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GRADUATE RESEARCH
Symposium

Monday, December 7, 2015
6:00 - 8:00 p.m. • *Campus Center Event Room*

*Showcasing graduate students' research,
capstone projects and scholarship.*
Ultra Credits are available to Stockton students.

stockton.edu/grad

Dean's Welcome Message

Welcome to the Graduate Research Symposium at Stockton University. Today we celebrate the journey and accomplishments of our graduate students who have engaged in research within the past year. Designing and conducting research can be a challenging and rewarding part of this academic journey and tonight signifies the culmination of one's empirical quest and capstone experience. I must acknowledge that this research could not have been possible without the dedicated assistance of faculty mentors who have shared their own passion, curiosity, and knowledge with these distinguished scholars.

The Fall 2015 presenters include students from nine distinct programs: American Studies, Business Administration, Communication Disorders, Computational Science, Criminal Justice, Instructional Technology, Nursing, Occupational Therapy, and Physical Therapy. Their projects signify their commitments to practitioner-based research, academic excellence, and are comprised in the oral and poster presentations listed within this booklet.

We are proud of them all. We are grateful to all who contributed to the success of this event: our graduate student presenters, dedicated alumni, faculty advisors, program directors, deans, program faculty, staff, friends, family, and all of our special guests. We encourage you to attend the sessions, view the posters, and ask these remarkable scholars about their journey.

Best regards,



*Dr. Lewis Leitner, Dean of the School of Graduate
and Continuing Studies*

Graduate Research Symposium

Campus Center, December 7, 2015

-AGENDA-

6:00 p.m. – 6:15 p.m. Welcoming Remarks Campus Center
Event Room

6:15 p.m. – 8:00 p.m. Poster Session Campus Center
Event Room

Doctor of Physical Therapy

Master of Arts in American Studies (CCM5)

Master of Arts in Criminal Justice

Master of Arts in Instructional Technology

Master of Business Administration

Master of Science in Communication Disorders

Master of Science in Computational Science

Master of Science in Nursing

Master of Science in Occupational Therapy

Thank you



Academic Affairs
Campus Center Operations
Chartwells
Computer Services
Event Services
External Affairs
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Plant Management
Print Shop
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Marleen Hartley, Poster Presentation

Disability, Mental Health Needs and Healthcare in the Netherlands

As part of AOTA's centennial vision, considering global connections and diversity, occupational therapy in the United States benefits from the mutual exchange of practice experience across the world. It is in light of this idea that we can appreciate and compare healthcare, disability, mental health and the role of occupational therapy in the Netherlands.

The Netherlands is known for its socially progressive healthcare and treatment approaches. This presentation takes a closer look at how disability, mental health and the role of occupational therapy are integrated components of this system. The core of this presentation is a case study of a client with advanced COPD and serves to compare and contrast interventions used in the Netherlands, at the same time considering possible impact on clients and the provision of occupational therapy in the Netherlands compared to the United States.

Additionally, mental health in the Netherlands is an important part of its health benefits as it provides 100% coverage. Many facilities, offer a combination of in-patient as well as a wide variety of ambulatory services. Although funds and treatments are easily accessible, similar to the United States, only a small percentage of occupational therapists provide services in this particular sector.

-Presentations-

Doctor of Physical Therapy

Jennifer Pesce, Easel Presentation

Use of the WOMAC Tool to Measure Functional Outcomes in Patients with Total Joint Replacements

A retrospective study of Western Ontario and McMaster Universities Osteoarthritis Index in Total Joint Replacement patients was performed on 100 patient charts over a 2 year span. The objective of the review was to determine if patient's subjective improvement of pain, stiffness and function was higher at 6 months post surgery if they received Physical Therapy on the day of Surgery (post op day 0).

Master of Arts in American Studies

Adam Capritti, PowerPoint Presentation

The Roebling Connection: Washington Roebling as a Dramatic Hero

This study compared an historical figure with his dramatic representation. Washington Roebling, Chief Engineer of the Brooklyn Bridge and Colonel in the American Civil War is portrayed in Mark Violi's "Roebling: The Story of the Brooklyn Bridge." The purpose of this study was to compare the historical Roebling with the dramatic portrayal as well as some archetypes of heroes in 19th century American theater.

