



CARS

CREATIVE ACTIVITY
.....
& RESEARCH
.....
SHOWCASE

NAZARETH COLLEGE

Friday, April 21, 2017, 1–4 p.m., Arts Center
naz.edu/cars



**THIS PAGE
INTENTIONALLY
LEFT BLANK**

Introduction

We are excited to host the sixth annual CARS (Creative Activity and Research Showcase) event, which highlights the achievements of Nazareth's undergraduate and graduate students. CARS 2017 features more than 225 students who will display their work in a variety of formats, including performances, posters, and presentations.

The CARS event highlights the remarkable breadth and depth of the academic activities available to the students at Nazareth, ranging from scientific research to theater and dance performances. It also underscores the value of a Nazareth education, which partners faculty and students who are dedicated to learning and discovery.

I hope you are as impressed as I am with the many achievements of our students.

Sincerely,

A handwritten signature in cursive script that reads "Daan Braveman".

Daan Braveman
President, Nazareth College

Thank you!

On behalf of the hosts of the annual CARS event, the Office of Sponsored Programs and Faculty Research, we would like to thank our volunteers who have given their time to serve on the planning committee and/or as judges. We would also like to thank all participating faculty, staff, and students. We appreciate the commitment of both the volunteers and the participants to the CARS event and acknowledge that CARS would not exist without the support of the Nazareth College community.

CARS 2017 Committee

Michelle Donahue - *Physical Therapy*

Catherine Doyle - *Library*

Diane Enerson - *Psychology and Higher Education Student Affairs Administration*

Grant Gutheil - *Psychology*

Jennifer Harman - *Sponsored Programs and Faculty Research*

Mary Maher - *Nursing Global Studies and Public Health Program in Nursing*

Debra Mathewson - *Sponsored Programs and Faculty Research*

Kim McGann - *Sociology and Anthropology*

John Reef - *Music*

Danielle Taormino - *Sponsored Programs and Faculty Research GA*

Stephen Tajc – *Chemistry and Biochemistry*

Octavio Vazquez - *Music and Honors Program*

Edward Wiltse - *English and Communication*

CARS 2017 Judges

Alison Albright

Laura Barnard

Mary Kay Bradley

Meg Callahan-Steckley

Hilda Chacon

Lindsay Chasse

Heather Coles

Ilka Datig

Corinne Dempsey

Janine DiCarlo

Lynda J. Dimitroff

Michelle Donahue

Kim Dunay

Jacob Ertl

Nick Garigliano

Rose Hair

Liz Hebert

Stephen Hill

Maria Hopkins

Pat Huntington

Kelly Hutchinson

Nadine Hylton

Melissa Johnson

Kate Jones

Betsey King

Carolyn Lagoe

Mary Dahl Maher

Elise Miklich

Andy Morris

Samantha Nolte-Yupari

Ryan O'Loughlin

Mary Anne Parker

John Reef

Teresa Riekstins

Margaret Rollins

Jenna Sadue

Matthew Schoell

Beverly Smoker

Shirley Sommers

James Spiller

Leah Stacy

Laura Sullivan

Andrea Talentino

Timothy Thibodeau

Megan Tobin

Amanda Torpey

Program at a Glance

Format	Location	Time
Welcome/Opening with President Braveman	Arts Center: A14	1:00 – 1:10 p.m.
Paper Presentations	Arts Center: Wilmot Recital Hall	<p>1:15 p.m. <i>The Viability and Variability of Fan Extensions in the Modern Literary World</i></p> <p>2:30 p.m. <i>Musical Interventions</i> “Thriller”: Innovations and Impacts Beethoven’s Ninth Symphony and the Identity of Divided and Reunified Germany Goodness Gracious, It’s Gershwin!: A Fusion of Styles in Blue</p>
Paper Presentations	Arts Center: A59	<p>1:15 p.m. <i>Literature, Film and Identity</i> Color Schemes and Identity in “My Beautiful Laundrette” Forget the Boy Hero, Forget the Dastardly Pirate: Peter Pan and Captain Hook’s Complicated Roles in Peter and Wendy The Bride, The Scream Queen and the Final Girl: A examination of the construction of femininity in horror movies from 1930-2015</p> <p>2:30 p.m. <i>Mathematics and Education</i> Homework: Do you really need it? The Connection Between Reading and Mathematics Student Actions when Comparing Fractions</p>
Paper Presentations	Arts Center: A14	<p>2:30 p.m. <i>Faces of Diversity</i> Mexican Border Migration to the United States: Crossing Physical and Cultural Boundaries Health Care in Germany Poetic Suffering Inclusion: Islam, Islamophobia and the United States and how we could address it</p>
Paper Presentations	Arts Center: A187	<p>1:15 p.m. <i>Communication, Health and Media</i> The Face of Homelessness in D.C. Swipe Right: A study of college students’ dating app use Branding Your Most Authentic You Public Health Program Evaluation of Community Agencies</p> <p>2:30 p.m. <i>Diversity, Democracy and Global Citizenship</i></p>

Presentations by 2016 Summer CARS Grant Recipients	Arts Center: A14	1:30 p.m. Bringing Latino History and the Digital Archive Alive in the Classroom through Lesson Plans 1:45 p.m. The Life of Local Food & Drink
Performances	Arts Center: A13	1:30 p.m. Letting You Go: A Story About Addiction 1:45 p.m. Made in China: A Sampling of Chinese Folk Songs 2:00 p.m. 9 TO 5, The Musical 2:15 p.m. Breaking The Silence 2:30 p.m. Panel Discussion 3:00 p.m. Closing
Posters	Arts Center: Upper Lobby and Lower Lobby	2:00 – 3:30 p.m.
CME Presentations	Lipson Lounge	2:00 – 3:30 p.m.
Award Announcements/ Closing Reception with Dr. Talentino	Arts Center Upper Lobby	3:30 – 4:00 p.m.

Core Milestone Experience

The Core Milestone Experience (CME) gives students the opportunity to reflect on their intellectual journey using artifacts from their perspective-enduring question (PEQ) courses, Integrative Studies, and Experiential Learning to create an enduring question. Students then create a project that demonstrates a thoughtful engagement and exploration of their Enduring Question.

The CME course faculty have invited students whose completed projects were of exceptional distinction to share their work here at CARS. Please visit the Lipson Lounge during the poster session to see the wide variety of exciting and insightful projects.

Index

CARS Summer Research	8
Kelley Ginster, April Mashaw, Paul Lippert, Alexis Blydenburgh, Terry McArdle	8
Devin MacHenry, Maria Posato, Olivia Bauso	8
Paper Presentations	9
Olivia Bauso	9
Hannah Borriello	9
Jessica Brown, Maria Quagliana, John Beyer, and Ricarda Harnischmacher	9
Natalie Burrows	10
Katherine Dickey	10
Hannah Eberle, Hannah Mang	11
Stephanie Fernaays	11
Claire Hardy	11
Jessica Locey	12
Kathleen Marzano, Nicholas Gerbino, Madison Bugman	12
Karlie O'Gara	13
Ryan Page	13
Brittany Patton	13
Megan Searing, Stephanie Mongelli	14
Anani Serbeniuk	14
Hali Shepard	15
Sarah Speer	15
Mary Walrath	16
Lauren Watt, Nicholas Gerbino, and Tinisha Baxter	16
Performances	18
Breaking the Silence	18
Letting You Go: A Story about Addiction	18
Made in China: A Sampling of Chinese Folk Songs	19
9 TO 5 the Musical	19
Poster Presentations	20
Shawn Andrus (#1)	20
Anna Antonik (#2G)	20
Jordan Axelrod, Taylor Glenn, Zamda Kamikazi, Katie LaManna, Jessica Maloney (#3)	21
Kristina Back (#4)	21
Kristina Back (#5)	21
Brittany Barry (#6G)	22
Alex Bednarski (#7)	22
Lauren Beeles (#8)	23
Christine Blackmer (#9G)	23

Alexis Blydenburgh (#10)	23
Emily Bolt, Brianna Horn, Kelly Pike, Kearstin Shirley (#11)	24
Mark Bradley, Grace Fumich, Erika Holland, Lindsay Klein, Annjerri Watkins (#12).....	24
Clare Brennan (#13).....	24
Paxton Brewer (#14G)	25
Jennifer Cator (#15G)	25
Gannon Connors, Emilee Hyde, Eileen Pelkey, Daryn Loy, Sarah Izzo, Shane Fuentes, Alyssa Merrill, Jacob Murphy, Mustafa Ahmed, Giannette Kokkoris, Matthew Kwok, Claire Narang, Aditi Seshadri, Anjana Seshadri, Catherine Wu, Selena Zhang (#16)	26
Katie Convertino (#17G)	26
Katherine Cox, Krista Ortiz, Claire Guy, Nicholas DeMarco, Scott Sullivan (#18G).....	27
Tanya Cziesler (#19G).....	27
Hannah Darr (#20)	28
Connor Delaney (#21G)	28
Kevin Denny and Jacob Cuyler (#22)	28
Amanda Entress, Gabrielle Sharp (#23G).....	29
Andrea Frey, Olivia Martinez, Jeffrey McQuay, Lianna Raspudic (#24G).....	29
Macala Gallow, Michelle Gerace, Tylyn Martin, Josef Nachar, Ketan Sarpaul (#25).....	30
Kelley Ginster (#26G).....	30
Sarah Godnick (#27)	30
Emily Griffith (#28G).....	31
Alyson Hallett (#29G).....	32
Julia Hess, Ally Kadin, AnneMarie Boland (#30).....	32
Stevanie Hilfiker (#31G)	33
Katherine Holbein (#32)	33
Denzell Jackson (#33).....	34
Janna Jamso (#34)	34
Kyle Lai (#35).....	35
Alexa Laubscher (#36).....	35
Abigail Linn (#37G)	36
Daryn Loy, Sarah Izzo, Gannon Connors, Emilee Hyde, Eileen Pelkey, Shane Fuentes, Alyssa Merrill, Jacob Murphy, Mustafa Ahmed, Giannette Kokkoris, Matthew Kwok, Claire Narang, Aditi Seshadri, Anjana Seshadri, Catherine Wu, Selena Zhang (#38)	36
Ethan Luta (#39)	37
Christina Luther, Dana Voldan-Curry (#40G).....	37
Mark Lysiak, Jacob Murray (#41).....	37
Simone Macirella (#42)	38
April Mashaw (#43G)	38
Danielle Mastropierro (#44G).....	39
Cassandra Matalavage (#45).....	39
Dominique Matties (#46G)	39

Brandy McCarthy, Haley DeVona, Francesca Speiss (#47).....	40
Andrea McNeil (#48G)	40
Alyssa Merrill, Jacob Murphy (#49)	41
Mikala Miller (#50).....	41
Larissa Mitchell (#51G)	42
Emily Modeen, Julia Widmer (#52)	42
Paloma Mundi (#53).....	43
Margaret Namy (#54).....	43
Abbey Notter (#55G).....	44
Taylor Olmstead (#56G).....	44
Uchekukwu Onwubalili, Hannah Acciari, Macala Gallow (#57)	45
Ashley Owens (#58).....	45
Kayla Page and Mackenzie Kirkland (#59)	45
Tabitha Paisley (#60G)	46
Caitlyn Paris-Woods, Johnnice King, Mackenzie Dallimore (#61).....	46
Juliana Posato (#62)	47
Christopher Redmond (#63).....	47
Alyssa Sackett, Kate Durr, Vincent Parrillo, Drew Simoneau, Elizabeth Howell, Katlynn Ray (#64G).....	48
Ariana M. Scarfone (#65)	48
Yaqub Shabazz (#66)	49
Kysha Smith (#67)	50
Francesca Speiss, Whitney Thomas, Alexandria Lovejoy (#68)	50
Nicholas Spencer (#69).....	50
Alison Stedman, Erin Stryker (#70).....	51
Qiwen Wan (#71)	51
Lauren Watt, Tinisha Baxter and James Walsh (#72)	52
Melissa Wilkinson (#73)	52
Abigail Wood (#74)	53
Cassidy Zeller (#75G)	53

*** (G) following the poster number denotes graduate student**

CARS Summer Research

Kelley Ginster, April Mashaw, Paul Lippert, Alexis Blydenburgh, Terry McArdle

Title: Bringing Latino History and the Digital Archive Alive in the Classroom through Lesson Plans

Faculty Sponsor: Professor Isabel Cordova, History and Political Science

Abstract: Our group designed K-12 lesson plans to educate local students on Latino history. Each of us focused on specific grade levels and utilized the NYS Social Studies standards to create our lessons. This project was incredibly important because K-12 students are not always exposed to Latino history in schools, even though there is a large Latino population here in Rochester.

Motivation for participating: Requirement for CARS Summer Research Grant.

Devin MacHenry, Maria Posato, Olivia Bauso

Title: The Life of Local Food & Drink

Faculty Sponsor: Professor Leah Stacy, English and Communication

Abstract: Boomtown Table, a new online magazine, follows the people that drive the food and drink scene in Rochester. As part of an initiative to increase Boomtown's following, Olivia Bauso (Editorial Assistant), Maria Posato (Graphic Design Assistant) and Devin MacHenry (PR Assisat) constructed and successfully implemented a plan to grow the magazine through shareable content, social video and real-world interaction.

Motivation for Participating: Requirement for CARS Summer Research Grant.

Paper Presentations

Olivia Bauso

Title: Branding Your Most Authentic You

Faculty Sponsor: Professor Leah Stacy, English and Communication

Abstract: I'm passionate about developing a strong, authentic personal brand. In true "TedTalk" fashion, I researched and compiled a presentation on how one can strengthen their online presence regardless of future career. In this digital age, social media presence is an important factor in one's success. I can tell you the steps to take right now to ensure your success in the future.

