

NAZARETH COLLEGE



CARS 2022

Creative Activity and
Research Showcase

APRIL 19, 2022

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Introduction

Welcome to CARS – Creative Activity and Research Showcase

We gather as a community for CARS in celebration of the remarkable creative activity and research of our undergraduate and graduate students across our array of programs.

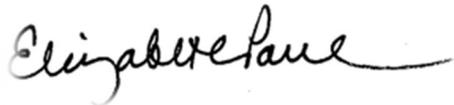
Together with their faculty sponsors, our students engage in many forms of creative activity and research, with inquiry at the heart of their endeavors.

Indeed, inquiry is at the heart of a Nazareth education. Inquiry shows us what is possible, drives change, and encourages imagination of a better future for ourselves and our communities. It is critical for advancing knowledge, fostering creativity, inspiring innovation, and improving quality of life.

CARS also celebrates the power of mentoring and collaboration for transformational learning. Thanks to all faculty sponsors of our students' creative activity and research.

I am so excited to see what questions our students are asking, the problems they are tackling, the possibilities they are imagining, and to see where this exceptional learning takes them.

Thank you for being here today, and for celebrating the achievements of our students and the vitality of our learning community.



Elizabeth L. Paul
President

Share Your Experience – #NAZCARS22

One of the most exciting aspects of doing research and creative work is sharing one's work with others. We invite you to engage with CARS participants throughout this event by asking thoughtful questions about their work, by celebrating their accomplishments with them, and by sharing highlights of the day with your friends, family members, fellow students, and colleagues.

Just like presenting one's research or performing can sometimes be nerve-wrecking at first, so can asking someone, particularly someone you don't know, about their work. If that's you, we've got you covered! If you feel unsure about how to start a conversation with a participant about what they are presenting, you can find our handy "ORSI Life Hack: Asking Great Questions at a Conference" guide at the registration table. Come pick one up for tips on how to ask presenters engaging questions that help you learn and help them further share all their hard work with others.

You will see comment boxes around the event – please fill out a comment card telling us what you enjoyed about CARS and/or suggestions you might have for us for next year. We are eager to read your feedback!

Lastly, please share highlights from today on social media by using this year's hashtag, #NAZCARS22. We are excited to be back in person and can't wait to see all your favorite moments of CARS 2022!

Thank you!

As hosts of the annual Creative Activity and Research Showcase, the Office of Research, Scholarship, and Innovation (ORSI) would like to thank our volunteers who have given their time to serve on the planning committee. We would also like to thank all participating faculty, staff, and students. A special thank you to Mary Rose Utter, graduate assistant in community engagement for compiling the CARS 2022 program. We appreciate the commitment of both the volunteers and the participants to CARS and acknowledge that CARS would not exist without the support of the Nazareth College community.

CARS 2022 Committee

Rachel Bailey Jones – Education
Michelle Donahue – Physical Therapy
Cathy Doyle – Library
Francesca Gentile – English and Communication
Grant Gutheil – Psychology
Kelly Hutchinson Anderson – Chemistry/Biochemistry/Education
Timothy Kneeland – History, Politics and Law

Lindsey LaPlant – Psychology
Mary Maher – Public Health in Nursing
Debbie Mathewson – Office of Research, Scholarship, and Innovation
Jessica Slentz – Office of Research, Scholarship, and Innovation
Octavio Vazquez – Music
Ed Wiltse – English and Communication
Stephanie Zamule – Biology

Program at a Glance

Format	Location	Time
Welcome/Opening with President Beth Paul	Forum in Shults Center	10:00 – 10:10 a.m.
Honors Capstones	Zoom	10:00 a.m. – 3:00 p.m.
Poster Presentations Session #1 (Even numbers 2 – 62)	Gym in Shults Center	10:15 – 11:15 a.m.
Paper Presentations Panel #1	Smyth 148	10:15– 11:15 a.m.
CME Presentations	Reading Lounge in Shults Center	11:00 a.m. – 12:00 p.m.
Paper Presentations Panel #2	Smyth 160	11:15 a.m – 12:15 p.m.
Presentation by 2021 SOARS Grant Recipient	Porthole Lounge in Shults Center	11:30 – 11:45 a.m.
Paper Presentations Panel #3	Smyth 161	1:00 – 2:00 p.m.
Performances	Arts Center A13	1:30 – 2:30 p.m.
Interactive Creative Experiences	Reading Lounge in Shults Center	1:30 – 2:30 p.m.
Paper Presentations Panel #4	Smyth 163	2:00 – 3:00 p.m.
Poster Presentations Session #2 (Odd numbers 1 – 63)	Gym in Shults Center	2:00 – 3:00 p.m.
Day Reception	Forum/Reading Lounge in Shults Center	3:00 – 4:00 p.m.
Evening Graduate Poster Presentations (numbers 501–510)	Forum in Shults Center	6:30 – 7:30 p.m.
Evening Graduate Reception	Reading Lounge in Shults Center	7:30 – 8:00 p.m.

Paper Presentations Schedule

Panel 1: Race and Class in Recent British Cinema

Time: 10:15 – 11:15 a.m.

Room: Smyth 148

Madeline Dovi: “Brit Grit”: British Contemporary Social Realism and the Human Truth of the Scottish Working Class Portrayed by Ken Loach’s “Sweet Sixteen”

Elyse Gosney: An Exploration of Identity in “My Beautiful Laundrette”

Panel 2: Gender and Latinx Representation

Time: 11:15 a.m. – 12:15 p.m.

Room: Smyth 160

Gabriela Rose Mirasola: Latine Representation in White Dominated Media and its Impact on Young Latinas

Meghan Brooks: Proto-Feminist Poetry: Sor Juana Inés de la Cruz’s Literary Legacy

Panel 3: NYS History

Time: 1:00 – 2:00 p.m.

Room: Smyth 161

Marcus Lombardo: Harriet Tubman: More Than Just the Moses of Her People

Emma Baldwin: The Buffalo Pan-American Exposition (1901 World’s Fair): An Emblem of Optimism & Influence

Panel 4: Theater, Dance and Empowerment

Time: 2:00 – 3:00 p.m.

Room: Smyth 163

Katie-Beth Anspach: The Importance of Theatre in the Early Childhood Classroom

Matthew Allen: Sing for Your Discourse and You’ll get History: Interpreting the Past Through American Musical Theatre

Kyra Green: Dance Experience with School 9

Honors Capstones Schedule

Zoom

Room #1

<https://naz.zoom.us/j/86206987524?pwd=S3RHc0JRQjJySVBDSUR6aWRKamJBZz09>

Meeting ID: 862 0698 7524 Passcode: 125578

10:00 – 11:00 a.m.: Gianna Arcuri

11:00 a.m. – 12:00 p.m.: Taylor Coonelly

1 – 2 p.m.: Tyler Young

Room #2

<https://naz.zoom.us/j/86494230591?pwd=SEFsVnZaU09iN1JQR0I1SGNYZIRuQT09>

Meeting ID: 864 9423 0591 Passcode: 898605

10:00 – 11:00 a.m.: Meghan Bargabos

11:00 a.m. – 12:00 p.m.: Paige Lee

1 – 2 p.m.: Sarah Stolberg

2 – 3 p.m.: Sarah Smith

Room #3

<https://naz.zoom.us/j/88125941612?pwd=WWYzU0RwQXNWY29xWU5HYjIbTNYUT09>

Meeting ID: 881 2594 1612 Passcode: 454180

10:00 – 11:00 a.m.: Ruth Riggie

11:00 a.m. – 12:00 p.m.: Olivia Minor

1 – 2 p.m.: Liam Frager

Core Milestone Experience

Reading Lounge, 11:00 a.m. – 12:00 p.m.

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 faculty have invited students whose completed projects were of exceptional distinction to share their work here at CARS. Please visit the reading Lounge (in Shults Center) from 11:00 a.m. to noon to see the wide variety of exciting and insightful projects.

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Please note:

- 1. All information is included, without editing, as submitted by student participants.**
- 2. (G) following the poster number denotes graduate student participating during the day program.**
- 3. Posters numbered 500 and above indicate participation in the evening graduate program**

Core Milestone Experiences

Helene Becker

Academic Major: Mathematics & Inclusive Early Childhood/Childhood Education

Title: Inclusivity in STEM Classrooms & Beyond

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: Did you know that there is a lack of inclusivity in the STEM field? There is an overrepresentation of White and Asian/Asian Americans, and an underrepresentation of Black, Hispanic, and American Indian/Alaskan Native. Also, the majority of STEM jobs are held by males, not females. This leads to the question of how we can cultivate an inclusive STEM field, more specifically how can educators cultivate an inclusive STEM field. To answer this question, I conducted interviews with current STEM field educators, ranging from elementary school teachers to college professors, as well as compiled a list of ways to cultivate an inclusive STEM classroom and online resources. I choose to answer this question because I am a woman in STEM and a future educator. I want to inspire my future students to reach their full potential and chase their dreams. I would never want anything, like their race, gender, ethnicity, abilities, language spoken, sexual orientation, or any other aspect of who they are, to limit what they can do.

Motivation for Participating: By presenting my work at CARS, I hope to shed light on the lack of inclusivity in the STEM field and what can be done to help create an inclusive STEM field. I want to be able to share what I have learned about the current STEM field, inclusivity in STEM classrooms, and quality online resources for students and teachers. I would also love to hear from educators who I was unable to interview about their thoughts on inclusivity in STEM classrooms and share resources with them.

Andrew DiMaria

Academic Major: Chemistry and Education

Title: THE POWER OF DESIGN

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: I created an iMovie discussing my I.S courses at Nazareth and connecting them to my core classes. I did to show how in different disciplines you can approach the problems the same way.

Motivation for Participating: How to present my own project confidently.

Amanda Foster

Academic Major: Psychology

Title: The Positivity Looking Glass

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: How does society view positivity? How does this influence an individual's perception of the term? - I wanted to answer these questions stemming from my interest in Positive Psychology and simply human thought and interactions in society. Therefore, I went about asking individuals (via a Google Form), "What does positivity mean to you?" Afterward, I took in these responses in a way that was inspired by the sociological concept of the looking glass self and showcased the images I had taken through making a poster on Canva, a tool I learned about through my Content Marketing class. Overall, from my interests in Positive Psychology, Sociology, and Content Marketing I have been reminded that the way in which people view a concept such as positivity is vast. Therefore, we cannot market ourselves to believing that one opinion is superior but rather each influences our own perception.

Motivation for Participating: As I have grown up, I have worked to bring a dose of positivity to all that I do which stems from my typically optimistic outlook on life. Additionally, as I move on from Nazareth this spring, I am hoping that within my life's work I can further impact others similar to how I have interacted with my teammates, fellow peers, professors, etc. and with this, I want to have compassion and empathy for the various perspectives I encounter on topics that are brought up. Overall, I hope by presenting my CME at CARs that others from the Nazareth Community will be able to take away something from my project to utilize in their day-to-day interactions.

Elena Garcia

Academic Major: Psychology

Title: Stigma Surrounding Mental Health

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: CME Project- video comprised of interviews with various people asking questions pertaining to stigma around mental health

Motivation for Participating: I hope to gain recognition for my work and professional experience in this type of setting.

Core Milestone Experiences (CME)

Amelia Johnson

Academic Major: Communication and media

Title: Social Media and the 2020 Presidential Election

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: I made an hour-long video presentation regarding how people aged 18-24 used social media and how they navigated social media's impact on how they voted in the 2020 election. I did this because I know that social media had a huge impact on how I voted in the past election, and I wanted to know if other people experienced the same impact. I was able to take a glance in to the content that people see, what they choose to see, and how they have analyzed the impact that content has had on them (if any).

Motivation for Participating: I think it would be really exciting to engage in conversation about my CME project and learn about the perspectives of other people on this topic. The CAR showcase provides an environment of engaged viewers that are eager to discuss and learn about the various projects being presented, and I think it would be very interesting and exciting to be able to dive deeper into this conversation with a new group of people.

Hannah Kelley

Academic Major: Adolescent Education and Biology

Title: What does success look like for students with mental and physical disabilities?

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: I created a short video on Adobe Spark highlighting anxiety disorder (a mental disability) and cerebral palsy (a physical disability) and what success might look like for a student diagnosed with either of these.

Motivation for Participating: I hope to learn what it is like to interact with people and present my findings in a meaningful way. I hope to connect with others in the education field.

Brianna McDermott

Academic Major: Inclusive Early Childhood/Childhood Education and American Studies

Title: Pen Pal Friends

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: I created a book about a child from the United States connecting with a child from Somali for a school project. I started by doing a bit of research about Somali and what children do there and learn and who is in charge. I then typed all this information accordingly into my book. I did this because I am an education major and feel it is important for kids in America to learn from first-hand accounts what other countries are like. I also would have loved to do a project like this as a child.

Motivation for Participating: I hope that I can practice my skills of presenting and help people to understand the benefits of having children connect from different countries.

McKenna Purcell

Academic Major: Inclusive Early Childhood Education & Psychology

Title: Race and Gender in Education

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: 1) I created a children's book titled "Do I Belong? Race and Gender in Education" that works to answer my enduring question for my CME, how do gender and race impact the educational experience of children? 2) My story works to address my question by talking about the school experiences of a fictional character, Ava, who has just moved to the United States from South Sudan where girls are unable to go to school. She encounters many obstacles to her academic success because of her racial status and gender identity. I included graphs in my book that show racial and gender inequality in graduation rates, income, and student and teacher composition in schools, as well as discuss culturally responsive-sustaining teaching which can be used to combat these inequalities by educating teachers and administrators in creating inclusive environments for students. I also conducted interviews with people of different genders and races who attended different types of schools (rural, urban, suburban) in order to get a better look at how race and gender play an active role in how one is taught and generally experiences school. 3) I did this project because I have learned about inequality and educational disproportionality in a few of my classes and found it very troubling. I wanted to learn more about why it exists, what it is rooted in, and how we can work to reduce its impact so that all students have opportunities to thrive and succeed academically and even non-academically. I want to be a teacher someday, so I also found it very applicable to my field.

Motivation for Participating: I hope that I will gain a deeper understanding of the importance of equitable and inclusive education and share with others the significance of this. We have moved away from segregation in schools and yet we are still seeing a degree of this in terms of access to opportunities. I want to learn how others can relate to this as well and even be seen in my work.

