



16th Annual 2014

STUDENT RESEARCH AND CREATIVITY EXPOSITION

THURSDAY, MAY 1
WILLIAMS CENTER
1:00 – 6:00P.M.

POSTERS

PRESENTATIONS

DISPLAYS

PERFORMANCES

DEMONSTRATIONS

Student Research and Creativity Exposition Committee:

Ziya Arnavut, Computer and Information Sciences
Paul Benson, Sponsored Programs
PJ Corron, School of Music
Jack Croxton, Office of Student Creative Activity and Research
Jennifer Dyck, Psychology
Gloria Hobbs, Curriculum, Assessment, and Academic Support
Tracy Horth, College of Liberal Arts and Sciences
Lauren Kicak, Graduate Studies
David Kinkela, History
Anamaria Klein, College of Education
Alexandria Maley, Undergraduate Representative
Dixon Reynolds, Theatre and Dance
Carol Smith, College of Liberal Arts and Sciences
Jonathan Titus, Biology
Peter Tucker, Visual Arts and New Media
Ivani Vassoler-Froelich, Political Science
Tiffany Wong, Graduate Representative

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

Teresa Brown, Provost and Vice President for Academic Affairs
Morgan Pullen and Patrick Reilly, Video Capturists
Darryl Coleman and Randy Gadikian, Reed Library
Patty Herkey, Publication Services
Kevin Cloos, Mark Delcamp, and Facilities Services
Michael Lemieux and Lisa Noody, Campus Life
Faculty Student Association

“Congratulations to the students and mentors whose work is featured in the 2014 Student Research and Creativity Exposition! As you can see from this Expo booklet and from interactions with the many students who are involved in today’s program, SUNY 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 2014 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 SUNY 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



"The mission of the Office of Student Research and Creative Activity is to promote and support student scholarly activity and creative work across the SUNY 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

During my first year on the campus, I have been incredibly impressed by the ways in which our students and faculty work together. The creativity among them is exceptional, and it's gratifying to see so many examples represented here at the Exposition. I look forward to supporting many more student projects not only in the arts but also across the disciplines.

Congratulations to all student participants, and thank you to their faculty mentors and to OSCAR for making this possible.

Ralph J. Blasting, Ph.D.

Dean, College of Visual and Performing Arts



“The examples of collaboration between faculty and students and interdisciplinary student teams represented in the SUNY Fredonia Student Exposition are perfect illustrations of our University motto “Where Success is a Tradition.” We have brought together our best students and faculty to form a true “learning community” that has advanced knowledge in their respective fields, produced extraordinary creative works, and brought the theories and concepts learned in a course alive to solve a problem or advance an idea.



These projects, works of art, research reports, experiments, and demonstrations whether created by an individual or a team represent the “best learning outcomes” of our University. Students have the opportunity to work with each other in interdisciplinary teams; with faculty from across the University; with leaders of profit, non-profit and governmental organizations; with students and members of the communities in the region; and experience learning opportunities that involve actively engaging their knowledge.

With the opening of the new SUNY Fredonia High Technology Incubator, these projects will include the entrepreneurs at the cutting edge of their fields who will make a contribution to the regional and national economy by making their ideas into tangible products and services for their chosen customer base. Congratulations to the students, faculty, and organizations that participated in the Student Exposition!”

Russell P. Boisjoly, D.B.A.
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



“Some people would like to claim that research is in competition with teaching, that there is a dichotomy between those faculty who are strong teachers and those who are strong researchers. The fact is, helping students to engage in research and creative activity, allowing them to participate in the scholarly and creative work of faculty, is one of the highest and most effective forms of teaching. Students can understand the value of intellectual and creative activity best when they are actual participants within the process of intellectual exploration or artistic creation. To encourage student research and creative activity is to take students seriously as fully enfranchised partners within the process of their education. Faculty at Fredonia do this very well, and today we celebrate some of the special results of our tradition of helping students become active learners. I

congratulate the students who participate in today’s events, and I commend the faculty who have directed and inspired these student efforts.”

Sincerely,

John Kijinski, Ph.D.

Dean, College of Liberal Arts and Sciences

Thursday, May 1, 2014
Williams Center
1:00 p.m. to 6:00 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.

Environmental Education for Young Scientists

Jessica Abendschein, Julie Fitzpatrick, Kathryn Greene, Kelsey Kruse, Meghan Lydon, Analisya Ramos, Marissa White, Curriculum and Instruction

GIS as a Tool for Fighting Poverty in Chautauqua County

Caleb Bardeen, Geographic Information Sciences

The Retrospective Analysis of National Fuel Gas

Julia Bautista, Psychology

The Humanities: Pop Culture and Marketing

Doreen Bumpus, English

The Retrospective Analysis of Chili Recreation

Teresa Braun, Psychology

The Retrospective Analysis of RJ's Ice Cream

Emily Cavallari, Psychology

The Retrospective Analysis of KISS (Korean Intern Student Society)

Minyoung Choi, Psychology

The Retrospective Analysis of JCC Men's Baseball Team

Matthew Cummings, Psychology

The Effectiveness of Pitchers

Joseph DiRaimo, Mathematical Sciences

The Retrospective Analysis of Corning Museum of Glass

Kevin Geiser, Psychology

Integrating Dance and Public Health

Christina Giannitsis, Public Health

Christine Jorgensen

Samuel Hoffman, Women's and Gender Studies

Treatment for type 2 diabetes: Glucosidase inhibitors

Eunna Huh, Chemistry

SCADA Security

Steven Johnson, Damen Sprague, Computer and Information Sciences

NMR Spectroscopy in the Analysis of Trapped Volatile Organic Compounds

Anthony Lake, Chemistry

Visualization of Sqd-grk Interactions in Live Drosophila Oocytes Using Trimolecular Fluorescence Complementation (TriFC)

Nancy Levensailor, Biology

The Retrospective Analysis of American Pool Enterprises

Craig Link, Psychology

Little Rock 9

Kara MacIntyre, History

American Marketing Association Take 5 Case Competition

Ryan McConnell, Business Administration

Chautauqua County Agriculture and Gender

Hanna Neumann, English

SUNY Model European Union Simulation

Jason Pandich, Laura Hirst, Alexander Stone, Victoria Banach, Political Science

Social Facilitation and Cognition

Gabriella Pietropaolo, Felicia Schiefer, Psychology

Effects of Multitasking on Academic Performance

Chelsey Sengillo, Lauren Lind, Psychology

The Retrospective Analysis of Bob Evans

Gianna Taglioni, Psychology

The First Sexual Revolution

Mariah Turk, Bethany George, Women's and Gender Studies

The Retrospective Analysis of Wegmans

Bridget Wagner, Psychology

The Retrospective Analysis of Adams Fairacre Farms

Colin Ward, Psychology

Drag Queens and Transvestism

Renee Willett, Women's and Gender Studies

The Retrospective Analysis of Wendy's

Ashley Wise, Psychology

The Retrospective Analysis of Chautauqua Institute Boys and Girls Club

Jessica Young, Psychology

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

A Survey of Career Opportunities in Computer and Information Sciences

Kazim Atasoy, Computer and Information Sciences

Literacy Experiences of Teen Mothers

Amanda Babyak, Language, Learning, and Leadership

Vocabulary Change in Preschoolers Related to When Dialogic Reading Occurs

Lauren Boyle, Psychology

The Retrospective Analysis of Lena's Pizza

Terrence Browne, Psychology

Productions/Operations Management: Applying LEAN Tools to Small Business

Doreen Bumpus, Business Administration

Who's Name Comes First? Psycholinguistic Properties, Context Effects, and Sociohistoric Influences Affect Name Order Preference

Teresa Ciambella, Psychology

Engaging In Our Community: InterVarsity Christian Fellowship Service Trip

Marsha Cohen, Volunteer and Community Services

The Transition

Jami Curtis, Gretchen Herb, Women's and Gender Studies

A Manipulation of Stress and Dog Presence on Heart Rate, Heart Rate Variability and Working Memory

Jami Curtis, Alexis Perez, Christina DellaNeve, Psychology

The Power of Proteomics: A Study of Viral Mediated Host Protein Post-Translational Modification

Max DeNies, Biology

The Retrospective Analysis of an EAP Internship

Michael Dicenzo, Psychology

The Chautauqua Center's Relation to Biochemistry and Biology

Charde Drake, Ciara LiVecchi, Public Health

Operation Smile

Megan Favale, Amy Rosenberger, Shannon Rumpf, Victoria Rosdahl, Communication Disorders and Sciences

RENT dramaturgy

Maggie Gilroy, Theatre and Dance

The Feminist Agenda: Education

Kimberly Hodges, History

Bias Throughout The Decision Making Process: A Study on The Temporal Dimensions of Cognitive Error

Collin Kesel, Psychology

The Retrospective Analysis of Fredonia Food Mart

Alexis Koerner, Psychology

Gender in Jazz

Christopher Malone, History

The Petrography of Ultramafic Rocks in the Blue Ridge Mountain Belt

Anna Maynard, Geosciences

Christianity and Sexuality

Hanna Neumann, Women's and Gender Studies

The Retrospective Analysis of Town of Greece Community and Senior Center
Felicia Schiefer, Psychology

The Effects of White Privilege Awareness in Freshman Undergraduate Students in Relation to their Attitudes and Behavior Toward Others
Kimberly Smith, Psychology

The Retrospective Analysis of Disney World
Molly Smith, Psychology

The Retrospective Analysis of the Frewsburg Central School Varsity Baseball
Joe Spoto, Psychology

The Retrospective Analysis of Cummins Engine
Ben Wilson, Psychology

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

A Study of Virtual Museum Guide for Mobile Applications
Kazim Atasoy, Computer and Information Sciences

SLA Monitoring
Michael Barry, Computer and Information Sciences

Corelation of Cultural Change and the NAACP
Lindsey Bauza, History

The Retrospective Analysis of Regal Cinemas
Kaylyn Billups, Psychology

Engaging in our Community Series:Delta Chi
Justin Borrelli, Volunteer and Community Services

The Retrospective Analysis of National Honor Society
Jennifer Breau, Psychology

GIS for Infrastructure Management at Chautauqua Institution
Jacob Calabrese, Geographic Information Sciences

Molecular Analysis of mcrobial Films near Canadaway Creek
Miles DeAngelis, Biology

The Retrospective Analysis of the Boy Scouts of America
Zak Dorler, Psychology

Apple Cider Vinegar Detoxification
Jen Fuller, Larissa Dobson, Marisa Colpoys, Lisa Capitano, Exercise Science

Instruments and Identities
Emma García, Sociology

Water Education
Courtney Gfroerer, Julie Davis, Taryn Poole, Zachary L.Beaudoin, Curriculum and Instruction

Inside the Times
Maggie Gilroy, Sylvana Dussan

The No Child Left Behind Act: A Result Of Residential Segregation?

