khat chewing in Yemen, a community-based intervention is needed to eradicate its use. The plan will outline the steps that will be undertaken to combat Khat chewing and the associated funds needed to initiate and implement such a plan.

## Graduate

**Poster Number: 9**  
**Analyzing Two Core Measures for Patients Admitted with Community Acquired Pneumonia for 30 day Readmission**  
**Andrew Balavitch**  
**Advisor: Dr. Gail Lis**

According to The Joint Commission, "pneumonia is the sixth most common cause of death" in the United States (2010). Effectively treating community acquired pneumonia (CAP) is important to help improve health outcomes, reduce thirty day hospital readmissions, and reduce thirty day mortality. Guidelines pulled from the Infectious Diseases Society of America and the American Thoracic Society are used in conjunction with The Joint Commission's core measures to develop a treatment plan for all patients admitted with community acquired pneumonia. Core measures were created in 1999 by key stakeholders (clinicians, healthcare organizations, hospital associations, and consumers) to ensure safety and quality in practice, with financial consequences to those institutions or individuals who do not follow the core measures (The Joint Commission, 2010). A total of five core measures are outlined by The Joint Commission, two of which will be investigated as process indicators during this project for their effectiveness in reducing 30 day hospital readmissions. This quality improvement project will utilize retrospective chart review to evaluate twenty electronic medical records for patients admitted to a medical floor with CAP for evidence-based guideline directed interventions that include documentation of blood cultures

being drawn prior to antibiotic administration, and timeliness of appropriate antibiotic administration (within eight hours of admission to the hospital). The charts will also be evaluated for thirty day hospital readmission secondary to complications from pneumonia, length of stay, and common comorbidities which would influence readmission and potential complications. Data will be analyzed using descriptive statistics. The role of the advanced practice registered nurse will be discussed.

**Poster Number: 11**  
**Coronary Artery Disease in Primary Care:  
Prevention in Asymptomatic Women at High Risk for Disease**  
**Kristen Bourgon-Yee**  
**Advisor: Tracey Chan**

This poster will present findings of a continuous quality improvement project that examined adherence to best practice guidelines for the prevention of Coronary Artery Disease (CAD) in females greater than 20 years of age at high risk for CAD. According to the American Heart Association (AHA), CAD is the most common type of heart disease and is the leading cause of death in the United States. This project setting is a holistic primary care practice serving a population of approximately 3,000 patients. The AHA has established guidelines for use in primary care practice. These guidelines include annual cholesterol screening, and diet and exercise counseling, which were chosen because the holistic nature of this practice relies heavily on lifestyle modifications. To measure the effectiveness of the practice in implementing these practice standards, a retrospective chart review was conducted. Inclusion criteria for this project are: 1) females, 2) ages > 20, 3) 1 or more of the following risk factors: cigarette smoking, obesity, hypertension, or diabetes, 4) asymptomatic for CAD. Forty charts were chosen at random. A standard data collection tool was constructed to record the following information: 1) gender, 2) age, 3) 1 or more risk factors for CAD, 4) lipid panel within the last year, 5) documented diet/exercise counseling. Data will be analyzed using descriptive statistics. Findings will be examined for adherence to national guidelines and implications/recommendations for practice will be presented.

**Poster Number: 12**  
**Gluten Free: The Health Benefits, The Public Perception,  
and The Impact on The Restaurant Industry**  
**Todd Buchanan**  
**Advisor: Dr. William Kasperski**

The project is titled; Gluten Free; The Health Benefits, The Public Perception, and The Impact on The Restaurant Industry. This research paper will delve into the research of others that have tested gluten-free products and studied people that have lived the gluten-free lifestyle. It will also get the public's perception of gluten-free, what their knowledge about gluten is, and whether or not they are aware of people around them that practice a gluten-free diet. This research will also survey restaurant owners about their menus, gluten-free options, and their patrons that may ask for gluten-free products. The analysis and interpretations are still in progress and

will be completed by April 30, 2016. The research will be done through previous research and surveys given to people anonymously. The researcher expects that women will be more familiar with gluten-free diets and people in the age group of 27 to 45 will have more knowledge as well. The researcher expects to also find that very few people are aware of what gluten is. The researcher expects to find that the majority of restaurant owners are unaware of what gluten is, and the longer they have been in business, the less likely they will have knowledge of gluten in general. The research should also show that more women owners would know more about gluten than their male counterparts. The researcher also believes that there will be approximately ten percent of customers that ask about gluten-free menu items.

**Poster Number: 13**  
**Underutilization of Occupational Therapy in Hospice  
and Palliative Care**  
**Jill Burress**  
**Advisor: Dr. Kelly Rhoades**

The purpose of this study was: a) to explore how two fields, Hospice and Occupational Therapy, work together, b) to understand why there are apparent low numbers of Occupational Therapists (OTs) employed in the Hospice Care settings, and c) to expound on the benefits of a stronger presence of skilled OTs to the Hospice image and patient/family satisfaction. Hypotheses included: H1: Most OTs in daily service do not utilize available hospice/palliative care services with eligible patients, and H2: Combining Hospice Care and Occupational Therapy services will create better outcomes at end of life for patients and families. Research design was multimodal and utilized surveys and in-depth interviewing for data collection. Summary findings revealed that the use of Occupational Therapy for patients nearing the end of life allowed them to receive skilled services that align with the comfort care and symptom management practices that are the cornerstone philosophy of hospice and palliative care. Patients receiving OT could potentially benefit from extended time spent in hospice care, with better quality of care at end of life that also contributed to quality family time and improved communication in relationships stemming from life review and healing. These results help to minimize the myth that hospice means giving up, allowing it to be a natural, even welcome progression in the continuum of care, evolving as a valued model within palliative care delivery at end of life.

**Poster Number: 14**  
**Changing the Daily Soup**  
**Molly Clayton**  
**Advisor: Dr. Karen Obsniuk**

In this study, six four-year-old preschool students were given a letter curriculum that included a character, a story, and multi-sensory activities. The letters learned were reinforced with iPad activities and review games to help solidify knowledge. Through a teacher maintained journal, pre- and post-testing, and photographic evidence the researcher showed that students were beginning to master their letters and phonemes. There was a documented 23% average increase in letter and phonemes in post-testing data. Pretesting and

post-testing was done using flashcards and tested not only the letter names but the letter sounds as well. Through using salient characters, stories, and activities with review and technology, students successfully increased their letter name and sound knowledge.

**Poster Number: 16**  
**Small Business Initiative: BH Bikes**  
**Denise Collaku and Nina Stojic**  
**Advisor: Dr. Patricia Pelavin**

This small business initiative is a collaboration between BLVD Harambee, two students in the MBA 6950 Capstone course and their instructor. BLVD Harambee is a non-profit organization striving to commit to the overall economic development of its community and provide a means for self-sustaining services within the Church of Messiah in Detroit. The project focuses on a business initiative for BH Bikes, proposing a profit-based bicycle shop business model. The shop provides various life skills to the Islandview neighborhood of East Detroit by fixing old bicycles and making them available for transportation throughout the community. The principles of quality management in terms of obtaining additional funding, enhancing marketing, and structuring operations will be examined. The methodology for this study consists of data collection from a voluntary-participation, 16-question survey study distributed to the parishioners of the Church of Messiah within the Islandview area of Detroit or others that attend the Church for meetings and/or workshops. Both demographic and quantitative-type questions were used. Several hypotheses will be explored using the survey data to provide insight on statistical analyses as related to biking interest, age groups and income within the Islandview area of Detroit. Survey responses will be analyzed using Chi-Square, Correlation, and ANOVA testing. The report will be presented to the "client" in written format and in an oral presentation upon completion of the project.

**Poster Number: 20**  
**The Effects of Working Remotely on the Dynamics of the Workplace**  
**Shantaye Dennis**  
**Advisor: Dr. Patricia Pelavin**

Working remotely, is becoming a more viable work option, as time progresses. Industries are shifting away from mandating employees to work onsite. They are offering more "flex time", or the option for employees to work solely from home. Despite the overall shift, some employers are reluctant to incorporate the working remotely into their organization. This project reviewed the pros and cons of working remotely through the perception of the employee. It also contained input from managers who have employees who work remotely. The purpose of this research was to examine the differences and similarities within different age groups, genders and hours worked. The samples consisted of both quantitative and qualitative data. A survey was created in Qualtrics, and distributed to 50 participants (employees) who work remotely. The survey was sent via a Qualtrics link either by email or social media to a select group. The survey consisted of 3 demographic questions and 19 Likert questions. The questions touched on an array of benefits, challenges and overall satisfaction of working remotely. There were also one-on-one

managerial interviews conducted with managers consisting of 9 open ended questions. The data collected from the Qualtrics surveys will be analyzed through SAS using various tests. The hypotheses will be tested and will also identify other similarities/differences derived from the data. The responses from the managerial interviews will be included as supporting, additional data.