Core Milestone Experiences (CME)

McKenzie Shaw

Academic Major: Psychology

Title: The Influence of Our Environment on the Development of Addiction

Faculty Sponsor: Professor Kelly Hutchinson, CME

Abstract: I wrote a short story that showcased multiple examples of how an individual can develop an addiction purely based on their environment. I did this by reading peer reviewed studies discussing environmental scenarios that were more likely to influence an individual to develop an addiction. I did this because I am an aspiring social worker and inherently interested in addiction and working with addicts. I think understanding addiction as a mental illness is extremely important and being able to understand that there are a multitude of reasons someone may develop is an addiction is very important. On top of that, I think working on taking away the stigma of addicts that they are inherently bad people is important, as well.

Motivation for Participating: I hope to strengthen my communication skills and presentation skills at CARS, and I hope to learn more about others' perspectives on addiction and engage in meaningful discussions surrounding mental health resources.

Honors Capstones

Gianna Arcuri

Academic Major: Inclusive Childhood Education

Title: Animal Assisted Intervention on Nazareth College Campus

Faculty Sponsor: Professor Laura Poleshuck, Occupational Therapy

Abstract: For my honors CARS project, I wanted to see the benefits that AAI has on a college campus. For this project, I surveyed PT students because this is an intensive and stressful major on campus. I created a mixed methods survey to ask multiple questions in regards to AAI on campus.

Motivation for Participating: I am excited to see what people have to say in response to my findings! Class requirement for HON 400.

Meghan Bargabos

Academic Major: Environmental Science and Sustainability

Title: Cazenovia Lake: An Overview and Restoration Proposal for the Maintenance of Invasive Species and Harmful Algal Blooms

Faculty Sponsor: Professor Rachel Jones, Education

Abstract: Cazenovia Lake is a 1,164-acre lake located in Madison County, New York. It is heavily developed, and has provided the community with drinking water, recreation, and scenery for many years. While cherished by the community, this body of water has faced multiple challenges, including various invasive species and harmful algal blooms. Both of these issues can cause harm toward the overall health of the ecosystem, as well as the community who cherishes the lake. It's crucial to find functional strategies in removing and preventing invasive species and harmful algal blooms, both to benefit the ecosystem and the community. This paper analyzes how invasive species and harmful algal blooms affect aquatic ecosystems, and what the best means of restoration are as they pertain to Cazenovia Lake.

Motivation for Participating: I look forward to sharing my findings and spreading knowledge about invasive species and harmful algal blooms. Class requirement for HON 499.

Taylor Coonelly

Academic Major: Sociology

Title: Together, We Are Better: The Importance of Multicultural Childrens' Literature and Educational Spaces

Faculty Sponsor: Professor Rachel Bailey Jones, Honors and Education

Abstract: Books are one of the first ways that children begin to experience the world around them and develop the critical thinking skills needed to grow. Childrens' literature can act as a mirror or window into the social world, telling narratives of those in power and whose stories are deemed worthy. The literature provided in classrooms and literacy programs are the primary source of literature acquisition by learners, and that is why it is critical that children's literature in these spaces is chosen with a multicultural lens, including all different types of individuals. My goal is to dive into the realm of multicultural children's literature and help literacy programs/spaces in Rochester expand and grow to become more inclusive in their practices.

Motivation for Participating: Ideas for further engagement. Honors class requirement.

Paige Lee

Academic Major: Music Education

Title: Equity in Music Education and the Rochester City School District

Faculty Sponsor: Professor Keith Koster, Music Education

Abstract: For the Honors Engagement track, I spent 40+ hours volunteering at the Rochester City School District instrument repair shop and observing two teachers in the district via Google Meet. The main goal of my capstone project was to contribute to the Rochester City School District's (RCSD) music program in a positive and meaningful way and engage with students and teachers from the community. There are many teachers and administrators in the district who care deeply about their students and community, and through presenting my project I hope to highlight some of the amazing people, programs, and activities, as well as opportunities for future educators and members of the Rochester arts community to get more involved. The tools and resources needed for a comprehensive music education may not be readily available in a school district that struggles with funding, staffing, and other priorities. My overarching question was how can music educators across the United States develop their music curriculum to be more applicable in diverse school settings? Furthermore, how can we reimagine and restructure what it means to have a "comprehensive music education" so that music may be accessible to students of all backgrounds and ability levels?

Motivation for Participating: I hope to get more students interested in participating in the Honors Program, and also to get more involved in the local Rochester community. Class requirement for HON499.

Olivia Minor

Academic Major: Mathematics and Adolescent Education

Title: Narratives of Adolescent Mathematicians

Faculty Sponsor: Professor Rachel Bailey Jones, Education

Abstract: In mathematics classrooms around the globe, students are determining who they are as learners, as mathematicians and as young influential people in this world. All of these roles fit into a term called “self-concept” which is a crucial development in terms of an education. In math specifically, it’s important to address this notion of self-concept because this could explain why students see their ‘math selves’ as being capable or not and could explain why they hold themselves to certain standards. In order to study which factors are most influential upon the formation of this self-concept, a Google Form questionnaire was administered to about 50 adolescents from a local school. Alongside doing research, this questionnaire assisted me in understanding what exactly is impacting current students. As a future math educator, it’s important for me to be aware of what is affecting my students before they come to me, and while they are in my classroom. Not only will this research benefit me, but other current and future educators as well. By learning more about where our students are coming from and their learning needs, we can better understand them as individuals and improve their educational journeys.

Motivation for Participating: From presenting my research and work at CARS, I will be spreading awareness of a topic that is not widely known or recognized. Several people have a negative association with the subject of mathematics, and I wish to change that. By presenting what I have learned from current high school students, along with my research on the topic I am open to gaining more insight from those who come to my presentation. Utilizing the platform that CARS offers will potentially allow me to make others more aware of their own self-perceptions when it comes to mathematics, along with changing the way they may approach this subject in the future. Class requirement for HON – 485.

Ruth Riggie

Academic Major: Psychology

Title: Implementing a Mindfulness-Based Curriculum in a Second Grade Class

Faculty Sponsor: Professor Rachel Bailey Jones, Education

Honors Capstones

Abstract: For my honors capstone I developed a mindfulness curriculum and then prated it in a second-grade classroom in a charter school in the city of Rochester. This was to demonstrate the social, emotional, and cognitive benefits of mindfulness on young children and show how easy it is to incorporate mindfulness every day in a school setting.

Motivation for Participating: I hope to share the benefits of mindfulness to a larger group of people. Class requirement for HON 499.

Sarah Smith

Academic Major: History

Title: All Roads Lead to Rome: Liberty and Tyranny in The Annals of Imperial Rome

Faculty Sponsor: Professor Timothy Thibodeau, History, Political Science, and Law

Abstract: My historiographic discourse breaks down Tacitus' famed surviving work, The Annals of Imperial Rome. Through the close analysis of three of the surviving books of The Annals, each representing a specific emperor of the Julio-Claudian Dynasty I make a direct correlation between Tacitus' anti-tyrannical works and the Founding Generation's deep understanding and instatement of these limitations on power in order to protect the American people for centuries to come. Tactius' works point to the necessity of systematic institutional restraints on power for the preservation of liberty; an idea that our Founders dwelled upon relentlessly in their pursuit of the perfect government, and a struggle we see today in our federal systems.

Motivation for Participating: To share my hard work and love for my thesis on Roman literature. Class requirement for HON 499.

Sarah Stolberg

Academic Major: Mathematics and Adolescent Education

Title: Rural Teachers' Perceptions of Effective Experiences Which Enable Students to Develop Identity and Interest in STEM Fields

Faculty Sponsor: Professor Rachel Bailey-Jones, Honors

Abstract: The current study focuses on underrepresented rural students, schools, and teachers who are consistently overlooked in research. More specifically, the research will focus on the component of what experiences rural educators are creating to develop interest and identity within students, so that the students feel more capable, eager, and motivated to pursue STEM related careers. As later mentioned in the literature review, students and parents in rural communities are often unaware of the possible careers and occupations there are in STEM fields, due to the geographic isolation of rural

schools. This is why it is ever-so important for rural educators to provide experiences and promote exposure of STEM fields for their students, so that those students have a fair chance of entering a job market dominated by STEM careers. Ways in which rural educators use the resources they do have to their advantage to provide meaningful learning opportunities for their students is what will be studied.

Motivation for Participating: Professional Experience, class requirement for HON 499.

Tyler Young

Academic Major: Psychology

Title: School-Based Interventions for Children with Comorbid Attention-Deficit/Hyperactivity Disorder and Oppositional Defiant Disorder

Faculty Sponsor: Professor Rachel Bailey Jones, Honors Program

Abstract: Many children receive a diagnosis of attention-deficit/hyperactivity disorder (ADHD), and a portion of these will also be diagnosed with oppositional defiant disorder (ODD). When a child receives this comorbid diagnosis, symptoms typically appear earlier on and with more intensity. This can create academic and social deficits in educational settings. Because of this, studying effective interventions to help these students shows importance. Interventions have been previously discussed for each of these disorders individually, but research has not yet covered those that could be used for this comorbidity. The present study sought to address this gap by examining what interventions have been used to help students with comorbid ADHD and ODD. Semi-structured interviews were conducted with various professionals (N = 6) who work in educational settings. Questions were asked pertaining to their relationship with the child, the interventions they used and their effectiveness, and other contributing factors. Their answers were compared to determine any major similarities and differences. Participants described use of primarily behavioral interventions, though some academic and sensory or relaxation techniques were used as well. This suggests that behavioral interventions in school settings may be especially beneficial for these students, creating directions for future research.

Motivation for Participating: Experience presenting and defending my research in front of an audience. Class requirement for HON 499.

Experiential Learning Pathway: Mentored Research

Interactive Creative Experiences

Sean O'Key

Academic Major: Community Youth Development

Title: Inclusive Leadership as the Core of Changemaking

Faculty Sponsor: Professor Marie Watkins, Community Youth Development

Abstract: In partnership with the members of the Mayor's Youth Advisory Council, CYD students engage in reflective dialogue about the importance of inclusive leadership and racial healing as change makers. The two-semester service-learning partnership discussed components of servant leadership and the qualities of inclusive, empathetic and self-aware leaders as future change makers. The end result is a guidebook of inclusive leadership activities for Rochester youth development programs. The Presentation Group includes Community Youth Development Integrative Capstone Students and The Mayors Youth Advisory Council/ Youth Voice One Vision Members with their advisor, Mr. Tremain Harris, City of Rochester's Department of Youth Services and Recreation.

Motivation for Participating: Public affirmation for our 15-year-old Service-Learning partnership with the Mayor's Youth Advisory Council members and the promotion of inclusive leadership as a means to implement change making. Class requirement for CYD 480.

Experiential Learning Pathway: Community engaged learning, Student Leadership, Mentored Creative Activity

Paper Presentations

Matthew Allen (Panel 4)

Academic Major: American Studies

Title: Sing for Your Discourse and You'll get History: Interpreting the Past Through American Musical Theatre

Faculty Sponsor: Professor Thomas Lappas, History, Politics and Law

Abstract: I wrote a paper on the unique ability of the language of Musical Theatre to make a meaningful contribution to historical discourse. I took a class about the unique ability of Film to achieve the same goal and using my background in theatre applied the basic principles of reading films as history to the art form of Musical Theatre. I conducted some research, and wrote on my own experience listening to, and watching musicals that deal with historical themes. I wrote this paper as a final paper for the class I took "Controversy on Film" but also wrote on this subject because I am interested in looking at the different ways in which history manifests itself in society through non-academic methods. I am interested in presenting this paper, but I would also like to present clips, both video and Audio, to go along with the paper to provide context and engage the audience in historical discourse through Musical Theatre.

Motivation for Participating: I hope to gain a larger diversity of opinions on the topic that I am presenting, and hope to get a sense of how many people would agree with my idea that history comes in many forms. Class Requirement for AMS 543.

Katie-Beth Anspach (Panel 4)

Academic Major: Theatre, Inclusive Early Ch/Childhood Education, BS

Title: The Importance of Theatre in the Early Childhood Classroom

Faculty Sponsor: Professor Lindsay Reading Korth, Theatre and Dance

Abstract: For my senior theatre comprehensive research project, I choose to combine both of my majors and passions of theatre and education to research the benefits of Theatre and its elements in the early childhood classroom. I researched many ways that theatre can be implemented into the classroom and how theatrical elements such as roleplaying, dramatization of literature, and Imaginative play have direct correlation to developmental and academic success in young children. I choose to do this research and formulate this project to show that the arts are so much more important than they are given credit for in our education system and to specifically highlight the direct benefits of theatre when working with the next generation.

Paper Presentations

Motivation for Participating: I hope to learn that people are as excited as myself to integrate more arts into the educational system and are simply not sure how. Maybe my research will be a way to start a conversation and get some ideas flowing about all of the ways the arts are beneficial to young children in more ways than just being enjoyable. Class Requirement for THA 499.

Emma Baldwin (Panel 3)

Academic Major: English, History, and Adolescence Education

Title: The Buffalo Pan-American Exposition (1901 World's Fair): An Emblem of Optimism & Influence

Faculty Sponsor: Professor Thomas Lappas, History, Politics, and Law

Abstract: Last spring, I wrote this paper as a final for my New York State History class. I did my own independent research to compose the paper, which was mostly based on primary (and some secondary) accounts; our library's databases and historical newsprint were my principal sources to do my work. While there are many reasons for my paper's inspiration, chief among them were my close geographical connection to Buffalo, my love for local history, and the historiographical narrative(s) I uncovered while conducting my research.

Motivation for Participating: On one hand, CARS would be the perfect way to practice for my anticipated paper presentation for the Phi Alpha Theta Conference. Then, on the other hand, I would love to showcase not only my work, but the awareness and information that comes out of it. And then, to top it all off, I thoroughly enjoyed presenting last year and only hope to again!

