

20th Annual Student Research & Creativity Expo



FREDONIA
STATE UNIVERSITY OF NEW YORK



OFFICE OF PUBLIC AFFAIRS AND COMMUNICATIONS

**POSTERS
PRESENTATIONS
DISPLAYS
PERFORMANCES**

**Thursday, April 26, 2018 12:00 p.m. - 5:00 p.m.
Williams Center, Fredonia, New York**

Buffet lunch: Williams Center Multipurpose Room

Keynote Address: Williams Center Room 204

Dr. Jill Reese, Associate Professor, School of Music

"Reciprocal Growth: Mentorship in Student - Faculty Research"

Student Research and Creativity Exposition Committee:

Ziya Arnavut, Computer and Information Sciences

Paul Benson, Sponsored Programs

Jack Croxton, Office of Student Creative Activity and Research

David Kinkela, History

Robyn Reger, School of Business and Assoc. Provost Office

Robert Rogers, Mathematical Sciences

Carol Smith, Communication

Susan Sturm, Curriculum and Instruction

Peter Tucker, Visual Arts and New Media

Ivani Vassoler-Froelich, Politics and International Affairs

Courtney Wigdahl-Perry, Biology

The following individuals and offices are acknowledged for their many contributions:

Teresa Brown, Provost and Vice President for Academic Affairs

Kevin Cloos, Mark Delcamp, and Facilities Services

Michael Gerholdt, ITS

Michael Lemieux and Lisa Noody, Campus Life

Tracy Horth, College of Liberal Arts and Sciences

Justin Jakubowicz, ITS

Information Technology Technicians

Faculty Student Association

“Congratulations to the students and mentors whose work is featured in the 2018 Student Research and Creativity Exposition! As you can see from the program and from interactions with the many students who are involved in today’s program, Fredonia offers opportunities for authentic scholarly and creative work across a range of disciplines, and this year we are featuring work that models community engagement as well. Our campus has the most important resources for accomplishing this kind of work: talented, curious students and faculty with the creativity, expertise, and commitment to guide those students in their projects. Regardless of what’s next after graduation—advanced studies or professional work in their fields—Fredonia students have the research, performance, and presentation skills to succeed.”



Sincerely,

Virginia Horvath, Ph.D.
President

Congratulations to the students and faculty mentors who are participating in the 2018 Research and Creative Activity Exposition. The annual Research and Creative Activity Exposition reflects the university’s commitment to undergraduate research as a high-priority activity for both faculty and students. The National Council of Undergraduate Research has identified several characteristics of excellence in undergraduate research on university campuses, including scholarly faculty who are committed to mentoring students in their field, broad participation from faculty and students across disciplines, accessible opportunities for undergraduates, and integration with other engaging high-impact opportunities such as community engagement. I am very pleased to see Fredonia possesses the essential characteristics of excellence in undergraduate research, scholarship and creative activity. Thank you to the faculty and staff who make these transformative learning experiences possible for our students, and congratulations to our students for their good work on display today.



Sincerely,

Teresa M. Brown, Ph.D.
Provost and Vice President for Academic Affairs

One of my favorite poets, E.E. Cummings, is quoted as saying “Once we believe in ourselves, we can risk curiosity, wonder, spontaneous delight, or any experience that reveals the human spirit”. The act of creating—creating research, creating art, creating scholarly work—is one of the most highly regarded in any college or university. The time and effort, the engagement, and the commitment that it takes to “create” should be applauded and congratulated.

At the OSCAR Expo, we witness the educational collaboration that has been forged between Fredonia students and faculty, and we are invited to experience, first hand, the human spirit that exists on our campus.

Judith Horowitz, Ph.D.

Associate Provost for Graduate Studies, Sponsored Research, and Faculty Development



“The mission of the Office of Student Research and Creative Activity is to promote and support student scholarly activity and creative work across the Fredonia campus. Such an endeavor is integral to the teaching and learning experience. It provides an opportunity for students to become closely affiliated with a faculty mentor and to develop skills and knowledge that will benefit them significantly in the future. Clearly, both students and faculty gain from such activity, and therefore it is important that the institution make a concerted effort to promote such collaborations.

I am very pleased by the level of participation in this year’s Research and Creative Activity Exposition and I am truly impressed by the quality of our students’ work. They should indeed be proud of their considerable accomplishments. For many of them this is the capstone experience of their academic careers. Furthermore, I would like to commend all of the faculty mentors for the time and energy that they have devoted to supervising these projects. Thanks to everyone who has contributed to this special day of celebration.”

Sincerely,

Jack Croxton, Ph.D.

Director of the Office of Student Creative Activity and Research

“Good projects require both inspiration and practice. You need to have discipline as well as flexibility. In the arts, sciences, and humanities, creative activity and research go hand-in-hand, and this Exposition shows our students’ work at its best.”

Thank you and congratulations to all participants, and to their faculty mentors and to OSCAR for making this possible.

Ralph J. Blasting, Ph.D.
Dean, College of Visual and Performing Arts



The wide range and high quality of the scholarly and creative activity presented at the annual Student Research and Creativity Expo is a true reflection of the university’s mission to “enrich the world through scholarship artistic expression, community engagement and entrepreneurship.” Congratulations to both students and their faculty mentors for a job well done.

Moj Seyedian, Ph.D.
Interim Dean, School of Business





"Student research and creative endeavors are a critical component of the intellectual vitality of our university. These activities of critical inquiry are the authentic application of what is learned from textbooks, reference materials, and the classroom. These application projects also provide a rich opportunity for faculty and students to collaborate as active partners in applied scholarship. The Student Research and Creativity Exposition provides our campus learning community with an event to showcase and celebrate the quality of academic engagement of our students. Congratulations to all who have participated in this most excellent event!"

Sincerely,

Christine Givner, Ph.D.
Dean, College of Education

On behalf of the faculty and staff of the College of Liberal Arts & Sciences, I congratulate the students participating in the 20th Annual Student Research and Creativity Exposition. This program contains an impressive list of projects. In many cases, the work represents the culmination of study and/or practice; in others, it is a point along a continuum of development with additional, related projects to come. Regardless of the exact nature of these projects, each highlights hard work, innovation, insight, etc.

This collection of student effort demonstrates the degree to which Fredonia embraces the teacher-scholar model. Here at Fredonia, learning is a collaborative process requiring close interactions between students, faculty, staff, and, quite often, the surrounding community. In fact, the College of Liberal Arts & Sciences prides itself on the creation of a community of scholars where the usual lines of demarcation between teacher and student, campus and community, and art and science are blurred.



J. Andy Karafa, Ph.D.
Dean, College of Liberal Arts and Sciences

Thursday, April 26, 2018
Williams Center
1:00 p.m. to 5:00 p.m.

Most exhibits will be available for viewing throughout the day – students are scheduled to be present to answer questions at the indicated times.

POSTERS AND OTHER PRESENTATIONS

Multi-purpose Room

1:00 p.m. to 1:30 p.m.

Lessons with Potential from Teachers with Potential

Valerie Andryshak, Kimberly Gage, Christopher Kelley, Emily Marsh, Sarah McCann, Emily Nichols, Killeen Schmitz

(note: this poster project will be on display with no formal presentation)

Diatoms of high altitude lakes in the Andes Mountains of Peru

Jeri Franklin

Plant competition and mycorrhizal fungi

Jeri Franklin

Public Health Internship at the Student Health Center

Abigail Agbi, Biochemistry

Initiatives Improving Health in Chautauqua County

Leah Ferger, Biology

Stuttering in Spanish-English Bilinguals

Amy Rodriguez, Comm. Disorders and Sciences

Generations of the Web

Alexander O'Hare, Computer Science

A Cup of Coffee & The English Enlightenment

Anna Booth, History

Revolutionary Enlightenment Ideology in the American Revolution

Joseph Marsala, History

The Potential Pancea of Urban-Ag

Girard Marotto, Interdis Stds - Envir Sciences

Research Proposal for the Chautauqua Nursing and Rehabilitation Center

Conor O'Grady, Interdis Stds-Exercise Science

Visualizing Global Terrorism

Chadwick Berggren, Mathematics

Molecular Binding Interactions that induce/inhibit the Activation of p53

Tara Thompson, Medical Technology

Death and Health Complications in Relation to the Birth Process - What We Can Do About It

Alexandra Viola, Music Therapy

Mental Health Services Provided to Women from the 19th to the 21st Century

Courtney Sieg, Social Work

Co-Presenters: Kylie Harris

Adolescents' Out-of-School Writing Practices with Technology

Kim Lotocki, Literacy: Birth-12, Graduate Student

1:30 p.m. to 2:00 p.m.

Belize 2018

Emily Hauser, Child Includ Ed:Engl 7-9 Ext

Dementia Through a Positive Lens

Madeleine Heaton, Comm. Disorders and Sciences

Recovery after Childhood Aphasia

Rachel Arnold, Comm. Disorders and Sciences

EnablArm - The Arm That Learns From Itself

Inderdeep Bajwa, Computer Science

How Enlightenment Writers Viewed European Peasants

Steven Lasch, History

miRNA mediated knockdown of B-Oxidation enzymes in Chlamydomonas reinhardtii

Jacob Favret, Molecular Genetics

Co-Presenters: Derek Kosciński

Preparing the Fredonia Observatory Camera to Take Science Images

Sean Dempsey-Gregory, Physics

Effects of correlated color temperature on self efficacy, concentration, and comfort in an educational setting

Ernesto Mercado Irizarry, Psychology

Co-Presenters: Jaime Birkmeyer; Nicholas Certo

Perceptions of Individuals Diagnosed with Cancer

Taylor Gibbon, Psychology

Summer Reading Setback and Parental Involvement

Rachel Skopinsky, Literacy: Birth-12, Graduate Student

Adolescent Reading Habits and Perceptions

Alyzia Glasier, Literacy: Birth-12, Graduate Student

2:00 p.m. to 2:30 p.m.

Bat Population Monitoring: Using Acoustic Surveys to Better Assess Activity Levels in Bat Populations

Sandra Emke

Food Waste Study @ Cranston Marche

Brandon Flores, Business Admin – Management

USITT 2018

Erin Feil, BFA Theatre Production and Design

Exploring the Current Model of Autism in Mouse: Third Trimester

Exposure to Valproic Acid

Lillian Dixon, Biology and Psychology

Co-Presenters: Alberto Gonzalez, Matthew Evans, Connor Mauche, Mackenzie Hardy

Government Tax Rates & Revenues: An Empirical Analysis of the Laffer Curve

Deztian Orsolits, Business Admin - Management

Pay Disparities in Major League Soccer

Diana Barva, Business Admin - Marketing

Marketing Internship at WCA Home

Chelsea Robillard, Comm. Disorders and Sciences

Enlightenment of the French Revolution

Isaiah Eisenhauer, History

Bear Lake, NY: Algae Communities and Water Quality

Simona Lukasik, Interdis Stds - Envir Sciences

Structure- Function Analysis of the gurken-5'UTR

Brian Guy, Molecular Genetics

Perceptions of the American Dream

Rachel Williams, Music Therapy

Co-Presenters: Taylor Gibbon

Public Health Internship Abstract

Nicole Battaglia, Psychology

Experiencing NCECA

Natalie Sacchitella, Vis Arts New Med: Graph Design

Co-Presenters: Torry Haggins; Collin Hassler; Emma Mauro

A Vocabulary Analysis of the New York State Mathematics Assessments

Shana Czekanski, Literacy: Birth-12, Graduate Student

2:30 p.m. to 3:00 p.m.

UFO analysis

Jess Delcamp, Applied Mathematics

Death Certificate Review

Amy Miller, Biology Kensi Phillips

A New Attack on Women: Acid Attacks and Their Reign in the UK

Tylah Arthur, Comm. Disorders and Sciences

Studying Abroad in Niigata, Japan

Yue Wang, English

Enlightenments major influences

Jacob Storms, History

History Capstone Presentation

Madeline Friedler, History

The Start of Feminist During the Enlightenment?, and How They Shaped the World.

Megan Buchholz, History

Vive La Revolucion! How Enlightenment ideals and thought influenced the success of Haitian Revolution

Jelissa Samuel, History

Set It Up Guide

Johnelle Dishaw, Interdis Stds-Exercise Science

What I Gained From Study Abroad

Sydney Lyons, Interdisciplinary Studies

Death Certificate Review Internship

Kensi Phillips, Social Work Amy Miller

Universal Screening for literacy needs within a Response to Intervention Framework

Kelsey Gannett, Literacy: Birth-12, Graduate Student

3:00 p.m. to 3:30 p.m.

Ketone Synthesis through a Weinreb Amide-Grignard Reaction

Kelly Hider, Biochemistry

Eat Smart Western New York

Jessica Madara, Criminal Justice

Model European Union Simulation

Joseph Weglarski, Criminal Justice

Co-Presenters: Daniel Orzechowski; Zachary Polo

Avifaunal Biodiversity and Land Use of the Indonesian Palau Penida Archipelago

Ashlee Abrantes, Biology

Women's Issues and Domestic Abuse

Alexis Grissom, Criminal Justice

Co-Presenters: Jayla James; Mahogany Barker; Cameron Collignon

Enlightenment in the Founding of the United States

Adam Klajbor, History

Theological Foundations of Lockean Toleration

Hugh-Daniel Mosher, History

Radio Interferometer Imaging of Protostars

Kyle Mascara, Physics

Student Expo Poster - HIST 206

Emily Keyes, Social Studies-Adolescence

Co-Presenters: Ed Justyce Ramsey; Michelle Merrill

The Lines of Conformity and A Meshed Consciousness

Tyler Favorite, Sociology

Comparing SUNY Schools

Michelle Hamilton, Business Admin - Finance

Statistical Analysis of Smoking and Health Outcomes by County

Eric Knop, Business Admin - Finance

Global Trends and Blood Types

Satomi Ohira, Business Admin - Management

Audio Engineering Society Convention 2017

Carlos Rivera, Sound Recording Technology and Music Performance

Co-Presenters: Avarie Stevens, Olivia Mancuso, Emily Knuuti, Jaden Zhang, Brianna Cordi, Nicole Bien, Jackson Longo, David Carls

CCSCNE 2018 Competition

Seth Weidman, Computer Science

Co-Presenters: Michael Conti; Aierken Shalayiding; Alexander O'Hare; Robert Moore; Dakota Wicker

3:30 p.m. to 4:00 p.m.