Daniel Dinnebeil, PowerPoint Presentation

The Economic Gains of Suffering: The Invisible Hand of GDP

Suffering is our most precious resource. It is the primordial basis for society. After all, society is organized around the avoidance of pain and the pursuit of happiness, called the pleasure principle in psychology. Because pain and pleasure are two sides of the same coin, this can just as well be called the pain principle. Actually, this is not an exercise in semantics. Research has shown that how something

is framed will elicit different responses to the same set of facts; i.e., the half-full versus the half-empty glass. For economic decisions, this includes risk-seeking versus risk-averting behavior, and applies to the economy as a whole. In America, GDP is the indicator used, which, as an abstraction of value, considers the pleasure side of our economy. However, this “value” subsumes the true costs of human, animal, and plant suffering. Instead, because the root of all value is suffering, the pain side of our economy should be considered. In the barest sense, this is disutility (e.g., physical effort, loss of leisure), risks (e.g., unintended consequences), and externalities including social costs (e.g., injustice, inequality, loss of social capital), ecological costs (e.g., pollution, depletion of natural resources), and mental costs (e.g., negative psychic capital, anxiety). Therefore, I propose the “economics of suffering” to actually address this fundamental question of how suffering is allocated. In short, we need to ask, “How much suffering, who gets to suffer, and what do we suffer for?” Overdetermined by our socioeconomic relations, we can do more to end suffering.

Jennifer Robinson, PowerPoint Presentation

A Production History of “The Passionate Pilgrim” by Margaret Crosby Munn

This independent study concentrated on the production history of the play “The Passionate Pilgrim,” written in 1910 by Margaret Crosby Munn. Some focal points were the times, places and the significant difference in venues while the play was in production. Some of the key people involved such as the producers, the writer, and the music director have been researched to gain a better perspective on the production history and how it may have been received by the public. The beauty of this play may have been lost, but it can be reimagined by presenting a brief synopsis of the play and an interpretation of pieces from the musical score that was produced for the play. The final goal will be to add this production history to the already existing web presence for the author.

Master of Science in Occupational Therapy

Caroline Jordan & Gabrielle Richardson, Poster Presentation
Occupational Therapy’s Role in Health & Wellness: An Experiential Learning Activity

This poster describes a successful experiential learning activity designed to educate MSOT students about the role of occupational therapy in health and wellness initiatives and advocate for the profession in a public forum. First year MSOT students collaborated in groups to research a health and wellness topic relevant to the field of occupational therapy. Each group prepared an informational poster while receiving feedback from both faculty and other classmates throughout the design process. The students presented their posters at Stockton University’s Wellness Day Fair in March 2015. Students completed a survey and a reflection regarding this experience. This poster reflects the student perceptions of an experiential learning activity in the occupational therapy program using a mixed methods design.

Gabrielle Richardson, Poster Presentation

Health Literacy & Written Materials: Impact on Health

Health literacy reflects a person’s capacity to make health care decisions based on skills necessary to access, process, understand, and implement appropriate self care information. This presentation reports findings of health literacy levels required for written health care materials and considers the impact of these findings for health in Atlantic County. Furthermore, assessment tools such as the Newest Vital Sign (NVS) and the Simple Measure of Gobbledygook (SMOG) were analyzed to provide health care providers with a quick way to assess the readability of their written materials they are providing to clients. Additionally, quick and easy tips are provided to help improve clients overall health literacy skills so that they can understand their health information fully.

The proposed hypothesis is the implementation of NP clinics will reduce the number of ER admissions related to chief complaints secondary to chemotherapy side effects: nausea, vomiting, fatigue, shortness of breath, pain, fever. A quantitative method will measure patients' perceived management of symptoms using a numeric scale 0-10, 0 being no management and 10 being optimal management. Benefits performing this study include reducing acute care expenditures. Additionally, improved symptom management of chemotherapy induced side effects such as nausea, vomiting, shortness of breath, pain, and depression will improve quality of life of patients receiving cancer treatment.