Meghan Brooks (Panel 2)

Academic Major: Spanish/Mandarin Chinese

Title: Proto-Feminist Poetry: Sor Juana Inés de la Cruz's Literary Legacy

Faculty Sponsor: Professor Suhail Islam, English

Abstract: Having studied Sor Juana Inés de la Cruz's famous "Response of the Poet" in Global Literature, I used my knowledge of Spanish in conjunction with literary analysis of the English translation to investigate her use of rhetorical craft to state her argument for women's education and undermine critiques of her secular works. As one of the most well-known proto-feminists to emerge from Mexico in the 17th century, Sor Juana makes a fascinating historical figure to study for her witty writing and astonishingly progressive views of the role of women in society, femininity as a whole, and the intersection of education and religion.

Motivation for Participating: I hope to gain more experience presenting my studies and research in front of a group of people who do not necessarily have a baseline knowledge of the subject.

Madeline Dovi (Panel 1)

Academic Major: Communication and Media - Writing/Editing

Title: 'Brit Grit': British Contemporary Social Realism and the Human Truth of the Scottish Working Class Portrayed by Ken Loach's "Sweet Sixteen"

Faculty Sponsor: Professor Ed Wiltse, English

Abstract: I explored British contemporary socialism through the film 'Sweet Sixteen' by Ken Loach, specifically his criticisms of post-industrial Britain (masculine world of dissent, Machiavellian means of survival and low-brow youth culture) following the Thatcher years.

Motivation for Participating: I hope to sharpen my presentation skills whilst sharing my knowledge of the BCSR genre with my peers. Class requirement for ENGL-322.

Elyse Gosney (Panel 1)

Academic Major: English & Communication and Media Studies

Title: An Exploration of Identity in "My Beautiful Laundrette"

Faculty Sponsor: Professor Ed Wiltse, English/Communication

Abstract: Coming soon.

Motivation for Participating: I hope to gain insights from other throughout facilitating a discussion about the topics I focused on in my paper. This opportunity will bring me experience in sharing, presenting, etc.

Kyra Green (Panel 4)

Academic Major: Dance and Theatre

Title: Dance Experience with School 9

Faculty Sponsor: Professor Mariko Yamada, Dance

Abstract: I would like to bring the entire third grade class to Nazareth College for a dance experience. The date we have selected is May 2, 2022, at 8:30AM till 10:30 AM.

Paper Presentations

We are tentatively planning: Welcome to Naz/Ice Breaker Games: George Hall “Master Class”: George Hall (hand out Naz Merch after class” Snack: Dining hall/Medial Formal Lounge View of a Performance by Naz dance students: Callahan for the Master Class, the children will be split in half and distributed to a group, taught by two of the current students in the Performance and Collaboration class. So, each group will have two student teachers. Along with the student teachers I have collaborated with Rugby to have male identifying figures to not only help supervise the student teachers, but to promote the idea that anyone can dance no matter the gender. Having male dancers is very important for young male students to see.

Motivation for Participating: To allow new opportunities in the dance and arts sector on campus that includes reaching out in the community. I want to emphasis the importance of dance for children.

Experiential Learning Pathway: Student Leadership, Noncredit Bearing Community Engagement

Marcus Lombardo (Panel 3)

Academic Major: Psychology

Title: Harriet Tubman: More Than Just the Moses of Her People

Faculty Sponsor: Professor Thomas Lappas, History

Abstract: Harriet Tubman is one of the most celebrated women in the history of our country due to the fact that she brought over 1,000 enslaved people to freedom. In this paper, I have highlighted some of the lesser-known aspects of Tubman’s life, examined the faults in the historiography surrounding Tubman, and discussed problems regarding how Tubman is publicly remembered today. My sources for this work include the existing biographies of Tubman, the numerous children’s books devoted to Tubman, the recent movie about Tubman’s life, and various contemporary articles surrounding public efforts to memorialize Tubman. I concluded that there has been too much focus in the historiography surrounding Tubman on her work with the Underground Railroad and not enough emphasis on her life in Central New York after the Civil War was over. I also concluded that public memory of Tubman has been centered on fictionalized accounts popularized in children’s books instead of on the real and numerous different heroic acts that Tubman accomplished throughout her life. Public knowledge of Tubman’s real life could be inspirational to future generations as they work to solve problems relating to poverty and various forms of oppression.

Motivation for Participating: I hope to gain experience presenting and defending my work to people who may or may not know as much as I do about this topic. I also am interested in seeing how interested the campus community is in this topic. Class requirement for HIS 345.

Gabriela Rose Mirasola (Panel 2)

Academic Major: Theatre Arts & Communication and Media Studies

Title: Latine Representation in White Dominated Media and its Impact on Young Latinas

Faculty Sponsor: Professor Lindsay Reading Korth, Theatre and Dance

Abstract: In this paper, I explored the underrepresentation and misrepresentation of specifically Latinas in theatre and film and how this effects the mental health and wellbeing of young Latinas in America. I looked at a variety of actors and the range of work they have done, movies where the entire story could be considered Latine representation (In the Heights, West Side Story), and more. As a Cuban woman, ingesting media constantly while never seeing someone who looks like me, talks like me, or acts like me took a toll on my mental health when I was too young to understand how to seek out better content to digest.

Motivation for Participating: I hope to get more eyes on the issue at hand. Class requirement for THA 452.

Performances

Anna Ahlquist

Academic Major: MMPP – Master’s in Music Performance & Pedagogy

Title: "The Hunt" for the Best Beethoven Edition - Sonata in Eb Major, Op. 31 No. 3

Faculty Sponsor: Professor Bonnie Choi & Professor Jacob Ertl, Music

Abstract: While studying Beethoven sonatas, students almost always encounter a great variety of editions available to them from which to work. They may already own an edition different from their teacher recommendation. Or they simply may be using a score easily available online. Determining what defines a "best" edition to use is not necessarily a simple task. There were already multiple published editions within Beethoven's own lifetime due to his constant revision and correction of existing editions. Upon the composer's death, a number of individuals wished to present themselves as conduits for Beethoven's legacy, preparing what they considered to be authoritative editions of his works. Beethoven student Carl Czerny created what was perhaps the most significant of these editions. Concepts of what would constitute Beethoven's final compositional thoughts varied significantly over the ensuing decades. We now have ready access to a generous choice of editions, each in its own way claiming authentic accuracy and insight. How do we determine which one(s) to be "the best"? This research first establishes a meaning for that adjective. The sonata Op. 31/3 ("The Hunt") will serve as the vehicle for our pursuit of the "right" edition. Guiding for these judgments will include (but not limited to) editorial access to earlier sources, consideration of one's need of urtext or critical or performance edition, the quality of printing and visual appeal, editorial suggestions, explanations of variants, and even cost. We are blessed with a truly valuable variety of editions, making substantive comparisons between them even more challenging.

Motivation for Participating: I hope to gain performance & speaking experience. I hope to present the first movement of this sonata with a short presentation (in a shortened/condensed lecture-recital format).

Experiential Learning Pathway: Mentored Creative Activity, Mentored Research.

Kevin Leysath II

Academic Major: Music Composition

Title: Film Scoring Process

Faculty Sponsor: Professor Octavio Vazquez, Music Composition

Abstract: Every semester, music composition students like me have the opportunity to collaborate with filmmaking students at the Rochester Institute of Technology. Composers and filmmakers take turns presenting their portfolios, and if they have an interest in each other they get in contact. This year I ended up working with Hebrew Campbell on his Film, A Handful of Quarters. Throughout this process we have meetings and discussions about where music should go and what the director wants it to sound like in certain places. This will be my first live-action film, and I wanted to use live and electronic instruments to make it as good as possible. I score all my others using digital audio workstations such as Logic and Protools. This collaboration helps me with communication skills, getting more experience in the field I aspire to be in, and overall helps build my portfolio and artistic expression. The connections I make with filmmakers while in college are a great advantage because of our future careers beyond graduation. I want to be a professional Film and TV composer, so this experience is something that I put my all into to make the best music possible for the picture. This presentation will talk about the Film Scoring process on my side and the process when working with a student filmmaker. The film will be presented, and I will talk about the instruments being used and how I went about choosing them. The presentation will also show how I worked with live instruments for the first time.

Motivation for Participating: I hope to become more confident in speaking in front of an audience and to possibly gain more connections for future potential projects at Nazareth. Feedback is something I am also open to in response to my presentation. Overall, I want to become more comfortable when speaking in depth about my work.

Experiential Learning Pathway: Field & Clinical Experience

Poster Presentations

Helin Abdullah (#1)

Academic Major: Biomedical Sciences

Title: The Intersection of Medicine and Social Justice

Faculty Sponsor: Professor Stephanie M. Zamule, Biology

Abstract: In this project, I'm going to explore and describe the role of social justice in medicine and healthcare, how these two elements intersect with one another and why putting light on such topic matters to us as future changemakers and global citizens. In this historical era in which we rethink our narratives, vow to make changes, liberate, unlearn, and learn certain values, it's crucial to understand where does medicine and healthcare stand in the amidst of all of that.

Motivation for Participating: I'm hoping to put light on this issue and show that the interconnection of medicine and social justice is a lot deeper that we have been always taught, a lesson I learned through my professors and readings.

Dakota Allis, Connor Hamilton (#2)

Academic Major: Psychology

Title: Life Prep and Lacrosse

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: We are interested in exploring the men's lacrosse team. We are interested in how they integrate students and staff into the program. We think we know the lacrosse team has done a good job integrating individuals with disabilities into the program. We think we will discover the students and staff who have been integrated into the program play a larger role in the team than people might think.

Motivation for Participating: The purpose of this project is to highlight disability visibility on our campus. Class Requirement for INT 427.

Emily Autore (#3)

Academic Major: Inclusive childhood Education and History

Title: Disability and Inclusive Childhood Education

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: For the CARS event this semester we have decided to focus our area of study on inclusive childhood education and how it has integrated neurodiversity and disability into its curriculum. As future educators it is imperative that we are exposed to all types of learners during our own education and that we are equipped to support and help all of our future students.

Motivation for Participating: The purpose of this project is to highlight disability visibility on our campus. Class requirement for INT 427.

Hannah Bardeen (#4)

Academic Major: Dance Studies and Psychology

Title: Take Deep Breaths: Effects of Deep Breathing on State Anxiety and Cognition

Faculty Sponsor: Professor Lindsey LaPlant, Psychology

Abstract: Deep breathing is known to calm the nervous system, reducing stress. Previous research indicated state anxiety and cognition can be positively affected by deep breathing. This study investigated how participants' cognition and state anxiety were affected by their deep breathing experiences. Participants completed a task and self-report questionnaire to test how their breathing experience affected both measures. Results indicated no significant difference in either anxiety or cognition after deep breathing exercises. I did this research for my Final Project for my Psychology Statistics class last semester, but also as a continuation of my research on aspects of meditation used in Dance Movement Therapy.

Motivation for Participating: I hope to show people the positive effects of deep breathing, while also showing the reality of conducting studies with a small sample size, and how it may severely affect final results of the study.

Elena Baugh, Grace Decker (#5)

Academic Major: Biology

Title: Identifying Abnormal Nuclear and Chromosome Patterns in WEHI231 Cell Cultures

Faculty Sponsor: Professor Matthew J. Temple, Biology

Abstract: WEHI 231 cells are a unique strain of cancerous cells from mice. Components such as DNA and actin in cancerous cells are important to observe in

Poster Presentations

order to understand the structure and genetic activity of the cell. Actin is a protein that functions in motor movement in the cell, creating microfilaments to facilitate cellular contractions. Fluorescent stains 4',6-diamidino-2-phenylindole (DAPI) and phalloidin tritc (PT) were utilized in order to observe the DNA and Actin, respectively, in and around the nucleus and cell membrane. Via fluorescence microscopy and 3D microscopy, patterns of the DNA and actin were observed, and photos were captured with ImagePro. DNA "walls" and other patterns were compared between different cell cultures and plates, as well as the actin patterns along the nuclear and cellular membranes. The findings of this study show how cancerous cells can have abnormal patterns in genetic and critical cellular materials and can further lead to examination of the layout of other proteins and organelles.

Motivation for Participating: I hope to gain professional experience presenting my work in an organized manner.

Emily Brand, Kristen Akin, Margaret Hannon, Jessica Harris, Mackenzie Noto (#6)

Academic Major: Occupational Therapy

Title: The Relationship of Time Spent in Positioning Devices and Preterm Infant Motor Performance Post-NICU: A Pilot Study

Faculty Sponsor: Professor Julie Kunisch, Occupational Therapy

Abstract: We conducted a pilot feasibility study to investigate the relationship between the duration of time spent in positioning devices and motor performance of preterm infants. The motor performance of five post- NICU infants at 3-4 months of corrected age was investigated using the Test of Infant Motor Performance (TIMP). Data collection for the time spent in positioning devices was collected via a parent self-reported survey. This poster presentation will provide detailed analysis of the findings and insight into larger future study possibilities.

Motivation for Participating: Experience in poster presentation for professional development. Class requirement for OTR 514.

Vanessa Caratozzolo, Justine Brooks, Jordyn Bombay, Sara Vanderhoof, Paige Pasquarella, Juliana Bunnell, Ally Darrer, Emma Cuffney (#7)

Academic Major: Communication Sciences and Disorders

Title: Conversing with Members of the NC3 Clinic

Faculty Sponsor: Professor Susan Mack, Communication Sciences and Disorders

Abstract: The Neurogenic Communication and Cognition Clinic (NC3) is an on-campus clinic located in the York Wellness and Rehabilitation Institute. This clinic provides free

services for the community. Members of the NC3 clinic have expressed interest in having a student partner to communicate with. This program provides a platform for people with various neurological conditions to build relationships and companionship while reinforcing their communication strategies learned in therapy. Partners meet once a week in-person or via Zoom for an hour that is determined by both partners. The student partners are learning how to connect, gain experiences, and build relationships with diverse populations. This is an opportunity provided within the senior capstone course for the Communication Sciences and Disorders major.

Motivation for Participating: Gaining experience sharing information and interacting with others. Class Requirement for CSD Senior Seminar: Engaged Professional.