**Poster Number: 21**  
**Business Plan for the Dunklin Childcare Services**  
**Angela Dunklin**  
**Advisor: Dr. Patricia Pelavin**

The economic structure of society has considerably influenced how families care for their children. For parents who work for income or would like to work, childcare is a concern that is almost universal. For this reason, sensible high-quality childcare is vital to parents' abilities to balance work success with family responsibilities. Therefore, the purpose of this research is to develop a business plan for a new start-up business, which will be a childcare center that provides children between the ages of 6 weeks and 5 years old with high-quality services. The primary data collection method used for this project was a Qualtrics survey made up of consumer perception questions that were structured around the business plan. This survey was sent to 75 participants via email, which contained a link to the Qualtrics server. A business plan and pro-forma financial statement will also be developed. The data for this research project will be analyzed by using descriptive and inferential statistics to establish the important factors consumers consider when choosing a childcare facility.

**Poster Number: 22**  
**Tranexamic Acid's use in the Massive Transfusion Protocol**  
**Hussein Fawaz**  
**Advisor: Dr. Gail Lis**

In 2014, the Centers for Disease Control and Prevention reported that trauma is the third leading cause of death across all age groups (CDC, 2014). Hemorrhage is responsible for over 35% of pre-hospital deaths and greater than 40% of deaths within the first day (Kauvar, Lefering, and Wade, 2006). This has led to many institutions developing a massive transfusion protocol with the administration of Tranexamic acid (TXA) embedded within the protocol. TXA is an antifibrinolytic that inhibits plasminogen, thus, preventing fibrin degradation. If given within the first three hours of injury, TXA will lead to decreased coagulopathy and bleeding (Williams-Johnson, McDonald, Strachan, and Williams, 2010). The objective of this retrospective analysis will be to evaluate the use of Tranexamic Acid in patients that are receiving the massive transfusion protocol to decrease coagulopathy and control bleeding. Process indicators include the time from activation of trauma to implementation of the Massive Transfusion Protocol, where the TXA is ordered, and documentation of the order for TXA. The data will be analyzed using descriptive statistics. The impact and role of the APRN in the care of the trauma patient with the massive transfusion protocol activated will be discussed.



**Poster Number: 23**  
**A Study of College Bound High School Seniors' Knowledge of Student Loan Debt**  
**Cesar Figueras and Thomas Oliver**  
**Advisor: Dr. Patricia Pelavin**

The goal of this study is evaluate two and four year college bound (and vocational institutions bound) high school students' existing knowledge about financing their future college plans, and highlight any strengths or weaknesses that are found. Investigators have enlisted five high schools in Wayne and Washtenaw Counties to participate in the study, and have estimated 400 responses to the study based on discussion with high school counselors. Investigators have hosted informational sessions at each of the schools to educate and explain the study's purpose and goals to the potential participants. A survey instrument, created in Qualtrics Survey creator, was distributed to students with a signed parental consent form who volunteered for the study. The survey was available and/or distributed in either electronic or paper forms, depending on schools technological capabilities. Questions pertaining to interest rates, differences in loan types, methods of financing, etc. were asked; however, NO personally identifying information was requested in the survey instrument or by the investigators.

**Poster Number: 24**  
**Health Care Reform: Medicaid Expansion in Michigan and Improvement to Access to Care**  
**Shariea Franklin**  
**Advisor: Dr. William Kasperski**

One of the most challenging problems for the United States is improving access to care for uninsured Americans. When looking at the profile of uninsured nationally across measures such as (age, race, income etc.) the poor and working poor are disproportionately uninsured. Considering the large number of uninsured Michiganders, however when compared nationally are half as likely to be uninsured as other states but still reflect a disproportionately high number of uninsured individuals. The purpose of this research is to see if access to care has improved with Healthy Michigan Plan, Michigan's Medicaid expansion program. Publicly available data on counties enrollment throughout Michigan from inception of the program to current date was analyzed to see if the ACA's intent to reduce the barriers of access to care.

**Poster Number: 25**  
**"Take it to heart." Blood Conservation Strategies in the Cardiovascular Surgical Patient**  
**Shawn Gauvin**  
**Advisor: Dr. Gail Lis**

In 2010, the American Heart Association (AHA) reported that 17.6 million persons in the United States have coronary heart disease with over 700,000 myocardial infarctions occurring each year and 120,000 of those resulting in death. According to the AHA guidelines, coronary artery bypass graft surgery (CABG) is the preferred treatment modality for coronary heart disease for high-risk patients such as those with left main disease, severe 3-vessel disease, severe

ventricular dysfunction, or failed balloon angioplasty. The National Center for Health Statistics estimated that in 2010, 397,000 coronary bypass surgeries were performed. Allogeneic transfusions due to intraoperative bleeding are common in cardiovascular surgical cases particularly when cardiopulmonary bypass is required. Increasing evidence suggests that blood transfusions during cardiac procedures are linked to worsening outcomes such as infection, increased morbidity, increased length of stay, and higher health care costs. Given these findings, the Society of Thoracic Surgeons (STS) published evidenced based guidelines that call for blood conservation strategies associated with cardiac operations. Through a retrospective chart review, twenty medical records of patients who have undergone CABG surgery will be evaluated for adherence to a restrictive transfusion strategy as recommended in the STS guidelines. The process indicators to be evaluated include the use of Lysine analogues to reduce total blood loss during surgery, intraoperative autologous blood transfusion, and controlled use of post-operative parenteral fluid use to limit hemodilution. Data will be analyzed using descriptive statistics. The role of the APRN in blood conservation will also be discussed.

**Poster Number: 26**  
**A Not So Short Stay: Geriatric VTE Prophylaxis**  
**Chelsea Goodson**  
**Advisor: Dr. Gail Lis**

This continuous quality improvement project will evaluate the assessment of the need for venous thromboembolism (VTE) prophylaxis and the appropriate prophylactic interventions to prevent a thromboembolic event in patients admitted to the medical short stay unit (MSSU) who exceed a 24-hour admission. A DVT is a preventable complication of hospitalization; therefore, VTE risk should be assessed at admission, with change in level of care, and at discharge. The burden and impact of a thromboembolic event are astounding, as many as 900,000 people are affected annually by a DVT1 and about ten billion dollars in medical costs can be attributed to DVTs annually. Geriatric patients have a four to six times higher risk of experiencing a thromboembolic event when compared to younger patients, and the risk doubles with each decade of aging. The impact of preventable hospital complications and re-admission in geriatric patients, such as a thromboembolic event are profound and debilitating, influencing the patient's overall health and well-being. Through a retrospective chart review, two process indicators will be examined, whether the MSSU midlevel provider assessed VTE risk when there is a change in level of care and was VTE risk assessment accurately calculated for inpatient geriatric patients (>= 65 years of age)? In addition, an assessment will be performed to evaluate if the patient was re-admitted within 30 days and if so, was it for the development of a thromboembolic event. Data will be analyzed using descriptive statistics and implications for advanced practice registered nurses (APRN) will be discussed.

**Poster Number: 28**  
**Transitioning into College and Common Stressors**  
**Nickie Hampsher**  
**Advisor: Dr. Patricia Pelavin**

Research has found that a student's overall success is shaped in many

ways by their experience during their first-year of college. Learning to adapt to academic and social stressors faced by this population of students are a large component to college retention rates. The concept of the project was to gather statistical data that can be analyzed about the general population of Madonna University students who are classified as First Time in Any College (FTIAC). Sample data was gathered using a convenience sample of 37 Madonna University freshmen who were enrolled and participated in the UNV 1010 class during the fall 2015 semester and subsequently enrolled in winter 2016. Data collection was completed through the instrument of a structured online survey consisting of 14 close-ended questions. Students were sent emails requesting their assistance to complete the linked Qualtrics survey. Collected data will be analyzed using a variety of tests to determine if there are any significant findings that indicate which variables may be direct contributors to stressors commonly experienced by freshman students. Variables will also be explored to determine if they have any effect on the students overall perception of their college experience to date. The findings will provide insight into whether there are significant differences in the level of stress or satisfaction among males and females, living situation or the first in their family to attend college.

**Poster Number: 29**  
**Probiotics in Practice: C. the difference**  
**Joanna Healey**  
**Advisor: Dr. Gail Lis**

According to the Centers for Disease Control and Prevention (2012), the elderly receiving antibiotics in a healthcare setting are most at risk for *Clostridium difficile* (C. Diff) infections. Lipp, Nero, and Callahan (2012) found that not only did a hospital acquired C. diff infection increase a length of stay by nearly 12 days, but it cost just under \$29,000 per infection. Guidelines for the diagnosis, treatment, and prevention of *Clostridium difficile* infections (CDI) published in *The Journal of Gastroenterology* (2012) stated, "... there is insufficient evidence that probiotics prevent CDI. (Strong recommendation, low-quality evidence)" (p.491). A retrospective chart review will be conducted on the electronic medical records of 20 patients admitted to the adult surgical intensive care unit (SICU) service receiving antibiotics therapy for at least 48 hours. This continuous quality improvement project will assess compliance with probiotic administration for those receiving antibiotics for 48 hours and de-escalation of broad spectrum antibiotics after cultures were finalized. This data will be further analyzed in terms of incidence rates of C. diff infections in those who received probiotics versus those who did not. Data will be analyzed using descriptive statistics and implications for the advanced practice nurse in preventing healthcare associated infections will be discussed.