- Daniel Halewski, History
- IRES-Mediated Translation of grk mRNA During Drosophila Oogenesis***
Danielle Hindes, Biology
- The effect of personality on situational factors based on incentives***
Derron Hilts, Heather Johnson, Zakary Dorler, Psychology
- Diet-Induced obesity alters skeletal muscle fiber types of male but not female mice***
Jordan Johnson, Biology
- Sex in the 60's***
Jennifer Klimeck, Kia Richman, Women's and Gender Studies
- The Retrospective Analysis of the Hollister Company***
Courtney Mahoney, Psychology
- Attributions of Blame for a Sexual Assault on a College Campus***
Alexandria Maley, Megan Favale, Psychology
- Population Study of *Lilaeopsis schaffneriana* ssp. *recurva* to determine genetic variability***
Allison Martin, Biology
- Experiential Learning Research***
Ryan McConnell, Erin Dorozynski, Business Administration
- The Retrospective Analysis of Wendy's***
Bridget McKnight, Psychology
- Where Are the Women?***
Ken Olsen, History
- Green Algae Research***
Alexander Payne, Biology
- Delta Phi Epsilon Community Service***
Olivia Phillips, Santina Phillips, Volunteer and Community Services
- Modern Brazil: A Preliminary Assessment of Government Initiatives to Combat Corruption, Inequality, and Crime***
Vasil Popjanevski, International Studies
- Combatting Hunger in Latin America and the Caribbean***
Kelsey Rausch, International Studies
- The Importance of the Affordable Care Act's Contraceptive Mandate***
Thomas Schwob, Women's and Gender Studies
- Examining Associations Between Digital Calendar Use and Prospective Memory***
Keith Stam III, Jillian Burgess, Psychology
- Working Memory and Health***
Kirstie Surrena, Nikole Lindquist, Catherine Guth, Exercise Science
- Quakers Among the Seneca Indians***
Penny Sutton, History
- Native American Assimilation during the Colonial Period***

Chad Szymkowiak, Michael Kowal, Erik Corrie, Michael Schreiner, History

A Breakdown of Computer Literacy and Computer Security Literacy by Demographic

Ibrahima Toure, Mohamed Sadek, Computer and Information Sciences

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

The Retrospective Analysis of the Faculty Student Association

Natalie Bourlotos, Psychology

The Retrospective Analysis of SUNY Fredonia Tour Guides

Lauren Boyle, Psychology

Searching for Light Responsive Metal-organic Frameworks via the Incorporation of Photochromic Linker Molecules

David Butzer, Chemistry

Understanding different cultures and racial /ethnic differences in decision making biases

Mary Cappotelil, Psychology

The Retrospective Analysis of Quaker Boy Hunting Calls

Michael Catuzza, Psychology

The Restropective Analysis of Wegmans

Chris Ciambor, Psychology

Heart Rate Variability and Working Memory Performance in the Presence of a Therapy Dog

Amber Conte, Samantha Galloway, Psychology

The Retrospective Analysis of Tim Horton's

Cody Crandall, Psychology

The Second Shift

Mitchell Cummings, History

Massive Resistance

Jefferson Detric, History

U.S. Employment

Zak Dorler, Mathematical Sciences

The Effects of Video Exposure to Cluttering on Undergraduate Students' Perceptions of a Person who Clutters

Lindsey Farrell, Communication Disorders and Sciences

MEDTOC Networking

James Fefes, Computer and Information Sciences

Added weight variable in fitness, comparing effect of BMI to VO2max (mL/kg/min)

Megan Fournier, Jackie Moran, Lindsay Adams, Sarah Kelish, Erin Parker, Cait Suhecki, Ariel Cox, Exercise Science

The Black Slave Woman

Bethany George, History

Finding Novel "expressways" for gurken Translation

John Hasper, Biology

The Retrospective Analysis of Tim Horton's

Derron Hilts, Psychology

The Retrospective Analysis of The Italian Fisherman

Lauren Hind, Psychology

HRas/p21- A critical intermediate in signal transduction

Allison Martin, Chemistry

Exploring Racial Relations: The 3-Way Relationship between the Master, the Mistress and the Female Slave

Pilar Nelson, Interdisciplinary Studies – Self Design African American Studies

NAEYC Conference Poster

Analisyra Ramos, Curriculum and Instruction

Affirmative Action and Income Equality

Jordan Reed, History

Constructing Meaning from Doodles

Amanda Rockwood, Language, Learning, and Leadership

The Retrospective Analysis of Infusion Sales Group

Marisa Scozzaro, Psychology

Involving a Therapy Dog in a Preschool Classroom as a way of Enriching the Learning Environment

Jenna Steinmiller, Sarah Anderson, Psychology

Fluid Interventions and Cognitive Function

Kristy Unkrich, Molly Morgante, Kristi Putzig, Ian Ellenberger, Exercise Science

Comparing Positive and Negative Expectancy on Olfactory Perception

Kate Urtz, Jessica Miller, Kenneth Baum, Psychology

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

Primary Schools in Plymouth: A Look at English Education

Kathleen Adduci, Rachael Kibler, Curriculum and Instruction

Chautauqua Opportunities "Community Gardens"

Aaron Boedecker, Public Health

Sudoku Solver

Manuel Joseph R. Candidato, Computer and Information Sciences

The Retrospective Analysis of Residence Life

Tieliek Curry, Psychology

Effects of Insufficient Sleep

Anna Ferrante, Mathematical Sciences

Sports Psychology in the MLB

Cody Grasso, Keegan Johnston, Psychology

Up til Dawn

Brittany Hull, Volunteer and Community Services

Oil Accumulation in C. reinhardtii Using the Antianginal Drug Trimetazidine to Shift From Lipid Oxidation to Fatty Acid Accumulation by Inhibiting 3-Ketoacyl Coenzyme A Thiolase

Aman Kumar, Biology

IRES-Mediated Translation of grk mRNA During Drosophila Oogenesis

Jacob Merle, Biology

Students Taking Active roles in Service: Social Work Club

Shannon Schwarberg, Social Work and Volunteer and Community Services

Dusty Vent: Rapid Game Prototyping using HTML5/Javascript and C++/Simple DirectMedia Layer

Jeffrey Swift, Nicholas Freville, Patrick Hodge, Computer and Information Sciences

Identifying Important Habitat Features for Bat Conservation Using Acoustical Sampling and GIS

Jonathan Townsend, Biology

Effects of Female Quality on Mate Choice Tradeoffs and Consistency in a Predation Context in Crickets

Rebecca Watro, Biology

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

Patterns of Victimization

Alexandra Ackles, Mathematical Sciences

The Days of Service Volunteer and Community Services

Sara Bartz, Danielle Consaul, Natalie Buck, Brittany Hull, Leadership Studies/Volunteer and Community Services

Gift Exchange Economies in the Early Americas

Ashley Bertolini, Emily Jones, History

Forging Bridges Between IMC and the Local Community

Doreen Bumpus, Business Administration

The Retrospective Analysis of the University Bookstore/Convenience Center

Kaitlyn Caufield, Psychology

Derivatives as a Rate of Change: College Students' Understanding of the Concept of a Derivative

Suzanne Constantinou, Mathematical Sciences

Trade Good Values in Early America

Sarah Creighton, History

Training for the long-term: An education with child welfare specialization or on the job training?

Kelly Forstbauer, Danny Galusha, Ian Jutsum, Kathryn Feather, Social Work

College Students' Misconceptions of the Order of Operations and its Applications

Kristen Joseph, Mathematical Sciences

Count Off by Threes? Optimal Size for Group Work

John Hamilton, Mathematical Sciences

The Silent Killer of the New World

Kelly Lewis, History

Speedy 3-D: Spatial Ability in Adolescence and How it Varies by Age, Gender, and College Major

Sara Maiorana, Mathematical Sciences

Math without Technology: A Study of Two Generations using Mental Math and Estimation to Accomplish Everyday Mathematical Tasks

Karla Mead, Mathematical Sciences

College Students' Accuracy in Measurement Estimation: The U.S. Customary Units vs. the Metric System

Ashley Melinski, Mathematical Sciences

Undergraduate College Students' Success In Exponential Expression Estimation Tasks

Travis Mirabella, Mathematical Sciences

Construction Estimation: Mathematical Estimation and It's Real-World Application in the Construction Fields

David Newcomb, Mathematical Sciences

The Retrospective Analysis of The Guerrillas

Brian O'Reilly, Psychology

Childhood Lead Poisoning Prevention: Using Social Work Practice to Solve a Public Health Crisis

Antonio Regulier, Public Health

Drag in America

Valerie Reynolds, Maegan Clark, Women's and Gender Studies

Understanding and Misconceptions of Rates of Change and Unit Conversions

Elizabeth Schake, Mathematical Sciences

Projectile Motion Analysis

Jeffrey Swift, Computer and Information Sciences

Vegetative Communities at SUNY-Fredonia College Lodge

Jonathan Townsend, Tiffany Wong, Rebecca Watro, Mona Alabbadi, Biology

Estimating, Percentages, and Area: Students' Ability to Accurately Estimate What Percentage of an Object's Area is Shaded

Kaitlyn Whitney, Mathematical Sciences

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

How safe is your state?: An analysis of violent crime rates and contributing variables in each of the 50 states.

Alexandra Ackles, Mathematical Sciences

Preservice Teachers' Perceptions of iPad Use for Creating and Performing in Secondary General Music Methods

Rachel Bicheler, Callan Robinson, Kristina Verrico, Music

Consulting for Family Video

Marc Braghirol, Business Administration

Gender-Driven Differences in Entrepreneurial Intentions

Alissa Faulkner, Jeff Evans, Mike Novelli, Elise Hayden, Business Administration

The Retrospective Analysis of Pole Position Raceway

Paul Flahire, Psychology

The Retrospective Analysis of Buffalo Hearing and Speech

Stephanie Gokey, Psychology

Social Networking and Emotions

Pamela Kus, Elizabeth Roberti, Erin Slattery, Stephanie Thompson, Psychology

The Progression of Birth Control

Kathryn Lucas, Abby Blinn, Women's and Gender Studies

The Study of Sexual Abuse in American Slavery

Emily O'Sullivan, Ashley Bertolini, Women's and Gender Studies

The Retrospective Analysis of The Jamestown Jammers

Corey Raymond, Psychology

Terminology of Prostitution in America

Kathryne Rapp, Women's and Gender Studies

The Effect of pH Modulation on α CA3 & β CA6 in *C. reinhardtii*

Ramses Rodriguez, Biology

Human-Animal Interaction: Storytelling

Brooke Schutrum, Joshua Andrzejewski, Kimberly Molfetto, Samantha Galloway, Psychology

Regression Investigations on Weight and Exercise from NHANES National Youth Fitness Survey

Christopher Shartrand, Mathematical Sciences

Generational Tattoo Tolerance: Employing the Millennial Generation

Sarah Smith, Joshua Hodge, John Elerick, Karl Deck, Business Administration

Sexualization of the Disabled Body

Joshua Steffen, Women's and Gender Studies

Sex Education: if not in schools, then where?

Kaylee Torre, Women's and Gender Studies

The Effects of GDP on the Environment

Rachael Tschari, Mathematical Sciences

College Students' Misconceptions in Fractional Learning

Shannon Tydings, Mathematical Sciences

Examining the effects of background music on memory recall in introverts and extroverts

Nichole Whiteford, Lauren Ciulla, Devan Nichols, Psychology

Photomorphogenic Effects of UV-B Radiation and Antioxidant Treatment on *Brassica rapa*

Tiffany Wong, Biology

5:30 p.m. to 6:00 p.m.