Habitat for Humanity: Collegiate Challenge

Waverly Lancer, Communication - Comm Studies

Co-Presenters: Caroline Bilotti

Social Justice and TEWWG

Jamia Randall, English

Co-Presenters: Arjumand Ali; Kyle Egan; Noelani McAfee

Using Remotely Sensed Imagery to Supplement the Monitoring of Harmful Algal Blooms (HABs) in Chautauqua Lake, New York

Katherine Van Oss, Geology
Co-Presenters: Emily Beers

Enlightenment and Women: Overcoming Pitfalls and Exclusion

Ian Fairchild, History

Colorism and the Effects of Gentrification

Matthew Kowalski, Music Performance
Co-Presenters: Kathryn Andalora; Alexandra Buchner; Taylor Golisano; Jolie Perry

Capozzi's Pizzeria Internship

Taylor Baird, Psychology

Interracial Anxiety: How Previous Experiences with Other Races And Racial Attitudes Can Affect Future Interactions

Sade Hellams, Psychology BS

Impact of On and Off-Campus Living on Minority and Majority Students

James Walters, Psychology BS
Co-Presenters: Sade Hellams

Patriarchy in Society

Jonah Adeson, Social Studies-Adolescence Ed
Co-Presenters: Andrew Loretto; Abby Blinn; Ashleigh Reinhardt

Peasants During the French Revolution

Rebecca Jones, Social Studies-Adolescence Ed

Fredonia Enactus 2018 Summary

Jane Garrity, Business Admin - Marketing
Co-Presenters: Kelsey Kaczor

Mapping the Public Parks of Chautauqua County Using GIS

Devan Zajac, Geology

The Affective Factors that Influence a Child's Emergent Literacy Skills and Behaviors

Taylor Gawron, Literacy: Birth-12, Graduate Student

Home Literacy Environment and Its Effect on Emergent Literacy Skills

Ashley Gangi, Literacy: Birth-12, Graduate Student

Student metacognition and understanding the strategies students use to increase reading comprehension.

Kiri Kochanski, Literacy: Birth-12, Graduate Student

4:00 p.m. to 4:30 p.m.

A Study of Eighth Grade and Pre-Calculus Students and Their Misconceptions of Exponents and the Order of Operations

Sarah Mannion

Defining Risky Decision Making: Research Synthesis and Meta-Analysis

Robert Phillips, Psychology BS

An Analysis of Student Conceptual Understanding of Trigonometry

Michelle Persaud

The Effects of Mathematical Vocabulary and Notation on Students Learning

Samantha Nickerson

The Chautauqua Center health patient portal

Ashley Feind, Biology

The Family Kitchen - Chautauqua County Rural Ministries

Alaina Corso, Comm. Disorders and Sciences

Danielle Aragon's Public Health Internship

Danielle Aragon-Prieto, Communication - Comm Studies

PRSSA National Assembly

Alexis Sorbello, Communication - Public Rel
Co-Presenters: Hannah Wittig

Catherine the Great and The Enlightenment

Mary Kay Taylor, History

Impact of the Enlightenment on American Slavery

Jayla Williams, History

The Enlightenment and The Church

Trenten Merrill, History

An Exploration of Situated Cognition and Physical Context within the Statistics Classroom

Dakota Morano, Mathematics 7-12

Derivatives Deficiencies: An Analysis of College Students' Misconceptions Regarding Derivatives and their Applications

Emily Fay, Mathematics 7-12

Associations between Predictors of Sexual Aggression and Self-Reported Coercion in Latinx versus Non-Hispanic Ethnicity

Kara Freise, Psychology

Belief in performative bisexuality in participant perception of responsibility and harm in victims of sexual aggression.

Elayna Kinney, Psychology
Co-Presenters: Ernesto Mercado Irizarry; Ariel Gelfand

Creation and Validation of a Scale to Measure Belief in Performative Bisexuality

Elayna Kinney, Psychology

Co-Presenters: Ernesto Mercado Irizarry; Sarah Kelly; Ariel Gelfand

Effects of Context Factors On Framing Effects

Robert Phillips, Psychology BS

The Relationship Between Masculinity/Femininity and Trust

Robyn Mc Neilly, Psychology BS

Co-Presenters: Tyler Latt

Comparing Revolutions: American Success & French Failure

Patrick Spellicy, Social Studies-Adolescence Ed

Seeing Oneself: Contextual Analysis of Diversity in Commonly Read Young Adult Literature

Jessica Carson-Davis, Literacy; Birth-12, Graduate Student

4:30 p.m. to 5:00 p.m.

Over Sex

Casterline Villar, Acting

CAPP Internship

Janie Mathew, Biology

Co-Presenters: Mondyna Prevot

Public Health Internship

Mondyna Prevot, Biology

Recycling In Classrooms On Campus: An Analysis Using Six Sigma

Thomas Jones, Business Admin - Management

English Enlightenment with Elegant Ladies

Olivia Weixlmann, History

Intellectual Revolution: China's Enlightenment of the Twentieth Century

Daniel Richer, History

Evolution Of Protostellar Outflows

Kassidy Howard, Physics

Clean and Healthy New York

Saphire Jones, Psychology

School Social Work Internship

Alicia Deering, Psychology

Step It Up Guide

Cassandra Kaminski, Psychology

Effects of Fixed vs. Growth Mindset on Problem Solving

Robert Phillips, Psychology BS

Co-Presenters: Erin Lemmey; Kara Freise

Examining the Issues of Domestic Violence and Gender Norms Through the Works of Zora Neale Hurston

Owen Cheeseman, Social Studies-Adolescence Ed
Co-Presenters: Santazzia Collins; Nelson Mendoza

Bringing the Classroom to Life through Studying Abroad

Nicole Ewer, Spanish

MoCCA Arts Festival Features Animation/Illustration

Anais Cantres, Vis Arts New Med: Anim & Illus
Co-Presenters: Erin Canniff; Dakota Marquardt; Kathleen Fenton; Mattea Gully; Hayley Patterson;
Melissa Neuburger; Madison Spear

Parent and Teacher Perceptions of Students' Early Literacy Behaviors within Various Pre-School Models

Barbara Simon, Literacy: Birth-12, Graduate Student

ORAL PRESENTATIONS

1:00 p.m. to 1:30 p.m.

Room 103A

Expanding Ukulele Technique in the Clinical Setting
Alexia Lekos, Music Therapy

Room 103B

How Latinos Experience Racism in Western New York
Mikayla Fuller, Sociology

1:30 p.m. to 2:00 p.m.

Room 103A

Christian Religious Community in the Japanese-American Internment: "The Brightest Spot in a Terrible Tragedy"
Joseph Marsala, History

Room 103C

Eurovision and Swedish Identity: Power Ballads as Modern Swedish Folk Music
Nora Ramsey, Music - Applied

2:00 p.m. to 2:30 p.m.

Room 103B

The MLB Free Agency Problem

Justin Willis, Business Admin – Finance

2:30 p.m. to 3:00 p.m.

Room 103A

H1B Visa Petitions Analysis

Jason Cheung, Computer Science

3:00 p.m. to 3:30 p.m.

Room 103B

Capture: Scoring for Short Film

Benjamin Jankowski, Music Education

3:30 p.m. to 4:00 p.m.

Room 103C

A New Approach to Optimal Solution of Rubik's Cubes with Half Turns

Kellie Halladay, Applied Mathematics

LIVE PERFORMANCE

3:30 p.m. to 4:00 p.m.

Room S204

An Insight to Japanese Contemporary Music

Benjamin Hellert, Music Education

VOLUNTEER AND COMMUNITY SERVICES PRESENTATIONS

The Volunteer and Community Services Program is a part of campus life which provides volunteer opportunities for students to help build sustainable and meaningful partnerships in the community. This program assists students with real world experience while enriching the lives of others and enhancing their academic experience. In addition, the office provides advisement and resources to faculty and staff. The program is dedicated to promoting volunteerism and service learning experiences in and outside the classroom. Students will showcase their volunteer and community service projects/experiences on posters or slideshow demonstration of pictures.

Volunteering in the Community: Sigma Phi Epsilon

Simon Brydges, Business Admin - Finance

Delta Chi Volunteering in Our Community - Volunteer and Community Services

Paddraic Fox, Mathematics-Physics

Co-Presenters: Spencer Bright

Winter Clothing Drive Project; Volunteer Services

Caitlin Sweet, Vis Arts New Med: Draw/Paint

Volunteering In The Community: Alpha Phi Omega

Lucas Butchko, English - Adolescence Educ

Co-Presenters: Jamie Gaiser

Lakeshore Humane Society Volunteer Projects

Alexis Sorbello, Communication - Public Rel

PERFORMANCES

Merrins Dance Theatre, 258 Rockefeller Arts Center

4:00 p.m.

Unburying Certitude

Choreographer: Paula J. Peters, Assistant Professor, Department of Theatre & Dance

Music: Adagio for Strings by Samuel Barber

Dancers: Jacquelyne Ambrosio, Rachel Clayback, Anna Fitzpatrick, Kristen Keitzhaus, Ayami Ijichi, Mamiko Nakatsugawa, Trevor Northrop, Aja Pandey, K Morgan Prikazsky, Rachel Prikazsky, Vanessa Raffaele, Julianne Wagner

Perception or Intention

Choreographer: Rachel Prinkazsky

Music: Stateless, "Bloodstream", and text by the cast

Dancers: Monika Bregande, Jaqlyn Colangelo, K Morgan Prikazsky, Vanessa Raffaele

REMARKS

Room S204ABC

12:15 p.m.

Dr. Virginia Horvath, President

Dr. Teresa Brown, Provost and Vice President for Academic Affairs

Dr. Jack Croxton, Director of the Office of Student Creative Activity and Research

KEYNOTE SPEAKER

Room S204ABC

12:15 p.m.

Dr. Jill Reese

“Reciproactive Growth: Mentorship in Student-Faculty Research”

Dr. Jill Reese is Associate Professor of Music Education at The State University of New York at Fredonia. She earned degrees in Music Education from Temple University (Ph.D.), University of Michigan (M.M), and Michigan State University (B.M.). She taught vocal/general and early childhood music in Michigan and Pennsylvania. She and her university students have presented and published research nationally and internationally on topics including technology, improvisation, early childhood music, general music, and ukulele. She is the founder of Fredonia Ukulele (an intergenerational community ukulele group) and a YouTube channel that provides over 100 original ukulele play-along videos for teachers, students, and amateur ukulele players and has over 16,500 subscribers and 2,000,000 views. She was awarded the 2017 Fredonia College Council Award for Community Engagement for facilitating community ukulele and early childhood music experiences through community-university partnerships. In addition, she has a book coming out through GIA Publications about teaching pedagogy for elementary general music.

ABSTRACTS

(Alphabetical by presenter’s last name)

Avifaunal Biodiversity and Land Use of the Indonesian Palau Penida Archipelago

Ashlee Abrantes, Biology

Mentor: William Brown

Changes in land use affect land cover and biodiversity, making conservation management of regions native to IUCN red list species a challenge. This preliminary study of the small Indonesian islands of the Palau Penida Archipelago begins to fill the gap previous studies have neglected; examining the presence of endemic species in historically deforested tropical regions home to critically endangered animals facing the challenges of improved infrastructure and increased tourism. Over 60 surveys across the islands, 46 exotic and 14 endemic species of a possible 430 species (13.95%), were observed, including the critically-endangered Bali Starling *Leucopsar rothschildi*. Twelve endemic species accounted for 4.63% of nearly 3500 total birds surveyed. Forest, a natural avian habitat, showed a significantly lower species density than all other land use categories surveyed

Poster / Display Presentation 3-3:30

Patriarchy in Society

Jonah Adeson, Social Studies-Adolescence Ed

Co Presenters: Andrew Loretto; Abby Blinn; Ashleigh Reinhardt

Mentor: Jennifer Hildebrand

Patriarchy in society is a major issue both in the past and modern times. Our project is exposing the extent to which it is still prevalent in our society today specifically connected to our insistent social class structure. While also using the writing of Zorniel Hurston to show how this structure was fought in the past and can be fought today.

Poster / Display Presentation 3:30-4

Public Health Internship at the Student Health Center

Abigail Agbi, Biochemistry
Mentor: Melissa Lyon

I am a biochemistry major with a minor in public health. I chose to intern with the health center on campus because it best matches my major and my future career of working in the medical field. For this internship, I have so far made a flyer about getting tested for STDs and work on a brochure about when to use antibiotics. I expect to be more involved with planning health promotion activities on campus. In terms of results, I am still awaiting results, specifically measuring the effectiveness of the brochure. For my own personal results, so far I have learned about what antibiotics are used for as well as how to design an eye-catching brochure. Overall, in terms of public health, I have learned how to inform and educate people about when antibiotics should be used, which connects to public health essential service 3.

Poster / Display Presentation 1-1:30

Lessons with Potential from Teachers with Potential

Valerie Andryshak, Kimberly Gage, Christopher Kelley, Emily Marsh, Sarah McCann, Emily Nichols, Killeen Schmitz
Mentor: Keary Howard, Teodora Cox

From fractions to calculus (and plenty in between) plan to “steal” a variety of take-home projects and activities from Fredonia mathematics education seniors presenting their lesson study research at the Association of Mathematics Teachers of New York State annual conference.