**Poster Number: 31**  
**Breathe Easier: Exercise Your Lungs Using Incentive Spirometry**  
**Amanda Iwelunmor**  
**Advisor: Dr. Sue Sirianni**

This continuous quality improvement project will analyze the current process of ordering and implementation of pulmonary hygiene with incentive spirometry in the bone marrow transplant popula-

tion in an acute care setting. According to Antin and Jones (2009) "Pulmonary injury is one of the most common complications of stem cell transplantation and a major cause of morbidity and mortality" (p.130). Our goal as health care providers is to prevent or reverse pulmonary complications in our patients. According to the American Association for Respiratory Care (AARC) clinical practice guidelines: Incentive spirometry: it is imperative to properly assess for patient's need for incentive spirometry, provide proper education of use, and monitor patient performance and outcomes to assist with prevention or reversal of pulmonary complications. Through a real time chart review, patients that are admitted to the bone marrow transplant service and staff will be evaluated for pulmonary hygiene adherence. The process indicators that will be evaluated are: Order placed in the patient's EMR for incentive spirometry and frequency, documentation in the EMR of nursing education regarding proper use of incentive spirometry, and patients will have an incentive spirometer at their bedside. The outcome to be assessed will be development of pulmonary complications. Data will be analyzed using descriptive statistics. Implications for advance practice nurses regarding pulmonary hygiene will be discussed.

**Poster Number: 32**  
**Prevention Strategies in Reducing Surgical Site Infections in Post-Operative CABG Patients**  
**Dijana Kopic**  
**Advisor: Dr. Gail Lis**

Surgical site infections cause significant morbidity and mortality and accounts for over 3 billion dollars in annual costs in the United States. It affects approximately one to two percent of patients after cardiac surgery, but it significantly increases mortality and hospital costs. The Society of Thoracic Surgeons practice guidelines have specific recommendations in reducing post-operative CABG surgical site infection including appropriate antibiotic prophylaxis, and post-operative glycemic control (Engelman et al., 2007). Health care facilities can significantly improve patient outcomes, and furthermore reduce hospital length of stay, readmission rates, and associated cost by following the practice guidelines. Through a retrospective chart review, twenty medical records of patients with the primary diagnosis of coronary artery bypass grafting and/or valve surgery will be evaluated for adherence to the Society of Thoracic Surgeons' practice guidelines on prevention of surgical site infections. The process indicators evaluated will include documentation of appropriate antibiotic prophylaxis (within one hour of incision), and post-operative glycemic control with blood glucose level less than 180 mg/dl on post-operative day number one. Data will be analyzed using descriptive statistics. The role of the advanced practice nurse will be discussed in the prevention of post-operative CABG surgical site infections.

**Poster Number: 33**  
**Exploring Frontline Innovation in Brick-and-Mortar Retail Environments**  
**Leah Keasal**  
**Advisor: Dr. William Kasperski**

This study was conducted to explore organizational design and

leadership practices in brick-and-mortar retail environments to determine how they influence sustainability with regard to front line employees' overall performance and innovation strategies. In the retail industry, the topics and issues involving sustainability and innovation have traditionally been viewed as complex issues for senior management to solve. During times of cultural transformation, leadership expectations change and organizational flattening redefines core roles and redistributes responsibilities; driving and influencing innovation at all levels in the organization then becomes key to obtaining competitive sustainability. However, there is an industry-wide lack of corporate funding and initiatives focused on purposefully developing and empowering front line retail employees to foster profitable, sustainable, and innovative organizational cultures in brick-and-mortar retail environments. To identify aspects of organizational culture and design that may impact retail employees' ability to innovate in a physical retail store environment, the researcher created an anonymous online Qualtrics survey using questions designed to measure the attitudes of front line retail employees.

**Poster Number: 37**  
**How Well Are We Controlling Hypertension?**

**Jason Learman**  
**Advisor: Tracey Chan**

Hypertension is a chronic disease that is both preventable and treatable yet it affects African Americans at a higher rate than other races. Hypertension is considered a silent killer due to the lack of symptoms it presents with. Uncontrolled hypertension can lead to many other diseases with increased morbidity and mortality. The purpose of this research is to see how well practitioners are controlling African Americans blood pressure to the target goal set by the International Society on Hypertension in Blacks (ISHIB). This research will also look at practitioners' compliancy with the guidelines for treatment of hypertension recommended by the ISHIB. The population will consist of African Americans who have hypertension between the ages of eighteen and sixty. Forty patients will be selected randomly for a retrospective chart review. Following this research the results will be examined to see if practitioners are providing the best evidenced based care to their patients.

**Poster Number: 38**  
**Using the CHA2DS2-VASc Score to Identify Risk of Stroke Prior to Starting Anticoagulation Therapy in Newly Diagnosed Non-Valvular Atrial Fibrillation**

**Margi Patel**  
**Advisors: Dr. Gail Lis and Dr. Patricia Clark**

According to the American Heart Association, atrial fibrillation (AF) is the most commonly occurring dysrhythmia affecting an estimated 2.7 million Americans (AHA, 2015). Although most people experience no symptoms associated with AF, if left untreated, the side effects of this dysrhythmia can lead to poor health outcomes and complications such as stroke or heart failure. The American Heart Association defines AF as "a quivering or irregular heartbeat (dysrhythmia) that can lead to blood clots, stroke, heart failure and other heart-related complications" (AHA, 2016, para. 1). In 2014

the American Heart Association/American College of Cardiology (AHA/ACC) updated their guidelines for the management of patients with Atrial Fibrillation. This quality improvement project will conduct a retrospective chart review of approximately 20 records of patients with non-valvular atrial fibrillation (NVAF). Charts will be evaluated for the documentation of CHA2DS2-VASc score prior to determining the need for anticoagulation therapy as well as the documentation of the guideline recommended oral anticoagulation therapy indicated for NVAF. Data will be analyzed using descriptive statistics. The role of the advance practice nurse in the care of newly diagnosed NVAF will be discussed.

**Poster Number: 40**  
**Guideline Directed Management of Patients with Symptomatic Atrial Fibrillation with Direct Current Cardioversion**

**Danielle Pichan**  
**Advisor: Dr. Gail Lis**

This continuous quality improvement project analyzes the impact of education and care in the management of patients with symptomatic atrial fibrillation and the prevention of stroke. While some state that atrial fibrillation is simply an odd heartbeat, this diagnosis is so much more than suggesting the heart dances to the rhythm of its own drum. According to the American Stroke Association, approximately 15 percent of strokes are the result of untreated heart arrhythmias (2014). The American Heart Association Task Force, American College of Cardiology and the Heart Rhythm Society developed guidelines specifically addressing the supervision of patients with atrial fibrillation and identified direct current cardioversion (DCC) as a key management strategy to pursue rhythm control (2014). Shocking a patient into normal rhythm with an impending clot significantly increases the likelihood of a thromboembolic event. Therefore, performing a transesophageal echocardiogram (TEE) prior to cardioversion can determine the presence of clots, justifying whether the procedure is safe to perform in the setting of improper anticoagulation. Utilizing these strategies decreases the occurrence of stroke as a complication of DCC. This quality improvement project will utilize evidence base practice guidelines to evaluate proper medical management prior to DCC that includes the documentation of accurate CHADS2VASc score assessment, appropriate prescription of anticoagulation medication prior to DCC, or if needed, a TEE prior to DCC, as well as the outcome of stroke within 30 days of procedure. The data will be analyzed using descriptive statistics. The role of the advanced practice nurse in this endeavor will be discussed.

**Poster Number: 41**  
**Math Facts Matter**  
**Shannon Pilkinton**  
**Advisor: Dr. Karen Obsniuk**

This study reports on how students' computational fluency can be increased by implementing Xtra Math, a web-based math facts program, and consistent use of addition flashcards in the classroom. The subjects included 19 first grade students from a private, suburban elementary school. The students' scores on a timed math



facts test indicated a need to increase the speed and accuracy of basic math facts in order for students to be able to score well on standardized tests in subsequent years. The data reported from Xtra Math and observations from the use of math flashcards were contradictory. However, the post-test results showed dramatic improvement in first grade students' timed math facts test scores.

