

OFFICE OF THE PRESIDENT

December 9, 2022

Dear Campus Community:

Telling the story of Westfield State University by creating and showcasing the wonderful work of our faculty and students is a vital part in how we communicate with our community. Our faculty consists of some of the brightest and most innovative individuals in higher education, and our students consistently rise to the challenges presented to them.

I am honored to present the wonderful work of the Center for Undergraduate Research and Creative Activity committee (CURCA) and its director, Dr. Lamis Jarvinen, for this celebration of learning and scholarship.

The necessary role of public state universities in developing intelligent, well-reasoned, purposeful citizens cannot be overstated. We all appreciate and understand the importance of building a citizenry of creative, lifelong learners. Our students are often purposeful contributors to our communities and continue to build on the skills and lessons learned through hard work and dedication.

We are a University of IDEAs. Our practices through “Innovation,” welcoming “Diversity,” “Engaging” with our campus community and beyond, and “Advancing” those concepts through the voice and actions of skilled and capable individuals are what makes our University unique.

I offer congratulations to all that subscribe and lift our mission and values to the highest level. To highlight our intellectual curiosity shows the world that we are capable of great things.

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

Warmly,



Dr. Linda Thompson
President

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CENTER FOR UNDERGRADUATE
RESEARCH AND CREATIVE ACTIVITY

Welcome to our 2022 Fall CURCA Celebration!

The CURCA celebration is an exciting time for our campus as we gather to showcase the research and creative work of Westfield State students across all disciplines. On behalf of the CURCA committee, congratulations! It is an honor to host this student event and to highlight WSU's commitment to providing high impact practices and experiences.

All participating students have explored the process, research, outcomes, and application of their knowledge and creativity to real-world issues. Whether through classroom-embedded work, independent research, or internships, these experiences provide students with an opportunity to develop and demonstrate their skills while gaining a deeper understanding of their field of study.

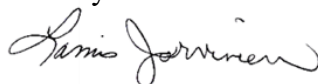
We are excited to be in person to showcase the work of over 300 students, presenting over 150 diverse research and creative projects along with 52 original works of poetry displayed on the Wall of Words. Our Celebration is enriched with our keynote speakers, Chief of Staff Dr. Michael Freeman, English Major Grace Templeton '22, and our selected poets English Majors Alexis Crafts '24 and Liam Foskett '24. Additionally, art and photography student work will be displayed in Arno Maris Art Gallery with creative theater work displayed outside of the Gallery. Our student-run *Persona* will host an open mic poetry event in the Black Box Theater.

Acknowledgements

There are so many people to thank! First and foremost, thank you to the students for your contributions and to faculty mentors for your tireless work ensuring project engagement and success! Thank you to President Dr. Linda Thompson and Academic Affairs for prioritizing undergraduate research and creative activity through funding and advocacy. The dedicated CURCA advisory board members; Prof Roderico Acevedo, Prof Lisa Barao, Prof Anthony Furnelli, Dr. Lamis Jarvinen, Prof George Ramirez, Prof Jason Ramsey, and Prof Amanda Salacinski for your insights, contributions, and advocacy. Thank you Lisa McMahan and Bill Hynes, Office of Advancement, for your generous support, Cindy Vanbeek and all the generous volunteers for helping to make this a success! Prof George Ramirez, thank you for the beautiful booklet cover design!

Special thanks to Tony and Bob in the Copy Center for their amazing ability to produce excellent work on short notice, to Facilities and Operations staff for preparing the Celebration space, the Chef and Catering staff led by William Connor, Chris Hirtle and his staff in Media Services, David Shapleigh and Faith Lund for facilitating us in the Art Gallery, the Marketing and Social Media staff including Leslie Rice, Alyssa Goodreau, David Friedman, and Greg Sanocki.

Thank you all!



Lamis Jarvinen, Ph.D.

Director, Center for Undergraduate Research and Creative Activity

Fall 2022 CURCA Celebration Program

Registration and Poster Setup

12:00 – 1:00 pm Registrations & Poster Setup Ely 1st Floor Lobby

Opening Ceremony

**1:00 – 1:50 pm Welcome Remarks Ely 2nd Floor, Black
Dr. Lamis Jarvinen, CURCA Director Box Theater
Dr. Michael Freeman, Chief of Staff
Grace Templeton '22, Student Keynote
Alexis Crafts '24, Student Poet
Liam Foskett '24, Student Poet**

Oral Presentations

**2:00 – 2:10 pm LJ Claudio '25, English Arno Maris Gallery
Poems: A Collection on Language**

**2:10 – 2:20 pm Taylor Camossi '24, Biology
Identifying An Insect Adaptation for Inhabiting Marine
Environments in the Small Cabbage White Butterfly**

Poster Presentations & Wall of Words

**2:10 – 3:00 pm Poster Presentations (Odd #s Present) Ely 1st Floor
Wall of Words Group I Ely 2nd Floor Lobby**

3:00 – 3:10 pm Intermission & Change in Posters

**3:10 – 4:00 pm Poster Presentations (Even #s Present) Ely 1st Floor
Wall of Words Group II Ely 2nd Floor Lobby**

4:00 pm Raffle Prize Drawing Ely 1st Floor Lobby

Poetry Readings

**2:20 – 3:20 pm Open-Mic Poetry Reading, *Persona* Arno Maris Gallery
All welcome to participate**

Photography Artwork

**1:00 – 4:00 pm Student Photography, ART 0215 Introduction Arno Maris Gallery
to photography, Professor Paul Bloomfield**

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*We hope that you can visit projects at your lesiure long after the Celebration is over.
All projects can be found on <http://www.curca.westfield.ma.edu/>*

** = Signifies that a project includes a video or oral presentation on our website*

School of Business, Mathematics, Computing, and Sustainability

Accounting and Finance

Poster No.

Johnston Ziyah '23

5

Faculty Sponsor: Professor James Schlaffer & Professor Leah Neilson

We Still Own This City: The Impact of Police Corruption in HBO's The Wire and We Own This City

My project is going to analyze the similarities and differences of police corruption in season one of The Wire (2002) and We Own This City (2022). Both shows have multiple law enforcement figures that negatively affect the force, the community, and civilians alike, which hinders the effectiveness of policing in Baltimore, MD, the setting for both shows.

Margaret Ahearn '23

6

Faculty Sponsor: Professor James Schlaffer & Leah Nielsen

Dreaming of the Game: Wallace and the Unintended Consequences of Deportation

I will be looking at Wallace, from the hit HBO tv show, The Wire and how his unintended consequences can relate to DACA. Wallace was underprivileged and unable to escape his unfortunate predicament, much like how children in the Dreamers program feel.

Daniel Currier '25

14

Faculty Sponsor: Professor James Schlaffer & Leah Nielsen

Laboratory Lies: The Farak & Dookhan Drug Scandals and The Future of Laboratory Internal Controls

Every day, a team of chemists test samples collected by police officers across the Commonwealth of Massachusetts to verify that they are illicit substances. But how can we ensure that these chemists are conducting accurate tests? This project explores the Drug Lab Scandals that plagued the Commonwealth in the early 2010s and assesses what internal controls can be used to prevent similar tragedies from occurring again.

Nina Cushinsky '23

8

Faculty Sponsor: Professor James Schlaffer & Leah Nielsen

Tracking The Opioid Usage in Maryland and Pennsylvania

Over the past decade, opioid addiction has been the main cause of death in Maryland and Pennsylvania. I will be providing a statistical analysis of the opioid epidemic in these two regions of the US.

Jacob Damelio '25

19

Faculty Sponsor: Professor James Schlaffer

Decriminalisation Without a Plan; Comparing Oregon and Portugal

Oregon's decriminalisation efforts have fallen short due to a lack of preparation and planning. I will examine the differences between Oregon's programme and that of Portugal, which achieved a significant level of success.

Poster No.

- Austin Lourake '24** 17
Faculty Sponsor: Professor James Schlaffer & Leah Nielsen
Police Budgeting Versus Income Dispair in Baltimore
I am looking at different forms of police energy and finding if there is a correlation between Baltimore median income. Then I will compare it to what Baltimore has done wrong over the years to try and fix the war on drugs and look at news methods and solutions to help solve the war on drugs.
- Lydia Walsh '22** 12
Faculty Sponsor: Professor James Schlaffer & Leah Nielsen
The Relationship Between Green Spaces and Drug Use
My project will analyze the relationship between green spaces and drug use. All of my research will come from existing studies about drug use and the effects of green spaces on people's well-being.
- Nora Mulligan '25** 7
Faculty Sponsor: Professor James Schlaffer & Leah Nielsen
Major Weaknesses: Will Boston Public Schools Improvement Plan Resolve Them?
Boston Public Schools has weaknesses in student academic achievement and growth, chronic absences, English Language Learner (ELL) progress, transportation, and properly serving the most vulnerable students. The state wants to take over power over the schools but Boston Public Schools have submitted an improvement plan looking to strengthen their school system, so the question I'm looking to answer is will this improvement plan resolve these issues?