Flax Fiber: How Beating Times Effect Paper-making

Shauna Beckstein, Visual Arts and New Media

Whiteness in America: Antebellum and Reconstruction Women

Michael Castellano, History

Fredonia Enactus

Emaleigh Dudley, Eric Cadena, Chelsea Lydic, Jesse Duane, Business Administration

Echoes of Emily

Caeli Faisst, Theatre and Dance

Chautauqua County Gleaning Project

Hannah Farley, Volunteer and Community Services

Recognizing Connections in Biology and Public Health

Kim Foltz, Public Health

Encryption and Flight Routing

Jessiel Heitor Hacke, Computer and Information Sciences

Modern Brazil: A new superpower in the horizon?

Connor Hoffman, International Studies

Blue Devils in Bell Bottoms: 1970s Student Life at SUNY Fredonia

Charles Johnson, Christopher Murray, Jonathan Wacienga, History

The Importance of the First Three Years

Rachael Kibler, Kathleen Adduci, Ezdehar Alhabeedi, Naimah Almutairi, Naseebah Alrehaili, Ashley Bartela, Jessica Bridge, Kristen Forcucci, Callan Robinson, Curriculum and Instruction

Mad Men and Marriage: Betty Draper and the Visibility of Emotional Abuse

Courtney Loiacono, Communication

Domestic Rape

Ariella Lusterman, Women's and Gender Studies

Designing of Web Based Application for Computer Science and Information Systems Majors with MS Visual Studio.NET 2012 in Virtual Lab

Amy Masters, Computer and Information Sciences

Indian Boarding Schools: Forced Assimilation and an End to a Way of Life

Anna Prince, History

4G LTE Scheduling

Shaun Reich, Patrick Hodge, Thomas Gouridine, Computer and Information Sciences

Experience Based Learning

Angel Roopnarine, Lauren Hargraves, Emmanuel Guzman, Communication Disorders and Sciences

Communication Disorders Student Society Volunteer and Community Services

Julia Santini, Communication Disorders and Sciences and Volunteer and Community Services

Keeping Lucy Out of The Act: "I Love Lucy" as Reinforcing and Subverting Postwar Culture

Natalie Sowa, Women's and Gender Studies

Throughout the day

Intro Literary Publishing Class

Allisa Butlak, Luke Dumke, Deanna Foley, Leo Frank, Ashley Friedman, Megan Gleason, Kathryn Haro, Liam Jones, Katarina Kleine, Mary Laing, Danielle Lorenzo, Katie Lucas, Melissa Mazurek, Sabrina McMullen, Sarah Sadler, Joseph Smith, Vaughn Thompson, Michaela Worosz, English

Advanced Poetry Writing

Keegan Johnston, Danielle Lorenzo, Bryanna Martonis, Sydney Thomas, Thomas Warmbrodt, Elizabeth Wenneman, Sarah Peace, English

ORAL PRESENTATIONS

Room G103B

1:00 p.m.

Look Down Below

Anatoliy Biliciler, Computer and Information Sciences

1:30 p.m.

MEDTOC

Anatoliy Biliciler, Computer and Information Sciences

2:00 p.m.

Mad Men and Marriage: Betty Draper and the Visibility of Emotional Abuse

Courtney Loiacono, Communication

2:30 p.m.

Infering the Closed Quotient

Robert Dunlap, Music

3:00 p.m.

Fredonia Enactus

Emaleigh Dudley, Eric Cadena, Chelsea Lydic, Jesse Duane, Business Administration

3:30 p.m.

CFA Research Challenge

Aaron Valeska, Victoria Wessel, Nicole Sparks, Matthew Sullivan, Business Administration

Room G103C

1:30 p.m.

The Transgression of Language

Bryanna Martonis, English

3:00 p.m.

Friends Across Borders

Zora Middleton, Alexandria Marcott, Brittany Probst, Emily C Jones, Volunteer and Community Services

3:30 p.m.

Beauties and Beasts of Dracula, Carmilla, and Strange Case of Dr. Jekyll and Mr. Hyde

Shirley Ibach, English

Un-Veiling Alison: Deconstructing Chaucer's Most Infamous Wife

Melissa Mallaber, English

TRIDENT READING Room S204D

5:00 p.m. to 6:00 p.m.

Trident

Shelby Converse, Ryan Norton, Lisa Halas, Michael Flanagan, Rebecca Kulp, Sydney Thomas, Peter Mason, Stephanie Ward, Matthew Perloff, Jacob Lesinki, Katryna Pierce, English

MUSICAL PERFORMANCE Room S204

3:40 p.m.

Traditional Ghanaian Gyl Music

Brandon Minicucci, Donald Malone, Music

DANCE PERFORMANCES DODS HALL DANCE STUDIO, ROOM 148

2:40 p.m.

Injustice?

Harley Branning, Molly Carriero, Lauren Dewey-Right, Michelle Kirisits, Noelle Lazor, Abigail Sullivan

2:50 p.m.

Painting Darkness

Choreographer: Sydney Thomas (BFA Dance major – Senior)

Presenters: Adam Ali, Joan Cusick, Lauren Dewey-Wright, Sarah Peace, Steve Russell, Courtney Stewart

Understudy: Samantha Mazzalonga

4:50 p.m.

Injustice?

Abigail Donegan, Jasmine Joyner, Alexa Lindberg, Nicole Miller, Mercedes Smith, Kerri Williamson

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.

The Days of Service Volunteer and Community Services

Sara Bartz, Danielle Consaul, Natalie Buck, Brittany Hull, Leadership Studies/Volunteer & Community Services
poster presentation: 3:30 p.m.

Engaging in our Community Series: Delta Chi

Justin Borrelli, Volunteer and Community Services
poster presentation: 2:00 p.m.

Engaging In Our Community: InterVarsity Christian Fellowship Service Trip

Marsha Cohen, Volunteer and Community Services
poster presentation: 1:30 p.m.

Chautauqua County Gleaning Project

Hannah Farley, Volunteer and Community Services
poster presentation: 1:00 p.m.

Up til Dawn

Brittany Hull, Volunteer and Community Services
poster presentation: 3:00 p.m.

Friends Across Borders

Zora Middleton, Alexandria Marcott, Brittany Probst, Emily Jones, Language, Learning, and Leadership/Volunteer and Community Services
oral presentation: 3:00 p.m.

Delta Phi Epsilon Community Service

Olivia Phillips, Santana Phillips, Volunteer and Community Services
poster presentation: 2:00 p.m.

Communication Disorders Student Society Volunteer and Community Services

Julia Santini, Communication Disorders and Sciences/Volunteer and Community Services
poster presentation: 1:30 p.m.

Students Taking Active roles in Service: Social Work Club

Shannon Schwarberg, Social Work and Volunteer and Community Services
poster presentation: 3:00 p.m.

GRADUATE STUDENT PRESENTATIONS

Literacy Experiences of Teen Mothers

Amanda Babyak, Language, Learning, and Leadership
poster presentation: 1:30 p.m.

Preservice Teachers' Perceptions of iPad Use for Creating and Performing in Secondary General Music Methods

Rachel Bicheler, Callan Robinson, Kristina Verrico,
poster presentation: 5:00 p.m.

Derivatives as a Rate of Change: College Students' Understanding of the Concept of a Derivative

Suzanne Constantinou, Mathematical Sciences
poster presentation: 3:30 p.m.

The Effectiveness of Pitchers

Joseph DiRaimo, Mathematical Sciences
poster presentation: 1:00 p.m.

The Effects of Video Exposure to Cluttering on Undergraduate Students' Perceptions of a Person who Clutters

Lindsey Farrell, Communication Disorders and Sciences
poster presentation: 2:30 p.m.

Beauties and Beasts of Dracula, Carmilla, and Strange Case of Dr. Jekyll and Mr. Hyde

Shirley Ibach, English
oral presentation: 2:00 p.m.

College Students' Misconceptions of the Order of Operations and its Applications

Kristen Joseph, Mathematical Sciences
poster presentation: 3:30 p.m.

Count Off by Threes? Optimal Size for Group Work

John Hamilton, Mathematical Sciences
poster presentation: 3:30 p.m.

Diet-Induced obesity alters skeletal muscle fiber types of male but not female mice

Jordan Johnson, Biology
poster presentation: 2:00 p.m.

Speedy 3-D: Spatial Ability in Adolescence and How it Varies by Age, Gender, and College Major

Sara Maiorana, Mathematical Sciences
poster presentation: 3:30 p.m.

Un-Veiling Alison: Deconstructing Chaucer's Most Infamous Wife

Melissa Mallaber, English
oral presentation: 2:00 p.m.

Math without Technology: A Study of Two Generations using Mental Math and Estimation to Accomplish Everyday Mathematical Tasks

Karla Mead, Mathematical Sciences
poster presentation: 3:30 p.m.

College Students' Accuracy in Measurement Estimation: The U.S. Customary Units vs. the Metric System

Ashley Melinski, Mathematical Sciences
poster presentation: 3:30 p.m.

IRES-Mediated Translation of grk mRNA During Drosophila Oogenesis'

Jacob Merle, Biology
poster presentation: 3:00 p.m.

Construction Estimation: Mathematical Estimation and It's Real-World Application in the Construction Fields

David Newcomb, Mathematical Sciences
poster presentation: 3:30 p.m.

Constructing Meaning from Doodles

Amanda Rockwood, Language, Learning, and Leadership
poster presentation: 2:30 p.m.

Understanding and Misconceptions of Rates of Change and Unit Conversions

Elizabeth Schake, Mathematical Sciences
poster presentation: 3:30 p.m.

Identifying Important Habitat Features for Bat Conservation Using Acoustical Sampling and GIS

Jonathan Townsend, Biology
poster presentation: 3:00 p.m.

Vegetative Communities at SUNY-Fredonia College Lodge

Jonathan Townsend, Tiffany Wong, Rebecca Watro, Mona Alabbadi, Biology
poster presentation: 3:30 p.m.

College Students' Misconceptions in Fractional Learning

Shannon Tydings, Mathematical Sciences
poster presentation: 5:00 p.m.

Effects of Female quality on Mate Choice Tradeoffs and Consistency in a Predation Context in Crickets

Rebecca Watro, Biology
poster presentation: 3:00 p.m.

Estimating, Percentages, and Area: Students' Ability to Accurately Estimate What Percentage of an Object's Area is Shaded'

Kaitlyn Whitney, Mathematical Sciences
poster presentation: 3:30 p.m.

Photomorphogenic Effects of UV-B Radiation and Antioxidant Treatment on Brassica rapa

Tiffany Wong, Biology
poster presentation: 5:00 p.m.

REMARKS

Room S204

4:00 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 S204

4:15 p.m.

Dr. Brian Green

"Changing Direction: Considering Context, Flexibility, and Focus."