Motivation for Participating: Professional Internship Program II-- instead of completing Leadership Program and was suggested by a faculty member after giving the speech as part of a class last semester.

Hannah Borriello

Title: Health Care in Germany

Faculty Sponsor: Professor Lisa Cerami, Foreign Languages and Literature

Abstract: As Senator Bernie Sanders once said, "We can learn from countries around the world in terms of healthcare." Americans do not know enough about cultures and government systems of other major countries around the world. This project focuses on understanding how the health care system in Germany functions and the major accomplishments they've made.

Motivation for Participating: Requirement for German 499.

Jessica Brown, Maria Quagliana, John Beyer, and Ricarda Harnischmacher

Title: The Viability and Variability of Fan Extensions in the Modern Literary World

Faculty Sponsor: Professor Adrielle Mitchell, English and Communication

Abstract: Our panel members were selected for outstanding work on a research paper in our Transmedia Adaptations class. Individually, we wrote papers surrounding the issue of fan creations across media of entertainment. We each researched different ones and discussed how they can be considered viable sources of literature that involve a lot of work through thick engagement. We chose to explore this area of research as both a mutual class assignment, and also as we found the emergence of fan extensions and 'remix culture' to be personally interesting. Our presentation has blossomed from what was originally a cut-and-dry research project, into a cross-sectional analysis of multiple fan-created works. We will focus on viability

Paper Presentations

and variability of fan created extensions of video games, novels, films and television shows for the purpose of our discussion.

Motivation for Participating: To share learned broad concepts from specific examples we researched.

Natalie Burrows

Title: Beethoven's Ninth Symphony and the Identity of Divided and Reunified Germany

Faculty Sponsor: Professor Zbigniew Granat, Music

Abstract: My study-abroad experience in Berlin, Germany inspired and informed my Honors Program thesis topic: Beethoven's Ninth and the formation of the German and European identities. Simply being in Berlin, one feels the repercussions of the tumultuous 20th century. Perhaps the most well-known event of this epoch was the devastating Second World War and the tragic genocide known as the Holocaust; but Germany, Europe, and the world at large endured countless other difficult events in the 1900's that have shaped and continue to shape the identity of Germany and Europe. To track this changing identity through this turbulent period I will use the iconic Ninth Symphony by Ludwig van Beethoven. This work is the perfect vehicle as it is listened to, played, performed, and politicized in each era. I will present my thesis chapter on divided and reunified Germany as this era shows the most interesting and drastic difference in interpretation of Beethoven's Ninth.

Motivation for Participating: To gain experience in presenting in this capacity as I plan to pursue Musicology upon graduation.

Katherine Dickey

Title: Goodness Gracious, It's Gershwin! A Fusion of Styles in Blue

Faculty Sponsor: Professor Zbigniew Granat, Music

Abstract: George Gershwin's 1924 jazz concerto, Rhapsody in Blue, should be given more consideration in the canon of serious 20th century music. I believe he does not get enough credit from those who work within the classical music tradition. Rhapsody in Blue was a radical new piece of music that combined jazz with classical music. I collected sources on the reactions of Gershwin's contemporaries, as well as analyses of the thematic organization of the piece. I used a reduction for two pianos in order to conduct my own analysis of the work. It initially started as a class project, but work as a research assistant inspired me to continue my own research into a surprisingly controversial piece of music.

Motivation for Participating: URSAP Grant.

Hannah Eberle, Hannah Mang

Title: Swipe Right: A study of college students' dating app use

Faculty Sponsor: Professor Carolyn Lagoe, English and Communication

Abstract: We wanted to discover the prevalence of dating applications among college students, as well as, the motivations and outcomes of use. We disseminated a survey to college students in the Rochester area. This is an important topic due to the negative stigma associated with dating apps despite the fact that many young people use them.

Motivation for Participating: Requirement for Communication Research Methods.

Stephanie Fernaays

Title: The Bride, The Scream Queen, and The Final Girl: An examination of the construction of femininity in horror movies from 1930-2015

Faculty Sponsor: Professor Edward Wiltse, English and Communication

Abstract: I watched a select number of horror movies and examined their construction of femininity through the medium and the social/ historical conditions. I brushed upon film theory, narrative structure, and other scholar's research of the genre as a whole. I was inspired after watching the Bride of Frankenstein on the big screen and wondered about her as a character.

Motivation for Participating: I enjoy research and this is a pet project of mine.

Claire Hardy

Title: Poetic Suffering

Faculty Sponsor: Professor Suhail Islam, English and Communication

Abstract: No history lacks tragedy. Some histories contain more than others. Tragedies such as war, famine, and genocide are only a few of the blemishes we see on the historic surface. Despite immense suffering and cruelty experienced during these time periods, we find positive consequences of tragedy. One of the most prevalent is art. Both Anna Akhmatova and Paul Celan lived through times of brutal emotional strife. To cope with the turmoil and pain they produced poetry. Akhmatova periled through the Communist tirade while Celan survived the Holocaust. Akhmatova's family was imprisoned while Celan experienced German internment camps first hand. It is the distinctions between their struggles and likeness of their writings that demonstrate the ubiquitous nature of suffering spawned from government persecution.

Motivation for Participating: To showcase my work and receive feedback from professionals.

Paper Presentations

Jessica Locey

Title: Homework: Do you really need it?

Faculty Sponsor: Professor Nicole Juersivich, Mathematics

Abstract: There is much debate on whether the benefits outweigh the costs of assigning and completing homework. Many students believe that homework is not worthwhile, and some educators are unsure of the quality and quantity of homework to assign. The purpose of this study was to compare and contrast students' and teachers' perceptions of homework at both the college and high school level in terms of purpose, benefits, and drawbacks to determine the scope, quantity, and quality of homework assignments that have high educational value and are within the zone of students' productive disposition. My research questions focused on how students viewed homework with respect to its purpose, educational value, and willingness to complete; how teachers viewed homework with respect to its purpose, educational value, and design; and how students' and their teacher's views of homework compared and contrasted with respect to its purpose and educational value. A questionnaire was given to approximately 30 high school students and their teacher and 30 college students and their teacher. Follow-up interviews were conducted with both teachers, and follow-up focus groups were conducted with students.

Motivation for Participating: Requirement for MTH 490; Research in Mathematics Education.

Kathleen Marzano, Nicholas Gerbino, Madison Bugman

Title: Diversity, Democracy, and Global Citizenship

Faculty Sponsor: Professor Yamuna Sangarasivam, Sociology and Anthropology

Abstract: We are excavating the intersectionality of diversity, democracy, and global citizenship, through the practice of politically engaged scholarship. By examining the intersectionality of the aforementioned fields through ethnographic fieldwork, we intend to create a clearer picture of how diversity, democracy, and global citizenship are both experienced and contested. Through intensive dialogue and engagement with community agencies and individual actors, we are exploring the relationships between policy and implementation, race, ethnicity, and belonging, utilizing the overarching lenses of education, public health, and communication sciences and disorders. Privilege can be utilized to further or disrupt systems of oppression. Diversity, citizenship, and power have been commoditized and weaponized to demonstrate ownership of democracy at home and abroad, which is shaped and restricted by a white supremacist, capitalist, hegemonic nationalism and patriotism. By utilizing the anthropological methods of reflexivity and self-critique, we aim to challenge these systems of oppression, thereby forwarding the struggle for social justice.

Motivation for Participating: Requirement for Anthropology Senior Seminar.

Karlie O'Gara

Title: Forget the Boy Hero, Forget the Dastardly Pirate: Peter Pan and Captain Hook's Complicated Roles in Peter and Wendy

Faculty Sponsor: Professor Edward Wiltse, English and Communication

Abstract: This paper takes a psychoanalytic literary approach to the reading of J.M. Barrie's iconic boy hero, Peter Pan, in his novel Peter and Wendy. While traditional perceptions of this story place Peter Pan in the role of hero and cast pirate Captain Hook as his villain, this paper looks to the convoluted ideas of youth and maturity in the novel to complicate that dichotomy. Evidence of this novel suggests that there is no real hero or villain, and it also goes so far as to suggest that Pan and Hook are not even two separate characters. Given the fact that they both exhibit many of the same qualities, it is easy to draw the conclusion that they are actually one person. Instead of being entirely different people, Pan and Hook are two sides of the same morally ambiguous character. The animosity we see between the boy and the pirate is an externalization of one person's internalized fears of growing up and of running out of time. This goes to show that sometimes our greatest enemies are our own fears coming to life.

Motivation for Participating: Topic of interest.

Ryan Page

Title: Inclusion: Islam, Islamophobia and the United States and how we could address it

Faculty Sponsor: Professor Muhammad Shafiq, Religious Studies

Abstract: I was approached by Dr. Shafiq to take my enduring questions paper from his Islam and Global issues class and write a paper about Islam and inclusion as it pertains to America. My research presented a connection between Conservative Christians and Muslim Americans that could be a starting point for a sustained alliance, which can begin then to break down other barriers.

Motivation for Participating: I was encouraged by my Professor.

Brittany Patton

Title: The Connection between Reading and Mathematics

Faculty Sponsor: Professor Nicole Juersivich, Mathematics

Abstract: Previous research has shown a correlation between reading and mathematics performance in children in grades 2-5, with correlation increasing as grade level increases. The purpose of my study was to replicate and expand upon these studies to see if a correlation existed with students in grades 2-6 using a different set of assessments. Furthermore, I

Paper Presentations

wanted to determine whether reading a math word problem aloud would increase student access and ability to solve such word problems; therefore, indicating that one could measure more accurately a student's mathematical performance if the barrier of reading was removed. A mixed method approach was taken to answer the study's questions. Both reading and math inventories were given to approximately 125 students in grades 2-6, and a common core based word problem was given (and read aloud) for approximately 5 focus groups. A correlation analysis was completed for the math and reading inventories. Thematic analysis was used to describe student access and ability to solve the problems upon an initial attempt, an attempt after reading aloud the problem once, and another attempt after reading aloud the problem a second time.

Motivation for Participating: Requirement for Mathematics Research, MTH490.

Megan Searing, Stephanie Mongelli

Title: Student Actions when Comparing Fractions

Faculty Sponsor: Professor Nicole Juersivich, Mathematics

Abstract: Teachers are teaching mathematics using one modality, but students don't necessarily learn in the same modality as teacher instruction. The purpose of our study is to explore and describe the relationship between students' learning style preference and problem solving representations after engaging in visual and kinesthetic modes of teaching in an introductory lesson on comparing fractions. Our research questions include: (1) How do third-graders choose to represent their solution method to compare fractions after engaging in learning activities taught using kinesthetic and visual modalities? (2) What is the relationship among third-grader learning style preference, third-grader choice of solution representation, and teaching modality? To test our questions, we first distributed a modality test to find each student's preferred learning style. We then taught a lesson introducing two strategies to compare fractions: one targeting kinesthetic learners and the other targeting visual learners. Finally, we administered an assessment to test which of the two strategies the students preferred. The results from the modality test and fraction assessment were compared.

Motivation for Participating: Requirement for MTH490: Research in Math I.

Anani Serbeniuk

Title: Mexican Border Migration to the United States: Crossing Physical and Cultural Boundaries

Faculty Sponsor: Professor Hilda Chacón, Foreign Languages and Literature

Abstract: This paper examines the arduous journey to the United States across the Mexican border made by many immigrants from various Latin American countries, especially Mexico. The many dangers and complications that arise from taking the risk to pursue a better life will

also be discussed with special emphasis on women and children. Though the physical migration of various species has been exhibited from the beginning of time, many negative prejudices and feelings about immigrants persist all over the world. Furthermore, this paper aims to showcase the physical and cultural boundaries that an immigrant must break when migrating to a new country such as the United States.

Motivation for Participating: I really enjoy this topic and am passionate about it.

Hali Shepard

Title: "Thriller": Innovations and Impacts

Faculty Sponsor: Professor Zbigniew Granat, Music

Abstract: I began this research process with an interest in Michael Jackson and the title track from one of his best-selling albums, "Thriller." I began to dig around the databases for information on Michael Jackson, his Thriller album and the title track. These sources provided background material while an online piano reduction of "Thriller" allowed for musical analysis. Using these resources, I was able to determine and argue the impact "Thriller" had on several aspects of our society. Over the past year, I have been involved in academic research with Dr. Zbigniew Granat. Although much of my time has been spent helping him with his own project, this work has inspired me to do some of my own research. My goal of this project was to prove "Thriller's" significance in the musical world. As a result of my research, I discovered not only the artistic impact, but the social and political effects as well.

Motivation for Participating: URSAP.