School of Criminology, Psychology, Social Justice, and Public Policy

Psychology

- Paige Walsh '26, Lily Dufresne '26, MaryKate Quinlan '26** 23
Faculty Sponsor: Professor Summer Williams
The Influence of Physical and Neural Responses on Emotions
The current research focuses on emotional responses resulting from the ability to recognize physical and neural reactions to stimuli. Experiments study sexual functioning and dysfunction, the universality of facial expressions, and the use of functional magnetic resonance imaging to identify regions of brain that activate with truth and lies and determine different emotional responses as a result of specific behaviors.
- Kaylee Colby '26, Isabella Piacente '26** 83
Faculty Sponsor: Professor Summer Williams
Families and Communities: Issues with Mental Health and Stigma
The proposed studies will examine mental health perceptions within familial relationships, as well as mental, social and physical health within varying community environments with the goal of understanding mental health stigma and perception.

Poster No.

- Alanna Esdale '24, Trey Faulkner '24, Jenna Hurlburt '23** **51**
 Faculty Sponsor: Professor Princy Mennella
Does Tik Tok Usage Influence Self-Esteem & Physical Appearance Comparisons?
 We examined whether female college students viewing Tik-Tok more frequently are susceptible to low self-esteem and greater physical appearance comparisons.
- Sarah Hough '26, Laila Jenkins '26** **84**
 Faculty Sponsor: Professor Summer Williams
Mental Health Stigma and Judgment: The Role of Culture and Bystander Intervention
 In today's society, judgment from others affects how we make decisions and how stereotypes operate. The current studies will examine mental health stigma within various cultural settings and judgement-based situations in classrooms in regards to bystander intervention.
- Kiara Johnson '24, Gianna Rampello '24, Chloe Benoit '24** **53**
 Faculty Sponsor: Professor Princy Mennella
Sleep Disturbances in Undergraduate Students: Are They Related to Anxiety and Depression?
 The purpose of this study was to examine the symptoms of anxiety and depression, and how they correlate with sleep quantity and quality. There was a positive correlation between depression, sleep quality, and sleep quantity.
- Kylie Jones '24, Danielle Roberge '23, Colleen Fellows '23** **54**
 Faculty Sponsor: Professor Princy Mennella
Social Anxiety in Student-Athletes vs Non-Athletes
 Our study aimed to assess whether student athletes experience less social anxiety than their non-student athlete counterparts using the Liebowitz Social Anxiety scale. After comparing the overall scores of both groups, social anxiety is not different between student-athletes and non-student athletes.
- Grace Kelley '24, Olivia Kane '23** **60**
 Faculty Sponsor: Professor Princy Mennella
ADHD Subtypes and their Preference for Substances
 ADHD (Attention Deficient Hyperactivity Disorder) symptomology among college students and their preference towards substances was tested to see if there were differing preferences among the ADHD subtypes. Our results showed no difference among subtypes in their selection for specific types of substances.
- Rachel Lagasse '23, Veronica Curtis '23, Natali Livingston '23** **55**
 Faculty Sponsor: Professor Princy Mennella
Is THC Impairing Your Working Memory?
 We studied if working memory would be impaired with more frequent THC use. Our results demonstrated that frequent THC usage does not worsen working memory.

Poster No.

- Karina Little '23, Shannen O'Brien '23, Jillian Pearson '24** **68**
 Faculty Sponsor: Professor Princy Mennella
Did Resilience and Anxiety Effect GPA During the Pandemic?
 We explored whether trait anxiety and resilience affected academic performance during the COVID-19 Pandemic. Our results showed no relationship between trait anxiety and resilience on GPA scores.
- Alexis Mastorakis '23, Samantha Greenslade '24, Katherine Steele '24** **52**
 Faculty Sponsor: Professor Princy Mennella
Academic Stress in College Students With ADHD
 We had evaluated the differences in academic stress between students with ADHD and students without ADHD. The results of this study concluded of there being no significant difference of academic stress between students ADHD and without, by using a two-tailed t-test.
- Abigail Mathieu '24, Meghan Gleavy '23, Moira Mihalak '23** **56**
 Faculty Sponsor: Professor Princy Mennella
When Should You Do Your Homework?
 We studied how time of day impacts the cognitive function of early birds and night owls. Our study showed that night owls perform significantly better in the evening.
- Annelise Rivera '24, Marissa Benvenuti '24, Brooke LaDuke '24** **50**
 Faculty Sponsor: Professor Princy Menella
The Relationship Between Bipolar Disorder Type 1 and Substance Abuse and How It Affects the Rate of Crime Amongst College Students
 We aim to measure the relationships between bipolar disorder (BP-1), substance abuse and illegal acts committed by college students. We used a regression analysis to determine if BP-1 and substance abuse were significant predictors regarding illegal activities.
- Christopher Schoen '23, Beau Desrosiers '26** **90**
 Faculty Sponsor: Professor Summer Williams
Self-Confidence and Binge Drinking: The Role of Culture and Locus of Control
 The proposed studies in the area of personality psychology will first analyze the role of locus of control and its impact on college student binge drinking and second, the potential influence of individualistic and collectivistic culture on perceived levels of self-confidence.
- Nicholas Smith '24, Nathaniel Crook '23, Emma Thompson '24** **92**
 Faculty Sponsor: Professor Princy Mennella
Do You Sleep, Not Have Stress, and Process Information Fully? In College?
 We wanted to see if there was a relationship between sleep, stress, and cognitive functioning, as these are commonly neglected variables in academic settings. We achieved this by creating a survey of regularly used assessments for each variable, and then compared PSYC 0319participants' scores.

School of Education, Arts, Communication, and Humanities

Communication

Poster No.

Tara Wallace '23

127

Faculty Sponsor: Professor Sinuk Kang

I Never Saw the Fire Hydrant

I Never Saw the Fire Hydrant is my own personal story about my opportunity as an on screen talent and the accident resulting in internal injuries that changed my life. Followed by years long medical struggles until I was finally able to rebuild my life again, returning to set, this time behind the scenes and working towards my degree full of hope.

Tara Wallace '23

130

Faculty Sponsor: Professor Sinuk Kang

The Importance of Female Filmmakers

The Importance of Female Filmmakers is a short film celebrating the women pioneers of the film industry before most were pushed aside by men. Overlooking women's voices in film in favor of male voices is limiting in a variety of damaging ways for young girls and boys, women and men.

English

Kaitlyn Egan '24

4

Faculty Sponsors: Professor Leah Nielsen and Professor James Schlaffer

The Impact of Drug Use on Criminal Activity and its Depiction in HBO's The Wire

My research focuses on the impact that drug use has on criminal behavior, and how it is depicted in HBO's The Wire. In order to shed light on this relationship I considered Bureau of Justice Statistics, Massachusetts Parole Hearings, and the character Bubbles in The Wire.

Kayla Rodrigues '24

153

Faculty Sponsor: Professor Vanessa Diana

The Truth Behind Thanksgiving

Everything that we have learned about Thanksgiving isn't as accurate as what actually went down. It's important to acknowledge the full story that occurred between Natives and Pilgrims

Jordan Aguiar '24

15

Faculty Sponsor: Professor Leah Nielsen

The Brutality of Policing in Television: Comparing Police Brutality Across Different Media

The goal of this research is to examine the ways in which the social climate has impacted the depiction of policing in television. The research will compare the ways that a network show, Chicago PD and a cable show, The Wire portray the policing and the problems within the system.

Poster No.

