## Director'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 their empirical quest and capstone experience. I must acknowledge 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 2017 presenters include students from seven distinct programs: American Studies, Business Administration, Data Science & Strategic Analytics, Environmental Science, Nursing, Occupational Therapy and Physical Therapy. Their projects signify their commitment to practitioner-based research and academic excellence, and they are outlined in the oral and poster presentations listed within this booklet. We celebrate the diversity and innovativeness of the research presented this evening and promote interdisciplinary research conversations among the campus community.

We honor Stockton University's commitment to the research projects presented here tonight. To facilitate the communities' commitment to graduate research, each presenter is wearing a nametag along with a royal blue ribbon. Each additional ribbon is also significant and honors:

Graduate Program Directors black ribbon
Research Advisor white ribbon
Distinguished Graduate Research Fellowship red ribbon
Graduate Student Council funding yellow ribbon

We are proud of the presenters. We are grateful to all who contributed to the success of this event: our graduate student presenters, dedicated alumni, faculty advisors, program directors, program faculty, deans, 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 personal journey.

Best regards,

AmyBeth Glass, Ed.D.

Director of Graduate Enrollment Management

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## Graduate Research Symposium

## Campus Center, December 4, 2017

#### -AGENDA-

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

Event Room

6:15 p.m. – 7:00 p.m. Poster Session Campus Center

Event Room

Doctor of Physical Therapy

Master of Arts in American Studies (CC-M5)

Master of Business Administration

Master of Science in Data Science & Strategic Analytics

Master of Science in Nursing

Master of Science in Occupational Therapy

Professional Science Master's in Environmental Science

The names in this program are those of graduate student presenters as of November 14, 2017.

#### -Presentations-

## **Doctor of Physical Therapy**

Adam Popowitz, Distinguished Research Fellowship Recipient

Advisor: Dr. Patricia McGinnis

Poster Number: 1

Title: Non-traditional Students Facing Microaggressions in Postsecondary

Healthcare Education

This study examined non-traditional student exposure to microaggressions in the pursuit of health care related education. Non-traditional students, as outliers within the student population, are gaining increased presence within the undergraduate student body. While diversity among students may be recognized as valuable, it appears that faculty perceptions may not reflect this. Microaggressions, subtle insults inflicted toward individuals strictly due to their membership within a particular group, have remained a threat to heterogeneity within student populations as perpetuated by faculty and students. Research has shown that microaggressions have been directed toward racial minority groups on college campuses, reducing self-esteem. While these obstacles for the aforementioned groups have been well documented in the literature, assessment of microaggressions directed toward non-traditional students remains incomplete. For purposes of this study, non-traditional students were defined as those who are 25 or older, who did not start college immediately following high school or who have returned after an extended absence of enrollment in any higher education program. Therefore, this study was performed for the purpose of evaluating non-traditional student exposure to microaggressions and the impact on their ability to succeed in academia. Data was collected through the use of an online survey tool distributed to students and faculty. Conclusions drawn from this study indicated that non-traditional students have a distinct experience while facing more challenges as compared to traditional students in the pursuit of health care related higher education. Despite this, they continue to exhibit great strength in the academic environment.

#### Master of Arts in American Studies

**Courtney Stewart** 

Advisor: Dr. Thomas Kinsella
Campus Center Meeting Room: 5

Title: Museum of the American Revolution Internship

The Development & Membership Office at the Museum of the American Revolution helps fund events and exhibits at the institution and provides opportunities for individuals and families to attend the museum multiple times to truly experience all the galleries and programs offered. This presentation highlights the experience of an internship, which involved assisting with donor and grant research, data entry, database management, mailings, filings and updating membership records. Details of the museum events, guest lectures and special programs are also discussed.