Sarah Speer

Title: Color Schemes and Identity in "My Beautiful Laundrette"

Faculty Sponsor: Professor Edward Wiltse, English and Communication

Abstract: The film, "My Beautiful Laundrette," addresses issues of living in the country of England as an immigrant from Pakistan. There are themes revolving around the complexities of gender and sexuality, and how these factors intersect with issues of ethnicity and race to shape the lives of characters throughout the film. In her critical Essay, "My Beautiful Laundrette: Hybrid 'Identity' Or the Paradox of Conflicting identifications in 'Third Space' Asian British Cinema of the 1980s", Monica Calvo Pascual discusses how the film does not share shortcomings of earlier films addressing issues of immigration in Great Britain made in the 1980's. (Calvo 59-60) Calvo claims that earlier films in this genre and time period often choose to use the race of immigrant characters as a lens through which to explore all the issues the characters face in life and in living in a new place (Britain). This is a problematic mode of representing immigrant characters, as having race play such a defining role in their identity reinforces stereotyping of immigrants. She goes on to say that pointing to race as the key

Paper Presentations

component behind characters' experiences and identities offers a homogenized and generalized view of the experiences and personhood of people of a certain race, leaving little to no room to address how issues of socioeconomic standing or gender or sexual orientation play a part in shaping peoples' identities and experiences. (Calvo 60) Resulting in the identity of a race of people being homogenized in such films in an image of the male experience and heteronormativity, which problematically disregards the ways in which female and homosexual members of a race or immigrant population often face twice as much marginalization in life as their straight, male, counterparts. (Calvo 60) Within *My Beautiful Laundrette*, Calvo praises the treatment of the characters of Tania (who is a woman) and Omar, (who is homosexual) who as children of Pakistani immigrants living in Britain would have their experiences glossed over in previous 1980's movies about immigration. Instead, *My Beautiful Laundrette* gives us a well-rounded and realistic depiction of individual characters and is a more realistic attempt of addressing questions about what it means to be an immigrant and of Pakistani descent living in Britain at this time. Tania and Omar's identities are shown to be shaped within three main contexts: their socioeconomic status, their ethnic background, and their personal relations with people. Throughout the movie, the director uses color in scenes dealing with these three aspects of the character's lives and experiences in ways which highlight and emphasize how these factors shape their identities and their relationship to the world around them. (Calvo 62) While Calvo explains how pastel color schemes in the movie play a part in defining meaning in the character lives, I expand on her ideas about color and the film to discuss the use of three primary colors, (blue, yellow, and red) to convey ideas about how these factors intersect with race and ethnicity to shape the lives of the characters in the film.

Motivation for Participating: Interest in dialogues concerning immigration, gender, and sexuality.

Mary Walrath

Title: The Face of Homelessness in D.C.

Faculty Sponsor: Professor Leah Stacy, English and Communication

Abstract: While in Washington D.C. during the Fall semester of 2016, I worked on an editorial team at the local street paper, where I extensively researched conditions of homelessness in the city and wrote an investigative piece that ran on the cover of the paper.

Motivation for Participating: Suggested by my professor.

Lauren Watt, Nicholas Gerbino, and Tinisha Baxter

Title: Public Health Program Evaluation of Community Agencies

Faculty Sponsor: Professor Mary Dahl Maher, Nursing

Abstract: Three senior public health majors conducted program evaluations of community agencies that provide formal and informal health promotion services. Each student made individual arrangements with a local non-profit and completed preliminary research and multiple site visits to assess the value and impact of the organization's work. These assessments will provide the organizations with an outsider's perspective of the effectiveness of the program which may lead to improvement of the program's services. This was a great opportunity for Nazareth students to forge relationships with community agencies to promote the health of the Rochester population.

Motivation for Participating: PBH 480 class requirement.

Performances

Breaking the Silence

Emily Kreitsek, Savannah Thomas, Amy Shurtliff, Sydney Jones, Kellie Kaminski, Emma Loree-Findeis, Zachary Grant, Mickayla Greagon, Kimberly Cassetta, Sarah McLaen, Nina Nasca, Grace Yeziarski, Emily Lawrence, Jaqueline Ellis, Sara Coykendall, Lydia Schifley, Erica Rivoli, Kaitlyn Hjelmar, Shannon Gavin, Sarah Baxter, MacKenzie Swinehart

Faculty Sponsor: Professor Heather Roffe, Theatre and Dance

Abstract: Through an on-campus dance club, Emily Kreitsek choreographed both "Break the Silence" and "Heal" in support of those affected by domestic violence, sexual assault, and sex trafficking. Her hope was to not only bring awareness to the topic, but to allow those personally impacted to feel a sense of freedom through the dance's creative expression. As a group, they have empowered each other to break down barriers and perform these pieces both emotionally and consciously, considering the severity of the subject, and the impact it has on so many lives. "Break the Silence" depicts the emotional trauma and breaking of an individual dealing with situations of sexual assault, while "Heal" shows the healing process of those who have been victimized. As many of the dancers have a personal tie to this dance, the group has become a support system for one another, using art as an outlet for the pain many have felt.

Motivation for Participating: To bring awareness of the impact of sexual assault, and to give support to those who have lived and relived any kind of sexual violence. To those who have been silenced: we are with you.

Letting You Go: A Story about Addiction

Sarah McLaen, Jenna Kellogg, Emily Kreitsek, Jackie Ellis, Nina Nasca, Kimberly Cassetta, Lydia Schifley, Allison Laing, MacKenzie Swinehart, Sydney Jones, Kellie Kaminski, Erica Rivoli, and Sara Coykendall

Faculty Sponsor: Professor Heather Roffe, Theatre and Dance

Abstract: Sarah McLaen choreographed a dance commemorating those whom we've lost to drug addiction and alcoholism, and honoring their families. Over two semesters, she's worked with different dancers to create a piece inspired by the stories that she has read about and seen in the media. She created this piece because she wants to address the other side of addiction: the families and friends who watch their loved ones suffer. Sarah explained that these people have to make an impossible decision – do I enable this person's illness by bailing them out every time they get in trouble, or let them face their own consequences? It's hard to let someone go, and to tell them that you can't help them until they're ready to be helped, but for your own sanity and safety, sometimes you must.

Motivation for Participating: Dance is an amazing way to share stories with the world. Addiction is a difficult subject to discuss, so we hope that by allowing dance to do the talking, the audience will be able to create an internal dialogue and reflect on their own thoughts.

Made in China: A Sampling of Chinese Folk Songs

Yingxi Liu

Faculty Sponsor: Professor Bonnie Choi, Music

Abstract: Chinese folk song is inspired by the everyday life of Chinese people and has been passed down from generation to generation. The performance tradition of this music involves a particular kind of vocal sound that is unusual yet very enchanting to Western ears. Songs such as “Jasmine Flower”, “The Big Red Rooster with Fur Legs” and “Liu Yang River” will be performed on voice, erhu (a traditional two-string bowed instrument) and piano.

Motivation for Participating: Many people have heard this style of singing yet know very little about its origins, techniques and variety. Music is perhaps the most effective way to promote cultural experience and understanding.

9 TO 5 the Musical

Abigail Swanson, Abigail Voss, Anna Kostakis, Cassidy Halpin, Chiara Giampietro, Christopher Peterkin, Christopher Salvaggio, Claire Ganem, Demetrio Alomar, Dylan Kastel, Emily Mullin, Jacob Smith, Janna Kozloski, Joshua Feldman, Justin Smith, Kaitlyn Buckert, Katja Stavenhagen, Kit Prelewitz, Michael Schuetz, Michaela Groth, Peter Smith, Regan Stacey, Samantha Antoniewicz, Samuel Melita, Sara Hayward, Sterling Tull, Vincent Capluzzi

Faculty Sponsor: Professors Matthew Steffens & Corinne Aquilina, Theatre and Dance

Abstract: We’ve been rehearsing the musical numbers for 9 To 5: The Musical with faculty members Matthew Steffens & Corinne Aquilina. We are working toward a performance of the full show in Callahan and would like to share one of the numbers from it at CARS!

Motivation for Participating: To work toward our professional development skills to become working artists in our field of musical theater.

Poster Presentations

Shawn Andrus (#1)

Title: Capitalism: The United States building block for inequality

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: This poster presentation will represent how the sociological theme of capitalism connects to the sociology major and my life's work. The sociological theme my literature review will focus on is capitalism. Capitalism is the economic system that involves the free market where individuals control trade for profit. My interest in capitalism stems from Marx's conflict theory learned in the courses I think Capitalism is the foundation of other forms of social oppression such as Gender, Race poverty. I believe capitalism is a breeding ground for these social issues; Social theory and Social classes. This is a large section of sociological theory and a major topic of the field of sociology. This concept of capitalism will be a major study of my life's work because I consider it a very important topic in sociology, where I will be attaining a graduate degree and then a J.D. with the hope of getting into researching policy in order to influence and implement regulations and laws that can benefit the "have not's" in our society. Some topics of interest to further research are inheritance laws, corporate trade secrets, and criminal laws relating to corporate entities. These Laws directly impact economic inequality caused by capitalistic society.

Motivation for Participating: Requirement for SOC 444.

Anna Antonik (#2G)

Title: School #9 Clinical Residency Experience

Faculty Sponsor: Professor Naomi Erdmann, Language, Literacy, and Technology

Abstract: As a clinical resident, I worked with many students at School #9 to support their literacy development. I tutored one-on-one, facilitated small ELA groups of struggling students, and assessed students' phonemic awareness skills. The experience at School #9 has taught me a variety of useful skills as an elementary teacher and as a literacy specialist. Some of these include interpersonal communication with English Language Learners, cultural awareness, flexibility, and strategies to engage students in reading and writing. I participated in the Clinical Residency program to support students who struggle with reading and writing in the Rochester area and to better enhance my skills as a developing literacy specialist.

Motivation for Participating: Requirement for Clinical Resident and Graduate Assistantship program.

Jordan Axelrod, Taylor Glenn, Zamda Kamikazi, Katie LaManna, Jessica Maloney (#3)

Title: Patient outcomes based on nursing education preparation

Faculty Sponsor: Professor Lynda J. Dimitroff, Nursing

Abstract: This evidence-based practice project was to determine whether a BS in Nursing or an AD in nursing produced better patient outcomes. To begin the project we developed a PICOT question, completed a literature review, synthesized the literature, drew conclusions about practice, and asserted implications for practice.

Motivation for Participating: Requirement for NSG 350 Evidence-Based Practice for Clinicians.

Kristina Back (#4)

Title: Are our schools colorblind?

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: This poster presentation will synthesize how a significant sociological theme connects to the sociology major and my life's work. The theme of my study is colorblind racism and the ways it is portrayed in our education system. As teachers, it's important to give all of our students the opportunity to have an equal and adequate education. Colorblindness can be defined as a racial ideology that suggests the "best way" to terminate discrimination is by bringing justice to a community, without regard to race, culture, or ethnicity. In many cases, teachers can't look beyond these characteristics of their students'. The structure of our educational system does not adhere to this colorblind ideology either. This theme connects to the sociology major because having the colorblind ideology is not the answer. Race, ethnicity and cultural background are a part of a person's identity and society. This ideology is making race a taboo topic that people cannot openly discuss. My life's work will have this theme intertwined within because teachers have to look at the entire student. I'll do this by analyzing their specific academic needs and strengths. There is more to a student than just their race and cultural background that teachers need examine within the classroom setting. This is important for me as a teacher because these characteristics are their identity. If we were to dismiss those, we'd be dismissing part of their identity.

Motivation for Participating: Requirement for Sociology Senior Seminar.

Kristina Back (#5)

Title: "One child, one teacher, one book, one pen." Malala Yousafzai

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: I researched Malala Yousafzai and her global impact on the education of girls. I examined the lessons and values of Malala and her organization, The Malala Fund. I completed discourse analysis of her autobiography, website, and social media representations. By examining her work and social media representations, I tracked the impact of her work on the global expansion of girls' access to education. As a future educator, I am very interested in the gender inequalities and accessibility in education worldwide. Through analyzing her work, advocacy for girls' education, and influence on global policy, her lessons impact my own work as a teacher, working to create equity of opportunity for all students.

Motivation for Participating: Requirement for Seminar in Women and Gender Studies.

Brittany Barry (#6G)

Title: Effect of a Yoga and Art Intervention on Stress Reduction of College Students

Faculty Sponsor: Professor Stephen Demanchick, Creative Arts Therapy

Abstract: College students are a population that experience significant and varied amount of stress. Over time, stress can negatively impact both mental and physical health. A review of the literature on stress and college students has shown that negative effects can be reduced when college students are able to cope effectively. In the past, research has found that yoga can reduce stress in college students. Likewise, art making and art therapy research has also shown to decrease stress. Due to the lack of research on the effect that yoga and art in combination may have on stress reduction, this study focused on answering the question: Does the combination of yoga and art reduce stress in college students? A single subject ABA research design was utilized in this study in order to analyze college student stress levels before, during, and after implementation of a yoga and art intervention.

Motivation for Participating: For the experience of presenting my research.

Alex Bednarski (#7)

Title: I'm white, I'm privileged, and here's how I know it.

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: I like to think that to get a good look at the world we live in we need more perspectives than what we can provide ourselves. So as a white millennial male raised in middle-class suburbia in the United States, I think it's fair to say that my own personal perspective lends little to no unique insight. Coming to college was the first time in my life that this reality was made apparent for me, and one constant theme of this influx of knowledge is the fact that most people who like me don't even know the advantages we have, which I can assure you is true for most people. As a sociology major, I've seen through various literature sources how exactly people like me are privileged, as well as where and how we can see that in society today and in the future. I've been introduced to this reality in the form of both

educational resources and through my peers and educators and I now believe that while I may never fully comprehend what it's like to not have these privileges, I can at least acknowledge my privileges in a way that helps to support those who do not. By looking at Whiteness and what that truly entails, I hope to be able to express to others what they've never been forced to recognize.

Motivation for Participating: Requirement for Sociology Senior Seminar.

Lauren Beeles (#8)

Title: Freedom from Trauma: Communication as a Solution

Faculty Sponsor: Professor Esperanza Roncero, Foreign Languages and Literature

Abstract: As part of a senior project for my Spanish major, I explored the use of communication as a method of healing from traumatic experiences. Using pieces of Spanish and English literature, I wrote a paper in which I conclude that those who have suffered from trauma need to connect with other people as a part of the healing process. I argue that in order to do this, victims of trauma can utilize either written or oral testimony, and that there are advantages and disadvantages to both of these methods.