Experiential Learning Pathway: Community engaged learning

Carolyn Carlic, Maddie Willett, Tom Griffin, Emily Walley, Maya Harasymchuk, Paul Williams (#8)

Academic Major: Environmental Science and Sustainability, Religious Studies

Title: Leaching of Lead in Crystal Decanters

Faculty Sponsor: Professor Stephanie M. Zamule, Biology

Abstract: Lead is a heavy metal that can cause a variety of adverse neurological effects, and even death in extreme cases. Lead can be found in numerous places, including paint, gasoline, cosmetics, crystal glasses, and a variety of consumer products. With lead being present in many objects, there are surprisingly few regulations. For this experiment we focused on crystal wine decanters. Crystal decanters, also known as lead crystal, contain lead as a reinforcing agent which may leach out during consumer use. The FDA recommends that lead crystal should not be used every day for wine consumption. For this study we used 12 decanters in groups of 4 with wines with various sugar contents and pH levels. Within each group, there were two decanters that had various levels of lead and one control which was made of glass. The wine used was pink moscato, white wine, red wine, and water. Samples were taken over a course of a year, digested, and analyzed using atomic emission spectroscopy to determine if lead had leached out. From our findings at the 60-day mark, pink moscato showed the highest levels of lead leaching out at 2900.75 ppb and 2551.5 ppb. Lead is a silent danger as it can go undetected due to the lack of smell, taste, and color when present. With this added danger, the health effects that come with exposure of lead can get misdiagnosed and the poisoning can continue to happen. Without the knowledge of where exposure can happen, what levels create adverse health effects, and how to remediate the heavy metal, the silent danger will continue to cause harm.

Motivation for Participating: How to present data in a professional setting, to spread awareness about the dangers of lead, to gauge the community's knowledge on lead and the dangers associated.

Experiential Learning Pathway: Mentored Research

Annabelle Carney (#9)

Academic Major: Biochemistry

Title: A computational study of the γ -butyrolactone monomer and its complexes with water

Faculty Sponsor: Professor Josh Newby, Chemistry

Abstract: The γ -butyrolactone (GBL): water complex was computed and analyzed through the study of the GBL monomer, electron density mapping of both GBL and water, and utilized Gaussian 16 to make inferences on how this specific complex would occur in nature, and measure the energies, optimizations, and frequencies. Several input structures led to complexes to be found in natural GBL and water interactions. Hydrogen bonding was seen as the driving force of these interactions, between the water monomer and the GBL's oxygen atoms. Accounting for isotopologues and the identified transition state, further research would be required to experimentally confirm the structures and their physical chemistries. The understanding and conclusions of this phenomena were seen through the identification of computed interactions with various electron density theories. The information gained from the GBL: water complex can be used to examine the energy and transition of GBL to GHB, γ -hydroxybutyrate, commonly known as liquid ecstasy.

Motivation for Participating: Professional presentation skills and share my research.

Experiential Learning Pathways: Mentored Research.

Sophia Caruana (#10)

Academic Major: Ethical Data Science

Title: COVID-19, Vaccines, and You

Faculty Sponsor: Professor Wendy Norris, Math

Abstract: The power of lies can change someone's life in addition to the COVID-19 pandemic, an infodemic of falsehoods is being intentionally spread about the global crisis for political and economic reasons. One can kill off a virus but not disinformation. Denying science, denying the efficacy of the COVID-19 vaccines, and promoting alternative information and treatment causes confusion and mistrust. The truth of the matter is that people may not know about how to make sense of ambiguous pandemic information. The aim of this research is to shed light on different points of view and to educate people on disinformation trends. Understanding is the first step for unification.

The second purpose is to educate. To better understand this phenomenon, I conducted an anonymous survey of 107 people through a snowball sampling method. The survey consisted of basic demographic questions and disclosures of vaccination status, social media usage, and opinions about a viral anti-mask meme. The data was computationally analyzed, visualized, and interpreted using standard statistical methods in the Python programming language. This research revealed associations between the respondents' various demographic categories, their political ideologies, vaccine status, social media usage, information preferences and a willingness to believe disinformation about the COVID-19 pandemic.

Motivation for Participating: I hope to gain practical skills about presenting a grad-style presentation and learn how others interact with public presentations. I also hope to practice teaching others on the fly and gaining leadership skills in doing so.

Kamal M Chappell (#11)

Academic Major: Biology & Public Health

Title: Determining the Role of Patulin in Virulence of the post-harvest fungal pathogen *Paecilomyces Niveus*, causal agent of *Paecilomyces* Rot of apple.

Faculty Sponsor: Professor Jennifer Gonzalez, Biology

Abstract: Here we are conducting two separate genetic modifications, one of the PKS gene, and separately the gene for an accessory protein. The PKS gene was previously identified within the genome, and we used the software AntiSmash to identify the neighboring accessory genes. Using Primer3 and NEB Tm Calculator programs the proper sequence of primers and annealing temperature can be found to properly knockout the patulin producing genes using homologous recombination. While DNA extraction is happening a hygromycin susceptibility assay, and protoplast assay will be conducted. Upon extracting the DNA, a PCR amplification will be conducted to amplify the flanking regions. A Hygromycin B (~2500bp) will be inserted in between the primer flanks as the selectable marker. Once the knockout is complete the genetically modified *Paecilomyces Niveus* will undergo a high-performance liquid chromatography test (HPLC) to confirm the successful knockout. In tandem with this occurring a virulence assay will be conducted by letting *Paecilomyces Niveus* grow up toothpicks and inoculating certain fruits with said toothpicks. Finally, a complementation test will be conducted by reinserting the removed genes to confirm that Patulin is responsible for the level of virulence.

Motivation for Participating: I hope to present my research and show case all the Microbiology skills I have learned and performed by knowing the "in's and out's" of my research. I have never presented scientific work at a conference like this before, so I am excited to get my perfect my presentation skills as first author of my research. Class requirement for SCI 250.

Experiential Learning Pathway: Mentored Research

Nora Conlen, Kyla Thompson, Pasquale Garno (#12)

Academic Major: Biomedical Sciences

Title: Accessibility in Laboratory Spaces at Nazareth College

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: We will conduct interviews and speak to students in order to assess the level of accessibility in the science labs at Nazareth. This is an important topic for us because we spend a lot of time in the labs. This is part of a class that is currently exploring visibility and accessibility in different areas on campus.

Motivation for Participating: Different perspectives on the level of accessibility in the science labs. Class requirement for INT 427.

Taylor Coonelly (#13)

Academic Major: Sociology

Title: Teachers' Microaggressions and Allyship in Children's Literature: How Far Have We Come?

Faculty Sponsor: Professor Cuthbert Rowland Storm, Education

Abstract: Continuation of prior research that focusing on what instances of microaggressions and allyship are present in children's literature, and what they can tell us about perceptions of marginalized students (originally emphasizing students with disabilities, LGBTQIA+ students, and African American students) and expanding research parameters by including works of microaggressions and allyship by peers to better understand the school environment for marginalized children.

Motivation for Participating: Engaging with students about the incorporation of Children's Literature that inclusively displays allyship. Class requirement for EDU 486.

Georgia Cowley (#14)

Academic Major: Psychology

Title: Impact of Instagram Use on Mental Health

Faculty Sponsor: Professor Lindsey E. LaPlant, Psychology

Abstract: I dispersed a survey to female psychology students, I did this through SONA. To learn more about the influence that social media, particularly the impact that Instagram has in the lives of female identifying college students.

Motivation for Participating: Learn how to present a poster in a conference like setting.

Experiential Learning Pathway: Mentored Research

Tanner Crisafulli, Griffin Randall (#15)

Academic Major: Business Management

Title: X-Culture Global Virtual Team Experience: Salad Ventures

Faculty Sponsor: Professor Jennifer Leigh, Business

Abstract: In this poster the team of X STUDENT will discuss their intensive global virtual team project on COMPANY NAME HERE. COMPANY BRIEF OVERVIEW: SENTENCE 1 ON WHAT IT IS AND SENTENCE TWO ON WHAT WAS REQUESTED IN THE TEAM REPORT (LIKELY IDENTIFICATION OF NEW MARKETS). The poster will provide a brief overview of the teaming process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate to use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: To become a better speaker and presenter, Class requirement for BLDR 430.

Makenzie Curle (#16)

Academic Major: Clinical Laboratory Science

Title: Clinical Consequences of NSAIDs

Faculty Sponsor: Professor Matthew Schoell, Clinical Laboratory Science

Abstract: Non-steroidal anti-inflammatory drugs, NSAIDs, are commonly used pain relievers which also aide in reducing inflammation and fevers. Some commonly used NSAIDs, such as aspirin and ibuprofen, are taken multiple times throughout the day. This project will focus on how NSAIDS have clinical consequences on the coagulation cascade, a necessary pathway for blood clot formation in the body.

Motivation for Participating: I hope to gain experience in sharing how common drugs can effect important pathways in our body. Class requirement for CLS 450.

Poster Presentations

Emily Denzler (#17)

Academic Major: Business Management

Title: X-Culture Global Virtual Team Experience: JACPACK for the UK and US Markets

Faculty Sponsor: Professor Jennifer Leigh, Business and Leadership

Abstract: JACPACK is a Columbian backpack company that creates vibrant and useful backpacks for a variety of purposes and ages. They additionally offer fanny packs, diaper bags, handbags, travel bags, and much more. They started their journey in 2015 and ever since have expanded their 3 way through South America. They have a high potential to succeed in many markets they decide to enter. With brilliant color blocks and distinct designs, they are recognizable to anyone who has come across their products before as well as new customers. Our team decided to expand to the UK and Us markets. Our poster project includes a proposal to further expand a legitimate company into a global market. The poster will provide the different steps that were taken to complete the proposal as a whole. There were three total sections. Section one was the market-product and competition analysis. This included the industry and new market section. Section two was marketing and included promotional channels, messages, and promotional materials. Section three was operations management. This included the market entry mode, pricing strategies, and logistics. We included an analysis of each section along with images that shows evidence of benefits going into a specific market. A few key aspects that helped with research were JACPACK's key qualities, a SWOT analysis, global market research, and many other factors.

Motivation for Participating: We hope to gain a new experience with discussing what we have learned during our x-culture project. We are looking forward to putting our individual experiences together in a group project. Class requirement for BLDR 430.

Matthew Droney, Colin Brickwood (#18)

Academic Major: Health sciences, DPT

Title: Perovskite Quantum Dots & Photovoltaic Cell Efficiency

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry

Abstract: As traditional non-renewable energy sources like fossil fuels are depleted, the need for efficient, renewable forms of energy is becoming more apparent. Perovskite solar cells are a promising form of renewable energy, touting high efficiency at relatively low production and maintenance costs. Researchers synthesized a series of cesium-lead-halide perovskites, specifically utilizing bromide, chloride, iodide, bromide chloride mix, and bromide iodide mix species. UV-vis and emission spectroscopy were used to characterize synthesized perovskites. It became apparent that different species reach peak excitation under specific wavelengths of visible light, leading to significant

differences in energy emission and absorbance at certain wavelengths. In part adapted from Schatz et al and Mikhail Shekhirev et al, we have found that cesium lead bromide perovskites had exceptionally easy synthesis and efficient fluorescence relative to the other species produced. A simple solar cell was designed to test the efficiency of the synthesized perovskites following the exposure to a white light spectrum, as per the procedure by Linda Fans et al. The efficiency of the solar cells was evaluated by measuring the light-generated voltage and charge lifetime. Non-bromide perovskites and two blended halide perovskites were combined to create a solar cell covering the wide spectrum of light absorption. A second solar cell was created using solely cesium-lead-bromide perovskites. The choice of the sole perovskite was based on the strong absorption of the cesium-lead-bromide perovskite albeit in a narrower spectral range. Limited trials slightly favored the cesium-lead-bromide perovskite solar cell in terms of peak voltage and charge retention. Ease of access and synthesis of perovskite solar cells allows for the incorporation of these experimental methods in multiple disciplines of study, including chemistry, physics, and sustainability.

Motivation for Participating: Experience presenting as the expert in a topic in front of others.

Experiential Learning Pathway: Mentored Research

Marris Eck, Brandon Cruz (#19)

Academic Major: Inclusive and Adolescent Education

Title: Disability in HEOP

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: This reason we are interested in looking into HEOP is because it supports students with low-income backgrounds. Since we know that we want to look into how people with disabilities are involved with HEOP as well. The HEOP community at Naz is like one big family. Where students from different cultures and backgrounds come together with the same purpose and that is to have a successful future. I think this opportunity is for all. I think we will be able to discover that HEOP is doing the same for everyone no matter if the student has a disability or not. I think we can be able to see what HEOP brings to the table when it comes to the support of students with disabilities.

Motivation for Participating: The purpose of this project is to highlight disability and visibility on campus. Class requirement for INT 427.

Kathryn Emerson (#20)

Academic Major: Museums, Archives, and Public History

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Title: History of Disability at Naz

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: I am interested in exploring the Center for Public History or the Nazareth Archives. I am interested to see the history of disabled students, alumni, and professors at Nazareth College

Motivation for Participating: The purpose of this project is to highlight disability visibility on our campus. Class requirement for INT 427.

Lauren V. Fairchild, Chloe Lang, Jennifer Evershed (#21)

Academic Major: Toxicology

Title: Use of Molecular Techniques to Resolve the Identity of an International Tree of Mystery

Faculty Sponsor: Professor Matthew J. Temple, Professor Jennifer B. González, Biology

Abstract: This experiment is being undertaken to determine the identity of a very old, unique sycamore tree (*Platanus* sp.) in Ukraine. The sycamore is known for its resilience and is often grown as a shade tree. This particular sycamore is of interest due to its age and leaf morphology, suggesting that it may be a hybrid of distinct variety. To identify the sycamore, chloroplast DNA was extracted from its leaves, along with the leaves of local sycamores (Fall 2021) for use in a multi-locus sequence typing analysis. Specific chloroplast genetic sequences were amplified (replicated) from the DNA using a polymerase chain reaction (PCR). PCR utilizes DNA as a template to make copies of the sequences using primers, and a polymerase enzyme in solution. The mixture is placed in a thermal cycler using temperature modulation to denature, permit annealing of primers, and extend the DNA copy with polymerase. Agarose gel electrophoresis will be used to determine successful replication. Once successful, DNA will be shipped to Cornell University for sequencing. Afterwards, sequences will be compared to known sequences to construct a phylogenetic tree to determine the tree's identity. Results are in progress, with anticipated completion by the end of the Spring 2022 semester.

Motivation for Participating: The experience of participating in a well-developed seminar along with other various candidates.