On display with no formal presentation

Danielle Aragon's Public Health Internship

Danielle Aragon-Prieto, Communication - Comm Studies
Mentor: Melissa Lyon

I am a Communication major with a minor in Public Health. At State Farm I studied what motivates people to make actionable choices. I chose this internship because I believe it connects to public health service number five. "Developing policies and plans that support individual and community health efforts." Disability insurance is a plan that helps people who become injured/ill. This policy allows an individual to continue providing for their family, pay medical expenses and even schooling if they cannot return to their regular job. I'm conducting an experiment to see what motivates people to participate in change. Such as coming in or seeking more information. Expected results are people are more likely to make a changes with a personal letter or phone call rather than a generic flyer with information.

Poster / Display Presentation 4-4:30

Recovery after Childhood Aphasia

Rachel Arnold, Comm. Disorders and Sciences

Mentor: McLoddy Kadyamusuma

A lot of research has been conducted on the residual language deficits and abilities after brain damage resulting in Aphasia. Aphasia is a language impairment resulting from brain trauma at various language processing cortical regions, affecting the ability to understand and produce language. This paper explores previous research in an attempt to specify the features that characterize the aphasia and the recovery process in children in comparison to the aphasia that occurs in adults. This paper examines a number of factors that affect the type of recovery patterns and language deficits that manifest after brain trauma in children. This paper explores how factors such as age, etiology, developmental period, lesion site/size, bilaterality, and capacity for language reorganization affect the manifestation and recovery trajectory after brain damage in children. Landau Kleffner Syndrome, a child-specific form of aphasia, will be explored in greater depth in order to shed light on the topic.

Poster / Display Presentation 1:30-2

A New Attack on Women: Acid Attacks and Their Reign in the UK

Tylah Arthur, Comm. Disorders and Sciences

Mentor: Andrea Zevenbergen

The poster presentation will discuss the increase in acid attacks in the United Kingdom and why it is so prevalent in that region compared to other parts of the world. It will zone in on the history of acid attacks that has led to the current frequency of them. Additionally, the source of materials to create this chemical weapon will be discussed as well as the emotional and physical effects of the attack on the victim and the punishment against the perpetrator. Finally, the gender demographics of the attacks will be discussed and related to other aspects of this issue.

Poster / Display Presentation 2:30-3

Capozzi's Pizzeria Internship

Taylor Baird, Psychology

Mentor: Melissa Lyon

I am Senior Psychology Major at Fredonia with a minor in Public Health. I have chosen to do an internship at Capozzi's Pizzeria in Gowanda as it serves the majority of my community. I was expected to create a menu that included calories and a pamphlet for the workers to help them understand and follow the guidelines given by the government. This project allowed me to monitor the health status of my community because the majority of my community consumes food from Capozzi's. By putting the calories on our menu we are informing the community of what they are consuming and hope that they make better decisions. By creating the pamphlet it helped the workers to actually know the laws they are supposed to follow and ultimately helps them to be enforced. The expected outcome of this internship is to provide a safe and responsible food establishment.

Poster / Display Presentation 3:30-4

EnablArm - The Arm That Learns From Itself

Inderdeep Bajwa, Computer Science

Mentor: Gurmukh Singh; Ziya Arnavut

EnablArm is a prosthetic hand that is built on lightweight 3D printing filament. Utilizing the ability of Myo wearable gesture control device, an input from human arm is given in order to replicate movement in the prosthetic hand. With the combination of advanced Machine Learning algorithms and proper tools, it can be trained to do almost any task that an average human can perform. This

prosthetic arm only costs \$40 to design but provides a measurable grip strength up to 14 Kg. At this moment, EnablArm has been programmed with 8 different human gestures including a grip to grab a bottle and to pick up a key, to show wave gesture, fist gesture, open-hand gesture, any two simultaneously used fingers gesture, and thumb up gesture. The use of Machine Learning makes it easier to train it so as to create new gestures, controls its movements, and features similar to human being's arm.

Poster / Display Presentation 1:30-2

Pay Disparities in Major League Soccer

Diana Barva, Business Admin - Marketing

Mentor: Nancy Boynton

When looking at pay disparities in sports it is evident that some players make more than the average salary. There are many reasons why that might happen that may be looked at especially in Major League Soccer (MLS) where some players might play on respective national teams for their countries or just score a lot of goals to justify their high value. With research into the history of the player and their standings we may be able to determine why some might make more than others.

Poster / Display Presentation 2-2:30

Public Health Internship Abstract

Nicole Battaglia, Psychology

Mentor: Melissa Lyon

I am majoring in psychology and minoring in public health and sociology. I chose the internship with Eat Smart New York (ESNY) because I believe nutrition is extremely important, no matter what socioeconomic background one comes from. ESNY gives low income families an opportunity to learn about nutrition, and incorporate it into their lives. My lesson plan is for youth. It helps children increase their consumption of fruits and vegetables. My internship connects to the Ten Public Health Essential Services. For example, number three, inform, educate, and empower people about health issues. ESNY informs people about the potential risks of unhealthy eating, it educates people on how to eat better on a budget, and it empowers people to live a healthy lifestyle. ESNY partners with Cornell University, grocery stores, corner stores, and community gardens to make the program as beneficial as possible.

Poster / Display Presentation 2-2:30

Visualizing Global Terrorism

Chadwick Berggren, Mathematics

Mentor: Nancy Boynton

The Global Terrorism Database (GTD), maintained by the University of Maryland, was created to document terrorist attacks across the world using a large number of variables to describe each incident. R Studio, which is data analysis software, is used to generate graphs to visualize where terrorist attacks occur most frequently, and the type of attack. This project will also try to identify any motivations across all attacks either regionally or globally.

Poster / Display Presentation 1-1:30

A Cup of Coffee & The English Enlightenment

Anna Booth, History

Mentor: John Staples

For my topic I would like to talk about the changing intellectual roles of men and women during the Enlightenment. I would primarily focus on English coffee houses and salons, where men and women went to share their ideas in a way that they never had before. Additionally, I would discuss the significance salons played in the further education of women. For men, coffee houses provided a sort of classroom where men of lower income could pay a penny for a cup of coffee and an intellectual debate. I would focus on the eventual integration of coffee houses and other public areas for debate, and the growing idea that women could be intellectual equals to men.

Poster / Display Presentation 1-1:30

Volunteering in the Community: Sigma Phi Epsilon

Simon Brydges, Business Admin - Finance

Mentor: Joyce Smith; Raymond Rushboldt

SigEp is redefining fraternity on college campuses across the country. We complement a man's education by delivering a premier student experience in one of the most formative times of his life. Through SigEp, men strengthen their character, build leadership and interpersonal skills, and learn to develop healthy, lifelong relationships that are essential to a successful and fulfilling life. Member of Sigma Phi Epsilon volunteer often throughout the semester on the local, regional, and national level. Some of our campus wide events include, 'Bald for Bucks,' 'Tree Trot,' 'Fredonia 5k run/walk,' help with hurricane Maria relief, along with multiple community wide clean ups.

Poster / Display Presentation 1-1:30

The Start of Feminist During the Enlightenment?, and How They Shaped the World.

Megan Buchholz, History

Mentor: John Staples

How did women shape the world? My presentation looks through the eyes of the enlightenment and shows how women were treated and what they did to overcome the norm of obedience under men they have faced during the time. These women were not taken seriously by the so-called enlightened thinkers that we know today but they have helped push for women's rights and independence. My presentation will expose the men and women that were in the mist of progression for women's rights, and to show the ugly truth that women had to face on their day to day life.

Poster / Display Presentation 2:30-3

Volunteering In The Community: Alpha Phi Omega

Lucas Butchko, English - Adolescence Educ

Co Presenters: Jamie Gaiser

Mentor: Joyce Smith

For more than 10 years, Alpha Phi Omega has worked with the Volunteer and Community Service office. Alpha Phi Omega is a national coeducational service fraternity focused on assisting our campus and community. During the past year, we have performed a variety of community service activities, including Fall Sweep, Safe Halloween, Operation Breakfast Rescue, the Winter Clothing Drive, and the Hurricane Relief Efforts, which is located in Erie Hall.

Poster with no formal presentation

MoCCA Arts Festival Features Animation/Illustration

Anais Cantres, Vis Arts New Med: Anim & Illus
Mentor: Jill Johnston

The Society of Illustrators is hosting the Museum of Cartoon, Comics, and Animation festival on April 6 and 7, 2018. This event is Manhattan's largest independent comics, cartoon and animation festival, where there are over 7,000 attendees from across New York each year. The event features over 400 exhibiting artists displaying their work, award-winning guests of honor speak about their careers and artistic processes and other featured artists conducting workshops, lectures and film screenings. The Animation and Illustration Club at Fredonia traveled to the Metropolitan West in New York City. Students from the club exhibited their work, attended screenings, met with other artists and presented themselves with job opportunities in New York City. The event expanded student's opportunities by making friends with other artists and possible employers all over New York. We hope to encourage other artists at Fredonia and provide career resources to our students and club members.

Poster / Display Presentation 4:30-5

Seeing Oneself: Contextual Analysis of Diversity in Commonly Read Young Adult Literature

Jessica Carson-Davis, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This presentation discusses the quality and variance of the representations of Culturally and Linguistically Diverse populations in popular young adult literature. Through the lenses of Critical Race Theory, Multicultural Literature Theory, and Reader's Response Theory, this researcher has completed a content analysis of nine popular young adult novels to analyze the quality of the representations found, as well as the demographics of the authors of the novels.

Poster / Display Presentation 4-4:30

Examining the Issues of Domestic Violence and Gender Norms Through the Works of Zora Neale Hurston

Owen Cheeseman, Social Studies-Adolescence Ed
Co Presenters: Santazzia Collins; Nelson Mendoza
Mentor: Jennifer Hildebrand

The presentation, which consists of an informational poster, will examine the persistent societal issues of domestic violence and gender norms, relating the ongoing discussion of the intertwining nature of these two issues to Zora Neale Hurston's classic novel *Their Eyes Were Watching God*, with specific attention paid to how the action of characters within the book reflect Hurston's view of these issues.

Poster / Display Presentation 4:30-5

H1B Visa Petitions Analysis

Jason Cheung, Computer Science
Mentor: Nancy Boynton

As more businesses and companies look into data driven technologies such as automation and AI, the demand for data scientists has been growing quickly. H1B visa which is an employment based visa to allow foreign workers to work in the US. With the increasing demand for data scientists in the United States, it is hypothesized that there is a growing number of international workers needed to fill those positions. This study is carried out to analyze whether there is a connection between H1B visa

petitions for jobs related to the data science field as well as the geographical locations of different H1B visa petitions. This study was based on data from the US Office of Foreign Labor Certification (OFLC) for H-1B Visa petitions between 2014 – 2017 consisting the job's location, position, year, status with over 1 Million applications which were analyzed and visualized through the use of R and R Studio.

Oral Presentation 2:30-3

The Family Kitchen - Chautauqua County Rural Ministries

Alaina Corso, Comm. Disorders and Sciences
Mentor: Melissa Lyon

I am a Communication Disorders and Sciences major with a minor in Public Health. I selected this internship because I love working with children and making a little difference in their life. This internship is about providing the local community with the knowledge and options needed when it comes to nutrition and health. There is a monthly Cooking and Nutrition workshop at the Family Kitchen which offers a healthy meal and dessert along with information on why it is a healthy choice. The focus of these workshops are on the younger generations; we want to educate them on healthy eating habits and reduce childhood diabetes and obesity. This internship is connected to the third Public Health Essential Service, which is "Inform, educate, and empower people about health issues".

Poster / Display Presentation 4-4:30

A Vocabulary Analysis of the New York State Mathematics Assessments

Shana Czekanski, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

A Vocabulary Analysis was completed on the New York State 2017 Mathematics Assessments for grades 5 through 8. The Vocabulary Analysis was completed using the 2017 New York State Standards and Tiered Vocabulary in order to begin to identify the reading difficulty of the Mathematics Assessments.

Poster / Display Presentation 2-2:30

School Social Work Internship

Alicia Deering, Psychology
Mentor: Melissa Lyon

My name is Alicia Deering and I am a Psychology major with a double minor in Public Health and Sociology. I worked closely with the School Social Work team at The Academy at Maple Ave in two projects that aimed at fighting hunger in our community. I chose this internship because my ideal career would be a School Social Worker. I learned about what their roles were and how they are involved outside of the schools and in their communities, as well as which population I would like to work with in the future. Our goal was to begin a food pantry for the students through donations. The Partners in Kind of Chautauqua County project involved collecting and donating personal care baskets for the elderly. These two projects mobilized community partnerships as well as linked people to health services.

Poster / Display Presentation 4:30-5

UFO analysis

Jess Delcamp, Applied Mathematics
Mentor: Nancy Boynton

A dataset scraped from the National UFO Reporting Center (NUFORC) containing information regarding UFO sightings throughout the world is used to find associations between variables in the dataset. This dataset examines mostly domestic sightings, with a number of international sightings as well. Relationships between variables such as location, shape of object, and duration are discussed. The main focus of this project is to analyze the characteristics of each occurrence using geographic maps and numerous graphs to do so. A data analysis software, RStudio is used to complete these analyses, with over 88,000 UFO sightings included.

Poster / Display Presentation 2:30-3

Preparing the Fredonia Observatory Camera to Take Science Images

Sean Dempsey-Gregory, Physics

Mentor: Michael Dunham

A 17 inch PlaneWave Instruments telescope with a SBIG STT-8300M CCD camera was recently installed on the State University of New York at Fredonia campus, for use in education, outreach, and research. Our current goal is to characterize the noise properties of the camera, in particular the noise added by calibration procedures, so that we are able to minimize the noise added by calibration to our science images. In order to achieve this goal we have analyzed the relationship between the number of dark frames used and the noise in the combined master dark frame. We have also performed a preliminary analysis on the stability and consistency of flat field frames across different nights.