- Jennifer Diamond '23** **18**
 Faculty Sponsors: Professor Leah Neilsen and Professor James Schlaffer
The Impact from 9/11 on the War on Drugs in Worcester, MA
 In the show, *The Wire*, we see within the first episode that the war on terror took precedent over, and took resources from, the war on drugs in Baltimore after 9/11. For my research, I am analyzing how my hometown, Worcester, MA, had a shift in police focus from drugs to terrorism in the early 2000s.
- Kerry Greenough '24** **20**
 Faculty Sponsors: Professor Leah Nielsen and Professor James Schlaffer
Community Resources for Baltimore's Youth in Comparison to the Henry Street Settlement in New York City
 After viewing the first 3 seasons of "The Wire", children of Baltimore in the show were oftentimes seen in extremely dangerous settings and without parental supervision. For this reason, this research is focused on the community resources offered to Baltimore's youth in real life, and then compares those resources to The Henry Street Settlement, a highly praised community resource for New York City's youth.
- Ziyah Johnston '23** **38**
 Faculty Sponsor: Professor Vanessa Diana
The Stolen Lives of Native American Women Due to Human Trafficking
 Tommy Orange (who is from the Cheyenne and Arapaho Tribes of Oklahoma) authored a novel called *There There*. In the book, there are intriguing and sad conversations around violence towards Native American women, partly due to human trafficking. This project will look at why Native women are targeted by human traffickers, and what we can do as a society to protect them and raise awareness on the issue.
- Zachary Tyler '23** **43**
 Faculty Sponsor: Professor Vanessa Dianna
The History and Significance of Powwows
 In the novel *There There* by Cheyanne and Arapaho author Tommy Orange he revolves his story around a powwow in Oakland where many different types of characters are linked to one celebration. This presentation will summarize the history of the Native American powwow and how it became and remains important to Indigenous people.
- Timothy Pawloski '24** **44**
 Faculty Sponsor: Professor Vennesa Diana
Exploring the Indian Relocation Act
 In the novel *There There*, Cheyenne and Arapaho author Tommy Orange brings up the Indian Relocation Act, an act that encouraged Native Americans to leave reservations and move to the cities to assimilate into the general public. This project will explore the details of what exactly the Indian Relocation Act was while highlighting the struggles and accomplishments the Native American people experienced while assimilating to the cities.

Poster No.

- Julia Robak '26, Kiki McNary '26** **57**
 Faculty Sponsor: Professor Vanessa Diana
The History of Carlisle Football and Its Modern-Day Legacy.
 In the play, A Moon and Two Windows (2019), Kiowa author, N. Scott Momaday frames the play with The Carlisle Indian Industrial School football team playing West Point in an important game. This project will dig deeper into the history of Carlisle football led by Jim Thorpe, the coaches and players that shaped the successful program, and their impact on modern-day football.
- Eli Pease '26** **63**
 Faculty Sponsor: Professor Vanessa Diana
The Many Meanings of Vé'ho'e
 In the Novel There There, Cheyenne/Arapaho author Tommy Orange makes reference to creatures of Cheyenne legend known as Vé'ho'e, which can be translated to Whiteman or spider. This project will explore the different meanings of the word Vé'ho'e, the legends of the Vé'ho'e, and how the definition evolved over time due to colonization.
- Cole Rodrigues '26** **64**
 Faculty Sponsor: Professor Vanessa Diana
The Pequot Massacre, the first Thanksgiving?
 Tommy Orange of the Cheyenne and Arapaho Tribes of Oklahoma mentions in his novel There There, the truth behind Thanksgiving, which originates from the Pequot massacre. This presentation will look into the Pequot Massacre to find the truth of what really happened on the first Thanksgiving.
- Duncan Nichols-Delay '26, Chris Ross, Chase Russo** **65**
 Faculty Sponsor: Professor Vanessa Diana
Suffocation of The Spirit: Native American Boarding Schools
 In the screenplay, The Moon In Two Windows, by Kiowa author, N. Scott Momaday, he talks about the truth behind Native American life within the American Indian Boarding Schools, which were intended to assimilate the students and make them colonized. Our project will talk about the pain and suffering these Native Americans had to endure while being students at these schools and the everlasting effect it had on their culture.
- Ashley Ugolini '22** **66**
 Faculty Sponsor: Professor Vanessa Diana
Missing and Murdered Indigenous Women
 In the novel There There, Cheyenne and Arapaho author Tommy Orange utilizes the character Geraldine to raise awareness on the disproportionately high rates of violence that Indigenous women face. This project will detail what violence Orange is referencing, explore why this epidemic is still occurring today, and research what activists are proposing as solutions to this issue.

Poster No.

- James Hickey '24** 67
 Faculty Sponsor: Professor Vanessa Diana
An Exploration of Mental Health in Indigenous People
 In the novel *There There*, Cheyenne and Arapaho author Tommy Orange writes characters in a way that conveys the multitude of mental health issues Native people experience daily, including but not limited to depression, PTSD, OCD, anger issues, and alcoholism, mirroring the real-life mental health crisis that Native people face today. This project will research the complex interaction between Native culture, history, communal suppression, trauma, and mental health, while also exploring the effects this is having on Native people here and now.
- Preston Young '24, Noah Harriman '25** 71
 Faculty Sponsor: Professor Vanessa Diana
Violent crime and Native American women
 In the novel *There There*, by Cheyenne and Arapaho member Tommy Orange, the fact that Native American women are disproportionately victimized by violent crime compared to other ethnicities is explored. This project's intent is to discuss the rationale behind why these cases are so prevalent, and how the criminal justice system can be held largely accountable to how few cases are prosecuted.
- Zoe Pouliot '24** 72
 Faculty Sponsor: Professor Vanessa Diana
Native Spirits
 The topic of spirits/ghosts came up multiple times, in "The Moon in Two Windows" by Kiowa author N. Scott Momaday, and "First Fruits" by Standing Rock Sioux author Susan Power, ghost characters are featured in both. This project will explore the beliefs in spirits in both the Kiowa and Sioux tribes and their impact on their culture.
- Chris Greene '25, Ryan Donahue '24, Ryan O'Halloran '26** 73
 Faculty Sponsor: Professor Vanessa Diana
Native American Influence on Sports
 Native American Influence on Sports
 In the play, *A Moon In Two Windows* written by Kiowa author N. Scott Momaday, he talks about the Carlisle Indian School where Native American children were sent to be stripped of their heritage and formed to fit in the mold of a "proper American." This project will look into the influential and under-appreciated role football played in the lives of the children at the school, and the way Carlisle football shaped the game of football today.
- Jordan Fournier '24, Ingram Aschalon '24** 74
 Faculty Sponsor: Professor Vanessa Diana
The Uncensored History of Thanksgiving
 In the novel *There There*, Cheyenne and Arapaho author Tommy Orange gave a violent description of the history behind Thanksgiving. This project will give a view of various historical topics behind the meaning of Thanksgiving and how it has affected Native Americans today, such as the traditions, sacrifice, heroism and unforgettable losses of loved ones and families.

Poster No.

- Harrison Ganong '26, Kiley Palmquist '26, Austin Sullivan '26** **78**
 Faculty Sponsora: Professor Dristi Neog and Vanessa Diana
Creating Imageability and Inclusivity in Westfield
 Our semester-long Discover Westfield course drew the conclusion that Westfield struggles with building a community. Utilizing survey data and research to develop an idea, this presentation will display a plan to increase a sense of belonging by considering diverse artistic urban design interventions.
- Gabriella Mortensen '26** **82**
 Faculty Sponsor: Professor Vanessa Diana
Native American Powwow Regalia
 In the novel *There, There*, Cheyenne and Arapaho author Tommy Orange references regalia, traditional clothing and items worn at Native American powwows. This project will research the meaning, origin, and purpose of regalia, who wears it and for which dances.
- Emily Turner '25** **85**
 Faculty Sponsor: Professor Beverly Army Williams
The Importance of Inclusion in a K-12 Classroom
 This project is focused on a survey from teachers about how they include students from all different cultural backgrounds and their knowledge about racial discrimination. With this data from multiple teachers and outside research, I will be making a blog post featuring ways to include all students in the classroom environment.
- Jazmaryann Brightly-Cruz '24** **87**
 Faculty Sponsor: Professor Vanessa Diana
Native American Powwows And The Meaning of Powwow Regalia
 In his novel *There There*, Cheyenne and Arapaho author Tommy Orange depicts a powwow and characters wear traditional powwow regalia. This presentation will describe when and where powwows started as well as the cultural significance of the traditional regalia worn for powwow dances.
- Emily Devlin '24, Rose Pennucci '25 , Raya Mackechnie '26** **89**
 Faculty Sponsor: Professor Vanessa Diana
Girls and Women Gone Missing
 In the novel *The Marrow Thieves*, Métis author Cherie Dimaline portrays violence against women through the Indigenous female characters. This project will research the history and statistics of murdered and missing Indigenous women, and call for the need to bring more awareness to this topic and reduce the numbers.
- LJ Claudio '25** **Oral Presentation**
 Faculty Sponsor: Professor Wyatt Paige Hermansen
Poems: A Collection on Language
 My work is about the language spoken versus the language written. My collection contains themes of loss as well as the way language is viewed in society.