Tina Wismar, Poster Presentation

Reducing Stress and Preventing Burnout: Introduction of a Nurse Practitioner as a Critical Care Ambassador

The intensity of the critical care environment exposes nurses to a high level of stress, increasing the risk of burnout leading to turnover. Nationally, the turnover rate for nurses is approximately 20%. Based on the predicted nursing shortage to increase by 2- 3% annually and the estimated cost of \$65,000 to replace each burned-out nurse, lowering the turnover rate is a national and organizational priority. Burnout results from the depletion of emotional and physical coping resources in response to chronic job stress. The purpose of this study is to explore if the addition of a nurse practitioner (NP) as a critical care ambassador reduces nurse stress. Using a pre-test/post-test design, a convenience sample of nurses from three critical care units will complete the Maslach Burnout Inventory and Hospital Anxiety and Depression scale before the introduction of the NP ambassador to the unit, then at 12 weeks after the intervention. The role of the NP ambassador will be to support the staff with the factors that contribute to burnout such as moral distress and issues with patients' families. To address moral distress, the NP will lead debriefing and grief expression sessions. The NP will serve as a family and patient educator, advocate, and liaison between physicians, nurses, and other members of the interdisciplinary team through daily rounds. The proposed results of the study will support the addition of a NP critical care ambassador to the critical care team to reduce burnout by improving the critical care workplace environment.

Ashley Vaccaro, PowerPoint Presentation

Making the Physical Digital: Hammonton History Project

The town of Hammonton is a relatively small town that resides in Atlantic County, New Jersey and is better known as the "Blueberry Capital of the World." This town, which contains families who have raised their children and grandchildren for generation after generation, is approaching its 150th anniversary, or Sesquicentennial, in 2016. Hammonton has a rich history filled with agriculture, factories, and even presidential encounters. To celebrate the town's accomplishments, Stockton University's satellite campus Kramer Hall has teamed up with community members, faculty, staff, undergraduate, and graduate students to create a year full of events memorializing the culture of its hometown. As part of this memorialization, the Richard E. Bjork Library has created a digital collection dedicated to organizing the different facets that encompass the town's history. At this current time there are two sub-collections: Hammonton History Project Postcards, and Hammonton History Project Photographs. These two collections have hundreds of materials which the community is able to access at the click of a mouse. This presentation discusses the process of digitizing and uploading photographs to the digital collections software CONTENTdm. The purpose of digitizing these collections is so that the community will always have a way of accessing their rich history; so that it may never be lost or forgotten. It is projects like this one that pave the way for future museums, historical societies, and towns to come.

Master of Arts in Criminal Justice

Abigail Bielecke, Hayley Leiva, & Stephanie Medvetz,

Poster Presentation

A Content Analysis Examining Media Reports of Rapes and Gang-Rapes in India

Rape is one of the most serious forms of violence against women and affects victims and families worldwide. As a result of its prominence, rape (and gang-rape) is reported in news media almost daily. The current study uses a content analysis approach to examine approximately 1,800 news stories reported between 2011 and 2014. The frameworks of rape (and gang-rape) news stories in India are examined, such as victim and offender demographics, along with more specific information about the crimes committed. Findings and policy implications will be discussed.

Brianna Johnston, Poster Presentation

Concentrated Crime in a Casino Town

Public housing properties are a feature of most American cities. However, their structural characteristics, residential requirements, and in recent years, dilapidation, have continued to isolate these structures, and their inhabitants, from middle-class America. Drawing upon tenets from social disorganization theory, defensible space literature, criminogenic hotspot literature, and environmental criminology, this study sought to explain the relationship between public housing properties and criminal offenses as compared to offenses citywide. In a citywide analysis of Atlantic City, New Jersey, reported murders, robberies, sexual offenses, and shots fired (from July 2012 through July 2015) were examined. Offenses were geo-coded using ArcMap software. The results deviated from other empirical examples. It was revealed that public housing properties in Atlantic City were not more criminogenic when compared to other city structures. Specifically, public housing properties experienced very few murders, robberies, and sexual offenses when compared to the city in general. Because of these findings, the true criminogenic sites of the city were more accurately highlighted – the citywide hotel casinos and the iconic Atlantic City boardwalk.