Brianna Cardinale-DeCicco Advisor: Dr. Deborah Gussman

Advisor: Dr. Deborah Gussman
Campus Center Meeting Room: 5

**Title:** Excavating Lost Literature: Recovering Olive Logan's Novel, *They Met by* 

Chance: A Society Novel

The purpose of this ongoing study is to research and locate the voice of 19th century American actress, novelist, lecturer and women's rights activist, Olive Logan, by recovering her novel, *They Met by Chance: A Society Novel* (1873). In her own moment, Logan and her work were well received; but, over time, her voice waned out, floating beyond the periphery of American literary history and into erasure. *They Met by Chance* depicts the socially and economically elite—high society—and the oppressive culture they create. The novel is primarily set in the beach resort area of Long Branch, New Jersey, and reveals controversial issues of identity, race, gender and immigration as well as social status in America during the late 19th century.

#### Stephen Reynolds

Advisor: Dr. Thomas Kinsella

Campus Center Meeting Room: 5

Title: Stories from the Front Lines: The Atlantic County Veterans Museum

The Atlantic County Veterans Museum currently resides within the historic Daniel Estell house in Estell Manor. Encouraged by County Executive Dennis Levinson and former County Executive Richard E. Squires, in conjunction with the Veterans Museum Committee, the Atlantic County Veterans Museum is dedicated to providing a tribute to Atlantic County veterans and presenting their stories through donated artifacts, documents and photographs. To accomplish this tribute for local veterans, a process of gathering, researching and preserving artifacts personally donated by local veterans and the overall community unfurls, overseen by the head curator, Nick Leonetti. In addition, a number of eager volunteers, including the researcher, aid Leonetti in this process in order to create historically accurate exhibits, preserve local history through the preservation of donated artifacts, and increase community outreach and cooperation. This presentation seeks to highlight the efforts made by the curator, the volunteers and the local veteran community in preserving local history within the Atlantic County Veterans Museum.

#### Master of Business Administration

Sarina Gaughan

Advisor: Dr. Diane Holtzman

Table Number: 1

Title: "I Manager" Project

The "I Manager" project reflects the types of decisions a student in the MBA program would make as a manager, as well as the reasons behind those decisions. It discusses factors including biographical and cultural facts, education, strengths and weaknesses, and personal values. It also shows an analysis of the results from multiple personality assessments taken on the Pearson My Lab platform.

**Allison Henry** 

Advisor: Dr. Diane Holtzman

Table Number: 2

Title: Integrated Marketing Communication Plan

This integrated marketing communication plan was created for the local nonprofit Unexpected Wildlife Refuge. Information about the organization's background and organizational strategies was gathered first via public information followed by interviews with a key employee. With heavy input from the key employee, three goals and objectives were established as the focus of the plan. A situation analysis was then conducted to examine the Refuge's strengths, weaknesses, opportunities and threats. Research about the demographics and psychographics of the nonprofit's customer base was gathered to most accurately target an audience. Finally, marketing collateral in the form of a media plan, traditional advertising, social media advertising and a public relations plan was created based on the research and analysis. Tracking procedures for evaluating the effectiveness of the plan were also recorded.

John M. Kayes

Advisor: Dr. Diane Holtzman

Table Number: 3

Title: Osprey Drones LLC

Osprey Drones LLC is a start-up, veteran-owned, registered and licensed business enterprise in the photography industry that will specialize in the aerial drone photography business. Due to the several (large and small) aerial drone photography business already in existence throughout the state of New Jersey, a feasibility study as well as a survey of the market were conducted to identify ways to distinguish Osprey Drones LLC from its competitors. The goal of this business is to become the leading aerial drone photography company in southern New Jersey providing services such as Phase I Environmental Site Assessments for property analysis, creating orthophotos, alternatively known as orthophotomaps, cartography (particularly in photogrammetric surveys), landuse planning, real estate, archaeology, movie production, etc.