Poster No.

- Aaron Stout '24** **95**
 Faculty Sponsor: Professor Vanessa Diana
Spirituality over Artistry: Analyzing the Work of James Hampton in the Context of the Novel There There
 In his novel *There There*, Cheyenne and Arapaho author Tommy Orange went out of his way to include the work of artist James Hampton. This project will analyze the work of Hampton and offer an analysis of why Orange chose to include a reference to this unique artist.
- Summer O'Neil '26** **96**
 Faculty Sponsor: Professor Vanessa Diana
The Heartbeat of Mother Nature
 In the novel, *There There*, by Cheyenne and Arapaho author Tommy Orange, there are many examples of how drumming is used in Native American cultures to bring people together in drum circles and at powwows to connect one to their spiritual self. This project will research Native American music and the significance of it to one's spiritual self.
- John Ware '26** **113**
 Faculty Sponsor: Professor Vanessa Diana
History of Crime in Oakland
 In the novel *There There*, by Tommy Orange, a member of both the Cheyenne and Arapaho tribes of Oklahoma, he references crime within the youth of Oakland, California. This project will help to express the history of crime rates within Oakland and help viewers become more aware of how these activities affect society for Native American residents of Oakland today.
- Brian Chalmers '24** **117**
 Faculty Sponsor: Professor Vanessa Diana
An Unbreakable Code: The Navajo Code Talkers
 In his play, *The Moon in Two Windows*, Kiowa Author N. Scott Momaday depicts the first students at The Carlisle Indian Industrial School, the goal of which was to erase Native American language and culture in efforts of assimilation. A generation later, some of his Navajo students used their invaluable Native American Language to create an unbreakable code that ultimately won the Second World War.
- Elizabeth Mercer '25** **120**
 Faculty Sponsor: Professor Vanessa Diana
Inspiring Native American Women Athletes
 In his play, *The Moon in Two Windows*, Kiowa author N.Scott Momaday, celebrates the accomplishments of Jim Thorpe who is an Olympic Gold Medalist from the Sac and Fox Tribe; however, no female athlete has been celebrated in this semester's literature class. This CURCA presentation gives credit to Native American female athletes whose accomplishments in professional and Olympic sports deserve more recognition because they can inspire the future generation of athletes.

Poster No.

- Meghan Devlin '25** **121**
 Faculty Sponsor: Professor Beverly Army-Williams
How Can Educators Destigmatize Special Education
 This project explores ideas to encourage future educators to destigmatize special education among all student populations.
- Owen Browne '26, Sam Santos '26** **122**
 Faculty Sponsor: Professor Vanessa Diana
Native American Residential Schools and Intergenerational Trauma
 In class, we learned about the Residential Schools that Native American children were forced to attend. For our project we decided to explore and elaborate on the effects these schools, and the effects they have on Native American people today.
- Hannah Donofrio '25, Kelsey McCarthy '25** **123**
 Faculty Sponsor: Professor Vanessa Diana
Powwow Traditions and Their Connection To Spirituality
 The novel *There, There* by Tommy Orange explores the spirituality between powwow traditions and their connection to the community. This poster will dive into these topics as well as how they connect to Native American clothing styles and different dance styles.
- Gabriella Mortensen '26** **124**
 Faculty Sponsor: Professor Vanessa Diana
Native American Powwow Regalia
 In the novel *There, There*, Cheyenne and Arapaho author Tommy Orange references regalia, traditional clothing and items worn at Native American powwows. This project will research the meaning, origin, and purpose of regalia, who wears it and for which dances.
- Joey Wlazlo '26** **125**
 Faculty Sponsor: Professor Vanessa Diana
Deep Dive into Dakota Ceremonies and Traditions
 In *Standing Rock* author Susan Power's short story "First Fruits," Dakota student Georgiana arrives at Harvard University to begin her first year, and her father smokes out her dorm room with prayer tobacco in order to expel evil spirits. This project will research this use of prayer tobacco as well as other Dakota (Sioux) ceremonies and traditions to explain their meanings and components.
- Molly Champney '25** **136**
 Faculty Sponsor: Professor Beverly Army-Williams
Malnourishments in Student Athletes
 How can we help prevent malnutrition in athletes? This project, a poster campaign, covers the dangers of undiagnosed malnourishment in athletes, and gives tips and tricks to stop it before it starts.

Poster No.

- Amanda Murphy '25** **138**
 Faculty Sponsor: Professor Beverly Williams
Using Social Media to Fight Social Media: Creating Awareness of Social Media Dangers
 How is modern day social media affecting young people's minds and well being and how they view themselves? This project, a series of Instagram posts, is meant to spread awareness of the dangers of social media, and how to navigate it.
- Brody Tapply '25** **139**
 Faculty Sponsor: Professor Beverly Army Williams
Mental Health in the Criminal Justice System
 Both criminal offenders and legal officers themselves deal with mental health issues on a daily basis. This project provides recognition of the issue, and different practices to work towards a better understanding.
- Ethan Russell '25** **140**
 Faculty Sponsor: Professor Beverly Army-Williams
Gun Violence and Trauma in Modern America
 How can we fix the gun problem in America? In this project I go over how the gun problem in America causes not only death but mental trauma to those who are affected in school settings.
- Drew Cirillo '25** **142**
 Faculty Sponsor: Professor Professor Army-Williams
Health Equity in the Prison System, A Social Media Campaign
 As a community we need to fight for better health equity in the prison system, because prisoners are facing high risks like disease, drug addiction, and mental illness. This project, a social media campaign, seeks to educate the public about this issue.
- Curtis Dion '25** **143**
 Faculty Sponsor: Professor Beverly Army-Williams
Bringing Awareness to Mental Health in the Military
 In 2020, over 582 military members died by suicide. This project, a newspaper article explores how that number could be decreased.
- Lauryn Whynott '25** **144**
 Faculty Sponsor: Professor Beverly Army-Williams
Increasing Women in Law Enforcement
 How can the law enforcement increase their diversity among women and minorities from the college level? By creating a poster campaign, women in the criminal justice major will support each other as they pursue a career in law enforcement.

Poster No.

- Teyonce Nunnally-Bess '25** **145**
 Faculty Sponsor: Professor Beverly Army-Williams
Addiction Support
 Many people who deal with addiction think that they are alone and not worthy. This project, a poster campaign, will help them believe otherwise, and highlight available support systems.
- Caitlyn Santos '25** **146**
 Faculty Sponsor: Professor Beverly Army-Williams
How Much is Curriculum Impacting Students?
 This project dives deeper into the curriculum, and how much it can impact students as they grow up, and explores curricula that are less structured. This project will be an email to K-12 administrators and teachers about how they perceive the curriculum.
- Patrick Hughes '25** **147**
 Faculty Sponsor: Professor Beverly Army-Williams
Improving the Relationship Between Officers and the Community
 How can both the police and the community improve their relationship? This project is a letter to a local police department asking them to hold/create a workshop that will Improve the relationship between officers and the community.
- Cameron Corcoran '25** **148**
 Faculty Sponsor: Professor Beverly Army-Williams
Advocacy for Student Wellbeing
 In a study that surveyed about 1000 high school students, in regards to lockdown/quarantine, 30% had considered suicide, and 10% actually tried committing. In this project, a letter, I'm advocating to education and government officials to further investigate how to help students who've taken hits to their physical, mental, and educational health due to the COVID-19 Pandemic.
- Crystal Rucki '24** **150**
 Faculty Sponsor: Professor Beverly Army-Williams
Breaking the Stigma Around Academic Help-Seeking
 This project, a panel discussion proposal, seeks to increase student awareness on the stigma surrounding academic help seeking and methods both students and educators can utilize in order to encourage help-seeking behaviors.
- Kaitlyn Egan '24** **42**
 Faculty Sponsor: Professor Vanessa Diana
Missing and Murdered Indigenous Women and their Portrayal in Native American Literature
 In both novels There There by Tommy Orange (Cheyenne and Arapaho), and The Marrow Thieves by Cherie Dimaline (Métis), female characters are continuously subject to violence. This presentation will compare these character depictions to the existing crime data, and highlight the movement toward visibility of Missing and Murdered Indigenous Women and Girls in our society today.

Poster No.

