



curca

Spring Celebration
MAY 2, 2025

TABLE OF CONTENTS

CELEBRATION PROGRAM SCHEDULE	1
LETTER FROM THE PRESIDENT	4
LETTER FROM THE PROVOST	5
POSTER PRESENTERS (Listed by Department)	6
WALL OF WORDS PRESENTERS	54

SCHEDULE

12:00-1:00 p.m.	Registrations and Poster Setup	Dower Lobby
1:00-1:30 p.m.	Opening Ceremony Introduction- Dr. Brian Jennings, Associate Provost, Academic Affairs Welcome Remarks- Dr. William Salka, Provost and Vice President, Academic Affairs Introduction to Student Keynote Poets- Dr. Michael Filas (English) <ul style="list-style-type: none"> • Mackenzie Fagan “I want to be you” • Tierney Boyle, “Dirt Bites Back” 	Dower 127
11:45-2:00 p.m.	Pizza Lunch	Dower 190
1:45-3:45 p.m.	Oral Presentations 1:45- 1:57 Jillian Constant ‘25 Faculty Sponsor: Professor Michael Vorwerk <i>Phragmites australis Invasive Extent, Control Methods, and Restoration Plan in Westfield State University's Research Area</i> Westfield State University’s Environmental Science Research Area has been inundated by the invasive reed, <i>Phragmites australis</i> for at least 16 years. For this research, I created a management plan for the removal of phragmites from the property. This includes: goals, justification, a literature review, a site assessment, and a best practices management plan. In order to better understand the extent of degradation, percent cover transects were collected on the degraded and reference sites and compared to establish a current extent and expected outcome parameters. Based upon a review of control methods and the current state of the site, I recommend the application of herbicide paired with cutting; followed by distributing native seeds and a monitoring period, which should effectively lead to the eradication of <i>Phragmites</i> from the site. With this initial management plan established, the physical restoration of the site conducted by the Environmental Science department can begin. 2:00-2:12 Isabella Boutet ‘25, Josh King ‘25 Faculty Sponsor: Professor Timothy Parshall <i>From Lawn to Lab: Transforming Campus Spaces into Native Ecosystems</i> Colleges and universities are increasingly incorporating sustainable landscaping to create	Dower 127

outdoor learning environments, which also improve the mental health of students by serving as recreational spaces at Westfield State University. Our project aims to bolster sustainable landscaping initiatives and a space for hands-on environmental education through the expansion of Native Garden Beds, the development of educational signage, and the measurement of the impact of sustainable landscaping on soil properties. Anticipating the development of a no-mow meadow on campus in Fall 2025, our project includes a baseline soil analysis of lawn, garden bed, and future No-Mow Meadow areas. Initial findings suggest that there is higher soil stability and higher organic matter content in native garden beds compared with lawns. We have created informational signage for horticultural species by partnering with the Westfield State University RIDE Center to enhance outdoor learning opportunities for all departments. Additionally, the newly installed signage features a QR Code linking to the WSU Greenhouse and Gardens Website to promote easily accessible information.

2:15-2:27

Sophia Jones '25, Griffin Beardsley '25

Faculty Sponsor: Professor Timothy Parshall

Comparing Budburst Timing between Invasive and Native Shrub Species on the campus of Westfield State

Invasive species have a huge negative impact on ecosystems, often outcompeting native species within those ecosystems. The goal of our project is to investigate one of the potential ways that invasive species may have an advantage over native species. Our hypothesis is that invasive shrubs will experience an earlier budburst than native shrubs. In addition, contrasting microclimates might have an influence on budburst. We observed several native and invasive species in two different sites on campus, measuring the number of dormant, swelling, and buds experiencing budburst from late February through mid April. After tagging branch sections we recorded information twice each week, along with deploying temperature and light sensitivity loggers. We anticipated a larger percentage of budburst earlier for the invasive species, which would give them a longer growing season. Results suggest that with the exception of one native species (common elderberry) invasive species are experiencing earlier budburst along with swollen buds compared to our native plant species.

2:30-2:42

Lexus Mastromatteo '25

Faculty Sponsor: Professor Alex Daniel

Caffeine Improves Attentional Consistency but Not Working Memory

For most college students, caffeine is a staple of daily life (Godson, 2022). Caffeine is a stimulant characterized by its ability to reduce fatigue and increase alertness (dea.gov). Past research has shown caffeine to reduce latency in an attentional bias task, such that participants that drank caffeine respond more quickly than participants that drank a placebo (Lorist et al., 2003). More recent research in the field of attentional bias has emphasized the role of attentional variability, which is the fluctuation of attentional processes overtime. We hypothesized that participants that drank coffee would exhibit reduced attentional variability as well as faster reaction times. College students were randomly assigned to two groups: a caffeine group and a decaf (placebo) group. They then participated in a traditional dot-probe task, by which their reaction time was measured across three trial types: uncued trials, cued trials, and distractor trials. Participants were also given two additional tasks that measure short-term memory and prospective memory. Like previous literature, we found that participants who

	<p>consumed caffeine responded faster across all trial types. They also demonstrated reduced attentional variability compared to the control group, confirming our hypothesis.</p> <p>2:45-2:57 Jack Woodbury '25 Faculty Sponsor: Professor Supriya Sarnikar <i>Elasticity in Tariffs and the Sales Tax</i></p> <p>My research comes as a result of the recently revived question in political economy as to whether tariff revenue could offer a meaningful substitute for other entirely domestic forms of taxation. For my purposes, the sales tax offers the best analog for tariffs due to the similar effects on revenue generation between the two that arise when different levels of supply and demand elasticity are assumed. By incorporating the latest estimates for elasticity of supply and demand for specific goods, it then becomes possible to estimate the expected near-term revenue and welfare loss resulting from either a tariff or sales tax on that good.</p>	
1:45-4:00 p.m.	<p>Poster Presentations/Wall of Words <u>1:45-2:45 ODD NUMBER posters</u> <u>3:00-4:00 EVEN NUMBER posters</u></p> <p>First Year Journey The Westfield State Journey includes two areas: First Year Journey: Academic Inquiry and Wellbeing: Caring for the Holistic Self. In each of these areas, students select courses that match their interests. This area also includes a University Wide Requirement completed within the major. Through these courses students develop a foundation for academic, social, educational and personal success. Students acquire the skills and knowledge necessary to navigate academic inquiry and grow as healthy, self-aware, creative, curious and confident individuals. These courses include self-reflective practices as well as how to practice learning alongside an engaged community of learners.</p>	Dower 134
2:30-3:30 p.m.	<p>Persona Open Mic Join students and faculty for an open mic/poetry reading!</p>	Dower 191

OFFICE OF THE PRESIDENT

May 2, 2025

Dear Campus Community:

Showcasing the research projects of our faculty and students is a vital part of how we communicate and engage with our community. I am honored to support the important work of the Center for Undergraduate Research and Creative Activity (CURCA) Committee for another year in celebrating learning and scholarship.

As well-reasoned, intelligent, and purposeful citizens, Westfield State University graduates are known for their contributions to businesses, government, education, non-profits, and the social fabric of our communities. For those individuals and groups who support our mission, the CURCA presentation shows that our students' efforts yield relevant and purposeful research that benefits the whole of society.

Our faculty consists of the brightest and most innovative individuals in higher education, and our students consistently rise to the opportunities and challenges presented to them.

CURCA is a vehicle for our students and faculty to work together to explore complex problems, develop meaningful and relevant questions, and articulate a wide range of solutions. Involvement in CURCA also offers our students leadership skills, which are essential to succeed in a 21st century work environment.

Congratulations to our presenters and best wishes to attendees as you explore this scholarly display.

Sincerely,



Dr. Linda Thompson
President

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AN EDUCATION LEADER AND INNOVATOR SINCE 1839

OFFICE OF THE PROVOST

May 2, 2025

Dear Campus Community:

It is an honor and a privilege to acknowledge the spring celebration of the Center for Undergraduate Research and Creative Activity (CURCA). I commend Westfield State University undergraduate students and faculty members for engaging in this important tradition, presenting their work in the areas of research and creative activity.

At this event each semester, WSU students showcase their intellect and scholarship, putting the classroom knowledge they have gained to the test through research and creative avenues, both on campus and in experiential learning and internships. This critical involvement propels students to pursue advanced degrees and challenging careers.

The University's CURCA initiative takes the satisfaction and rewards of thoughtful analysis and creativity to a higher level, serving to advance educational attainment and as a springboard to new ideas. Congratulations to all of our students and faculty presenters and best wishes to attendees as you explore this wonderful scholarly display.

Sincerely,



William M. Salka
Provost

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PRESENTATIONS

PRESENTER(S) (by Department)

Poster
#

BIOLOGY

Paige Davis '25

4

Faculty Sponsor: Professor Katie Weglarz

Monarchs, Milkweed, and Microbes: The Impacts of AMF on Danaus plexippus Growth

The monarch butterfly's (*Danaus plexippus*) coloration acts as a warning for their toxic taste. Monarch butterflies, as caterpillars, continuously eat milkweed throughout their development and sequester the toxin, cardenolide, which is produced by the plant. When raising monarch butterflies, native milkweed (*Asclepias syriaca*) is the recommended plant to feed growing caterpillars in gardens due to its lower toxicity level. The tropical milkweed plant (*Asclepias curassavica*), although the caterpillars can ingest it, has a significantly higher toxin content and can prove to be fatal for the caterpillar if too much is ingested. Cardenolides can be further reduced in milkweed utilizing the soil fungi, arbuscular mycorrhizae (AMF). Here we ask how the cardenolide content of milkweed affects the growth and fitness of a monarch butterfly. Monarch caterpillars were placed on cardenolide manipulated plants and growth was monitored by weight in the caterpillar phase. Cardenolide was assessed using an absorbance assay from plant and insect extracts. Higher cardenolide content makes monarchs less palatable by predators, thus increasing their fitness. I expected to find that a higher amount of cardenolides would cause better growth, but a lower cardenolide amount would cause slower monarch growth. This study helps us understand how a soil microbiome can impact a milkweed plant's cardenolide production, as well as impact the organisms who rely on this plant such as the monarch butterfly.

Autumn Jones '26, Lily Dufresne '26, Katie Slattery '26, Ryan Moran '25

7

Faculty Sponsor: Professor Kimberly Berman

The Impact of LPS Priming on Inflammation in Human THP-1 Macrophages Under both Bacterial Infection and Glycemic Conditions

Inflammation is a critical component of the immune response, aiding in defense against infections and injuries. Macrophages play a key role by responding to bacterial molecules such as lipopolysaccharide (LPS), triggering cytokine secretion, including interleukin-6 (IL-6), through the toll-like receptor 4 (TLR4) pathway. Chronic inflammation, however, contributes to various diseases, including diabetes and cardiovascular disorders. Emerging research suggests that metabolic conditions, such as hyperglycemia, can exacerbate inflammation by amplifying IL-6 production via the TLR/MyD88/NF- κ B pathway. Specifically, THP-1 macrophages exhibit intensified inflammatory responses under high glucose conditions, and hyperglycemia has been shown to disrupt normal immune regulation, linking metabolism to inflammation. This study investigates the effects of different LPS priming durations on IL-6 secretion in THP-1 macrophages. Additionally, it examines whether hyperglycemia further enhances IL-6 secretion in response to LPS priming and bacterial infections with *Escherichia coli* and *Bacillus cereus*. By employing enzyme-linked immunosorbent assay (ELISA) to quantify IL-6 levels, this study aims to deepen our understanding of the relationship between inflammation and metabolic state. The findings could provide valuable insight into immune regulation and inform therapeutic approaches for diseases associated with chronic inflammation.

Faculty Sponsor: Professor Kimberly Berman

Impact of Ibuprofen Concentrations on THP-1 Macrophage: Bacteria Killing and Inflammatory Cytokines Production.

Ibuprofen is a pharmaceutical drug classified as a Non-steroidal anti-inflammatory drug (NSAID) and is often used to reduce fevers and reduce mild to moderate pain. Concerns have emerged regarding its potential to weaken immune defenses, particularly by reducing Interleukin-6 (IL-6) cytokine levels and macrophage efficiency and production. IL-6 is a proinflammatory cytokine that plays a key role in immune activation and inflammatory responses. It is primarily secreted by monocytes and macrophages in response to inflammatory stimuli and contributes to immune cell activation and antibody production. Research on ibuprofen's effects on immune function have been conducted at both a cellular level and larger-scales. Cellular studies have compared multiple NSAIDs, including ibuprofen on macrophage viability, and expression, utilizing computational modeling and biophysical analysis, while larger-scale studies have tested ibuprofen's effects on immune function in rats. Findings suggest that ibuprofen moderately reduces IL-6 cytokine production and reduces macrophage efficiency. This study will be performed to explore the effect of ibuprofen on the level of inflammatory IL-6 cytokines produced by THP-1 macrophages after exposure to the clinical *Staphylococcus aureus* strain MN8 and the ability of the macrophages to phagocytose and kill the bacteria. In this study, extracellular bacteria will be compared to the intracellular bacteria within the macrophages, IL-6 levels will be measured by ELISA and the bacterial cell death will be calculated to determine the function of the THP-1 macrophages after exposure to ibuprofen.

Faculty Sponsor: Professor Kimberly Berman

Investigating the Effects of Nicotine on Macrophage Viability and Response

Nicotine is a chemical found in all kinds of products found globally, such as cigarettes, nicotine pouches, and vaporizers. According to the Centers for Disease Control and Prevention (CDC), 1 out of 5 people reported using any tobacco or nicotine products (CDC, 2024). With nicotine becoming more of a concern, especially in younger generations, there is a lack of studies regarding the effects of immune function when exposed to nicotine. Research suggests that nicotine binds to various immune cell receptors, specifically the TLRs, including TLR2 and TLR4, which can alter downstream signaling and inflammatory cytokine production (Kalra et al., 2000). To further explore this issue, testing the effects of nicotine on macrophage cells shows how the body responds to a specific type of addictive stimulant alkaloid that affects the central nervous system. The study first investigated whether methanol, nicotine dissolved in methanol, with or without LPS causes macrophage cell death. A cell viability test was performed by exposing macrophages to different concentrations of nicotine, methanol, and LPS, using WST-1 to measure cell activity. The second question examined whether nicotine impacts how macrophages respond to both Gram-negative and Gram-positive bacteria. An IL-6 ELISA was used to assess nicotine interference with macrophage bacterial sensing through toll-like receptors (TLRs), which are immune receptors that activate the immune system, by measuring cytokine release. Cell survival and immune signaling analyses will reveal nicotine's hindrance on the macrophages ability to fight infection.

Faculty Sponsor: Professor Kimberly Berman

A Continued Biofilm Quest; Investigating Interactions with Human Macrophages, Arthrobacter, and Biofilm

Soil is a diverse ecosystem made up of insects, bacteria, and fungi that work together to maintain soil structure for nutrient flow and survival of organisms. *Arthrobacter*, a gram positive bacteria species, is commonly found in New England soil and is known for its ability to produce biofilm. Biofilm is an extracellular matrix created by bacterial colonies to secure and protect themselves. In soil, biofilm not

only protects bacteria but also contributes to soil structure itself. The human immune system consists of two main responses: innate (primary response) and adaptive (secondary response). Macrophages, one of the human body's innate responses to a pathogen, secrete cytokines that signal the adaptive response. This study aims to quantify the immune response to *Arthrobacter* by measuring interleukin-6 (IL-6) secretion from macrophages exposed to *Arthrobacter* with and without biofilm production. Macrophage responses were assessed through a controlled experiment with varied conditions, including the biofilm presence, macrophages priming with lipopolysaccharide (LPS), and the difference in concentration of bacteria. Hypotheses included increased IL-6 production in response to biofilm presenting bacteria due to the biofilm acting as a protective barrier. Results contribute to understanding the immune interactions between soil-derived pathogens, offering insights into infection risks for high-exposure groups such as farmers, hikers, and populations like children with weaker immune systems. This research may guide future studies on human immune response to soil bacteria.

Sara Russell '25

27

Faculty Sponsor: Professor Arne Christensen

*Fluorescent Nanoplastics are Internalized Within the Epithelium of the Midgut of the Intestine in *Daphnia magna**

Nanoplastics (NP) in the environment have become a growing concern in today's society. The effects of the ingestion of NPs in organisms, aquatic in particular, is still relatively unknown. This study aims to examine NP internalization in different regions of the water flea (*Daphnia magna*) intestinal epithelium. Moreover, we tested varying sizes (0.5 μm and 1.0 μm mean diameter) of NP and compared their relative internalization. We hypothesized that if *D. magna* are exposed to varying sizes of NP, then the gut will be able to internalize the smallest size in the highest concentration compared to the largest size in minimal concentration. The study's findings showed that the hypothesis was not supported; instead, the largest NP (green) was found to be internalized more than the smallest NP (red). The study also revealed that internalization occurred more frequently in the midgut than the hindgut, a region of the intestine that is important for nutrient uptake. This study contributes to a foundation of understanding of the impacts of NP exposure on intestinal epithelium internalization, and possibly, other organ systems. Not only is this research relevant to aquatic organisms like *D. magna*, but organisms such as humans. Understanding the effects of NPs on the neurological and chemical aspects of the body could revolutionize the materials we use in everyday life and how medicine can be used within the body.

Victoria Kent '25

29

Faculty Sponsor: Professor Robin White

*Effect of reproductive status on traumatic brain injury outcome in *Drosophila melanogaster**

The potential impact of reproductive status on susceptibility to neurodegeneration following traumatic brain injury (TBI) remains a topic of debate, with conflicting conclusions in human studies. To investigate this relationship, we utilized *Drosophila melanogaster* as a model to assess the effects of reproductive status on TBI recovery. We are comparing virgin and mated female flies, focusing on survival and synaptic damage, a key indicator of neurodegeneration. We expect our results to demonstrate that virgin female *D. melanogaster* exhibit higher survival rates and less synaptic damage at one-week post-TBI compared to mated females. Synaptic damage will be analyzed using fluorescent microscopy with nc-82 and goat anti-mouse 488 antibodies, and neurodegeneration-related protein expression will be investigated. We anticipate our findings will suggest that reproductive status may influence neurodegeneration following TBI and highlight the value of *D. melanogaster* as a model for studying neurobiological processes related to injury and recovery.

Faculty Sponsor: Professor Arne Christensen

Chronic Nanoplastic Exposure Increases Mitochondrial Abundance in THP-1 Macrophage-like Cells

There has been an alarming increase in the number of research studies that have reported finding nanoplastics in the human body, with key routes of exposure being inhalation, ingestion, and absorption. There is limited knowledge of the long-term effects nanoplastics have on human health. The purpose of this study was to observe any changes in the structure or abundance of mitochondria in THP-1 cells exposed to 20 μm mean diameter nanoplastics for 1.5 or 72 hours. This experiment was conducted over two parts, PMA differentiation and nanoplastic exposure. Stimulated by PMA, the differentiation induced the THP-1 cells in suspension to become macrophage-like cells that adhered to the culture plate surface. Adhered cells were exposed to 20 μm nanoplastics for 1.5 or 72 hours. To observe changes to mitochondria, THP-1 cells were stained with DiOC6(3) membrane stain. We hypothesized that the exposure to nanoplastics would induce time-dependent changes in mitochondria structure or abundance, with longer exposure leading to increased accumulation of nanoplastics and reduced mitochondrial abundance. Surprisingly, the results of our study showed that chronic nanoplastics exposure resulted in an increase in mitochondrial abundance. Taken together, our results help to improve our understanding of the effects of nanoplastics on macrophage-like cells.