in America. This initiative was launched with best practices being addressed to make healthcare organizations safer and the hope to decrease morbidity and mortality. The purpose of this study is to understand the impact of rapid response teams in hospitals and desired outcomes. A cross-sectional, descriptive study will be performed utilizing a convenience sample who have experienced a rapid response call. Participants will be recruited from a major medical center on designated floors in the hospital with administrator consent. A chart review audit will be conducted after a rapid response call. The audit will consist of questions relating to patients condition prior to the call and after the call and the end result of patient's condition. It's important to understand if a rapid response team is making a difference with morbidity and mortality. This study will provide valuable information for healthcare organizations regarding the need for rapid response teams saving lives and the benefits associated with reducing morbidity and mortality. The main goal regarding the problem is to decrease the rate of negative outcomes in hospitals.

Jeffrey VonSchmidt, Poster Presentation

Primary Care to Lessen Chemo-Related Fatigue

Chemotherapy-related side effects result in hospital admissions in 63.2% of patients who present to the emergency department. Incremental expenditures can reach \$45 million per year, in the US, for hospitalizations or emergency room visits. Chemo-related fatigue remains a primary barrier of improving quality of life in patients undergoing chemotherapy. The purpose of this research is to answer two questions: Does the implementation of general practitioner/nurse practitioner led clinics reduce the triaging of emergency room admissions related to cancer related fatigue? Does the implementation of nurse practitioner/general practitioner led clinics result in improved management of cancer related symptoms? This non-experimental design will use a convenience sample of cancer patients who present to the emergency department of a major cancer center, after receiving chemotherapy.

Angela Romero, Poster Presentation

Advance Care Planning in America: Measures to Increase Awareness and Attainment

According to the U.S. Census Bureau (U.S. Census Bureau, 2015), one in five Americans is projected to be 65 and over by 2030 and by 2044, more than half of all Americans are projected to belong to a minority group. Results abstracted from a Health Styles Survey from 2010 were designed to be representative of the U.S. population and demonstrated that only 26.3% of the population studied had an advance directive. Lack of awareness was the most frequently reported reason for not having an advance directive. Data also indicated racial and educational disparities in completion of advance directives.

Differences in race, nationality, socioeconomic status and educational level are factors that have been found to influence a thorough awareness of advance care planning. The Patient Self Determination Act (PSDA) endorses that all individuals have the right to autonomy and that self-determination at the end of life is to be respected.

Therefore, it is critical that healthcare providers find creative ways to educate and empower patients and family members.

The purpose of this study seeks to investigate how standardized education and discussions in primary health care, regardless of age, will effectively inform and empower individuals about advance care planning. Individuals can then make educated decisions and be assured that both their wishes would be honored and the burden be lifted from family and loved ones.

Wendy Stratton, Poster Presentation

The Effect of Rapid Response Teams and Desired Outcomes

The number of deaths of patients in hospitals is at an unacceptable rate. The Institute of Medicine estimates about 98,000 people die each year in hospitals in the United States. Healthcare organizations face challenges with medical errors and near misses. The names of patients that hospitals save are unknown as the focus tends to be on unwarranted deaths. The 100000 Lives Campaign is a nationwide initiative that was introduced by the Institute for Healthcare Improvement (IHI) in order to reduce morbidity and mortality

Master of Arts in Instructional Technology

Marquita Fitzpatrick PowerPoint Presentation

Infection Protection Basics

This study examined how supplying basic infection control information would influence the understanding and behaviors of visitors in the units of Voorhees Pediatric Facility. Participants were given Pretests to check prior knowledge about infection control. Participants then partook in a 3 lesson learning module as well as a simulation session. Participants were then given Post tests and assessments using rubrics to measure results. Families participating in the instruction showed an increase in knowledge and performance of favorable behaviors concerning infection control. According to the surveys at the end of the learning module, participants found the information and learning experience to be beneficial.