- John Henneberger '26** **59**
 Faculty Sponsor: Professor Vanessa Diana
Intergenerational Trauma Among Native Americans.
 In the novel *There There*, author Tommy Orange, a member of the Cheyenne and Arapaho tribes, references the horrifying effects of intergenerational trauma through different character perspectives, such as Jacquie Red Feather. This project will draw on research to explore the psychological, and sociological effects of intergenerational trauma among Native Americans, as well as treatment strategies.
- Courtney Berthiaume '26** **62**
 Faculty Sponsor: Professor Vanessa Diana
The Lasting Effects of Native American Boarding Schools
 Kiowa author N. Scott Momaday writes about the history and experience of the Native American boarding schools in his screenplay, *The Moon in Two Windows*, set at Carlisle Indian Industrial School, the very first of this type. This presentation will discuss not only the students' experiences in the schools, but also what happened to the ones who survived, how this history is taught in modern day classrooms, and the overall lasting legacy of the boarding schools today.
- Brynn Friedhaber '23** **69**
 Faculty Sponsor: Professor Vanessa Diana
The Underrepresented Native American History Behind Harvard University
 In the short story "First Fruits," Standing Rock Sioux Tribe member Susan Power explores the overlooked Native American history of Harvard University, which included the Indian College established in the 1640's. This project will research the Harvard Indian College, the first Native American graduate, what Harvard is doing today to represent this history, and how Harvard's Native American students and faculty are feeling today regarding their representation.
- Seamus Mitchell '24** **91**
 Faculty Sponsor: Professor Vanessa Diana
A Deeper Consideration of There There by Tommy Orange
 After reading 3 different critic reviews of the book, *There There* by Tommy Orange, each critic has formulated their thoughts and ideas to attest that Orange's book is an incredible work of art and should be read in classrooms worldwide. In addition, each critic voiced their concerns about the violence and stereotypical views readers can create by reading some of the content in the books. The critics believe stereotypes about Native American crime on other Native American people can lead to the readers thinking all Native Americans are violent killers and many other terrible ideas that are not true.
- Cheyenne Courtney '25, Lucia Sanches '25** **93**
 Faculty Sponsor: Professor Vanessa Diana
Indigenous Mascots: The Impact on Self-Identity
 In the novel, *There, There* by Cheyenne and Arapaho author, Tommy Orange references the idea of Native images issued in professional sports and hints at the hurt and blatant disregard of their culture in the stereotypical representations. This project will research the impacts of harmful and inaccurate depictions of Indigenous people in the sporting industry and how it impacts their self-identity.

Poster No.

- Madison White '26** **112**
 Faculty Sponsor: Professor Vanessa Diana
Breaking the Silence; Bringing an End to Violence Against Indigenous Women.
 In the contemporary novels Marrow Thieves written by a Canadian author from the Métis tribe Cherie Dimaline and There There written by an American author from the Cheyenne and Arapaho tribes Tommy Orange, violence against Indigenous Women is depicted. The poster presentation will illustrate the high rates of violence towards Canadian and American Indigenous Women, educate the audience on the problem, and highlight the activists who are raising awareness and their proposed solutions.
- Samantha Hallice '24** **116**
 Faculty Sponsor: Professor Vanessa Diana
Missing and Murdered Indigenous Women
 In the novel, There There, author Tommy Orange of the Cheyenne and Arapaho tribes depicts the war on Indigenous women who experience higher rates of violence than any other racial or ethnic group in America. This project will research why the rates of missing and murdered Native women are so high, why Indigenous women are being targeted, what is being done to bring awareness, and how to end violence against Indigenous women.
- Hannah LeBlanc '26** **119**
 Faculty Sponsor: Professor Vanessa Diana
Native American Activists and Nonprofit Groups using Social Media
 Social media is a crucial part of Native American Activists and Nonprofit groups' journey. Through social media these groups are able to spread awareness, gain traction, and receive support.
- Connor Fitzgerald '26** **128**
 Faculty Sponsor: Professor Vanessa Diana
Native American Hunting Techniques & Traditions
 In the futuristic novel The Marrow Thieves (2017) by Metis author Cherie Dimaline, the author describes many hunting scenes in which the characters draw on traditional Indigenous hunting practices. This project will focus on some of the many Indigenous hunting traditions in North America, as well as what has remained the same and what modern hunters have taken from Native Americans to continue the tradition and passion.
- Emma Bowes '26, Aidan Robert '26, Bryce York '26** **131**
 Faculty Sponsor: Professor Vanessa Diana
The Truth behind Indigenous History in our Curriculum
 In the novel There There by Cheyenne and Arapaho Tribes author Tommy Orange gives the background of Indigenous culture and history. This project will research propaganda's effect on Indigenous history in schools and today's society.

Poster No.

- Sean Macinnis '24** **149**
 Faculty Sponsor: Professor Venessa Diana
Drumming in Native American Culture
 In the novel There There, Author Tommy Orange talks about native American powwow's and what they mean to the culture. We found out in the book that a huge part of powwows and the culture are the drums especially with Thomas Frank. This project will research how drums affect their culture.
- Tatiana Reyes '26, Olivia Stafford '26, Brigid Deveau '26** **80**
 Faculty Sponsors: Professor Vanessa Diana and Professor Dristi Neog
Westfield: The Conversion of Downtown into an Uptown 🤔
 In a semester-long course focusing on downtown Westfield, we learned through a survey that residents inside the town desire to see more connection and involvement. With a few tweaks, including plazas, interactive structures, and art pieces, the underused Westfield Park Square and River Front can be transformed back into spaces where people can socialize and interact with one another.
- Angela Hayes '26, Melody Latshaw '26, Tyler Sullivan '26** **79**
 Faculty Sponsors: Professor Vanessa Diana and Professor Dristi Neog
What Better Place To Chill Than Westfield!
 A few open public spaces in the downtown have the potential for a makeover to make Westfield a place to gather and hang out. Our research-based urban design recommendations aim at creating places to chill in Westfield, such as outdoor dining, seating areas, and shaded areas that attract all age demographics, which would help bring vitality back into Westfield.
- Isabella Piacente '26, Gabriella Zive '26, Meghan Haupt '26** **81**
 Faculty Sponsors: Professor Vanessa Diana and Professor Dristi Neog
Discovering Westfield Through Arts and Signage
 Survey data show that Westfield residents believe that downtown Westfield is currently very confusing, dull, and lacks a common theme, but, with the help of artistic signage, Westfield can become a place that is not only inviting, but easy to navigate for people of many different backgrounds. Cultivating from survey data, site analysis, research, and personal experience, this presentation will represent a solution and vision for a more inclusive, vibrant, inviting, and interactive environment in downtown Westfield.
- Christopher North '23** **22**
 Faculty Sponsor: Professor Leah Nielsen
Classroom Despair: Examining The Use of Funding (And Lack of Funding) in Baltimore's Current Education System
 For decades, Baltimore's public school district has been underfunded and this has impacted students' accessibility to vital services and opportunities to pursue further education. An analysis on statistics such as race, test scores, and graduation rates would help address institutional problems with Baltimore's education system and inspire potential ideas for improving the experience for students in the classroom, as well as an evaluation on what the state government should do to allocate their funds to help ensure student success in and outside school.

Poster No.

- Jessica Zaniewski '25** **25**
 Faculty Sponsor: Professor Beverly Army Williams
Confidence in the Classroom: Building Meaningful Student-Teacher Relationships
 My project addresses the importance of building meaningful student-teacher relationships, in a K-12 environment, that are built on trust and acceptance. I have created a bulletin board depicting the importance of building these relationships and how both students and teachers can work together to create a more positive learning environment.
- Jenna Higley '23** **40**
 Faculty Sponsor: Professor Vanessa Diana
Debates Around Native American Blood Quantum
 In his novel, *There There*, Cheyenne and Arapaho author Tommy Orange references the topic of blood quantum, a measurement of how "Indian" an individual is. This poster will present information about what blood quantum is, different qualifications that various tribes require, and how it contributes to diminishing legal recognition of Native American identity or "paper genocide."
- Kyle Cole '26** **58**
 Faculty Sponsor: Professor Vanessa Diana
An Examination of Dakota Mythology
 Yankton Dakota writer Zitkala-Sa's "Schooldays of an Indian Girl" and Standing Rock Dakota author Susan Power's "First Fruits" both include many references to Dakota (or Sioux) mythology, beliefs, and customs. This project will take a look into some of the stories, themes, and ideas behind Sioux mythology and discover what sort of significance they hold.
- Jason Brewster '25** **70**
 Faculty Sponsor: Professor Vanessa Diana
Addressing Appropriation: Allyship Through Open-Minded Cultural Celebration
 In the short story "First Fruits" by Standing Rock Sioux author Susan Power, a white college student's open-mindedness to actively exchange and participate with her Sioux roommate's Native culture is depicted as a healing and non-offensive practice. My project seeks to determine the difference between cultural appropriation and celebration to provide a lens for non-Indigenous people to become better educated and more effective allies.
- Bryan Grady '26** **126**
 Faculty Sponsor: Professor Vanessa Diana
The Dakota 38
 In the poem 38, Oglala Lakota author Layli Long Soldier gives a history of the executions of thirty-eight Dakota men by the United States government. This project will delve further into the details of these executions and will answer questions regarding the events that occurred leading up to them and afterwards.