**Poster Number: 43**  
**Comparison of Venous Thromboembolism Prophylaxis Options in Post-Operative TKA/THA Patients in a Skilled Nursing Facility**

**Susan Riggan**

**Advisors: Tracey Chan and Mary Jane Favot**

This poster will present comparative findings of a continuous quality improvement project that evaluates adherence to current thromboprophylaxis guidelines in post TKA/THA patients. The project setting is a sub-acute rehabilitation unit in a skilled nursing facility in southeastern Michigan. The literature demonstrates that patients are at a 20-40% risk for developing VTE post TKA/THA, yet there is no consensus on the ideal method of VTE prevention. The two most popular guidelines are those published by the American College of Chest Physicians (ACCP) and the American Academy of Orthopaedic Surgeons (AAOS). This inconsistency has raised the concern that many patients are at risk for insufficient thromboprophylaxis or excessive bleeding. The focus of the project involved the identification of various thromboprophylaxis approaches utilized in post-operative TKA/THA patients, and the prevalence of complications seen in this same population of sub-acute rehabilitation patients. My findings will examine the differing thromboprophylaxis guidelines, the impact of these guidelines, and correlational adverse events following THA/TKA surgery. To evaluate adherence to thromboprophylaxis guidelines, a retrospective chart review was completed. Inclusion criteria for this project were: 1) patients who had undergone THA/TKA between January 1 through December 31, 2015, 2) males and females, and 3) ages 55-85. Exclusion criteria included TKA/THA patients with comorbidities necessitating prior thromboprophylaxis. A data collection tool was developed to collect sample demographics and variables including: 1) age, 2) gender, 3) surgical procedure, 4) type of thromboprophylaxis, 5) duration of treatment, and 6) adverse events.

**Poster Number: 44**  
**Blood Pressure Monitoring in Type II Diabetic Patients**

**Amanda Ryan**

**Advisor: Tracey Chan**

This poster will present findings of a continuous quality improvement project that examined adherence to best practice guidelines for blood pressure monitoring in patients with type II diabetes. The project setting was a primary care practice serving a population of adult patients. The American Diabetes Association (2015) has established guidelines to reduce the risks and complications associated with cardiovascular disease in diabetic patients. These guidelines include a target blood pressure in diabetic patients of SBP<140 mmHg, and a DBP<90 mmHg. To measure the effectiveness of the practice in implementing these practice standards, a retrospective

chart review was conducted. The inclusion criteria for this project were: 1) established patients with a diagnosis of type II diabetes, 2) ages greater than 18, 3) seen in the last 1 year. Thirty charts of diabetic patients were chosen at random. A standard data collection tool recorded the following information: 1) age, 2) gender, 3) Hgb A1c, 4) blood pressure recorded at last visit, 5) whether blood pressure was appropriate for recommended practice guidelines, and 5) if blood pressure was inappropriate, was intervention implemented. Data will be analyzed using descriptive statistics. Findings will be examined for adherence to national guidelines and implications for practice will be presented.

**Poster Number: 45**  
**Improving Patient Satisfaction related to patient education for the NSTEMI patient**

**Wendi Santavicca**

**Advisor: Dr. Patricia Clark**

Coronary Artery Disease is the most common type of heart disease. Many aspects of care are related to self-management by patients. Patients with coronary artery disease must understand their disease process and how best to manage it in order to optimize their outcomes. The Institute of Medicine (IOM) clearly supports patient and family engagement (2011). By providing adequate and relevant patient education, healthcare providers engage patients and their families in managing their health and making decisions about their care. This continuous quality improvement project reviews the educational process for patients with a new diagnosis of non ST elevated myocardial infarction (NSTEMI). Patient satisfaction scores obtained through the Press Ganey survey process have declined in regards to the patient's satisfaction with patient education. Through a retrospective chart review, twenty patient charts on a specific cardiology unit with a primary diagnosis of NSTEMI will be evaluated for adherence to the American Heart Association/American College of Cardiology (AHA/ACC) recommended NSTEMI guidelines for providing patient education. Data will be analyzed using descriptive statistics. The role of the Advanced Practice Nurse (APRN) in providing patient education for this patient population will be explored.

**Poster Number: 46**  
**Financing a College Education at Madonna University**

**Anthony Santori**

**Advisor: Dr. William Kasperski**

This research design project targets the student loan debt crisis. The target population for this study is college students at Madonna University. The study will analyze different financial ways to pay for college tuition. The finance options students have are federal or private student loans, Pell grants, scholarships, working while attending class, or parents paying for their education. The researcher wants to find out how students are financing college tuition each semester at Madonna University. The survey will consist of 20 questions testing participant's knowledge of student loans, scholarships, financial literacy, and interest on certain types of loans. The purpose of this study is to examine what kind of loans students are using, which gender is in more debt, and to test a student's financial literacy about student loans. After the study is complete, the researcher

wants to educate current and future students about this problem. The student loan debt crisis is holding back students from purchasing homes, getting married, getting a job, and moving forward after graduation. Students need to be more aware of what the interest rate and what kind of loan they are taking out to pay for education before they sign the dotted line.

**Poster Number: 47**  
**Human Trafficking: Who are the Victims?**  
**Joy Segal**  
**Advisor: Dr. William Kasperski**

Human Trafficking has become one of the largest issues in the United States involving the most vulnerable members in our society. Human trafficking is a worldwide issue that affects every facet of society. Human trafficking may involve sex and/or labor trafficking. This research will attempt to address who are the most vulnerable members involved in human trafficking, what age group is the most likely to fall victim to human trafficking and what racial background are human trafficking victims.

**Poster Number: 48**  
**Evaluation of the First Dose of Antibiotic Therapy in the Emergency Room for Newly Diagnosed Community-Acquired Pneumonia Patients**  
**Elizabeth Sergison**  
**Advisor: Dr. Patricia Clark**

This continuous quality improvement project evaluates the use of antibiotics in the emergency room for all patients newly diagnosed with community-acquired pneumonia (CAP) and examines the relationship to the patient's overall hospital length of stay (LOS). CAP affects more than five million Americans annually and is associated with high morbidity, mortality, and healthcare costs. The Infectious Disease Society of America and the American Thoracic Society's consensus clinical guidelines on the management of CAP state that blood and sputum cultures must be obtained prior to the patient receiving their first dose of intravenous antibiotics and that the first antibiotic should be given within the ER setting prior to the patient being transferred to another unit. This project will evaluate these two process indicators through a retrospective chart review of twenty patient medical records. The overall LOS within the hospital will be compared to the Centers for Medicare and Medicaid Services annual geometric LOS for CAP, which was documented as 2.9 days in 2015. Data will be analyzed through the use of descriptive statistics. Implications for advanced practice nurses in caring for patients with CAP will also be discussed.

**Poster Number: 49**  
**Consumer Opinion Regarding Telemedicine**  
**Colin Sheldon**  
**Advisor: Dr. William Kasperski**

The title of the study is Consumer Opinion Regarding Telemedicine. The rising cost of healthcare and the aging baby boomer population are two important issues that need to be addressed in the near future. Telemedicine can potentially alleviate some aspects

of those issues, but healthcare consumers need to be willing to use telemedicine and the myriad technologies surrounding it before any widespread implementation can occur. This project attempts to gain insight on the consumer's opinion of telemedicine at this time. Historical accounts of telemedicine were examined. A sample of students at Madonna University were surveyed through Qualtrics regarding certain aspects of telemedicine. The results will be analyzed using Microsoft Excel and SPSS statistical analysis program.

**Poster Number: 50**  
**Is it HIIP to Consult?**  
**Navdeep Singh**  
**Advisors: Dr. Gail Lis and Dr. Therese Jamison**

This continuous quality improvement project analyzes the management of Cystic Fibrosis Related Diabetes (CFRD) via two different medical service providers. CFRD is the most common comorbidity in people with Cystic Fibrosis (CF), occurring in 20% of adolescents and 40-50% of adults (Moran, et al., 2010). The additional diagnosis of CFRD has a negative impact on pulmonary function and overall survival in CF. The American Diabetes Association Guidelines state patients with CFRD who are on insulin should perform SMBG (self-monitoring of blood glucose) at least three times a day. (ADA-E; Consensus) and CF patients with CFRD should be treated with insulin therapy. (ADA-A, UPSTF-B). Diabetes is often seen as a benign condition to be watched while treating the main illness of hospitalization, but recent studies have shown aggressive treatment of hyperglycemia has greatly reduced morbidity and mortality (Clemente, et al., 2004). Because of aggressive treatment, hyperglycemic teams have emerged within health care settings to treat CFRD. Through a retrospective chart review, twenty patient charts will be evaluated for adherence to practice guidelines. The process indicators to be evaluated will include CFRD management by either Hyperglycemia Intensive Insulin Program (HIIP) or the Medical Pulmonary service, and T1D blood sugar screening with appropriate Insulin therapy based upon results of a fasting blood sugar between 100-180 and pre-meal/bedtime sugar of less than 200. Overall glycemic control will be evaluated. Data will be evaluated using descriptive statistics. Implications for the management of CFRD by the advanced practiced registered nurse will be discussed.