Master of Business Administration

Kristin Banks, Frank Naumann, & Vaughan Reale

PowerPoint Presentation

Integrating Traditional and Social Media Marketing at the Stockton University Speech and Hearing Clinic

The Speech and Hearing Clinic (SHC) is a special program/entity within the Stockton University School of Health Sciences. It has been servicing Atlantic County and surrounding areas for approximately 40 years, delivering speech, language and hearing evaluation services as well as rehabilitation services. The graduate program in Communications Disorders, of which the clinic is a part of, is on track to receive accreditation as a "Masters Level Graduate Program in Communications Disorders" in spring 2016. Per the SHC website, the clinic has two major purposes: "to serve as a training ground for students who are preparing to become speech language pathologists and to provide therapeutic and diagnostic services for children and adults with disorders of communication." As such, the SHC has four customers; the students enrolled in the clinical program, the patient's

serviced by the clinic, the “feeder” entities referring clients to SHC and the organizations recruiting students from the clinic, due to the experience gained while working under the “careful supervision of certified speech language pathologist and audiologist.

The Integrated Marketing Communications (IMC) plan developed for the SHC aims to achieve annual increases in patient volume and socio economic diversity, additional attention from potential employers of graduate students participating in the SHC program and to increase funding thru greater donations and fee revenue. Thoughtfully, introducing Social Media marketing tools such as Facebook and email drip campaigns and coordinating them with traditional tools such as public service announcements, tri-fold brochures and special events, can yield inexpensive and significant performance enhancements.

Johanna Rowland, Table Top Presentation

IMC Plan for Cape Counseling Services

The purpose of this research is to create an Integrated Marketing Plan utilizing Social Media as well as traditional advertising to increase visibility, donations, volunteerism and commerce for Cape Counseling Services in Cape May County, NJ.

Jessica Salway & Samantha Vicchiarelli, PowerPoint Presentation

Milton & Betty Katz Jewish Community Center “Membership”

The mission of the Milton and Betty Katz JCC of Atlantic County is to foster an appreciation of Jewish identity, values and culture, to promote the health, education and welfare of our members, to strengthen Jewish family life, to build a sense of community and ensure Jewish continuity for our children, our children’s children, and ourselves. The Jewish Community Center prides itself on building a sense of community. The center stands to be recognized as a place that is comfortable with a relaxed atmosphere. The center wants to create an environment for members to come and “meet people”. The Benchmarking project states that “The JCC creates a sense of belonging for those it touches.” And “The JCC consistently delivers an outstanding experience for its members and users.

as it changes from sending facility to ambulance to receiving facility. Music has been widely researched and recognized as an effective non-pharmacological means of easing pain and anxiety in multiple sub-specialty areas of healthcare. Additional studies indicate that patients who are able to select their own favorite type of music to be played will have the greatest benefits. The research question of this proposal is as follows: does patient-selected music decrease anxiety during critical care transport?

Adeline Persaud, Poster Presentation

The Effects of Animal-Assisted Therapy (AAT) on the Nursing Staff

This presentation examines the positive effects that Animal-Assisted Therapy (AAT) can have on the nursing staff in acute care hospitals. This study explores how stress and anxiety can be significantly decreased with the assistance of AAT. The purpose of this study is to investigate if AAT is effective in decreasing stress and anxiety for nurses during their shifts. The study hypothesizes that nurses who participate in animal-assisted therapy will have reduced levels of stress and anxiety. Currently, there is a gap in literature on the effects that AAT can have on the nursing staff. Existing studies have proven that AAT can positively affect hospitalized patients during their moments of stress and anxiety. The study was chosen because if evidence supports positive outcomes, then the nursing staff will gain new insight on effective ways to cope with stress and anxiety in the workplace. The study will be conducted in an acute care setting where the nursing staff can voluntarily choose to participate. Nurses will be randomized into an intervention group or to a control group. Nurses in the intervention group will have sessions of feeding, touching, and commanding tricks to dogs. Data will be collected before and after each session through the Spielberger State Anxiety Inventory (STAI). Based on supportive data, studies have shown that animals can positively affect the overall psychological well-being of individuals. This study provides promising data that can be beneficial to all nursing staff within acute care settings.