Motivation for participating: Requirement for SPN*400: IS Spanish Senior Project.

Christine Blackmer (#9G)

Title: The Effects of Inquiry Based Learning on Third Grade Students

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: This research focuses on the implementation of inquiry based learning in a 3rd grade classroom. Students receive an inquiry based instruction two days a week during math. The intent of this research is to promote student enjoyment, engagement, collaboration and critical thinking.

Motivation for Participating: To share and discuss my year-long action research that demonstrates my passion for education and what I have learned as an educator.

Alexis Blydenburgh (#10)

Title: Cultural Reflections Before and After an International Experience

Faculty Sponsor: Professor Esperanza Roncero, Foreign Languages and Literature

Abstract: Through my research, I interviewed students who had studied abroad and read a book called "Foreign to Familiar," which I used as a framework for my research topic. I then read the interviews and identified common aspects of culture discussed in reference to "Foreign to Familiar." Utilizing the patterns I had found, I wrote a comprehensive paper which I will be summarizing as a poster in order to portray the importance of an international experience as a tool to reflect on one's culture of origin. This is important to me on a personal level because my own study abroad experience impacted the way I view my own country and the world in ways I would not have imagined before.

Motivation for Participating: Requirement for Spanish Senior Comprehensive.

Emily Bolt, Brianna Horn, Kelly Pike, Kearstin Shirley (#11)

Title: The prevalence of horizontal violence among registered nurses

Faculty Sponsor: Professor Lynda J. Dimitroff, Nursing

Abstract: This evidence-based practice project was to determine whether or not education was a helpful intervention for horizontal violence among registered nurses. To begin the project we developed a PICOT question, completed a literature review, synthesized the literature, drew conclusions about practice, and asserted implications for practice.

Motivation for Participating: Requirement for Evidence-Based Practice for Clinicians.

Mark Bradley, Grace Fumich, Erika Holland, Lindsay Klein, Annjerri Watkins (#12)

Title: Compassion fatigue in registered nurses

Faculty Sponsor: Professor Lynda J. Dimitroff, Nursing

Abstract: This evidence-based practice project was to determine what types of interventions would help decrease compassion fatigue in registered nurses. To begin the project we developed a PICOT question, completed a literature review, synthesized the literature, drew conclusions about practice, and asserted implications for practice.

Motivation for Participating: Requirement for Evidence-Based Practice for Clinicians.

Clare Brennan (#13)

Title: Women in the Workforce

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: This poster presentation will synthesize how a significant sociological theme connects to the sociology major and my life's work. My CARS poster will demonstrate,

specifically, my interest in the sociological theme of women in the workplace. Numerous sociology classes that I have taken over the course of my undergrad have examined the topic of gender, and it's a topic that I've remained fascinated by; especially in regards to how women are seen in the workplace. I am a woman and this topic intrigues me in the sense that I've undergone certain experiences being the gender that I associate with, and will continue to undergo certain experiences throughout my life's work; I'm going into a profession in which inhabits mostly men. This theme is important to study, not only because gender is one of the most interesting social conceptualizations that I come to understand, but because it can be understood as a social issue as well (the inequality/discrimination of women).

Motivation for Participating: Requirement for SOC 444 - Sociology Senior Seminar.

Paxton Brewer (#14G)

Title: School #9 Clinical Residency Experience

Faculty Sponsor: Professor Naomi Erdmann, Language, Literacy, and Technology

Abstract: 1) Literacy with students 2) Push in, pull out services 3) Support kids with literacy needs.

Motivation for Participating: Clinical Residency Program.

Jennifer Cator (#15G)

Title: Global Coherence of Story Narratives in Right Hemisphere Dysfunction

Faculty Sponsor: Professor Melissa Johnson, Communication Sciences and Disorders

Abstract: Right hemisphere brain damage often results in cognitive-communicative deficits (Tompkins, 2012). Impairments may be evident in discourse coherence and cohesion (Marini, Carlomagno, Caltagirone & Nocentini, 2005). The focus of this study was to measure global coherence in a story retelling task of the fairy tale "Cinderella" by seven individuals with right hemisphere dysfunction (RHD) as a result of a right hemisphere stroke and five healthy controls. Global coherence is defined as the degree to which specific utterances relate to the overarching topic (Glosser & Dessler, 1990). Using a 4-point scale, an average global coherence score for each participant was derived (Wright, Capilouto & Koutsoftas, 2013). Although not statistically significant, results trended toward lower average global coherence for participants with RHD when compared to controls. There is need for improved understanding of discourse characteristics in RHD that has been partially addressed by this research.

Motivation for Participating: Participating in this research study is part of my graduate assistantship and is a great opportunity to gain research experience.

Gannon Connors, Emilee Hyde, Eileen Pelkey, Daryn Loy, Sarah Izzo, Shane Fuentes, Alyssa Merrill, Jacob Murphy, Mustafa Ahmed, Giannette Kokkoris, Matthew Kwok, Claire Narang, Aditi Seshadri, Anjana Seshadri, Catherine Wu, Selena Zhang (#16)

Title: Contribution of lower Genesee river watershed to the algal blooms in Lake Ontario

Faculty Sponsor: Professor Padmini Das, Professor Stephanie Zamule, Biology

Abstract: Toxic algal blooms caused by the elevated trophic-levels (phosphate and nitrate) in waterways is a major concern in the Great Lakes regions. Lake Ontario has been experiencing massive algal bloom every summer, emphasizing the need for monitoring the nutrients inputs by major streams and rivers. The objective of the current study was to determine whether the Genesee River contributes to elevated trophic levels of Lake Ontario as function of seasonality. Water samples were collected from six different locations along the mouth of the river and analyzed primarily for nitrate, ammonium, and phosphate levels. Other water quality parameters were measured including pH, electrical conductivity, turbidity, and dissolved oxygen. Results show that total phosphorous (TP) concentrations in all locations are many folds higher than the EPA permissible guideline (0.02mg/L). Nitrate-nitrogen levels are higher than expected in clean water, but lower than EPA guideline (10 mg/L). 22 species of green-algae were identified in these locations. Locations with high algal growth resulted in higher concentrations of ammonium, lower levels of DO, and acidic pH.

Motivation for Participating: Requirement for Scientific Research 450 (SCI450).

Katie Convertino (#17G)

Title: How Does Direct Teaching of Spelling Features Impact Students' Spelling Progress?

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: This project examines the impact of students' spelling progress with direct teaching of spelling features. Various methods of data collection ensured the efficacy of the intervention. The baseline data, Developmental Spelling Analysis (DSA) from Words Their Way, assessed students on their initial knowledge of different spelling features. The intervention implementation consisted of direct teaching of three spelling features and utilizing different materials and activities. The intervention included three small groups for 20 minutes twice a week. Depending on student needs, intervention on a specific spelling feature was implemented for approximately 4-6 weeks. Informal data was collected occurred. Additionally, the same DSA was administered to students to assess progress after each spelling feature was taught. This project was developed due to the knowledge that spelling has become less of a priority in schools today. The preliminary findings indicate that the use of this method increases students spelling abilities across several instruments.

Motivation for Participating: To share and discuss my preliminary findings on implementing effective spelling methodologies for elementary learners.

Katherine Cox, Krista Ortiz, Claire Guy, Nicholas DeMarco, Scott Sullivan (#18G)

Title: Does Weight Bias Exist Among Graduate Physical Therapy Students?

Faculty Sponsor: Professor Staffan Elgelid, Physical Therapy

Abstract: Our group created a Qualtrics survey that was sent to colleges and universities approved by the Commission on Accreditation in Physical Therapy Education (CAPTE). The survey, utilizing the NEW Attitudes Scale and 7 additional questions developed by our team, was designed to help answer the following question: Does Weight Bias Exist Among Graduate Physical Students? This question is predicated on existing research from Australia that concluded Physiotherapists possess a weight bias. With increasing obesity rates across the world, we chose this research due to its potential effect on ethical implications when treating patients who may be overweight. To date, there has been no research that examines the bias of graduate level physical therapy students. In an effort to identify the presence or absence of this bias, we hope to lay groundwork for future studies in this area. We feel that this information can provide a glimpse into the quality of current Physical Therapy education, and the mindsets of therapists who will be leading the next generation.

Motivation for Participating: Requirement for PTR 761.

Tanya Cziesler (#19G)

Title: How Does an Education Technology Specialist Contribute to a Project-Based Learning Program in an Elementary School?

Faculty Sponsor: Professor James Fenwick, Language, Literacy, and Technology

Abstract: Throughout my experience during Nazareth College clinical residencies at Allendale Columbia for the Educational Technology Specialist program, I have been a part of the Project Based Learning (PBL) program that the school implements within their kindergarten to fifth-grade classrooms. By learning more about what Project Based Learning and how an educational technology specialist contributes allowed for me to gather information about the career path that I am choosing to take. During my time at my clinical residencies, I have collaborated with teachers, administrators, and students to learn more about PBL and how technology plays a significant role in the students learning the process. I was eager to know more about PBL because it is a learning method that requires the teachers and students to use more technology and introducing students to real-life skills and strategies that they will use outside of school. I contributed to this part of the PBL lessons with my mentor, by teaching students about digital literacy and citizenship before introducing the new technologies that the students will be using for their projects.

Motivation for Participating: Requirement for Educational Technology Specialist Clinical Residencies.

Hannah Darr (#20)

Title: Refugee Resettlement Practices and Entrepreneurship

Faculty Sponsor: Professor Jennifer Leigh, Management

Abstract: I am conducting research on 1. Where are the Nepali-Bhutanese, Congolese, Burmese (Karen & Karenni), and Somalian resettlement communities in the US? What are the relocation agencies in these communities? 2. What are the best practices in Canada for their resettlement efforts, especially those related to employment? I am conducting the research as an independent study and am going to submit my findings to the Rochester Refugee Resettlement Services Office.

Motivation for Participating: Independent study research.

Connor Delaney (#21G)

Title: A Case Report of an Intensive Clinical-based Physical Therapy Model

Faculty Sponsor: Professor Michelle Donahue, Physical Therapy

Abstract: A case report regarding outcomes following an intensive course of physical therapy for a six year old with spastic quadriplegic cerebral palsy at Gross Motor Function Classification System Level 3. The case study was performed to determine the amount of improvement with intensive physical therapy versus standard care. The patient was followed for two weeks using the specific intensive physical therapy model framework. The framework consisted of receiving therapy for two hours a day, every day, for two weeks. There were several outcomes used before and after the two weeks to assess the patient's functional skills and GMFM score. The functional skills that were worked on over the entire two weeks consisted of sit to stands, walking with loft strand crutches, treadmill walking, and standing balance. The patient demonstrated more improvement than what would be expected with standard care in all functional outcomes and her GMFM score at the end of the two weeks.

Motivation for Participating: Completed case report during a clinical and felt the outcomes were so good that it needed to be shared with the public.

Kevin Denny and Jacob Cuyler (#22)

Title: Utilizing small molecules (NBD-556) for the diagnosis of HIV

Faculty Sponsor: Professor Stephen Tajc, Chemistry and Biochemistry

Abstract: HIV targets the immune system of an infected host resulting in an increased chance of acquiring immunodeficiency, rendering the host susceptible to infection and disease. HIV persists as a global epidemic infecting approximately 36.9 million individuals worldwide. While

there is no cure for HIV, antiviral therapy can help control the virus allowing for longer life expectancy and a reduction in the ability to transmit the disease. The advantages of early detection are widely understood however, current methods which rely on the presence of HIV antibodies lack the ability to detect HIV after initial exposure. Past research has shown that NBD-556 has the ability to bind directly to HIV envelope glycoprotein (GP-120). Our goal is to attach a functional group, which can be monitored via spectroscopic methods, to NBD-556. Naturally, the binding of NBD-556 to GP-120 will induce electronic and structural changes to NDB-556. By monitoring this change it is therefore possible to determine whether or not GP-120, and by consequence HIV, is within an individual.

Motivation for Participating: Requirement for SCI42030 Adv. Sci Research.

Amanda Entress, Gabrielle Sharp (#23G)

Title: Teacher Perceptions of Collaboration with School-Based Occupational Therapists

Faculty Sponsor: Professor Laura Poleshuck, Occupational Therapy

Abstract: Our Master's research project sought to determine how elementary school teachers perceive collaborative practices with school-based occupational therapists. After developing the Survey of Teacher Perceptions of Collaborative Practices with School-Based Occupational Therapists, we collected responses from suburban elementary school teachers via Survey Monkey. Using SPSS software, we analyzed our data to learn about the collaborative practices between elementary school teachers and occupational therapists from the teachers' perspectives. This research was completed in hopes of determining the current supports and barriers to collaboration and supplementing existing research to provide information applicable to both school-based occupational therapists and teachers.

Motivation for Participating: Requirement for OTR 513: Research Writing and Presentation.