Poster No.

- Ruby Recio '25** **141**
 Faculty Sponsor: Professor Beverly Army Williams
Gender Diversity in Criminal Justice
 What are the impacts of having a more gender diverse criminal justice workforce? This project, a news letter article, will explore the need for greater gender diversity.
- Madison Dudley '26, Elier Rosado '26** **61**
 Faculty Sponsor: Professor Vanessa Diana
Purpose of the Native American Powwow and Regalia
 In the novel There There, Cheyenne author Tommy Orange brings his characters together through a powwow and illustrates the significance of the powwow regalia to the Native American community. This project will research the impact and meaning of what both the powwow and regalia represent to Native Americans.
- Caroline Eckert '25, Lauren Legere '23, Skylar Allard '24, Allison VanSleet '24** **88**
 Faculty Sponsor: Professor Vanessa Diana
Substance Abuse in "Urban Indian" Communities
 In the novel There There, author Tommy Orange, of the Cheyenne and Arapaho tribes, emphasizes the topic of substance abuse throughout the stories of his 12 Native American characters who live in Oakland, CA, making them part of the "Urban Indian" population. This project will research the prevalence of substance abuse and addiction among Native Americans and in particular its impact on the "Urban Indian" population.
- Cameron Ranck '26** **114**
 Faculty Sponsor: Professor Vanessa Diana
Global Warming and Indegenious Tribes
 In the novel, The Marrow Thieves, by Cherie Dimaline, many present day issue can be found throughout the themes of the book. This project will address the topic of global warming and how effects the day to
- Afia Aning '25, NayelieVelez '24, Janel Echevarria '26** **115**
 Faculty Sponsor: Professor Vanessa Diana
Thanksgiving Holiday Or Horror
 In There There, Tommy Orange from the Cheyenne and Arapaho tribes in Oklahoma. In his book he reveals the true meaning behind thanksgiving. This Project will uncover the sickening, historical horrors of this so called celebratory holiday!
- Anna Brewer '26, Derya Karakus '24, Andrew Chadbourne '24** **118**
 Faculty Sponsor: Professor Vanessa Diana
A Closer Look at Native American Medicine
 In numerous examples of contemporary Native American Literature, authors depict Indigenous medicines and ritual treatments. This project will show research that explains some of these methods and practices that are used to heal.

Poster No.

- Abigail Krug '25** **135**
 Faculty Sponsor: Professor Beverly Army Williams
Inclusion in the Classroom
 Inclusion in the classroom is such an important aspect of teaching. Students who struggle in school because of intellectual and physical disabilities should be able to feel as important and able as every other student in their class.
- Carly Hayes '24** **13**
 Faculty Sponsor: Professor Leah Nielsen and James Schlaffer
Opportunity Disparity: Education in The Wire
 I will be looking at the education system in The Wire to see the effects on education and graduation rates due to the lack of opportunities and resources available to students. I want to compare the education structure in Baltimore to another city that has a completely different support structure to identify the reasons for the differing graduation rates.
- Levi Ekstrom '23** **21**
 Faculty Sponsor: Professor Leah Neilsen
Violence Towards LGBT Bodies and Characters
 Often in television LGBT identifying characters are brutalized in story lines. This trope is evident in the influential TV series The Wire, where characters are brutally tortured, murdered, and dehumanized.

Wall of Words Poetry Contributing Authors

Ely 2nd Floor Posters

Professor Becky Olander class – Westfield State University

Adrian Buck '25, Arianna Donovan '24, Mackenzie Fagan '26, Alexina Ferrentino '23, D Harnish '23, Kevin Hennessey '23, Iyanu Doxy Laguerre '23, Siobhan Keane '25, Kasidee Nichols '26, Lilah Randolph '25, Faith Roy '25, Cris Rucki '24, Harleigh Sirafos '25, Blasmiry Villalona '24, Derek Zinck '23

Professor Michael Filas class – Westfield State University

Moye Aboli '23, Alexa Arroyo '23, Ashley Bloem '23, Caitlin Chandler '24, Alexis Crafts '24, Kaitlyn Ford '25, Liam Foskett '24, Patrick Hughes '25, Emily Lasek '24, Isabella Moniz '25, Thomas Parent '24, Emily Rua '25, Katie Steele '24, Hunter Wilcox '24, Sean Willis '26

Professor Sean Bates class – Westfield State University

Margaret Ahearn '23, Adilia Bonilla '23, Nathan Crane '25, Jomayrie Cruz '23, Joseph Franco '25, Dalys Fontanez '24, Collin Furmaniuk '23, Lindsey Genatossio '23, Darren Peabody '24, Zoe Pouliot '24

Professor Leah Nielsen class – Westfield State University

Isabelle Bizalion '25, Kait Carmichael '23, Caitlyn Chu '24, Alexis Crafts '24, Ava Diggs '24, Jack Dudley '24, Liam Foskett '24, Angie Matthew '24, Jayda Mazzarella '25, Anthony Rivera '24, Corey Rososky '24, Grace Templeton '22

Professor Dave Champoux – Holyoke Community College

Cassandra Cook, Charlie Mark

School of Health, Natural Sciences, and Human Services

Biology

Poster No.

- Sharlene Jumba '23** **97**
 Faculty Sponsor: Professor Jessica Stephens
Health Complications During Pregnancy
 Types of viruses that are dangerous during pregnancy.
 Ways to prevent complications and high risk pregnancy
- Sean Clancy '23** **133**
 Faculty Sponsor: Professor Jessica Stephens
The Maternal Microbiome's Impact on Fetal and Infantile Development
 The human microbiome is a dynamic system that plays a key role in establishing offspring's immune system and colonizing microbiota. This living system has a determining impact on child development, yet remains a persistent blindspot in fostering future generations.
- Samantha Biseinere '23, Valerie De Jesus '23** **129**
 Faculty Sponsor: Professor Dr. Jessica Stephens
The Importance of Nutrition During Pregnancy.
 Our project focuses on the various nutrients needed during pregnancy. We investigated the importance of supplementation and the unequal access to prenatal care that currently occurs in minority and marginalized communities.
- Annalise Cramer '23** **132**
 Faculty Sponsor: Professor Mao-Lun Weng
Deforestation Affects Spillover Risk If Multi-Host Pathogens
 Many pathogens can infect multiple host species, and land use change can create novel contacts between populations. Understanding the risk of short- and long-term spillover risk via modeling enables mitigation of these diseases.
- Taylor Camossi '24** **Oral Presentation**
 Faculty Sponsor: Professor Kathryn Weglarz
Identifying An Insect Adaptation For Inhabiting Marine Environments In The Small Cabbage White Butterfly
 Research of butterfly wing size and area of melanization for specimens located around saltwater, compared to inland regions. Insects require a necessary adaptation to allow inhabitation of regions near saltwater.

Poster No.

Shanna Mecherekov '23 39

Faculty Sponsor: Professor Robin White

Effects of Melatonin on Traumatic Brain Injury in Drosophila melanogaster

Traumatic brain injury leaves 1.5 million people in the United States each year with short- and long-term complications due the current lack of effective treatments. This study examines the effects of melatonin, a potential treatment, on traumatic brain injury in Drosophila melanogaster (the fruit fly).

Autumn Charnik '25 151

Faculty Sponsor: Professor Jessica Stephens

Science Behind Attractiveness

I am researching the science and biology behind attraction and an attractive face. What kind of key factors are included when someone is looking for a partner, and how does that make someone more attractive.

Cecylia Cove '25 152

Faculty Sponsor: Professor jessica stephens

Cancer in Pregnancy

what happens during pregnancy and how it affects the mother and fetus. Also about how treatments affect the mother and baby.

Chemical and Physical Science

Holden Nelson '23 16

Faculty Sponsor: Professor Aaron Reyes

Identifying Sources of Salinity in The Westfield River: A Hydrogeochemical Classification of Natural Waters

This work showcases water quality data and indicators in the Westfield River Watershed collected over the Summer of 2021. This data is used to identify and qualify sources of salinity in the Westfield River.