care they received during a hospital visit. This research focuses on instituting nurse initiated pain management protocol to improve satisfaction scores in the Emergency Department (ED) setting. It has been established that more than 70% of patients present with pain as their main symptom, making pain the most common reason people seek ED care. Pain management is a relevant issue for nurses because they are often the first staff member a patient sees with a pain complaint. This research would serve to create protocol that would help nurses provide effective pain relief to their patients with less delay. This study will utilize a convenience sample of patients presenting to the emergency room with acute pain. Nurse initiated pain management will be implemented and Emergency Department Community Assessment of Healthcare Providers and Systems (EDCAHPS) survey scores will be used to measure the effectiveness of the intervention. EDCAHPS is a random survey instrument that measures patient satisfaction as it guides The Centers for Medicare and Medicaid Services (CMS) reimbursement. The purpose of this study is to demonstrate that when patients' pain is addressed by nurse initiated pain protocol their perception of the quality in care they received will improve.

Lisa Lincoln, Poster Presentation

The Effects of Self-Selected Music on Patient Anxiety During Ground Interfacility Critical Care Transport

Though critical care transports are relatively common, there is little known about transport-related anxiety. As of 2013, an estimated 500,000 individuals undergo critical care transports annually. These patients are usually critically ill, and require transport to another facility for a higher level of care or specialized services not available at the sending hospital. These transports are often unexpected by the patient, which can increase anxiety or stress. Unrelieved stress or pain results in increased heart rate, blood pressure, respiratory rate, disturbed sleep and appetite, and increased anxiety. Anxiety can increase pain perception, therefore increasing negative physiological effects. By using nursing interventions such as music to manipulate the environment for optimal patient comfort, critical care transport nurses help the patient adapt to the situation and the environment

Through our integrated marketing communication plan, we will work with Ms. Fink and Ms. Ruth to strengthen the image of the Jewish Community Center. The center wants to increase membership and to show members what they have to offer. The client wants to reiterate what membership at the center offers. Through our integrated marketing communication plan, the clients would like to solve the problem of people perceiving membership as "pricey". The Jewish Community Center wants to make it known that they are competitively priced for the services that are offered. Many of the services offered at the center are included within the parameters of the membership fees. The center offers discounted memberships to families, couples, and seniors unlike other fitness facilities in the area, which do not.

Master of Science in Communication Disorders

Stephanie Darrow, Poster Presentation

Medical Personnel Knowledge of the Frazier Free Water Protocol for Implementation in Care Facilities

Dysphagia is a swallowing disorder that can affect any individual, especially the elderly. When dysphagia becomes a risk to an individual's health, modifications are typically made to the diet. Diet textures and consistency changes in conjunction with strengthening/positional strategies are the leading changes to assist dysphagic patients, depending on severity. Though subtle, these changes in diet have a great impact on hydration, quality of life, and other health issues. Changes in diet consistencies can especially reduce the risk of aspiration pneumonia. How do you meet hydration needs and improve quality of life? A relatively recent option is a free water protocol which allows some access to water between meals for patients on thickened liquids. This option has specific guidelines and regulations that must be met before considering if a patient qualifies. Unfortunately, this option may be less accessible than imagined. Physicians must sign off on this request and ensure that appropriate measures are being done by staff to safely permit

water consumption. Since this protocol is relatively new, this study surveyed speech-language pathologists and nurses to determine their knowledge and comfort with implementing a free water protocol to dysphagic patients. Preliminary findings determined that more staff knowledge and training is necessary for speech-language pathologists to recommend this protocol for implementation. A limited sample size may allow for further research. Further research may also include other professional opinions including physicians and respiratory therapists.