**Poster Number: 51**  
**Hypertension Management in Diabetes Mellitus Type 2 Patients**  
**Dayana Nanda Siriwardhana**  
**Advisor: Dr. Gail Lis**

This continuous quality improvement project will evaluate patients with Diabetes Mellitus Type 2 (DMT2) and Hypertension (HTN). The major cause of mortality in diabetes is cardiovascular diseases, and the diagnosis of diabetes confers a two- to four-fold increase in cardiovascular risk (Baranski, Clutter & McGill, 2013). The American Diabetic Association (ADA) guidelines are very specific when managing blood pressure (BP) in diabetic patients because HTN substantially increases the risk of both macrovascular and microvascular complications including stroke, myocardial infarction, coronary artery disease, heart failure, peripheral vascular disease, retinopathy, nephropathy, renal failure, and possibly neuropathy.

ADA guidelines support the use of angiotensin-converting enzyme inhibitors (ACE-I)/angiotensin receptor blockers (ARB) therapy for treatment of HTN in DMT2. In addition to pharmacology, the importance of following a sodium restricted diet is also imperative to assist diabetic patients to reach target BP of below 140/90. Through a retrospective chart review, twenty patients with a primary diagnosis of DMT2 and HTN will be evaluated to the adherence with guidelines. Two process indicators evaluated include documentation of sodium restricted diet in patients admitted to the hospital and documentation on the medical administration record (MAR) for ACE-I or ARBs. Data will be analyzed using descriptive statistics. The role of advance practice registered nurse (APRN) will be discussed.

**Poster Number: 52**  
**AACE/ACE 2015 Glycemic Algorithm: How Do We Measure Up**  
**Debra Sneddon**  
**Advisor: Dr. Catherine Nichols**

AACE/ACE 2015 Glycemic Algorithm: How do we measure up? This poster will present findings of a continuous quality improvement project that examined adherence to best practice for the management of newly diagnosed type II diabetes among adult patients. The project setting is a very large suburban primary care practice that has a significant number of type II diabetics. The American Association of Clinical Endocrinologists (AACE) has developed guidelines known as AACE/ACE 2015 guidelines for diabetes. Specifically, the AACE Glycemic Control Algorithm will be utilized to determine if newly diagnosed type II diabetics were put on an appropriate medication therapy in accordance with their Hgb A1c. To measure the effectiveness in implementing this practice standard, a retrospective chart review was conducted. The inclusion criteria for this project were 1) All patients newly diagnosed with type II diabetes 2) Age eighteen and older. Forty charts were chosen at random. A standard data collection tool was constructed and data collected reflected the three ranges of treatment guidelines outlined by the AACE/ACE guidelines. Data will be analyzed using descriptive statistics. Findings will be examined for adherence to national guidelines and implications for practice will be presented.

**Poster Number: 53**  
**Osteoporosis Screening**  
**Mariana Stefanescu**  
**Advisor: Tracey Chan**

This project presents the tools used to detect, prevent and manage Osteoporosis in a clinical setting. The population was determined based on the World Health Organization and USPSTF recommendations and include all 15 years postmenopausal women 50 years and over. The FRAX score was used to determine the risk fracture. The bone density DXA scan was the tool used to evaluate the risk for Osteoporosis. Osteoporosis seems to be ignored by the female population and its fatal consequences could be avoided if the disease was detected on time and the treatment implemented was based on the guidelines. National Osteoporosis Foundation guidelines posted on April 2014 were considered the most updated guidelines and the tool was developed accordingly. The DXA test is a non-painful, easily performed and less invasive procedure. Pharmacologic and

nonpharmacological treatment is available for the population at risk and the disease could be totally treated. A data collection tool was developed and a random sample result of a total of 28 charts reviewed.

**Poster Number: 55**  
**What Impact Does Food Manufacturers have on Society?**  
**Cassandra Thiel**  
**Advisor: Dr. William Kasperski**

Food manufacturers negatively impact society, because they are aiding in sending 310,000 Americans into an early grave because of preventable diet-related diseases which our government seems to ignore. These preventable diseases are caused from processed foods, such as nutritionally hollow contents of potato chips, soft drinks and fast-food. Similarly, Americans are being deceived into thinking foods are healthy for them because the packaging states, low-sodium, no trans-fat and good source of fiber, when in fact these statements are far from the truth. The researcher would like to find out the impact of food manufacturers on society. Further the researcher will look into various aspects of society, such as low-income or high-income. Likewise, does income affect diseases, such as diabetes and hypertension? Additionally, age could play a factor in the obesity rate or the possibility of misleading labels on food products.

**Poster Number: 57**  
**A Business Plan and Analysis for an Adult Day Care Center**  
**Sharon Tulkki**  
**Advisor: Dr. Patricia Pelavin**

The following research study was conducted to develop a business analysis for an Adult Day Care Center. An Adult Day Care Center is a place, where our Elders or Loved Ones can be watched over during the day. There are many emotional, social, cognitive, and physical benefits for seniors, who continue to be actively engaged with members of their communities. Medical costs for Elder care is continuing to rise and using an Adult Day Care Center, can help families save money. An Adult Day Care Center is a viable, alternate option to bridge the gap, before a Loved One is put in either an assisted living or nursing home facility. Included in this study are the results from a survey, which was conducted via the researcher's personal network of acquaintances. The intent of the survey was to determine if there was a market need for an Adult Day Care Center. Additionally, hypothesis testing, business plan, pro forma financial analysis, and a marketing analysis, will also be discussed. At this point, it is known that 78 percent of the participants would consider using an Adult Day Care Center. It should also be noted, that 84 percent of the respondents feel that there is a need for an Adult Day Care Center in their community.

**Poster Number: 58**  
**Auto Loan Debt: Impact on Individual's Finances**  
**Muneeb Wains-Malik**  
**Advisor: Dr. William Kasperski**

This research project addresses the soaring auto loan debt in the United States. Furthermore, the study is necessary to determine



what financial difficulty individuals are facing when it comes to taking out loans to finance on vehicles. The study is necessary to determine how much money people are spending on vehicles. The research is necessary to determine if different age groups and gender have an effect on how much money is being spent on vehicles. There are too many individuals that are taking out loans to finance on vehicles. Furthermore, the current auto loan debt in the United States is over one trillion dollars and is continue to grow. The rate is increasing and by 2018 the auto loan debt will be near the student loan debt in the United States. Individuals that are in the market to finance on a new vehicle have to do their research and realize that making a car payment will change the way they handle their finances. As a result the average new car payment in the United States is \$471 a month and the average price for a new vehicle is \$30,000. Americans are spending too much money on cars and the current average salary in the United States is \$54,000 a year and people are spending close to that amount or over on vehicles.

**Poster Number: 60**  
**Aging Nation: Estate Planning and the Aging Nation within the United States**  
**Amanda Wheeler**  
**Advisor: Dr. Patricia Pelavin**

Over the last century the number of people in the United States over the age of 65 has tripled and that number continues to grow. Due to these numbers increasing so rapidly, researchers have expressed concern regarding the issues that may transpire from this situation. Having a greater increase of people over the age of sixty-five (65) has brought up several concerns such as healthcare, employment, Medicaid, taxes and estate planning. Therefore, a strategic initiative was proposed to develop a marketing strategy for Morello Law Group, P.C., an Elder Law firm that focuses on the need for Estate Planning. This strategic initiative research will explore through literature review, surveys, and interviews with principals the potential factors that exist and that cause individuals to seek estate planning. A client survey will be conducted to determine the factors and differences for why individuals seek estate planning as well as interview an attorney practicing in the field of elder law in order to get a better understanding of how the laws in elder care law has changed over the years and why it's more important than ever to have an estate plan in place. This strategic management initiative will help assist Morello Law Group, P.C., to increase business, to gather demographics of current clients and to help strategically aligned the customer base.

**Poster Number: 61**  
**Police Body Cameras: Can They Give a More Accurate Perspective of Law Enforcement, Clarify Police Tactics and Increase Community Trust?**  
**LaMonica Williams**  
**Advisor: Dr. William Kasperski**

This project seeks to assess the benefits of police body cameras. The researcher seeks to assess how citizens and actual police officers view the usefulness of police worn body cameras. The researcher believes that citizens and police will have diametrically opposing

views regarding their usefulness in clarifying police tactics, and if the footage from the body worn cameras on law enforcement can assist in bringing about understanding and community trust between citizens and police.

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## Demonstration Poster Presentations

### Undergraduate

**Poster Number: 7**  
**How to Have End-of-Life Conversations in Minority Communities**  
**Hongwei Zhao**  
**Advisor: Dr. Kathleen Aseltyne**

Minority populations are growing rapidly in the U.S. Data shows that compared to white patients, minority patients are less likely to choose hospice and palliative care, and more likely to consume ineffective and burdensome high-intensity treatments at the end-of-life, and often suffer poor quality during the last phase of their life. It is always a challenge to have the end-of-life conversation with people of different cultural and religious backgrounds. Usually, for ethnic people, end-of-life decision making is impaired by poor communication and lack of understanding about the treatment options. In addition, for certain minority groups, there are special barriers due to cultural or historical reasons. Lack of effective end-of-life conversations between physicians and patients may be one of the main reasons prompting minority people to forgo hospice and palliative care. To have the conversation in minority communities, it is vital to identify the barriers and find effective strategies to overcome them. Community-based interventions have been proven helpful in breaking ethnic barriers, especially with using experience of persons who are from their own communities. Other useful approaches and tips are also discussed within this posted session.