Faculty Sponsor: Professor Arne Christensen

Lysosome Abundance Increases in THP-1 Macrophage-like Cells Exposed to High Concentrations of Nanoplastics

Due to the extensive use of plastics, humans have been exposed to harmful nanoplastics that accumulate in human tissue. Scientists believe nanoplastics significantly affect THP-1 cells by disrupting metabolism and increasing inflammasomes and IL-1 β secretion. How nanoplastics affect lysosomal function in cells is not well understood. This study examines the cell health and lysosomal function of THP-1 cells when exposed to nanoplastics. We hypothesized that nanoplastics would decrease lysosomal function and cell health in THP-1 cells. THP-1 cells were differentiated and exposed to fluorescent green 1000 μm mean diameter nanoplastics, and lysosomes were stained with an organelle-specific red fluorescent stain. Our results show that increased exposure to nanoplastics caused an increase in cell confluence and lysosomal abundance. Our study results shed new light on our limited understanding of the effects of nanoplastics on cell health and lysosomal activity in THP-1 cells.

Faculty Sponsor: Professor Arne Christensen

Exposure of THP-1 Cells to High Concentrations of Nanoplastics Decreases Mitochondrial Abundance

Nanoplastics (NPs), tiny plastic particles less than 1 μm in size, are becoming more common in environmental ecosystems and pose potential health risks due to their ability to enter biological systems. This study aimed to investigate the effects of NP exposure on mitochondrial abundance in THP-1 monocytes, a cell type that plays a key role in immune defense. We hypothesized that NPs would induce mitochondrial dysfunction, along with a decrease in mitochondrial abundance. We first differentiated THP-1 cells into macrophage-like cells using PMA, then exposed the cells NPs at two concentrations (10 $\mu\text{g}/\text{mL}$ and 100 $\mu\text{g}/\text{mL}$). Mitochondrial abundance was evaluated using the DiOC6(3) mitochondrial membrane stain and fluorescence microscopy. The results showed no significant effect of nanoplastic concentration on cell number; however, the results revealed that exposure to NPs in the highest concentration (100 $\mu\text{g}/\text{mL}$) had lower mitochondrial abundance, whereas the lower concentration (10 $\mu\text{g}/\text{mL}$) exhibited higher mitochondrial abundance. Our findings suggest that NPs influence mitochondrial function in macrophages, potentially disrupting immune function. This study adds to the growing understanding of the toxic effects of NPs, emphasizing the need for more research to explore the long-term impacts of chronic exposure, especially on immune cell function and human

Spencer Edwards '26, Sophia Taglieri '27, Caitlyn Wellington '26, Karolina Jaworski '28

72

Faculty Sponsor: Professor Carl Grobe

Effects of Temperature on Pieris rapae Wing Tip Melanization

Pieris rapae (cabbage white butterfly) is found worldwide, inhabiting a diverse range of biomes, from the deserts of California and the mountain ranges of Canada in the Western Hemisphere to the deciduous forests of the United Kingdom, China, and the Scandinavian region of Europe. A key characteristic of this species is the melanization of its wing tips which plays a role in thermoregulation. This study compares the wing tip melanization of *P. rapae* from two different temperature zones with relatively similar precipitation levels. We analyzed data from 20 individuals collected in the arid southwest United States and 20 individuals from the temperate deciduous forests of the United Kingdom, measuring the percentage of wing tip melanization relative to total forewing surface area. We hypothesized that butterflies from hotter climates would exhibit greater wing tip melanization, as increased pigmentation could reduce light reflectance to the core which would regulate in hot climates. Whereas there would be less wing tip melanization in cooler climates in order to reflect more light to the core, retained as heat.

Jacquelyn Harrington '25

112

Faculty Sponsor: Professor Robin White

B-hydroxybutyrate Does Not Affect C6 Astrocytoma Wound Healing

Cancer is a leading cause of death in the world, but there are not many cost-efficient treatments readily available. One option that has been proposed is the ketogenic diet, which is the replacement of carbohydrates with fats and proteins. When carbohydrates are metabolized they release glucose resulting in a source of energy. When fats are metabolized, they create ketone bodies to produce energy. These ketone bodies are able to make up 60% of the brain's energy. While limited research has been conducted on how astrocytoma cells respond to ketone bodies such as β -hydroxybutyrate (β HB), no one has explored how replacement of glucose with β HB affects the migration of astrocytoma cells. This study aimed to determine if C6 astrocytoma cells could metabolize β HB after a wound was given to the cells. We hypothesized that if we give C6 astrocytoma cells a simulated ketogenic diet, then wound closure would be decreased. To test this we plated 10,000 cells on a 96-well plate which received a scratch wound. These cells were given varying amounts of glucose and β HB and then put into the Incucyte apparatus. Images of the wound closure were taken every hour for the span of 42 hours. Cells treated with glucose had significantly more wound closure as opposed to the cells that were treated with β HB. These findings suggest that the ketogenic diet may decrease migration of astrocytoma cells.

Evelyn Morrisette '26, Katherine Kane '25, Spencer Edwards '26, Neishalie Gutierrez '25

48

Faculty Sponsor: Professor Arne Christensen

THP-1 Macrophage Cells May React with Nanoplastics Similar to Pathogens

Concerns of the toxicity regarding plastics are on the rise, including concerns surrounding the environment and on human health. The largest source of plastic pollution comes from single-use water bottles, food containers, and beauty care products. Microplastics (less than 5 mm) and nanoplastics (less than 1 μ m) are of particular concern due to their ability to enter the body undetected. Recent studies have detected nanoplastics in various human tissues including the blood, lungs, liver, and reproductive organs. This study investigates the implications of nanoplastics exposure on THP-1 monocyte differentiation, in comparison to Phorbol myristate acetate (PMA) differentiation. PMA is commonly used in vitro to mimic pathogen exposure and induce THP-1 monocyte differentiation into macrophage-like cells. In our study, THP-1 cells were cultured with or without PMA, and both of these treatments were incubated with or without 0.02 μ m mean diameter crimson nanoplastic beads, and

monitored using an Incucyte live cell analysis system over the course of 48 hours. We found that THP-1 cells exposed to 0.02 μm nanoplastics (without PMA) demonstrated slightly enhanced differentiation in relation to our positive control. This discovery suggests that nanoplastics may confound THP-1 cells, perhaps mimicking pathogens. Further research is warranted to narrow down the specific reasons behind this phenomenon.

Lexus Mastromatteo '25, Quynh Rosario '26, Victoria Kent '25

49

Faculty Sponsor: Professor Arne Christensen

Pre-exposure to Nanoplastics Impairs Subsequent Uptake: A Size-Specific Response in THP-1 Cells

The deleterious impacts of nanoplastics (NPs) on humans is a growing area of research as their nearly ubiquitous identification throughout the human body has become apparent. One area that has not been well researched is how pre-exposure to NPs may affect subsequent uptake of them. To investigate this relationship, we utilized human differentiated THP-1 cells to assess NP (1 μm mean diameter) uptake in THP-1 cells with prior exposure to NP (0.02 μm or 0.5 μm), exploring if size is a factor as well. Fluorescent nanoplastics were added to two treatment groups followed by a second dose of NPs (1.0 μm) that both the treatment groups and control group received, after which analysis was completed using Incucyte software. We found that cells which had been exposed to 0.02 μm NPs took in a significantly reduced amount of subsequent NPs, while cells who were treated with the 0.5 μm NPs took in a similar amount of NPs as the control group did. Our data suggests that the smaller NPs “clog” cells and prevent subsequent uptake of NPs— though whether determining this is due to the NPs physically blocking cellular pathways or due to more complex interactions such as inducing stress responses would benefit from further research. The implications of this research may help explain health issues stemming from exposure to smaller NPs that cells easily uptake. We hope this research sheds some light on the size-dependent effects of NPs on human cells and highlights the value of fluorescent nanoplastics to study physiological impacts of exposure to these particles.

Abby Work '25

70

Faculty Sponsor: Professor Kimberly Berman

Novel Antibiotics: Impact and Discovery

The increasing prevalence of antimicrobial resistant microorganisms has become a global concern as it undermines the effectiveness of antibiotic treatment and leads to millions of deaths each year. Specifically, patients in clinical settings such as hospitals are at a critical risk of infection with antibiotic resistant bacteria due to the proximity to infected individuals, lowered immunity, poor antibiotic stewardship and person-to-person contact with staff. The microorganisms Enterobacter, Staphylococcus, Klebsiella, Acinetobacter, Pseudomonas, and E. coli, known as the ESKAPE pathogens, display some of the greatest concern and highest lethality of antimicrobial resistant infections. These pathogens have become increasingly difficult to treat due to their resistance against broad spectrum antibiotics.

In an effort to combat antimicrobial resistant infections, research into new novel antibiotics that show activity against the ESKAPE pathogens is at an increased necessity. A primary and effective method of novel antibiotic discovery includes microbial sourcing from soil sampling. The nutrient content and competing biodiversity of soil make it an ideal origin for bacteria that produce antibiotic properties. Antimicrobials have been successfully sourced from soil bacteria resulting in the creation of antibiotics that resulted in worldwide change, such as Streptomycin. This Commonwealth Honors Project aims to analyze current literature to determine which bacteria from soil have the highest potential to be utilized in the development of novel antibiotics. Novel antibiotics from soil bacteria offer a unique opportunity for medical advancement but also provide a catalyst for a greater conversation surrounding soil quality, biodiversity and conservation.

CHEMICAL AND PHYSICAL SCIENCES

William Buckley '25

114

Faculty Sponsor: Professor Ashley Evanoski-Cole

Investigation of Greener Methods for Analysis of PCBs in Surface Waters

The first goal of this study is to evaluate the effectiveness of 2-Methyltetrahydrofuran (2-MeTHF) to replace dichloromethane in the extraction of PCBs from environmental samples in an effort to increase sustainability of this method. The Housatonic River in Western Massachusetts and Connecticut is an active Environmental Protection Agency (EPA) clean-up site for PCB contamination from a General Electric Plant dating back to the 1930s. Environmental samples were collected and prepared using EPA Method 1628 guidelines for aqueous samples, which includes separatory funnel extraction and concentration via rotary evaporator. Results from the method development were compared to prepared PCB standard solutions.

Michael Gantt '25

122

Faculty Sponsor: Professor Ashley Evanoski-Cole, Tarin Weiss

Idling in the Westfield State Commuter Lot

In Massachusetts, idling policies exist to help curb the pollution released by vehicle engines left running while the vehicle is stationary. Emissions from idling include nitrogen and sulfur dioxides (NO₂, SO₂), carbon monoxide (CO), and particulate matter (PM). These pollutants, if in concentrations above the National Ambient Air Quality Standards (NAAQs), have been found to increase cardiovascular disease and cancer and negatively impact those with weakened immune systems and asthma. The goal of this study is to investigate if car idling hotspots exist around WSU's Commuter Lot by measuring emitted pollutants (such as NO₂, SO₂, PM_{2.5}). Data collection methods included the use of four passive air samplers installed around the lot, a PurpleAir air quality sensor installed on Wilson Hall, PocketAir hand-held sensors, and a survey of students' responses about car idling. Pollutants captured on the passive air samplers were analyzed in the lab using an ion chromatograph. Data analysis using Excel helped to determine if locally high concentrations of pollutants exist and if they were above federal safety standards. Because air quality affects everyone, the study includes a discussion of Westfield State University's adoption of an idling policy for the betterment of student, staff, and faculty health.

COMMUNICATION

Annabelle Yeaton '25

12

Faculty Sponsor: Professor Christopher Gullen

Reshaping Adult Entertainment

OnlyFans, a subscription-based social media platform, has revolutionized the adult entertainment industry by offering creators greater control and potential for financial independence. This literature review looks at the ethical challenges and professional risks of using OnlyFans, especially for educators looking for extra income. This literature review examines both traditional methods of pornography distribution and the stigma surrounding adult content to provide context. It also explores relevant theories like Feminist Theory, Social Exchange Theory, Uses and Gratifications Theory, Objectification Theory, and Cultural Hegemony. These frameworks help to understand the motivations, risks, and social factors that drive individuals, particularly educators, to platforms like OnlyFans. The review analyzes the motivations behind joining OnlyFans, specifically focusing on the financial pressures and desires for autonomy that may particularly affect educators. Several case studies of teachers who have left their positions to pursue OnlyFans careers are examined, highlighting the potential for increased earnings but also the significant risks involved. These risks include potential unemployment due to contract violations or reputational damage, financial instability stemming from the unpredictable nature of the platform, loss of essential benefits tied to traditional employment, and the potential for long-term regret. This review seeks to answer the central research question: Why are individuals,

especially those in professions like education, turning to OnlyFans, and what are the ethical and professional implications of this trend? By reviewing existing research and exploring real-world examples, this review aims to provide an understanding of OnlyFans's impact on both individual creators and the broader professional landscape.

Aidan O'Neil '25

136

Faculty Sponsor: Professor Sinuk Kang

Artist's Block

After a long night of drawing, Aidan wishes he could keep making his art forever. But he knows with school, running, content creation, and his partner to look after, he may never have time for it in his day to day. He goes to bed, completely unaware his drawings can hear him say he won't have time for them ever again. The power of all the creativity put into the artwork brings the drawings to life, and they hatch a plan to get him back on track to drawing once seeing his planner of things to do for the week. Throughout each day, they find ways to meddle with his plans, mess up his tasks, and overall make the week pretty miserable. The question is, will this bring Aidan back to his sketchbook or not?

The inspiration for this project comes from progressing through all the college years and having a difficult time sticking to my hobby and do what I enjoy doing most when I have a number of different responsibilities to keep track of. This is interpreting how in my head I want to draw and create artwork, disrupting me from getting other things accomplished. The artistic twist to this just personifies the feeling of distraction during everyday events. The drawing is preventing me from getting things done, just like the thoughts of wanting to draw taking me away from what I need to do. "Artist's Block" is also a term for running out of inspiration when working on art, but as the title is a play on words; the art is blocking the artist from doing what they needs to do.

Tyler King '26

125

Faculty Sponsor: Professor Christopher Gullen

The Taylor Swift Effect

Small-town girl finding a place in this world turned bejeweled mega pop star, Taylor Swift is a name everyone knows. From her "Fearless" country beginnings to her "1989" transformation and beyond, Swift has consistently redefined the music landscape era by era. The research of this project delves into Swift's role as a cultural icon, examining her influence on contemporary society, culture, and the music industry. Through an in-depth look at Swift as a celebrity, her body of work, and her record-breaking global phenomenon, "The Eras Tour," we can explore how a person can achieve a sense of "Midas Stardom," turning anything they touch into gold. The project will discuss topics such as economics, public influence, and social impact through the lens of Swift and her influence. It explores the music industry icon's brief history, career milestones, and devoted fandom: the "Swifties." It will also examine the alchemy between Swift and the public to better understand her depth of influence on other artists and some seemingly unrelated areas, such as the bead and crafting market for friendship bracelets or the NFL. By investigating these elements, the project aims to identify and explain how she achieved this status and provide an answer to the question: what is all the hype about? By the end, we will understand "The Taylor Swift Effect" and recognize her as the mastermind behind her success.

Cyan Reed '28

116

Faculty Sponsor: Professor Sinuk Kang

Cyan's Podcast: Crafting a Story Through Audio

This 12-minute podcast episode, created as part of a class project, explores episode eight of RuPaul's Drag Race Season 17, recorded during the season's airing. The production process involved selecting a topic, scripting, recording, editing, and publishing the episode online, with a focus on storytelling and audio quality.

One of the challenges encountered was managing audio levels due to voice strain during recording. The voice would occasionally drop in volume, requiring careful adjustments to maintain consistency. During editing, it was necessary to amplify small moments without making them sound unnatural, which providing a deeper understanding of audio production. Additionally, integrating background music helped set the overall tone of the episode and made it feel more complete.

Beyond technical skills, this project was an exciting and creative experience. Analyzing the episode in depth, particularly the runway looks, challenged me to translate visual elements into engaging audio commentary. The process reinforced my appreciation for podcasting as a powerful storytelling medium. This experience has inspired me to explore podcasting further, experimenting with different formats, guest discussions, and broader media topics. It was not only an opportunity to refine my editing skills but also a fun and rewarding way to share my enthusiasm for pop culture and storytelling.

ECONOMICS

Kaleigh Murphy '25 84

Faculty Sponsor: Professor Supriya Sarnikar

The Economic Determinants and Return on Investment of Sports Participation

This project aims to provide a new perspective of sports participation. Looking at sports as an investment can give families and individuals helpful insight to maximize their well-being. By analyzing factors such as time, travel, expenses, mental health, physical health, income and participation rates this research provides a tool for examining economic factors. The Return on Investment equation will show results from the data previously mentioned and show if sports participation is worth the cost. The equation will be run for various sports. The results will provide sports organizations, school systems, and policymakers with insights into what it truly means to participate in a sport.

Jack Woodbury '25

Oral
Presentation

Faculty Sponsor: Professor Supriya Sarnikar

Elasticity in Tariffs and the Sales Tax

My research comes as a result of the recently revived question in political economy as to whether tariff revenue could offer a meaningful substitute for other entirely domestic forms of taxation. For my purposes, the sales tax offers the best analog for tariffs due to the similar effects on revenue generation between the two that arise when different levels of supply and demand elasticity are assumed. By incorporating the latest estimates for elasticity of supply and demand for specific goods, it then becomes possible to estimate the expected near-term revenue and welfare loss resulting from either a tariff or sales tax on that good.

ENGLISH

Celi'28 92

Faculty Sponsor: Professor Catherine Savini

How Microaggressions Affect the LGBTQ Community and How You Can Help Prevent Microaggressions

My project seeks to raise awareness to the daily struggles LGBTQ people face through microaggressions and how the WSU community can face these issues together through listening to queer voices. At a public institution, queer people should have a right to feel safe, but queer college students, such as myself, are dealing with microaggressions everyday. What I have learned about microaggressions is that they are not always intentional, many people just have been educated on the LGBTQ community and simply don't know better. To help minimize microaggressions in a community such as WSU, education coming from queer voices is necessary, which is why I will be making an educational zine with all kinds of information about microaggressions, statistics, and how a college community can be better for LGBTQ youth. The mental health of queer people is being affected by

microaggressions everyday, and with what is going on in America politically, people need to be empathetic and understanding towards the LGBTQ community.

Viena Andrade '28

93

Faculty Sponsor: Professor name

The Weight of Being Ignored: Empowering Black Women's Health Through Awareness and Advocacy

The purpose of my project is to shed awareness on how women with polycystic ovarian syndrome (PCOS) face dismissal and delayed diagnosis by healthcare providers due to the presence of gender biases and medical racism. PCOS is a hormonal disorder that affects 6-13% of women of reproductive age and 70%% of women go undiagnosed by healthcare providers. If left untreated, it can lead to long-term health complications in the future. This project asks: What role does medical racism play in the delayed diagnosis and improper treatment of PCOS among colored women and how can women address these disparities? Some women avoid seeking medical care because they feel dismissed or they may seek care from providers of their race. People should be aware of gender biases and medical racism that go on in healthcare. Colored women especially, should know how to advocate for themselves when encountering these situations and fight these systematic challenges. I chose to create a website for my venue and will share different stories of how women, including me, have faced different healthcare disparities to shed awareness of the impacts of these systematic challenges.