Poster / Display Presentation 1:30-2

Set It Up Guide

Johnelle Dishaw, Interdis Stds-Exercise Science

Mentor: Melissa Lyon

This internship's purpose is to research the people of Chautauqua county to help them become more active and update the County's Step It Up Guide. By doing this, I found what is current and new information that needed to be added. I am looking for activities for the older generation and thinking about and identifying what activities are appropriate for this generation. Also, I identified activities that would be helpful for the whole population. I selected this internship because I am passionate about health and wellness and helping people find a place to be physically active. From this research I learned there are many places to be active in Chautauqua county for all ages, such as trails, parks, fitness centers, and schools. I learned this through two main Public Health essential services; evaluate effectiveness, accessibility, and quality of personal and population-based health services and research for new insights and innovative solutions to health problems.

Poster / Display Presentation 2:30-3

Exploring the Current Model of Autism in Mouse: Third Trimester Exposure to Valproic Acid

Lillian Dixon, Biology and Psychology

Co-Presenters: Alberto Gonzalez, Matthew Evans, Connor Mauche, Mackenzie Hardy

Mentor: Catherine Creeley

Valproic acid (VPA) is a commonly prescribed drug for those suffering from epileptic disorders as well as bipolar disorder. When individuals who are reliant on these medications become pregnant, they must decide between stopping their medications or using a known human teratogen. VPA is known to have specific effects to the human embryo during development, these characteristics have become

known as fetal valproate syndrome. This syndrome is characterized by facial dysmorphism, congenital anomalies primarily spina bifida as well as decreased verbal intelligence leading to a diagnosis within the autism spectrum disorder. These negative effects are not exclusive to humans however, and have been shown to have a less severe effect on other mammals who have been exposed. VPA has since been used in animal models of autism spectrum disorder in research. We used the neonatal mouse model on Swiss - Webster timed pregnant mice to examine the effects of valproic acid exposure in the third trimester. Litters of pups were randomly assigned on P14 to one of three groups, a control receiving saline, or a second or third group which were injected with differing doses of valproic acid (200 mg/kg or 400 mg/kg respectively). Body weights were measured daily for 25 days starting on P5. Walking initiation, rotarod testing, and sociability testing (three chambered apparatus) were performed through P43, with Morris water maze testing spatial learning and memory between P54 to P67. It was hypothesized that results of such testing would suggest deficits consistent with the autism model in mice exposed to VPA. Results will be shared at the conference.

Poster / Display Presentation 2-2:30

Enlightenment of the French Revolution

Isaiah Eisenhauer, History

Co Presenters:

Mentor: John Staples

I will explain the effects of the age of enlightenment on the French Revolution, Reign of Terror, and Napoleons rise to power in France. This Chaotic time in France was a direct result of the enlightenment and enlightenment thinking. It is from the enlightenment we see the end of the Monarchy in France I will explain why, and How.

Poster / Display Presentation 2-2:30

Bat Population Monitoring: Using Acoustic Surveys to Better Assess Activity Levels in Bat Populations

Sandra Emke

Mentor: Karry Kazial

Although bats are the second largest group of mammals and they provide many ecosystem services, they are very cryptic in nature, making it hard to monitor and research bat populations. Understanding these population trends are essential for conservation and management efforts. Many methods of population monitoring have been developed, all with benefits and drawbacks. Mist netting was the most popular way of monitoring bat populations until recent years. Now it is more common for acoustic surveys to be used in order to monitor these difficult species. This poster will discuss information centered on monitoring bat populations using ultrasonic microphones and conducting walking acoustic surveys on bat populations within Chautauqua County. Information included; why and how surveys are performed, what can be done with the information collected and even how you can get involved.

Poster / Display Presentation 2-2:30

Bringing the Classroom to Life through Studying Abroad

Nicole Ewer, Spanish

Mentor: Erin Willis

It is no doubt that study abroad and exchange programs are beneficial to students' intercultural awareness as well as personal, intellectual and professional growth. However, during my experiences

as an exchange student in Mexico and an intern in Spain, I discovered a unique academic element that contributes to the abundant benefits of expanding one's learning across borders. During my experiences abroad, I was exposed to a foreign language, cultural characteristics, and historical sights that I had learned about in class. The experience of interacting with the material I was learning first-hand, rather than solely visually, allowed me to develop a personal connection to these topics and therefore become extremely interested and enveloped in the class material. Study abroad and exchange programs bridge the gap between imagination and reality, therefore increasing student understanding and engagement.

Poster / Display Presentation 4:30-5

Enlightenment and Women: Overcoming Pitfalls and Exclusion

Ian Fairchild, History
Mentor: John Staples

The subject of this poster will be about the impact that the Enlightenment had on women during the time period. Things that will be included are as follows: ways that men attempted to exclude women, pitfalls that women faced, and their successes. Examining ways that they contributed to the new societal changes and influenced way of living will be beneficial because they will uncover a perspective that is often overlooked and will allow some to realize that women had a large impact on Enlightenment thinking and society.

Poster / Display Presentation 3:30-4

The Lines of Conformity and A Meshed Consciousness

Tyler Favorite, Sociology
Mentor: Jeanette McVicker

To express embodiment, language, and subjectivity from my Women's Writers class with Dr. McVicker, I decided to use the two novels *A Room of One's Own* by Virginia Woolf and *Cassandra* by Christa Wolf. For my project I have decided to create a few abstract art pieces using acrylic paint on poster boards to demonstrate how the novels correlate and express the same ideas that women had to take and create a different path other than the one laid out in front of them to write, create artwork, or anything that wasn't considered acceptable for women throughout history. The first piece of artwork I created is titled *Lines of Conformity* and the second piece of artwork I made is titled *Meshed Consciousness*.

Poster / Display Presentation 3-3:30

miRNA mediated knockdown of B-Oxidation enzymes in Chlamydomonas reinhardtii

Jacob Favret, Molecular Genetics
Co Presenters: Derek Koscinski
Mentor: Frederick Harrington; Phillip Hastings

Microalgae have shown enormous potential to be used as a carbon neutral source of biofuel. Under various environmental stressors algae have shown physiological changes in their storage and production of triacylglycerols (TAG's) which are pre-cursors to biofuels. mRNA analysis revealed that the increase in storage of TAGs not due to an increase in the synthetic pathway activity but rather a downregulation in the oxidative pathway, known as the Beta-oxidation pathway. Current research in the Harrington lab is focused on disrupting the enzymes of the B-oxidation pathway, as well as lipases present in *Chlamydomonas reinhardtii* using miRNA a method of RNA interference. miRNAs disrupt translation of RNA to proteins therefore altering phenotypic expression. The levels of cellular RNA

following transfection of *C. reinhardtii* with the miRNAs will be assessed using quantitative RT-PCR to assess the efficiency of the knockdown.

Poster / Display Presentation 1:30-2

Derivatives Deficiencies: An Analysis of College Students' Misconceptions Regarding Derivatives and their Applications

Emily Fay, Mathematics 7-12

Mentor: Keary Howard; Teodora Cox

This research investigates why students encounter difficulties when solving calculus problems, especially those involving derivatives. Specifically, it examines the misconceptions students have solving calculus problems involving various derivative rules when they are combined or put in context. It is hypothesized that varying levels of calculus students (University Calculus I and II, Survey of Calculus I and II, University Calculus III) will make similar procedural and conceptual mistakes on problems involving derivative rules such as product, quotient and chain rule. Furthermore, students will make procedural and conceptual mistakes when said derivative rules are part of a more complex differentiation problem (i.e. multiple derivative rules are involved or in contextual examples involving the derivative).

Poster / Display Presentation 4-4:30

USITT 2018

Erin Feil, BFA Theatre Production and Design

I attended USITT 2018 in Fort Lauderdale this year to meet professionals of the Theatrical Production Industry. I also applied for the USITT Lighting Design award sponsored by Barbizon Lighting, using my designs I created here at SUNY Fredonia. I attended professional sessions and learned about the new advancements of the industry, along with presenting my portfolio and resume to a team of judges as well as winning 2nd place in the USITT olympics with Brian C. Staton for light hang.

Poster / Display Presentation 2-2:30

The Chautauqua Center health patient portal

Ashley Feind, Biology

Mentor: Melissa Lyon

My internship to fulfill my public health minor this semester has been for The Chautauqua Center. Their mission is to deliver high quality patient centered health in our region. Here, they are assuring the provision of health care to individuals that might otherwise not have access to such service. For my 40 hours I will be working at the Dunkirk and Jamestown centers every week. My job requirements for my position are to help patients with their online health patient portal, as well as educate the patients of The Chautauqua Center's services. My goal is to encourage patients to sign up for the patient portal, and hopefully to increase the number of participants. The portal allows the center's patients to view their lab results, request prescription refills, and schedule appointments along with many other features. At this internship I will receive real experience working in the public health field and assuring competent public health services for everyone.

Poster / Display Presentation 4-4:30

Initiatives Improving Health in Chautauqua County

Leah Ferger, Biology

Mentor: Melissa Lyon

The improvement of overall health in Chautauqua county communities is the focus of the project carried out during my internship with Eat Smart New York through Cornell Cooperative Extension. The main goals of the Eat Smart New York program that I chose to focus on were increasing the consumption of fruits and vegetables and reducing the intake of beverages with high sugar contents. I achieved these goals through teaching programs and community involvement. The the issue of sugary beverage consumption was addressed by offering alternatives for these drinks, healthy fruit-infused water directly compared to soda and juices through a visual display. Teaching programs in the community targeted the goal of healthier eating, specifically demonstrating how to grow healthy foods and planting vegetables with children at the Jamestown gardening exposition. Children and adults were surprised by how easy healthy eating can be and how destructive current habits can be.

Poster / Display Presentation 1-1:30

Food Waste Study @ Cranston Marche

Brandon Flores, Business Admin - Management

Mentor: Lisa Walters

Weighed food waste in Cranston Marche. Recorded based on whether it was solid or liquid waste. Found total waste. Found Average waste. In order to determine an assignable cause for food waste, I also recorded waste based on which station the food came from. (1 of 6) This is a follow-up to a similar project done in 2011, also at Cranston Marche.

Poster / Display Presentation 2-2:30

Delta Chi Volunteering in Our Community - Volunteer and Community Services

Paddraic Fox, Mathematics-Physics

Co Presenters: Spencer Bright

Mentor: Joyce Smith

For the past 25 years, the Delta Chi Fraternity has been volunteering in our community. We have increased our efforts and would like to share our experience and passion with the campus and the community. We will create a poster highlighting some of our major events including: Day for Kids, Fall Sweep, Relay for Life, and Adopt-A-Beach.

Poster / Display Presentation 1:30-2

Diatoms of high altitude lakes in the Andes Mountains of Peru

Jeri Franklin

Mentor: Courtney Wigdahl-Perry

Limited information is available about the environmental history of high-elevation areas of South America - microfossils contained in lake sediments may provide valuable records of past climate on a local to regional scale. To explore whether diatoms (a type of algae microfossil) are present in these lakes, core samples were obtained from three high altitude lakes in the Andes Mountains of Peru. The samples were then sectioned off and processed in order to isolate and clean the diatoms. Diatoms samples were identified to genus via a compound microscope. The long term goal of this project is to pair the data with archaeological records to understand climate and human occupation of the Andes.

Poster / Display Presentation 1-1:30

Plant competition and mycorrhizal fungi

Jeri Franklin

Mentor: Jonathan Titus

Note: please contact me via farn5149@fredonia.edu Experimental research into the relationship of mycorrhizal fungi and plant growth. Soil samples were obtained from two different locations. One soil sample was from beneath spruce trees and the other from beneath brush. Half of the soil from each location was autoclaved, to destroy any mycorrhizal fungi that may have been present. Thus, there are a total of four soil treatments. A native grass (Big Bluestem 'Niagara'), and a habituated grass (Timothy) were planted in each soil type. Data will be collected to determine how the mycorrhizal fungi impacts plant growth, and how the growth of the native grass is effected by the presents of the habituated grass.

Poster / Display Presentation 1-1:30

Associations between Predictors of Sexual Aggression and Self-Reported Coercion in Latinx versus Non-Hispanic Ethnicity

Kara Freise, Psychology

Mentor: Darrin Rogers

Sexual aggression causes negative psychological, health, and economic consequences. We explored the strength of associations between a variety of culturally-linked cognitive and social variables and indicators of sexual aggression in Latinx and non-Hispanic individuals. An online survey was administered to students (27.7% male, 71.8% female) from a Hispanic Serving Institution in the US-Mexico border region (N=619) and a university in the northeastern US (N=355). Sixty percent of participants reported Latinx heritage. Variables including acceptance of interpersonal violence, belief in scripted refusal, belief in the opposite sex as fundamentally unknowable and fundamentally other, callous sexual attitudes, adversarial relationship beliefs, and conformity to gender norms were modeled as predictors of sexual aggression. Using structural equation modeling methods we compared the strength of relationships between these sets of variables in Latinx versus non-Hispanic white participants. Implications for future research will be discussed.

Poster / Display Presentation 4-4:30

History Capstone Presentation

Madeline Friedler, History

Mentor: John Staples

I will be researching and presenting on how the Europeans used the Enlightenment movement as a tool to rationalize their colonization of foreign lands.

Poster / Display Presentation 2:30-3

How Latinos Experience Racism in Western New York

Mikayla Fuller, Sociology

Mentor: Randolph Hohle

The goal of this study is to understand the lived experiences of Hispanic people in Jamestown, NY. This project will explore the different challenges they face living as a racial minority. The subjects will answer open ended interview questions about how their lives have been impacted by their ethnicity, how they cope with challenges, and how they fight against the various stigmas. They will also answer a

few questions using the Likert scale to describe the degree of acceptance they feel in the community and amount of pride they feel about their nationality.