Dr. Brian Green is a former Psychology major who went on to get a PhD in Industrial Engineering from the University of Buffalo. He is currently a Human Factors Engineer

at the US Nuclear Regulatory Commission in Washington, DC and is also an adjunct professor of Psychology at George Washington University.

RECEPTION IMMEDIATELY FOLLOWING

ABSTRACTS

Please note that the abstracts for the following presentations are located at the end of this listing:

Advanced Poetry Writing
Dance Performances
Retrospective Analysis Psychology Abstract

Patterns of Victimization

Alexandra Ackles, Mathematical Sciences
Mentor: Dr. Nancy Boynton, Mathematical Sciences

I have conducted a number of small analysis of the National Crime Victimization Survey (NCVS) data with data from 1993-2012. I first analyzed the effects of age and sex on the rate of victimization. My second analysis looks at the effects of age and race on victimization, and my third analysis looks at the effects of sex and race on rate of victimization. Regression analysis techniques were used to determine the demographics of people who are most often the victims of crime in the United States.

Poster presentation: 3:30 p.m.

How safe is your state? An analysis of violent crime rates and contributing variables in each of the 50 states

Alexandra Ackles, Mathematical Sciences
Mentor: Dr. Nancy Boynton, Mathematical Sciences

Crime is everywhere in the United States, but are some states safer than others? I have conducted a data analysis using regression techniques to determine which state is the safest, in terms of violent crime. I have analyzed data from 2009-2012 from the Uniform Crime Reporting (UCR) database as well as contributing data from multiple United States government sources. My analysis looks mainly at violent crime rates and the variables that may affect them. I have also looked at the four census-determined regions of the United States to determine if one region is safer than the others.

Poster presentation: 5:00 p.m.

Primary Schools in Plymouth: A Look at English Education

Kathleen Adduci, Rachael Kibler, Curriculum and Instruction
Mentor: Dr. Cynthia Smith, Curriculum and Instruction

The College of Education offers an exciting international teaching practicum in Plymouth, England for undergraduate and graduate students. Ten Fredonia students participate in this exchange each June, which is a three week opportunity to work in English primary (elementary) schools. During the practicum, participants observe key principles of the British education system, while collaborating with school teachers in working with school children age 5-12. This opportunity educates in highlighting cultural features of the English school, and serves as a comparative experience to what teacher candidates see in the American school setting. We wish to present our findings from the experience via poster presentation.

Poster presentation: 3:00 p.m.

A Survey of Career Opportunities in Computer and Information Sciences

Kazim Atasoy, Computer and Information Sciences
Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Computer and information science jobs are growing to become worlds' biggest job opportunities. Most of the companies already integrated their system with technology and there are still some rural companies that haven't integrated with technology but day by day these companies will be integrated too. Technology is more than just automation; now it is being woven around our life. Therefore, people keep inventing, producing and adapting our wishes to technology. In this research paper, I tried to find answers

to some questions about career opportunities in computer and information sciences that creates most of these technologies that serve the world.

Poster presentation: 1:30 p.m.

A Study of Virtual Museum Guide for Mobile Applications

Kazim Atasoy, Computer and Information Sciences

Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

In this work we present a Virtual Museum Guide for Mobile Applications using an advanced Image Recognition system and low-cost devices, such as smart phones. The goal of the Virtual Museum Guide for Mobile Applications project is to offer a rich and interesting visiting experience, and to improve the attractiveness and accessibility of Museums and their exhibits to the prospective visitors.

Poster presentation: 2:00 p.m.

Literacy Experiences of Teen Mothers

Amanda Babyak, Language, Learning, and Leadership

Mentor: Dr. Jennifer Ro, Language, Learning, and Leadership

This master's thesis study identifies educational approaches that may improve teen mothers' literacy experiences as they come to identify themselves in institutional settings. Though teen pregnancy has declined 52% from 1991 to 2012, only 38% of teen girls who have a child before age 18 obtain a high school diploma. This study explores teen mothers' literacy education experiences, how teen mothers perceive themselves within their institutional settings, and educational approaches that would benefit teen mothers' literacy learning. The researcher created a professional development workshop for current and future literacy professionals who will be involved in the literacy education of teen mothers.

Poster presentation: 1:30 p.m.

GIS as a Tool for Fighting Poverty in Chautauqua County

Caleb Bardeen, Geosciences

Mentor: Dr. Ann Deakin, Geosciences

During the Fall 2013 semester, I completed a GIS (Geographic Information Systems) internship with Chautauqua Opportunities Inc. (COI) in Dunkirk, New York. COI's mission is to fight poverty through the mobilization of resources and creation of partnerships to promote empowerment, economic independence and opportunities. My goal was to show that GIS could be used as a resource in that mission. I used data from the Census Bureau and COI to generate a series of maps that would assist in the visualization of poverty rates and licensed child care providers, home ownership, and locations of runaway youth and home care locations. I also assisted with a housing survey in an area of Dunkirk to identify structures that were vacant and in need of repair. This survey was geocoded and mapped. In addition to ArcGIS Desktop 10.1, I used Esri's new cloud GIS solution, ArcGIS Online, to make the maps more accessible.

Poster presentation: 1:00 p.m.

SLA Monitoring

Michael Barry, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

SLA Monitoring allows customers to see all the information on the delivery of packets in their network including jitters, end to end delay and packet loss. We have successfully implemented Lua scripting in Wireshark to count the packets that belong to different QoS classes on the ISP link. This can become a useful tool for customers who want to monitor their network and see which classes their users are using heavily. Initially, the customer provides the traffic descriptors. The script collects statistics for specified time. Then, the program analyzes the data and provides suggestions to the customer for adjusting bandwidth share of various classes. The program will contain a GUI interface and statistical analysis of data with suggestions to reduce or increase the subscription for various traffic classes.

Poster presentation: 2:00 p.m.

The Days of Service Volunteer and Community Services

Sara Bartz, Danielle Consaul, Natalie Buck, Brittany Hull, Leadership Studies/Volunteer & Comm. Svcs.
Mentor: Ms. Joyce Smith, Volunteer and Community Services; Mr. Mark Suida, Leadership Studies

For LEAD201, there were two classes with four different service projects, each working with the elderly and the youth of the Dunkirk/Fredonia community. The leadership class taught by Eric Hotchkiss hosted the Golden Jubilee for the Women's Christian Association, as well as The Minute to Win It Extravaganza for the Salvation Army. The leadership class taught by Mark Suida hosted Carnival Day and Field Day for the Boys and Girls Club, as well as Casino Night for The Chautauqua County Home. These events implemented recreational and social activities for the community surrounding SUNY Fredonia. The events held by LEAD201 classes created strong ties between the campus and the community.

Poster presentation: 3:30 p.m.

Corelation of Cultural Change and the Naacp

Lindsey Bauza, History
Mentor: Dr. Emily Straus, History

Although Black Americans were freed from bondage following the abolition of slavery in 1865, they would endure persecution and repression for decades to come. However, the establishment of the National Association for the Advancement of Colored People (NAACP) in 1909 would profoundly aid Black Americans in their struggle for equality. An examination of important NAACP landmarks and the correlation of events of cultural change will be given in this presentation.

Poster presentation: 2:00 p.m.

Flax Fiber: How Beating Times Effect Paper-making

Shauna Beckstein, Visual Arts and New Media
Mentor: Mr. Tim Frerichs, Visual Arts and New Media

Two pounds of flax fiber was beaten for ten hours in a Hollander beater. A Hollander beater is a machine with an oval shaped basin and a roller with dull blades on it. Water and fiber circulate in the basin, and are forced through the section with the roller. The beater separates individual fibers and suspends them in water. During the beating plant fibers, like flax, develop fibrils (hair-like abrasions on the surface). Fibrils allow the fiber to weave better, resulting in stronger paper. Fiber was removed every hour and two sheets of paper were pulled from the fiber. The resulting books are documentation of how the different beating times effect the final sheet of paper. As a general rule, the longer the fiber is beaten the "crisper" and stronger the paper will be.

Painting/drawing/sculpture: 3:30 p.m.

Gift Exchange Economies in the Early Americas

Ashley Bertolini, Emily Jones, History

This study focuses on the significance of gift exchange economies in early Mexican societies and the Southeast. This system characterized both positive and negative interactions indigenous natives and Europeans.

Poster presentation: 3:30 p.m.

Preservice Teachers' Perceptions of iPad Use for Creating and Performing in Secondary General Music Method

Rachel Bicheler, Callan Robinson, Kristina Verrico, Music
Mentor: Ms. Jill Reese, Music

The purpose of this qualitative study was to investigate preservice music teachers' perceptions of their experiences using iPads to engage students in creating and performing music during field-teaching integrated in their general music methods course. Analysis of reflections reveals students' perceptions

relate to experience using technology and creating music. Research questions that guided this study were (a) what are these preservice teachers' perceptions of their technological, pedagogical, and content knowledge, and how might these perceptions be influenced by their experience using technology during field teaching? (b) how do they describe their experiences using the iPads for performing and creating music, and teaching students? and (c) what are their perceptions of the technology as a tool for engaging students in performing and creating?

Poster presentation: 5:00 p.m.

MEDTOC

Anatoliy Biliciler, Computer and Information Sciences
Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

MEDTOC is a disaster mitigation software system to assist patients by connecting paramedics to physicians before patients are delivered

Oral presentation: 1:30 p.m.

Look Down Below

Anatoliy Biliciler, Computer and Information Sciences

In the light of events with Russia and generally growing energy and healthcare problem, we propose an advanced geothermal and artificial thermal facility and using the excess magma fumes to create artificial thermal pool for the nearby community while producing enough electricity for over 40.000 homes.

Oral presentation: 1:00 p.m.

Chautauqua Opportunities "Community Gardens"

Aaron Boedecker, Biology/Public Health
Mentor: Dr. Linda Dorster, Public Health

Chautauqua Opportunities is a non for profit community action Agency leading the fight against poverty by mobilizing resources and creating partnerships to promote empowerment, economic independence and opportunities. The community gardens initiative is to support nutrition, food security, gardening, enterprise, and production activities within the communities that COI serves, with the hopes that COI customers become empowered to be self-sufficient and lead healthy lives. The biological approach allows me the opportunity to integrate disease control methods of possible infection to gardens, healthy growing conditions and promote how fresh produce and healthy nutrition positively affects bodily function. In accomplishing this Chautauqua opportunities is able to achieve their mission statement. My "Mind Map" allows me the opportunity to illustrate the connection between the Gardening program to my major in Biology and minor in Public Health.

Poster presentation: 3:00 p.m.

Engaging in our Community Series: Delta Chi

Justin Borrelli, Volunteer and Community Services
Mentor: Ms. Joyce Smith, Volunteer and Community Services

For 20 Years, the Delta Chi Fraternity has worked with the Volunteer and Community Service office to make our community a better place to live. Logging over 200+ hours annually for the past 4 years, we have increased our efforts and would like to share our experiences and passion with the campus. We will create a poster highlighting some of our major events including: Operation Breakfast Rescue, Day for Kids (Boys and Girls Club), Miracle on Main St., The Spring Egg Hunt, The Friendly Kitchen, and Slush Rush.

Poster presentation: 2:00 p.m.