Abigail Forness & Nicole Mortellite, Poster Presentation
Effects of Autism Movement Therapy on the Speech and Language Goals in Children Diagnosed with Autism Spectrum Disorder

Social communication is an essential skill for all children. Most typically developing children pick up on the natural flow of social conversations from their parents, peers, and educators. However, for children with Autism Spectrum Disorder (ASD), social communication cues such as eye contact, turn taking, emotion, and personal space are not so easily absorbed. These skills are lost on children with ASD. Without these skills, children with ASD are at a disadvantage when it comes to school, extra curricular activities, and eventually the workforce. Research has shown that there are many interventions available for children with ASD and their families that aim to improve social communication skills. However, there is little research on the effects of a fairly new intervention method called Autism Movement Therapy (AMT). The purpose of this study was to investigate the impact of AMT on speech therapy goals such as social communication (eye contact, conversation skills etc.). Three boys, two eight year olds and one twelve year old, participated in this study. All were diagnosed with ASD. The results showed improvements on current speech therapy goals for all three participants.

Master of Science in Nursing

Katelyn Battistelli, Poster Presentation
Abdominal Postoperative Surgical Incision Protocol

Surgical site infection continues to contribute toward the increased hospital stay, spending, and mortality rates of acute care patients postoperatively. There is an estimated 500,000 surgical site infections reported yearly within the United States acquiring an excess of 3.7 million inpatient days and over \$1.6 billion extra dollars spent. Many different strategies have been introduced in an attempt to eliminate infection, although none pertaining to incisional site care. In this prospective, longitudinal study, a group of postoperative abdominal surgical patients will be evaluated in a hospital setting. Through the use of proposed incisional care interventions and a surgical wound classification scale data will be collected, in order to support an optimal surgical wound protocol. The purpose of this study is to evaluate the use of a wound care protocol on abdominal surgical procedures, with the goal of reducing postoperative wound infection rates and healthcare cost. This study will be performed utilizing a convenience sample of a ethnically and racially diverse population who will be undergoing an abdominal surgical procedure. Participants will be recruited from the preoperative appointment at a local community medical hospital and consent for postoperative tracking of wound care for inpatient hospital stay will be obtained. The implementation of standardized wound care protocol will enhance evidence-based practice and improve patient outcomes.

Darcy Campisi, Poster Presentation
Do Nurse Initiated Pain Protocols Implemented in an Emergency Room Setting Improve Emergency Department Consumer Assessment of Health-care Providers and Systems (EDHCAHPS) Survey Scores?

Accurate and timely evaluation of pain has been the focus of much research and it has been found that treatment often falls short. 60% to 80% of pain is under treated often due to addiction fear, judgmental attitude and lack of knowledge. Inappropriate pain management influences patients' perception of the quality of

Master of Science in Computational Science

Catherine Rosenberg, Poster Presentation

Accurate Limb Volume Computation for Lymphedema: A Comparison of Mathematical Approaches

Currently, the rectangular method for calculating the volume of a limb is the standard of choice amongst plastic reconstructive surgeons who specialize in surgical interventions for lymphedema, which was initially pioneered in Europe and Asia and has recently come to the United States. However; prior mathematical research has proven that Simpson's Method is more accurate than the rectangular method when calculating volume. The current method for calculating percent improvement is based off of the percent decrease formula using the unaffected limb as the accepted value for the volume of a limb. Unfortunately, this method leads to more mathematical errors than comparing pre-surgery volume of affected leg to post surgery volume of the affected leg.

Microsoft Excel and Maple 15 were used to evaluate the various numerical methods for calculating volumes of rotation. The methods that were evaluated included the use of Cubic Splines, Least Squares Trend Lines in Microsoft Excel, Simpson's 1/3 method, Simpson's 3/8 Method, Trapezoid Method, and Riemann Sums. Each of these numerical methods has an associated error term; therefore, this study looks for the method that incorporates the least error in the volume calculation. It is the intent that the plastic and reconstructive surgeons who actively use these surgical interventions for lymphedema will use the most effective method for volume calculations in their evaluations of total limb volume.