Oral Presentation 1-1:30

Home Literacy Environment and Its Effect on Emergent Literacy Skills

Ashley Gangi, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

Home literacy environment is an important factor when it comes to young children developing emergent literacy skills. This master's capstone project will present a free website resource developed by the presenter to provide information on the best literacy practices parents can use in the home can help children succeed in reading and writing once they attend formal schooling.

Poster / Display Presentation 3:30-4

Universal Screening for literacy needs within a Response to Intervention Framework

Kelsey Gannett, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This poster will present an historical analysis of the government policies that led to the Response to Intervention framework. Also included will be a brief historical overview of special education and the interaction it has with the Response to Intervention Framework.

Multimedia Presentation 2:30-3

Fredonia Enactus 2018 Summary

Jane Garrity, Business Admin – Marketing
Co-Presenter: Kelsey Kaczor
Mentor: Susan McNamara

Enactus is an entrepreneurial national nonprofit organization focused on economic, social, and environmental outcomes. Our team is composed of 85 students working on 5 teams across 13 projects. We assess the needs within Chautauqua county and forms teams to work towards creating an impact. Each year we travel to competition to present on our outcomes from throughout the year.

Poster / Display Presentation 3:30-4

The Affective Factors that Influence a Child's Emergent Literacy Skills and Behaviors

Taylor Gawron, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

Emergent literacy is a child's knowledge of reading and writing skills before they learn how to read and write words. This thesis explores the many factors that impact a child's emergent literacy skills, including self-efficacy, motivation, attitude, and family factors.

Multimedia Presentation 3:30-4

Perceptions of Individuals Diagnosed with Cancer

Taylor Gibbon, Psychology
Mentor: Jack Croxton

The purpose of our study was to examine the attitudes and emotions of individuals with cancer. More specifically we examined how college students believe individuals with cancer view their (eg. the cancer patients) life in terms of quality of life (QoL) and hope. We conducted a study that focused on the perceptions of emotions of individuals diagnosed with cancer varying age, type of cancer, and stage of cancer progression. College students were given one of eight randomly assigned miniature biographies regarding a cancer patient, where the patient is either seventeen or seventy-five, has breast or lung cancer and is described as either curable or terminal. We performed a 2x2x2 factorial design, varying age of the patient (seventeen/seventy-five), type of cancer (breast cancer/lung cancer), and the patient's prognosis (curable/terminal).

Poster / Display Presentation 1:30-2

Adolescent Reading Habits and Perceptions

Alyzia Glasier, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This qualitative research will explore adolescent reading habits and attitudes through paper based and online surveys distributed to 6 high school students in an after school homework program at the library.

Poster / Display Presentation 1:30-2

Women's Issues and Domestic Abuse

Alexis Grissom, Criminal Justice
Co Presenters: Jayla James; Mahogany Barker; Cameron Collignon
Mentor: Jennifer Hildebrand

With a thorough knowledge and background of domestic abuse through society's eyes and the knowledge obtained from Zora Neale Hurston's, *Their Eyes Were Watching God*. We will explain the similarities and common parts of women's issues in society and how domestic abuse ties in with that as well.

Poster / Display Presentation 3-3:30

Structure- Function Analysis of the gurken-5'UTR

Brian Guy, Molecular Genetics
Mentor: Scott Ferguson

Gurken (Grk) is an EGFR ligand that establishes dorsal-ventral and anterior-posterior patterning in oocyte development in *Drosophila melanogaster*. Spindle-B (Spn-B) is an enzyme responsible for the reparations of DNA breaks, and flies mutant for Spn-B have reduced Grk expression due to the activation of the ATR/CHK2 meiotic checkpoint. We have found that spn-BBU mutants that are subject to dietary restriction lay more wild type eggs reflecting the return of Grk expression. We hypothesize that the grk mRNA has an Internal Ribosomal Entry Site (IRES) that initiates translation independently of the 5' cap. Using dual luciferase assays and CRISPR mutagenesis, our current data suggest the IRES is located in the grk 5'UTR. To determine the structures that are required for IRES translation, we performed a SHAPE experiment on the grk 5' UTR. In combination with the mutagenesis study, we have begun to identify the structures that facilitate IRES function.

Poster / Display Presentation 2-2:30

A New Approach to Optimal Solution of Rubik's Cubes with Half Turns

Kellie Halladay, Applied Mathematics

Mentor: Jonathan Cox

How many moves are required to solve a Rubik's cube in the quickest way possible? There is a method for finding the maximum number of moves to solve a Rubik's cube in the minimum number of steps. This number is known as God's number. We will consider finding God's number in the case where we only allow 180 degree turns on the cube. Is the size of the cube a factor in determining the optimal number of moves needed? Take a 2x2x2 Rubik's cube, for example. It seems that this cube would require less moves than a 3x3x3 to solve. How do these 2 cubes compare? Are there Rubik's puzzles that are larger than a 2x2x2 but smaller than a 3x3x3? Yes, and these intermediate steps in between the 2x2x2 and the 3x3x3 are vital to the analysis of the 3x3x3.

Oral Presentation 3:30-4

Comparing SUNY Schools

Michelle Hamilton, Business Admin – Finance

Mentor: Nancy Boynton

Data from Collegescorecard.ed.gov are used to compare the percentages of each ethnicity in all of the SUNY Schools, the percentage not enrolled and employed 6 years and also 10 years after graduating. The goal is to see if some SUNY schools are superior to others in employment after graduation and if the mixes of ethnicities are different in each SUNY school. This will be extremely interesting, because SUNY schools charge close to equal tuition, but if one school has better employment rates after graduation it may attract more people.

Poster / Display Presentation 3-3:30

Belize 2018

Emily Hauser, Child Inclusion Ed: Engl 7-9 Ext

Mentor: Erin Willis

This poster will reflect my J-Term in Belize, Central America. I am going to include pictures, and talk a lot about the school that I taught in for two weeks, some of the struggles of teaching in a different country, and so on. I will be also including some of our expeditions and photos of those as well.

Poster / Display Presentation 1:30-2

Dementia Through a Positive Lens

Madeleine Heaton, Comm. Disorders and Sciences

Mentor: McLoddy Kadyamusuma

Alzheimer's disease is the leading cause of dementia in the United States. Alzheimer's dementia involves the progressive neurodegeneration of the brain. This deterioration of the brain leads to cognitive deficits as each cerebral lobe of the brain becomes affected. In addition to memory, the other symptoms of this disease may include experiencing mood swings, loss of planning abilities and the ability to participate in everyday tasks. The purpose of this research is to analyze past and present views on dementia, while simultaneously exploring how the views affect the lives of patients with dementia. This paper investigates the Biomedical view as well as the Positive approach, and their varying effects on the quality of life for individuals with dementia. The Positive lens approach encompasses various types of therapy approaches such as Elder-Clowning, and Spiritual Reminiscence therapy. This paper will explore the efficacy of these therapies and whether they increase the quality

of life in individuals with dementia.

Poster / Display Presentation 1:30-2

Interracial Anxiety: How Previous Experiences with Other Races And Racial Attitudes Can Affect Future Interactions

Sade Hellams, Psychology BS
Mentor: Lisa Denton; Joseph McFall

This project consists of two studies that explore racial attitudes and experiences among White and Black adults. The purpose of Study I was to determine whether a lack of positive previous experiences with another race creates intergroup anxiety. We sought to replicate the results of previous research with White participants, as well as extend the research with Black respondents. We will conduct a factor analysis to determine if the Black participants' responses to a measure of intergroup anxiety are consistent with the pattern of responses of White participants. The purpose of Study II was to determine whether the level of one's overt racism affects the answers to the original measure of intergroup anxiety from the Plant (2003) study. To do this, we administered the original Plant measure, as well as the Modern Racism Scale (McConahay, 1986), to college students. Data will be analyzed by the date of presentation.

Poster / Display Presentation 3:30-4

An Insight to Japanese Contemporary Music

Benjamin Hellert, Music Education
Mentor: Karolyn Stonefelt

The art of Japanese contemporary music is made up of so many concepts, regarding timbre, rhythm, and tonality that are so abstract to the western world. Specifically discussing the works of Keiko Abe can sum up many other composers works as well as she is one of the shining stars of this musical style. These certain concepts provide so much ambiguity in a sense of what you are hearing, yet so much certainty in the emotions you feel when listening. Abe's music is filled with a certain energy that broadcasts several wide ranging emotions over few minutes. Her music is mainly transcendental and addresses the beauty of the natural world. Although this is not always the topic of other Japanese composers the language in which they communicate a point is very similar to what Abe may do.

Live Performace 3:30-4

Ketone Synthesis through a Weinreb Amide-Grignard Reaction

Kelly Hider, Biochemistry
Mentor: Matthew Gronquist

Some roundworms within the order Aphelenchida, including some species which are economically important as agricultural pests, have been shown to interact ecologically through the use of volatile pheromones. Chemical analyses by gas chromatography-mass spectrometry (GC-MS) have identified several candidates for the active pheromone or pheromone mixture. In order to confirm tentative identities, as well as to carry out further biological testing, a synthetic sequence leading to the candidate compounds based on the Weinreb amide-Grignard ketone synthesis has been developed.

Poster / Display Presentation 3-3:30

Evolution Of Protostellar Outflows

Kassidy Howard, Physics

Mentor: Michael Dunham

Protostellar outflows, which are ubiquitous in the star formation process, remove mass and angular momentum from the forming star and trace the underlying mass accretion process. In an effort to better understand how outflows evolve and how they regulate star formation, we have previously measured the dynamical properties for a large sample of isolated protostellar outflows. The goal of this present research project is to assemble complete spectral energy distributions for each protostar, calculate evolutionary signatures for each object, and place them into a relative evolutionary sequence, so that we may study how outflows evolve as protostars evolve.

Poster / Display Presentation 4:30-5

Capture: Scoring for Short Film

Benjamin Jankowski, Music Education

Mentor: Jamie Sampson

"Capture" is an open-source short film that I scored myself. I will show the 3 minute short film, while also going into a brief history of film scoring, as well as some methods I used to convey narrative, character, and world dynamics. Since film first existed, music has played alongside it in a variety of capacities. Certain compositional pioneers, like Erich Wolfgang Korngold and Aaron Copland, began to introduce leitmotifs to represent character development, and scoring a scene to track dramatic and emotional arcs on both a micro and macro scale, respectively. The talk will also feature the use of specific tools and tricks used by film composers of the past and by myself in my short film, such as the use of harmonic stasis, a re-orchestration of a theme, and musical cell development.

Oral Presentation 3-3:30

Clean and Healthy New York

Saphire Jones, Psychology

Mentor: Melissa Lyon

Clean and Healthy New York (CHNY) is a grass roots organization located in Albany, New York, focused on changing environmental policies. CHNY is primarily concerned with the unregulated toxins found within children's products. This internship provides undergraduates a hands-on experience with common public health networks of change. Interns are heavily involved in meeting senators in attempt to gain bill support; connecting with other public health agencies to create a partnership around the common issue; being a public face of CHNY with direct face-to-face lobbying at Albany's capital, and reading research to ensure maximum understanding of CHNY's target issue. Although my desire is to be a therapist, CHNY provided an education that transcends demographic barriers by illustrating the impact of public health issues and the immense change legislative action can create.

Poster / Display Presentation 4:30-5

Peasants During the French Revolution

Rebecca Jones, Social Studies-Adolescence Ed

Mentor: John Staples

This poster will be presenting how peasants and lower class peoples lived during the Enlightenment Age. Specifically, how French peasants were affected by Enlightenment thinking and changes brought on by the French Revolution.

Poster / Display Presentation 3:30-4

Recycling In Classrooms On Campus: An Analysis Using Six Sigma

Thomas Jones, Business Admin - Management
Mentor: Lisa Walters

There is room for improved recycling rates on campus here at Fredonia State College, and colleges across the nation. This analysis was done to address that topic, specifically in classrooms. I picked this study to show the versatility of the Six Sigma process, and its uses in virtually any area of business and all walks of life where there is a process. Because let's face the facts, everything is a process. With this study I had hoped to find key issues in the process and discover solutions to these issues, to improve the process. Hopefully, with enough overall concern and effort, change can be achieved.

Poster / Display Presentation 4:30-5

Step It Up Guide

Cassandra Kaminski, Psychology
Mentor: Melissa Lyon

I'm a psychology major with minors in public health and sociology. I worked on the Step It Up Guide through the Chautauqua County Department of Health and Human Services. The guide provides a list of places in Chautauqua County where people can go to be active. I researched locations and information that would be helpful for someone aged fifty and older. I transferred that information into a brochure that's available to the public. I chose this internship because I'm interested in finding ways to help others stay healthy. The objectives were to provide services for a specific target population, to create a brochure that people will read, and to create a guide that's easy to follow. Through providing locations and activities where people can be active, the internship connects to the public health essential services: link people to needed health services, and research new insights and solutions to health problems.

Poster / Display Presentation 4:30-5

Student Expo Poster - HIST 206

Emily Keyes, Social Studies-Adolescence Ed
Co Presenters: Justyce Ramsey; Michelle Merrill
Mentor: Jennifer Hildebrand

This project will connect race and feminism within the book "Thier Eyes Were Watching God" to present day social justice movements.

Poster / Display Presentation 3-3:30

Belief in performative bisexuality in participant perception of responsibility and harm in victims of sexual aggression.