Ace Delgado '28

94

Faculty Sponsor: Professor Catherine Savini

Why Ingredients Matter: Examining the Availability of WSU's DC Food Nutrition Information

According to my analysis of a week's worth of food offerings, the Westfield State University Dining Commons currently only has nutrition information available on 84% of all of its food, which is 95% of the static items and 40% of its changing items. The lack of available nutrition information makes it difficult for students like myself who struggle with high cholesterol, anxiety, eating disorders orthorexia and ARFID (Avoidant Restrictive Food Intake Disorder). Not knowing the ingredients also impacts students who have food allergies, food intolerances, other eating disorders, and other dietary restrictions. Around 22% of college-aged people have anxiety, which increases the risk of developing an eating disorder and asking for help. On top of that, over 20% of people have a food intolerance and or a food allergy. To promote healthy eating and peace of mind, I propose making the nutrition information that is advertised more accurate and widely used, especially for the food items that aren't store-bought and packaged, since those are the items that cannot be easily searched.

Angela Tindell-Gula '25

110

Faculty Sponsor: Professor Leah Nielsen

One Of Many

"Addiction is a disease that affects a countless amount of people. Small communities have been ravished by alcohol and drugs, destroying lives and families. Addiction has not only devastated small towns, it is far reaching and has become a problem statewide, nationally and throughout other parts of the world. My project, "One of Many," explores the themes of addiction and family, while examining how addiction's long-lasting effects can compromise all of those it touches, not just the addict. "One of Many" explores these themes by using interviews, essays, story telling, photography, and personal experience to capture the human experience through the lens of those devastated by addiction.

ENVIRONMENTAL SCIENCE

Jillian Constant '25

62

Faculty Sponsor: Professor Michael Vorwerk

Phragmites australis Invasive Extent, Control Methods, and Restoration Plan in Westfield State

University's Research Area

and

Oral

Presentation

Westfield State University's Environmental Science Research Area has been inundated by the invasive reed, *Phragmites australis* for at least 16 years. For this research, I created a management plan for the removal of phragmites from the property. This includes: goals, justification, a literature review, a site assessment, and a best practices management plan. In order to better understand the extent of degradation, percent cover transects were collected on the degraded and reference sites and compared to establish a current extent and expected outcome parameters. Based upon a review of control methods and the current state of the site, I recommend the application of herbicide paired with cutting; followed by distributing native seeds and a monitoring period, which should effectively lead to the eradication of *Phragmites* from the site. With this initial management plan established, the physical restoration of the site conducted by the Environmental Science department can begin.

John Gaj '27, Jack Ferreira '27

76

Faculty Sponsor: Professor Lili Lei

Effects of Different Light Wavelengths on Cyanobacterial Growth

Cyanobacteria can be a detriment to water quality when large blooms occur in freshwater. For this experiment, Cyanobacteria will be cultured under different wavelengths of light to determine at what wavelengths their growth rate is most impacted. The growth rate will be analyzed using chlorophyll A concentrations using the standardized methodology for EPA testing. The expected results are that the specified wavelengths will inhibit growth more than full spectrum light. More specifically that out of Far-red wavelengths, blue wavelengths, and full spectrum wavelengths, blue light will inhibit cyanobacteria growth the most. The significance of this study is to gain a better understanding of preferred light conditions in cyanobacteria to potentially aid in new, less harmful remediation methods during cyanobacterial blooms.

Jamey Gusmano '25, Finn Radowicz '27

77

Faculty Sponsor: Professor Lili Lei

Comparing the Air Quality Between a Forested and Urban Local Site Before and After Precipitation

Understanding the relationship between precipitation and urbanization on air quality is vital for guiding sustainable urban planning, protecting public health, and adapting to climate change.

The air quality in an urban and non urban environment will be tested before and after rain using a portable air monitor. We will measure carbon dioxide, PM2.5, and particulate matter to indicate air quality. We predicted that rain will reduce concentration of CO₂, PM2.5 and particulate matter in the air, and have a larger effect on non-urban environments. This research will provide valuable guidance for urban planning and policymaking aimed at improving air quality and fostering healthier communities.

Lindsey Dion '25, Kaitlyn Wernik '25

78

Faculty Sponsor: Professor Lili Lei

Microplastics in Freshwater Systems: A Comparison of Three Local Sites

Plastic demand has outpaced its manageability and is the most used material by humans, leading to plastic pollution throughout the environment. The presence of microplastics in freshwater systems is concerning to human and environmental health. We collected water samples from three bodies of water: a vernal pool located near Holyoke Community College in Holyoke, the duck pond in Stanley Park in Westfield, and the Westfield River in Westfield. The microplastics were removed from the samples using vacuum filtration and examined with compound microscopes. We expect the river to have the highest abundance of microplastics and the vernal pool to have the lowest. This study will provide insight into our local microplastic conditions.

Isabella Boutet '25, Joshua King '25

Oral
Presentation

Faculty Sponsor: Professor Timothy Parshall

From Lawn to Lab: Transforming Campus Spaces into Native Ecosystems

Colleges and universities are increasingly incorporating sustainable landscaping to create outdoor

learning environments, which also improve the mental health of students by serving as recreational spaces at Westfield State University. Our project aims to bolster sustainable landscaping initiatives and a space for hands-on environmental education through the expansion of Native Garden Beds, the development of educational signage, and the measurement of the impact of sustainable landscaping on soil properties. Anticipating the development of a no-mow meadow on campus in Fall 2025, our project includes a baseline soil analysis of lawn, garden bed, and future No-Mow Meadow areas. Initial findings suggest that there is higher soil stability and higher organic matter content in native garden beds compared with lawns. We have created informational signage for horticultural species by partnering with the Westfield State University RIDE Center to enhance outdoor learning opportunities for all departments. Additionally, the newly installed signage features a QR Code linking to the WSU Greenhouse and Gardens Website to promote easily accessible information.

Sophia Jones '25, Griffin Beardsley '25

Faculty Sponsor: Professor Timothy Parshall

Comparing Budburst Timing between Invasive and Native Shrub Species on the campus of Westfield State

Invasive species have a huge negative impact on ecosystems, often outcompeting native species within those ecosystems. The goal of our project is to investigate one of the potential ways that invasive species may have an advantage over native species. Our hypothesis is that invasive shrubs will experience an earlier budburst than native shrubs. In addition, contrasting microclimates might have an influence on budburst. We observed several native and invasive species in two different sites on campus, measuring the number of dormant, swelling, and buds experiencing budburst from late February through mid April. After tagging branch sections we recorded information twice each week, along with deploying temperature and light sensitivity loggers. We anticipated a larger percentage of budburst earlier for the invasive species, which would give them a longer growing season. Results suggest that with the exception of one native species (common elderberry) invasive species are experiencing earlier budburst along with swollen buds compared to our native plant species.

Oral
Presentation

Joshua King '25

Faculty Sponsor: Professor Lili Lei

Examining the Efficacy of Face Mask Materials Against Wildfire Smoke Inhalation

This study examined the effectiveness of commonly used face mask materials in mitigating the adverse health effects associated with inhaling wildfire smoke. With the increase in wildfire due to chance, management decisions, and climate change, New England has seen a rise in the days of the year when the air quality has been negatively affected by these large smoke plumes. Smoke contains a variety of particulate matter (PM_x), toxic gases, and, depending on the combustion material, a variety of volatile organic compounds (VOCs) as well as heavy metals. This poses significant respiratory health risks. I evaluated the filtration efficacy of common surgical masks and KN96 masks against PM_{2.5}, PM₁₀, carbon dioxide, formaldehyde, and free-floating particles under controlled conditions simulating realistic smoke exposure at different intervals. Filtration efficiency was assessed using values derived from a hand-held TempTop M2000 meter. The results indicate variability in filtration performance across different types of mask materials.

104

Jenna Boivin '25

Faculty Sponsor: Professor Lili Lei

Rethinking Invasive Species: A Case Study Analysis of Management Timing and Ecological Succession Dynamics

The negative impacts of invasive species have been extensively studied across a wide range of ecological contexts, whereas there have historically been limited studies that have addressed their beneficial implications. Only recently have the positive ecological effects of invasive species emerged as a focus in ecological research. Although many contemporary studies acknowledge both beneficial

138

and adverse impacts, there remains a significant gap in research specifically addressing the positive roles of invasives within the framework of ecological succession, as well as in the development of targeted management strategies based on these dynamics. This study analyzes three case studies on invasive species management: (1) Impacts, Potential Benefits, and Eradication Feasibility of Aquatic Alien Species in an Integral Natural State Reserve, (2) Evaluating Spatially Explicit Management Alternatives for an Invasive Species in a Riverine Network, and (3) Synergistic Effects of Soil Nutrient Level and Native Species Identity and Diversity on Biotic Resistance to *Sicyos angulatus*, an Invasive Species. The role of successional stage and temporal dynamics in shaping effective invasive species management is examined through these case studies. This research aims to expand insight into adaptive management strategies by emphasizing the functional roles and temporal dynamics of invasive species within ecological systems.

Eric Gingras '27, Evan Allen '27

61

Faculty Sponsor: Professor Lili Lei

A Survey of Zooplankton in Two Local Water Bodies

Zooplankton are essential to the ecosystem's health because they feed on the phytoplankton and serve as food for higher trophic level organisms in both fresh and marine ecosystems. Human interaction with different types of freshwater bodies influences the abundance and biodiversity of zooplankton. In our project, we will sample two local water bodies with different human interactions using a student plankton net, and the zooplankton was observed under a dissecting microscope. We expect to see a higher count of organisms in the body of water with less human activity. We expect to see fewer organisms in a body of water with more human activity. This study will help us get a further understanding of how many and what kinds of Zooplankton are living in the different waters and why.

FIRST YEAR JOURNEY

Tyra Fosu '28

58

Faculty Sponsor: Professor Nicole West (Care Center)

What's the Sitch? Is this a Friendship or More? How modern friendships have blurred the lines.

Friendships are the backbone of every social event and classroom dynamic. This class focuses on the importance of friendship and understanding how friendships influence personal development and well-being. By analyzing friendships in media and real-life scenarios, I aim to discover methods for developing meaningful, supportive relationships. This research will provide me with the tools to create an environment where students feel inspired to prioritize genuine friendships and cultivate compassionate and thriving communities.

Brenden Camphor '28, Kevin Lourenço '28, Zachary Parrow '28,

23

Faculty Sponsor: Professor Marsha Marotta (Political Science)

Taiwan vs. Brazil- Democracy at Risk

Comparing and contrasting Brazil and Taiwan's democracy. Discussing their strengths and weaknesses. Speak about the GDP in each country, economy, and education. We will also discuss how each democracy is at risk, its history, and its location. Finally discussing how the United States can learn from each country.

Madison Krupa '28, Diego Cruz '28, Jordyn Lemelin '28

24

Faculty Sponsor: Professor Marsha Marotta (Political Science)

Democracy in Switzerland and Japan

In our study of democracy at risk around the world we will explore why Switzerland is considered a full democracy and why Japan is considered a flawed democracy. We will include information about their strengths and weaknesses, population, background, history, economy, and what the U.S. could learn from these two countries.

Zack Torres '28, Jesper Seeberg '28, Asiatic Allah '28, Emile Tremblay '28 63
Faculty Sponsor: Professor Marsha Marotta (Political Science)
Democracy At Risk : Italy & France
In our study of democracies at risk around the world, we will be exploring Italy and France, with Italy being considered a "flawed" democracy and France being considered a "full" democracy. In addition, we will take into account what the United States can learn from the behavior of these two democracies.

Stephanie Paiva '28, Livia Reynolds '28, Brooklyn Jones '28, Mary Detucci '28 68
Faculty Sponsor: Professor Marsha Marotta (Political Science)
Democracies of South Korea and Israel
This poster will contain political information about Israel and South Korea. It will discuss what puts the democracy at risk within each democracy and what the U.S. can learn from each of their strengths and weaknesses.

GEOGRAPHY, PLANNING, AND SUSTAINABILITY

Ailish Ferrick '25 1
Faculty Sponsor: Professor Alina Gross
Priorities of Tribal Strategic Plans
Abstract This project explores the key characteristics of strategic plans developed by Tribal governments. It also examines plans developed by Western institutions that support engaging with Tribal governments. A content analysis of fifteen Tribal strategic plans, five Tribal engagement strategic plans by Federal agencies, and two Tribal engagement strategic plans by the American Planning Association and the State of New Mexico. The analysis revealed that Tribal strategic plans and Western strategic plans had very different priorities. The findings of this project can be used to help Western institutions better align their Tribal strategic plans with the priorities of Tribal governments. The results also potentially offer lessons that could be applied to planning with historically marginalized communities in the strategic planning process.

Sarah Hadlock '25 3
Faculty Sponsor: Professor Alina Gross
Zombie Malls: The Downfall of Shopping
The current state of malls in the United States is disheartening. Malls are either thriving or dying at fast rates. Data from interviews with local mall-goers and employees at two different malls in Connecticut provided a glimpse into the shoppers and workers' perceptions of the malls in two locations in Connecticut. Employees and shoppers at the Enfield Square Mall and Crystal Mall were asked their opinions about the current state of the mall. Community members had strong opinions regarding the malls' status and what should be done with them. The results showed that most people are unhappy with the current state of the malls. The results of this study indicated what the community and mall employees think should happen to the malls that are dying out in their towns, leaving unattended spaces to fall into despair. The compiled data from the surveys given to 50 shoppers and 20 employees was broken down by location and age of the participants, providing us with vital information on what they would like to see happen to this unique space.

Sophia Jones '25 8
Faculty Sponsor: Professor Alina Gross
A Case Study of Mattera Community Garden
Mattera Community Garden is a recently established community garden in the town of Reading, MA, having been established in 2022. This case study has examined what the purpose of the garden is for the community that uses it. In addition, the sense of community established by the gardeners and among the townspeople has been explored to find out the role that Mattera Community Garden has

played in the community. The challenges that the community garden faced both currently and during its establishment have also been examined. Information was gathered through interviews with key people such as Reading town staff, gardeners, and Reading Food Pantry employees. So far results have shown that the garden was established as a “community grassroots effort for like-minded people” and has further evolved to establish a community within the town of Reading. The findings of this study will provide insights for the establishment of future community gardens along with highlighting ways of improvement for Mattera Community Garden. In addition, the study will provide insight on what ways Mattera Community Garden has impacted the community.

Will Brewster '25

9

Faculty Sponsor: Professor Alina Gross

Trees and the Planning Process in Western Massachusetts

Trees and the Planning Process in Western Massachusetts

Over 80 million people in the United States (around a quarter of the entire country) suffer from a seasonal allergy to pollen that comes from trees, grass, or weeds. Male trees produce pollen, while the female trees absorb and remove the pollen from the air. This project was done to identify and examine trees in the western Massachusetts area, find out whether there is an overabundance of male trees to female trees, and whether the male trees are contributing to an increase in seasonal allergies. In addition to researching local trees, this approach involved interviewing local professionals including planners and local tree wardens, as well as examining local plans in order to identify patterns and understand the process of how trees are selected and planted in communities. Results can potentially help communities with tree selection and help foster improved communication around these processes.

Kellen Hobson '26

11

Faculty Sponsor: Professor Alina Gross

Investigation of the Feasibility of Car Share Programs in University Settings

Car-sharing programs have become popular ways to offer sustainable transportation, allowing people to use cars without owning them. This project explores the development of car-sharing programs, their successes and challenges, and the potential for implementing such a program at Westfield State University (WSU). The information gathered during this project was retrieved from interviews with planners and professionals at local colleges with ride share programs, as well as content analysis of the plans for such programs. Though the findings of this research are in progress, the data retrieved from the interviews and content analysis will allow for a better understanding of how these programs work. This information will be used for recommendations of a car share program at Westfield State University and other colleges looking to implement these programs. This project will provide a practical look at how car-sharing programs can work in a university setting, offering a flexible and sustainable transportation option for students and staff.

Jillian Constant '25

50

Faculty Sponsor: Professor Carsten Braun

Hurricane Storm Surge Impacts along Cape Cod, Massachusetts: A Case Study for Harwich, MA

As the impacts of climate change gradually escalate by the year, coastal towns are facing increasing urgency to develop action plans in the event that they are impacted by extreme weather events such as hurricanes. Hurricanes and their associated storm surges are the most likely threat to the livelihood and safety of the residents of Cape Cod. Harwich, a town in Cape Cod, is among the many towns faced with this situation where planning and knowledge are paramount for efficient and effective hurricane disaster plans. In order to better understand the scale and level of impact each severity of hurricane would have on Harwich, MA, I imported terrain data and NOAA estimates of hurricane category storm surge levels. From there I mapped out, based on each hurricane Category, how much of Harwich, MA would be inundated as a result. I then geo-enriched each affected area with demographic data: total

and senior population, the median age, the average income and house value, the total number of businesses and housing units, and any critical infrastructure. Based on these attributes, Category 4 and 5 hurricanes pose the largest risk to the area with people, businesses, and buildings affected. Schools, fire/police stations, and the interstate highway are also at risk during Category 4 and 5 hurricane storm surges. These results indicate that the town should plan for more significant impacts associated with Category 4 and 5 hurricane storm surges. These findings help further our understanding of the sheer scale and impact that increasing extreme weather events pose on coastal communities on Cape Cod.

Benjamin Hayward '25

51

Faculty Sponsor: Professor Carsten Braun

Hurricane Storm Surge Impacts along Cape Cod: a case study for Wellfleet, MA

The goal of this project was to visualize and quantify the impacts of hurricanes on Wellfleet, Massachusetts. Climate change is expected to cause more extreme and more frequent weather events, including hurricanes. This project can help show areas most at risk and what to expect from serious weather events. Using ArcGIS Pro, I performed a raster analysis of hurricane storm surges. 5 storm surges were analyzed: Category 1 at 1.5 meters, Category 2 at 2.5 meters, Category 3 at 3.5 meters, Category 4 at 5 meters, and Category 5 at 8 meters. Data was then geo-enriched to quantify the effects, such as on population, businesses, and critical infrastructure.

A police station, fire station, and Route 6 were identified as critical infrastructure. In the analysis, the police and fire stations remained unaffected even at a Category 5 storm surge. At a Category 3 storm surge, Route 6 started to become obstructed. This would interfere with potential evacuation as it is the major road through Wellfleet. Median household income and home value were also analyzed. Those with lower incomes were impacted first. Higher value homes were generally impacted first as well. In conclusion, while storm surges are disruptive at any level, starting at a Category 3 hurricane there is a serious danger for evacuation planning.

Max Brunelle '26

52

Faculty Sponsor: Professor Carsten Braun

Mapping Storm Surge Impacts: Brewster, MA

Brewster is a coastal town located on Cape Cod, Massachusetts. Due to its position next to the Atlantic Ocean, the town is vulnerable to the impacts of natural disasters such as storms and hurricanes. As sea levels are rising and climate change impacts are becoming more prevalent, more coastal cities and towns will begin experiencing similar issues, some at greater Intensities than others. Coastal communities can use geospatial technologies to analyze and visualize the impacts of natural disasters such as hurricanes in order to make themselves more climate-resilient and to facilitate the disaster preparation and response process.