Andrea Frey, Olivia Martinez, Jeffrey McQuay, Lianna Raspudic (#24G)

Title: The Effect of Small Group Modified Constraint Induced Movement Therapy for Clients with Chronic Stroke in an Outpatient Setting

Faculty Sponsor: Professor Kathleen Stoklosa, Occupational Therapy

Abstract: The purpose of this within-subjects research study was to determine if changes in occupational performance of clients with chronic stroke occurred after four weeks of small group modified constraint-induced movement therapy. Three participants with residual post-stroke functional deficits were recruited using convenience sampling. During the summer of 2016, the participants' occupational performance was assessed using the Motor Activity Log and Wolf Motor Function Test prior to the intervention phase by a blinded assessor. All participants were given a behavioral contract, a caregiver contract, and a home diary prior to the intervention phase. The intervention phase was conducted by graduate OT student

researchers under the supervision of a faculty advisor; a NYS licensed occupational therapist. During the intervention phase, participants wore a mitt-constraint on the unaffected extremity during treatment to facilitate the use of the extremity affected by the stroke. There were 8 sessions lasting 2 hours each. The individuals were instructed to participate in meaningful daily living tasks, including dressing, laundry, and cleaning while wearing the mitt for 5 hours during each weekday. The final session included a post-evaluation completed 1 week after the last intervention session. Outcome data was analyzed using SPSS 2.0 software.

Motivation for Participating: Research completed during OTR514-04.

Macala Gallow, Michelle Gerace, Tyllyn Martin, Josef Nachar, Ketan Sarpaul (#25)

Title: The impact of Magnet designation on patient outcomes

Faculty Sponsor: Professor Lynda J. Dimitroff, Nursing

Abstract: This evidence-based practice project was to determine if Magnet designated hospitals have better patient outcomes than non-Magnet hospitals. To begin the project we developed a PICOT question, completed a literature review, synthesized the literature, drew conclusions about practice, and asserted implications for practice.

Motivation for Participating: Requirement for NSG 350 Evidence-Based Practice for Clinicians.

Kelley Ginster (#26G)

Title: School #9 Clinical Residency Experience

Faculty Sponsor: Professor Naomi Erdmann, Language, Literacy, and Technology

Abstract: I worked at School #9 this year as part of the Literacy Education program here at Nazareth. I provided push-in and pull-out services at various grade levels to help students improve their literacy abilities by supporting students using decoding and comprehension strategies. This contributed to my preparation as a future literacy specialist.

Motivation for Participating: Requirement for Literacy Clinical Residency Program, which is a graduate assistant position offered to select students each school year.

Sarah Godnick (#27)

Title: Integrating Mindfulness into Daily Practice with Undergraduate Nursing Students

Faculty Sponsor: Professor Lynda J. Dimitroff, Nursing

Abstract: The purpose of this study was to determine the effects of a 15-week mindfulness course on outcome measures (perception of stress, mindfulness skills, and physiological markers) in undergraduate nursing students (NS) in a Bachelor of Science Nursing (BS) program. Mindfulness means awareness of being present in the moment while acknowledging what one is feeling and thinking. This practice has been around for thousands of years and originally stems from Buddhist philosophy. Kabat-Zinn (2005) is credited for bringing mindfulness to the forefront in today's society as a stress reduction technique through his teachings. We hypothesized that a 15-week mindfulness course would sustainably reduce both subjective and objective stress levels as determined by self-reported outcome measures and physiological markers (PM) including resting heart rate (HR), blood pressure (BP), and respiratory rate (RR). The specific aims of the study were to 1) Examine the effect of the mindfulness course on subjective and objective stress levels longitudinally (baseline, midterm, end of course, and post-course. Participant stress levels will be measured via validated questionnaires and PMs; 2) Determine if the mindfulness skills taught in class are implemented longitudinally; and, 3) Correlate changes in mindfulness practice with PMs longitudinally.

Motivation for Participating: Requirement for Research Assistantship.

Emily Griffith (#28G)

Title: Social-Emotional Learning Strategies in a Primary Classroom

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: I am doing this topic within a second grade classroom because I have noticed a lot of younger students coming into school with high levels of anxiety and less social skills. I believe that these lagging skills are interrupting students' levels of performance in the classroom. So far I have focused on Responsible Decision Making skills, meaning looking into problem-solving skills, tattling, understanding small problems versus big problems. Now I am starting to focus on self-management skills, meaning impulse control, self-discipline, stress management, self-motivation, and organizational skills. I have been implementing these strategies through morning huddle (morning meeting) with a morning message, through small groups that vary (mid-day), and a whole group activity or discussion (after lunch - end of the day). I have used posters (anchor charts), exit tickets, worksheets, friendship cards, Problem Detectives Club activity and working on case files to help solve the problems. I used a lot of books to make connections and have the students be able to solve the problem on their own. I also read part of a story and stopped and talked to the class about the problem that was happening and they got to draw the problem and draw a solution they thought fit the scenario. So this is a topic I am interested in and especially at a second grade level.

Motivation for Participating: I am a teaching fellow for inclusive childhood education and would like to share my year-long experiences and the data I have received throughout all of my activities and assessments. I will discuss my findings and the progress that my students are making.

Alyson Hallett (#29G)

Title: Integrating Technology into Primary Level Classrooms

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: I am showcasing a year-long action research project on technology integration in primary classrooms. I am completing my research in 2nd grade classrooms in Victor, NY. The students were given a baseline assessment to see where their technology skills were in September. Since then, the students have been using online reading programs, Google Docs, and Edmodo to participate in group discussions. I found that many schools have technology resources available to them, but are unsure of how to appropriately use them. This research has helped me to find strategies that can be used in primary classrooms and to integrate technology as a resource in the classroom.

Motivation for Participating: I am an Inclusive Childhood Education Fellow in the Professional Graduate Program. I would like to share my research with current and future classroom teachers and provide them with resources that can be used regarding technology.

Julia Hess, Ally Kadin, AnneMarie Boland (#30)

Title: Using Peer Social Skills Programs to “Win Others Over”: Perspectives from Teens, Parents and Stakeholders

Faculty Sponsor: Professor Lisa Hiley, Communication Sciences and Disorders

Abstract: In the Communication Sciences and Disorders Program student clinicians participate in clinical experiences designed to support coursework with clinical practice. One specific placement is the Social Communication Club at Nazareth (SCCAN). Within this semester long after-school social skills club, student clinicians focus on teaching and practicing social skills within naturalistic settings to two groups of (pre)teens. During the fall of 2016, the club curriculum used a project-based learning approach to focus on the theme of social skills designed to “win others over” in order to build meaningful relationships. This topic was chosen because the development of communication skills is essential to an individual’s ability to navigate social situations in everyday life. To document the importance of social skills programming, we collected participant (i.e., teen) and parent feedback, obtained partner and stakeholder insight from the Director of Education at The Norman Howard School and Program Manager at AutismUp, as well as drew upon our own experiences as student clinicians. This CARS presentation will connect our findings to highlight qualities that make the group beneficial, including the importance of building a safe community to learn, as well as the value of choice within an authentic environment to practice social skills.

Motivation for Participating: We would like to share our clinical experience and findings in regards to the effectiveness of social skills programming for students with communication challenges.

Stevanie Hilfiker (#31G)

Title: Writing: The Importance of Organization and Sentence Fluency

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: 1. I collaborated with teachers in a general education kindergarten classroom and an inclusive second grade classroom twice a week, with a focus on writing. RCSD School 46 uses the 6+1 Writing Traits, and following this model, I worked with a small group from kindergarten and a small group of second graders on two specific writing traits: organization and sentence fluency. As my time continued at the school, I also began to implement higher level questioning into my writing groups. During times when writing was not being worked on, I worked with small groups in each grade level on math. 2. Most days, I pull my writing students out of the classroom, and work on one of my traits for 30-45 minutes, twice a week. Some days, the students and I stay in the classroom, and work in our group on the writing activity the remainder of the class is working on. 3. My background is in speech language pathology, and writing is all about language, and is a content area where my background can be best utilized.

Motivation for Participating: I want to share and discuss the collaborations between School 46, their teachers and myself in improving the writing skills of students. The information I have collected will give teachers and administration insight into effective ways to aid in the improvement of writing skills in the areas of organization and sentence fluency.

Katherine Holbein (#32)

Title: Methods Used to Create a Multicultural Classroom

Faculty Sponsor: Professor Esperanza Roncero, Foreign Languages and Literature

Abstract: I researched the various methods that should be used in different types of classrooms in order to facilitate learning for everyone in the classroom, with a focus on students from multicultural classrooms. It will also highlight some methods that can be used to teach about different cultures within the classroom. I have done extensive research on this topic, and have conducted interviews with students in various classrooms. I chose to research this topic as I am going to be a teacher and I think that it is very important to include all cultures in not only our classroom culture but also our curriculum. I wanted to share my research in hopes that other teachers would see some of these methods and integrate them into their classrooms.

Motivation for Participating: Requirement for SPN 400.

Denzell Jackson (#33)

Title: Inequality in Our Education System

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: In my literature review, I will go in depth about the inequality that exists in our educational system at the private and public level, by using various sociological themes and concepts to help individuals understand the significance of the specific problems we are facing, such as available health care, insurance policies, economics in the community, commonality of race as educators compared to students, and lastly the available resources (textbooks, nutrition, transportation, etc.) Looking at the infamous educational social structure, we can see the existing gap between inner city school and suburban schools in our educational system. The City of Rochester is known for its rich history. However, the city is also known for its negative notion of being one of the most impoverished cities in all of the United States. But what is astonishing is if you look at the division of the Genesee River. Every school on the west side of the river is wealthy or has a tremendous amount of funding, while the east side of the city is impoverished and lacking resources. This transpiring epidemic is caused by the contributing factors of capitalism, institutional racism, segregation, and color blindness. These particular concepts connect to my major because, I was taught throughout my tenure at Nazareth College that the term Sociology can be defined as; the systematic study of the development, structure, interaction, and collective behavior of organized group of human beings. Using the concept of sociological imagination, I am looking deeper into why our educational system has inequalities and flaws. We currently live in an era where individuals and society claim that racism does not exist anymore, but it is present in our current educational system and educational community. Looking at my personal life, these themes connect very well since I have experienced a variety of schools (public inner-city, public suburban, public rural, and private boarding). I have seen, firsthand, the inequality of available resources, opportunities, classes, and professors. Through my life's work, I want to make a difference. Being a black male who wants to go into this profession, I exemplify breaking the threshold of a female dominant profession. But in retrospect, I feel as if students in an inner city environment will gravitate towards me because I am an individual who can relate to them and will remain unbiased.

Motivation for Participating: Requirement for Sociology 444.

Janna Jamso (#34)

Title: Rainbow Dragons of Bhutan

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: I am exploring the closeted world of the LGBT+ community in Bhutan in connection to the politics, religion, and cultural aspects and expectations of the Bhutanese society. The methods used for this research include: interviews; scholarly articles and journals; contextual and intellectual blogs, and testimonial videos. I chose this topic because the issue of LGBT+

community is neglected and not spoken of in Bhutan. Bhutan became a Democracy only in 2008, and due to its patriarchal natured laws, laws on women were only very recently written down in the constitution. In the midst of this newly formed democracy, a lot of focus has been on women's rights and women empowerment in Bhutan, but what the Bhutanese society failed to notice was at the same time the LGBT+ community had just begun to rise as well. While Women's issues and rights have been addressed and made aware, the LGBT+ community in Bhutan still stays under the table.

Motivation for Participating: Requirement for Seminar in Women and Gender Studies.

Kyle Lai (#35)

Title: Racial Capitalism in Modern Labor Markets

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: This poster presentation will synthesize how a significant sociological theme connects to the sociology major and my life's work. Sociology looks at all social inequalities and attempts to give an explanation as to why these inequalities are present. The theme I would like to focus on is racial capitalism. "Racial capitalism evokes one of the darkest eras in American history, during which nonwhiteness and nonwhite human beings were assigned value and transferred among white people as commodities." In relation with laborer markets when racial capitalism is present, workers are valued by skill, experience, and age. However, some workers are valued by race and gender. These values can change the worker's wage and employment-even if they're more skilled than others. My life's work is to become a union representative and liaise with employers so that there is equal opportunity for all workers.

Motivation for Participating: Requirement for Sociology Senior Semenor.

Alexa Laubscher (#36)

Title: Don't Fear "Queer": Understanding the Complexities of LGBTQ+ Terminology

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: I evaluated academic literature that traced the development of such terms. Then, I conducted a questionnaire that evaluated people's perception of such terms and gathered opinions on currently used terms and their previous counterparts or variants. I will be presenting the evolution and perception of a few key terms.

Motivation for Participating: Requirement for WGS440: Seminar for Women & Gender Studies.

Abigail Linn (#37G)

Title: Visualization and Art Making on the Reduction of Stress for Collegiate Swimmers

Faculty Sponsor: Professor Jennifer DeLucia, Creative Arts Therapy

Abstract: The reason for this paper was to identify if a correlation existed between visualization, stress and art making in collegiate swimmers. This paper looked to explore whether or not the level of stress a collegiate swimmer identified decreased after guided visualization and art making. Four volunteers from a collegiate swim team participated in four sessions of the research study. Each study was as follows: the participants filled out a Daily Stress Inventory (DSI), a 58 item questionnaire about the past 24 hours minor stressors. Each participant then listened to the researcher conduct a guided visualization. After the guided visualization each participant was instructed to create an art piece that incorporated the sense of what they experienced during the guided visualization. Finally each swimmer completed a post DSI. This study was needed as little research has been done to identify the affects guided visualization along with art making in the reduction the stress levels in collegiate swimmers. With the reduction of stress, collegiate level swimmers may be able to perform at their maximum potential. With the information gathered by this study, the impact of guided visualization and art making on stress levels may be generalizable to a larger population.

Motivation for Participating: An opportunity to present my Thesis and provide me experience with a formal presentation of a research study.