Vocabulary Change in Preschoolers Related to When Dialogic Reading Occurs

Lauren Boyle, Psychology
Mentor: Dr. Andrea Zevenbergen, Psychology

The SUNY Fredonia Shared Reading Project worked with families of preschoolers in hopes to increase the children's vocabulary base. Within this project the current study was also conducted. The time of day that the families participated in dialogic reading was studied to determine if the amount of words learned was related to when the families read together. Reading logs that indicated what time the family read, what book was read, and how long the family read were submitted by 56 out of the 77 participating families; 37 of the 56 reading logs were complete enough to be used for this study. The hypothesis, to determine if vocabulary gains were related to being read to during the daytime hours rather than later in the evening, was not supported. The time of day the families read was not related to vocabulary change in the children. However, the most common time for reading was between 6:00 and 9:00 PM, and the group of children did make vocabulary gains during the time of the reading intervention.

Poster presentation: 1:30 p.m.

Consulting for Family Video

Marc Braghirol, Business Administrator

Mentor: Dr. Mojtaba Seyedian, Business Administrator

For our Business Consulting project, my team consulted for Family Video of Dunkirk. We chose to focus on reducing transaction processing fees. This is because Family Video generally competes on cost. Eliminating credit card fees was accomplished by using a software application (Venmo) that allows individuals to transfer funds to others without a fee. The usage of this software was supported by in store video game tournaments. Our research showed that video game tournaments increase store revenue by 5-10%. Our research also showed that teenagers, the specific target market in this instance, spend on impulse purchases, such as candy, when they are in stores with friends and have money available. According to data collected from Family Video, similar events that occur quarterly, known as grassroots events, significantly increase store traffic. Store traffic is very important in the video rental industry. Our recommendations could be used in other Family Video stores.

Poster presentation: 5:00 p.m.

The Humanities: Pop Culture and Marketing

Doreen Bumpus, English

Mentor: Dr. Shannon McRae, English

This submission to the Spring 2014 OSCAR exposition was the result of research done in Fall 2013 for "American Popular and Mass Culture" in which I examined the history of the comic book, the subsequent development of the American graphic novel, and how a change in marketing strategy helped drive the growth and acceptance of graphic novels in contemporary mainstream society.

Poster presentation: 1:00 p.m.

Productions/Operations Management: Applying LEAN Tools to Small Business

Doreen Bumpus, Business Administration

Mentor: Dr. Lisa Walters, Business Administration

This submission to the 2014 OSCAR Exposition is the result of research into the key principles and tools of LEAN and the possible application of these key principles and tools to the management of small business entities.

Poster presentation: 1:30 p.m.

Forging Bridges Between IMC and the Local Community

Doreen Bumpus, Sean Adymy, Nicholas Calidonna, Catherine Hale, and Cassandra Hardick, Business Administration

Mentor: Dr. Shazad Mohammed, Business Administration

Our Spring 2014 project was to create a branded business or service that would feasibly benefit the Dunkirk-Fredonia community or campus. We hope that our project has exceeded the scope of the assignment in that it seeks to benefit both local community as well as collegiate campus. The goal of our

startup-business, BACHH, is to provide the priceless experience of music education by developing and expanding children's musical knowledge and skills which also helps develop better communicators and listeners. BACHH partners with local businesses and fundraisers to assist with scholarships. Other resources for the BACHH's development: School of Business and School of Music internships, Option #4 learning components, qualification for the Start- Up NY initiative,

Poster presentation: 3:30 p.m.

Searching for Light Responsive Metal-organic Frameworks via the Incorporation of Photochromic Linker Molecules

David Butzer, Chemistry

Mentor: Dr. Holly Lawson, Chemistry

Photochromic molecules have the potential to transform traditionally passive materials into active materials which change their chemical or electronic properties in response to light stimulus. Photochromic molecules can be combined with metal-organic frameworks to create advanced materials for chemical separation, sensing, and photo-mechanical actuation. To further investigate, various photochromic linker molecules were synthesized to then be incorporated into metal organic frameworks. The photochemical reactions in these materials, both desired and undesired, were precisely monitored through spectroscopic and X-ray diffraction methods. Also, a new synthetic route for the production of 2-(phenyldiazenyl)terephthalic acid was attempted in hopes of increasing the yield given by traditional methods.

Poster presentation: 2:30 p.m.

GIS for Infrastructure Management at Chautauqua Institution

Jacob Calabrese, Geographic Information Sciences

Mentor: Dr. Ann Deakin, Geographic Information Sciences

GIS (Geographic Information Systems) is a valuable tool for infrastructure management of all kinds ranging from roads to utilities to recreation. Chautauqua Institution, the educational center on Chautauqua Lake in southwestern New York, relies on GIS to manage both its world renowned summer nine-week season and its site as a year-round residence and off-season destination. During the nine-week season, approximately 7,500 people are in residence on any given day, over 100,000 people attend the scheduled events and over 8,000 students participate in the Chautauqua Summer Schools. This historic 750-acre community needs the backbone GIS provides to ensure everything is operational. Chautauqua Institution's Department of Operations, has used GIS to map everything from its boat docks, parking, gardens, bench locations, and storm drains, among many other facilities. This poster presentation will be comprised of maps representing the ongoing GIS projects to support infrastructure management at Chautauqua Institution.

Poster presentation: 2:00 p.m.

Sudoku Solver

Manuel Candidato, Computer and Information Sciences

Mentor: Dr. Reneta Barneva, Computer and Information Sciences

The Sudoku puzzle is a number puzzle which has a 9x9 grid, each block will need to be filled with a number that is 1 through 9. The difficulty of each puzzle may vary, but cannot be determined by the number of digits that are initially placed on the board. The sudoku solver algorithm may have to incur guessing a number for a grid in order to solve the puzzle, since the puzzle may be impossible without speculation. The difficulty cannot be derived by the amount of numbers in the puzzle, we must measure it by the amount of logical analysis involved. Logical analysis would include all the techniques used to solve the sudoku puzzle. My project will implement two versions of a sudoku solver algorithm, one is to use a backtracking algorithm, which fills every single changeable grid to a number that can be placed in that specific grid. The second implementation will be using my own expert system using linked list to provide possible values for each changeable grid. Both are going to be timed on their performance, to see which has better efficiency.

Poster presentation: 3:00 p.m.

Understanding different cultures and racial /ethnic differences in decision making biases

Mary Cappotelil, Psychology

Mentor: Dr. Joseph McFall, Psychology

We conducted a study on decision making biases across cultures. Participants were recruited through the use of Amazon Mechanical Turk then took an online survey through Qualtrics. Amazon Mechanical Turk is a distributive work flow site capitalizing on human intelligence that contains a diverse group of workers. Our participants consisted of comparison groups of white Americans, minority groups from within the United States (black American, Hispanic/Latino American, and Asian American), a sample from India, as well as a diverse non-American group. The survey assessed decision biases including the sunk cost fallacy, counterfactual reasoning, and probability estimation. We also randomly assigned participants to receive one of two instructional stories followed by two questions. The instructional stories were either describing how the sunk cost fallacy or counterfactual reasoning bias worked. We implemented these stories to discover whether or not learning how these biases worked affected the participant's decision making on the following vignettes.

Poster presentation: 2:30 p.m.

Whiteness in America: Antebellum and Reconstruction Women

Michael Castellano, History

Mentor: Dr. Jennifer Hildebrand, History

A study of white women in the Antebellum and Reconstruction South that reflects the construction of white racial identity through oppression of the black population.

Poster presentation: 2:30 p.m.

Who's Name Comes First? Psycholinguistic Properties, Context Effects, and Sociohistoric Influences Affect Name Order Preference

Teresa Ciambella, Psychology

Mentor: Dr. Joseph McFall, Psychology

The present research consisted of two surveys on name order preference (i.e., in a pair of names, which do people say first?). Previous research has examined the phenomenon of "male to female order preference" in couples' names and its link to gender stereotypes and phonology (Hegarty, Watson, Fletcher, & McQueen, 2010; Wright, Hay, & Bent, 2005). However, much remains unknown about the cognitive and cultural factors that influence name order. In the first survey, we examined the generational differences in name order, looking to sociohistorical influences, such as changing gender role stereotypes that may influence people's name order orientation for their parents' and grandparents' names. We also analyzed the phonology of names to control for linguistic properties that alter name order orientation. Our second survey assessed name popularity by obtaining top names from the Social Security Name Index from 1950 and 2012. We also examined context effects by experimentally manipulating the order presentation of names by gender.

Poster presentation: 1:30 p.m.

Engaging In Our Community: InterVarsity Christian Fellowship Service Trip

Marsha Cohen, Volunteer and Community Services

Mentor: Ms. Joyce Smith, Volunteer and Community Services

During the winter break InterVarsity Christian Fellowship volunteered their time working on a variety of service projects. Nineteen students and two alumni spent six days serving at 11 different locations around Dunkirk and Fredonia. The projects included: Restored the Willow Mission Homeless Shelter; assisted the elderly at St. Columbans and Fredonia Place; clean-up and painting at Lakeshore Humane Society; meal preparation at Chautauqua Cty. Rural Ministry; Sorted & boxed clothing at Salvation Army.

Poster presentation: 1:30 p.m.

Derivatives as a Rate of Change: College Students' Understanding of the Concept of a Derivative

Suzanne Constantinou, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

This study examines students' misconceptions regarding the concept of a derivative. It is hypothesized that students in University Calculus III will not remember the concept of a derivative and the applications of a derivative. In addition University Calculus I students will correctly recall the definition of a derivative and will easily be able to understand derivative applications.

Poster presentation: 3:30 p.m.

Heart Rate Variability and Working Memory Performance in the Presence of a Therapy Dog

Amber Conte, Samantha Galloway, Psychology
Mentor: Dr. Nancy Gee, Psychology

Research in the area of Human-Animal Interaction has demonstrated that physiological reactivity to stress can be moderated by the presence of a companion animal. For example, blood pressure and heart rate (HR) do not elevate as much in the presence of the animal during the stressor. The current study examines heart rate variability and working memory performance during variations in stress induced by listening to a story (low stress) or recalling increasing complex sequences of words or shapes to the point of failure three times (higher stress). College students were asked to wear a HR monitor while they repeatedly listened and performed the verbal and visual WM tasks in the presence of the dog and handler, handler, and with no observer. The results indicated that the WM tasks were stressful to participants, but the presence of the dog did not moderate this increase in physiological reactivity.

Poster presentation: 2:30 p.m.

Trade Good Values in Early America

Sarah Creighton, History
Mentor: Dr. Nancy Hagedorn, History

This project explores the different values of trade goods between eastern Native Americans and Europeans in pre-1800 North America. Essential components to both the fur trade and the gift exchange economy, the value of trade goods varied according to the contemporary views of the participants. Essential in carrying on the economic endeavors of the fur trade and detrimental in establishing positive relationships through gift exchange, the different values of trade goods were significant in the development of early America.

Poster presentation: 3:30 p.m.