Elayna Kinney, Psychology
Co Presenters: Ernesto Mercado Irizarry; Ariel Gelfand
Mentor: Darrin Rogers

Bisexual individuals are subject to stereotyping, prejudice, and marginalization. One especially problematic stereotype is a belief in performative bisexuality (BPB), the belief that women—especially bisexual women—engage in sexual acts with other women primarily for the pleasure of observers. BPB is conceptually linked to sexual aggression against bisexual women. Over 400 online survey participants responded to a scale assessing BPB and to vignettes in which males pressured women for

performative bisexuality. We hypothesized that BPB in participants would be associated with lower ratings of harm and higher ratings of responsibility for victims in the vignettes, and that BPB would predict these responses more strongly for hypothetical victims who were bisexual versus heterosexual. The first set of hypotheses were clearly supported by results, while the second set were partially supported. These results will be discussed in light of bisexual-specific risk for sexual aggression and ongoing efforts to address biphobia and its consequences.

Poster / Display Presentation 4-4:30

Enlightenment in the Founding of the United States

Adam Klajbor, History

Mentor: John Staples

This project is meant to look at the American Founders and the influence that the Enlightenment had on the creation of the United States Government. It will look at founders such as Jefferson, Adams, and others that had a profound influence on the creation of the Government.

Poster / Display Presentation 3-3:30

Statistical Analysis of Smoking and Health Outcomes by County

Eric Knop, Business Admin - Finance

Mentor: Nancy Boynton

My project uses the data sets at countyhealthrankings.org to analyze and compare county smoking rates with health outcomes and state tax rates to state smoking rates to see if there is any association between either of them. I will also look at some counties that have their own tax rates on top of the state rate and to see if that makes the smoking rate significantly lower than the state average. The data will be presented with statistics and graphics to make it easy to read and understand. Along with looking at multiple regression and supervised learning models.

Poster / Display Presentation 3-3:30

Student metacognition and understanding the strategies students use to increase reading comprehension.

Kiri Kochanski, Literacy: Birth-12, Graduate Student

Mentor: Susan Sturm

This thesis explores if middle school students are metacognitively aware of the strategies they use to increase reading comprehension. It aims to answer a question of why do students not use reading comprehension strategies when they have been taught multiple.

Poster / Display Presentation 3:30-4

Colorism and the Effects of Gentrification

Matthew Kowalski, Music Performance

Co Presenters: Kathryn Andalora; Alexandra Buchner; Taylor Golisano; Jolie Perry

Mentor: Jennifer Hildebrand

This presentation will take an intersectional approach to the analysis colorism in modern day society. "Their Eyes Were Watching God," by Zora Neale Hurston will be used to illustrate the aforementioned concepts and will be supplemented by historical information to put these concepts in context.

Poster / Display Presentation 3:30-4

Habitat for Humanity: Collegiate Challenge

Waverly Lancer, Communication - Comm Studies
Co Presenters: Caroline Bilotti
Mentor: Nicole Hohenstein

We will be presenting a poster demonstrating our volunteering experiences in Clemson, S.C. The poster will include photos of our trip.

Poster / Display Presentation 3:30-4

How Enlightenment Writers Viewed European Peasants

Steven Lasch, History
Mentor: John Staples

When writing about Europe or Europeans many Enlightenment writers often neglected to mention the peasants (not serfs) that made up a majority of the population. Enlightenment writer's views on what Europeans were like, or thought they should be like, usually only took other intellectuals or people of similar status into account. The average peasant would not meet the standards set by Enlightenment writers and individuals of lower status were often excluded from their societies. Although individual Enlightenment writers most likely had differing views on peasants some common themes can be found in their writings.

Poster / Display Presentation 1:30-2

Expanding Ukulele Technique in the Clinical Setting

Alexia Lekos, Music Therapy
Mentor: Joni Milgram-Luterman; Kimberly Mancino

Ukulele is an important instrument used in the therapeutic setting. This workshop will help teach how to play the ukulele through a basic introduction of correctly holding, tuning, and strumming the instrument. The presentation helps to explore riffs from a variety of commonly used repertoire in the clinical setting and different therapeutic applications such as improvisation. By expanding on a variety of finger picking techniques and styles of playing, can improve the quality of musicianship and provide an authentic experience for clients.

Oral Presentation 1-1:30

Adolescents' Out-of-School Writing Practices with Technology

Kim Lotocki, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This master's research project employed the use of qualitative data (digital writing samples, online surveys, and individual interviews) in order to identify the out-of-school writing practices of eighth graders and answer the following research questions: what are adolescents' out-of-school writing practices?; and how do adolescents use technology in their out-of-school writing?

Poster / Display Presentation 1-1:30

Bear Lake, NY: Algae Communities and Water Quality

Simona Lukasik, Interdis Stds - Envir Sciences

Mentor: Courtney Wigdahl-Perry

Bear Lake is a small headwater lake located in Chautauqua County, New York. A management plan is needed at this site, but very little information is available about the ecology of this system. To better understand water quality concerns at Bear Lake, we performed monthly sampling from May-August 2017. We collected vertical profile data as well as whole water samples. In the lab, chlorophyll was filtered and analyzed on the spectrophotometer. Each sample was also analyzed for phytoplankton on an inverted microscope. In addition to water quality analysis, the watershed of Bear Lake was also mapped using ArcGIS. Results indicate that Bear Lake is a meso-eutrophic lake, with a diverse phytoplankton community. Dissolved oxygen concentrations decrease in the hypolimnion throughout the summer, leading to concerns about anoxia at this site. These data will be used in the development of an effective and adaptive management plan for Bear Lake.

Poster / Display Presentation 2-2:30

What I Gained From Study Abroad

Sydney Lyons, Interdisciplinary Studies

Mentor: Erin Willis

The poster I have created for this exposition is important because it demonstrates why study abroad can be a very necessary and integral part of a person's individual growth. Displayed are pictures of experiences that I had while study abroad that changed me as a person, and showed me that I could accomplish anything that I put my mind to. I think it's important for people to be made aware of all that study abroad can offer them.

Poster / Display Presentation 2:30-3

Eat Smart Western New York

Jessical Madara, Criminal Justice

Mentor: Melissa Lyon

I chose an internship with the Chautauqua Center for the Eat Smart New York program. I wanted to see first-hand how a public health program impacts the local community. The aim is to improve health and reduce chronic disease for low-income adults and youth. I trained with Patty Hammond the senior nutritionist at the Western NY location of the ESNY. We went to events to increase awareness and educate those in SNAP (Supplemental Nutrition Assistance Program). At events, we teach people how to increase their consumption of fruits and vegetables and how to reduce their consumption of sugary drinks. The goal is how many people we educated; 37 participated and 9 committed to change. This internship gave me the ability to go out inform, educate, and empower people about the importance of making healthy choices. We also came together with community partnerships to help innovate, collaborate, and educate.

Poster / Display Presentation 3-3:30

A Study of Eighth Grade and Pre-Calculus Students and Their Misconceptions of Exponents and the Order of Operations

Sarah Mannion

Mentor: Teodora Cox; Keary Howard

This research examines the misconceptions that students have when completing mathematical problems that include the laws of exponents and the order of operations. Students may have a reasonable understanding of the laws of exponents however, when combined with the order of

operations this may confuse students and this confusion may lead them to incorrect results. It is hypothesized that eighth grade and pre-calculus college students will have similar misconceptions while solving mathematical problems that involve exponents and the order of operations.

Poster / Display Presentation 4-4:30

The Potential Pancea of Urban-Ag

Girard Marotto, Interdis Stds - Envir Sciences

Mentor: Jonathan Titus

Over the summer I had an internship at the Massachusetts Avenue Project (MAP), which is an urban farm in the city of Buffalo. MAP has flowered into a brilliant organization that develops communal agriculture and a sustainable local food system. I did some research on the Good Food Purchasing Program (GFPP), which is a political mandate that many cities across the United States are introducing to their communities. The GFPP abides by five main pillars which are; (1) support the local economy, (2) environmental sustainability, (3) a valued workforce, (4) animal welfare, and (5) health. It is my belief that urban-ag shall play a large role in the future due to its immense potential for communal building, sustainable food practices, and local activism.

Poster / Display Presentation 1-1:30

Revolutionary Enlightenment Ideology in the American Revolution

Joseph Marsala, History

Mentor: John Staples

The 18th-century can accurately be described as one of revolution, both in intellectual thought and in the realization of political revolutions across Europe and the Americas. Though individual movements within these revolutions were often driven by practical physical and economic concerns, Enlightenment ideology with its widespread emphases on personal liberties and exploration of democratic ideals was seldom absent in the wider struggles. The ideas of thinkers like Rousseau, Locke, Montesquieu, and others, even if not fully-grasped or explicitly adhered-to by the general majority, were nonetheless disseminated to the masses to a significant enough degree to mobilize organized revolution at least implicitly in the name of these Enlightenment ideals. As perhaps the most globally impactful of the 18th-century, the American Revolution was particularly driven by Enlightenment ideals on a publicly-acknowledged level, before, during, and after the actual revolution in unprecedentedly liberal and democratic government policy.

Poster / Display Presentation 1-1:30

Christian Religious Community in the Japanese-American Internment: "The Brightest Spot in a Terrible Tragedy"

Joseph Marsala, History

Mentor: Ellen Litwicki

This paper's focus is on the presence and roles of organized religion in 1940s Japanese-American internment, particularly analyzing the roles of interned Christian congregations. This is supported by a plethora of primary sources, consisting largely of internment camp newspapers reflecting the few documented, though quite numerable, voices of Japanese-American internees during this period. These newspapers speak quite positively of the contributions of Christian congregations and lend great credence to the publications of respected Christian missionaries, well-acquainted with the interned community, speaking of lively and hopeful faith communities. The wider supportive role of Christian denominations that interned congregations was deeply connected with, often in cooperative

efforts, during the internment years is well-demonstrated by secondary literature. The conclusion, given these pieces of evidence, is that Christian communities instilled persevering hope through a supportive community that preserved established patterns of life for many internees.

Oral Presentation 1:30-2

Radio Interferometer Imaging of Protostars

Kyle Mascara, Physics
Mentor: Michael Dunham

Using data collected by the ALMA radio antennae array, images can be formed of protostars, using the CASA program. The images are then "cleaned" to get a clear image of the young stars. These images can then be used for various other fields of research in the birth of stars.

Poster / Display Presentation 3-3:30

CAPP Internship

Janie Mathew, Biology
Co Presenters: Mondyna Prevot
Mentor: Melissa Lyon

This semester I have been working with Jamestown's CAPP program. CAPP creates lesson plans for students on the spectrum, focusing the lessons on body safety, noticing sexual abuse, and analyzing surveys to determine how well their events work. I am a Public Health minor getting a BS degree for Biology; I chose this internship because it will help me when I become a physician. Lessons will allow me to help children who are suffering from sexual abuse or need more education about sexual wellness. Currently, I am composing lesson plans; in the future, I will analyze test results and attend classes and events led by CAPP. With this internship, I will learn how to carry out Public Health Essential Services three and nine - to inform, educate, and empower people about health issues, and evaluate effectiveness, accessibility, and quality of personal and population-based health services.

Poster / Display Presentation 4:30-5

The Relationship Between Masculinity/Femininity and Trust

Robyn Mc Neilly, Psychology BS
Co Presenters: Tyler Latt
Mentor: Joseph McFall

This study examined how varying degrees of masculinity/femininity influence the type of people we trust. This study breaks down participants into four distinct categories the masculine man, the feminine man, the masculine woman, and the feminine woman to look at the relationship between masculinity- femininity and trust. Two tests were presented to participants to assess individual levels of masculinity and femininity as well as to identify characteristics of people they are more likely to trust. Results from the study can be used in the assessment of decision making as well as a predictor of longevity within intrapersonal relationships.

Poster / Display Presentation 4-4:30

Effects of correlated color temperature on self efficacy, concentration, and comfort in an educational setting

Ernesto Mercado Irizarry, Psychology
Co Presenters: Jaime Birkmeyer; Nicholas Certo

Mentor: Joseph McFall

Past educational research has shown the connection between varying correlated color temperatures (CCT), their effects on concentration, as well as comfort. Comfort and concentration variables have been shown to have significant effects on a person's self-efficacy. Following this correlational link between variables, we believe that a connection between a light's CCT and a person's self-efficacy will be present, confirming a significant correlation between a person's environment and their self-efficacy. A between-subjects research design will be used to demonstrate the effects of CCT on a person's self-efficacy. Self-efficacy, concentration, and comfort will be defined as the score received on a corresponding test. Higher scores will indicate higher self-efficacy, concentration, and comfort. There will be three levels of correlated color temperature. All participants will be students at the State University of New York at Fredonia. All participants will be screened to ensure that they have no vision or learning disabilities.

Poster / Display Presentation 1:30-2

The Enlightenment and The Church

Trenten Merrill, History

Mentor: John Staples

My research is about how Enlightenment thought affected and also primarily weakened the power and authority of the Church. With the weakening of the Church I also look at how the rulers of the nations reacted and even thrived from this. This research does not hover over any specific nation or religion but, is instead an attempt to understand and discuss the dynamics which were gripping the nations at this time period in the context of the the Church, the State, and the thoughts which were happening at that time.

Poster / Display Presentation 4-4:30

Death Certificate Review

Amy Miller, Biology

Co Presenters: Kensi Phillips

Mentor: Melissa Lyon

I selected this internship because I was interested in learning how healthcare could connect to public health. Throughout internship, I learned about the different trends in death within Chautauqua County. This internship connects to my major because it makes me aware of the common causes of death. My future career path is a physician assistant, and this could help me to treat and diagnose people quicker. The purpose of this internship is to take death certificates and log them into an electronic system. This system will keep track of the death rates and demographics over time. Within the system we record identifiers such as age, gender, race, and causes of death. These indicators allowed us to plot data over time to determine the major trends of death. The work that I conducted was directly connected to public health through two essential services; monitor health status to identify community health problems and mobilize community partnerships to identify and solve health problems.

Poster / Display Presentation 2:30-3

An Exploration of Situated Cognition and Physical Context within the Statistics Classroom

Dakota Morano, Mathematics 7-12

Mentor: Keary Howard; Teodora Cox

This study explores situated cognition within the statistics classroom. It is hypothesized that college students taking a statistics course will perform better if the statistics problems connects to their social, cultural, and/or physical lives. It is also hypothesized that isomorphic problems in context will outperform numeric problems.