My project integrates the use of GIS (Geographic Information System) mapping to examine storm surge damages associated with Category 1 to 5 hurricanes. My analysis reveals that, as expected, the number of people impacted increases from 32 for a Category 1 hurricane surge to over 700 for a Category 5 hurricane storm surge. It is also obvious that the areas of Brewster located closer to Cape Cod Bay are more susceptible to hurricane storm surge damage with the number of business impacted increasing from 3 (Category 1 hurricane) to 39 (Category 5 hurricane) and the number of housing units impacted increasing from 20 to a staggering 677!

This type of analysis and visualization is very important to emphasize the importance of protecting housing, businesses, and critical infrastructure from hurricane storm surges in order to improve flood protection and raise the overall awareness of the community. Understanding the precise impacts of the different hurricane storm surge levels on population and critical infrastructure is critical for disaster planning and public safety.

Jack Ferreira '27

Faculty Sponsor: Professor Carsten Braun

Hurricane Storm Surge Impacts in Bourne, MA

The goal of this project was to visualize and quantify the impacts and consequences of hurricane storm surges on Bourne, a city located on Cape Cod, Massachusetts. This type of analysis is timely as climate change and the associated warming of the atmosphere and ocean increase the frequency and intensity of hurricanes.

In this project, I used Esri ArcGIS Pro and raster analysis to determine which parts of Bourne would get flooded from the storm surges associated with Category 1 to 5 hurricanes. I then geo-enriched the flooded areas with demographic and economic data such as population, income, home values, and the number of businesses impacted.

A particular finding of this study is the impact of storm surge flooding on real estate with median home values over \$600,000. In addition, 288 of the 952 total businesses in Bourne will be impacted during a Category 5 hurricane storm surge. The areas in the vicinity of the Cape Cod Canal that split Bourne are particularly impacted even during a Category 1 hurricane due to their proximity to the canal and the ocean. One particular concern is that the Canal Generating plant, located on the Cape Cod side of the canal, which is a natural gas electrical power station, would be impacted.

This analysis demonstrates Bourne's vulnerability to hurricane storm surges and the impacts on residents, real estate, and businesses.

Ledger Bartholomew '26

Faculty Sponsor: Professor Carsten Braun

Impact of Storm Surges in Yarmouth, MA

Storm surges from hurricanes pose significant risks to coastal communities, with varying impacts depending on the hurricane's intensity. Located on the East Coast on the Cape Cod Seaboard, Yarmouth, Massachusetts is at risk of Hurricane Storm Surge damage. In Yarmouth, the effect of storm surges from Category 1 hurricanes results in moderate coastal flooding and minor damage, while Category 5 hurricanes cause catastrophic surges, flooding coastline area, buildings, and damaging critical infrastructure. Geographic information systems (GIS) play a crucial role in mapping and analyzing storm surges, providing data for disaster preparedness and response. Understanding hurricane intensity and storm surges can assist evacuation planning, flood management, and the development of resilient infrastructure, as well as who is at risk.

In analyzing impacts of storm surges in Yarmouth, Massachusetts, based on data from 2024, ArcGIS Pro allows the use of Geoprocessing tools to map the storm surges using Terrain Data. Analyzing this data, the population, housing, and businesses, are at risk from levels of hurricane intensity. At a Category 1 storm, the highest-valued homes (\$856,557 median) are impacted, with only 548 people affected. At Category 5, the storm surge affects a large portion of Yarmouth, with a median home-value of \$668,939 and a significant portion of the population of 14,542. Also affected is critical infrastructure in the town, in areas such as Route 6, affected at Category 4 intensity, and Route 28A, affected at Category 3. These figures highlight the importance of preparedness to protect vulnerable communities, businesses, and infrastructure as Yarmouth faces the potential for more frequent and severe storm surges with Climate Change. While we cannot change the course of Mother Nature, we can change the outcome of lives lost and mitigate damage.

Will Brewster '25

Faculty Sponsor: Professor Carsten Braun

Implications of Storm Surges in the Town of Dennis

Implications of Storm Surges in the Town of Dennis

Climate change is a problem that is being magnified year by year, with hurricanes being one of the biggest problems that coastal communities face. At their worst, Hurricanes can cause storm surges upwards of 19 feet, which can displace many people and have major financial ramifications after they are done, which can be felt for a number of years before things even start to get better. This type of study is important so that these coastal communities can determine what steps they can take to mitigate these environmental impacts. The overarching goal of this project was to map and visualize which parts of Dennis, Massachusetts would be inundated with water during the storm surges associated with Category 1 through 5 hurricanes. Geospatial enrichment was used to quantify the demographic and economic characteristics of the flooded areas such as population, income, home price, number of businesses, and what critical infrastructure would be affected. My findings showed that the northern and southern areas of Dennis would be impacted the hardest, while the central parts would experience less severe impacts. Conservation lands, as well as the Fisherman's Landing would be completely flooded by even just a Category 1 hurricane. Around 1,300 people will be impacted by a Category 1 hurricane, while five times that amount of people will be impacted by a Category 5 hurricane. The information presented in this map can be used to inform future disaster planning and hurricane preparedness strategies.

Jared Wheeler '27

Faculty Sponsor: Professor Carsten Braun

Hurricane Storm Surge Impacts in Provincetown

Provincetown Massachusetts is one of the most culturally-important places in New England and is also a major tourist destination due to its location on Cape Cod. However, its location on the tip of Cape Cod also makes Provincetown extremely vulnerable to the flooding associated with hurricane storm surges. Understanding how hurricanes storm surges will impact both the populated area of Provincetown, and the Cape Cod National Seashore is therefore critical for disaster planning and response.

This GIS-based analysis uses data provided by MassGIS to determine the parts of Provincetown that would be flooded during the storm surges associated with Category 1 to 5 hurricanes. The impacted areas were then spatially-enriched with demographic and economic data such as population, income, home values, and more. In addition, the impact of storm surges on critical infrastructure was evaluated.

Every transportation route in and out of Provincetown starts to get flooded during a Category 1 hurricane storm surge, both ferry docks as well as the airport are completely underwater during a Category 2 hurricane storm surge, and the police and fire station begin to experience flooding during a Category 3 hurricane storm surge. Population centers start seeing flooding at a Category 1, with this number increasing exponentially at a Category 2 and beyond.

While Cape Cod is one of the most-popular areas in New England, it is also one of the most-vulnerable areas to natural disasters such as hurricanes. The town of Provincetown, in-particular, should invest into ensuring that critical transportation infrastructure and emergency management services remain operational during hurricane storm surges.

Jaiden Austin '26

Faculty Sponsor: Professor Carsten Braun

Hurricane Impacts on Barnstable, Cape Cod: A GIS Analysis of Storm Surge Inundation

Communities along the coast are at serious risk from hurricanes, whose effects vary depending on the strength of the storm. In order to better understand how this particular area can resist increasing storm severity, this study examines the effects of Category 1–5 hurricanes on Barnstable, Massachusetts. Hurricane damages were modeled using raster analysis in ArcGIS Pro, and the impacted infrastructure and people were visualized using geo-enrichment techniques. The findings show that the impacts of hurricanes increase gradually with each category, with damage increasing in both spatial extent and severity as storm strength rises. These results show how vulnerable Barnstable is to hurricanes that get stronger, underscoring the necessity of specialized preparedness and mitigation measures to safeguard locals and important assets against escalating climate hazards.

The analysis reveals that Barnstable faces significant risks from hurricane storm surges, with impacts escalating dramatically as hurricane strength increases. For a Category 1 hurricane (1.5 m surge), 907 residents—primarily in southern coastal areas like Hyannis—are displaced, affecting 1.8% of the population. This rises to 8,995 people (17% of the population) in a Category 5 scenario (8 m surge), with inundation extending inland to central Barnstable, including parts of Centerville and Osterville.

This analysis is important because it aims to inform local planning and emergency preparedness by highlighting the spatial extent of flooding, the demographics of affected residents, and the infrastructure most at risk.

Kaleb Hatt '26

Faculty Sponsor: Professor Carsten Braun

Impact of Storm Surges on Eastham, MA

Hurricanes and tropical storms are becoming more frequent and powerful due to climate change. It's important to evaluate the impacts of such weather events on more coastal communities. Eastham (Massachusetts) is a small community off the Northern coast of Cape Cod. The town has a population of about 6,000 people, with just two public safety facilities within its boundaries. My research is to determine the necessity of these stations and the possible need for other care centers, based on the environment and the time it would take for an emergency response during a crisis. Using GIS technology I performed a GIS analysis, this determined the extent of flooding associated with a Category 1 to 5 hurricane storm surge on Eastham. I included the impacts on population, transportation, and emergency response services such as police and fire because knowledge of the area's demographics allows for a better understanding of how severely the town is affected. This can lead to more community cooperation and the proper precaution measures being made. Results of my analysis indicated that Eastham is especially vulnerable and the entire population would be cut off from the rest of Cape Cod in a storm associated with a Category 2 hurricane. This underscores a need for closer emergency centers like hospitals to help serve the population of Eastham and the rest of Northern Cape Cod. These centers must be implemented especially with stronger and longer hurricane season expected in the coming years.

Daniel Lyons '26

Faculty Sponsor: Professor Carsten Braun

The Impacts of Hurricane Categories 1-5 on Truro, Massachusetts

Climate change is becoming a leading issue in global discussions, especially with how it contributes to increases in the frequency and intensity of hurricanes. This project was done as an assignment for GPS 0344 in order to map and quantify the potential impact of storm surges from these hurricanes. Specifically, the intention is to show how different hurricane categories would impact the residents and geography of Truro, Massachusetts, which could theoretically be used to aid in organizing rescue

procedures. I mapped the different areas of Truro that would be flooded by hurricane category based on elevation. I also calculated demographic impact statistics for each category, such as the number of businesses that would be flooded, the number of residents that would be displaced, what infrastructure would be compromised, etc. In addition to finding the statistics listed in my approach, I discovered that during Category 4 hurricanes, several highway ramps on the Grand Army of the Republic Highway in Truro become inaccessible. In addition, a large portion of the highway in northern Truro, leading into Provincetown, becomes inaccessible during Category 2 hurricanes. I also learned that Truro's emergency services (fire/police) are not at risk of being flooded by any category of hurricane due to their elevation. This means that the most important part of developing a rescue plan for when Truro is flooded by a severe hurricane is finding ways for emergency response units to circumvent the inaccessible highway entrances as necessary. In addition, due to the flooding of the highway in northern Truro, Provincetown is especially vulnerable as evacuations may be easily compromised.

HISTORY

Gianna Tata '26 15

Faculty Sponsor: Professor Erica Morin Kelliher

Queer Fear: How 1970s Activism Transformed LGBTQ+ Representation in Horror Cinema

This paper examines how queer activism in the 1970s, particularly through The Rocky Horror Picture Show, reshaped LGBTQ+ representation in horror films. It highlights how these films, by pushing boundaries around gender fluidity, sexual expression, and non-normative identities, reflected the broader gay rights movement and contributed to changing public perceptions, fostering acceptance, and opening doors for more diverse, unapologetic portrayals of LGBTQ+ characters in mainstream media.

Zachary Matlock '26 65

Faculty Sponsor: Professor Erica Morin Kelliher

Gangsters, G-Men, and Government Tactics: Prohibition Enforcement Strategies from 1926 to 1932

As organized crime grew during the Prohibition Era, the strategies federal law enforcement used to catch criminals became more creative and expansive. Through case studies such as the Saint Valentine's Day Massacre, the Wickersham Commission's findings, and high-profile convictions like Al Capone's tax evasion trial, this project examines federal tactics ranging from wiretapping to prosecution of financial crimes, with special focus on the impact of Prohibition and the role of agencies like the Bureau of Investigation and the Prohibition Bureau. My analysis evaluates the government's successes and failures, emphasizes the implications of government intervention in criminal enterprises, and describes the legal precedents set because of the government's actions.

Nathaniel Buskey '26 25

Faculty Sponsor: Professor Erica Morin Kelliher

The "Beast's" Big Blunder

In 1883, Governor Benjamin F. "Beast" Butler ordered an investigation of the State Almshouse in Tewksbury, MA based on accusations of nepotism, misuse of funds, and even skinning and selling human corpses. These accusations were widely false, and arguably only made to bolster Butler's political goals, but ultimately it was beneficial and led to improvements in the almshouse. This projects examines whether the investigation was justifiable based on the almshouse conditions, the life of Butler, the claims made by Butler, and the actual outcomes of the investigation.

Matthew Crusha '27 37

Faculty Sponsor: Professor Erica Morin Kelliher

Harvesters of Sorrow; Exploiting the indigenous of Leopold's Congo and United Fruits republics of Latin America

In the early 1900s, the United Fruit Company in Latin America and the Belgian Congo under King Leopold witnessed unprecedented exploitation of natural resources and mistreatment of local people and workers. A comparison of these locations and leaders reveals similar instances of poor working conditions, human rights violations, and inequitable economic policies that were explicitly intended to impoverish local populations and enrich colonial and corporate interests.

Colin Thibeault '27

107

Faculty Sponsor: Professor Erica Morin Kelliher

American Patriotism in Music and Music Education in the Early 1940s

During World War II, American music and music education shifted towards promoting nationalistic ideals, choosing to focus on supporting the American home front and lifestyle. Leaders in the field of music education directed changes in popular music by pushing patriotic ideals and artists. American music provided vital support and morale boosting for soldiers and civilians alike by highlighting the positive aspects of pre-war life and deriding (certain) Axis enemies.

HONORS

Nova Smith '27

64

Faculty Sponsor: Professor Hillary Sackett-Taylor

Bridging the Gap: Enhancing STEM Retention for Minority Students Through Service & Engagement

The underrepresentation of marginalized students in STEM fields remains a critical challenge that requires targeted interventions. This poster presentation synthesizes research on effective strategies to increase participation and retention among historically underrepresented groups, including low-income, first-generation, and racially minoritized students. Key findings highlight the importance of faculty mentorship, after-school and out-of-school STEM programs, accurate representation through supportive role models, hands-on learning opportunities, and systemic efforts to address racial and gender disparities. Additionally, faculty mentoring can help to serve accountability and goal-setting, while extracurricular STEM programs create engaging, real-world learning experiences that build critical thinking and problem-solving skills. Community-building and social-emotional support play a vital role in developing students' confidence and persistence. A holistic approach that integrates these strategies within a supportive learning ecosystem is essential for dismantling barriers and fostering equitable access to STEM education and careers. My experience volunteering at Girls Inc. of the Valley over spring break will also be analyzed and connected back to my main thesis.

Sherielys Cartagena Cruz '28

71

Faculty Sponsor: Professor Hillary Sackett-Taylor

Building Strong, Smart, and Bold Leaders Through Alternative Spring Break

Alternative spring break programs provide students with transformative experiences that combine service learning, leadership development, and community engagement. This study looks at the impact of the ASB program at Girls Inc., a non-profit organization dedicated to empowering young people to be strong, smart, and fearless. ASB participants promote personal growth while helping the youngsters they mentor build leadership abilities through hands-on mentorship, educational programs, and community initiatives. Using qualitative reflections and participant questionnaires, this study investigates how the ASB experience improves college students' leadership skills, broadens their awareness of gender justice, and strengthens their commitment to social change. According to the findings, ASB participants not only have a good, long-term influence on the adolescents they serve, but they also learn vital skills in civic involvement, teamwork, and advocacy. This study emphasizes the potential of ASB programs to develop socially responsible leaders while also reinforcing Girls Inc.'s objective.

Shaniah Mendez '26, Denise Uwamahoro '25

Faculty Sponsor: Professor Hillary Sackett-Taylor

Girls Inc. Service Project

With part of the Honors Program cohort, we participated in Girls Inc. of the Valley in Holyoke, Massachusetts, over Spring break. As students in healthcare majors, we aimed to promote health among adolescent girls living in marginalized communities. During our time there, we planned and executed activities that encouraged health, such as creating healthy recipes beneficial for menstrual cycles and mental wellness. Furthermore, we made mocktails and facilitated a discussion about underage drinking. This experience inspired us to conduct further research into the health complications that adolescent girls in marginalized communities often face. For instance, an academic journal titled "Health Issues in Hispanic/Latino Youth" indicates that adolescents of Puerto Rican ancestry have a higher prevalence of obesity and asthma. This research provided insight into the conditions that the adolescents at Girls Inc. of the Valley encounter, considering that participants are predominantly Black and Hispanic.

Considering that the participants have direct access to the resources provided by Girls Inc. of the Valley, we sought to further analyze how participation in Girls Inc. benefits their physical and mental health. In a peer-reviewed article titled "Girls On the Run: Impact of a Physical Activity Youth Development," a survey released to the participants reported significant improvements in social skills, psychological health, and physical fitness. This supports the idea that the implementation of organized physical activity programs positively impacts the overall health of young girls

Nathaniel Lawlor '25

95

Faculty Sponsor: Professor Hillary Sackett-Taylor

Barriers to Affordable Housing: The Role of City Planning, Zoning Regulations, and Economic Policies in Nonprofit Housing Expansion

City planning policies, zoning regulations, and economic policies create significant barriers to the expansion of affordable housing by nonprofit organizations like Habitat for Humanity. Restrictive zoning laws, complex permitting processes, and financial incentives that favor market rate development limit land availability and drive up costs, making it difficult for nonprofits to meet housing needs. This research examines how these factors hinder affordable housing initiatives and explores community-driven strategies for advocating regulatory change. By reviewing literature, government reports, and case studies, the study identifies potential solutions, such as mixed use zoning, density bonuses, and streamlined permitting processes. It also discusses how community activism and local policy changes can help overcome these barriers and support affordable housing efforts.

Julia Cincotta '28, Caleigh Carvill '27

99

Faculty Sponsor: Professor Hillary Sackett-Taylor

Our Experience in Supporting Socially Vulnerable Youth Within the Community

Our research question is- What resources are available to vulnerable youth in lower-income communities? Furthermore, how are we able to protect these resources? Through our thorough research, coupled with personal hands-on experience, we have witnessed firsthand what programs have been made available for vulnerable youth. During our Alternative Spring Break service project, we took our direct involvement at Girls Inc. of the Valley and combined our experience with our research. From this experience, we have gained important insights on our community as a whole and value what we learned from this experience.

Naomi Brito '26, Catrina Casting '26

106

Faculty Sponsor: Professor Hillary Sackett-Taylor

Westfield State Inc. of the Valley

This project will involve research and gained experience to demonstrate the benefits of community

service. We will be discussing the effects of community service on personal development.

Maya Thapa '25, Lina Anter '25

120

Faculty Sponsor: Professor Hillary Sackett-Taylor

Habitat for Humanity: The Impact on Community Stability and Economic Mobility

During Alternative Spring Break, we had the opportunity to volunteer with Habitat for Humanity, an organization dedicated to providing affordable housing to families in need. Throughout the week, we worked alongside other volunteers to clean and repair a front porch, learning valuable construction skills such as building and using tools to fix damaged parts of the house. This hands-on experience not only gave us insight into the process of home building and renovation but also allowed us to contribute to improving living conditions.