The Second Shift

Mitchell Cummings, History
Mentor: Dr. Jennifer Hildebrand, History

The Second Shift was a phenomenon that was experienced by many African American women throughout slavery and well into the 20th century. African American women, during slavery, would have to shift from working all day in the hot fields, to having to do the tedious chores of maintaining a family. After slavery, many African Americans worked as domestic workers and this Second Shift was still very real. Black women went from working long strenuous hours at an everyday job, to come home to a second shift of work. This project addresses how this phenomenon changed over time and the different ways in which it affected different people.

Poster presentation: 2:30 p.m.

The Transition

Jami Curtis, Gretchen Herb, Women's and Gender Studies
Mentor: Dr. Jeffery Iovannone, Women's and Gender Studies

Mental Illness is a common occurrence among many individuals in today's society. Despite the commonality of disorders, people who are labeled as "mentally ill" often suffer the negative consequences surrounding stigmas and discrimination. Among many psychological disorders, Transsexuality has been

included in these illnesses for decades. Gender Dysmorphic disorder although once was classified in the DSM has now been dismissed and removed from the most recent edition. This project aims to understand Gender Dysmorphic disorder before and after the DSM transition. We'd like to point out this conversion reflecting "trans" history and what this means for individual's sexual identity for future generations.

Poster presentation: 1:30 p.m.

A Manipulation of Stress and Dog Presence on Heart Rate, Heart Rate Variability and Working Memory

Jami Curtis, Alexis Perez, Christina DellaNeve, Psychology
Mentor: Dr. Nancy Gee, Psychology

Human-Animal Interaction has demonstrated that certain positive physiological responses are connected to the presence of animals. Research in this area found that there is a decreased physiological response to stress, risk for coronary heart disease, and increased survival rate following a heart attack in the presence of a pet. Most of this previous research on the physiological impact of pets has focused on the effect of pet ownership or pet presence. The current study examines the impact of touching a dog on heart rate (HR) and heart rate variability, while the stress level of the situation was varied. Children (ages 5-10) wore a HR monitor while they listened to a story (low stress), performed a working memory test to the point of failure three times (increased stress), and then listened to a story again (low stress). This manipulation was repeated for each child under three different conditions: Touching a therapy dog, touching a stuffed dog, and touching a human. Heart rate and working memory data will be presented and discussed.

Poster presentation: 1:30 p.m.

Molecular Analysis of microbial Films near Canadaway Creek

Miles DeAngelis, Biology
Mentor: Dr. Theodore Lee, Biology

Analysis of sandstone along Canadaway Creek revealed high levels of manganese and barium, but low iron content. The textures of the Mn-deposit suggest a role for microorganisms in their creation. Biofilms present at the location may provide information on the formation of these unusual deposits. Biofilms are the result of many different species of microorganisms clustering together on a surface. Such a surface might include water or even your teeth. Molecular analysis will be performed by isolating DNA directly from the biofilm and then amplifying the 16S rRNA gene, which is present in all organisms, to characterize the microbial community of these films. The 16S rRNA genes will be isolated and then sequenced to determine which microorganisms are present in the biofilms.

Poster presentation: 2:00 p.m.

Massive Resistance

Jefferson Dedrick, History
Mentor: Dr. Emily Straus, History

This paper by Freshmen Jefferson Dedrick will review "Massive Resistance," the public policy championed by US Senator Harry Byrd of Virginia, seen as a response to the landmark case Brown v. Board of Education.

Poster presentation: 2:30 p.m.

The Power of Proteomics: A Study of Viral Mediated Host Protein Post-Translational Modification

Max DeNies, Biology
Mentor: Dr. Scott Medler, Biology

A global proteomics approach was used to explore differential enterovirus infection- stimulated post-translational modifications (PTMs) of host proteins. Since post- translationally modified proteins innately regulate cellular activities and viral replication is dependent on host cell machinery, we hypothesized that viral infection evokes specific host proteome PTMs that favor viral proliferation. The aspiration of this

study is to identify proteins that are universally targeted during viral infection. SILAC, affinity chromatography, and Mass Spectrometry were used to identify ubiquitinated host proteins in control and infected cells. A scoring algorithm was developed to validate and rank proteins with biologically relevant PTMs. DAVID was implemented to expose common themes among highly ranked proteins and indicated that the most biologically relevant proteins were involved with protein transport and localization. Preliminary results are promising and suggest the validity of the new scoring algorithm as it is well documented that Poliovirus attacks the Golgi apparatus during infection.

Poster presentation: 1:30 p.m.

The Effectiveness of Pitchers

Joseph DiRaimo, Mathematical Sciences
Mentor: Dr. Andrea Austin, Mathematical Sciences

I am doing a test to see if there is a linear relationship between wins, age, games started, innings pitched, strikeouts, ERA, and previous season's wins. I used statistics from the 2013 MLB season and took a sample of 80 starting pitchers around the league. I receive my statistics from espn.com. I will use wins as my response variable and the other six variables will be my predictor variables. I hope to find which of the predictor variables is most closely correlated with wins and which predictor has the least correlation. Owners or managers of teams can use my conclusions to see what pitchers have to do to have the best season.

Poster presentation: 1:00 p.m.

U.S. Employment

Zak Dorler, Mathematical Sciences
Mentor: Dr. Nancy Boynton, Mathematical Sciences

The job market has been of growing concern for this generation. There seems to be a general consensus that each year the number of available jobs is getting progressively smaller. But what is it really doing? A number of variables were examined statistically to see if any correlations can be found linking the available jobs from year to year. Analysis of some individual states was done to see what might differ in different regions of the nation. The data used was collected from data.gov.

Poster presentation: 2:30 p.m.

The Chautauqua Center's Relation to Biochemistry and Biology

Charde Drake, Public Health
Mentor: Dr. Linda Dorsten, Public Health

The Chautauqua Center is devoted to creating connections with other local organizations to establish a facility that creates a one-stop spot for all health services. With a major in biochemistry, truly having an understanding of how biochemical reactions affect your overall health provides a sound background to help promote a healthy lifestyle. A major in Biology demonstrates how physiology is affected by life style choices, and how to promote better methods for taking care of your own personal health. Currently the CHC is equipped to handle a range of medical conditions. Early intervention and health education will promote a healthier way of life to predispose the community to better lifestyle choices. They provide services to uninsured and create connections to provide insurance to those without it. Having a background in the life sciences provides the general knowledge to help the center provide health education to the public.

Poster presentation: 1:30 p.m.

Fredonia Enactus

Emaleigh Dudley, Eric Cadena, Chelsea Lydic, Jesse Duane, Business Administration
Mentor: Dr. Susan McNamara, Business Administration

Enactus is a competitive student group that facilitates action to create a more sustainable campus and community. Last month, April 2014, student representatives from all five Enactus teams travelled to Cincinnati to present the work completed throughout the past year. This year's projects included a

research trip to Belize, Creation of artisan exchange group O.R.E, financial literacy programs, 'Say it Forward' anti-bullying programs, development of 'Food for Thought' food collection project and the continuation of Green waves Ink cartridge collection project. The teams competed against hundreds of universities from throughout the United States while being given the opportunity to network with business leaders and collegians from all regions of the United States while learning new ways to facilitate positive change through entrepreneurial action in Fredonia.

Oral presentation: 3:00 p.m.

Infering the Closed Quotient

Robert Dunlap, Music

Mentor: Dan Ihasz, Music

Using the program Voce Vista and an E.G.G., one can measure the Closed Quotient Ratio, or percent in time that the vocal folds are closed. If one does not have an E.G.G., we can infer what the Closed Quotient Ratio may be by looking at the audio waveform. To understand how to infer Closed Quotient Ratios, we will be looking at recordings of well known classical singers and of myself running through the program.

Oral presentation: 2:30 p.m.

Chautauqua County Gleaning Project

Hannah Farley, Volunteer and Community Services

Mentor: Ms. Joyce Smith, Volunteer and Community Services

The Chautauqua County Gleaning Project was formed in 1999 to meet the needs of the poor, working poor, children, and elderly in our county who do not receive enough fruits and vegetables. Gleaning is the "second harvest" of a farmer's crops which would otherwise go to waste due to lack of time and/or funds the farmer has to collect and sell the produce. The gleaned food is then distributed throughout Chautauqua County, where it provides the social disadvantaged within our community with nutritious and wholesome food. Over the past 12 years, the Gleaning Project has distributed food through over 60 food pantries and human services agencies county-wide. In the year 2013 alone, 20,450 pounds of food were gleaned, and 160,516 pounds were recovered. Our plans are ambitious, but as a community, we can topple the first pillar of poverty—hunger. This cannot be done without the generous farmers, businesses, and volunteers who are a part of the Gleaning Project.

Poster presentation: 1:00 p.m.

The Effects of Video Exposure to Cluttering on Undergraduate Students' Perceptions of a Person who Clutters

Lindsey Farrell, Communication Disorders and Sciences

Mentor: Dr. Kim Tillery, Communication Disorders and Sciences

The purpose of this study was to examine university students' perceptions of an person who clutters based on the effects of video exposure. With a total of 105 students; 54 students were provided with only a written definition of cluttering, while the other 51 other students were provided with both a definition and short informational DVD on cluttering (displaying multiple people who clutter). Each student was asked to fill out a survey, rating a person who clutters on a variety of speech-related and personality dimensions. Descriptive statistics for individual survey items and between-group comparisons were calculated. In general, respondents rated the person who clutters negative across all speech skills and personality traits listed. No statistically significant differences between the two group of students' ratings were found. Results were consistent with previous studies. Implications for future research are discussed.

Poster presentation: 2:30 p.m.

Gender-Driven Differences in Entrepreneurial Intentions

Alissa Faulkner, Jeff Evans, Mike Novelli, Elise Hayden, Business Administration

Mentor: Dr. Lisa Walters, Business Administration

The purpose of this study is to understand the differences in entrepreneurial intentions between males and females who are ready to graduate. Surveys were given to pending college graduates to determine their entrepreneurial goals. The study used qualitative data, consisting of responses to open-ended questions. The analysis of the data centered on evaluating elapsed time from graduation to the hoped-for entrepreneurial endeavor as this elapsed time may represent the confidence of an individual to start a business. The results suggest that males have a greater confidence with respect to entrepreneurial intentions, while females are more cautious about starting a business. Educators and mentors can use the results of this study to recognize and enhance entrepreneurial intentions in their students. This will help them to cultivate traits within their students that will lead to entrepreneurial success.

Poster presentation: 5:00 p.m.

Operation Smile

Megan Favale, Amy Rosenberger, Shannon Rumpf, Victoria Rosdahl, Communication Disorders and Sciences

Mentor: Dr. Bridget Russell, Communication Disorders and Sciences

The purpose of our independent study this semester was to continue to expand our chapter of Operation Smile on the SUNY Fredonia Campus. Operation Smile is an international organization which provides safe and effective surgery for children with cleft lip and palate in developing nations. We continued to spread awareness, and educate our community about cleft lip/palate through civic engagements. This year we raised money for the organization, ran cleft palate awareness workshops, and attended the craniofacial conference at Women and Children's Hospital at Buffalo. We communicated and worked with professionals from the international level of Operation Smile, and this project gave us the opportunities to advance in civic engagement. This independent study project was also a learning experience about craniofacial anomalies, assessment, and treatment. We learned to become advocates for these children, and we hope to continue to advocate and develop our chapter in the future.