Poster / Display Presentation 4-4:30

Theological Foundations of Lockean Toleration

Hugh-Daniel Mosher, History

Mentor: Dale Tuggy; John Staples

In determining the limits of civil government and in pursuing his own faith, John Locke developed reasonable yet controversial positions regarding toleration, why it is paramount that civil government and Christians alike should practice it, and why, above all, toleration is a critical aspect of the Gospel of Jesus Christ. I will also seek to explore the limits of Lockean toleration, for it is clear that his view is not all-inclusive. In exploring these matters I will analyze the scriptural and doctrinal appeals which Locke employs, and endeavor to determine whether or not they are relevant to, and appropriately supportive of his claims. I will utilize each of John Locke's "Letters Concerning Toleration" as well as "The Reasonableness of Christianity," published journals and books regarding Lockean thought and his historical context, and of course the Bible (both the King James Version and the New Revised Standard Version).

Poster / Display Presentation 3-3:30

The Effects of Mathematical Vocabulary and Notation on Students Learning

Samantha Nickerson

Mentor: Keary Howard

This research examines the effects that mathematical vocabulary and notation have on students' outcomes in middle school and college mathematics classes. It is hypothesized that students will generally lack foundation in understanding of key mathematical vocabulary in both geometry and algebra. In addition, it is predicted that both cohorts will exhibit similar deficiencies regardless of the age and educational differences.

Poster / Display Presentation 4-4:30

Research Proposal for the Chautauqua Nursing and Rehabilitation Center

Conor O'Grady, Interdis Stds-Exercise Science

Mentor: Melissa Lyon

The natural degree program for me was Exercise Science and a minor in Public Health. I wanted my internship to have an exercise component to it. Working at the Chautauqua Nursing and Rehabilitation Center gave me that opportunity. I was responsible for making 30 minute exercise programs for two separate groups of patients. One group was dementia patients so the exercise activities were slower paced and included cognitive exercises. The other group were patients that were higher functioning so the exercises could be faster paced. To evaluate the program, the patients write on a post-it note how they feel on a scale of 1-10. The expected results were improved mood. I gained a lot of experience and knowledge in the field of therapy as well as training. This exercise clearly helped them feel better both physically and mentally as seen by the results. This can be used as a tool to monitor the health of the patients.

Poster / Display Presentation 1-1:30

Generations of the Web

Alexander O'Hare, Computer Science
Mentor: Ziya Arnavut

We present our research on the web and how it is evolving. The goal of this research is to evaluate the web so that we can predict what will come next and the arising technologies that will reshape how we use the internet. Our poster will present an informational description on the generations of the web as well as talk about the important structures developed from each generation. A discussion on the semantic web, how to build for it, and how/when to use it will also be present.

Poster / Display Presentation 1-1:30

Global Trends and Blood Types

Satomi Ohira, Business Admin – Management
Mentor: Nancy Boynton

Various blood types were investigated in different regions around the globe as well as in a sample of individual countries. Data from the Red Cross website is used to generate a table of blood type observations in 65 countries: A+, A-, B+, B-, AB+, AB-, O+, O-. Using RStudio to analyze the data mentioned above, Black and Hispanic races tend to have a high percentage with O+ blood, and the Caucasian race tends to have O+ as well as A+ and the Asian region tends to have O+ blood. The most common blood type globally is O+. This investigation was prompted by considering the trend in blood types in the US and speculating if it extended to the globe.

Poster / Display Presentation 3-3:30

Government Tax Rates & Revenues: An Empirical Analysis of the Laffer Curve

Deztian Orsolits, Business Admin - Management
Mentor: Nancy Boynton

This study aims to use data and economic theory to create an empirical model of what is known in economics as the Laffer Curve. The Laffer Curve is a graphical representation of the tax rate and tax revenue collected, with tax revenue as the response variable. The concept of the Laffer Curve is purely theoretical; this study aims to analyze the practicality of this theory using government data to demonstrate how this curve acts outside of a theoretical setting. Data is analyzed and visualized using R and Rstudio software.

Poster / Display Presentation 2-2:30

An Analysis of Student Conceptual Understanding of Trigonometry

Michelle Persaud
Mentor: Keary Howard; Teodora Cox

This research examines students' understanding of foundational trigonometry using a right triangle and the unit circle. Despite the fact that unit circle trigonometry historically preceded right triangle trigonometry, it is hypothesized that college students will demonstrate a higher level of understanding of trigonometry through right triangle problems, likely due to the fact that right triangle trigonometry problems are taught prior to unit circle trigonometry problems.

Poster / Display Presentation 4-4:30

Death Certificate Review Internship

Kensi Phillips, Social Work
Co Presenters: Amy Miller
Mentor: Melissa Lyon

This internship drew my attention, because I was interested in the common cause of death in Chautauqua County. By choosing this internship, it has taught me several different factors that can lead up to an individual's death. The following internship relates to my major social work, and my future career path, because I wish to help individuals better their lives overall. Gathering information from these deceased individuals can better my knowledge towards helping people make healthier decisions. The purpose of this internship, is to review paper death certificates from the Chautauqua County Health Department, and then plug certain information into a database. By doing this, it allows the Chautauqua County Health Department to keep records of the trends of deaths. We have to record the age of the deceased individual, gender, race, zip code, and the cause of death. The following essential service that was incorporated into this internship was: to monitor health status to identify community health problems.

Poster / Display Presentation 2:30-3

Defining Risky Decision Making: Research Synthesis and Meta-Analysis

Robert Phillips, Psychology BS
Mentor: Joseph McFall

Risk is a common component of everyday life, especially in decision making. While definitions of risk vary based on situational context, there is an overwhelming agreement in the methods of measuring, however a lack of a unified definition for decision making. Current definition, forming the foundations multiple decision making tasks, denotes risk as sacrificing current gains for the opportunity of a larger gain. In addition to defining risk, we examined the effects of different tasks on decision making in everyday life. These effects were based on the level of risk as well as the control over gains/losses and it's generalizability to everyday risk. A meta-analysis of risky decision making articles based on participant characteristics, task outcome, and the effects on task performance was also performed. Based on these findings, everyday risk involves varying degrees of individual's control over gains and losses.

Poster / Display Presentation 4-4:30

Effects of Context Factors On Framing Effects

Robert Phillips, Psychology BS
Mentor: Joseph McFall

Framing effects in decision making have been primarily studied within the Asian Disease Problem framework. The original Asian Disease Problem has been expanded to examine contextual differences, such as social context involving friends and family, ambiguity and individual differences. Given the importance of contextual factors in decision making, it is vital to assess framing within other situational domains. The current study examines differences in contextual changes in the Asian Disease Problem and framed financial scenario. These changes involved ambiguous, social context, and individual differences in context. We hypothesize a significant difference in framing effects between the Asian Disease Problem and Financial scenario. In addition, we hypothesize differences in positive/negative framing based on the contextual condition and between the Asian Disease Problem and financial scenario. These findings may have implications for financial-based decisions such as purchasing a house or applying for a loan.

Poster / Display Presentation 4-4:30

Effects of Fixed vs. Growth Mindset on Problem Solving

Robert Phillips, Psychology BS

Co Presenters: Erin Lemmey; Kara Freise

Mentor: Joseph McFall

Mindset research has been used in an academic setting to determine whether having the belief that intelligence is malleable (growth mindset) is related to favorable academic outcomes. Having a fixed mindset in college has been linked to poor academic outcomes, such as low motivation and lack of resilience. Little research has been done to examine whether mindset has an effect on academic resilience. The current study will examine whether mindset (fixed vs. growth) has an effect on the amount of time spent on problem solving tasks including an impossible task. Previous research suggests having a growth mindset can moderate risk factors for dropping out in students with a lower socioeconomic status. Therefore, mindset research may be implicated in preventing drop out for college students facing adversity. This has implications in designing a learning environment that is conducive to encouraging academic resilience.

Poster / Display Presentation 4:30-5

Public Health Internship

Mondyna Prevot, Biology

Mentor: Melissa Lyon

I am getting a BS in Biology, with minors in Public Health and French. I am passionate about work surrounding sexual health, so this semester, I selected an internship which allowed me to work with Jamestown's CAPP program within the YWCA. They do work surrounding sexuality and teach workshops to middle and high school children. They also have a Safe Harbor program which works with Human Trafficking Prevention. What I have been working on specifically is to create social media posts, flyers, PSAs and interactive posts about healthy sexual habits, STI prevention, teen pregnancy prevention, as well as PSA around human trafficking. Soon, I will be attending classes to observe the way their curriculums are taught. This internship falls under Public Health Essential Services #3 which is to inform, educate, and empower the public, as well as #9 which is to evaluate effectiveness, quality of personal and population-based health services.

Poster / Display Presentation 4:30-5

Eurovision and Swedish Identity: Power Ballads as Modern Swedish Folk Music

Nora Ramsey, Music - Applied

Mentor: James Davis

This paper examines the Eurovision Song Contest and analyzes Sweden's notable use of power ballads to establish an emerging Swedish identity. The development of the rules of the contest, and each country's choice of musical style, reflect political tensions between competing countries. In the case of Sweden, their choice of "power ballads" as their representative style - and the musicians' use of English as opposed to Swedish - is an attempt to separate themselves from the rest of Europe by manufacturing a replacement for traditional folk music. Using Maud Karpeles' definition of folk music that emphasizes continuity through time, individual variation, and community selection, I will argue that the dramatic vocals, instrumental textures, and the rich harmonies of modern Swedish power ballads are succeeding traditional folk music. This merging of folk and modern ballads exposes a basic aesthetic that characterizes a new and developing Swedish identity.

Oral Presentation 1:30-2

Social Justice and TEWWG

Jamia Randall, English

Co Presenters: Arjumand Ali; Kyle Egan; Noelani McAfee

Mentor: Jennifer Hildebrand

Zora Neale Hurston touched on different social justices in her novel *Their Eyes Were Watching God*. Some of these examples are feminism, racism/ discrimination, domestic violence, equality, etc. This presentation will explore these topics and relate them to current issues that still effect people today.

Poster / Display Presentation 3:30-4

Intellectual Revolution: China's Enlightenment of the Twentieth Century

Daniel Richer, History

Mentor: John Staples

In the early twentieth century, China's citizenry engaged in an unprecedented growth in intellectual thought. Spreading to virtually all stretches of the nation's diverse regions, its abrupt expansion indiscriminately engaged millions of Chinese citizens into a battle of intellectual inquiry. Led mainly by youthful and collegiate students, what became known as the May Fourth Revolution illuminated the way in which Chinese citizens saw both themselves as well as the rest of the world. This paper seeks to analyze the extents to which this progression in thought paralleled the fundamental Enlightenment ideals of the 17th and 18th century.

Poster / Display Presentation 4:30-5

Sound Recording Technology and Music Performance

Carlos Rivera, Sound Recording Technology and Music Performance

Co-Presenters: Avarie Stevens, Olivia Mancuso, Emily Knuuti, Jaden Zhang, Brianna Cordi, Nicole Bien, Jackson Longo, David Carls

Mentor: Paul Coleman

This presentation will allow us to share what we learned at the Audio Convention. The new technologies announced, like the unveiling of new programs for mixing audio in Virtual Reality, new speaker tech, etc. We will also share some personal stories and what we've learned from this experience.

Poster / Display Presentation 3-3:30

Marketing Internship at WCA Home

Chelsea Robillard, Comm. Disorders and Sciences

Mentor: Melissa Lyon

I am interacting with the residents at the WCA home and documenting their daily lives, including how they benefit the community. My role in this includes but is not limited to creating an instagram page, creating a newsletter, constructing an email list to update family members with what is going on with their loved ones in their day-to-day life. This internship is beneficial to both the community and the residents because it motivates the residents to continue to be active, as people are noticing their role in the community and it is positive for the community because it shows that age does not stop people from being active in the community. These residents exercise regularly, create crafts to donate to organizations such as Meals on Wheels, and socialize often with each other and are constantly active.

This internship will motivate both older and younger generations to stay active.

Poster / Display Presentation 2-2:30

Stuttering in Spanish-English Bilinguals

Amy Rodriguez, Comm. Disorders and Sciences

Mentor: McLoddy Kadyamusuma

Most research that has been done on Stuttering has been on monolingual speakers of languages such as Spanish and English. However, stuttering in Spanish and English separately is not the equivalent of studying the characteristics of stuttering in bilingual Spanish-English speakers. This paper explores the similarities and differences in the characteristics of stuttering in Spanish-English bilinguals. Specifically, this paper analyzes the stutter of Spanish-English bilingual speakers in order to determine if the individuals who stutter have disfluencies in both languages, and if they do, if the characteristics of the stuttering are the same in both languages. This paper also explores if there is a direct relationship between being bilingual and stuttering and if delaying the introduction of a second or third language can reduce chances of stuttering in bilingual speakers. This paper will also address treatment options and whether it is enough for a monolingual SLP to treat bilingual speakers.

Poster / Display Presentation 1-1:30

Experiencing NCECA

Natalie Sacchitella, Vis Arts New Med: Graph Design

Co Presenters: Torry Haggins; Collin Hassler; Emma Mauro

Mentor: Hidetoshi Sadohara

NCECA is the National Council on Education for Ceramic Arts. The conference travels around the United States and this year it was located in Pittsburgh, PA. We will discuss, as well as showing, what it was like to experience all that takes place at NCECA for the first time. The conference hosted well known ceramics artist in both functional and sculptural work that gave lectures, demonstrations, and held discussion panels. There were also many onsite as well as offsite galleries and exhibitions. Our presentation will include photos and a video of our time at the conference. The conference acts as both a networking opportunity as well as a way to learn techniques from professional artist.