Our involvement with Habitat for Humanity enhanced our understanding of the important role that affordable housing plays in community well-being. As criminal justice students, we began to reflect on how stable housing can contribute to community stability and economic mobility. By connecting this question to our volunteering experience, we seek to examine how affordable housing affects individuals and communities, especially in terms of promoting social and economic opportunities.

To explore this further, we reviewed several articles that examine how Habitat for Humanity's affordable housing initiatives influence community stability and economic mobility. The study shows that owning affordable homes improves community stability by strengthening social ties and cooperation, especially in well-integrated neighborhoods. Affordable housing also supports economic mobility by offering manageable mortgage rates, financial education, and opportunities to build social connections. However, the impact on mobility varies based on local factors like the characteristics of the Habitat affiliate and the condition of the neighborhood. Overall, this research, combined with our first hand experience, highlights that affordable housing does more than provide shelter; it enables families to build financial independence and strengthens community ties, contributing to both individual mobility and collective well-being.

Olivia Rayne '28

132

Faculty Sponsor: Professor Hillary Sackett-Taylor

Alternative Spring Break: The Power of Project-Based Learning in Communities

This study explores the effectiveness of project-based learning (PBL) in teaching children academic skills and subject matters. Following Piaget's individual constructivist learning theory, PBL is focused on student inquiry, real-world relevance, and collaborative "hands-on" work. During Alternative Spring Break, Westfield State Volunteers used PBL strategies with adolescents at Girls Inc. of The Valley in Holyoke, Massachusetts. This allowed them to teach the adolescents through hands-on learning that was mostly centered on food. This study compares Alternative Spring Break experiences with literature and case studies to determine the effectiveness of PBL on cognitive development and learning. The findings illustrate that, when appropriately designed, PBL encourages active participation and enhances children's understanding of concepts.

Jessica Isbell '25, Austin Morgan '25, Brenna Guiliani '27

137

Faculty Sponsor: Professor Hillary Sackett-Taylor

Breaking the Cycle Through Stable Housing and Community Health

Financial instability and housing insecurity are deeply connected to healthcare and overall health and well-being. These challenges frequently amplify each other, leading to ongoing cycles of difficulty for individuals and families. Community based organizations like Habitat for Humanity play an important role in breaking this cycle by providing stable housing supporting healthier and more secure communities.

Charles Walsh '25, Allyson Russell '25

33

Faculty Sponsor: Professor Anthony Furnelli

Social Media and Privacy Issues

Social media apps like Facebook collect data on people, even if they don't have an account. This hidden data, called shadow profiles, comes from contact uploads, website tracking, and other sources. People can't see or delete this information, raising significant privacy concerns. Even after lawsuits and new privacy laws, companies still collect and use this data for ads and business.

Shaun Buteau '25, Matt Carpenter '25

34

Faculty Sponsor: Professor Anthony Furnelli

Social Media and Privacy Issues: Identity Theft

This poster explores the risks of identity theft associated with social media use, focusing on how personal information shared online can be exploited by cybercriminals. It discusses common methods of identity theft, including phishing and data breaches, while offering preventative strategies for users to protect their privacy and secure their online presence.

Alyson Guay '25, Austin Gross '25

35

Faculty Sponsor: Professor Anthony Furnelli

Digital Footprint: What You're Leaving Behind

Many people are unaware of what data of theirs is being collected online. Your digital footprint is a trace left behind by your online actions such as your browsing history, online purchases, and posts you've uploaded. With the rise of social media there is more room for security and privacy issues.

Angelica Mosijchuk '25, Jack Demayo '25

36

Faculty Sponsor: Professor Anthony Furnelli

TikTok Advertising

Following the recent growth of the mobile app TikTok, advertising on the platform has become extremely popular, leading to success for many brands and companies. Research suggests that TikTok advertising has become one of the most prevalent ways to build brand awareness and increase user engagement.

Max Cherven '25, Taylor Creech '25

38

Faculty Sponsor: Professor Anthony Furnelli

Small Businesses: Building Their Brand & Digital Marketing

Small businesses that successfully build brand recognition through social media are more likely to establish themselves within their target industry. Research shows that positive brand recognition is a stronger driver of online sales than a targeted approach to product promotion.

Kayla Ledoux '25, Josiah Bass-Collins '26

39

Faculty Sponsor: Professor Anthony Furnelli

Micro-Influencers & Personal Branding: What Drives Digital Success

With the rise of digital marketing has come the emergence of micro-influencers, who have changed the game of consumer behavior. This project explores how these smaller creators succeed through personal and strategic branding by utilizing media platforms like TikTok, Instagram, and YouTube. Through secondary research, we found that micro-influencers must build trust and partner with brands to grow a loyal audience. These creators focus on authenticity, consistency, and niche content to develop a strong personal brand. This study dives into how aspiring influencers can leverage digital tools to succeed and how marketers can effectively collaborate with them.

Skyla Nigro '25, Dominic Novio '25

40

Faculty Sponsor: Professor Anthony Furnelli

Digital Marketing Through Personal Branding & Social Media Influencers

In the world of digital marketing, personal branding and social media influencers have gained prominence as powerful resources for increasing consumer engagement and brand awareness. This study examines how businesses strategically utilize social media influencer partnerships and personal branding to strengthen their market presence. Through the evaluation of market trends and case studies, researchers assess the effectiveness of social media influencer collaborations, the role of trust with consumers, and the impact of digital behaviors on consumer behavior. Additionally, this presentation showcases strong marketing strategies for utilizing social media influencers, emphasizes challenges with audience targeting, ethics, and ROI, along with revealing the influence on consumer behavior.

Jessica Isbell '25, Jack Harnois '25, Natnael Walton '25

41

Faculty Sponsor: Professor Anthony Furnelli

Turning Trends into Transactions: TikTok Shop

This poster explores the impact of TikTok Shop on e-commerce and traditional shopping, highlighting how the platform has reshaped consumer behavior and business growth. By integrating social media with direct sales, TikTok Shop has created new opportunities for businesses to grow and develop at a rapid pace.

Maeve McGinley '25, Jessica McKeown '25

42

Faculty Sponsor: Professor Anthony Furnelli

Selling to Different Generations in a Digital World

Research indicates that consumers, regardless of age, tend to trust brands that offer a personalized shopping experience and prioritize customer relationships. However, reaching each generational cohort requires a tailored approach, as a "one-size-fits-all" strategy is not effective. By segmenting markets according to generational differences, businesses can significantly enhance engagement. Adapting marketing strategies to meet the specific needs and preferences of each generation leads to improved business outcomes. This project explores digital marketing strategies that effectively engage Generations X, Y, and Z.

James Bell '25, Kayla Bernier '25

43

Faculty Sponsor: Professor Anthony Furnelli

TikTok Personalized Advertising

TikTok is one of the most widely used social media platforms in the world. This poster examines how small businesses utilize personalized advertising to target specific users. It focuses on how ads are generated and personalized for the user.

Traevon Williams '27, Noah Hemenway '25

44

Faculty Sponsor: Professor Anthony Furnelli

Micro-Influencers: GymShark

Micro-influencers use digital marketing strategies and other tactics, such as authenticity, to build genuine relationships with consumers and grow a personal brand into a successful company. Gymshark is one of the most successful real-time examples, as the company has generated millions in revenue and continues to expand rapidly.

Quinn Manghan '25, James Lyons '25

79

Faculty Sponsor: Professor Anthony Furnelli

How AI improves sales and customer service

Artificial intelligence is changing the way business's operate by utilizing AI to help conduct sales and customer service. Using chatbots, virtual assistance, 24/7 customer support and data based decision

making to improve processes, AI is instrumental in helping sales people to be more efficient and effective with their time.

MUSIC

Ashley Judkins '26

108

Faculty Sponsor: Professor Sonya Lawson

The Evolution of Black American Religious Music and Its Impact on Popular Music

From spirituals and hymns to contemporary gospel, Black American religious music has evolved in multiple ways. Its purpose in American culture and the impact that this specific genre of music continues to have on the world deserves to be heard, understood, and practiced. This study is meant to explore the evolution of Black American religious music, its impact on popular music, and the cultural, historical, and especially musical developments that have contributed to this evolution. Although it may not be at the forefront of musical studies in America, it is beneficial to gain a deeper understanding of the songs, movements, and musical elements that stem from Black American religious music, which has influenced popular music.

NURSING

Ashley Schabacker '25, Kelsey Spiller '25, Zoe Lapis '25, Yirancis Rivera '25, Alexandria Lefebvre '25

16

Faculty Sponsor: Professor Jamie Rivera

The Importance of Oral Health: WSU Nursing Educating the Community of Rincon, Puerto Rico

Over this past Spring Break we completed clinical hours at the Costa Salud Community Health Centers to learn more about health systems in place in Puerto Rico. During this time we presented health education regarding the importance of oral health and its connection to overall health and wellbeing to patients waiting for appointments. We were able to connect oral health to promote overall health and the prevention of chronic disease complications. This experience allowed the five of us to participate first hand in patient education and experience how nurses exemplify the role of an educator for their patients. Learning about the role of a nurse within the community and how essential they are for promoting healthy living and high quality of life for our patients will improve our nursing care for our future careers.

Emma Mattson '25

131

Faculty Sponsor: Professor Jamie Rivera

Developing Best Practices for Non-Cardiac Death Organ Donation in the ICU

Background: Non-cardiac death organ donation means a patient has passed from cardio-pulmonary complications which is different from brain death, also referred to as circulatory death. These candidates are often not considered for organ donation which limits the availability of organs that may save another patient's life.

Objectives: The purpose of this project is to demonstrate that patients who pass from causes other than brain death may have viable organs that can save others. For patients who determined their organ donor status prior to passing, it is important to consider their decision.

Methods: For this project, there will be articles implemented from multiple sources. Specifically CINAHL, PubMed, and UpToDate were used to identify and utilize credible articles. Articles will consist of information regarding the frequency of organ donation from circulatory death compared to brain death.

Results: The presentation will include the cues from ventilation of when to call the organ bank. This is an important understanding that nurses should be aware of the different determinants of the patient

status changing which is crucial to notify the organ bank within a time frame that is optimal. Possible statistics will relate to how beneficial making the progress of considering these patients who have not passed from brain death to patients who are in need of organ transplants.

Limitations/Discussion/Implications: The results of this project can help demonstrate best practice for nursing pertaining to honoring the patient's wishes, along with identifying important factors that can determine the outcome of possible donation.

Kristina Lynch '25

31

Faculty Sponsor: Professor Jamie Rivera

Comfort Without Compromise: The Advantages of Moderate Sedation in Outpatient Settings

Moderate sedation has become an integral part of outpatient procedures, offering a balanced approach to patient comfort and procedural efficiency. This presentation explores the benefits of moderate sedation in outpatient care, focusing on its role in enhancing patient experience, improving procedural outcomes, and reducing the overall burden on healthcare systems. By providing a safe and controlled state of relaxation, moderate sedation allows patients to undergo diagnostic and therapeutic procedures with minimal discomfort or anxiety, all while maintaining their ability to respond to verbal cues. This presentation will also address the safety protocols and monitoring requirements offering evidence-based insights into its applications and outcomes. Ultimately, we aim to highlight how moderate sedation can optimize the quality of care in outpatient settings, leading to increased patient satisfaction, faster recovery times, and more efficient use of medical resources.

Mia Comeau '26, Emma Comeau '26, Arianna Andresen '27, Emily Fernandez '26

109

Faculty Sponsor: Professor Joan Kuhnly

From Night Owls to Early Birds: How Morning Workouts Could Improve College Students' Sleep

40 to 60 percent of college students report poor sleep. Much of this stems from the stress of a busy and fast paced lifestyle (Zhou et. al. 2022). However, poor sleep quality over time can cause a variety of health issues. What could be a healthy way to improve sleep quality and strengthen the sleep schedule? Research suggests that exercising in the morning instead of at night could help. Based on the current evidence, it may be helpful to try changing the workout class schedules on college campuses. This project proposal includes implementing an exercise program in the morning versus at night, involving a small sample of students to test this change. The implications for this study would demonstrate that on-campus fitness centers should host workout classes earlier in the morning, open and close earlier, and encourage students to work out in the morning with various incentives. Furthermore, students should be educated that exercising in the morning is healthier for them than exercising at night, specifically regarding sleep quality. With these results, better sleep quality can be promoted in groups at high risk for sleep deficits such as college students, leading to their better health overall.

Monika Reks '26, Mikela Demers '26, Meghan Young '26, Madison Clark '26, Kendal Sullivan '26

67

Faculty Sponsor: Professor Joan Kuhnly

Alternative Hypertensive Treatments

Background: There is minimal research on the use of herbal supplements v. oral hypertensives to treat hypertension. However, it can be seen in literature that cardiac herbal supplements in some cases have the ability to decrease cardiovascular events in patients as well as work similarly in controlling patients hypertension in comparison to angiotensin 2 receptor blockers.

Objective: This study aims to evaluate the effectiveness of cardiac herbal supplements compared to standard cardiac medications in achieving controlled hypertension within six months. Specifically, we seek to determine whether herbal supplements can prevent cardiovascular events, mitigate worsening hypertension, and reduce the need for prescription antihypertensive medications in patients with

stage 1 hypertension.

Methods: We would recommend that Cardiac Family Medicine MDs encourage herbal supplements for patients who have stage 1 hypertension in order to prevent cardiovascular events, worsening hypertension and the need for oral hypertensives. Patients will monitor blood pressures at home daily via use of MD-approved automatic blood pressure cuffs.

Results: Proposed outcomes will be monitored for 6 months after the practice change, the outcomes proposed are patients will have well-controlled blood pressures and a decrease in adverse cardiovascular effects with the use of herbal supplements making the need for the use of oral hypertensives unnecessary if the patient wants to choose the herbal route.

Implications: This project could have the potential for finding medicinal strategy in comparison to traditional medicine is valuable in finding alternative ways to treat patients with hypertension in general, as well as opening up possibilities for patients who find more comfort in the herbal medicinal route of treating diseases, specifically in this case, adverse events from hypertension.

Olivia Harkins '26, Isabelle McElhiney '26, Nora Gould '26, Allison Hill '26, Katelynn Pellegrini '26

69

Faculty Sponsor: Professor Joan Kuhnly

From Incubators to Cuddles: The Power of Skin-to-Skin Contact in Preterm Infant Care

Skin-to-skin contact (SSC), also known as Kangaroo Mother Care (KMC), is an evidence-based intervention that has been shown to improve health outcomes in preterm infants. This approach, which involves direct contact between a newborn and caregiver, has been associated with benefits such as enhanced neonatal weight gain, improved thermoregulation, neurological development, and stronger parent-infant bonding. Research indicates that SSC/KMC can also shorten hospital stays and support long-term developmental outcomes. Despite the overwhelming evidence supporting SSC, barriers to implementation persist. Challenges include variations in hospital policies, concerns about SSC's feasibility for critically ill neonates, and the need for adequate staff training. Incubators are currently the standard practice for care of preterm infants with low birth weights, however overall hospital stays are seen to be decreased with skin-to-skin contact, making this practice more cost effective for the hospital as well as the family. Addressing these barriers through standardized protocols and education can enhance SSC's integration into neonatal care. Given its extensive benefits, SSC should be prioritized as a first-line intervention for preterm infants, ensuring improved health outcomes and quality of care in neonatal settings. Overall continued research and implementation of SSC/KMC into neonatal care protocols can help optimize outcomes for preterm infants and support best practices in nursing.

Reese Jordan '27, Caressa Irzyk '27, Hannah Wodecki '27

73

Faculty Sponsor: Professor Jennifer Pappas

How the Gandara Center Influences Community Health Prevention Services

The Gandara Center located in Westfield, MA is a local Family Resource Center (FRC) dedicated to strengthening families and promoting well-being through various and specific prevention services. Family Resource Centers like this one, provide parenting support, mental health resources, financial literacy programs, and youth development initiatives to prevent crises before they occur. These services directly align with, support the ideas of and contribute to the Healthy People 2030 objective "ECBP-D07: Increase the number of community organizations that provide prevention services", which emphasizes the importance of accessible, proactive support systems for families. By addressing risk factors such as economic instability, lack of access to mental health care, and challenges in parenting, the Gandara Center plays a key role in improving population health in the Westfield community. Prevention services have a profound impact on public health outcomes, reducing the incidence of child neglect, substance use disorders, and mental health crises. These issues, if unaddressed, contribute to

higher rates of emergency care visits, homelessness, and intergenerational cycles of poverty and poor health. Through early intervention, education, and community support, the Gandara Center fosters resilience in families, ultimately decreasing long-term healthcare costs and promoting healthier communities.

This discussion is particularly relevant to nursing, as nurses play a critical role in community health, preventive care, and advocacy. Nurses working in public health, school systems, and clinical settings can collaborate with community organizations like the Gandara Center to connect families with needed resources. Furthermore, understanding the impact of social determinants of health, such as economic stability, education access, and social support, is essential in providing patient-centered care. Nurses can advocate for expanding prevention services, addressing barriers to care, and partnering with community organizations to improve health outcomes at both individual and population levels.

Kelsey Gagnon '26, Amanda Gamache '26, Jenna Krisiak '26, Katelyn Stankowski '26

75

Faculty Sponsor: Professor Joan Kuhnly

Comparing Epinephrine and Vasopressin in Cardiac Arrest: Impact on Return of Spontaneous Circulation

Cardiac arrest is a major contributor to both illness and death worldwide, it is important to research and compare therapeutic interventions to decrease the morbidity and mortality of this unfortunate event. The specific choice of vasopressor used during cardiac arrest management is a major contributor to the return of spontaneous circulation (ROSC). Our project explores the evidence on whether epinephrine or vasopressin is more effective in assisting in obtaining ROSC within 30 minutes. Current evidence supports that epinephrine alone is still most effective and should continue to be the standard of practice even though it does come with some concern around worsening myocardial dysfunction (Finn et al., 2019). There is some evidence that supports etiology affects the efficiency of epinephrine alone, vasopressin alone, and epinephrine with the addition of vasopressin (Stroumpoulis et al., 2008). Vasopressin has been found to have comparable effects of enhancing ROSC when compared to epinephrine (O'Reilly et al., 2023). However, the research to support this claim is minimal, and the reliability is questionable, which warrants further research. Due to the mixed evidence, we propose providing an educational session for staff of Emergency Rooms on this topic while continuing to prioritize epinephrine as the first-line vasopressor, followed by vasopressin, and monitoring patient outcomes to assess effectiveness in improving ROSC and survival rates.

Cristina Ferraro '25

87

Faculty Sponsor: Professor Jennifer Pappas

Utilizing Infographics for Health Education in Public School Nursing

Background: Parents often seek guidance regarding how to handle certain health conditions, effective ways of caring for their sick child, impacts of environmental factors on their children, and so much more. Health research is a component of healthcare that is often forgotten, but is vital for advancements and general public health communication. In schools, this position often falls onto the nurse, expected to research important topics pertaining to the individualized school community. This research is then to be shared, and increasing use of the internet poses for the research to be placed within it. But what method of communication yields a relevant and easy way of understanding for students and their families?