**Holden Nelson '23, Brianna Toomey '24, Daniel Lanctot '23,
Luke Mathewson '23, Patrick Mantos '24** 47

Faculty Sponsor: Professor Karsten Theis

Safety Moments: Fostering Laboratory Safety Culture at WSU

We developed a plan to bring attention to laboratory safety while students are gathered outside of the chemistry labs. Our aim is to make laboratory safety an integral part of planning and conducting experiments all the time, not just at the beginning of the semester.

Environmental Science

Poster No.

*** Margaret Hamilton '24, Taylor Camossi '24**

Video & 37

Faculty Sponsor: Professor Timothy Parshall

Journey Through Engagement: Decorating campus one mural at a time

We plan to propose to campus the idea of adding more colors through murals across Westfield's campus. Resulting in an increased positive atmosphere, community involvement, and bringing an awareness to campus as it provides a topic of discussion for each mural that would be created.

Makenna Albee '25, Kayla Brooks '25, Bethany Fornal '25

24

Faculty Sponsor: Professor Professor Lauren DiCarlo

The Effects of Temperature on Water Fowl In Stanley Park

In this study, we monitored the temperature and how it affects the attendance of ducks and geese in the duck pond at Stanley Park, Westfield. This was monitored over the span of five weeks with varying temperatures and times.

Noah Tyler '23, Alivia Gjekaj '23, Katrina Bingham-Maas '23, Jacob Squires '22

3

Faculty Sponsor: Professor Lauren DiCarlo

Invasive Plant Removal Restoration By the Little River

This project creates a restoration master plan that focuses on removing invasive plant species in a riparian area near the Little River. After the invasive species are removed, native wetland and pollinator plants will be planted to improve pollinator habitat.

*** Liam MacCurtain '22, Ryan Ziemnicki '23, Nicholas Dolak '23**

Video

Faculty Sponsor: Professor Timothy Parshall

Do Dams Simulate Drought Conditions Downstream for Macroinvertebrate Communities?

The goal of this project is to compare how climate change might impact Benthic Macroinvertebrates (BMI's) in rivers and streams by studying the health of natural communities in a drought and communities below dams. We investigated the diversity, richness and evenness of macroinvertebrates to see if they have been affected by the recent drought and dam conditions.

*** Lily Smith '22, Krysten Woods '22**

Video

Faculty Sponsor: Professor Timothy Parshall

Green Campus: Reducing the Ecological Footprint of WSU

The "Green Campus" project aims to analyze and apply the use of the natural resources of Westfield State University in a more efficient way that benefits social, economic, and natural environments. During this semester we evaluated four areas of campus to assess their ecological efficiency and improve it where necessary.

*** Evan Carboneau '23, Lydia Walsh '22**

Video

Faculty Sponsor: Professor Timothy Parshall

The Effects of Removing Burning Bush on Native Plants in Westfield, MA

Burning bush is an invasive shrub that is common throughout New England as a decorative plant. In our project, we investigated the effects of removing burning bush on native trees by collecting leaf litter samples and measuring tree growth.

Poster No.

*** Alivia Gjekaj '23**

Video

Faculty Sponsor: Professor Timothy Parshall

Improving Pollinator Habitat Restoration Techniques in Western Massachusetts, USA

The primary goal of this project is to expand methods of restoration and preservation of pollinator species in Western Massachusetts by restoring degraded pollinator habitats. I collected quantitative measurable data on pollinator plant availability and pollinator species richness within three separate locations on WSU property and compared it to similar data collected during the Spring 2022 semester.

*** Clint Leber '23, Brian Palmieri '23**

Video

Faculty Sponsor: Professor Timothy Parshall

Establishing Westfield State University as a Tree Campus USA

For our project we have been making progress on Westfield State's application to become recognized as a Tree Campus USA by the Arbor Day Foundation. We have been working on the five standards needed for approval: (1) Establishment of a campus tree advisory committee, (2) Evidence of a campus tree-care plan, (3) Verification of the plan's dedicated annual expenditures, (4) Observing Arbor Day, (5) Creating a service-learning project aimed at engaging the student body.

Jacob Towsley '23, Brett Smurra '24, Timothy Jinn '25

36

Faculty Sponsor: Professor Timothy Parshall

The Impact of Immersion in Nature on Mental Health and Stress Relief

The use of green spaces for stress and anxiety relief is a growing field of research. Our report / poster is a literature review looking at how the level of immersion in green spaces impacts health benefits, specifically stress and anxiety levels. We are proposing a project for future students to conduct to see the benefits of different immersion levels and their effects on student stress levels. The findings of this report could be beneficial for students during times of stress, such as midterm and final examinations.

Joshua Alstede '23, Taylor Griffin '24, Clint Leber '23, Austin O'Brien '22

2

Faculty Sponsor: Professor Lauren DiCarlo

Stanley Park Burning Bush Removal Master Plan

Our project consists of removing a large invasive patch of Winged Burning Bush in Stanley Park. We are replacing effected area with a rain garden consisting of native plant vegetation.

*** Sarah Deming '23, JacobSquires '22**

Video

Faculty Sponsor: Professor Timothy Parshall

Ring-Necked Pheasant Reporting Survey

The focus of this study was to band ring necked pheasants that were stocked by the Ashfield Rod & Gun Club on four parcels of land throughout western Franklin County, MA. The focus of this project was to measure the overall success of pheasant hunters as the season progressed and if seasonal factors affected success rates.

Poster No.

- * Austin O'Brien '22, Jessica Quenneville '22** **Video**
 Faculty Sponsor: Professor Timothy Parshall
Comparing Eastern Gray Squirrel Fur Color Morphs between Rural and Urban Areas
 The gray squirrel (*Sciurus carolinensis*) can be commonly found with two fur color morphs, gray and black. We used different sampling methods including trapping, roadkill collection, and road surveys to test what fur color was more common in rural, and urban areas.
- Abigail Mahoney '24, Michael Heins '24** **86**
 Faculty Sponsor: Professor Lauren DiCarlo
Site Inventory of the Pitoniak Property on Northwest Road, Westfield, MA
 This project consists of an inventory of vegetation, both native and invasive, as well as an analysis of soil quality at the Pitoniak Property on Northwest Road in Westfield, MA. Further recommendations for site restoration and use will be made using this collected data.
- Susannah Foster '25, Cassandra Eyma '25, Jor Danise '26, Laurel Colabella '23** **10**
 Faculty Sponsor: Professor Lauren DiCarlo
Norway Maple Leaves Changing Colors
 The leaves of immature and mature Norway Maples were observed during foliage color change in Westfield. It was found that leaves of the mature Norway Maples changed colors before the immature trees.
- Jacob Butler '24, Iyana Gordon '25, Samantha Martinez '25** **9**
 Faculty Sponsor: Professor Lauren DiCarlo
Do Colder Temperatures Affect The Response Times Of Koi Fish.
 Our group observed the response time of koi fish in Stanley park over the course of 8 weeks. We focused on the temperature and how it may affect these response times.
- Jankaleishka Burgos '23, Sarah Harrington '25, Alaina Percy '25** **77**
 Faculty Sponsor: Professor Lauren DiCarlo
Behavioral Effects Of Feeding On Ducks And Geese In Stanley Park
 This study focuses on the changes in behavior for ducks and geese before and after feeding in Stanley Park. We hypothesized that geese would exhibit more aggressive behavior before and after feeding as aposento ducks.
- * Jacob Towsley '23** **Video & 98**
 Faculty Sponsor: Professor Timothy Parshall
Hemlock Woolly Adelgid & Hemlock Elongate Scale in Western Massachusetts
 This study looks at the spread of hemlock woolly adelgid over the past 14 years due to climate change with relation to elevation. In addition, I mapped the distribution and infestation level of hemlock elongate scale in Western Massachusetts.

*** Kurtlen Burkott '22**

Video

Faculty Sponsor: Professor Timothy Parshall

Campus Greenhouse Proposal

Currently the greenhouse on WSU campus is not in the best condition. I investigated some of the uses and proposing improvements that can be made to the current greenhouse by surveying faculty/staff and students.

Sports Medicine and Human Performance

Courtney Costa '23

107

Faculty Sponsor: Professor Lynn Pantuosco-Hensch

How do the Health Benefits of Sports Drinks Compare to Energy Drinks for Adolescent Athletes?

This research project demonstrates the adolescent athlete's consumption of sports drinks and energy drinks that have an effect on their overall health. The health of the athletes has a higher chance of having more health issues in their future if they continue to consume unhealthy beverages when they are young.