Daryn Loy, Sarah Izzo, Gannon Connors, Emilee Hyde, Eileen Pelkey, Shane Fuentes, Alyssa Merrill, Jacob Murphy, Mustafa Ahmed, Giannette Kokkoris, Matthew Kwok, Claire Narang, Aditi Seshadri, Anjana Seshadri, Catherine Wu, Selena Zhang (#38)

Title: Contribution of sewage treatment plants to the elevated trophic levels of the lower Genesee River Watershed

Faculty Sponsor: Professor Padmini Das, Biology

Abstract: A major concern in the Great Lakes Region is potential eutrophication caused by elevated nutrients (phosphorus and nitrogen) carried by streams and rivers. In addition to fertilizer runoff from non-point sources like farms, point-sources like wastewater treatment plants (WWTP) contribute enormously to increase trophic levels of these waterways. Our current study investigated the relative nutrient concentrations of several upstream and downstream locations of two WWTPs in the lower Genesee River Watershed. The data from Avon-WWTP, located along the bank of the Genesee River, showed a significant ($p < 0.05$) increase in both nitrate and total phosphorus (TP) concentrations at the discharge point of the WWTP. The Bergen-WWTP discharges its effluents to a small stream that meets with the Black Creek which flows into the Genesee River. The effluents from the Bergen WWTP significantly ($p < 0.05$) increased trophic levels of the stream, which elevated nitrate and TP concentrations of the Black Creek. Interestingly, irrespective of the presence of these WWTPs, the TP levels in all sampling locations are many folds higher than the EPA-permissible level (0.02 mg/L), indicating the large release of TP from both non-point and point-sources.

Motivation for Participating: Requirement for SCI 450: Advanced Scientific Research.

Ethan Luta (#39)

Title: Synthesis of amino acids coupled to 2, 6-pyridine dicarboxylic acid, and evaluation of their affinity towards metals

Faculty Sponsor: Professor Stephen Tajc, Chemistry and Biochemistry

Abstract: Natural gas is a cleaner alternative to energy production; it also has 50% less carbon dioxide emissions than burning coal. However, a major downside to natural gas is the method by which it is obtained, which produces solutions of super saturated alkaline earth metals into the ground. Previous works have shown that a natural molecule 2, 6-pyridine dicarboxylic acid (DPA) is an efficient molecule for binding and removing alkaline earth metals, such as calcium, barium, and strontium, but only marginal binding to magnesium. As a result of DPA binding, these metals are precipitated out of solution. Our research is to synthesize novel DPA derivatives by coupling amino acids as to increase solubility and binding affinity for larger metals. The methods used include NMR to confirm structure, flame atomic absorption spectroscopy to quantify metal removal, UV spectroscopy and isothermal titration calorimetry to confirm association between the DPA derivative and metal.

Motivation for Participating: To prepare for the ACS national convention in San Francisco.

Christina Luther, Dana Voldan-Curry (#40G)

Title: Measuring Personal Growth in ACS Students

Faculty Sponsor: Professor Rebecca Fahy, Psychology

Abstract: We measured student growth based on changes in priority rankings. We administered three surveys to all ACS students during the fall 2016 semester in order to measure personal growth during their first semester in college. This was done by an initial survey asking students to rank their priorities, a mid-semester survey consisting of 47 questions taken from the Student Developmental Task and Lifestyle Assessment, and then repeating the initial ranking survey at the end of the semester in order to assess whether ranking priorities changed. We are currently in our last semester of the master's program in Higher Education Student Affairs Administration. Understanding college student growth and student priorities benefits us and Nazareth College's Student Success programming.

Motivation for Participating: Independent Study

Mark Lysiak, Jacob Murray (#41)

Title: Synthesis of Novel Dipicolinic Acid Derivatives for Improved Hydraulic Fracturing Wastewater Remediation

Faculty Sponsor: Professor Stephen Tajc, Chemistry and Biochemistry

Abstract: Hydraulic fracturing is a well stimulation technique that allows for the recovery of natural gas from shale rock formations beneath the ground. However, the hydrofracking technique requires injections of highly pressurized freshwater, in combination with sand into the ground, which produces millions of gallons of unusable wastewater contaminated with metal cations known as total dissolved solids (TDS). Our previous research has shown pyridine-2,6-dicarboxylic acid, commonly referred to as dipicolinic acid (DPA) is able to bind calcium and strontium metal cations present in the hydrofracking wastewater. This work primarily focuses on the synthesis of DPA derivatives by the addition of amino acids in order to increase the polarity and size with the hopes of targeting larger cations, such as barium and iron.

Motivation for Participating: Requirement for SCI 450.

Simone Macirella (#42)

Title: From "Deformed Males" to "Nasty Women": A History Women's Resistance

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: Through the use of primary and secondary sources, I have compared the rhetoric used to describe, and consequently subjugate, women over the centuries. Through careful deconstruction and analysis, I have examined the rhetoric used in ancient Greece and Rome, medieval Europe, and twentieth century America, before comparing it to the rhetoric used to describe women today. In doing so, I aim to promote awareness about the impact of language and how it shapes our culture.

Motivation for Participating: Requirement for WGS 440: Seminar for Women and Gender Studies

April Mashaw (#43G)

Title: School #9 Clinical Residency Experience

Faculty Sponsor: Professor Naomi Erdmann, Language, Literacy, and Technology

Abstract: As a clinical resident I represent the Nazareth College Literacy Education Program. I work in a kindergarten classroom where I work with individual students and small groups to improve their literacy abilities. I help these students with letter identification, letter-sound relationships, and writing. I employ strategies that I have learned in the Literacy Education Program to help my students. Being a clinical resident gives me great hands-on experience as a Literacy Specialist and will help me be an effective educator in the future.

Motivation for Participating: Literacy Education Clinical Resident Program.

Danielle Mastropierro (#44G)

Title: Family art making used to reduce stress: Families with an ADHD or Autism Spectrum Disorder Diagnosis

Faculty Sponsor: Professor Stephen Demanchick, Creative Arts Therapy

Abstract: Research was conducted over a four week time period with a family containing a child diagnosed with ADHD. It was hypothesized that if parent(s)/guardian(s) who have a child diagnosed with attention deficit/hyperactivity disorder or autism spectrum disorder participated in family art making then their stress levels would be reduced as measured by the Parenting Stress Index, Fourth Edition (Abidin, 2012). This study is a quantitative design utilizing a pre-inventory, a post-inventory, and a follow-up inventory. The family participated in two, 90 minute art making sessions. The first session focused on creating a family portrait. The second session, held one week later, focused on creating a gift for a family member. The data was analyzed by graphing raw scores to show change over time. The results showed a decrease in stress levels of the parent after participation in the two art making sessions with her child.

Motivation for Participating: I would like to participate in the Creative Activity and Research Showcase to share my research and educate others about benefits of utilizing art therapy, specifically with populations dealing with ADHD or ASD. I believe this would be an excellent opportunity to not only showcase my research, but also advocate for my field.

Cassandra Matalavage (#45)

Title: ERASMUS

Faculty Sponsor: Professor Esperanza Roncero, Foreign Languages and Literature

Abstract: Research about the different components of the ERASMUS international student exchange program.

Motivation for Participating: Requirement for Spanish Senior Seminar.

Dominique Matties (#46G)

Title: School 9 Clinical Residency

Faculty Sponsor: Professor Naomi Erdmann, Language, Literacy, and Technology

Abstract: Over the past two semesters I have been at Dr. Martin Luther King Jr. School 9 working with students in the literacy department as part of my graduate clinical residency. In the fall I worked directly in a first and second grade classroom as push-in reading support, however this semester I have taught nine individual students ranging from kindergarten to third grade. I pull these students out every Tuesday-Thursday for thirty minutes each and deliver

differentiated reading lessons tailored to their individual needs. We work on activating background knowledge, phonics, fluency, vocabulary, and reading, writing, and comprehension skills. These skills align with what they are learning in the classroom and are meant to work hand-in-hand with what their classroom teacher is teaching them on a daily basis.

Motivation for Participating: Required through Clinical Residency Program.

Brandy McCarthy, Haley DeVona, Francesca Speiss (#47)

Title: Making Maternal Health a Priority in Rebuilding Postwar Rwanda

Faculty Sponsor: Professor Mary Dahl Maher, Nursing

Abstract: In our Global Health course, we selected Rwanda as a case study. After learning about the atrocities of the 1994 genocide and the efforts to rebuild the healthcare infrastructure, we focused on maternal and infant health. We explored a variety of media and literature as well as primary sources from the Republic of Rwanda Ministry of Health. To learn the foundations of research, we took the Citiprogram certification in human subjects. We were assigned the topic of finding out more about the current status of maternal health to contribute background information for a grant proposal to the African Academy of Sciences on Prenatal Group Gatherings: The Way Forward to Improving Antenatal Care in Rwanda. We conducted a literature review.

Motivation for Participating: Requirement for PBH 102 Global Health.

Andrea McNeil (#48G)

Title: Essential Skills Need for a Primary Student to be Independent using Technology

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: A powerful tool for classrooms today is technology. This project entailed evaluating and working on essential skills that primary students need to acquire to be independent using technology. With the collaboration of the 2nd grade teacher in a suburban school district, this project helped to create assessments and learning tools. I researched applications students can use to practice the skills they need to become independent workers with technology by the end of second grade. Initial findings indicate that when students enter second grade their independent skill with technology is low.

Motivation for Participating: Education is a passion of mine, and learning about educational tools available to students is an interest of mine. I enjoy hands on learning with my professional peers, and gaining real world experience within the classroom.

Alyssa Merrill, Jacob Murphy (#49)

Title: Phytoremediation Potential of Switchgrass (*Panicum virgatum*) a native plant, to clean-up Bisphenol-A (BPA) contaminated aquatic systems

Faculty Sponsor: Professor Padmini Das, Biology

Abstract: Bisphenol A (BPA) is an endocrine disrupting compound, which leads to infertility, tumor growth, and obesity. Used in plastic production for decades, tremendous quantity of products containing BPA, are presently in landfills, potentially leaching BPA into the environment. Our assessment of hydrolysis and photolysis showed BPA is persistent in the environment. No statistically significant hydrolytic ($p = 0.42$) or photolytic ($p = 0.17$) degradation of BPA over a 55-day period occurred. This underscores the need to find an environmentally safe, ecologically sustainable, and socially acceptable BPA removal method from aquatic systems. As opposed to traditional ex situ processes, phytoremediation is non-disruptive, cost-effective, and ecologically-responsible. Switchgrass were assessed for their ability to phytoremediate BPA. Analyses with Switchgrass, a perennial, high-biomass, non-edible grass native to the Western New York region used the highest environmentally-relevant BPA concentration (20 mg/L). Kinetics of BPA removal by Switchgrass was assessed over 84-days under greenhouse conditions. Initially, Switchgrass exhibited slow removal, but after day 15, the removal was steady. In the end Switchgrass resulted in 55% BPA-removal from the aquatic media. Studies are currently underway to determine the fate of BPA in plant tissues through investigating the accumulation of BPA and its potential transformation into plant-BPA metabolites.

Motivation for Participating: Requirement for SCI 450.

Mikala Miller (#50)

Title: Development of the Hispanic Identity in Rochester

Faculty Sponsor: Professor Esperanza Roncero, Foreign Languages and Literature

Abstract: I researched the reasons and ways that individuals identified as Hispanic through surveys of Hispanic individuals in the Rochester area and research into the ways that people form identities. Since the Hispanic identity encompasses cultures from many different countries, I wanted to explore how people from diverse backgrounds are unified under this identity. I wanted to understand if there was one aspect of the Hispanic identity that was most critical in the formation of identity such as language or other shared experiences.

Motivation for Participating: Requirement for SPN 400 SPN Senior Project.

Larissa Mitchell (#51G)

Title: Oral Narrative Language with Kindergarten Students

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: Throughout the school year, I analyzed the progress of oral narrative language in three different kindergarten classrooms. This was done by giving a baseline assessment, called the test of narrative language, at the beginning of the year. Then various educational providers, including teachers, reading specialists, speech therapists and myself, used various strategies to improve narrative language skills. In particular, we used wordless picture books (along with meaningful questioning) to have the students develop appropriate story-telling language. In addition, a midpoint assessment was given halfway through the school year to track progress up to that point. At the end of the school year, the test of narrative language will be given once again. It is extremely critical for students, especially at this age to develop narrative language skills. This project mainly focused on oral narrative language. However, later these skills will be beneficial for when students need to develop written narrative language skills.

Motivation for Participating: I believe that sharing research is a great way for all educators to learn from one another. This overlaps with the idea of always using evidence-based practice. When teachers hear about what other educators have done and been successful implementing, it gives them more ideas to use in their classroom setting. With this larger array of educational strategies, teachers can become more likely to be effective teachers which in turn allow their students to become more successful. By sharing this research on narrative language, I hope to inspire teachers to use the same types of strategies in their classroom environments as well.

Emily Modeen, Julia Widmer (#52)

Title: Bioremediation of Neonicotinoid Insecticides, Thiamethoxam and Imidacloprid, by Select Bacterial Species

Faculty Sponsor: Professor Stephanie Zamule, Biology

Abstract: Neonicotinoid insecticides, including thiamethoxam (THM) and imidacloprid (IMI), have been associated with colony collapse disorder and developmental neurotoxicity. Environmental persistence of these insecticides establishes the need to develop sustainable bioremediation techniques. Phase I of this study evaluated the potential for bacterial remediation of THM and IMI by *Pseudomonas aeruginosa*, *Pseudomonas putida*, and *Pseudomonas fluorescens*. Bacterial utilization of these compounds as sole carbon or nitrogen sources was assessed as a function of initial THM/IMI concentration (10-90 mg/L). All three species used THM, but not IMI, as their sole carbon and nitrogen source. Based on Phase I results, Phase II was designed to characterize the kinetics of THM removal from aqueous media by *P. aeruginosa*, *P. putida*, *P. fluorescens*, *Alcaligenes faecalis*, *Escherichia coli*, and *Streptococcus lactis*. Residual THM and metabolites were measured using HPLC; statistical

analysis was run using JMP. Results showed significant ($p < 0.0001$) THM removal by *E. coli* (T50=12d), *P. fluorescens* (T50=18d), *P. putida* (T50=19d), *P. aeruginosa* (T50=23d). Removal by *A. faecalis* (T25=17d) was slower, and *S. lactis* removal was minimal. THM removal showed a strong negative correlation ($R^2=0.98$) with an unidentified metabolite in *P. putida* and *P. fluorescens* cultures.