Infographics (short for "information graphics") utilize visual components such as charts and icons to create a digital communication tool. According to Kong et al. (2025), these are especially useful during today's new wave of digital media and shortened attention spans for new information, allowing for a format that can be more easily understood, and more visually appealing.

Objective: Create a set of public health infographics for communicating important health information to students at a public school system and their families/guardians.

Materials and Methods: The online graphic design platform Canva was utilized to create flyers, with various colors and styles. QR codes are generated on each flyer to allow the reader to access more information from a credible website (The Center for Disease Control, The Mayo Clinic, etc.).

Results: 15 different infographics were created, discussing a variety of topics including, but not limited to: seizure safety, handwashing importance, and tick safety.

Future Implications: The superintendent of the school district will be sharing the infographics online via monthly and/or quarterly newsletters. The infographics will be dispersed and utilized at different points throughout the school year, continuously updating families on important information.

Conclusion: Infographics are important for public health communication within the school community, allowing for information to be addressed regarding unique needs of this population, and extending the connection of the public school nurse.

Caroline Eckert '26, Levi Sayre '26, Caroline Evans '26, Emma Miolla '26, Nia Murvin '26

86

Faculty Sponsor: Professor Joan Kuhnly

Alternative Birthing Positions

Introduction: The focus of this project relates to the implementation of the research that discusses the benefits of alternative birthing positions in comparison to the conventional supine position. The standard practice for birth now is the use of supine position. This can be due to lack of knowledge or research related to the benefits of alternative positions by midwives and physicians. This study will focus on educating the care team involved in the birthing process about alternative positions that align with the mother's requests.

Purpose: The PICO question being addressed is In pregnant people, how does alternative birthing positions compared to the supine position affect the length of the second stage of labor? These benefits of alternative positions affect the duration of the second stage of labor, patient comfort, and prevent certain complications that can occur during birth. This project will focus on educating the care team involved in the birthing process about alternative positions that align with the mother's requests. By doing so, this will prevent longer duration during the second stage of birth, reduce perineal tear and bleeding during birth, and promote patient satisfaction and comfort.

Methods: A literature search was conducted to collect evidence that is included in this educational program to promote use of alternative positions. Over the next six months after this educational program was implemented the monitoring of how frequently non-supine positions were used. In addition to this, the duration of the second stage of delivery will be monitored and compared to the births that used the conventional supine positioning.

Conclusion: Based on research, it is clear that using alternative birthing positions can significantly shorten the time the person is in the second stage of labor. Alternative practices also encourage pregnant individuals to incorporate their preferences and have more control over their birth.

Shelby Rice '26, Bill Fouche '26, Vanessa Salacinski '26, Janitza Salcedo '26, Taylor Nadeau '26

89

Faculty Sponsor: Professor Joan Kuhnly

How Sweet Can You Be?!?! Optimizing Type 2 Diabetes Management: Lifestyle modifications and the role of metformin

The global incidence of type 2 diabetes (T2DM) is on the rise, presenting significant challenges such as cardiovascular complications, impaired wound healing, and elevated mortality rates. Current treatment protocols prioritize lifestyle interventions, including diet and exercise, as

first-line therapies with metformin often utilized as a complementary option. (Ali, 2021). This project proposes to evaluate the efficacy of structured exercise, diet and metformin therapy in monitoring clinical outcomes in adults with T2DM. Based on the evidence, implementation of this proposed project could reinforce the superior efficacy of exercise in mitigating cardiovascular risks compared to pharmacological interventions alone. This project will identify clinical outcomes and change how practitioners treat newly diagnosed T2DM patients on what diabetes management strategies are useful to them. We expect this to drive future research to develop more personal management strategies for T2DM patients.

Cristina Ferraro '25

88

Faculty Sponsor: Professor Jennifer Pappas

Nursing Workforce Development

Purpose: This Quality Improvement project aims to address the crisis of the nursing shortage by providing education to adolescents about the scope of the nursing field, and how to become one themselves. A root cause of the nursing shortage can be traced down to a decline in nursing school enrollment, but how can we expect more nurses to appear in our facilities, if no one knows how to become one, or what they'd be expected to do?

Objective: Conduct video interviews with three current nurses, and one nursing student.

Methods: These interviews utilized a Panasonic video camera, and were edited using the video-editing software DaVinci Resolve. At the end of the video collection process, all edited videos were uploaded onto a public YouTube channel for viewing.

Discussion: The nurses of tomorrow are crucial for the health and wellbeing of our loved ones in their most vulnerable times. In order to foster a new generation of nurses, though, we must guide them towards success, in a way that best fits them. No longer are the times of finding a scientific book in the card catalog; we have entered an era in which technology invites us to explore our questions and find our answers. We already use our new innovations for communication and socialization – why not make use of the educational opportunities they may hold?

Implications: This Quality Improvement project serves as valuable information for current high school students and their families on what to expect when pursuing a degree in nursing, and the different ways to do so.

Alexis Kohout '25

97

Faculty Sponsor: Professor Marcia Scanlon

Empathy Without Exhaustion: Preventing Compassion Fatigue in Oncology Nursing

Compassion fatigue refers to the emotional detachment and social isolation that nurses may experience after working in high-stress environments or witnessing repeated instances of secondary trauma in their patients. Without the ability to connect with patients, families or coworkers, nurses may struggle to perform at their best. Oncology nurses, in particular, are at greater risk due to the nature of their work, which involves caring for cancer patients. Research has shown that nurses can prevent compassion fatigue by practicing self-care and recognizing the signs of being overwhelmed. This research project aims to explore strategies for preventing compassion fatigue and emphasize the importance of early identification to prevent it from affecting patient care.

Karley Aussant '27, Christine Carter '27, Lily Najdek '27

100

Faculty Sponsor: Professor Jennifer Pappas

Importance of Early Childhood Education

Early childhood education is a key factor in promoting long-term success. The YMCA plays a critical role in this effort by offering various programs like preschool education, after-school care, and summer camps, which focus on cognitive, social, and emotional development. These programs help children develop skills such as communication, problem-solving, and emotional regulation, giving them the tools to thrive both in school and in life.

Healthy people 2030 aligns with the goal of promoting children's health and well-being. Nurses in community health play a crucial role in supporting children's development and ensuring they grow up in healthy environments. By partnering with organizations like the YMCA, nurses can provide families with resources that foster children's health and development. Advocating for early childhood education helps prevent future health issues, creating a strong foundation for lifelong well-being. The YMCA is working to improve community outcomes by making sure more children have access to quality education, especially those from underserved backgrounds. The YMCA's programs are affordable and inclusive, allowing families from all economic backgrounds to enroll their children. This helps those who might not be able to afford quality education, ensuring that all children, regardless of their situation, have the opportunity to succeed. By increasing participation in these programs, nurses help to create healthier, more successful future generations, which would benefit the community as a whole.

Grace Jones '27, Zuhai Shinwari '27, Anjalina Lubarsky '27, Kiana Kalman '27

102

Faculty Sponsor: Professor Jennifer Pappas

Language Schools as Gateways to Health, Inclusion, and Community Well-Being

Language schools serve a crucial role in encouraging community engagement and proposing goals for public health initiatives such as Healthy People 2030. These organizations contribute to better social integration, economic opportunity, and healthcare accessibility for non-native speakers by providing language instruction. Developing proficiency in a language improves intercultural understanding, which may reduce feelings of loneliness and improve mental health. Furthermore, having access to language classes enables people to communicate with their healthcare providers more effectively, understand medical information, and navigate healthcare systems more easily, all of which improve health outcomes. According to the objectives of Healthy People 2030, language schools are essential for improving literacy, health equity, and community well-being by fostering inclusivity and bridging communication gaps. In nursing, language proficiency is essential for providing patient-centered care, ensuring accurate health assessments, and fostering trust between healthcare providers and patients. Nurses often work with diverse populations, and language barriers can lead to miscommunication, lower quality of care, and patient dissatisfaction. By promoting language education, nurses can improve their ability to educate patients about medications, procedures, and disease management, ultimately leading to better adherence to treatment plans and improved overall health. In essence, language schools serve as bridges that connect individuals to opportunities, well-being, and a healthier future. By fostering communication, inclusivity, and empowerment, they help weave a stronger, more connected society, one where everyone has a voice and the ability to thrive.

Lydia Sullivan '25, Timothy Jinn '25, Abigail Euson '25, E Evans '25

103

Faculty Sponsor: Professor Jamie Rivera

Defeating Germs One Craft at a Time

During the semester, we had the incredible opportunity to travel to Rincón, Puerto Rico. While there, we were able to organize educational activities for young children in the pediatric waiting room of Costa Salud Community Health Center. The CDC states that hand washing can prevent the spread of respiratory and gastrointestinal disease, so it is extremely important to reinforce proper hand washing. Respiratory etiquette is another crucial teaching to prevent children from getting and spreading viruses. Our activities focused on the importance of hand washing and general health hygiene as methods of reducing the spread of infections and maintaining well-being. We led interactive, engaging, and age-appropriate activities such as bingo, hand tracing for cut and paste, coloring activities, and reviewing informational pamphlets. Our goal was to assess patients' current knowledge of health hygiene, involve family members and provide tools to reinforce habits, and give children an active role in their learning to create a new understanding of infection prevention.

Faculty Sponsor: Professor Jamie Rivera

Psychosocial Concerns and Their Effect on Surgical Outcomes in Orthopedic Outpatients

This analysis examines the role of psychosocial factors in orthopedic outpatient recovery and adherence to surgical protocols. Findings suggest that while psychosocial concerns are recognized as crucial to outcomes, healthcare professionals often face barriers in addressing them, such as time constraints and lack of training. The studies highlight the need for structured interventions to improve psychosocial care, which could enhance surgical outcomes by improving adherence and patient recovery. This research calls for developing strategies to integrate psychosocial care into orthopedic practice to optimize patient outcomes.

Faculty Sponsor: Professor Jennifer Pappas

Mental Health Awareness for Adolescents with Depression (End the Stigma)

Mental health is defined by the World Health Organization (WHO, 2022) as a state of well-being in which an individual can cope with the normal stresses of life, realize their abilities, learn and work productively, and contribute to their community. It encompasses more than the absence of mental illness, involving the capacity to navigate life's challenges effectively. Adolescence is a critical developmental period during which establishing healthy coping mechanisms and understanding mental well-being can be particularly challenging.

The perception of mental health is often narrowly focused on mental illness. When considering conditions like depression in adolescents, a significant barrier to seeking help is the pervasive stigma associated with mental health challenges. This stigma can lead to young people feeling isolated and afraid of judgment, causing them to suffer in silence.

This project aims to promote mental health awareness among adolescents within the school system. Similar to health promotion and sexual health education, incorporating education about depression and other mental health issues could be beneficial. Such initiatives could provide students with information on recognizing symptoms, developing coping strategies, identifying resources for support, and fostering a culture that reduces stigma. Creating safe spaces within schools where students feel comfortable expressing their emotions and seeking assistance could be invaluable. Untreated adolescent depression can unfortunately contribute to negative outcomes such as substance abuse, school dropout rates, and tragically, suicide. Educating students about mental health during their formative years and actively working to dismantle stigma are crucial steps in fostering a healthier and more supportive environment.

Faculty Sponsor: Professor Jennifer Pappas

Bridging the Gap: Addressing Mental Health and Homelessness Through Advocacy and Care

Homelessness and mental health disorders are interconnected. Many people who experience homelessness also experience depression, anxiety, schizophrenia and more, with little to no access to mental health care. Healthy People 2030 includes research done about increasing the proportion of homeless adults that experience mental health issues and get mental health services. The Samaritan Inn in Westfield MA is a resource for individuals to utilize if they are homeless. Not only do they provide basic needs, they also provide therapy and counseling. They also refer people to the services such as mental health professionals, as well as anything else they may need. In 2024, a survey published in the National Library of Medicine found that 67 percent of people experiencing homelessness had a mental disorder. By addressing the psychological needs of the people, the Samaritan Inn relates closely to helping the number of homeless people care that is presented in Healthy People 2030. Sharing the same goals allows room for success and more opportunity for

accessibility to care. From a nursing perspective, advocating and providing care is crucial. Nurses have the ability to identify mental health issues, educate, and inform people. By strengthening the correlation between mental health care and homelessness, a community is improved overall as well as the quality of life.

Benjamin Dawe '27, Stanley Sasek '27, Chelsea Sarfo '27, Sydney Moreton '27

119

Faculty Sponsor: Professor Jennifer Pappas

Pet Therapy Helps to Decrease Suicide Incidents

In college campuses all over the United States students are plagued with depression, anxiety, and social isolation due to academic pressure. Assisted animal therapy (AAT), has been shown to reduce anxiety, stress, and depression for those of all ages. Westfield State offers a pet therapy program, specifically through dogs, which can help fight common issues of anxiety, depression, and stress among its student body. Pet therapy can directly combat these feelings, allowing you to interact healthily with cute animals like dogs, as well as being able to interact with your peers in a positive manner and create new relationships. Westfield State's pet therapy program enhances not only the sense of community among its students, but targets those of all ages across Western Massachusetts, especially those who are retired and looking for a way to give back to their community. Pet therapy has a positive impact on all members of the community. Reducing the suicide rate is an initiative of Healthy People 2030. There is not one singular solution, but AAT highlights the cognitive, emotional, and physical aspects to help reduce suicide incidents throughout the United States.

Andrew Currier '27, Emily Reed '27, Samantha Dyer '27, Leonora Kirouac '27

126

Faculty Sponsor: Professor Jennifer Pappas

Combating Childhood Food Insecurity

Without food, it is impossible to sustain life, which is why combating food insecurity is so important. Healthy People 2030, a 10-year federal plan to improve population health, includes an objective to decrease childhood food insecurity, which is an increasing issue. Food insecurity in children poses a community wide concern regarding public health and access to adequate food. There is reason to believe growing up with food insecurity can lead to long term health problems, trauma, and social detriment. Food pantries are an important resource to combat food insecurity among children, including those in the Westfield community, such as the Westfield Food Pantry, which serves thousands of community members a month, including several hundred children. It is important for nurses to recognize the prevalence of food insecurity in their patients to make a care plan specific to what the patient has access to. Nurses are also an important resource for the community as people tend to rely on them for education and additional supplements to improve the overall health of the community. Nutrition is a huge factor to public and individual health and a nurse in the community must be informed about how families and individuals can gain access to adequate food. Westfield Food Pantry and others like it are non-profit and do not seek money from individuals who need the food and do not require any documentation to qualify them, it is for anyone who comes in. Food insecurity is a dire reality for many people across the country, and food pantries are an effective way to combat the issue. Without resources like the food pantry, children are left to rely on food supplied by public schools, which is not accessible when school is not in session.

Bridgette Perry '27, John Alves '27, Kaileigh Brosnan '27, Alyssa Benson '27

127

Faculty Sponsor: Professor Jennifer Pappas

The Positive Impact of the Common Goods Pantry on Reducing Food Insecurity

Food pantries are a vital community resource that improve population health outcomes by combating food insecurity and providing nutritious options for underserved populations. By offering a variety of food options, including fresh fruits, vegetables, whole grains, and protein-rich items, food pantries help bridge the gap for those struggling to maintain adequate nutrition. The Common Goods Pantry, located

in Westfield, Massachusetts, is a non-profit, community centered program whose goal is to provide food and other basic necessities for the Westfield State University campus population. The services they provide directly contribute to the Healthy People 2030 objective of reducing household food insecurity and hunger. This issue has become more prevalent in many communities as of late. The Common Goods Pantry works toward changing the direction of this trend. They serve not only students, but also campus faculty and staff, who face a variety of social and economic issues, including those who are housing insecure, low income, year round on campus residents, students with children, and any others who may be in need of assistance. In addition, they provide food and other supplies for support or service animals, as this is a major expense for students who need these services. There are many health-related issues in this population that are improved by the pantry. The most significant is that it directly feeds students, preventing malnutrition or starvation due to a lack of resources. They also provide many hygiene products, including soaps, laundry detergent, tampons, pads, and other goods someone may need. Health outcomes for this population are greatly improved, which has major implications to nursing. A well fed population that is able to care for themselves and their needs properly, creates an environment in which there is a lower risk for infection and disease, adequate nutrition, and healthier outcomes for all members of the community.

Emma Mattson '25

128

Faculty Sponsor: Professor Susan Scott

The Different Presentations of Myocardial Infarction in Women and Men

Background: One of the most crucial leading causes of mortality is myocardial infarction (MI), also known as a heart attack. The male and female population are both greatly affected by MIs, however the clinical presentations of women who are suffering from an MI differ in ways that cause healthcare related disparities. The misunderstanding of how a woman may present in these circumstances can hinder the necessary diagnosis, treatment, and outcome.

Objective: The purpose of this project is to highlight the gap in care that women may receive due to different clinical presentations of an MI compared to men. There has been many forms of research done pertaining to the topic of MIs, however most do not cater to the recognition and treatment for women. This is due to lack of awareness surrounding the causes and risk factors of MI occurring in female patients, along with the misconception and turning away female patients when they are experiencing "atypical" symptoms.

Method: There were a multitude of articles and forms of research reviewed and explored for this project. Sources specifically from CINAHL, UpToDate, and PubMed. These sites are credible and provide sources that allowed the exploration of the cause of MI in women and what causes a gap in treatment that has increased the mortality rate in the female population.

Results: There has been more informative research that illustrates the concept that spontaneous coronary artery dissection (SCAD) is the main cause of MI in females. The presence of SCAD rather than an atherosclerotic plaque contributes to the different presentations of an MI occurring in females than males. Hormonal differences also greatly contribute to men and women not presenting the same symptoms.

Implications: This research is valuable in changing the treatment women receive when experiencing an MI and reducing the incidence of mortality due to a gap in effective recognition of the condition in a timely manner.

Joshua Atchinson '27, Payton Kelley '27, Ryley Cabey '27, Kiara Diaz '27

129

Faculty Sponsor: Professor Jennifer Pappas

Reducing Intimate Partner Violence Through the Community: All Inclusive Support Services (AISS)

This project examines the role of All Inclusive Support Services (AISS) in Springfield, Massachusetts, in alignment with the Healthy People 2030 objective, IVP-D04: Reduce intimate partner violence. AISS is a community-based organization that provides extensive support services to vulnerable populations, including those affected by trauma and/or violence. Familial services, like parenting classes, Anger and Beyond (anger management group therapy), Men Stepping Up for a Change (domestic violence group therapy for men), and women's support groups and mentorships. The study inquires about the quality of AISS's strategies for reducing exposure to violence, cultivating safe environments in Springfield, Massachusetts, and fostering overall resilience. Qualitative and quantitative data are utilized to evaluate AISS's effectiveness in contributing to Healthy People 2030's objective IVP-D04. Public health outcomes benefit from the interventions of AISS, like addressing intimate partner violence (IPV) and educating the community and advocating for victims. This project highlights the necessity of social services and community-based organizations in attaining positive public health outcomes.

Karoline Warzybok '25

130

Faculty Sponsor: Professor Jamie Rivera

Managing GLP-1 Use Around Surgery: Guidelines and Grey Areas

GLP-1 receptor agonists, such as semaglutide and liraglutide, are increasingly prescribed for type 2 diabetes and weight management. As more patients arrive for surgery while taking these medications, surgical teams must be aware of potential complications. New guidelines from the American Society of Anesthesiologists (ASA) and the American Society of PeriAnesthesia Nurses (ASPAN) highlight the risk of delayed gastric emptying, which can increase the chance of aspiration and other perioperative issues.