# Master of Science in Data Science & Strategic Analytics

Melissa Laurino

Advisor: Dr. Cliff Baldwin

Poster Number: 2

Title: Tide Stage and Directional Movement of Bottlenose Dolphins

(Tursiops truncatus) Off Cape May, New Jersey

Tide can impact marine mammals by influencing prey distribution, separating populations and the overall movement of a species. Bottlenose dolphins (Tursiops truncatus) in Cape May, New Jersey, utilize the area as their feeding, mating and nursery ground throughout the spring, summer and fall months. Opportunistic data collection by the Cape May Whale Watch and Research Center from April to November 2017 are expected to produce a strong relationship between tide stage and the directional movement. Results are presented with computational software R and Tableau. Applications in statistics will be applied to determine the significance of results. Improved understanding of the direct and indirect impacts of tide on this species in this region can further improve our knowledge of habitat utilization, stock structure and seasonal distribution.

### Master of Science in Nursing

Michelle Amendolia

Advisor: Dr. Rose M. Scaffidi

Poster Number: 3

**Title:** Will Increased Education to Patients and Families about the Negative Effects of Not Having a DNR Order Change Their Mind?

End of life care for patients and their family members can be a very difficult topic to discuss. The most important aspect is that their wishes are respected. The negative effects of not having a Do Not Resuscitate (DNR) order while at end of life include moral distress, suffering and avoidance for the patient and family. Moral distress results when individuals struggle in decision-making regarding end of life care and can present both verbal and nonverbal cues, including stress, anxiety, frustration and depression. Suffering is the unnecessary harm done to a person in whom the outcome will not be of benefit. Performing Cardiopulmonary Resuscitation (CPR) would cause unnecessary suffering to the patient and can also cause the family members and nursing staff to suffer due to witnessing the event. Because of the emotional and taboo topic of death, avoidance may be used to evade talking about end of life situations with patients and family members. This research explores whether increased education to patients and families about the negatives effects of not having a DNR order will change their mind. Without a DNR order present, CPR would be initiated. A quantitative study was conducted on patients and/or their family members that have or have had to face making a decision about DNR orders. The study consists of questionnaires to the patients and family members before and after receiving education.

**Jannine Bournias** 

Advisor: Dr. Rose M. Scaffidi

Poster Number: 4

**Title:** How Does Giving Report to Weekend Hospice

Staff Deliver Advocacy in Patient Comfort

Assessing pain is the key to initiating interventions and modifying them to provide the patient with a desired quality of life. Nursing collaboration is fundamental in achieving the goal of comfort for the patient. Nurse to nurse report encourages nurses to exchange necessary patient information, ensures continuity of care, promotes patient safety, and makes the nurse recognize their role in the patient's comfort. The purpose of this study is to maintain continuity of a hospice patient's pain relief between scheduled nursing visits.

The working hypothesis will be researched utilizing a quantitative experimental design with the intervention of Friday patient report (independent variable) given to weekend staff. The research will involve the comparison of pain scores for patients before the intervention of weekend report with pain scores after the intervention. The study will take place over a six-month period. The number of participants to be sampled will be approximately 40. The instrument to be use is the Scale of Pain Severity. The research data will be collected from patients who had visits over the weekend by staff that weekend report was not given to. The pain scale data from Friday to Monday will be reviewed to see if pain management was maintained through weekend compared to the patients where Friday report was not given to weekend staff. The working hypothesis for this study is that mandating Friday report received by weekend staff for hospice patients will improve comfort scores in these patients.

Amanda Brozoskie Advisor: Dr. Rose M. Scaffidi

Poster Number: 5

Title: Enhanced Patient Comfort:

The Effect of Support System Presence During Hospitalization

Open visitation policy has gained attention and support in America due to a shift toward patient-family centered care. Current research has focused on support system presence during hospitalization in intensive care units and during invasive procedures; however, limited research exists on support system presence in adult medical-surgical units. Additional research must be conducted to support evidence-based protocols aimed at fostering support system presence during hospitalization. The purpose of this study is to examine the relationship between patient comfort and support system presence in hospitalized adults on a medical-surgical unit. A naturalistic correlational study will be performed utilizing a consecutive sample of patients hospitalized on a medical-surgical unit from January 1, 2018 to July 1, 2018. Participants will be given a self-report survey containing Kolcaba's shortened general comfort questionnaire and 2 questions pertaining to support system presence. The study results will be useful in the development of evidence-based open visitation policies.