### Graduate

**Poster Number: 10**  
**The Impact of Hospitality on the Hotel Industry**  
**Harriet Bass**  
**Advisor: Dr. Betty Jean Hebel**

The Hotel Hospitality Industry continues to expand as families, groups and individuals chose to take advantage of the opportunity to travel. Airlines, Disney, and Casinos are highly connected to the Hotel Hospitality Industry. From the time families, groups, or individuals leave home and reach their destinations, they expect to receive top notch services. Whether they use ground or air transportation, the hotel is usually their first stop. Jobs in the hotel hospitality business include transportation, concierge, accountants, cooks, and managerial. The quality of hospitality that is extended, or the lack of, has the greatest impact on the business' return on investment. I will research which hotels have received the highest rating for providing the best quality hospitality. I will research

what strategies they have in place to maintain their status or obtain a competitive advantage throughout the 21st Century. The research will include recruitment and training, prices, locations, and amenities.

**Poster Number: 15**  
**Marketing to the Generations**  
**Denise Collaku**  
**Advisor: Dr. Betty Jean Hebel**

Today's business landscape requires many companies to innovated ways to reach out and gain the attention of multi-generational buyers not only in a national but compete in a global environment. The concept of generational marketing recognizes that economy, scientific progress, politics and technology greatly shape each group. Generational determined lifestyles and values have as much influence on buying and purchasing than the more communal demographic factors such as income, education, and gender. As the boundaries between categories begin to blur, and an antiquated approach is to single out individuals based on based on income, gender, ethnicity or education, effective marketing requires customization, and personalization. To remain relevant in today's environment, keen marketers know that every group has several subsets to consider when targeting and not every message will effectively come across to every person. However, it can get quite costly to provide the capabilities of allowing the customer to feel the personal experience and portray and understanding of their lifestyle. Based on this, it is critical to start somewhere so many have found it useful to get the big picture view of a targeted group of consumers. Today, four distinct generations are working together for the first time in history and marketing strategies must be successful in identifying these differences and similarities and determine when, or if, a demographic gap requires a targeted marketing approach. When marketing to different generations, create the right message to attract their attention on what is new and appealing to their specific needs.

**Poster Number: 18**  
**Marketing Stereotypes: Gender and Age**  
**Amanda Currin**  
**Advisor: Dr. Betty Jean Hebel**

The purpose of this research is to identify current marketing stereotypes based on age and gender and determine if they still occur today. Many may claim these marketing stereotypes are a common marketing strategy called marketing segmentation but evidence shows otherwise. The difference between marketing stereotypes and marketing segmentation is defined and examples of stereotype marketing are provided. Advertisements of video games, children's toys, and cleaning products were examined for the presence of stereotype marketing. In addition, many dissertations and studies were analyzed and it was confirmed marketing stereotypes surrounding age and genders are still occurring today.

**Poster Number: 19**  
**Recruitment Marketing Strategies**  
**Hussein Dabaja**  
**Advisor: Dr. Betty Jean Hebel**

The research is discussing the relationship between marketing and the hiring process. In the project, there will be discussion about how companies or organization present themselves to the potential candidates and their images in the workforce. Organizations using effective marketing techniques will attract more talented potential employees.

**Poster Number: 27**  
**Healthcare Technology and Privacy**  
**Kimberly Hamann**  
**Advisor: Dr. Betty Jean Hebel**

I will be discussing the internet technology in healthcare and privacy related to patients feeling comfortable enough to use and submit health information online. How the technology is changing and how more and more people are getting on board with electronic health correspondence.

**Poster Number: 30**  
**Stroke Awareness**  
**Shantelle Herring**  
**Advisor: Dr. Betty Jean Hebel**

Stroke, a cardiovascular incident that occurs in the brain, is the leading cause of adult disability and the fourth leading cause of death in the United States. Sadly, statistics show that most of us won't go unscathed by a stroke – if it is not us personally, it is a loved one or friend. Stroke Awareness is something that needs to be widespread to move it down from the 5th leading cause of death. By using more marketing strategies, this can easily be accomplished.

**Poster Number: 34**  
**Experiential Marketing in the Retail Apparel Industry**  
**Leah Keasal**  
**Advisor: Dr. Betty Jean Hebel**

To remain viable and profitable in today's retail environment, established big-box apparel retailers, such as JCPenny and Sears, have had to make significant adjustments to their overall business and marketing strategies. In spite of their efforts to remain competitive, "fast-fashion" retailers like Forever 21 and H&M (Rosenblum, 2015) continue to thrive and gain market share. Fast-fashion retailers have been notably successful at differentiating their brands using experiential marketing, described as "the opportunity to connect consumers directly to a brand, whether through sampling, mobile marketing tours, grassroots events, a product launch or exclusive event" (WWD, 2013). In support of big-box apparel retailers' efforts to remain relevant and competitive, this research project would explore and compare the experiential marketing strategies of fast-fashion and big-box apparel retailers. The results of this study have the potential to provide big-box apparel retailers with profitable and value-added experiential marketing recommen-

dations while ultimately increasing brand relevance and market share in the retail apparel industry.

**Poster Number: 35**  
**Walking the Line; Alleviating Privacy Concerns for Mobile**  
**Karen Klingensmith**  
**Advisor: Dr. Betty Jean Hebel**

An analysis of the technology surrounding internet-connected marketing to consumers and the trade-off of privacy concerns versus welcomed messages; where does the future lie?

**Poster Number: 36**  
**Repairing Brand Image**  
**Kevin Koch**  
**Advisor: Dr. Betty Jean Hebel**

Over the past 3 decades companies have had to face major crises or scandals that threatened the bottom line and as a result, have illustrated the importance of strategic crisis management as well as the organic capability to repair brand image. In today's media environment with instantaneous access to information companies must develop the ability to effectively address potential threats to the reputation of the brand as well as to manage the flow of information that is being released. This research examines several examples of crises that rocked major corporations around the globe as well as how those companies responded and if those responses helped to mitigate or exacerbate the problem. It is clear that most companies do not have effective crisis management plans and that in the examples described the initial response made these crises worse. Most leaders lied or attempted to hide deceitfulness, negligence and especially incompetence. However, these responses only made the situations worse; however if these companies had invested the appropriate time and resources into a clear and decisive crisis management strategy brand damage could have been avoided. Companies when developing a Crisis Management Plan need to seriously address the response their leaders will provide as the single most important factor to preserving the brand. Other issues like health and safety are obviously the most important factors to address from a legal as well as responsibility standpoint. However, if an organization wishes to preserve the brand they must honestly face the public and the crisis.

**Poster Number: 39**  
**New Leader in Marketing: Mobile Technology**  
**Rebecca Pena**  
**Advisor: Dr. Betty Jean Hebel**

In today's world technology is changing quickly, it seems just not that long ago that companies were collecting addresses from prospective customers so that they could follow up with them by sending out fliers about their next great promotion. The days of buying huge newspaper and magazine spots as a way to reach your target market are almost extinct as dinosaurs. Marketing companies now have the technology to track our every keystroke when on websites to learn faster what key triggers we have in regards to purchasing. One place you will see this type of technology is on Facebook. A challenge that many marketing professionals will have to face going

forward is how to place marketing ads so that they are seen on mobile devices such as an iPad, iPhone, Tablet and Android phones.

**Poster Number: 42**  
**Cross-Cultural and Multicultural Marketing**  
**Delphine Reed**  
**Advisor: Dr. Betty Jean Hebel**

This project addresses cross-cultural and multicultural marketing from a global multicultural marketplace perspective. As new products are developed or existing products are marketed to an ever changing culture, both globally and locally, effective strategies must incorporate the culture of the people to whom the product is marketed as well as the culture of the marketers. How the culture is perceived by the marketing manager must also include an analysis of how the products, country of origin and the marketers are perceived by the consumer. This paper examines both of those concepts in an effort to discover the best ways to market to an emerging culture that is both diverse and complex.

**Poster Number: 17**  
**Defying Challenges within the Soft Drink Industry**  
**Nina Stojic**  
**Advisor: Dr. Betty Jean Hebel**

This paper explores several published articles and research studies that report on the soft drink industry as it related to the concept of globalization. With recent decreasing demands in carbonated soft drink beverages, the research explores the use of several concepts based around international growth to maintain a competitive edge within the overall beverage industry. Challenges within the soft drink industry as a whole are examined with focus on recent health concerns based around the consumption of carbonated beverages. Concerns of obesity, diabetes, heart disease, and overall health risks as they pertain to high doses of sugar and calories within the ingredients of soft drinks are addressed. Marketing strategies of popular soft drink brands such as Coca-Cola and PepsiCo are analyzed, specifically within global market emergence. Cultural norms are investigated in global markets and compared to domestically acceptable standards within the notion of marketing and advertisement. Lastly, consumer behavior, particularly related to cultural sensitivity and awareness is discussed.