Lindsey Spindel '23

26

Faculty Sponsor: Professor Pantuosco-Hensch

The Relationship Between Physical Activity and Academic Performance in College Students

The existing literature related to physical activity and academic performance of college students was reviewed to examine if there was a relationship present. Overall, the literature suggests that higher levels of physical activity is associated with higher academic performance in traditional aged-undergraduate students.

Anna Stewart '22

99

Faculty Sponsor: Professor Melissa Roti

The Benefits of Yoga Therapy on Children with ADHD

A determined cure for ADHD has yet to be discovered, but yoga therapy is being implemented into rehabilitation plans to aid patients. Findings will be discussed on how yoga therapy is improving children's quality of life and decreasing symptoms of ADHD.

Barnard Emma '23

137

Faculty Sponsor: Professor Lynn Pantuosco-Hensch

The Effect of Sport Retirement on Athletic Identity and Mental Health of Athletes

This project will be discussing how an athlete's retirement of their sport effects their mental health and athletic identity. Topics that are considered include retirement age, reason for retirement, and coping strategies prior to retirement.

- Erin Carpenter '23** 75
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
Effect of Exercise on Older Adults That Are at Risk For or Have Osteoporosis
This research project seeks to identify if exercise increases bone mineral density in older patients who are at risk for or have Osteoporosis. The quality of life within this population is affected by fear of falls and fractures; therefore this research focuses on improving bone mineral density by implementing exercise.
- Nicolas Abbott '23** 106
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
Effect of Weather on Older Adults with Rheumatoid Arthritis
Patients dealing with Rheumatoid Arthritis are constantly complaining of flare ups and increased pain in certain weather conditions. This paper investigates the underlying causes for why patients are experiencing these flare ups and if it is physical or more psychological.
- Lauryn Davis '23** 76
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Negative Physiological and Mental Effects of Early Sport Specialization
With an increase in youth sport participation, specialization in one particular sport has become more prevalent, increasing the risk for mental and physiological illnesses and injuries. This research demonstrates the negative impacts of early sport specialization on the youth population and how these negative effects can be combated by specializing later on in their athletic careers.
- Angel Reyes '23** 35
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Effect of Resistance Training on Older Patients With Knee Osteoarthritis
For this research project we are focusing on the older population that has any level of knee osteoarthritis. Comparing different studies, resistance training is the better modality in improving this population's condition compared to different modalities.
- Noelia Santana '23** 110
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
Impact of Aquatic Therapy on the Social Development of Children with Autism Spectrum Disorder
The use of aquatic training has been found to be beneficial for individuals with autism spectrum disorder (ASD) in multiple domains. This research will assist clinicians to determine if aquatic therapy can provide a positive effect on social behaviors in children with ASD.
- Jacob Marissa '23** 33
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
Effects of Menstrual Cycle Hormones on Anterior Cruciate Ligament Tears of Female Athletes
ACL tears are common among female athletes for many reasons, one of them is increased levels of certain hormones. This research demonstrates how estrogen, relaxin and others increase the likelihood that female athletes will tear their ACLs because of the effects on ligament structure.

Poster No.

- Madison Horan '23** **46**
 Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Impact of Yoga on Anxiety in College Students
 College level education creates an increase of anxiety and stress on students. Through research it is demonstrated that participation in yoga as physical activity is an effective strategy to reduce anxiety.
- Zachary Soucy '23** **30**
 Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Effects of Cryotherapy on Recovery Post Exercise Performance
 Ice baths and other cryotherapy techniques are often used by athletes to improve muscle damage recovery and decrease soreness after training. This research studied the physiological effects of cryotherapy recovery techniques and will present findings that may challenge commonly held beliefs about cryotherapy for recovery following exercise.
- Haley Apotheker '23** **104**
 Faculty Sponsor: Professor Hensch
The Impact of Resistance Training on Insulin Control in Pediatric Cases with Type II Diabetes
 Among schoolchildren, obesity and its related metabolic consequences (i.e. poor glucose control attributable to increased insulin resistance) and a low muscle performance are a serious health problem. A previous report on insulin resistance in children stated the importance of exercise in improving insulin sensitivity and promoted resistance training for their effectiveness in decreasing insulin resistance levels in schoolchildren.
- Vincent De la Cruz '23** **27**
 Faculty Sponsor: Professor Dr. Lynn Pantuosco-Hensch
Load Prescription Autoregulation Its Effects on Strength Adaptations Achieved from a Resistance Training Program
 Adjusting the prescribed resistance training load to correlate with daily performance fluctuations is known as autoregulation. This paper investigates objective autoregulation via Velocity Based Training and subjective autoregulation via Rate of Perceived Exertion, and how these methods affect the strength adaptations caused by a resistance training program.
- Kylee Murphy '23** **31**
 Faculty Sponsor: Professor Dr. Lynn Pantuosco-Hensch
The Effects of Wearing Concussion Prevention Headgear During Soccer Performance
 The correlation between the action of heading and sports-related concussions in soccer is a prominent concern that is faced globally. This research addresses the use of concussion prevention headgear and their effects on the incidence and severity of sports-related concussions, when worn by various populations during soccer performance.

Poster No.

- Vincent De la Cruz '23** 32
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Effects of Load Prescription Autoregulation on Strength Adaptations Achieved from a Resistance Training Program
Adjusting the prescribed resistance training load to correlate with daily performance fluctuations is known as autoregulation. This paper investigates objective autoregulation via Velocity-Based Training and subjective autoregulation via Rate of Perceived Exertion, and how these methods affect the strength adaptations caused by a resistance training program.
- Jenna Higley '23** 29
Faculty Sponsor: Professor Pantuosco-Hensch
Impact of Wildlife Rehabilitation as a Conservation Tool to Increase Threatened Wildlife Populations
Wildlife rehabilitation has been used as a previous conservation tool, yet the benefits are not quite understood. Wildlife rehabilitators' main goal of rehabilitation is to increase post-release survival and to aid in reducing the decline of threatened wildlife populations.
- Elizabeth Naff '23** 28
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
A Comparison of Aerobic Exercise and Resistance Training on Type II Diabetes Treatment
Type II Diabetes is a common metabolic disease where there is an increase in glucose normally caused by sedentary and unhealthy lifestyle. This research will show how both aerobic and resistance training exercises can help to improve glycemic control and insulin resistance.
- Zachary Matracia '23** 34
Faculty Sponsor: Professor Lynn Pantuosco-Hensch
The Effect of Various Exercise on Recovering Breast Cancer Patients
This study focuses on different types of exercise on older breast cancer patients while undergoing treatment as well as post-treatment. Comparing how various exercises have different effects on patients physical and mental health while recovering.
- Emily Slater '23** 49
Faculty Sponsor: Professor Dr. Pantuosco-Hensch
How Can We Optimize the Way We Listen to Music Before Athletic Competition?
Research on optimal arousal levels in athletes and the effects of music on arousal. The purpose was to find out if we can optimize the type of music that an athlete listens to before a game in accordance their arousal levels.

Nursing

Poster No.

- Allison VanSleet '24, Bridget Frazier '25, Abigail Marshall '23** **1**
 Faculty Sponsor: Professor Jennifer Pappas
Patient Outcomes Related To Natural Environment And Greenspace
 Natural environments have known health benefits such as stress reduction, improved mental and physical health, decreased obesity, improved cognitive ability and focus. This project looks at patient outcomes when they are exposed to natural lighting, open windows, and appealing natural views. If patient outcomes improved with these factors then we are proposing that more greenspace be implemented in healthcare settings.
- Emma Strode '22, Lydia Sullivan '24** **41**
 Faculty Sponsor: Professor Jennifer Pappas
The Power of Body and Mind: The Benefits of Outdoor Educational Settings
 Explore the benefits and impacts on cognitive learning while outdoors. Purpose a natural outdoor classroom that is available for all disciplines on campus to promote more connections with nature.
- Abigail Steinman '23** **11**
 Faculty Sponsor: Professor Joan Kuhnly
Exploring Maternal Health, Mortality, and Morbidity Worldwide
 Researching maternal health, mortality and morbidity in three different countries. Exploring causes and preventative factors contributing to mortality rates.
- Sean Clancy '23, Kurtlen Burkott '22, Lydia Walsh '22** **45**
 Faculty Sponsor: Professor Jennifer Pappas
Assessing Media Outlets for Environmental Education Effectiveness
 Nature is important for human health, and bringing the two together requires effective communication. This project will be assessing various media outlets for educating people about opportunities to spend time in nature.