Experiential Learning Pathway: Mentored Research

Megan Forney, Madeline Klein (#22)

Academic Major: Chemistry

Title: Bismuth-Based Perovskite Crystals as an Alternative for Lead Halide Perovskites in Solar Energy Applications

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry

Abstract: Traditional silicon solar panels may soon be outperformed by the emerging technology of perovskite solar cells, with certain metal halide perovskites cells having efficiencies of up to 24%. Initial research focused on lead-based perovskites, however high toxicity and long-term instability of crystals created challenges in application. Due to lead's detriment to humans and the environment, bismuth is a favorable alternative in perovskite nanocrystals. In this work, we conducted an experimental investigation of the optical properties of two bismuth-based perovskites, dihydrogen-4,4-bipyridine bismuth iodide ((H₂bpy)₂[Bi₂I₁₀]) and hydrogen-2,9-dimethyl-1,10-phenanthroline bismuth iodide((Hdmphen)₃[Bi₂I₉]). Spectroscopic analysis of both compounds indicate the energetic characteristics of the perovskites, allowing for fine tuning and application in photovoltaics. Future work will focus on the characterization of the energies and excited state lifetimes of these bismuth-based perovskites. The efficiency of the bismuth compounds will also be compared to standard lead halide perovskites in solar energy applications.

Motivation for Participating: Through presenting at CARS, we hope to improve our presentation skills and receive feedback from the community on the work we have completed over the last two semesters.

Experiential Learning Pathway: Mentored Research

Jordyn Gardinier, Molly Calpin, Alexis Gould, Grace MacKinnon, Sarah Rohe (#23G)

Academic Major: Occupational Therapy

Title: Occupational Therapy Practitioner Partnerships: Clinician Perspectives

Faculty Sponsor: Professor Kathleen B. Stoklosa, Occupational Therapy

Abstract: Want to hear what occupational therapy practitioners think about supervisory partnerships? We conducted a study using a mixed-methods approach trying to answer the following questions: What are the perceptions of OT practitioners (OT/OTA) professional relationships? What are the factors that influence a more collaborative relationship? Based on AOTA's Vision 2025, our aim was to investigate supervisory relationships between OT supervisors and OTA supervisees, using alumni from both Nazareth and Bryant & Stratton Colleges. Both surveys and interviews were conducted

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independently to gather viewpoints and experiences in a multitude of ways. Come see our poster to see the results!

Motivation for Participating: Professional presentation of research, class requirement for OTR 514.

Travis Green, Emma Robinson, Marliana Guirastante (#24)

Academic Major: Business Leadership

Title: Differ Chat

Faculty Sponsor: Professor Jennifer Leigh, Business Leadership

Abstract: X-Culture Global Virtual Team Experience: Differ.Chat for the Norwegian Market, US Market, and United Kingdom Market In this poster the team of Emma Robinson, Marlaina Giurastante, and Travis Green will discuss their intensive global virtual team project on Differ.Chat. Differ.Chat is a Norway based communication app that connects students and professors on college campuses for educational, emotional, and social purposes. In this report we will be discussing the opportunities for Differ.chat to grow their company globally by analyzing markets in the US and the UK. We propose that differ set up free trial periods of their application so that users can see the real advantages of it. As far as costs are concerned, they should remain the same or be reduced slightly to have a positive impact on the customer. The poster will provide a brief overview of the teaming process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate the use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: I hope to be more creative, class requirement for BLDR 430.

Brittany Grund (#25)

Academic Major: Psychology

Title: Habits of Female Athletes

Faculty Sponsor: Professor Lindsey E. LaPlant, Psychology

Abstract: The participants received an email asking them to participate in this study, and the email will contain a Qualtrics link that will take them to the survey. Once the participants clicked on the Qualtrics link, they read the implied consent form and confirmed their agreement to participate in the study. The participants then answer the questions on the EAT-26 and Controlling Coach Behavior Scale that was provided. The

participants then answered demographic questions regarding their height, body weight, and what sports team they play on. The purpose of this research is to see if coaching style and athletic uniform type negatively impact eating habits in female varsity athletes.

Motivation for Participating: I hope to gain professional presentation skills.

Brittany Grund (#26)

Academic Major: Psychology

Title: Swimwear and Social Media

Faculty Sponsor: Professor Lindsey E. LaPlant, Psychology

Abstract: The purpose of this study was to see if participants who viewed Instagram photographs of bikini models with an "ideal" body type or an "inclusive" body type influenced participants' views about their bodies and their ability to broadly conceptualize beauty.

Motivation for Participating: I hope to gain professional presentation skills.

Aliya Guzman, Idalis Torres (#27)

Academic Major: Business Leadership

Title: Social Justice Mural

Faculty Sponsor: Ms. Tonya Guzman, Student Access and Achievement Programs

Abstract: The project is connected to the Student Scholar Initiative Program. Myself and Idalis are doing a social justice mural in the tunnels. The poster presentation would be a picture of the end product. The mural will be developed by Idalis, and I based on feedback from the various BIPOC student groups on campus. From there, we will determine which types of paint we will use. In the summer of 2019, I started an organization with my sisters called Project AIR (Art is Resistance), we raised over \$25k as social justice advocates because we wanted to raise awareness to its importance. Idalis is a social justice advocate and is using this opportunity to express that.

Motivation for Participating: We hope to raise awareness and to let the campus know that this will hopefully stand the test of time and social justice is a movement.

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Jenna Hood, Caley Cornwell, Grace Schmidt, MacKenzie Rivers, Ashley Plane, Ashley Meager (#28)

Academic Major: Communication Sciences and Disorders (CSD)

Title: Super Support Groups

Faculty Sponsor: Professor Susan Mack, Communication Sciences and Disorders (CSD)

Abstract: The Neurogenic Communication and Cognition Clinic (NC3) was established in 1992 to support individuals with various neurologic conditions. As part of the clinic, there are various support groups that clients participate in such as Technology, Women's Wellness, Quality of Life, and Artistic Expression. As part of the service-learning requirement for the senior capstone class in the Communication Sciences and Disorders (CSD), we join these groups each week to provide support and assistance in any way that is needed. Our role can range from helping someone send an email, to planning a monthly party where many of the clients gather to socialize! This service-learning experience has helped us fulfill our passion for helping others and gain another perspective on what our role as future speech-language pathologists may be.

Motivation for Participating: We hope to inform others about the purpose of the Neurogenic Communication and Cognition Clinic (NC3) in the YORK Wellness and Rehabilitation building on campus. Class requirement for CSD 457.

Experiential Learning Pathway: Community engaged learning

Chloe Lang, Bailey Pino, Emma States (#29)

Academic Major: Physical Therapy

Title: Exploring Center of Mass

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry and Biochemistry

Abstract: Center of mass (COM) is the average position of all parts of the system, weighted according to their masses. The purpose of this project was to explore the mathematical equations behind the COM of everyday 2D and 3D objects using DIY lab materials. The following was addressed: (1) "will the center of mass differ between 2D and 3D objects?" (2) "will the center of mass differ between regular and irregular objects?" (3) "how do we find the center of mass of a person?" The results indicated the COM did not differ between 2D and 3D objects. However, the COM did differ between regular and irregular. To find the COM of a person, the procedure of a lab found online was modified. An image of a gymnast was placed on a coordinate system in the program GIMP. Segment endpoints were measured and entered into an excel spreadsheet. Multiple equations were entered in excel to calculate the COM. The

resulting coordinate location of COM on the gymnast was about (460, 417) pixels. The reasoning for implementing COM exploration using GIMP into the physical therapy program was presented.

Motivation for Participating: Our group connected center of mass to the importance of this concept in the health sciences. Presenting our work at CARS is an ideal conversation started for med school applications and future resumes. Class requirement for PHY 207.

Alaina Lanthier (#30)

Academic Major: Clinical Laboratory Sciences

Title: Marijuana and Its Benefits on Immunity, Cancer, and Bacterial Diseases.

Faculty Sponsor: Professor Matthew Schoell, Chemistry/Biochemistry/CLS

Abstract: Researched the roles marijuana can have to help people with fighting pathogens. Also seeing how it plays a role in helping cancer patients. I did this to bring the information to people who may be unsure of how marijuana can help in medicine.

Motivation for Participating: What students/faculties views are on this topic and if they knew more would they agree that it should be used more in medicine. Class requirement for CLS 450.

Gabrielle Larsen (#31)

Academic Major: Communication Sciences and Disorders, and Psychology

Title: Analysis of the Cultural Climate of Nazareth College: A Survey on Student Perceptions

Faculty Sponsor: Professor Rebecca Fahy, Psychology

Abstract: Sexual assault is a widely underreported crime on college campuses. This project was designed to get a better understanding of the campus climate in relation to sexual assault. There was a survey sent out to the undergraduate students. The survey was made up of two parts; one section of the survey asked about real experiences and the other section was hypothetical in nature. The students were asked to provide relevant demographic information as well. This survey was completed to provide a foundation for growth and progress in the areas of sexual assault prevention and awareness among the students at Nazareth College. Statistics reported by the Rape, Abuse and Incest National Network (RAINN) indicate that 13% of college students experience rape or sexual assault. In the same report they indicate that only 20% of female students report this event to law enforcement. Thirteen percent can seem like a small number in other situations, but 13% of the students at Nazareth college is equal to

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423 students. If the statistic holds true on the Nazareth campus, then a lot of underreporting occurs. This survey was designed to find out what we are missing and how change can be made.

Motivation for Participating: I hope to spread awareness and learn about how individuals on the Nazareth campus feel about the issue of sexual assault and prevention. Class requirement for PSY.

Jamie Layhew (#32)

Academic Major: Business Management

Title: X-Culture

Faculty Sponsor: Professor Jennifer S.A. Leigh, Business and Leadership

Abstract: In this poster the Jamie Layhew will discuss their intensive global virtual team project on Novabrink. Novabrink is a toy company based out of Brazil that sells many different types of toys within well-known shops. As of right now they only sell within Brazil and we wanted to help them expand into other countries and maybe online as well. We want to help them expand their brand into the UK markets. The UK has a large market for toys and has a lot of the same interests in the partner ships that Novabrink has, such as Disney. Selling these toys, dolls and more within the UK could be a whole new growing point for this company. The poster will provide a brief overview of the team's process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate to use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: I hope to gain more presentation skills and be able to understand and explain global business and leadership. Class Requirement for BLDR 430.

Chloe List, Stephanie Goff, Rebecca Audi (#33G)

Academic Major: Occupational Therapy

Title: Engaging college students in therapy dog training: A qualitative study

Faculty Sponsor: Professor Laura Poleshuck, Occupational Therapy

Abstract: This study explores the possible effects of interacting with a therapy dog in training for college students at Nazareth College in Rochester, NY. More specifically, the researchers want to know the effects on the potential benefits after participating in a four-week program, during which the first and second-year students assist with the

training of a therapy dog for 30 minutes each week on their college campus. There were 20 participants that were first and second-year students that, following the four-week programs, completed a survey where eight themes emerged; 1) spending time with a dog, 2) stress relief/calming/happy, 3) campus connection, 4) getting outside/walking, 5) “something to look forward to”/“something to do”, 6) “learning”, 7) training a therapy dog, 8) homesickness/missing family dogs. It was found that the most common theme mentioned by the 20 participants was spending time with a dog.

Motivation for Participating: Experience presenting on our research in front of a live audience. Class requirement for OTR 514.

Marcus Lombardo (#34)

Academic Major: Psychology

Title: The Existence of Magnitude Estimation in Domesticated Dogs

Faculty Sponsor: Professor Christy Fessler, Psychology

Abstract: Dogs play a very important role in many of our lives. Many studies have been done that demonstrate the beneficial impacts that dogs can have on the mental, social, and physical health of humans. However, there have not been nearly as many studies that aim to specifically gain a deeper understanding of the inner workings of these animals. Research on the cognition of domesticated dogs could be instrumental in determining what type of tasks dogs could be trained to perform in the future and it could also be instrumental in making better decisions about animal welfare. In recent years, the studies of cognition in domesticated dogs has been increasing. One of these studies, by Macpherson and Roberts (2013), focused on one specific area of cognition: magnitude estimation. When canine subjects were tasked with selecting between quantities of food, the researchers found little evidence of this ability. However, they did demonstrate the presence of this ability in one dog, when presented with non-food items. The present study aimed to expand upon this finding to determine whether or not most dogs can tell the difference between more and less and make decisions based on quantity.

Motivation for Participating: I hope to gain experience presenting and talking about my research with people who may or may not be as knowledgeable in this area. I also hope to see if the people who are involved with animals on this campus feel this is a worthwhile area of study. Class requirement for PSY 485.

Marcus Lombardo (#35)

Academic Major: Psychology

Title: The Long Lasting Impacts of Racial Themes and Racial Diversity in Children's Media on Viewers

Faculty Sponsor: Professor Grant Gutheil, Psychology

Abstract: The racial messages that are presented to children have been up for intense debate in recent years. Schools and books in particular have been the subject of a lot of scrutiny in regards to what they are teaching children about race. However, one major source of information for children has not gotten nearly as much attention: television. Many television networks with young demographics have been shifting towards including more diverse stories in their lineups. One of these networks, the Disney Channel, claims that they have been part of a shift in the sociology of children due to the increase in diverse and racially themed programming. There has been very little research to back up these claims, but the previous research that has been done has found that television programming is effective at teaching racial lessons and at changing children's behavior in regards to race. However, more research needs to be done to determine the specific and longer-term impacts of this style of programming. In the present study, a survey was administered to examine the correlation between watching diverse and racially themed children's television shows while growing up and specific, present-day outcomes, such as racial attitudes, in college students.

Motivation for Participating: I hope to gain experience presenting and talking about my research with other people who may or may not be as knowledgeable on the topic. I also want to learn how the general Nazareth community responds to this topic and if they think it is important. Class requirement for PSY 486.

Olivia Losito, Katie Loewenguth (#36)

Academic Major: History

Title: Opportunities for Disability Accessibility in Niche Campus Spaces

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: Through the use of traditional research methods and interviews, our group will be exploring the greenhouse at Peckham and the college Makerspace, and how these spaces cater to students with disabilities. This project was undertaken to determine how accessibility options can be integrated further into niche campus spaces.

Motivation for Participating: We hope to gain professional presenting experience and raise awareness of disability accessibility on campus. Class requirement for INT 427.