Erin Gallagher, Poster Presentation

Preparation of SLPs in the AAC Use and Implementation Process for the Adult Population

An individual experiencing a temporary or permanent disability impacting his or her expressive communication abilities may require the use of augmentative and alternative communication (AAC). It is within the scope of practice of Speech-Language Pathologists (SLPs) to work as part of a multidisciplinary team to assess for and implement the use of AAC for those requiring such services. It has become increasingly evident, however, that many SLPs exhibit a lack of confidence in this process especially with the adult population. In an effort to understand the preparation of SLPs, the present study seeks to identify the training level of these professionals with regard to the implementation and use of AAC within the adult population. The purpose of this study was to identify whether or not the training level of SLPs impacts the amount of clients on their caseloads who utilize AAC and if training has an effect on a client's overall AAC compliance. Participants consisted of licensed and certified SLPs working within the United States who reported utilizing AAC with their clients. Participants were given a web-based survey which asked questions about their clinical setting, the percentage of their caseload that utilizes AAC, the level and types of training they have received with regard to AAC, and their confidence levels with assessing for and implementing AAC programs. It was found that there was a significance between training level and the number of clients who utilize AAC on the SLP's caseload. There was no significance between training and confidence levels.

Ashley Kendall, Poster Presentation

Analysis of Respiratory Strength Training and Dysphagia in Multiple Sclerosis Patients

More than one-third of the multiple sclerosis (MS) population has a swallowing disorder, which is the most common cause of morbidity and death in the late stages of MS. This is due to a subsequent diagnosis of aspiration pneumonia and dehydration, secondary to MS. The purpose of this study to address the following questions:

- 1) How prominently do SLP services factor into dysphagia intervention in the MS population?
2. How often are SLPs using respiratory muscle strength techniques for dysphagic MS patients as a treatment approach?
3. Do SLPs and MS patients think that treatment focused on strengthening the respiratory muscles can help alleviate dysphagia?

The researcher used Qualtrics to distribute two web-based surveys. The design of the study featured two surveys; the first consisted of a 6 point Likert scale survey to forty-four speech-language pathologists who have worked with dysphagic multiple sclerosis patients; the second survey, administered to thirty-seven multiple sclerosis patients targeted the following demographics: age, type of diagnosis, degree of swallowing difficulty, and use of therapeutic techniques. After the surveys were completed, the researcher calculated percentages for responses to questions. The results revealed that there is minimal SLP involvement in dysphagia intervention despite the fact that they are the primary provider. According to ASHA, it is the primary role of a SLP to evaluate and treat infants, children, and adults with feeding and swallowing disorders (dysphagia) (ASHA, 2009). The SLPs that answered this survey according to a 6 point Likert scale, “usually” used respiratory muscle strength training techniques. Although there was insufficient evidence indicating whether dysphagia was alleviated post training, SLP’s subjectively indicated on a 6 point Likert scale, that they “usually” felt that treatment focused on strengthening the respiratory muscles.

Sabrina LeVan, Poster Presentation

The Impact of Stuttering Treatment Method, Frequency, and Duration on the Self-Stigma of Individuals who Stutter as Assessed by the Self-Stigma of Stuttering Scale (4S)

Stuttering typically involves some aspect of stigma. Stigma can be defined as a trait or attribute that is devalued by a given social group. An individual who stutters may also experience self-stigma, which occurs when a person internalizes the external stigma they have experienced from the public. A review of the literature in this area reveals that self-stigma can lead to an array of issues such as anxiety, difficulty coping with stuttering, and low self-esteem. Michael Boyle developed the Self-Stigma of Stuttering Scale (4S) to assess the self-stigma of adults who stutter. The purpose the study was to examine the difference of self-stigma levels in individuals with various treatment experiences as measured by the 4S. Specifically, the research questions addressed differentiating self-stigma levels in individuals who receive higher frequency and longer duration therapy and the treatment types in which individuals exhibited less self-stigma levels. Adults who stutter were recruited by the National Stuttering Association and were electronically administered the 4S and demographic questions related to their treatment experience. Respondents reported a variety of treatment backgrounds, none of which revealed significant findings when compared to their 4S scores. Future research could include a wider range of participants, recruited from a variety of organizations to determine if treatment differences are involved in differentiating levels of self-stigma.