Poster presentation: 1:30 p.m.

MEDTOC Networking

James Fefes, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Designed to work alongside MEDTOC, an emergency healthcare data transmitting project by Dr. Zubairi. The project is designed to integrate MEDTOC into the 4G network, so that data can be sent and received over 4G in realtime.

Poster presentation: 2:30 p.m.

Effects of Insufficient Sleep

Anna Ferrante, Mathematical Sciences

Mentor: Dr. Andrea Austin, Mathematical Sciences

Using the 2012 cross-sectional Behavioral Risk Factor Surveillance System, data from 20416 people living in the United States was used to study sleep patterns of adults and the unhealthy behaviors that are associated with insufficient sleep. The primary risk factor of interest was sleep deprivation, where I compared people who sleep less than seven hours a day to people who sleep seven or more hours. The variables used to assess unhealthy behaviors included whether the people snored or not, whether they had unintentionally fallen asleep during the day at least once in the previous thirty days or not, and whether they had ever nodded off while driving in the previous thirty days or not. I believe that people who receive less than 7 hours of sleep are more likely to have two or more of these unhealthy behaviors compared to those who receive more than 7 hours of sleep.

Poster presentation: 3:00 p.m.

Recognizing Connections in Biology and Public Health

Kim Foltz, Public Health

Mentor: Dr. Linda Dorsten, Public Health

A representation of my experience working with the Early Intervention Program in the Chautauqua County Department of Health and Human Services, as well as the connections made with this program, my major in Biology, and my minor in Public Health, can be seen in my 'mind map'. The Early Intervention Program aids infants and toddlers with developmental delays by aiming to minimize negative effects of a child's delay on their ability to learn. As biology deals with human life, development, and genetic factors, early intervention works to determine when a child is not properly developing. This may be intervened so that the child can get the therapy needed to assist them in further development. The Early Intervention Program can recognize abnormal biological factors causing developmental delays in children, and may put an end to any detriments they may cause, allowing the children to live healthier and more fulfilling lives.

Poster presentation: 2:30 p.m.

Training for the long-term: An education with child welfare specialization or on the job training?

Kelly Forstbauer, Danny Galusha, Iam Jutsum, Kathryn Feather, Social Work
Mentor: Dr. Rolanda Ward, Social Work

The aim of the study is to understand if there are differences between caseworkers who received a baccalaureate education that specializes in child welfare and those who were hired as caseworkers without a specialized education in child welfare but who received on the job training. This study uses qualitative interviews to collect data from Department of Social Services commissioners, deputy commissioners, training directors, and supervisors, as well as from students who received specialized child welfare training during their bachelors education. Our poster will focus on the impact of our results on the professionalization and retention of child welfare caseworkers and if specialized training before the hiring process is beneficial for the long term careers of these individuals.

Poster presentation: 3:30 p.m.

Added weight variable in fitness, comparing effect of BMI to VO₂max (mL/kg/min)

Megan Fournier, Jackie Moran, Lindsay Adams, Sarah Kelish, Erin Parker, Cait Suchecki, Ariel Cox, Exercise Science
Mentor: Dr. Todd Backes, Biology/Exercise Science

Today's society is becoming overweight, obese, to grossly obese at an alarming rate. With 35.7% of the adult US population and 17% of children classified as obese. This study is to look at the effects on the cardio system on how rapid simulated weight gain affects heart rate, VO₂max, and perceived exertion rates on participants. The method of this study would include a 5 min step test for heart rate and VO₂ max. There will be 2 weeks of a baseline test, then by adding an additional 5% of the subject's individual body weight each of the following five weeks to simulate added body fat with the use of a weight vest. We will look at results from two perspectives. 1. How does weight effect predicted VO₂ max? 2. How does weight contribute to perceived exertion? Expected results of our study are 1. With added weight, VO₂max performance should diminish proportionately. 2. With added weight perceived exertion should elevate with the possibility that the participant will not be able to complete the session.

Poster presentation: 2:30 p.m.

Apple Cider Vinegar Detoxification

Jen Fuller, Larissa Dobson, Marisa Colpoys, Lisa Capitano, Exercise Science
Mentor: Dr. Todd Backes, Biology/Exercise Science

Apple Cider Vinegar Detoxification is mainly a commercial detoxification that is said to aid in weight loss and fat burning, clear skin, increase both immune system response and an overall feeling of health. We have five students consuming 4 tablespoons of ACV per day for 30 days. All students will remain on any diets and continue with physical exercise as they normally would, without change. Hydrostatic weight, weight on a scale, BMI, and skin visuals will be recorded both before and after the detox along with a journal of food consumed and any exercise done throughout each week. Expected results include a decrease in hydrostatic weight, decrease in weight on the scale, and visual skin clearing images.

Poster presentation: 2:00 p.m.

The Black Slave Woman

Bethany George, History
Mentor: Dr. Jennifer Hildebrand, History

In this poster I will show what it was really like to be a black slave women during the times of slavery. Women were bought and sold for more reasons that just being tough workers and creating a income for the plantation owners. Some underwent harsher times than the male slaves during this time. I hope to open people's minds to what the black slave women had to endure during slavery and after its abolition

Poster presentation: 2:30 p.m.

Integrating Dance and Public Health

Christina Giannitsis, Dance, Public Health
Mentor: Dr. Linda Dorsten, Public Health

My presentation represents my involvement with the Early Intervention Program. It highlights the similarities of my BFA Dance degree, Early Intervention and my Public Health minor. The Chautauqua County Department of Health and Services Early Intervention Program aims to assist those with developmental disabilities. The Early Intervention Program or EIP works with children ages birth to three years old and their families. There are several services that the EIP provides which are Preschool Special Education, Child Find, Children with Special Healthcare Needs and Physically Handicapped Children's Program. Developmental evaluations are administered to determine whether or not a child is qualified for the EIP. For those children who are at risk or suspected to have developmental disabilities are provided with a primary care provider who will refer the child to the EIP is necessary. This program focuses on the special community that is need of special services. Children with disabilities and their families get the attention, necessary resources and assistance needed for such circumstances. Having a sibling with special needs I understand how important these programs are to not only the individual but their families and I want to relay that to those that may be unaware.

Poster presentation: 1:00 p.m.

RENT Dramaturgy

Maggie Gilroy, Theatre and Dance
Mentor: Mr. Tom Loughlin, Theatre and Dance

This presentation reflects the research that was conducted for the mainstage production of RENT. The research compiled was used towards an informational research binder, program notes and lobby display. This research supplemented the production in order to further inform the cast and crew of the historical context of the subject matter of RENT.

Poster presentation: 1:30 p.m.

Inside the Times

Maggie Gilroy, Sylvana Dussan, Theatre and Dance

This presentation will consist of the information received by Maggie Gilroy and Sylvanna Dussan during the "Inside the Times" student editors workshop at the New York Times building. In addition to recounting information learned, we will explain how this information can be applied to the campus newspaper, The Leader, on which we are both editors.

Poster presentation: 2:00 p.m.

MLB Sports Psychology

Cody Grasso, Keegan Johnston, Psychology
Mentor: Dr. Bruce Klonsky, Psychology

This study is based on the recent research by Leah Palmer, a Psychology Independent Study student. Her research investigated the utilization of sports Psychologists by professional basketball teams. The present study aims to determine if major league baseball teams have similar attitudes towards the utilization of mental health professionals.

Poster presentation: 2:30 p.m.

Encryption and Flight Routing

Jessiel Heitor Hacke, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Development of flight data encryption and flight routing module. This is part of my innovative flight data tracker project. Four distributed ground servers, one central server and one plane server are ready. All of the servers run on identical versions of Linux. Given the source and destination airports, your flight routing module would identify the intermediate airports that can receive the flight data with the preferred radio link.

Poster presentation: 1:00 p.m.

Count Off by Threes? Optimal Size for Group Work

John Hamilton, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the efficiency and success of pairs, groups of 3, and groups of 4. Specifically, the researcher seeks to determine which group size leads to optimal learning for students working together through project-based learning type problems. It is hypothesized that students working in groups of 3 will work more efficiently to solve math problems more accurately than students working in groups of 2 or 4. Groups of 3 will communicate more effectively with a greater amount of time on task than groups of 2 & 4.

Poster presentation: 3:30 p.m.

Finding Novel “expressways” for Gurken Translation

John Hasper, Biology

Mentor: Dr. Scott Ferguson, Biology

We have taken advantage of a next-generation sequencing approach to identify candidate mutations in 10 independent lines from a forward genetic screen for regulators of dorsal ventral patterning during *Drosophila* oogenesis. Oogenesis is dependent on precise translational control and localization of numerous morphogens within the oocyte to achieve faithful patterning. Gurken, (*Grk*) is one such protein and is responsible for specification of the dorsal/ventral axis. Mutations in the spindle-B gene results in inefficient gurken translation due to activation of a meiotic DNA damage checkpoint that inhibits the Vasa RNA helicase, an essential grk translation factor. Thirty nine unique mutants were identified from an EMS mutagenesis of the third chromosome in a *spn-BBU* mutant background. Lines were screened for their ability to suppress the ventralized *spn-BBU* phenotype and therefore stimulate grk translation by novel signaling pathways (affectionately referred to as “expressways”). Eggs laid by homozygotes from each of the isogenized lines were scored for their dorsal/ventral polarity and compared to those of the control group of *spn-BBU* homozygotes. Through a partnership with Roswell Park Cancer Institute in Buffalo, NY, the best suppressor lines were subject to whole-genome re-sequencing using the Illumina HiSeq 2000 platform. We are currently evaluating the candidate mutations identified in these lines to elucidate the mechanism by which grk translation has been restored.

Poster presentation: 2:30 p.m.

The No Child Left Behind Act: A Result Of Residential Segregation?

Daniel Halewski, History

Mentor: Dr. Emily Straus, History

My presentation will touch on why the No Child Left Behind Act was created, what it was meant to change and its effectiveness. This presentation is meant to explore the possibility of the No Child Left Behind Act being created due to high levels of minorities in inner city school districts.

Poster presentation: 2:00 p.m.

The Effect of Personality on Situational Factors Based on Incentives

Derron Hilts, Heather Johnson, Zak Dorler, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

Motivating people to work together fluently is crucial in any work environment. Many factors may have an effect on an individual's motivation. The aim of the present study is to determine the effect personality has on situational factors based on incentives. Participants were first tested to see if they were either introverts or extroverts, and then given a questionnaire to determine what types of incentives would increase their motivation to work with others. We expect that individuals will be much more likely to participate in the hypothetical situations that have a greater incentive. Also, individuals with introvert personalities will more likely to participate in situations working with others when there is a greater incentive.

Poster presentation: 2:00 p.m.