**Poster Number: 54**  
**Marketing Retirement Communities Using Social Media**  
**Ellen Swies**  
**Advisor: Dr. Betty Jean Hebel**

How to provide long term elder care in the United States to the continued aging of the Baby Boomer population has moved from question, to problem, to crisis. Not only are the projected 77 million baby-boomers aging as a population as a whole, they are living longer and remaining healthier. The statistics are staggering with the projections from the US Census Bureau predicting that by 2030, the population of over 65 seniors will number nearly 72 million and comprise about 19% of the population in contrast to 40 million (13%) in 2010. Social Media has become an increasingly used medium for these seniors to interact. Pew Research Center



has found that elderly people are increasingly active on social media with a 35% increase since 2012. Given that the target market for retirement communities are members of the senior citizen population, the marketing strategy for these communities should include a comprehensive social media strategy. A two prong approach is discussed; incorporating in the marketing strategy of the retirement community social media components as well as offering programs to residents which include social media as a means to communicate and interact.

**Poster Number: 56**  
**Jackpots and BINGO: An Analysis of the Gaming Industry's Market Strategy**

**Desirae Tolbert**

**Advisor: Dr. Betty Jean Hebel**

With the need for continued growth in the gaming industry, there is a clear divide in the consumer market. The essence of a business's existence depends in part on its market mix. Casinos and social gaming alike are tasked with introducing market-development strategy that will reach new demographics, specifically millennials. The purpose of this research study is to identify how feasible this task is given the differences in generations, highlight trending initiatives, and analyze the potential marketing mix the gaming industry must deploy.

**Poster Number: 59**  
**The Issues of Marketing during a Recall or Crisis**

**Muneeb Wains-Malik**

**Advisor: Dr. Betty Jean Hebel**

This term paper and poster focus on recent events regarding a recall or crisis that has affected companies many of them that are on the Fortune 500 list. Ultimately a recall or a crisis poses significant issues for any marketing team in a company, regardless if it's the auto industry, airline or even natural gas industry. The scope of a recall and a crisis can have a devastating effect on a company or product. The Air France Concorde crash fifteen years led to a decrease in passengers on the specific jet. This led to major airlines shutting down their fleet because no passenger wanted to fly on the Concorde. If a company had a marketing strategy planned before a recall or crisis the company can save their brand image and retain customers.

**Poster Number: 62**  
**Marketing Strategies to Alleviate the Nursing Shortage**

**Gayvyth Willis**

**Advisor: Dr. Betty Jean Hebel**

With a projected nursing shortage of 1.05 million by 2022 (ANA, 2014), there have been cycles of nursing shortages but history tells us that quick fixes have not been effective. Planning for and implementing proven strategies will help mitigate this shortage. This paper proffers solutions from experts in the field that have been proven to be effective.

## Faculty Poster Presentations

**Poster Number: 63**  
**Working to Solve Compatibility Issues between Impression Enhancement and DNA Analysis**

**Dr. Jodi Lynn Barta and Jessica Zarate**  
**Biological and Health Sciences**

Impression evidence, deposited in both blood and non-blood biological fluids, is a common component at many crime scenes. Current fluorogenic enhancement methods for impression evidence can be problematic for DNA preservation and are often impractical for crime scene use due to their toxicity. This may result in a situation where a crime scene technician must make an either-or decision during evidence collection to enhance the impression and potentially damage the DNA evidence, or to gather the DNA evidence, which may subsequently destroy impression evidence. Zar-Pro™ Fluorescent Blood Lifters are successful in lifting, enhancing, and preserving bloody impression evidence providing a highly sensitive method for processing and fluorogenically enhancing bloody impression evidence that can be preserved and utilized over long time intervals, however, the viability of subsequent DNA analyses has not been established. The goal of this project was to test the viability of DNA in evidence processed with Zar-Pro™ Lifters, and to optimize a DNA extraction protocol in an effort to develop a simple, time and cost effective, non-toxic method that is safe for use at crime scenes and provides opportunities for subsequent DNA recovery suitable for forensic science laboratories. Preliminary results indicate that DNA is preserved and can be retrieved from lifted impression evidence. Research is ongoing, however, the data generated suggest that simplifying collection and preservation, while expanding the utility of impression enhancement methods to include DNA analysis, has the potential to change the way technicians approach crime scene evidence.

**Poster Number: 64**  
**Effect of Simulation on Senior Nursing Students' Patient Safety Competence**

**Jeanne Heatlie**  
**College of Nursing and Health**

The purpose of the study was to investigate whether the addition of a patient safety focused human patient simulation (PS-HPS) learning activity during the final senior semester of a nursing program changes students' perceptions of patient safety competence learning. For the pre-test post-test quasi-experimental study, a convenience sample of 48 undergraduate senior nursing students who engaged in the simulation was compared to 50 senior nursing students from the previous semester that did not receive the simulation. The Health Professional Education in Patient Safety Survey (H-PEPSS) was administered to both groups of students during the second week of the final semester of a baccalaureate nursing program and again at the end of the semester. For the first research question, the ANCOVA test determined that there was no significant difference in post-test classroom learning scores between the comparison and treatment groups, controlling for pre-

test classroom learning H-PEPSS scores,  $F(1, 95) = .000, p = .983$ . For the second research question, the ANCOVA test determined that there was no significant difference in post-test clinical learning H-PEPSS scores between the comparison and treatment groups, controlling for pre-test clinical learning scores,  $F(1, 95) = .496, p = .483$ . Implications for nursing education practice include: (a) simulation learning may not be more effective than traditional classroom learning strategies and (b) educators should continue to explore both classroom and clinical teaching strategies to advance students' patient safety competence learning. The study adds to the nursing research about the effectiveness of simulation for students' patient safety competence learning.

**Poster Number: 65**  
**Academic Service Learning (ASL) Study Abroad**  
**Mission Trips to Haiti Incorporates Franciscan**  
**Values of Madonna University**  
**Sr. Victoria Indyk and Janice Marchildon**  
**College of Nursing and Health**

Statement of the Problem: Madonna University faculty and students strive to find ways of incorporating the Franciscan values into college learning experiences. Purpose and Goals: The Haiti Mission ASL trips are a form of experiential learning that fulfills the University's Franciscan mission to instill in students Christian Humanistic Values, intellectual inquiry, a respect for diversity and a commitment to serving others. Background: Jacmel, Haiti is an impoverished and underserved state that has been affected by many natural disasters, disease and generations of systemic poverty. The Felician Sisters Mission and other faith based organizations are working to meet the needs of this underserved community. Method: A total of 5 mission trips to Haiti over an 18 month period from June 2014 to January 2016 were offered to faculty and students. Mission trip objectives and information about the trip were posted in Blackboard as well as through the ASL department. Results: Participants completed an online post survey. Some comments include: "This experience helped me see firsthand real people struggling with poverty." "I was able to experience and see the real poverty of Haiti - many Haitians do not have access to food, running water and many have no jobs to support their families." "This mission trip went above and beyond my expectations. I never imagined taking away what I did from this experience." Post survey comments demonstrated achievement of all areas of ASL purpose and goals.

**Poster Number: 66**  
**Madonna University Nursing Department Assess and Address**  
**the Needs of an Impoverished and Underserved Population**  
**Living in Jacmel, Haiti**  
**Sr. Victoria Indyk, Ph.D.**  
**College of Nursing and Health**

Jacmel, Haiti is an impoverished and underserved state that is affected by past natural disasters, disease and generations of systemic poverty. This rocky, mountainous area lacks running water, basic sanitation, and the people have little money and minimal job opportunities to pay for the basics of health, food, shelter, and

education. The purpose of this study is to assess the needs of Jacmel, Haiti and to show how the Madonna University Nursing Department is assisting the Felician Sisters Mission to address these needs. Utilizing the Leininger's Sunrise Enabler Model, this study focused on assessing the needs of Jacmel, Haiti and looked at how the Felician Sisters' Mission in Jacmel have developed programs to meet the pressing needs of scant healthcare, lack of food sources, and insufficient educational opportunities in their surrounding community. Programs provided by the Felician Sisters Mission were observed and participated in by various groups of Madonna University Nursing Faculty and Students over an 18 month period. Results of the study showed that the Felician Sisters Mission was appreciative of the help given by Madonna University nursing faculty and students. The Felician Sisters Mission has a Mobile Clinic that provides healthcare to 12 village sites. Their other programs include a Soup Kitchen that feeds 30-40 children daily, a Water Woman Blessing program to provide water filter buckets, afterschool programs to assist students struggling in studies, faith sharing and catechesis for children and adults, arts and crafts, painting instructions for young artists, and recreational activities.