Poster / Display Presentation 2-2:30

Vive La Revolution! How Enlightenment ideals and thought influenced the success of Haitian Revolution

Jelissa Samuel, History

Mentor: John Staples

For History Capstone this semester under the leadership of Dr John Staples, we (the students) learning about the various perspectives of the Enlightenment Era of the 18th century. Along with learning about enlightenment thinkers like Locke, Montesquieu and Rousseau, we focused on how enlightenment thought but the influence on various societal ideals and groups of people from the institution of slavery to women. My poster/display presentation will be on how the Enlightenment ideals influenced the leaders of the Haitian Revolution like Toussaint Louverture, leading the colony of Haiti (then known as Saint Domingue) to become the first independent black republic.

Poster / Display Presentation 2:30-3

Mental Health Services Provided to Women from the 19th to the 21st Century

Courtney Sieg, Social Work
Co Presenters: Kylie Harris
Mentor: Andrea Zevenbergen

Research shows that about one in three Americans struggle with mental illness. There are mental illnesses that certain genders are more likely to suffer from; women, for example, are more likely to suffer from depression, PTSD, anxiety and eating disorders. Though women are more prone to develop certain disorders, history shows that treatment wasn't commonly available. Hospitals for the mentally ill didn't open in the U.S. until 1833 and though treatment was available there, it was typically involuntary and was proven to have a damaging impact on those involved. Counseling and therapy have evolved over time to be more conventional and effective yet there is still stigma surrounding the use of therapy. Throughout our research process we concentrated on the history and importance of mental health counseling for women through a historical viewpoint. Our research timeline ranges from the start of mental health services to modern, ongoing services for women.

Poster / Display Presentation 1-1:30

Parent and Teacher Perceptions of Students' Early Literacy Behaviors within Various Pre-School Models

Barbara Simon, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This poster will present findings from a study about parent and teacher perceptions of three different types of pre-K programs that children can be enrolled in: full day; half day; and part time (only attending a couple days a week). Data were collected at a school that has all three of these programs to collect data about what parents and teachers actually think.

Poster / Display Presentation 4:30-5

Summer Reading Setback and Parental Involvement

Rachel Skopinsky, Literacy: Birth-12, Graduate Student
Mentor: Susan Sturm

This master's thesis explores the issue of summer reading setback and offers strategies for how parents can support their children during the summer months in order to reduce this setback.

Multimedia Presentation 1:30-2

Lakeshore Humane Society Volunteer Projects

Alexis Sorbello, Communication - Public Rel
Mentor: Joyce Smith

The Lakeshore Humane Society, located in Dunkirk, NY, is always looking for volunteers for their organization. They are 100% volunteer based and depend on their volunteers to care and raise funds for the animals.

Poster / Display Presentation 3:30-4

PRSSA National Assembly

Alexis Sorbello, Communication - Public Rel
Co Presenters: Hannah Wittig

Mentor: Rick Davis

In early March I attended the PRSSA National Assembly held in Miami. While there I learned about the future of the Public Relations profession, leadership skills, chapter development skills and so much more.

Poster / Display Presentation 4-4:30

Comparing Revolutions: American Success & French Failure

Patrick Spellicy, Social Studies-Adolescence Ed

Mentor: John Staples

This presentation will compare the revolutions in both America and France. I will go into why the American Revolution succeeded and why the French Revolution failed.

Poster / Display Presentation 4-4:30

Enlightenments major influences

Jacob Storms, History

Mentor: John Staples

I will be presenting a post on my capstones paper topic no will like to focus on major people during this time period that had a. Large part I. The enlightenment

Poster / Display Presentation 2:30-3

Winter Clothing Drive Project; Volunteer Services

Caitlin Sweet, Vis Arts New Med: Draw/Paint

Mentor: Joyce Smith

I worked with the Volunteer and Community Service office this semester in order to help families in need. I participated in the winter clothing drive which was a benefit for the Garment Gallery at the Chautauqua County Rural Ministry. Chautauqua County Rural Ministry is an interfaith, non-denominational human services agency based on the belief that every person is deserving of adequate food, clothing and shelter, and work opportunity by which to acquire basic necessities. The purpose of the Winter clothing drive was to help families in need in order to enhance their quality of life. The winter clothing items that were collected consist of hats, gloves, sweaters, coats, boots, and socks. The total weight of clothing items collected was 448 pounds.

Poster / Display Presentation 1:30-2

Catherine the Great and The Enlightenment

Mary Kay Taylor, History

Mentor: John Staples

I will be conducting a poster presentation on the Enlightenment and its relationship towards Catherine the Great. In particular, the relationship that the Enlightenment held towards the creation of her instructions. I will also be addressing the effect that the Enlightenment held upon Catherine's attitudes towards the Russian Peasantry, which were more stable than the more violent attitudes that were held by her predecessors.

Poster / Display Presentation 4-4:30

Molecular Binding Interactions that induce/inhibit the Activation of p53

Tara Thompson, Medical Technology
Mentor: Matthew Fountain

The p53 protein is important in many regulatory mechanisms including proliferation, cell cycle arrest or apoptosis when a cell is in danger and having the potential to become toxic to other cells or the organism. These regulatory mechanisms provide protection against DNA damage that could lead to mutations that result in many disorders and diseases including cancer. If there is a dysfunction of the p53 protein itself, or in the p53 gene that codes for its protein, this leaves the individual vulnerable to disease susceptibility. This corresponds to any dysfunction along the pathway that leads to the regulation of the p53 protein. Research shows that modifications of p53 binding site can be utilized for drug testing to stabilize the ability of p53 in cancer cells. The 3D structure will be discussed and how amino acid changes within the active site can inhibit or induce the activation of p53.

Poster / Display Presentation 1-1:30

Using Remotely Sensed Imagery to Supplement the Monitoring of Harmful Algal Blooms (HABs) in Chautauqua Lake, New York

Katherine Van Oss, Geology
Co Presenters: Emily Beers
Mentor: Ann Deakin

Harmful Algal Blooms, a growing threat to freshwater systems, have received considerable attention in the Great Lakes, but not in smaller lakes such as Chautauqua Lake in Chautauqua County, New York. The New York State Department of Environmental Conservation has been tracking HABs in Chautauqua Lake since August 2012, using site sampling and data collected by Chautauqua County's Department of Environmental Health. Increasingly, remotely sensed imagery is being used to supplement in situ sampling as a means for monitoring HABs from a broader perspective. This project evaluates Landsat and Sentinel satellite imagery to track HAB occurrence and spatial extent since 2012 using band ratios. Band ratios are used to classify the image based on reflectance values in different parts of the electromagnetic spectrum, particularly the near infrared and visible wavelengths.. The results of the image processing are compared to in situ samples taken by Chautauqua County's Department of Environmental Health.

Poster / Display Presentation 3:30-4

Over Sex

Casterline Villar, Acting
Mentor: Andrea Zevenbergen

We are aware of the oppression that females face in our society surrounding sexualization. But even within this marginalized group we find a group oppressed even further: women of color. There is a clear divide between women of color and white women with regard to sexualization, and the more frequent oppression toward women of color stems from the long history of people of color being targets of degradation. This abuse has also made women of color the ones to be most likely to experience sexual assault in their lifetime. This poster explores the role that sexualization plays against women of color and why it happens to women of color at such a higher rate than those that are not of color.

Poster / Display Presentation 4:30-5

Death and Health Complications in Relation to the Birth Process - What We Can Do About It

Alexandra Viola, Music Therapy
Mentor: Andrea Zevenbergen

Over 130 new and expectant mothers per day in the U.S. endure grave and potentially life-threatening complications in relation to the birth process. This number is too high, but there is much that can be done to decrease the prevalence of negative/fatal experiences. Complications throughout this process can leave women unable to bear more children, financially devastate families, and evoke incredible emotional and physical pain. There is a social/cultural misconception that these issues are rarities, but 700-900 women in the U.S. die annually in relation to childbirth/pregnancy. Proper medical attention and improved treatment of women in hospitals/other facilities, increased ease of access to quality resources, especially for women of minority populations, advocacy, research, the creation of committees and the implementation of systematic, state-led examinations of past cases are some ways we can improve the quality of this process for everyone involved and for future generations.

Poster / Display Presentation 1-1:30

Impact of On and Off-Campus Living on Minority and Majority Students

James Walters, Psychology BS
Co-Presenters: Sade Hellams
Mentor: Joseph McFall

Our research is intended to understand how a student's living situation affects academic performance. We would also like to determine whether or not, on or off campus living influences academic performance among minority students differently when compared to students in the majority. Individuals defined to be in minority groups have limited opportunities in domains such as socioeconomic status, education, and often experience an inequality in treatment when compared to majority students. Difficulties such as these provide stress in the lives of individuals in minority groups, that can lead to a struggling performance in nearly all areas of life. Providing an excellent education to every individual that seeks one, helps to ensure the continuation of a more diverse and well-informed society. We will employ a multi-measure approach to ensure an accurate assessment of student academic performance. We suspect that on-campus living will provide a greater environment for academic success for minority students and majority students. No main effect is expected to be found between minority and majority group academic performance. We also expect a greater increase in academic performance for minority students living on campus compared to majority students living on campus.

Studying Abroad in Niigata, Japan

Yue Wang, English
Mentor: Erin Willis

This poster is dedicated to showcasing my experience at Niigata, Japan and exploring my acquisition of language, academic profits, and cultural immersion during my stay. It is also a self-reflecting process of what I gained from studying and traveling in Japan and how this new exposure will contributed to my future pursuit of Japanese literature. I will focus on my stay in three places of Niigata, Sado, and Tokyo in the presentation, and examine each trip in detail: what did I see? How did it change my perceptions on Japan? How was that helpful to my studies? It is a time when my thoughts and ideas in the past, present, and future connect - drawing in all notes and pictures in the midst of learning and reflection - and compete for the most influential, at least to me. In this sense it is personal, but I would also like to share it and thus promote the idea of studying abroad.

Poster / Display Presentation 2:30-3

Model European Union Simulation

Joseph Weglarski, Criminal Justice
Co-Presenters: Daniel Orzechowski; Zachary Polo
Mentor: Raymond Rushboldt; Alexander Caviedes

This project is a poster presentation of our trip and experience in a Model EU Simulation in Brussels, Belgium. SUNY Fredonia was assigned the country of Italy. Each group member was assigned a role to play as an EU representative for this country, and we research our country's positions on a series of policy questions. The roles are Head of Government, Foreign Affairs Minister, and Permanent Representative (COREPER). We discuss pressing topics in the EU including EU cyber security, EU security and defense, and human trafficking.

Poster / Display Presentation 3-3:30

CCSCNE 2018 Competition

Seth Weidman, Computer Science
Mentor: Ziya Arnavut

Two Fredonia teams competed in the Regional CCSCNE computer programming competition, in Manchester, New Hampshire. Despite the outcome, we share our experiences.

Poster / Display Presentation 3-3:30

English Enlightenment with Elegant Ladies

Olivia Weixlmann, History
Mentor: John Staples

The British enlightenment and the contributions of women that created the foundation and greatly influenced enlightenment thought during the late 18th century. GIRL POWER, LITERATURE, ENLIGHTENMENT, EQUALITY

Poster / Display Presentation 4:30-5

Impact of the Enlightenment on American Slavery

Jayla Williams, History
Co Presenters:
Mentor: John Staples

A major theme of the Enlightenment focuses on individualism and individual liberties, specifically its application in abolitionist and anti-slavery movements within the era. Focusing on the impact of the Enlightenment on specifically the cultural mindset towards slavery, I investigate the global perspectives towards slavery with a focus on American slavery.

Poster / Display Presentation 4-4:30

Perceptions of the American Dream

Rachel Williams, Music Therapy
Co Presenters: Taylor Gibbon
Mentor: Andrea Zevenbergen

The purpose of the study is to explore adults' current perceptions of the American Dream (e.g., how

they define it, how attainable it seems) and to determine if these perceptions may differ due to demographic variables, such as age and gender identity. College students were given a self-report measure comprised of 23 statements related to the American Dream. Participants were asked to indicate their level of agreement (i.e., strongly agree, agree, neutral, disagree, strongly disagree). Participants were then asked to fill out eight questions related to their personal demographic background. This presentation will discuss significant relationships between specific demographic variables and perceptions related to the American Dream.

Poster / Display Presentation 2-2:30

The MLB Free Agency Problem

Justin Willis, Business Admin - Finance

Mentor: Nancy Boynton

Today, free agency is the backbone of Major League Baseball's labor market. Players are now getting paid based on supply and demand, and not just by negotiating with one team. Free agency rules have been changed numerous times for better or worse. However, many great players believe they are getting significantly less money than they are worth. Data trends for each team's spending habits, along with the revenue that they make will be examined. The new rules associated with free agency such as the luxury tax soft-cap system, along with revenue sharing, will also be examined using R, and Excel.

Oral Presentation 2-2:30

Mapping the Public Parks of Chautauqua County Using GIS

Devan Zajac, Geology

Mentor: Ann Deakin

Chautauqua County is home to over 100 public park areas, but not everyone knows where to find the closest park to their house, or even accurate information about the parks in their town. Parks and sports fields, as well as directions to these locations, will soon be an easily accessible feature in one convenient location. Using Geographic Information Systems (GIS) methods, existing park data, and other resources, public parks and recreational areas within Chautauqua County were mapped in ArcMap software. Parks and land were defined, selected, edited, and checked for accuracy before being plotted onto a basemap of Chautauqua County. The desired plots of land were created as polygons, which represent boundaries of land, and given information such as park name, municipality, and land use description. This data will be transferred to an interactive online map for the public to locate parks based on land characteristics and location.

Poster / Display Presentation 3:30-4

Dance Performance Abstract

This work is an investigation of how adversity helps us to rediscover what choices we want to make in our journey through life.