Motivation for Participating: Requirement for SCI 450.

Paloma Mundi (#53)

Title: Study Abroad: Impact on Development of Autonomy

Faculty Sponsor: Professor MaryAnn Bush, Psychology

Abstract: Autonomy gains were examined on Spanish students planning to go and returning from study abroad. Materials that allowed the study were: Developmental Autonomy Task of Student Developmental Task and Lifestyle Assessment (SDTLA), Multicultural Personality Questionnaire (MPQ), and Mindful Attention and Awareness Scale (MAAS). A 2-factor ANOVA analysis, significant results were found regarding students returning from abroad. Those scoring low on both, MAAS and MPQ, showed lower scores on autonomy. Students scoring high on the MAAS and the MPQ showed higher scores on autonomy. No significant results were found for students going to study abroad. We noticed that people scoring low on MAAS and MPQ that returned from abroad showed lower scores than students planning to. Together, these results suggest that study abroad experience has an impact on student's autonomy. The MAAS and the MPQ are good predictors of gains in autonomy.

Motivation for Participating: Independent research.

Margaret Namy (#54)

Title: Feminism in the Education Workforce

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: My CARS project is focused on feminism within the education workforce. Feminism is women having equal rights as males within society. The culture of women in any society has a direct relationship of their status among males as well as the competitive nature in the workforce. In societies that are generally patriarchal, is the basic idea that men have a higher chance of receiving jobs over a woman. This theme connects to my life's work as a teacher because women are not given the same opportunities as males in the administrative field. The majority of inclusive educators are typically women while men tend to be more involved with administration. This type of scenario is just one example of how men tend to have power over women in institutions such as schools. The theme of feminism relates to the sociology major because it analyzes the relationship between men and women in society. Having an unbalanced ratio of males to females in the workforce can lead to problems with fundamental

rights, power and equality. In order for the idea of feminism to continue to build in the education workforce, our society needs to make an effort for gender equality.

Motivation for Participating: Requirement for Sociology Senior Seminar.

Abbey Notter (#55G)

Title: Exploring the Role of the Speech-Language Pathologist in Transitions in Early Childhood for Individuals with Autism Spectrum Disorder

Faculty Sponsor: Professor Dawn Vogler-Elias, Communication Sciences and Disorders

Abstract: The roles and responsibilities of the speech-language pathologist (SLP) in the schools include designing “a continuum of service delivery models in the least restrictive environment for students with disabilities, and that they provide services to other students as appropriate” (ASHA, 2010). Another critical role of the SLP is to collaborate with a range of professionals to provide the most effective support for their students, as well as their families. Working with students and families during the transition process in the early childhood years includes supporting and engaging them in the planning process from one educational system to the next. There is limited information regarding the role of the SLP in transition planning for individuals on the autism spectrum, therefore, the goal of this thesis is to explore the role of the SLP during transition planning in the early childhood systems.

Motivation for Participating: The opportunity to present and defend my research, as well as, begin to educate a variety of professions on the emerging role of the SLP in transitions.

Taylor Olmstead (#56G)

Title: Using Inquiry to Promote Writing in Primary Grades

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: This project examines the effects of inquiry based learning to promote writing at the primary grade level. This project focuses on second grade students, using their interests to research and create informational texts. Students are required to draft, edit, and revise their work, thus promoting the necessary skills of being a productive and capable writer. The goal is to increase students’ interest in the writing process, expand their thinking, and promote the necessary skills of elementary writers that will carry on throughout their education. Preliminary findings indicate that using inquiry-based methods to teach writing skills allows students to expand their ideas, deepen their level of writing, and be more engaged in the writing process.

Motivation for Participating: To share my year-long project of action research in a classroom setting.

Uchechukwu Onwubalili, Hannah Acciari, Macala Gallow (#57)

Title: Vision 2020: Building a Health Infrastructure in Post-Genocidal Rwanda

Faculty Sponsor: Professor Mary Dahl Maher, Nursing

Abstract: We created a literature review, using primary and secondary sources, to provide background information for a grant application to the African Academy of Sciences to provide an innovative form of prenatal care which would improve the health care infrastructure. In 1994, the genocide against the Tutsis led to the deaths of 1 million people in Rwanda, nearly 20% of the population at the time, as well as the displacement of millions more. Injury and trauma were followed by the effects of a devastated health system and economy. As a result of genocide, the shortage of human resources in the health sector became one of the biggest challenges facing the government. The government of Rwanda has adopted a primary health care approach to rebuilding its health care delivery using a strategic plan entitled Vision 2020. The ultimate goal is to rebuild Rwanda as middle-income country by the year 2020. Specific goals within this movement are to expand access to healthcare and promote primary healthcare. The literature suggests that a decentralized healthcare system is imperative to the success of the health infrastructure being built in Rwanda. The tier-system allows for notable attention at the community level.

Motivation for Participating: Requirement for PBH 102 Global health.

Ashley Owens (#58)

Title: Period. : A Social and Family History of Menstruation

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: The representation of menstruation is both socially and culturally constructed. Information gathered directly through the experiences of women is the most accurate and the easiest way of knowing. Because of this and my own experiences as a woman, I identified a need to examine the evolution of the representation of menstruation and menstrual products, through both a social lens and familial lens. I used existing literature and the experiences of my grandmother, my mother, and myself to trace changes over generations. Through conducting visual discourse analysis of various generational menstrual product advertisements, I examined how through these, attitudes regarding menstruation are socially represented.

Motivation for Participating: Requirement for Seminar in Women and Gender Studies.

Kayla Page and Mackenzie Kirkland (#59)

Title: Structure relationship study comparing binding affinities of pyridine-2,6-dicarboxylic acid (DPA) with DPA derivatives to develop alternative small chelating molecules

Faculty Sponsor: Professor Stephen Tajc, Chemistry and Biochemistry

Abstract: Hydraulic fracturing is an efficient way to recover natural gas from shale rock formations beneath the surface. However, it involves the injection of millions of gallons of pressurized freshwater into the ground, producing millions of gallons of contaminated wastewater containing extremely high levels of total dissolved solids. Previous research in our lab suggests that pyridine-2,6-dicarboxylic acid (DPA), is able to chelate to the metal (II) cations that are found in the hydraulic fracturing wastewater. Our research focuses on a structure relationship study that will compare the pKa values of DPA to DPA derivatives. By correlating the pKa values, one can compare the binding affinities among these compounds studied. This data will allow us to develop alternative small molecules with chelating capabilities.

Motivation for Participating: Independent Research.

Tabitha Paisley (#60G)

Title: A Glimpse into the Educational Technology Specialist Clinical Residency

Faculty Sponsor: Professor James Fenwick, Language, Literacy, and Technology

Abstract: The purpose of this poster is to highlight the activities involved in being a Clinical Resident in the Educational Technology Program. The clinical residency is a graduate assistantship that focuses on implementation of skills acquired throughout the program. In my placement, I supported school roll-outs with new software, assisted teachers in designing interactive lessons and reviewed materials.

Motivation for Participating: To share my perspectives on the graduate assistantship program.

Caitlyn Paris-Woods, Johnnice King, Mackenzie Dallimore (#61)

Title: Fly High or Die Thats Our Slogan Because We're Golden

Faculty Sponsor: Professor Otieno Kisiara, Sociology and Anthropology

Abstract: This poster describes a public health initiative involving the PBH 101 Introduction to Public Health class in fall 2016. The class was tasked with developing educational material, as well as survey questions, to collect the Nazareth community's views on a planned smoke/tobacco/vape free campus policy to be effected in Fall 2017. This was planned to be not only a class project, but fieldwork in which we collaborated within a community. Through this project, a series of survey questions were created for students, faculty and staff to answer in order to gain insight on the perspectives of the transition to a smoke/ tobacco/ vape free campus. As team leaders, we worked in teams to develop educational material about the benefits of quitting, and the harms of continuing using these products. These facts would

eventually be used to promote and raise awareness around campus. We strategized on ways to involve people the campus community in the initiative and steps for the implementation of the intervention taking effect on campus. This project allowed us to work with faculty on campus as well as the larger Nazareth College community to not only aid in the planning of the rollout of the intervention but also allowed us to make connections with a larger population outside of the classroom.

Motivation for Participating: Requirement for Public Health 101.

Juliana Posato (#62)

Title: You Don't Need Racist People to Have Racism

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: The objective of my project is to display the ways in which racism exists at more than just the individual level. Although individual racism is a contributor to why American society is not post-racial, there are other ways in which racism is performed. This includes, but is not limited to, institutional racism, cultural racism, micro-aggressions, and cultural appropriation. My goal is to inform onlookers and judges at CARS that what constitutes as racism is not solely dependent on the opinions of others who do not embody the same race as them. Rather, the practices and regulations that make up social institutions, such as governmental organizations, schools, and health care treat minorities unfairly to create racism as well. This sociological concept focuses on the relationship between individuals of varying races and society and its consequences. This theme connects to my life's work in that my potential future career focuses on my interactions with others in the counseling field. To complete this project, I will take readings assigned in Sociology Senior Seminar as well as other sociology classes to support the notion that racism occurs at more than just the individual level.

Motivation for Participating: Requirement for SOC 444 - Sociology Senior Seminar.

Christopher Redmond (#63)

Title: Investigation into the binding of recombinant intimin and translocated intimin receptor proteins involved in infection by enteropathogenic and enterohemorrhagic E.coli

Faculty Sponsor: Professor Lynn O'Brien, Chemistry and Biochemistry

Abstract: Enteropathogenic (EPEC) and enterohemorrhagic (EHEC) Escherichia coli infection is a major source of foodborne illness. The binding of two proteins, intimin and the translocated intimin receptor (Tir), is responsible for the initiation of infection to occur in the intestinal epithelium of the host organism. Once expressed, Tir is translocated to the host cell by a type-III secretion mechanism, becoming immobilized in the intestinal epithelium with its intimin binding domain exposed on intestinal cell surface. Lesion formation results upon intimin binding to Tir binding domain, attaching the E. coli cell to the intestinal epithelium to dominate

the host cell membrane. The mechanism of protein interaction in E. coli infection gives great insight into how protein binding capabilities could be overcome. E. coli infection takes a minimum of 24 hours to diagnose. The production of a molecular inhibitor would allow for an increase in diagnostic processes and initiation of treatment, as well as prevent further infection. Here, the expression and purification of the intimin and Tir protein is reported. Binding interactions of the intimin and Tir protein are being investigated by ELISA assay, which will aid in the identification of an effective molecular inhibitor.

Motivation for Participating: Requirement for SCI 450 - Advanced Scientific Research.

Alyssa Sackett, Kate Durr, Vincent Parrillo, Drew Simoneau, Elizabeth Howell, Katlyne Ray (#64G)

Title: Using Mobility Devices in Inpatient Rehabilitation: A Description of the Decision-Making Process of Physical Therapists

Faculty Sponsor: Professor Sue O'Brien, Physical Therapy

Abstract: 1: To determine which factors physical therapists (PTs) who practice in inpatient rehabilitation facilities (IRFs) and skilled nursing facilities (SNFs) use to make decisions regarding prescription of canes and walkers for patients with brain injury and stroke. Purpose 2: To explore whether there were differences in decision making between PTs working in IRFs and SNFs, in prescribing assistive devices (ADs) for these populations. 2) A survey was distributed to contacts from a convenience sample of clinical education facilities associated with Nazareth's PT Program. The survey contained questions asking PTs how they choose assistive devices throughout the rehab process. Results: Five factors were identified and defined throughout the rehab stay including strength, balance, cognition, safety, and function. Consistency was found in the decision-making process regarding the use and prescription of ADs with patients with brain injury and stroke. Consistency in decision-making was also found between the types of inpatient care. 3) Understanding how PTs make decisions about assistive device prescription may help future PTs who enter this area of practice.

Motivation for Participating: To present a two-year clinical research project to the Nazareth community and share our discoveries with other professionals and students in our field of study.

Ariana M. Scarfone (#65)

Title: The "Positive" Side of Social Media: Body-Positive Posts as a Protective Factor Against Media-Induced Body Dissatisfaction

Faculty Sponsor: Professor Lindsey E. LaPlant, Psychology

Abstract: While past research has shown that exposure to mass media that depicts and promotes thinness as a standard of physical attractiveness reduces the body satisfaction of

women in Western society, minimal research has yet explored the psychological effects of the body-positive ideals of female beauty that have recently established a presence across online forums. This study combines classic research on mass media and female body image with contemporary findings on social media's impact on women's perception of self and body in order to examine the relative effects of the thin-ideal and the body-positive movement on the body dissatisfaction of college-age women. Female college students were briefly exposed to social media images representing thinness-depicting and thinness-promoting messages, the body-positive cause of self-acceptance and body diversity, a combination of the two perspectives, or body-unrelated media material. Although the combined manipulation caused considerably lower levels of self-reported body dissatisfaction than any other version of the stimulus, inconsistent with prior literature, no significant difference in body dissatisfaction was found across conditions. Explanations for this deviation from theoretical assumption are provided within the frameworks of persuasion psychology and social learning theory, and recommended extensions to the body-positive literature are proposed.