**Poster Number: 67**  
**The African American Woman Un-Athlete**  
**Michelle Lewis Watts**  
**College of Education**

African-American women report less sport and physical activity (PA) and disproportionately experience more unhealthy weight gain and associated health risks than any other gender-ethnic group. Gendered cultural differences such as body ideals, femininity norms, and health and fitness approaches need to be studied to address the health, sport and PA participation disparities for Black women. An understudied area is how mass media messages present Black women, in particular, adopting a sporting or physically active lifestyle. The purpose of this study is to examine the nature of the portrayal of African-American women athletes in popular magazines to understand the gendered and cultural messages that are displayed about their sport and PA participation. We conducted a content analysis of images from five popular women's magazines coding for sport and PA performance, feminine norms, and cultural characteristics. We found that editors and writers of the magazines portrayed the majority of African-American women athletes using traditional feminine norms, reproducing a singular, dominant femininity that is not representative of most African-American women. Analyzing magazine images helped us to understand the meaning of the messages given about African-American women's gendered sport and PA portrayal in broader society.

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## Interactive Displays

**Location: Lab Room S105**  
**Lift a Print: Forensic Science Interactive Workshop**  
**Dr. Jodi Lynn Barta and Jessica Zarate**  
**Biological and Health Sciences**

Indulge your fascination with forensic science. Listen to an

overview of evidence analysis and participate in hands-on demonstrations about latent prints, serology/DNA, drug chemistry and anthropology.

**Station Number: 8**  
**Innovation of 3D Printing in Healthcare**

**Judith Malick**

**Advisor: Dr. Phillip Olla**

The innovation of 3D printing in health care is evolving rapidly and has the potential to revolutionize the medical field. One of the greatest advantages of this additive manufacturing process is its ability to produce customized and personalized medical products and equipment for patients. Objects for medical use are created layer by layer by 3D printers that transform digital files into physical objects. Understanding the various types of 3D innovations in health care includes knowledge of 3D bioprinting (organs, tissues, skin), 3D prosthetics and assistive devices, 3D medical devices, and 3D printing for health education. The objective of this research project was to examine current and future trends in these areas through analysis of available literature. An example of how 3D printing gives the world a helping hand is E-NABLE, a group of global network volunteers that uses 3D printing technology to print prosthetic hands for people who need them. To summarize our research findings for the public, infographics have been created and will be displayed at our Symposium for Research, Scholarship and Creativity table. There will information for all ages on 3D printing. Sample prosthetic hands and a 3D printer will be displayed. To bring these innovations to life at Madonna University, a "Lend a Hand Interactive Workshop" will be set up for participants to actually print and assemble a prosthetic hand.

**Station Number: 9**

**3D Printing**

**Yvonne Zaher**

**Advisor: Dr. Phillip Olla**

This interactive project will provide an opportunity for participants to assemble 3D printed materials into prosthetic hands for children. Hands assembled by participants will be distributed to children around the world by E-NABLE, a global network of volunteers who use 3D printers to print prosthetic hands for children in need.

# SYMPOSIUM FOR RESEARCH, SCHOLARSHIP AND CREATIVITY AWARDS



## College of Arts and Humanities

### Film Awards

The 2015 Capstone Film Team: for the creation of *#Enough*

Miranda Ferguson  
Tae-Hun Park  
Alexandria Pisko  
John Boudreau  
Darius Thomas  
Joseph Calhoun  
Ashley De'La McClendon  
Damion Stevenson  
Kathryn Bessega  
DeCarlo Burris  
Rachel Banks  
William Deyonker  
Hyun-Jee Kim  
Fleshner, Jeffery

### Music Awards

*Nominated for the "Liberator Awards"*

Dido and Aeneas – Student-produced opera (August, 2015)  
Produced by Aaron von Allmen, Brittany Dimmitt, and Emily Crombez

Mark Istratie: Winner of Classical Singer Emerging Artist Competition in Ann Arbor, January, 2016.

## School of Business

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

Cesar Figueras – Graduate recipient  
Thomas Oliver – Graduate recipient  
Caitlin Marchione – Undergraduate recipient  
Stephanie Lijewski – Undergraduate recipient  
Paige Schmidt – Undergraduate recipient

## College of Education

### LOAP (Learning Outcome Assessment Project) Awards

Brigid Behmer  
Patricia Alvarado  
Shannon Dusute  
Kathlina Jewett  
Helen Oziem  
Colleen Panganis  
Kimberly Samsel  
Rachael Sims  
Lisa Thomson-Baker

## College of Nursing and Health

### Franciscan Values Award for Graduate Nursing

MSN - Navdeep Singh  
DNP - Lisa Cogswell

### Innovation and Scholarship In End-Of-Life Cultural Diversity Award

Hongwei Zha – Undergraduate recipient

### Role Modeling Compassionate Servant Leadership Award

Jill K. Burress – Graduate recipient

## College of Science and Math

### CSM Academic Award

Valerie Mayra (Forensic Science)

### CSM Leadership Award

Randa Abdallah (Dietetics)

## College of Social Sciences

### CSS Outstanding Academic Achievement Award

Sitara Govender (Humane Studies) – Graduate recipient

### CSS Innovation and Scholarship Award

Anne O'Rear (Aging Studies) – Undergraduate recipient

# Madonna University Institutional Review Board 2015-2016

Vicki Ashker, DNP, RN  
College of Nursing and Health

Gail Lis, DNP, RN  
College of Nursing and Health

Patricia Rouen, Ph.D., RN  
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Co-Chair

William Kasperski, Ph.D.  
School of Business

Kelly Rhoades, Ph.D.  
Hospice and Palliative Studies

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## Thank you to our poster presentation judges

Diane Burgermeister

John Magee

Kenneth Thiel

Deborah Dunn

Michelle Moy

Michele Lewis-Watts

Glenn Fischer

Jim O'Neill

Stewart Wood

Betty Jean Hebel

Patricia Pelavin

Carol Vandenberg

William Kasperski

Michelle Proctor

Lina Jawad

Sue Anne Sweeney

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## Thank you to our Symposium organizing committee

Jodi Lynn Barta

Laura Kull

Fatima Salemassi

Kelly Brooks

Michele Lewis-Watts

Sue Anne Sweeney

Donna Bryden

Wilson Muse

Kenneth Thiel

Andrew Domzalski

Phillip Olla

Carol Vandenberg

Glenn Fischer

Patricia Pelavin

Stewart Wood

Betty Jean Hebel

Michelle Proctor

# NOTES





# C h e r e n c e

## **Coherence, an Interdisciplinary Journal of Social Justice.**

Coherence seeks to promote critical interdisciplinary discussions on urgent problems of social justice, including exploring the often-conflicting meanings of justice that arise in a diverse society. Coherence is managed and edited in joint partnership with Madonna University's Center for Research and the Center for Catholic Studies and Interfaith Dialogue. Publishing its inaugural issue in 2016, the Coherence has compiled content representing a diverse range of social justice issues from an interdisciplinary perspectives such as:

- Social Justice and Public Health
- Criminal justice
- Race
- Environmental
- Education
- Technology

In selecting pieces for publication, Coherence is committed to publishing interdisciplinary content that is both unique to academics and consistent with our mission, thereby making a substantial contribution to scholarly discourse. The interdisciplinary nature of Coherence means that the editorial board actively seeks content that is diverse in voice and perspective, often including authors from other academic fields who confront social justice issues from a different point of view.

For more information please visit [www. Coherencejournal.com](http://www.Coherencejournal.com)



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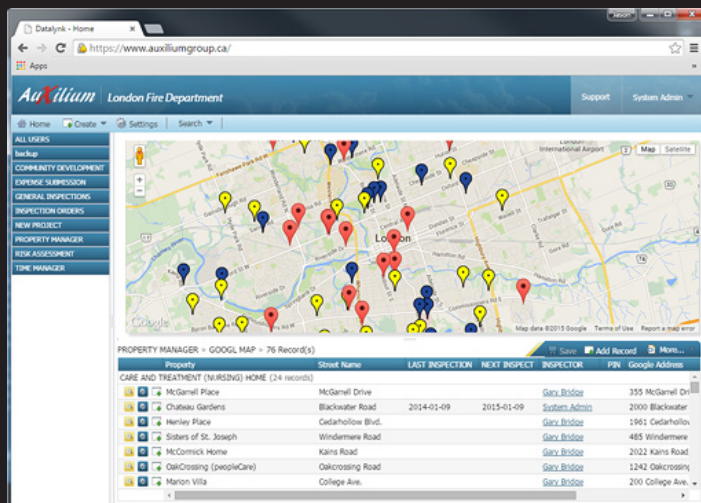
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**The Mission of the Center for Research**

is to provide leadership, coordination and support to faculty in identifying, securing, and managing resources to solve real-world problems. To encourage multi-disciplinary research, scholarship and creative endeavors that benefits the University's faculty, staff, students, alumni and community members.