Abby Manning (#37)

Academic Major: Biochemistry

Title: Exploring the interactions between cresyl violet and nucleic acid molecules

Faculty Sponsor: Professor Amber Charlebois, Chemistry and Biochemistry

Abstract: This research project examines the interactions that take place between cresyl violet (CV), an organic compound used for staining tissue and neurons, and nucleic acids. CV is a planar molecule that forms a complex with DNA and RNA and generates different colors. Running different sequences of DNA and RNA oligos, 15 bases in length, through gel electrophoresis and using CV as the stain produces the color differences. RNA tends to be stained more of a purple color while DNA stains as a bluer tone. To more precisely quantify these colors UV-Vis spectroscopy is used. In gel, a fiber optic UV-Vis is used to analyze the band on the gels, and a Cary 60 is used for the solution studies. The wavelength scans of the different oligos are unique with multiple peaks/forms present and therefore indicate that these nucleic acid-CV interactions may be base dependent. To further explore the CV local environment, we have experimented with different pHs around the pKas of the molecule. CV has been found to have distinctive spectra for each pH, similar to what is observed in the CV stained nucleic acids, providing insight into the local environments within the DNA and RNA oligos. PeakFit (Systat Software Inc.) continues to be used to identify and quantitate the peaks which represent the monomer, dimer and other unique forms.

Motivation for Participating: I hope to improve my scientific communication skills as well as my presentation skills.

Experiential Learning Pathway: Mentored Research

Nino Marino, Ryan Barrett, Grant Gallo (#38)

Academic Major: Business Leadership

Title: X-Culture: Differ.Chat - Expansion Analysis

Faculty Sponsor: Professor Jennifer Leigh, Business & Leadership

Abstract: In this poster, the team of Nino Marino, Ryan Barrett, and Grant Gallo will discuss their intensive global virtual team project on Differ.Chat. Differ.Chat is a private messaging application used in educational settings to connect students using the unique chatbot 'Bo.' After conducting marketing, competition, and market analysis of the prospective countries that we believe Differ.Chat should expand into, we have developed multiple directions through which Differ.Chat could grow their brand while increasing capital. Our suggestions are supported by research collected by separate teams composed of various cultures and nations that incorporate diverse perspectives

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into our final analysis. The poster will provide a brief overview of the teaming process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate to use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: We hope to gain experience in presenting business material. Class requirement for BLDR 430.

Experiential Learning Pathway: Student Leadership, International Experiences

Madisyn Marks, Hannah Smith, Jessica Granchelli (#39)

Academic Major: Biology

Title: Protein Structure Analysis Using Reversed-Phased HPLC Chromatography

Faculty Sponsor: Professor Amber Charlebois, Chemistry and Biochemistry

Abstract: This project aims to look at the retention times of two different proteins, lysozyme and trypsin. This two proteins were observed in three different forms, their native, denatured, and reduced forms. To create these different structures, the disulfide bonds in the proteins were broken using various solutions. The proteins were then run through the HPLC and peaks were analyzed to see how long it took each protein to elute. As the number of broken bonds increased, the retention times should be larger. The purpose of this lab is to not only help understand protein structure but to also develop an upper-level biochemistry lab that would experience with an HPLC.

Motivation for Participating: By presenting at CARS, we hope to build more communication and presentation skills, as well as share the research we have collected over the past years.

Jessica Michels, Anna High, Rebecca Hutchins (#40)

Academic Major: History and Adolescent Inclusive Education

Title: The intersection of Nazareth's Admissions Office and the Student Accessibility Office

Faculty Sponsor: Professor Isabel Cordova, Professor Shanna Jamanis, Professor Dawn Vogler Elias, Integrated Course

Abstract: 1.) Investigating the connection between the admissions office and the student accessibility office for prospective students with disabilities. 2.) We interviewed staff members at Nazareth who work in both offices. 3.) We are taking a class titled INT 427: Challenging "Normalcy": Disability Studies, Neurodiversity and Activism. Our goal

is to look at inclusion on our own campus as we take this course that focuses on the importance of inclusion.

Motivation for Participating: Better understanding of student accessibility within admissions on campus. Class Requirement for INT 427.

Molly Moran, Jenna Simpson, Kelly Artini, Elina Chase, Christiana Rowlands (#41G)

Academic Major: Occupational Therapy

Title: Interdisciplinary Role of Occupational Therapy in the Transition to Motherhood

Faculty Sponsor: Professor Lisa Sykes, Occupational Therapy

Abstract: Our research team of occupational therapy students, faculty member, and a community liaison developed a research study to explore the interdisciplinary role of occupational therapy in the transition to motherhood. Using a mixed methods study, data was collected via an online survey and an optional virtual focus group. The quantitative data was analyzed, and the qualitative data was transcribed, analyzed and coded for themes to answer the research question: What is the role of occupational therapists on an interdisciplinary team to support the transition into motherhood? We completed this study as a requirement for the 5-year Master of Occupational Therapy Program. We chose to explore this topic as there is little evidence to support the role of occupational therapy in this domain of practice and it is an emerging area of interest.

Motivation for Participating: We hope to educate students from other disciplines on what our role as occupational therapist could be in maternal role transitions. Additionally, we hope to gain experience in presenting literature in a professional setting. Class requirement for OTR 512 and OTR 514.

Lianne Moscato, Rita Cancellieri, Anthony Terrore, Keelin Paquette, Heather Hoyt, Gracyella Guilherme (#42)

Academic Major: Communication Sciences and Disorders

Title: Amigos De Jesus: Building Connections Virtually

Faculty Sponsor: Professor Tiana Giorgis, Communication Sciences and Disorders

Abstract: This was a collaboration between Nazareth College communication sciences and disorders students and students from Amigos de Jesus, a bilingual school and home for children, located in rural Honduras. We connected through Zoom on a weekly basis as part of our service-learning class. Through this experience, there was mutual learning where we exchanged skills about language and cultural humility. We learned how to overcome language barriers, grow past preconceived notions, and build cultural

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humility that can apply to our future profession. We worked on sourcing creative activities that we were able to share virtually in order to find commonalities between us and the children. This experience will benefit us as future speech-language pathologists as we build skills and character and grow in cultural responsiveness.

Motivation for Participating: We would like to gain experience presenting and connect with the Rochester community. Class Requirement for CSD 457.

Experiential Learning Pathway: Community engaged learning

Idelixa Figueroa Muniz (#43)

Academic Major: Clinical Laboratory Science

Title: Case Study: An Unexpected Finding of *Diphyllobothrium nihonkaiense* In a Patient with Inflammatory Bowel Disease

Faculty Sponsor: Professor Matthew Schoell, Chemistry and Biochemistry

Abstract: This is a deep investigation and comprehension of a case study about parasite. I do it for my CLS capstone class and also for learn more about different organisms that are not bacteria or virus.

Motivation for Participating: My hope is that people can gain knowledge. Class requirement for CLS 450.

Nyelah O'Meally (#44)

Academic Major: Communication Sciences and Disorders

Title: Student-led Safe Space for BIPOC students at Nazareth College

Faculty Sponsor: Ms. Jazzmyn Ivery-Robinson, Community and Belonging

Abstract: Though Nazareth College has established safe spaces on campus, it does not have a space solely dedicated for black students and curated by black students. Safe spaces defined by faculty or staff have not been claimed as safe spaces by students of color, and in some cases cause harm to students. The purpose of this study is to examine how black college students, through establishing a student-led safe space, can help students of color foster relationships with each other and create a community of belonging. I was able to survey BIPOC undergraduate students about their experiences on campus, if they feel they belong here and if not how to solve that. I used their responses and outside research to answer these fundamental questions: Why do black students need safe spaces? How do black students feel at PWIs? What is a safe space? And how do black students find safe spaces on this campus? In order to create a functional design of the safe space to address the issues faced by black

students on the Nazareth College campus in order to create a true community of belonging among black students.

Motivation for Participating: My hope from presenting this paper to CARS is that the narratives of black Nazareth students coupled with research will help inform faculty, staff, and other students of the perspectives of black students and what we need to be successful. A functional design of the safe space to address the issues faced by black students on the Nazareth College campus in order to create a true community of belonging among black students.

Experiential Learning Pathway: Student Leadership, Noncredit Bearing Community Engagement, Mentored Creative Activity, Mentored Research

Anne-Marie Pearson, Hannah Sertl, Mykailah Kelly, Anfernee Daily (#45)

Academic Major: Biomedical Sciences, BS

Title: Lead and Other Toxic Metals in Kajal and Kajal-Like Cosmetics in the Rochester Community

Faculty Sponsor: Professor Stephanie Zamule, Biology/Toxicology

Abstract: Since the withdrawal from Afghanistan, Rochester has accepted over 200 Afghan refugees. With them came new public health concerns. One of these concerns is the prevalence of elevated levels of toxic heavy metals (THMs), particularly lead, in both children and adults. Kajal, a traditional makeup product by many names, is widespread and culturally important. It's also a major source of lead. Studies vary in the number of products containing lead, one reported 17/23 products and another 14/21. The levels are high and vary greatly. One study found 10/14 products positive for lead had concentrations in excess of 84%. There is concern that other THMs could be present at toxic levels - one study found an excess of cadmium. Because these products are frequently used on children for believed medicinal properties, these high levels of lead are particularly concerning due to the well-documented effects on development in children. Adults also suffer chronic issues from high exposure. This study looks at products gathered from Rochester-community stores to survey the prevalence of lead in kajal-labeled products to establish a baseline of THMs in kajal, find culturally appropriate products safe for families to use, and become involved in community outreach to the Afghans.

Motivation for Participating: We hope to raise community awareness about our project and raise awareness for the issue in question generally. It goes beyond kajal - any and all makeup is/can be affected by these issues. People need to know about the widespread nature of THMs in cosmetics for there to be any long-lasting, meaningful change.

Experiential Learning Pathway: Noncredit Bearing Community Engagement, Field & Clinical Experience, Mentored Research

Alecia Peterson, Jeanne Bergett, Abigail Finch (#46G)

Academic Major: Occupational Therapy

Title: The Impact of the COVID-19 Pandemic: Parents' Perspectives on their Child's Sensory and Mental Health Experiences

Faculty Sponsor: Professor Elizabeth Baltus-Hebert, Occupational Therapy

Abstract: There is a lack of research on parents' perspectives of the impact of the COVID-19 pandemic regarding mental health and sensory experiences of their children. A qualitative study design was used in which semi-structured interviews were conducted with 8 parents of typically developing children aged 5 to 12 years. Thus, the research question of the present study is how the lives of children aged 5 to 12 years changed as a result of the COVID-19 pandemic.

Motivation for Participating: Practicing presenting in front of a large group while also educating the Nazareth College community on this specific topic. Class requirement for OTR 514.

Jenna Phillips, Carmine Alberga, Geena Morotti (#47)

Academic Major: Biomedical Science

Title: A Comparative Spectroscopic Study of Porphyrins and Cytochrome C

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry

Abstract: Porphyrins are essential and abundant organic compounds in biological systems. They are involved in cellular processes related to oxygen transport and energy transfer among other things, and they are present in many proteins such as hemoglobin and cytochrome c. Studying the porphyrin interactions is vital to understanding the function of heme proteins. The scientific aim of this research is to identify the relationship between porphyrin and cytochrome c; with special emphasis on spectral changes caused by interactions of proteins with metalated porphyrins. We have used a one-pot synthesis to construct tetraphenyl porphyrin (TPP). The TPP was subsequently metalated and used in a comparative study with Zn-substituted cytochrome c. This study relates the unique spectral characteristics of the porphyrins such as the number of spectral lines, the position of the line maxima, intensity, linewidth, and spectral shifts to the metal coordination and chromophore interactions with the surrounding protein.

Motivation for Participating: We hope to further expand our understanding of porphyrin interactions in heme proteins by having to teach others who are uneducated on the topic.

Experiential Learning Pathway: Mentored Research

Rocío Pilán, Juan Giner (#48)

Academic Major: Biotechnology

Title: Antimicrobial effect of essential oils.

Faculty Sponsor: Professor Amber Charlebois, Research and Chemistry

Abstract: The antimicrobial effect of essential oils has been tested in *E. coli*, *S. epidermidis*, *C. albicans* and *B. cereus* using the standard, pure composition of different oils, and extracting oils from spices. Peppermint, eucalyptus, clove and cinnamon along with their standards, eugenol and 1,8-cineole, suggest that essential oils are able to kill bacteria with various success. The Kirby-Bauer method together with antibiotic discs (vancomycin and gentamicin as a positive control) were used to determine the sensitivity or resistance of pathogenic bacteria. Results indicate that clove is the most effective towards the four microorganisms and the other spices are effective to a varying degree. Further research is being conducted to investigate the bactericide effectiveness of lower concentrations of these oils.

Motivation for Participating: Experience presenting my own work, improving my English skills and learning from other students work

Experiential Learning Pathway: Internships

Ruth Riggie (#49)

Academic Major: Psychology

Title: Body Positivity Trends at Nazareth College

Faculty Sponsor: Professor Lindsey LaPlant, Psychology

Abstract: I was able to use some of Dr. LaPlant's previous research and expand on it with my own question, "what does body positivity look like at Nazareth and what are some ways to promote body positivity on campus?" I looked at potential strengths that Nazareth has in promoting body positivity as well as looking at some of the potential barriers. Using student responses, I will research what other colleges have done to promote body positivity on campus and attempt to come up with some of my own solutions as well.

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Motivation for Participating: I hope to offer some solutions to the college about how to promote body positivity on campus.

Jennifer Roush (#50)

Academic Major: Dance, Psychology

Title: Kinesthetic Learning and the Impact on the Ability to Memorize in College Students

Faculty Sponsor: Professor Lindsey E. LaPlant, Psychology

Abstract: I would like to present the research I conducted about Kinesthetic learning as a part of my PSY 202 class. Kinesthetic learning impacts the way people retain information. To test this with college students, participants were assigned to learn words in one of two ways, kinesthetic or traditional. I hypothesized that the kinesthetic group would memorize significantly more words and enjoy the memorization process significantly more than the traditional group. Results indicated that kinesthetic memorization techniques have a significant impact on participant retention, but no significant impact on enjoyment when compared to traditional memorization techniques. I did this in order to demonstrate that physical methods of learning can be just as effective, if not more so than traditional methods. As a dance major, I am passionate about the value of movement as a way of learning, and sought to support my beliefs through research

Motivation for Participating: I hope to inform more people about what Kinesthetic learning is, and to share my findings that validate its legitimacy as a way of learning.