Motivation for Participating: To share with the Nazareth community the project poster that I completed for the 2017 Eastern Psychological Association Conference.

Yaqub Shabazz (#66)

Title: Who are Dr. Dubois, Dr. Ani, and Dr. Akbar and why are they important in academia?

Faculty Sponsor: Professor Ginger Jacobson, Sociology and Anthropology

Abstract: There are three figures in African American history that should be explored in order to better understand alternative positions of what it means to be black in contemporary America. Dr. Dubois is widely known as a powerful, intellectual thinker, writer, and social commentator. His later works are related to the direction of Black American culture and agency that deserves more than a cursory glance. Dr. Marimba Ani, who was an anthropologist, wrote a groundbreaking book entitled *Yurugu*. This book was one of the first African-centered critiques of European cultural thought and behavior. Very few African centered critiques of white American cultural movements, socio political postures, and overall worldview are discussed in ways that encourage mutual cultural understanding. Dr. Naim Akbar; An "Afro-centric," clinical psychologist, approaches the psychological impact of a people struggling to survive in a society that has not yet found a safe existence. His writings and lectures critique the Eurocentric psychological tradition, as well as, historical, pre-holocaust African culture, thought, and behavior. I hope to push the need for attention in the three areas of Sociology, Anthropology, and Psychology at the highest levels of academia in hopes of achieving true diversity along the lines of race. What education is complete if a student lacks an understanding of the world around them, how it is observed, and its origins?

Motivation for Participating: Requirement for SOC 444 - Sociology Senior Seminar.

Kysha Smith (#67)

Title: Saartjie Baartman to Serena Williams; White Supremacy and the Objectification of the Black Women's Body

Faculty Sponsor: Professor Rachel Bailey Jones, Women and Gender Studies

Abstract: My research analyzes the objectification of black women's bodies through the scope of patriarchal, white lenses. I analyzed texts that trace the discourse of years of objectification, from the sixteenth century to current times. My main objective is to provide a background for the way black women are represented against a patriarchal backdrop. I conducted interviews with black women to get their perspectives on how they view themselves within the power-driven white supremacist patriarchy. I presented historical and contemporary images of different representations of black women's bodies to the women. I choose Sara Baartman, as a key figure because her life story is a representation of how the body image of an African woman in the 18th century was demeaned and objectified thru the lens of white male norms, and continues to take place with Serena Williams whose body image has been ridiculed within white male dominated media. I will share how the body images of black women have evolved.

Motivation for Participating: Requirement for Seminar in Women and Gender Studies.

Francesca Speiss, Whitney Thomas, Alexandria Lovejoy (#68)

Title: The Nazareth College Community Response to a Tobacco-, Smoke- and Vape-Free Survey

Faculty Sponsor: Professor Mary Dahl Maher, Nursing

Abstract: The Nazareth College Marketing Department, the Task-Force for a Tobacco Free Campus and the Public Health Program teamed up to develop a survey, using Google Forms, and distributed it to the Nazareth College Community via e-mail. We conducted the survey as assessment is the first public health core function prior to developing interventions specific to the needs of the Nazareth campus.

Motivation for Participating: Motivated by class activity but interested in clean air initiative.

Nicholas Spencer (#69)

Title: Different From the Others: The Life and Representation of the LGBT Community in the Weimar Republic

Faculty Sponsor: Professor Lisa Cerami, Foreign Languages and Literature

Abstract: My presentation highlights the surprisingly progressive societal views on homosexuality in pre-fascist Berlin. The idea of a pre-Stonewall era society opening their arms to such a globally marginalized community has always intrigued me.

Motivation for Participating: Requirement for Foreign Languages Independent Study.

Alison Stedman, Erin Stryker (#70)

Title: Solid State Polypeptide Synthesis for Enteropathogenic E. Coli Inhibition

Faculty Sponsor: Professor Stephen Tajc, Chemistry and Biochemistry

Abstract: Enteropathogenic Escherichia coli O157:H7 bacteria are the cause of 73,000 illnesses annually in the United States alone. These bacteria cause intestinal lesions by attaching to the intestinal wall via their intimin- TIR protein complex. Disruption of this complex could potentially provide an alternative treatment of the infection, bypassing the use of antibiotics, to which the bacteria may become resistant. Polypeptide chains of three amino acids in length were synthesized via solid state chemistry in order to create a library of peptides. These peptides are suspected to bind to and disrupt the intimin- TIR complex within the enteropathogenic Escherichia coli. This library will be tested in ELISA assays to determine the peptides' ability to bind and disrupt the E. coli.

Motivation for Participating: Requirement for SCI450.

Qiwen Wan (#71)

Title: A Tale of Two Cities: Piano Teaching for Beginners – Jinan, Shandong Province and Rochester, NY

Faculty Sponsor: Professor Bonnie Choi, Music

Abstract: Western classical music is highly regarded in China. According to a 2012 survey, there are 36 million children studying piano in China, verses 6 million in the United States. Another 50 million Chinese children study violin. In China, there is a widely held belief that music education forms good citizenship and therefore Chinese parents urge their children to excel in music. American parents push their children to perform well in sports and music is a hobby on the side that a child may pick up anytime. The importance of music in China comes from the Confucian value of self-cultivation through self-discipline. Confucius believed that the study of music was “an indispensable way to train the mind,” and considered it more important than mathematics and writing. For Chinese parents, if their children can learn to play an instrument successfully, it is viewed as a useful intellectual accomplishment and a lot of times, parents want their children to fulfill their dream to learn the piano. Chinese kids receive a lot of pressure from their parents and teachers to focus on perfectionism. The Confucian mindset teaches Chinese kids to work hard, persevere and respect authority. The purpose of this study is to investigate the differences and similarities between the piano cultures and teaching styles

in China and the United States. Piano teachers based in Jinan and those based in Rochester, as well as their students and the parents of those students, were all interviewed.

Motivation for Participating: While taking my piano pedagogy class here at Nazareth, I noticed a difference in the method and terminology used when teaching beginners how to play piano.

Lauren Watt, Tinisha Baxter and James Walsh (#72)

Title: Group Prenatal Care as a Method of Building Community

Faculty Sponsor: Professor Mary Dahl Maher, Nursing

Abstract: In 1994, Rwanda faced a genocide that took the lives of 1 million people. There was a lack of trust after the genocide and families were torn apart. The people of Rwanda had no idea who to trust with their healthcare, not knowing if they would be killed while in a vulnerable position. The genocide wiped out healthcare centers, resulting in increased rates of maternal mortality. Centering Pregnancy is a type of care that focuses on longer group visits for prenatal care rather than short individual visits. During these visits women learn to care for themselves under the guidance of a midwife and/or nurse. This type of care has been shown to be more cost effective and provide a variety of positive benefits to the mother and baby. Our literature review will show the benefits Centering Pregnancy has on a family.

Motivation for Participating: Requirement for PBH 102 Global health.

Melissa Wilkinson (#73)

Title: Algicidal Effects of *Zostera marina* on the Toxigenic Dinoflagellate *Alexandrium catenella/tamarensis*

Faculty Sponsor: Professor William Hallahan, Biology

Abstract: The inhibitory effects of nearshore eelgrass *Zostera marina* on growth of *Alexandrium catenella/tamarensis* were examined in the laboratory. *Zostera* is a marine plant providing beneficial ecosystem functions in the coastal zone. *Zostera* is thought to secrete inhibitory compounds (allelochemicals) that may affect microalgae, such as *Alexandrium*, a toxin-producing dinoflagellate known to cause harmful algal blooms in coastal ecosystems. In this study, two strains of *A. catenella/tamarensis* from Sequim Bay, WA and Monterey Bay, CA were exposed to high and low doses of seawater extracts from fresh *Zostera* plant material. Both strains of *Alexandrium* experienced morphological changes including failure to divide and cell lysis. Linear and nonlinear regression analysis showed that cell growth was significantly ($p < 0.05$) inhibited with both doses over the 13 day exposure period.

Motivation for Participating: Interest in sharing my research.

Abigail Wood (#74)

Title: Body Image and Aging

Faculty Sponsor: Professor David Steitz, Psychology

Abstract: In this research, several factors such as physical health, memory, optimism, and depression were measured to better understand their influence on body image. Participants included residents at a local senior living community as well as undergraduates at Nazareth College. Comparing the findings from both of these populations will enhance our understanding of how these variables influence body image, as well as how the influence of these factors changes over the life span. This study was performed to address the lack of information on body image in older adults.

Motivation for Participating: This study fulfills the Independent study course requirement PSY 485.

Cassidy Zeller (#75G)

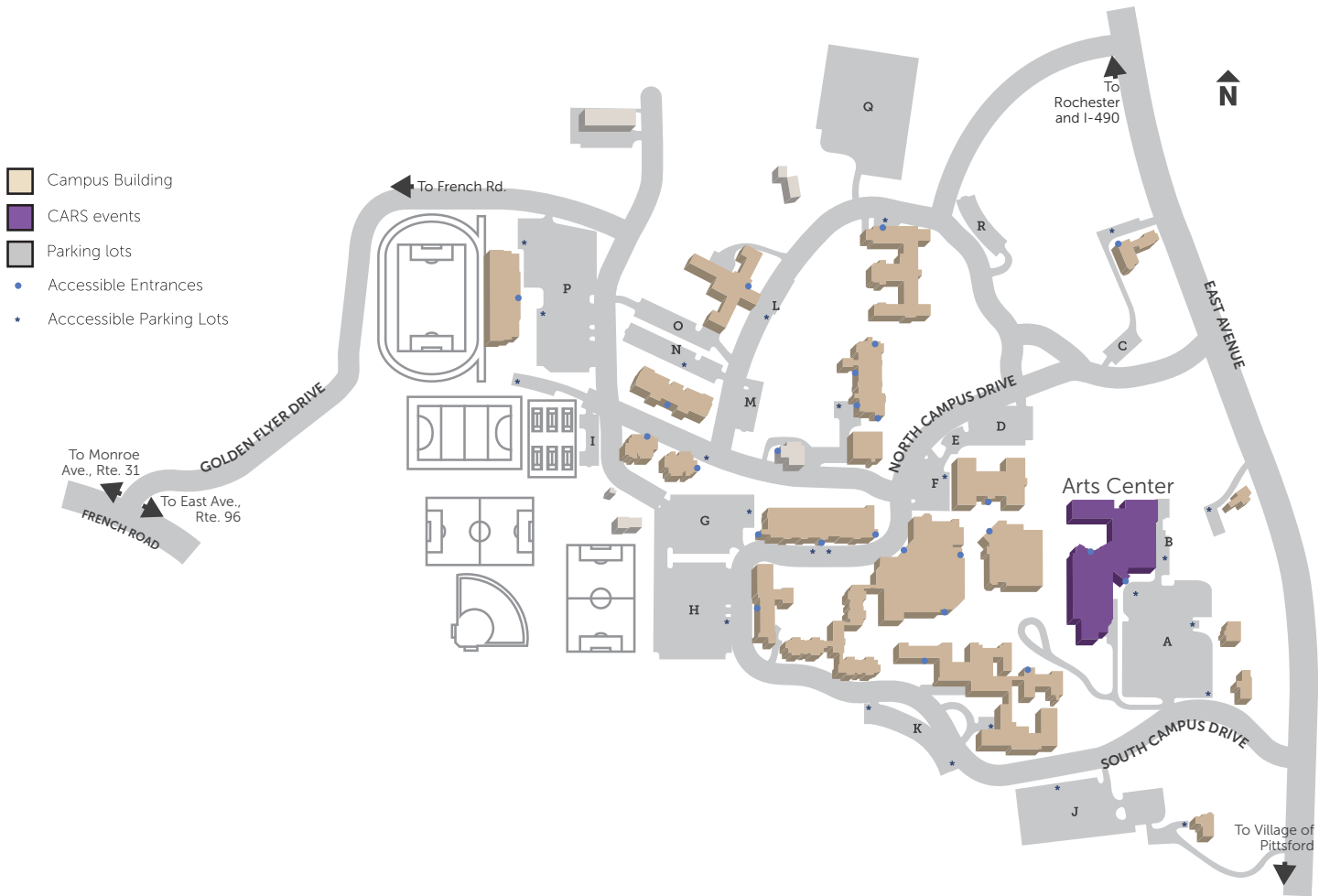
Title: The Effects of Play-Based Learning on the Phonemic Awareness and Phonics Abilities of Kindergarten Students

Faculty Sponsor: Professor Kerry Dunn, Childhood Education

Abstract: This project examines the effects that play based learning has on the phonemic awareness and the beginning stages of phonics abilities of kindergarten students. This action research included meeting with 2 kindergarten classes for 15-minute sessions 2 times a week. These sessions consisted of intentional and focused play-based learning activities that strengthened students' phonemic awareness skills. After it was clear that students mastered these skills, sessions began to incorporate print. Activities were engaging and incorporated movement, song, competition, and rigor. Preliminary findings indicate that play-based learning is an effective framework for phonemic awareness and phonics instruction.

Motivation for Participating: To examine the results of my preliminary findings on play-based learning in kindergarten students.

CAMPUS MAP



PARKING

- Visitors are asked to park in designated "visitor" areas or in lots A and B.
- Parking on campus roadways and grass areas is strictly prohibited.