Deborah DeMarco

Advisor: Dr. Rose M. Scaffidi

Poster Number: 6

**Title:** Implementing the Peer to Peer Recognition Program to cure Lateral Violence in the Workplace: An Intervention for Employee Job Satisfaction and Morale

Lateral violence (aggressive behaviors) can harmfully influence the workplace and the nurse's capability to provide optimal care. For many decades, aggressive behaviors have been a significant issue in health care environments because it can lead to decreased job satisfaction, as well as feelings of segregation, anxiety and depression. The literature is occupied with articles describing and predicting the psychological effects of aggressive behaviors that include loss of sleep, low self-esteem, distress, decreased morale and job satisfaction. According to the literature review, no studies were found in developing effective strategies to decrease lateral violence. Without proper programs in place, the occurrence of bullying in the workplace will prevail. The purpose of this study is to evaluate employee satisfaction scores before and after the implementation of the Peer to Peer Recognition Program (PTP-RP). The PTP-RP is a program developed to encourage awareness and increase a sense of team spirit. The program will promote honesty and transparency through simple team exercises and activities that will help build bonds. Bringing awareness of the damages caused by lateral violence reinforces that these behaviors cannot be tolerated. Better communication builds relationships, and willingness to unite will decrease lateral violence and increases job satisfaction.

This quantitative research study will apply an experimental design to determine if the implementation of the Peer to Peer Recognition Program (PTP-RP) decreases lateral violence and promotes employee satisfaction. Both Southern Ocean Medical Center (SOMC) and Ocean Medical Center (OMC) will participate. The Employee Satisfaction Scores will be obtained from surveys prior to the implementation of the program. Then the post-interventions scores from both facilities will be compared. If the findings support the hypothesis, then it may be beneficial to implement the PTP-RT at all facilities to decrease lateral violence and increase job satisfaction.

Amelia Fasciano

Advisor: Dr. Rose M. Scaffidi

Poster Number: 7

Title: Telehealth and its Impact on Retention of Peritoneal Dialysis Patients

Peritoneal dialysis is a modality option for end stage renal disease patients that is strongly recommended by Medicare, the primary payer of dialysis in the United States. It is a dialysis option for patients that is both cost effective and promotes the independence of patients in their daily lives. Direct and indirect costs such as dialysis equipment, medications and hospital admissions are significantly reduced in those who choose peritoneal dialysis therapy. Patients who choose peritoneal dialysis learn to complete daily dialysis treatments, independently, at home. Therefore, nurses play a major role in the training, support and management of these patients. Telehealth is an emerging practice to further explore in regard to its potential to promote patient retention and growth within home dialysis programs. The purpose of this study is to identify whether incorporation of weekly telemedicine video conferencing, with newly admitted patients, affects patient retention rates in home dialysis programs. A quantitative, quasi-experimental study will be performed utilizing a convenience sample among end stage renal disease patients who are initiating peritoneal dialysis training. Participants will be recruited from the six area dialysis units in Atlantic and Cape May counties. Three of these units will conduct weekly videoconferencing and three will not to determine the effectiveness of enhanced patient support through telemedicine. The goal of the study is for nurses to incorporate established best known practices in order to improve patient retention rates within their individual home dialysis programs.

Maria C. Hernandez

Advisor: Dr. Rose M. Scaffidi

Poster Number: 8

**Title:** The Relationship between Retention Rates and Nurses Who Experience Workplace Verbal Abuse

A disruptive behavior, such as verbal abuse among health care workers, especially nurses, threatens their safety and well-being. Not only is it costly to the health care facility, it is detrimental to the nurse's physical and mental health. Verbal abuse also affects the quality of patient care and increases the risk of poor health outcomes. The purpose of this study is to explore the nursing retention rates and its relationship with nurses who left their career due to their experiences with disruptive behaviors and verbal abuse from their patients within their workplace. Participants will be recruited from a variety of settings, such as acute, chronic and ambulatory health care facilities, and surveyed with past experiences and their current career status and reasons if no longer working on the field. This study will provide valuable information for nurses, the health care industry, and all the organizations that employ thousands of nurses and whose goal is to keep them within their organization.