Yahya Sellars (#51)

Academic Major: Sociology

Title: Moving Forward on DEI in a Data-Focused Way

Faculty Sponsor: Ms. Jennifer Canning, Center for Spiritually

Abstract: Nazareth College has a dedication to its students to make them equitable leaders by the time they graduate. Therefore, I created a survey as an attempt in helping Nazareth College attain that goal of equitable leaders. This survey is a simple baseline survey of Diversity terms and information. This would be a way for departments in the college to see where Nazareth college students are in this information for the college to know where to put curriculum and programing changes. This will also allow departments to be accountable for their own work and drive for true DEI change in their respective department and majors. My goal is for this survey to be sent at the beginning of each semester to see where students are in knowledge in DEI

and the students be tracked until they graduate. This will allow college to see what programs work and how their efforts made students more knowledgeable of DEI when first coming to Nazareth College.

Motivation for Participating: I hope to kickstart a more action base change in Nazareth College when it comes to diversity, equity, and inclusion initiatives.

Miyah Sizer, Makalah Sizer, Tate Martinez (#52)

Academic Major: Business Management

Title: X-Culture Global Virtual Team Experience: JacPack for the Chinese, Mexican, and UK Markets

Faculty Sponsor: Professor Jennifer Leigh, Business and Leadership

Abstract: Worked with a global virtual team to create a business plan for the Colombian company Jacpack. Over the course of a month, we met with members from various parts of the world and completed three sections including: The Market, Marketing, and Operations Management. We went through this process to satisfy a School of Business and Leadership requirement.

Motivation for Participating: The experience of synthesizing our work and articulating our findings to a group of people. Class Requirement for BLDR 430.

Jeffrey Smith, Dominic Vito, Andrew Vogler (#53)

Academic Major: Biomedical Sciences Sanela Lampa-Pastirk, Chemistry

Title: Versatile hands-on activities for integrated physics classroom

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry

Abstract: This work is inspired by the need for the flexible delivery of the scientific material without sacrificing the active engagement of students. After the recent pandemic and transition to online instruction, we modeled our instructions so that experiments can be conducted outside of the classroom, in the event of in-person instruction being suspended. The majority of the students enrolled in the integrated physics 1 and 2 courses at Nazareth College are physical therapy and biomedical science majors. The goal of this work is to create a course curriculum focused on the interests of students majoring in physical therapy and biomedical sciences through integrating physical therapy exercises into the traditional physics curriculum. The new activities are designed to utilize the IOLab device as its versatility and variety of sensors provided the unique opportunity to revise the physics curriculum with more emphasis on student engagement and direction. The design of activities for the integrated physics laboratory and lecture involved the preparation of laboratory handouts accompanied

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with tutorial videos and additional instructor guides. This work is informed by student feedback and is continuously adapted to increase the engagement of students in the learning process and enhance student learning outcomes. We hope to continue the curriculum revisions for other physics courses at Nazareth College with the goal of creating a similar integrated classroom that focuses on learning through activities.

Motivation for Participating: Our focus is sharing the work and changes made to the physics curriculum with Nazareth students.

Xavier Solivan-Rivera (#54)

Academic Major: Chemistry

Title: Prediction of Carbon Monoxide - Furan Minimum Energy States via Computational Analysis and Matrix Isolation

Faculty Sponsor: Professor Josh J. Newby, Chemistry

Abstract: The minimum energy configurations of the furan: carbon monoxide complex have been determined by computational chemistry. In this work, many (>20) initial configurations were sampled in order to find all possible minima of the potential energy surface. The minimum energy geometries are characterized as a linear O-C···H interaction and a linear C-O···H interaction, a superimposed CO molecule parallel and horizontal to the furan's ether group and a planar interaction between CO and the C-O of the furan. These minima were found to be within 4 kJ/mole of each other. Additionally, the energy required to move between these minima has been determined using transition state calculations. Our computational results will serve as the basis for future matrix isolation FTIR experiments where we intend to determine the experimental structure of this complex.

Motivation for Participating: Public speaking experience, the opportunity to present my work, and get people interested in my line of research.

Experiential Learning Pathway: Mentored Research

Allison Sortore, Alicja Cygan (#55G)

Academic Major: Occupational Therapy

Title: Health Professionals' Perspectives on the Application of their Collegiate Interprofessional Education Post-Graduation

Faculty Sponsor: Professor Elizabeth Hebert, Occupational Therapy

Abstract: As a research team, we explored how interprofessional education provided at Nazareth College through the School of Health and Human Services influenced skills,

attitudes, and frequency of collaboration with other health professionals post-graduation. We did this by interviewing Nazareth alumni, including occupational therapists, speech pathologists, and an art therapist 2-4 years post-graduation to gain their perspective on interprofessional content provided at Nazareth and how it currently influences their professional behaviors. We completed this project to explore how interprofessional education has influenced alumni in their interdisciplinary collaboration. This project helps to reflect on the strengths and areas of opportunity for the interprofessional education that is currently being provided at Nazareth College. These results may help to meet the growing needs of students to enter the workforce equipped to work on an interprofessional team, as interprofessional collaboration becomes a more prevalent topic nationally.

Motivation for Participating: We hope to educate individuals involved with the interprofessional education at Nazareth on its strengths and areas of opportunity to further support students in becoming interprofessional team members. In addition, we hope to gain experience presenting research to a diverse group of individuals. Class requirement for OTR 514.

Erin Spina, Anibella Barona, Connor Doherty (#56)

Academic Major: Business Management

Title: X-Culture Global Virtual Team Experience: JACPACK

Faculty Sponsor: Professor Jennifer Leigh, Business and Leadership

Abstract: In this poster, the team of Anibella Barona, Connor Doherty, and Erin Spina will discuss their intensive global virtual team project on the company JACPACK. JACPACK is a backpack company located in Colombia, which produces bold and vibrant products through color blocking. The challenge presented by this company is the global expansion of its brand and is in need of an expansion strategy in order to do so successfully. The poster will provide a brief overview of the teaming process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate to use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: Ability to successfully portray our learned knowledge as the result of our global team project. Class requirement for BLDR 430.

Adrien Stone, Samuel Smyth, Jacob Costa (#57)

Academic Major: Business Leadership/Management

Title: X-Culture Global Virtual Team Experience: Jacpack for the markets of Thailand, China, and Norway

Faculty Sponsor: Professor Jennifer Leigh, Business and Leadership

Abstract: In this poster the team of Jacob Costa, Samuel Smyth, and Adrien Stone will discuss their intensive global virtual team project on Jacpack. Jacpack is a bag/luggage company that's manufacturing is based primarily out of Medellín Colombia; Jacpack's "bags" are carefully put together by expert artisans who create products that are recognized for their one-of-a-kind psychedelic design, vibrant color schemes, and sparkling look. The X-Culture experience asked us to identify new markets for Jacpack to enter into, and then create a business strategy for how Jacpack should bring their product offerings effectively into this new market(s). The poster will provide a brief overview of the teaming process through the X-Culture experience and the company selected, identify disciplinary connections to the School of Business and Leadership curriculum, demonstrate to use of trade and scholarly data in the decision making and recommendations, and offer a logical argument for the varying recommendations for the company.

Motivation for Participating: We hope to gain public speaking experience and summarizing our work for others at the college who did not participate in this type of experience. Class requirement for BLDR 430.

Jeremy Swartz, David Bresci (#58)

Academic Major: Chemistry

Title: Physics of the Slap Shot

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry and Biochemistry

Abstract: We tested the parameters that would produce the fastest slap shot. We tested stick flex, strike distance, hand positioning, swing speed, and player speed. We shot 5 pucks with various flexes and used the best for the duration. Next, we shot 5 pucks at different strike distances, and used for the duration. Then we tested all 27 combinations of the remaining three parameters to find the ideal combination. We were interested in understanding how to produce a good slap shot from a physics perspective.

Motivation for Participating: I hope to learn how to summarize findings from experiments and learn the presenting side of the sciences. Class requirement for PHY-207.

Victoria Thompson (#59)

Academic Major: Nursing + Public Health

Title: Archiving Anderson

Faculty Sponsor: Professor Timothy Kneeland, History, Politics, and Law

Abstract: I interviewed and archived the life and work of Dr. David Anderson. I did it because I felt that we should tell the stories of our hidden figures at Nazareth College.

Motivation for Participating: I hope to allow others to know about our hidden figures we have at Nazareth College

Experiential learning pathway: Mentored creative activity

Andrew Vogler, Dominic Vito (#60)

Academic Major: Biochemistry

Title: Demetallation and Remetallization of Cytochrome C Utilizing Spectral Analysis in Absence of Hydrofluoric Gas

Faculty Sponsor: Professor Sanela Lampa-Pastirk, Chemistry and Biochemistry

Abstract: Protein misfolding is the result of amino acids incorrectly folding into their final quaternary structure. The process leads to the final protein structures that cannot perform the original function of the native fold. Neurodegenerative diseases such as Alzheimer's can arise when these misfolded proteins aggregate, forming masses known as amyloid fibrils. One aspect of the protein unfolding research aims to better understand the mechanisms of unfolding reaction and aggregate formation. In this study we examined cytochrome c because of its small size, well-known structure, and most importantly the presence of the heme group that can serve as an internal chromophore. The cytochrome c cannot be used in the emission studies of the unfolding process directly as the native heme with axially ligated centrally positioned iron does not have fluorescent properties. However, the substitution of the d5 metal Iron with a d10 metal such as Zinc yields the fluorescent protein without altering its structure. Our work demonstrates the safe, efficient and reproducible protocol for demetallation/remetallation of cytochrome c (Kubie et Al). The protocol is appropriate for the protein folding/unfolding studies in the undergraduate laboratories. The viability of the Zn substituted cytochrome c product for fluorescence-based folding/unfolding studies was tested and confirmed using traditional unfolding methods and standard denaturants.

Motivation for Participating: I hope that Dom and I both gain experience presenting research and articulating it to other people, learning from their questions.

Experiential Learning Pathway: Mentored Research

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Emily Weaver (#61)

Academic Major: Biochemistry

Title: Computational Study of the γ -Valerolactone: Water Complexes

Faculty Sponsor: Professor Josh Newby, Chemistry

Abstract: The molecule γ -valerolactone (GVL) and its interactions with water were analyzed using the computational chemistry program Gaussian16. This program was used to find stable complexes with GVL and water. In this study, the minimum energy geometries and vibrational frequencies of the complex were determined. We sampled a wide variety of input structures to find all possible minimum energy structures of the complex. This search was guided by the calculated electron densities of the two monomer units. A total of four, true minima have been found at multiple levels of theory including B3LYP, M05-2X, ω B97X-D, and MP2. While our brute force method is useful in finding all possible minima, it is also time consuming. We are currently implementing a second program (ABCluster) to help streamline our optimization process. Analysis of our geometries, vibrational features, and the new sampling method will be presented.

Motivation for Participating: I would like to be able to present my research to a wider audience as well as gain more experience presenting research.

Christian Winkler (#62)

Academic Major: Chinese

Title: Color Television; Invention of Guillermo González Camarena

Faculty Sponsor: Professor Hilda Chacón, World Languages and Cultures

Abstract: I have created a Google Slides presentation showcasing the accomplishments of Guillermo González Camarena, as well as providing biographical information.

Motivation for Participating: I wish to share information that I have researched with the Nazareth Community.

Tyler Young (#63)

Academic Major: Psychology

Title: Investigating Declarative and Procedural Memory Performance After State Anxiety

Faculty Sponsor: Professor Grant Gutheil, Psychology

Abstract: Though they are meant to be adaptive by pushing us to avoid unpleasant stimuli, anxiety and stress can also have several negative impacts on our lives as well, including memory impairments. College students are subjected to stress-inducing environments, even though they are expected to learn information and skills that will be essential for their future careers. The present study addresses a gap in the literature regarding whether declarative or procedural memory is impaired more by state anxiety. This would have implications in educational settings so that accommodations can be made to the learning process to improve retention of information and skills. It was hypothesized that participants who underwent high-anxiety conditions and engaged in a procedural memory task would display greater memory errors. Participants (N=36) engaged in either a low-anxiety and high-anxiety task followed by a declarative memory task or a procedural memory task. Number of errors in the memory task was measured and compared between the four groups. The results indicated that participants in the procedural memory groups performed significantly worse than those in declarative memory groups. However, there was no significant difference between anxiety groups or a significant interaction.

Motivation for Participating: Experience presenting at a research conference. Class requirement for PSY 485.

Experiential Learning Pathway: Mentored Research

SOARS Summer Research

Rachel Hance

Academic Major: Communication Sciences and Disorders

Title: The Use of Humor During Group Social Skills Intervention

Faculty Sponsor: Professor Megan Tobin, Communication Sciences and disorders

Abstract: We identified what types of humor occurred during a group social skills intervention and investigated the link between the use of humor and relationship development among the group members. To do this we investigated how other research has analyzed the use of humor during different types of interactions. We used this information to create a coding system to identify different types of humor (i.e., teasing, joking, self-denigrating) and responses to humor (i.e., continue, end, neutral, ignore, respond with a joke, respond with a tease). We applied this coding system to 10 x 30-minute conversations from the beginning and end of when this social skills group met.

Motivation for Participating: I hope to learn how to present research in a meaningful way to a group of people.

Evening Graduate Poster Presentations

Anna Castellani (#501)

Academic Major: Art Education

Title: Sustainability in the Art Classroom: An Ethnographically Influenced Study of Saturday Art School Materials

Faculty Sponsor: Professor Samantha Nolte, Art Education

Abstract: I present an ethnographically influenced study of Saturday Art School (SAS) materials to see if a zero waste/eco-friendly art room is attainable. I discuss findings of bloggers who currently implement zero waste practices and researchers who speak about the disposal of art materials. This is a step often forgotten in the zero-waste classroom, but it is just as important as the purchases we make. Daniel Grant (2010) states that the proper disposal is a crucial piece to the sustainable cycle so the inclusion of methods to close that gap are absolutely essential. I will implement the use of photo documentation/maps, field notes, and interviews as my methods of data collection in the hopes to find out how realistic zero waste implementation is in the art classroom. I close with my plan to make a cheat sheet manual for SAS teachers to show how sustainability implementation can be achieved and attainable without major changes.