This project reviews current research and national recommendations related to the perioperative management of GLP-1 medications. By staying informed and adjusting practices accordingly, surgical teams can better support patient safety and outcomes in this evolving area of care.

Mackenzie Carr '27, Nathan Sylven '27, Kaitlyn Colby '27, Shea O'Brien '27

133

Faculty Sponsor: Professor Jennifer Pappas

How Local Farms Support the Health and Wellness of the Communities

Studies have shown that the lack of vegetable consumption in diets places people at a higher risk for developing vitamin deficiencies, and diseases such as obesity, diabetes, and cardiovascular conditions. Many Americans fail to meet the recommended daily intake of vegetables. One of the goals of Healthy People 2030 is to increase vegetable consumption of people aged 2 years and older. In order to reach this goal nutrition education, accessibility, and affordability need to be implemented. Resources such as local farms can help increase vegetable consumption by promoting wellness and creating easy access to essential nutrients. Brattle Farm is a non profit organization located in Pittsfield Massachusetts. Brattle Farm grows an array of vegetables including spinach, broccoli, lettuce, carrots, peppers, herbs, and tomatoes. The farm provides an opportunity to the community of Pittsfield MA to obtain vegetables even if they cannot afford them. These opportunities include work shares, CSA shares, and contributions to local food pantries. Brattle farm also provides accessibility to the community through their locally and naturally grown vegetables which are located near the center of Pittsfield. Brattle Farm also provides education to the community through a program called fun on the farm as well as partnering with physicians in order to provide nutrition information within local schools. Programs like this help improve population wellness and can help 2030 reach its goal.

Anna Hudock '27, Emma Goulart '27, Makayla Melanson '27, Brenna Guiliani '27

Faculty Sponsor: Professor Jennifer Pappas

Local Initiatives Impacting Preventative Health: Project Lifesaver

Project Lifesaver is an organization with the purpose of helping communities who choose to participate in their mission, aid in the use of important preventative services. This community resource coincides with Healthy People 2030 objective of increasing the number of organizations that provide access to preventive health services. Project Lifesaver, utilized by the South Hadley Police Department and other agencies nationwide, is designed to regard, and protect individuals at risk of wandering due to cognitive impairments, including dementia and autism, as well as traumatic brain injuries. By using radio frequency technology and portable devices, as well as incorporating trained search and rescue teams, which are typically part of law enforcement or fire departments, the program enhances community safety by facilitating the rapid location and recovery of missing individuals. A community health approach emphasizes the importance of integrating programs like Project Lifesaver into broader public health initiatives. This research explores how such resources contribute to improved health outcomes by reducing injury risks, minimizing emergency response costs, and providing peace of mind for families and caregivers. Findings highlight the need for increased collaboration among healthcare professionals, law enforcement, and community organizations to expand access to preventive services and strengthen public health infrastructure. Through these efforts, local initiatives can play a critical role in promoting safety, independence, and well-being for vulnerable populations. Nurses play a crucial role in population health, and being well-informed about available resources is essential for supporting their patients. Integrating this kind of preventive service into care plans allows nurses to play a pivotal role in supporting patient safety and well-being, while also contributing to public health goals of reducing health risks and improving quality of life for at-risk populations. Overall, promoting access and awareness to such preventative resources contributes to the broader goal of improving health outcomes and fostering healthier communities.

Autumn Frailey '25

5

Faculty Sponsor: Professor Susan Scott

Family Presence During Resuscitation

Family Presence During Resuscitation (FPDR) is when a family is permitted to be present with their loved one during cardiopulmonary resuscitation. In the past FPDR was not practiced out of concern that the family would be traumatized or that family members would interfere with the success of the resuscitation process. The evidence does not support this. It has been shown that family presence does not change the outcome of the patient's resuscitation. Surveys have revealed support FPDR by health care workers, patients and families. There is mixed evidence around FPDR leading to psychological trauma to family members who are present, but based on existing evidence, policies should be put in place to support FPDR and should include a healthcare team member who is designated to support the family member who is present during the resuscitation.

Autumn Frailey '25, Abby Work '25

6

Faculty Sponsor: Professor Jamie Rivera

Dengue Fever

Dengue Fever is an illness passed onto people from mosquitos. Dengue Fever is a concern for people who live in the Caribbean, Africa, South America, and Pacific Islands. For most people Dengue Fever is mild and can be treated at home with rest and hydration. But for a small group of people Dengue Fever can be severe, destroying platelets. Destruction of platelets can cause internal bleeding resulting in hemorrhaging and shock. Patients may need to obtain a blood transfusion if they begin to hemorrhage. Unfortunately, it is not known who will have a severe case of Dengue so prevention is key. Prevention includes making sure there are screens on windows and doors, getting the vaccine, and avoiding mosquito bites.

In order to spread more awareness about Dengue and prevention we created a pamphlet to educate the public in Puerto Rico when we went there for clinical over spring break. The pamphlet outlines the definition, transmission, signs and symptoms to look out for, signs and symptoms that require immediate medical attention, treatment, and prevention. We printed these pamphlets in both English and Spanish. We also provided additional handouts from the CDC website for more information and provided free bug spray.

Shaniah Mendez '26, Jennelle Dillard '27, Gabrielle Dumont '26, Sophia Guy '26, Aaliyah Davis '26

85

Faculty Sponsor: Professor Joan Kuhnly

Implementing the Best Interpreter Program for Non-English speaking Patients

Our topic addresses language barriers in healthcare that may impact patient health outcomes and the patient-nurse relationship. We posed this question because we wanted to understand how patients feel when they recognize a language disconnect between their provider or nurse, with the solution being either a virtual or an in-person interpreter. What makes our project unique is that this is an ongoing issue in the healthcare system. Ultimately, the goal of healthcare providers is to deliver ethical and safe patient care; to achieve this, effective communication is essential for assessing patient needs and evaluating treatment outcomes. We agreed that consistency in interpreter services is necessary, and that translators should be well-versed in various dialects of the language they are translating.

Our proposed data collection method involves gathering qualitative feedback from patients in long-term care settings who require translators, along with researching available literature on the topic. We would develop surveys for patients who used either virtual translation or in-person translation services to complete during their discharge process, allowing them to share insights about their experiences with their chosen type of translator. We expect to conclude that patients with access to an in-person translator experience better health outcomes. We anticipate results that show in-person interpreting fosters more trust from the patient, encouraging them to open up about their feelings (Choi & Lee, 2023). The in-person interpreter enables the patient to feel heard. Feeling understood is essential for building trust among the patient, the interpreter, and the healthcare team, which ultimately leads to improved patient health outcomes.

Morgan Austin '27, Ella Chew '27, Jacqueline Roccabruna '27, Andrew Roddie '27

101

Faculty Sponsor: Professor Jennifer Pappas

Pharmacies impact on promoting public wellness

Healthy people 2030 is working towards promoting a healthier, more well-sustained population. One of the main concepts is to increase the proportion of people who get the influenza vaccine every year. To tackle this objective, increased education about vaccinations as well as promoting access to immunizations through local pharmacies will increase the percentage of the population who are vaccinated each year. By increasing influenza vaccination rates, we can achieve an increased herd immunity within our communities. This will reduce the number of individuals infected with influenza and protect those who are unable to get the influenza vaccine due to health restrictions. The influenza vaccine provides the antibodies necessary to fight off the virus, lowering the risk of getting the influenza, as well as severity. Research looks at the social determinants to health that prevent individuals from getting the vaccine; while also looking at the impact of pharmacies on reducing the social determinants of health. Common social determinants to health include lack of transportation, low income, lack of support system, lack of resources and knowledge all affect the health and well-being of our nation. Assessing vaccine hesitancy and fears that are associated with getting the influenza vaccine. The need for education within the public about the influenza vaccine is incredibly important to reduce fears and concerns of the influenza vaccine. Education can also increase the proportion of individuals who receive the influenza vaccine. Through efforts to increase the proportion of individuals who receive the influenza vaccine, population health is also improved. Pharmacies within

the local communities promote wellness, vaccinations and education, helping to achieve the healthy people 2030 objective of 70% vaccination rate.

Hailey Mann '27, Christine Buzulan '27, Riana Austin '27

115

Faculty Sponsor: Professor Jennifer Pappas

Reduce household food insecurities and hunger

"Food insecurity is more than just hunger, it is a widespread issue that affects millions of individuals and families, impacting their health, well-being, and quality of life. It often occurs when people lack reliable access to enough nutritious food to sustain an active and healthy life. More than just skipping meals, food insecurity is deeply connected to economic hardship, limited access to affordable healthy foods, and systemic inequalities. Individuals struggling to afford food are often forced to choose between paying for rent, medicine, or meals. This can lead to malnutrition, increased risk of chronic diseases like diabetes and hypertension, and mental health challenges such as stress and anxiety. Located in Chicopee, Massachusetts, Lorraine's Soup Kitchen and Pantry provides meals, groceries, and support to anyone facing food insecurity. Every day, individuals and families in the community struggle with food insecurity. For over 30 years, Lorraine's has served the community through their pantry and soup kitchen. They connect with donors and supporters, offer assistance to families and neighbors, and help lead the fight against food insecurity. The kitchen serves hot meals to the community every evening, while the pantry provides groceries to families and individuals struggling to put food on the table. Their mission is simple: to fight hunger and assist with dignity and respect. Through the support of donors, volunteers, and community partners, Lorraine's ensures that no one in Chicopee goes hungry. Healthcare professionals, particularly nurses, have a unique opportunity to mitigate food insecurity's impact on health. Nurses can identify at-risk patients, provide education on nutrition and resource accessibility, and advocate for systems that will help find solutions for food insecurity as a public health issue. By fostering community engagement and connecting individuals with support systems such as Lorraine's, nurses contribute to long-term health improvements and social equity. Addressing food insecurity is not only a moral imperative but also a crucial step in enhancing overall public health. Ensuring access to nutritious food can break cycles of poverty, reduce healthcare costs, and build stronger, healthier communities.

PSYCHOLOGY

Serena Roberts '25

134

Faculty Sponsor: Professor Claudia Ciano-Boyce

At Home Art Therapy

This study explores the effects of art therapy as an intervention for reducing stress levels in individuals. Art therapy, a form of psychotherapy that uses creative processes to improve mental well-being, has gained recognition as an effective approach to manage stress. The study investigates the outcomes of an at home option of art therapy for participants experiencing varying levels of stress. Participants were asked to complete stress scales measuring their levels of stress both before and after completing a coloring page provided to them. The findings suggest that engaging in art therapy leads to significant reductions in self-reported stress levels. Moreover, qualitative feedback from participants indicate both a desire to participate in a similar activity when stressed in the future and recommend art therapy as a form of coping with stress to others. This study concludes that at home art therapy can be a valuable tool in stress management, offering an accessible method for individuals to cope with and reduce stress.

Micah Scott '27, Kaitlynn Brooks '24, Cherylan Skrocki '25

Faculty Sponsor: Professor Robert Hayes

Stigma Directed Toward Chronic Illness: 2025 vs. 2002

In the mid-1980s, research reported that people living with HIV were viewed differently on measures of competence, depression, morbidity, dependance and moral worth when compared to those living with heart disease and/or cancer. By 2002, research revealed that these differences were minimized, except when it came to considering moral worth. This cross-sectional study seeks to determine whether there have been any changes over the last 25 years. 500+ participants aged across the lifespan were surveyed using the identical instruments in earlier research. The usefulness of imaginal exposure, i.e., imagining a loved one living with HIV produced more favorable attitudes toward those living with HIV. It is hypothesized that imaginal exposure will still produce similar results. It is also hypothesized that differences in moral worth toward individuals living with HIV will not be significant, i.e., factors across the last 25 years have reduced stigma. These factors, as well as strengths and limitations of this research are discussed.

Katherine Canty '25

21

Faculty Sponsor: Professor Claudia Ciano-Boyce

Student-Athlete Mental Health (CHP)

Student-athletes face unique mental health challenges due to the demands of balancing academics and athletics. This study examines the importance of mental health services for student-athletes at Westfield State University and explores ways to improve accessibility and utilization. Survey results indicate that while 100% of student-athletes reported awareness of available mental health services, 61% admitted to not utilizing them. Additionally, over 50% expressed interest in accessing a nutritional specialist if offered by the university. These findings highlight potential gaps in current support structures and suggest that expanding service offerings and improving engagement strategies could enhance student-athlete well-being. Insights from this research will help inform university efforts to ensure more effective mental health support tailored to student-athlete needs.

Lexus Mastromatteo '25Oral
Presentation

Faculty Sponsor: Professor Thomas Alex Daniel

Caffeine Improves Attentional Consistency but Not Working Memory

For most college students, caffeine is a staple of daily life (Godson, 2022). Caffeine is a stimulant characterized by its ability to reduce fatigue and increase alertness (dea.gov). Past research has shown caffeine to reduce latency in an attentional bias task, such that participants that drank caffeine respond more quickly than participants that drank a placebo (Lorist et al., 2003). More recent research in the field of attentional bias has emphasized the role of attentional variability, which is the fluctuation of attentional processes overtime. We hypothesized that participants that drank coffee would exhibit reduced attentional variability as well as faster reaction times. College students were randomly assigned to two groups: a caffeine group and a decaf (placebo) group. They then participated in a traditional dot-probe task, by which their reaction time was measured across three trial types: uncued trials, cued trials, and distractor trials. Participants were also given two additional tasks that measure short-term memory and prospective memory. Like previous literature, we found that participants who consumed caffeine responded faster across all trial types. They also demonstrated reduced attentional variability compared to the control group, confirming our hypothesis.

SOCIAL WORK

Alexis Leonard '25

Faculty Sponsor: Professor Maureen Clark

Anxiety and Stress in College Students

The study explored college students' anxiety and stress, comparing levels at the start versus the middle of the year. I chose this topic to see when students feel the most stressed during the school year. This study helps show when college students feel more stressed, guiding professors and counselors in providing better support. There were 25 students in an Introduction to Social Work class from Westfield State University that were a part of the sample study. They completed a survey that asked them to rate their academic stress. The majority of the results found that academic stress decreased from the start to the middle of the school year. The results showed that while overall academic stress decreased, students became a bit more anxious about the future as the school year progressed. Providing additional support such as workshops based on stress and anxiety and promoting on campus support (counseling center, Banacos, etc.) throughout the school year for students could be beneficial in decreasing their stress.

10

Isabella Moniz '25

Faculty Sponsor: Professor Maureen Clark

Resilience in Transition: A Qualitative Study of Young Adults with Experience in the Department of Children and Families.

This study is aimed at examining the qualitative as well as some quantitative data related to the resiliency in young adults with involvement in DCF services. The significance of this study is to better understand the driving forces behind those with little or no natural life supports to be able to meet their needs. This research aims to bring awareness to the resiliency of a population that is often not studied and how resiliency is defined by these participants.

13

José Rosario López '25

Faculty Sponsor: Professor Maureen Clark

Empowering Life Skills for Unhoused Veterans

This exploratory study aims to assess the need for Life Skills Training (LST) as a potential tool for addressing homelessness within the veteran population of Western Massachusetts. LST has the potential to empower unhoused veterans by helping them regain their independence. A life skills-focused program could equip veterans with the necessary tools to re-enter the workforce by providing training in resume building, job interview preparation, and effective job search strategies tailored to their unique skill sets. Additionally, LST could serve as a mechanism for enhancing financial literacy, offering veterans education in budgeting and money management. Furthermore, LST could help alleviate the social stressors that hinder successful reintegration by incorporating training in time management, effective communication, and conflict resolution, thereby supporting veterans' transition into social and professional environments.

14

Crystaliz Ortiz '26

Faculty Sponsor: Professor Vanessa Robles

Educational Challenges Within Hispanic Families

This research project will examine the experiences of Latino students attending Westfield State University who have experienced educational challenges in their educational careers. The study will be conducted using qualitative analysis from interviews to gain an understanding of the causes and barriers to the social issue. Participation is voluntary, including current Westfield State University students and WSU staff or faculty who self-identify as Hispanic. Participants will be diverse in gender roles, socioeconomic class, and age range, from 18+. Findings from this research will inform a club on campus called the Lafe and other programs on the Westfield State campus that support the needs of these students. The club was created on campus for Latino students to have a safe space and environment to embrace cultural richness and diversity. Results will help inform will inform a club on

campus called the Lafe and other future programs on the Westfield State campus that support the needs of diverse students. Additional findings will enhance the cultural diversity among educators in educational settings in the future. Findings will provide insight to help all current and future Latino students at Westfield State of inherited struggles in their educational journey and how it is possible to overcome academic struggles within Hispanic family dynamics.

Julia Montanez-Brown '25

26

Faculty Sponsor: Professor Maureen Clark

Examining the Impact of College Support Systems on Students Transitioning Out of Foster Care

Students with foster care experience face unique challenges in higher education, including financial instability, housing insecurity, and limited access to mentorship. This study explores the effectiveness of college-based support systems in addressing these challenges. Using a qualitative research approach, semi-structured interviews were conducted with 50 college students who have experienced foster care. Thematic analysis identified key findings, including the positive impact of mentorship, the barriers posed by financial aid complexity, and the ongoing issue of housing instability. The study highlights the need for increased awareness of available resources, expanded financial and housing support, and the development of structured mentorship programs. By addressing these gaps, colleges can improve educational outcomes for foster youth, leading to higher retention and graduation rates. This research contributes to the growing body of knowledge on foster youth in higher education and provides actionable recommendations for policy and practice improvements.

Sthela Sibley-Welch '25

30

Faculty Sponsor: Professor Maureen Clark

What is the impact of art therapy on mental health?

Art therapy can range from claymation to painting and is defined as “a psychotherapy that uses art media to promote expression and communication to support people in distress” (Ursuliak et al., 2019, as cited in Attard & Larkin, 2016). This research explores the impact of art therapy on mental health by conducting interviews with art therapists and gathering insights from the general public. While prior research suggests its effectiveness in treating conditions such as depression and schizophrenia (Hu, 2021), further evidence is needed to substantiate its efficacy.

This study examines the specific populations and disorders for which art therapy is most beneficial. By integrating professional insights with public perspectives, it seeks to assess public awareness and identify disconnects between clinicians' perspectives and public perceptions of this treatment, which emerged in the 1940s (Bitonte & De Santo, 2014).

A mixed-methods research design will be used. Convenience sampling will recruit general public participants through paper and online flyers linking to a survey. Additionally, art therapists will be recruited for interviews via phone calls. The goal is to conduct five interviews, though all collected data will be used. Survey responses will be submitted electronically without requiring names, ensuring confidentiality. Interview participants will sign consent forms, and all interviews will be audio recorded and deleted after data analysis."