Michael Lowe

Advisor: Dr. Rose M. Scaffidi

Poster Number: 9

Title: Leadership Focus in Pressure Ulcer Prevention

Pressure ulcer (PU) development has become a common occurrence in hospitals settings and health care institutions nationwide, imposing substantial burdens on patients, families and caregivers. In addition to the impact of physical, mental and social wellbeing of patients, are the sky rocketing costs of treatment of Pus, which encompasses financial burdens to all parties. Nurses and nursing assistants have been depicted as the front lines of defense for pressure ulcer prevention and have often been unfairly criticized for the development, progression and deterioration of PUs by those in leadership positions. Accusations such as these influences the cross-examinations of what role does leadership play when it comes to PU prevention, treatment and surveillance. Leadership positions are responsible for the appraisal of their staff competence and delegation of duties ensuring the safety of their patients while maintaining a high standard of care resulting in favorable patient outcomes. The purpose of this study is to investigate the understanding of the role held by leadership concerning PU assessment, prevention and surveillance to see if education of leadership would result in a decrease in PUs incidences. A quantitative study will be conducted utilizing a group of supervisors and nurse managers who are all registered nurses employed by the rehabilitation center whose duties are to supervise all clinical and ancillary staff in the facility consisting of 80 beds. A pre- and post-test experimental design will be administered to obtain baseline data and identify any flaws prior to any intermediation and compared to the post-test scores to identify any change of significance post intervention. This study will provide valuable information concerning leadership ability and eventually constructive feedback.

Glenn Ludan

Advisor: Dr. Rose M. Scaffidi

Poster Number: 10

**Title:** Educating Non-Compliant Dialysis Patients and the Effect on Patient Benefits on Self Care

Chronic renal failure is progressive, and in most times, an irreversible decline in kidney function. When kidneys lose their function, end stage renal failure is the result. Patients may have to undergo hemodialysis treatments, follow strict dietary guidelines and have fluid restrictions. This dramatic life-changing event can take its toll on the patient and their family. Dialysis treatment is paramount to sustaining life but might make life harder than it already is for these patients. Dialysis can give back quality of life and promote independence when strict guidelines are followed. However, some dialysis patients are non-compliant on following their prescribed dialysis regimen, which may lead to further complications or death. Some reasons may be because they have not received proper education on the importance of following the prescribed regimen on hemodialysis. The purpose of this study is to evaluate how educating non-compliant dialysis patients about the importance of following the prescribed dialysis regimen can lead to a better quality of life. A paired T-test will be utilized for this study. A pre-test and post-test will be given to the patients after the nurse educates the chronic hemodialysis patients on adhering to strict dialysis guidelines. These guidelines will be on following a renal diet, limiting fluid intake and having a positive attitude toward being compliant with their new lifestyle. The pre-test and post-test will be compared to see if there are any significant changes. If the hypothesis is supported by the research findings, then it may be beneficial to improve the approach on an educational model for hemodialysis clinics in the future.

Laura Mann

Advisor: Dr. Rose M. Scaffidi

Poster Number: 11

**Title:** Nursing Staff Compliance, Education, and Family Presence During Cardiopulmonary Resuscitation (CPR)

Despite the recommendations of the American Heart Association in supporting, encouraging and recommending the presence of family members during cardiopulmonary resuscitation (CPR), nurses continue to oppose family presence during patient resuscitation. Nursing staff have voiced numerous concerns surrounding family presence during patient resuscitation, such as family members interfering during patient resuscitative efforts or even retaliation against staff. However, 90 percent of patients who have experienced resuscitation or experienced events close to resuscitative efforts preferred family presence during these times. This quantitative study hypothesizes that the presence of a nurse educator during patient resuscitation will decrease nursing staff stress and fear surrounding family presence during CPR. Nursing staff fear and stress will be decreased through the presence of the nurse educator, who will play a vital role in providing family member support and education during patient resuscitation. Ultimately, this will allow for nursing staff to focus on the resuscitative efforts of the patient. The nurse educator will support and educate family members throughout the patient resuscitation to promote patient and family centered care and to ensure family members understanding that every effort is being made to save the patient's life.