Motivation for Participating: I am excited to present a topic I am passionate about. I have never done a presentation like this and excited to see how it will help me grow mentally in both my everyday life and my professional life. Class requirement for AED 690/699.

Elise Coon (#502)

Academic Major: Literacy Education (B-6)

Title: The Integration of Multisensory Interventions and Explicit Literacy Instruction

Faculty Sponsor: Professor Kerry Dunn, Education

Abstract: As a Clinical Assistant, I have been exploring multisensory instruction, more specifically, how the integration of multisensory interventions and explicit literacy instruction strengthens students' skill development. Since September, I have been working alongside two Literacy Specialists twice a week in a suburban primary school. I work closely with 5 students, 4 first graders and 1 second grader. I began my project by gathering baseline data to determine the skill areas in need of development. This data analysis informed my decision to begin instruction in the areas of phonics and sight word identification. I have been implementing research-based strategies for

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multisensory instruction in small group and individual settings in two 15 minutes sessions, weekly. I continue to track and analyze student's progress weekly. Preliminary data analysis indicates significant academic gains. This research is ongoing, and a comprehensive data analysis will take place at the end of the project. This experience has provided valuable skills and knowledge to support children's literacy development. I have learned the impact of incorporating multiple senses to assist in retention of foundational literacy skills. I now have the experience of integrating multisensory components into literacy interventions, which I can take with as I enter this profession.

Motivation for Participating: I look forward to engaging in the process of sharing this research opportunity with professionals and peers. CARS will provide me with an audience and the learning experience of communicating my findings through this research process and connecting it to my academic learning through coursework.

Danielle Kennedy (#503)

Academic Major: Art Education

Title: "How Does a Family Dog Comfort Its Owner in Times of Stress?"

Faculty Sponsor: Professor Samantha Nolte-Yupari, Art Education

Abstract: I will be discussing "How Does a Family Dog Comfort Its Owner in Times of Stress?" Studies involving Animal Assisted Intervention (AAI) are only recently being conducted due to its fairly known appearance on college campuses. Most college students by nature are stressed from constant workloads, managing their time, and studying for tests without having nearly enough time to get it all finished. Several students in college have outside academic priorities as well, whether they are a student athlete, a performer, clubs' member, etc., this removes additional time away from their academics as well. As a college student myself, this level of high stress hits quite close to home; in this research I explored how and if a dog can really reduce levels of stress through Autobiographical Research. The reason for this is to share the results of my research through my personal relationship with my dogs and provide my findings of a pet's ability to reduce stress.

Motivation for Participating: I hope to gain the ability to present on my research and data collection. Class requirement for AED 690.

Kayli Krossber (#504)

Academic Major: Literacy Specialist, B-6, MSED

Title: How A Comprehensive Multi-Sensory Approach Impacts Phonological Awareness and Phonics Instruction for Tier 3 students

Faculty Sponsor: Professor Kerry Dunn, Education

Abstract: As a Clinical Assistant, I have been conducting in-depth research with third grade students. I pull three students twice a week whom I meet 1:1 in individual settings at our scheduled time throughout the day. I have designed interventions that research the effectiveness of multi-sensory approaches to learning which build upon students' phonological awareness and phonics abilities, at the TIER 3 level. Instruction is driven by each student's data, as skills are being taught and retaught as needed. Each lesson is designed to build upon student's automaticity and accuracy to perform essential literacy skills, in which manipulatives are used and the senses are engaged during the learning process. Through my ongoing work I have discovered the imperativeness of teaching students in an engaging hands-on manner that correlates with the skills and science behind how they learn to read and acquire language.

Motivation for Participating: From presenting my work at CARS, I hope to educate others about a topic that I have come to feel incredibly passionate about. Multi-sensory learning may seem easy to understand, as one uses manipulatives to teach, and students get engage by becoming hands on with their learning. Yet, I want to share at CARS how multi-sensory learning is more than fun items to engage with. It is a form of building connections between rather difficult literacy concepts and creating concrete examples. I aim to share how data NEEDS to drive instruction, how we should allow students to be active in their construction of knowledge and why phonological awareness/phonics is very important. As I present, I hope to educate others, and I look forward to being educated by my peers. I want to walk away with new teacher strategies/information under my belt. By presenting at CARS, I gain the chance to have informed professional conversations and, in the meantime, take a hands-on active approach to add to my own learning in the process.

Erika Ly (#505)

Academic Major: Inclusive Childhood Education, Professional Certification

Title: The Impact of Positive Thinking on a 6th Grade Student's Sense of Self

Faculty Sponsor: Professor Kerry Dunn, Education

Abstract: I am a clinical assistant working in 6th grade Reading and English Language Arts (ELA) classrooms. I have been doing whole class interventions with a focus on social emotional learning and an emphasis on positive thinking, especially with the past year and a half of distance learning. These interventions were taught in a series of lessons. My interventions focused on having students look at their own strengths and creating affirmations to strengthen their self-esteem. I believe that these strategies will help students intrinsically and ultimately, create a stronger sense of self within these students.

Motivation for Participating: I hope to gain more confidence in presenting to my peers and faculty.

Evening Poster Presentations

Maddison Moore (#506)

Academic Major: Literacy Specialist, Birth-Grade 6, MSED

Title: The Impact of Goal-Setting and Game-Based Learning on Student Motivation, Self-Efficacy, and Academic Achievement

Faculty Sponsor: Professor Kerry Dunn, Education

Abstract: As a Clinical Assistant in a rural school district, I am conducting an ongoing inquiry research project with first and second grade students receiving Tier II literacy intervention services. I have been researching the impact of goal setting and game-based learning on students' motivation, self-efficacy, and academic achievement. Qualitative indicators of motivation and self-efficacy in student interviews were coded. Student academic achievement related to specific skill development is measured each session and will be measured holistically upon completion of the project. I work with students twice a week, implementing interventions in small group and individual settings. As I collect data, students simultaneously track their own progress toward their goals. Analysis of this two-tiered tracking system after each session informs each subsequent instructional session. Data collection and analysis is ongoing. Preliminary data analysis indicates increases in academic achievement. Comprehensive data analysis will occur at the end of the project. In my future teaching experiences, I believe this research will help me better understand how to address student motivation, self-efficacy, and academic achievement in a personalized, engaging manner.

Motivation for Participating: I hope to have the opportunity to inform others about the benefits of goal-setting and game-based learning in the classroom. I also hope to gain some new insights related to this topic as I talk with those who are interested in learning more about my project.

Makayla Pierpont (#507)

Academic Major: Literacy Education

Title: The Effectiveness of a Phonics Curriculum on Word Reading Fluency

Faculty Sponsor: Professor Kerry Dunn, Education, Adjunct in Art and Design

Abstract: As a Clinical Assistant, I am conducting an ongoing research inquiry project in a suburban elementary school. I have been teaching and researching the effectiveness of a new district adopted intervention curriculum (95% Phonics Lesson Library). Specifically, I want to learn how the 95% curriculum impacted 5th grade students who are concentrating on word reading fluency and retention. These students receive extra support with a reading specialist. I work with students twice a week, through pull out services, implementing interventions in small groups, collecting data before, after, and then again two weeks after the designed lesson. While this project is

still in process, early indications in the data suggest students are making improvements in fluency based on the current pre and post information. I believe that this research will help me to better understand how a structured and supplemental reading curriculum influences students' fluency development.

Motivation for Participating: I hope to gain confidence in myself as a public speaker. I also believe that presenting this project will allow me the opportunity to fully appreciate the work I did as a Clinical Assistant.

Ashley Todd (#508)

Academic Major: Art Education

Title: Drawing on Whiteboards: What does it reveal?

Faculty Sponsor: Professor Samantha Nolte-Yupari, Art Education

Abstract: For my thesis research project I placed a whiteboard in the art and design hallway at Nazareth College and documented what students drew. I wanted to do this because I wanted to bring awareness of whiteboards being a form of art and expression.

Motivation for Participating: That research can be fun, and you find out interesting things from your data. Class requirement for AED 520.

Jasmine Weiskopff (#509)

Academic Major: Art Education

Title: Childhood and Family: an auto-ethnographic examination family portraits

Faculty Sponsor: Professor Samantha Nolte-Yupari, Art Education

Abstract: Throughout my research, I was attempting to answer the question; How do the family portraits of a group of childhood friends from Central New York reflect and inform their conception of family and/or childhood? Throughout my initial research, I dissected sources that pertained either to the interaction between art and culture, the images of children, or the overall conception of childhood. Through the motif of the Romanticized Child (Higonnet, 1998), it is assumed that all children are innocent, blank slates, in which adults can impose ideas upon. Family portraits are examples of visual culture that is shaped through personal narratives about childhood and family dynamics. By examining the family snapshots of myself and my group of childhood friends, I explored how conceptions of childhood and family are reflected and informed by family portraits. Through a series of didactic interviews examining the participants' family portraits, I compiled data about the "mom-approved portrait", "candid portrait", and "found-family-portrait". It was my hope that in doing this I can become cognizant of the ways I myself conceptualize childhood and how this manifests in my teaching practices.

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Motivation for Participating: To share what I have been working on this past year.
Class requirement for AED 690.

Taylor White (#510)

Academic Major: Literacy Specialist, Birth-Grade 6, MSED

Title: The Impact of a Multisensory Approach on Literacy Interventions for Sixth-Grade Students

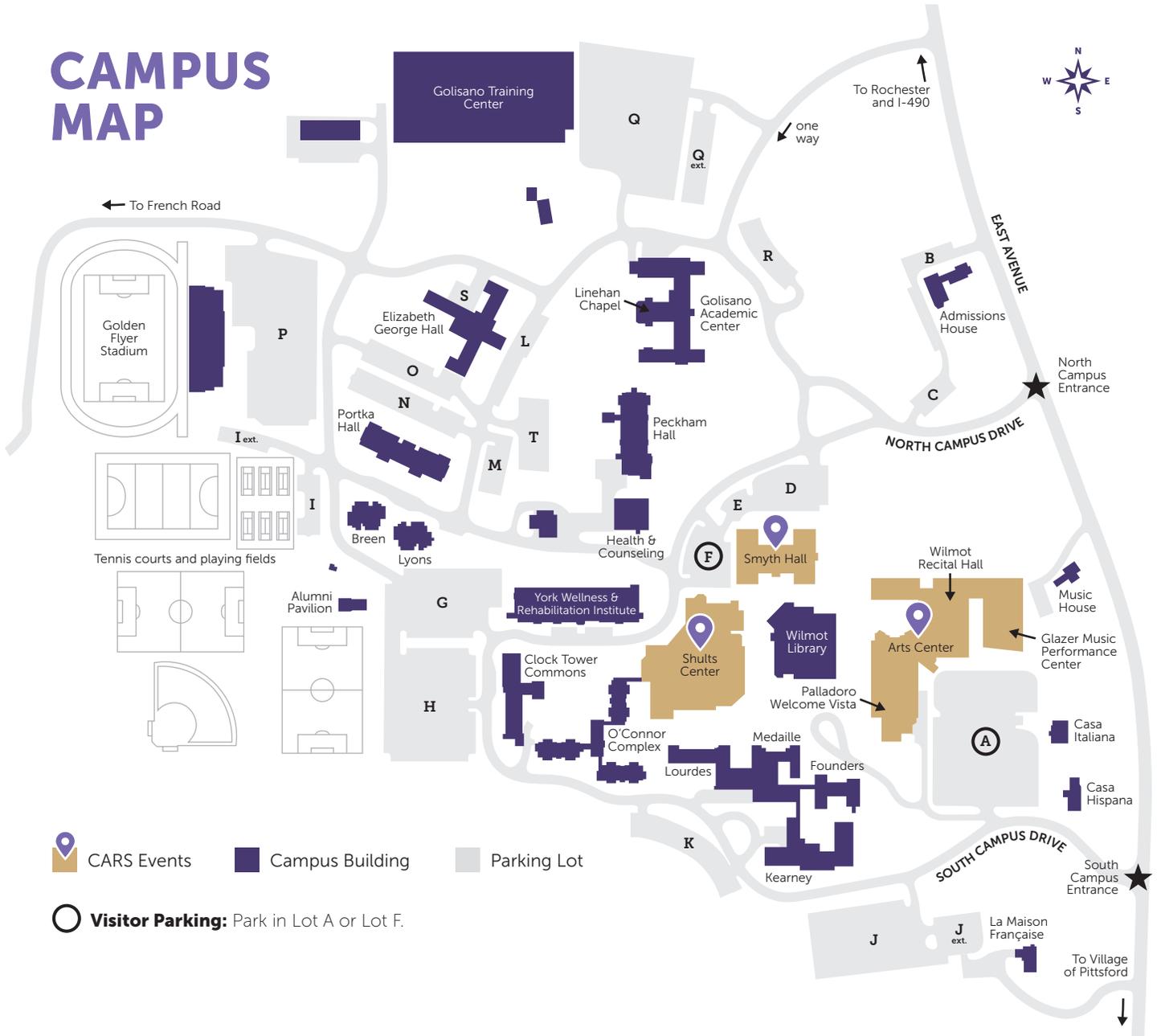
Faculty Sponsor: Professor Kerry Dunn, Education

Abstract: As a Clinical Assistant, I am completing a research project in a sixth grade reading classroom. I have been researching the effectiveness of a multisensory approach to literacy interventions for sixth-grade students in both general education and inclusive education settings. I work with 7 students twice a week, implementing interventions in whole-group and small-group settings. The group of student participants for each intervention vary based on needs. I am hoping this data will help me to determine how integrating movement and hands-on activities into reading instruction across different instructional areas helps improve sixth-grade students' reading behaviors.

Motivation for Participating: What I hope to gain and learn from presenting my work at CARS is to gain more confidence presenting in front of other graduate peers and professors, as well as gain insight from other Clinical Assistant's research in their given area.

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CAMPUS MAP



RESEARCH ROCKS.

Thank you to everyone who submitted and participated!

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