Donald Goyette '25

81

Faculty Sponsor: Professor Maureen Clark

Perception & Prevention: Exploring Sexual Assault Among College Students

On college campuses sexual assault is now being identified as one of the most rapidly growing problems in the United States. According to Baldin-White's (2021) academic article "College Students and Their Knowledge and Perceptions about Sexual Health" 1 in 4 women will experience sexual assault in their lifetime, with the rates being even higher among an undergraduate population. Statistics from the U.S Department of Justice indicate that over 99% of these crimes are perpetrated by

men. Sexual assault, due to its sensitive and private nature, is also one of the most under-reported crimes both on college campuses and among the general population. Access to substances like drugs and alcohol, social settings like parties and gatherings, and organization like Fraternities, are all contributing factors that increase risk for sexual assault on college campuses. In response, college campuses have implemented prevention programs to educate students on the prevalence of sexual assaults and ways to prevent and address incidences of sexual assault. Post pandemic, many universities, including Westfield State University, transitioned to mandatory online sexual assault prevention training programs for students. It is unclear if doing so has had an impact on the accounts of sexual violence on campus. The major aims of this study are two-fold; one, to better understand the perceptions and experiences of sexual assault on college campuses, and two, to elicit feedback on this change to the online training program. Furthermore, the study hopes to both contribute to the existing body of knowledge, as well as expand on it to provide greater understanding of student perceptions, experiences, and effective prevention strategies.

Laura Bellefleur '25

82

Faculty Sponsor: Professor Vanessa Robles

Beyond the Badge: How Mental Health Stigma Shapes the Perspectives of Criminal Justice Majors
Beyond the Badge: How Mental Health Stigma Shapes the Perspectives of Criminal Justice Majors, explores the experiences of senior Criminal Justice majors at Westfield State University, focusing on the role of mental health within their field. Utilizing qualitative methods, the research aims to examine the support systems, barriers, and needs of these students as they prepare for careers in law enforcement and related professions. A key focus is the impact of mental health stigma, which has historically been ingrained in law enforcement culture, discouraging officers from seeking necessary support. Previous research indicates that this stigma persists despite the growing awareness of mental health challenges among officers, contributing to adverse outcomes such as high rates of stress, PTSD, and suicide. This study aims to inform campus support services, curriculum development, and interventions that promote mental well-being among students before they transition into the workforce. The study found that most students perceive a stigma surrounding mental health and recognize the need for more academic resources on mental health support, including information on vicarious trauma. The findings have the potential to contribute to a broader understanding of how to break down barriers to mental health care within the Criminal Justice system, ultimately fostering a healthier and more resilient professional environment.

Timothy Allen '25

91

Faculty Sponsor: Professor Vanessa Robles

Does Masculinity Affect Men's Mental Health

The researchable question I have chosen is based on men's mental health in the United States. Do men seek help for their mental health? In the United States, men's mental health has been overlooked for an extended period until this generation, whose awareness of mental health is highly more recognizable. However, male mental health is sought more than it used to be; a lot of men still hold on to their emotions because that is what they were taught: to show strength in the hard times that they have faced. Although mental health in males gets overlooked because they are less likely to seek treatment than women, it is essential to engage with these individuals because depression and suicide are ranked as the leading causes of death among men. Six million men are affected by depression in the United States every year. This Case Study hopes to determine if men engage in treatment for their mental health after exposure to traumatic experiences. This researcher uses secondary data and compares it to the themes identified by the research participants. The data collected suggests that men are less likely to seek treatment because of the lack of support in the community or because of the stigma of how men should handle their mental health. "The view that men have on how they should handle their mental health is that they should be strong and push their emotions down so they don't have to process it because in their very showing your emotions is a sign of weakness".

Nadia Ramos '25

Faculty Sponsor: Professor Vanessa Robles

Link between Unjust Healthcare Treatment of Women of Color and Their Substance Use

Many women of color have reported experiencing racism and sexism, many of the records being from their experiences with the United States healthcare system. Using thematic analysis, interviews were conducted with medical professionals of different backgrounds who have more than ten years of experience in the healthcare system. Statements were collected from these medical professionals about their accounts on the subject of sexism and racism in the healthcare system and the possible connection to women of color and their substance use disorders. The comprehensive hypothesis was to attain more insight into the correlation between the healthcare system and substance use disorders in women of color. Limitations within the data collection included the lack of women of color with substance use disorders. The expectation for this research is primarily to inspire more in-depth studies on the subjects of women of color and their treatment by the healthcare system, along with research diving into their developed substance use disorders. More research would be crucial to create a more solidified understanding of correlations between healthcare injustices and substance use disorders among women of color.

121

Cassandra Eyma '25

Faculty Sponsor: Professor Maureen Clark

An Evaluation of WSU Basic Needs Resources

Basic needs insecurity is described as a lack of access to healthy food, stable housing, transportation, affordable child-care, health services, technology, and any other necessities for students in a postsecondary school setting. Basic needs are typically separated into two categories, food and housing, which are the avenues that college campuses focus on when trying to provide resources for their students. In a national study that researched 4-year universities and community colleges in the U.S., it was found that 42% of students were food insecure, 46% were housing insecure, and 12% were homeless at community colleges. For university students, 36% were food insecure, 36% were housing insecure, and 9% were homeless. Westfield State University is a medium sized liberal arts school in western Massachusetts with an undergraduate population of just under 4,000 students. WSU provides basic needs services for students including TRIO, which is a federally funded program that provides academic support to low-income, first generation, and disabled students. WSU also provides a campus wide food pantry. In this study, students will complete surveys discussing their basic needs experiences and to what extent they utilize campus resources. Faculty interviews will be conducted to discuss programs available to students, and demographic information will be compared to use of programs to assess whether or not campus initiatives are reaching vulnerable populations or provide adequate resources. The goal of this research is to assess the usefulness of basic needs resources on the Westfield State University campus.

123

Kamila Forfa '25

Faculty Sponsor: Professors Jennifer Propp and Vanessa Robles

Self-care in BSW & MSW

Self-care is an aspect of social work that is spoken to all students from the very beginning of their social work journey at Westfield State University. Within my study I had 43 participants 37 from the BSW program and 6 from the MSW program. Participants had varied in age from 18 to 45. In an existing study, research shows that most students reported that they get 6 hours or less of sleep. Participants who took part in this study were able to conclude that little sleep has an effect on their mood, anxiety, and depression (Spadola, et.al, 2023). This study aims to look at the differences in self-care with BSW & MSW social work students. This is a quantitative study where information on self-care was gathered through a survey using a rating scale. Findings within my study on self-care were that all social work students at an average of 69% all eat regularly (breakfast, lunch, and dinner) and an average of 66% of students feel that they get enough sleep. Other findings within this study were that all social work

students on an average of 60% of students say that they try to minimize stress in their life and an average of 63% of students said that they ask for help when they need it. These findings highlight the importance of self-care for social work students which can inform how universities teach and support self-care for social work students in their BSW and MSW programs.

Shayan Grayson '25

124

Faculty Sponsor: Professor Vanessa Robles

Secondary Traumatic Stress, Compassion Satisfaction, and Burnout at a Family Support Services Office in Springfield MA.

Compassion satisfaction, secondary traumatic stress, and burnout are all prevalent constructs proving thematic for professionals as a result of providing human services. In Springfield, Massachusetts providers of Family support services at a behavioral health clinic render services that facilitate the manifestation of each of these constructs. This study utilizes quantitative analysis through google forms to explore the rates and possible contributing factors to secondary traumatic stress, compassion satisfaction, and burnout with consideration for the unique barriers to resources professionals are met with would allow for implications to be made in how to better support employees in the CSO Springfield Family Support Services office. Data was collected through the use of a demographic questionnaire and the Professional Quality of Life (proQOL) Test, which assesses secondary traumatic stress, burnout, and compassion satisfaction. A comparison was made between the results of the demographic questionnaire relating to frequency of client sessions, duration of time working in Springfield, nativity to Springfield, and diagnosed mental illness and the scores of the proQOL to make inferences about the connectivity of the constructs and factors relating to the workplace. The assessment results showed that 75% of respondents reported an average level of compassion satisfaction. Additionally, 66.7% experienced an average level of secondary traumatic stress, while 33.3% reported low burnout levels. Adversely, 58.3% experienced an average amount of burnout, and 8.3% reported a high level of burnout. Furthermore, 83.3% of the respondents were not native to Springfield, and 83.3% work full-time at CSO. Findings from this study advance our understanding on the impact each construct has on the professionals at CSO and allows for implications on how CSO can better support employees in the face of secondary traumatic stress, burnout and compassion satisfaction with consideration for the setting of service.

Hannah Cheney '25

139

Faculty Sponsor: Professor Vanessa Robles

Trauma Informed Organizations: An Assessment of the West Springfield Boys and Girls Club

The West Springfield Boys and Girls Club (WSBGC) currently serves around 600 children from the West Springfield community. A large portion of the children at the WSBGC are part of marginalized communities, and face systemic oppression from racism, sexism, poverty, and/or the child-welfare system. Research states that exposure to traumatic experiences are more likely to occur within marginalized communities. A major component in reducing the adverse effects of childhood trauma is implementing protective factors that foster resilience, like delivering Trauma-Informed Care (TIC). The purpose of this study was to assess the knowledge, attitudes and beliefs the director's level of leadership had surrounding Trauma and Trauma-Informed Care as individuals and an organization. Participants were instructed to complete a 57-question Likert scale survey before and after a presentation on Trauma and Trauma-Informed Care was delivered. Survey results indicated that the majority of participants cared about providing TIC but lacked the knowledge on how to practice it as well as the proper training opportunities to be educated on it. However, some participants indicated that they don't feel TIC is necessary to practice within their job role. After the presentation was delivered data results confirmed a decrease in that belief. These results shed light on the areas the organization is lacking when it comes to TIC, in addition to highlighting where its strengths lie. This study may inform the WSBGC's future decisions concerning training, allocation of funds, and new

Fikiri Amisi '25

140

Faculty Sponsor: Professor Vanessa Robles

The Impact of Refugee Life on Youths

This study explored the multifaceted impact of refugee life on youth, focusing on psychological well-being, educational attainment, and social integration. Refugee youths represented one of the most vulnerable global populations, as they often faced war, political instability, and forced displacement due to climate change. The research employed a quantitative survey method and collected data from English-proficient refugee youth participants at the Jewish Family Service of Western Massachusetts. The surveys addressed mental health status, educational challenges, social experiences, and past life in refugee camps. Key findings revealed a high prevalence of mental health concerns such as depression, anxiety, and post-traumatic stress disorder (PTSD), which were linked to both pre- and post-migration trauma. Participants encountered educational obstacles, including enrollment barriers, language difficulties, and inadequate resources, all of which limited their academic progress and future employment prospects. Socially, refugee youths experienced isolation, exclusion, and cultural disconnection in their host communities, which intensified feelings of loneliness and alienation. The study highlighted the critical need for trauma-informed, culturally competent mental health services, as well as academic and language support in schools. It also underscored the importance of inclusive policies that supported integration. These findings aimed to inform policymakers, educators, and community organizations, encouraging targeted interventions that promoted resilience, belonging, and long-term success for refugee youths.

Lillian McDonnell '25

17

Faculty Sponsor: Professor Vanessa Robles

Barriers to Accessing Mental Health and Social Services from the Perspective of Mental Health Professionals and Social Workers

Objectives: Barriers to accessing mental health and social services from the perspective mental health professionals and social workers research study was created to examine and seek to discover the barriers that exist preventing individuals from gaining access to social services, community, and mental health services. This study looks at the perspective of what service providers feel are the barriers in connecting their clients to these services. Accessibility to services, and what are the recommendations to overcome these barriers.

Methods: Methods that were used in this research project were a survey that contained both open ended (qualitative) and closed ended (quantitative) questions. Quantitative data was collected and analyzed through Google Forms. Google was the tool chosen for this process because it is user-friendly and has the ability to automatically collect and organize data in real time. Open ended questions were identified through analysis of common themes within the open- ended responses within the survey. Participants for this study were staff at Clinical Support Options, a non- profit behavioral health agency located in Springfield MA. This study had 9 participants in total.

Results: of this study identified/ suggested that systematic barriers and challenges hindering access to services were insurance limitations, lack of insurance coverage. Challenges pertaining to coordination between schools and providers. Additional challenges addressed were the housing crisis and language barriers between provider and clients. Suggestions to address these barriers by participants within this study included improving staffing, better insurance coverage, stronger partnerships across institutions, and including access to interpreters in services.

Implications: Implications from the results of this research study point towards suggestions to

addressing these barriers by improving staffing, better insurance coverage, stronger partnerships across institutions, and including access to interpreters in services, reducing the stigma associated with services by advocating for more awareness and surrounding mental health and social services.

Iris Cerda '25

22

Faculty Sponsor: Professor Maureen Clark

How Effective Are Social Programs in Reducing Loneliness Among Older Adults?

This study explores the impact of social engagement programs on reducing loneliness among older adults aged 60 and over. The research involved surveying 10-15 participants actively involved in social programs. The survey assessed participants' feelings of loneliness, access to social support, and perceived benefits of program involvement. Findings indicate that while most participants reported reduced feelings of loneliness through program participation, some still experience social isolation. The study highlights the importance of expanding and enhancing social programs to foster stronger connections and support networks for older adults.

Olivia Fay '25

60

Faculty Sponsor: Professor Maureen Clark

Coping With Loss

Grief is a complex emotional response to loss, and for college-aged students (18–25), navigating this experience can be particularly challenging as they balance academic, social, and personal responsibilities. This study explores the coping mechanisms and support systems utilized by college students following the death of a significant person in their lives. Through a survey-based methodology, data were collected from participants who have experienced grief within this age range to examine their coping strategies, access to support, and perceived effectiveness of available resources. The findings highlight common coping mechanisms, including social support, therapy, and personal resilience strategies, as well as barriers students face in seeking help. Additionally, the study assesses the role of institutional support, such as counseling services and peer networks, in facilitating the grieving process. By identifying both effective and insufficient areas of support, this research aims to inform educational institutions and mental health professionals on how to better assist grieving college students.

Seth Harris '25

32

Faculty Sponsor: Professor Vanessa Robles

What Are the Barriers for Students with a History in the Foster Care System in Successfully Graduating College?

This research explores the barriers faced by college students with a history in the foster care system and how these challenges affect their ability to graduate. Nationally, over 340,000 youth are in foster care, with approximately 20,000 aging out each year. Many of these individuals experience significant emotional, social, and financial instability due to early experiences of abuse, neglect, multiple placements, and disrupted education. These factors often lead to struggles with mental health, substance use, low self-esteem, and a lack of stable housing or employment. Through a questionnaire distributed to six college students with foster care experience, this study examines how financial hardship, mental health challenges, lack of family support, and housing insecurity impact educational attainment. The goal of this research is to highlight the specific needs of this population and propose strategies for colleges and universities to provide better support. Findings may inform future policy changes and institutional practices aimed at improving graduation rates and long-term outcomes for students from foster care backgrounds.

Rona Poku-Mensah '25

Faculty Sponsor: Tamara Smith

Why is There a Higher Mortality Rate for Black Women & Babies in the US

Black women in the United States are three to four times more likely to die from pregnancy-related complications than white women, and Black infants are over twice as likely to die before their first birthday. These disparities persist across income and education levels, revealing a deeper issue rooted in systemic racism, implicit bias in healthcare, and unequal access to quality maternal care. This presentation explores the historical and social determinants contributing to these alarming rates, including chronic stress from racial discrimination, lack of culturally competent care, and underrepresentation in medical research. By highlighting real stories, current statistics, and community-driven solutions, this talk aims to spark dialogue and encourage actionable change to protect the lives of Black mothers and babies.

WALL OF WORDS

THE WALL OF WORDS POSTERS ARE LOCATED ON THE RIGHT SIDE OF THE ROOM

The Wall of Words is a collection of verse and prose poetry culled from current writing workshop students' work. Audience members are encouraged to ask the poets and authors about the forms they wrote in, the inspiration for their works, if they had a model text they were working from. . . and of course, asking about specific themes or imagery is always welcome. Our talented poets and writers develop their pieces in studio workshop sessions, getting feedback from their professors and classmates, but we are grateful to have an expanded audience for student creativity at CURCA!

-Professor Michael Filas (English)

ENGL English Literature Presenting 1:45-2:45 Professor Michael Filas		ENGL Creative Nonfiction Presenting 1:45-2:45 Professor George Layng		ENGL 130-001 Presenting 3:00-4:00 Professor Leah Nielsen		ENGL 130-003 Presenting 3:00-4:00 Professor Leah Nielsen	
201	Ava Reich '27	239	Faith Roy '25	200	Anna Sellon '25	230	Caroline Gius-Chavez '28
203	Alicia Beaton '27	241	Eli Pease '26	202	Lia Steskla '27	232	Grace Lawrence '28
205	Angelina Williams '28	243	Justin TerVeen '25	204	Daniel Rojas Ugalde '26	234	Zoë Welts '28
207	Sicilia Campbell '28	245	Maia Soucy '25	206	Seven Randall '28	236	Madeleine Frye '28
209	Caitlyn Hanna '27	247	Caitlyn Chu '25	208	Mia Goddeau '28	238	Joseph D. Antonellis '27
211	Grace Vitorino '25	249	Joseph Antonellis '27	210	Sarah Lopez '28	240	Destiny La Nay Tetlow '26
213	Faith Roy '25	251	Sydney Wietecha '27	212	Nicholas Chaffee '28	242	Dalyan Babcock '25
215	Katelyn Beddia '25	253	Thomas Parent '25	214	Kade Vieira '28	246	Tempest Curzio '27
217	Jayda Mazzarella '25	255	Summer O'Neil '25	216	Cassadi O'Leary '26	248	Cam Haley '28
219	Joey Testa '27	257	Nicholas Marshall '25	218	Caroline Galvani '28	250	Greg Marengi '28
221	Tierney Boyle '26	259	Grace Peltier '25	220	Jasper Russo '28	252	Chelsea Smart '26
223	Lee Gould '27	261	Jason Brewster '25	222	Bethany Cardoza '27	254	Maya Reissner '26
225	Madison Dudley '26	263	Maddy Hall '25	224	Nick Hunt '28	258	Liv Carney '28
227	Molly Moulin '2			226	Iris Turnberg '28	260	Daniel Santiago '28
229	Courtney Berthiaume '26			228	Shane Thompson '28	262	Jaylin Carlin '25
231	Sam Westervelt '25						
233	Sean Koperek '25						
235	Crystal Betancourt '25						
237	Fatima Ali '26						

Westfield State University is delighted to be hosting guest CURCA submissions from Holyoke Community College.

Presenting from 3:00-4:00 p.m. are:

- Owen Bannish (#244)
- Kasey James (#256)

Thank you to Professor Dave Champoux, Creative Writing Advisor from HCC, for your help in facilitating this collaboration!

HOW TO INTERACT WITH THE WALL OF WORDS:

Please ask us about our poetry and short prose! Ask our student writers if one of the works on display is by them, and even if their work is not on display, please ask questions!

Some possible questions to ask a poet or creative author:

- Ask about the form of poem.
- Ask about the rhyme scheme and rhythm.
- Ask about their inspiration for the work.
- Ask them about their writing habits.
- Ask them about their biggest writing challenges.
- Ask them about their writing goals.
- Ask what changes they made when revising.
- Ask about the symbolism
- Ask about the themes.
- Ask about the language.
- Ask about the line breaks.
- Ask about what they left unsaid.
- Tell them what you think

THANK YOU
to all students, faculty members,
and supporters of CURCA