Kenneth Michelette

Advisor: Dr. Rose M. Scaffidi

Poster Number: 12

**Title:** Substance Abuse in an Emergency Department, the Effectiveness of a Brief Intervention with Booster Calls

Substance abuse in the United States is a growing issue and is considered a national epidemic, drawing the attention of our leaders, from the local to the national level, with more than 64,000 drug related deaths in 2016 alone ("Overdose Death Rates," 2017). All emergency departments (ED) throughout the country are affected by this epidemic with an increase in the number of cases daily. There are over 2.5 million substance abuse patients seeking help in EDs, including repeating patients. Each emergency department is in the front line of the battle against substance abuse; however, too often treatment consists of traditional therapy with only a brief intervention or no intervention addressing the addiction issue. The purpose of this study is to evaluate the effectiveness of an ED's brief intervention with 14 booster sessions in comparison to brief interventions with no booster sessions in patients who are admitted to the ED with substance abuse. This quantitative experimental study will be evaluating and analyzing the different outcomes between brief interventions with no booster sessions and brief interventions with aggressive booster sessions. Participants will consist of patients arriving in four different ED's who are under some level of influence that wish to participate in hopes to eliminate or reduce that substance abuse. The study will utilize the Transtheoretical Model of change to determine the self-efficacy of the individuals in the study and provide an environment of change. The goal of this study is to provide valuable information for health care providers, in the reduction of repeat instances in the ED of substance abuse patients through a brief intervention and follow-up booster calls.

Diana Paone

Advisor: Dr. Rose M. Scaffidi

Poster Number: 13

Title: Reducing Lateral Violence: The Key to Increasing Patient Satisfaction

Lateral violence is one of the biggest challenges facing the nursing profession today; it has been linked to patient safety, psychological harm and the recruitment and retention of nurses (Roberts, 2015). Nursing units with excessive levels of conflict often experience reduced satisfaction of staff, increased absenteeism, high turn-over rates and a decrease in productivity (Weinand, 2010). The adverse effects of lateral violence can have a negative impact on patient satisfaction. The objective of this research is to discover if educating nursing staff on all aspects of lateral violence will lead to an increase in patient satisfaction. A quasi-experimental quantitative research study with a time series is being proposed. The researcher will obtain the HCAHPS scoring for three units of a local hospital before and after an educational intervention is implemented on the topic of lateral violence. The study will examine if educating the staff on lateral violence will result in an increase in patient satisfaction. Results: As this is a research proposal, the actual study has not been conducted at this time and therefore, the results of this research are currently unknown. Conclusion: Lateral violence is a problem that plagues the nursing profession. If it is found that educating nurses on lateral violence increases patient satisfaction, perhaps administrative staff will take notice, and work together with educational and staff nurses to eradicate lateral violence in the nursing profession.

Vyacheslav (Steven) Pastukh Advisor: Dr. Rose M. Scaffidi

Poster Number: 14

Title: Nursing Professionals' Attitudes Toward Euthanasia.

Nurses as health care professionals are in a central place to express their attitudes toward euthanasia. This descriptive non-experimental quantitative study aims to examine perceptions and attitudes toward euthanasia among nursing professionals. The study seeks to explore how three factors such as work experience, level of education and religion influence nurses' attitudes toward euthanasia. It is important for nurses to be involved in the discussion of euthanasia, since they are professionals who have an input into end-of-life care. Nurses spend a great amount of time interacting with patients and their families and, because of this, their personal perceptions of euthanasia are important not only in settings where they work but also in the creation of a relevant health policy legislation. Convenience nonrandom sampling will be used to recruit 50 nurses at selected locations as participants of the study. A cross-sectional survey using questionnaires will be conducted to assess nurses' attitudes and personal perceptions about euthanasia.

Margaret Stachowski

Advisor: Dr. Rose M. Scaffidi

Poster Number: 15

Title: The Relationship of Education with Self-Management after Kidney

Transplantation

Despite pre-transplant education provided to kidney transplant (KT) patients, many patients are confused about medications regimen and are unaware of changes that kidney transplantation brings about in their life after the surgery. The purpose of the proposed study is to explore the effects of an educational intervention on KT patients' knowledge regarding transplantation process and to explore the relationship of knowledge and self-management of kidney recipients. A quantitative quasi-experimental study will be conducted using adult kidney recipients recruited from Lourdes Health System in Camden. The sample will include inpatient and outpatient KT patients. The data will be collected through questionnaires during pre-transplant phase of the transplantation and after the surgery. Participants' level of knowledge and self-management skills will be measured using two instruments: the Kidney Transplant Understanding Tool (K-TUT) and the Self-Management Scale for Kidney Transplant Recipients (SMSKTR). The sample will be divided into experimental and control groups. All participants will receive pre-transplant education before the surgery and they will be asked to complete the K-TUT questionnaire before the discharge. Counseling intervention will take place after the surgery during the next three months. This intervention will be led by nurses and only the experimental group will participate. After the intervention, participants from both groups will be given K-TUT and SMSKTR questionnaires and data will be analyzed. This research study proposal will provide valuable information regarding educational interventions that could improve patients' adherence to treatment and possibly prolong the life of transplanted kidney.

## Master of Science in Occupational Therapy

Sarah Friedman & Allison Preim

Advisor: Dr. Janette Boney

Poster Number: 16

**Title:** ACE the Workplace: Occupational Therapy Interventions to Advance Capabilities for Employment

This study aimed to determine whether an 8-week occupational therapy (OT) program would increase fine motor skills and balance to improve overall vocational-skills within a supported employment setting for adults with Intellectual and Developmental Disabilities (IDD).

While various community-based programs have tried to increase the percentage of employed adults with IDD, many continue to experience difficulties completing work tasks due deficits with fine motor skills and balance. Following the completion of OT intervention, quantitative and qualitative data suggests improvements with fine motor skills and balance.

## Professional Science Master's in Environmental Science

Kristina Koreivo

**Advisor:** Dr. Elizabeth Lacey

Poster Number: 17

**Title:** Competitive Interactions between Zostera Marina and Ruppia Maritima Via in Situ Studies in Barnegat Bay, New Jersey

Seagrasses provide important ecosystem services for commercial and recreationally important fish and shellfish species. Locally, Barnegat Bay has experienced a decline in the dominant species Zostera marina (eelgrass) and an increase in the opportunistic Ruppia maritima (widgeon grass) due to changing water quality parameters. There is a paucity of evidence by which to surmise whether this shift is due to competition, localized species die-offs or other factors. There have also been no studies which assess whether the habitat provides the same services with the increase in R. maritima.

The object of this research was to evaluate the competitive factors between both seagrass species while also comparing the ecosystem services provided. The experimental site consisted of nine 1 m2 plots: three plots as Z. marina (weeding all R. maritima from the plot), three plots as R. maritima (weeding all Z. marina from the plots), and control (lightly disturbing the sediment but not removing any vegetation). Monthly site visits occurred June-October 2017 during which recolonization rates and percent cover for each plot was recorded. Biomass samples were taken in August and October and were separated and weighed for above and belowground biomass of seagrass tissue, an important indicator for competitive interactions. Our results suggest that while there were significant differences in belowground biomass (higher for Z. marina); the general habitat created by either species provides short-term benefits for the fauna that inhabit seagrass beds. Future studies should include larger regions with longer duration to explore any temporal or spatial trends.

## Save the Date:

Spring 2018 Graduate Research Symposium April 25, 2018

Thank you

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