IRES-Mediated Translation of grk mRNA During Drosophila Oogenesis

Danielle Hindes, Biology
Mentor: Dr. Scott Ferguson, Biology

Gurken (Grk) expression is required to specify the polarity of the developing oocyte during *Drosophila* oogenesis. Proper localization and translation of grk transcripts is required to achieve accurate axis specification. grk translation is tightly regulated and, like many mRNAs, requires recognition of the 7-methylguanosine cap at the 5' end of the RNA to initiate translation. Cap-dependent grk translation initiation requires the activity of the DEAD-box RNA helicase, Vasa. In spindle-class mutants DNA double stranded breaks persist, thereby activating the ATR/Chk2-dependent meiotic checkpoint and resulting in inhibition of Vasa. The resulting loss of Vasa activity blocks cap-dependent translation of grk. The corresponding loss of Grk signaling results in ventralized eggs. We have found that blocking cap-dependent translation genetically or pharmacologically can stimulate grk translation in spindle mutants. These suppressive effects are caused by reduced TOR activity, thereby stimulating cap-independent translation. For example, PyK is able to modulate the kinase activity of TOR. We show that Pyk mutants also suppress the grk translation defect in spindle-class mutants. Translation of some mRNAs can be initiated via a secondary structure in the 5' UTR called an Internal Ribosomal Entry Site (IRES). This unexpected result, whereby grk translation is stimulated by conditions that favor cap-independent initiation, has led us to hypothesize that the grk 5' UTR contains an IRES. An IRES allows for translation of important mRNA's, even in the absence of canonical cap-dependent translation factors. We have developed in vivo reporter constructs to assess grk 5' UTR translation activity in response to manipulation.

Poster presentation: 2:00 p.m.

The Feminist Agenda: Education

Kimberly Hodges, History
Mentor: Dr. Emily Straus, History

The research presented encompasses the advancement of education for women.

Poster presentation: 1:30 p.m.

Modern Brazil: A new superpower in the horizon?

Connor Hoffman, International Studies
Mentor: Dr. Ivanni Vassoler-Froelich, International Studies

For much of the 20th century and so far most of the 21st century there has only been one superpower in the Americas but according to recent predictions we soon may have another superpower. The supposed second superpower in the Americas is Brazil. Brazil has such a rich history and would be the very first superpower from the Latin Americas and would greatly change the international order if it becomes a superpower. The question I aim to answer is what factors have lead to Brazil's predicted rise to superpower status. While many people have pointed to the oil reserves found in Brazil to be the reason for its predicted growth to superpower status. I feel that although the recently found oil reserves have a huge impact on this I feel that their have to be other contributing factors and I aim to explain what these other factors are.

Presentation: 5:00 p.m.

Christine Jorgensen

Samuel Hoffman, Women's and Gender Studies

Mentor: Dr. Jeffry Iovanonne, Women's and Gender Studies

Christine Jorgensen was an American woman who received a lot of attention in 1953 after undergoing procedures to change her from a man into a woman. Christine was really born as George Jorgensen and was a man until she began surgeries and long term hormonal replacement therapy in Denmark. Christine became popular due to media coverage and she used this to her advantage to inform the public about transsexuality. She has become an influence because of her courage to step into the spotlight and act as a spokesperson for transgender people.

Poster presentation: 1:00 p.m.

Treatment for type 2 diabetes: Glucosidase inhibitors

Eunna Huh, Chemistry

Mentor: Dr. Matthew Fountain, Chemistry

Along with increasing prevalence of obesity, more people are suffering from diabetes because of insulin problems. When cells cannot receive the signal of insulin, blood sugar level increase and the body cells cannot receive nutrient supplies. In order to treat this disease, one of the approaching method is inhibiting glucose breakdown enzyme, glycosidase. There is a lot of research focused on discovering chemical compounds to inhibit the activity of this enzyme. I researched several scientific primary articles and figured out how the inhibitors work in body metabolism.

Poster presentation: 1:00 p.m.

Up til Dawn

Brittany Hull, Volunteer and Community Services

Mentor: Jennifer Wilkins, Volunteer and Community Services; Ms. Joyce Smith, Volunteer and Community Services

Fredonia for St. Jude hosts an annual event called Up til Dawn. Each year we work diligently to raise money for the St. Jude Children's Research Hospital in Memphis, TN. Up til Dawn is an all night event that consists of games, raffles, food and entertainment. Students form teams of six and are encouraged to raise a certain amount of money as a whole. Throughout the night, teams compete in challenges that represent different aspects of St. Jude. All proceeds are sent to St. Jude to relieve the families financially, so they can focus on the health of their child.

Poster presentation: 3:00 p.m.

Beauties and Beasts of Dracula, Carmilla, and Strange Case of Dr. Jekyll and Mr. Hyde

Shirley Ibach, English

Mentor: Dr. Sandra Liggins, English

This presentation will explore the psychology inherent within the Beauty and the Beast trope, specifically in Dracula, Carmilla, and Strange Case of Dr. Jekyll and Mr. Hyde. The battle between the Beauty and the Beast of the self is depicted in each of these novels. The Beast self acts out of immaturity and passion; while the Beauty must tame the Beast into the societal ideal. Male authors like Le Fanu, Stevenson, and Stoker often used female characters or feminine characteristics to express forbidden sexual appetites. These novels serve as a tool to extend a man's consciousness into the other – a metamorphosis into the beast – where he can be free enough from societal strictures to indulge his fantasies. This proposes a new angle on repressed female sexuality in the nineteenth century; a man's sexual deviancy is even more taboo than a woman's.

Oral presentation: 2:00 p.m.

Blue Devils in Bell Bottoms: 1970s Student Life at SUNY Fredonia

Charles Johnson, History

Mentor: Eric Meringer, History

During the spring semester of 2014, Blue Devils in Bell Bottoms: 1970s Student Life at SUNY Fredonia will conduct oral histories investigating SUNY Fredonia student organizations, academics and residence and social life during the 1970s. We will present on behalf of our class, HIST 495, to our fellow students and staff of the university, an oral history of SUNY Fredonia in the 1970s.

Presentation: 3:30 p.m.

Diet-Induced obesity alters skeletal muscle fiber types of male but not female mice

Jordan Johnson, Biology

Mentor: Dr. Scott Medler, Biology

Growing evidence suggests that adipose tissues exert significant effects on the basic fiber type composition of skeletal muscles. In the current study, we investigated the long-term effects of a high fat diet and subsequent obesity on the muscle fiber types in C57 BLK/6J mice. Litters of mice were randomly assigned to either a high fat diet or a control group at the time of weaning. Single fibers were harvested from the soleus and plantaris muscles, and fiber types were determined using SDS-PAGE. The high fat diet mice were significantly heavier than the control mice, but muscle masses were not different. In male mice, the high fat diet was associated with a significantly lower proportion of slow, type I fibers in the soleus muscle. Moreover, the proportion of type I fibers in the soleus of male mice was inversely proportional to the relative fatness of the male mice.

Poster presentation: 2:00 p.m.

SCADA Security

Steven Johnson, Damen Sprague, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Simulation testbed development for SCADA Security using OSSIM security monitoring and SCADA honeynet as implemented in literature. Project includes experimentation for attacks and their detection on an industrial control unit. The first step that we took was to create a virtual Ubuntu 64-bit server using VMware Player for Windows, and install MySQL server on it. Also the target and honeynet virtual machines were installed on to the Ubuntu server using VMware Player for Linux. Lastly, OSSIM (a security monitor program) was virtually installed on Windows and linked to the MySQL server on Ubuntu.

Poster presentation: 1:30 p.m.

College Students' Misconceptions of the Order of Operations and its Applications

Kristen Joseph, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research investigates why students struggle with solving mathematical expressions and equations when the order of operations process is necessary. It is hypothesized that students in a non-mathematics major college classroom will have difficulty using the correct order of operations process when solving expressions and equations when multiple operations are involved. It is also hypothesized that non-mathematics major college students will have equal difficulty solving for variables using the order of operations process.

Poster presentation: 3:30 p.m.

Bias Throughout The Decision Making Process: A Study on The Temporal Dimensions of Cognitive Error

Collin Kesel, Psychology

Mentor: Dr. Joseph McFall, Psychology

The goal of this study is to provide a more comprehensive and organized framework for the way we understanding decision making biases and systematic errors in cognition. Using an adapted universal five-stage decision making model, we sought to categorize over 100 cognitive biases and behaviors found in current decision making literature according to certain commonalities. The cognitive biases were

grouped based on the context of their origin into the categories of social, framing, affect-related, and base-rate biases. We also factored in the role of other cognitive processes such as cognitive dissonance, cognitive consistency, hot cognition, and loss aversion into the presence of bias as a means of further classifying how and why these biases occur. The data we compiled has been organized into a number of visuals which illustrate where the biases can theoretically occur in the five-stage decision making model.

Poster presentation: 1:30 p.m.

The Importance of the First Three Years

Rachael Kibler, Rachael Kibler, Kathleen Adduci, Ezdehar Alhabeedi, Naimah Almutairi, Naseebah Alrehaili, Ashley Bartela, Jessica Bridge, Kristen Forcucci, Callan Robinson, Curriculum and Instruction
Mentor: Dr. Mira Berkley, Curriculum and Instruction

The first three years of life are instrumental in human development. The effects of what occurs during these crucial first years of life resonate through a lifetime. From the moment a child is born, the brain begins developing at a rapid rate, reflecting the early physical, emotional and cognitive growth of the child during infancy. Throughout the first three years, a child's outlook for a healthy, successful life is mapped through complex brain growth and development. Topics such as the state of care for our infants, emotional attachment, and the developmental phases of the infant were explored by graduate students enrolled in EDU562 Infant Development and Education. Through our poster presentation, we hope to educate on presenting various findings of infant development and applications of theory regarding the first three years of life.

Poster presentation: 5:00 p.m.

Sex in the 60's

Jennifer Klimeck, Kia Richman, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

We will be conducting Research on how sex in the '60's was portrayed in society among all sexualities.

Poster presentation: 2:00 p.m.

Oil Accumulation in C. reinhardtii Using the Antianginal Drug Trimetazidine to Shift From Lipid Oxidation to Fatty Acid Accumulation by Inhibiting 3-Ketoacyl Coenzyme A Thiolase

Aman Kumar, Biology
Mentor: Dr. Fred Harrington, Biology

Within the past 15 years there has been a rising interest in the use of photosynthetic microorganisms (PSMs) as a source for alternative fuels (Work et. al, 2011). One promising area is the production of high lipid content algae, which can be extracted and can be converted into biodiesel. *Chlamydomonas reinhardtii* will be used to study the effects of triacylglycerol (TAG) accumulation and how this process is regulated. The Harrington algae research lab hypothesizes that the induction of lipid droplets is regulated during nitrogen starvation. Current molecular data correlates intracellular lipid droplets accumulation with sustained expression of Acetyl-CoA Carboxylase (ACCase) and a decrease in expression of 3-ketoacyl-CoA thiolase (KAT). By maximizing the synthesis of TAGs without killing the cell, we propose that this research will contribute to the industrialization of biodiesel production from green algae.

Poster presentation: 3:00 p.m.

Social Networking and Emotions

Pamela Kus, Elizabeth Roberti, Erin Slattery, Stephanie Thompson, Psychology
Mentor: Dr. Jack Croxton, Psychology

The goal of this study is to understand the impact of social media sites on people's reactions to and interpretations of various messages. Our object was to use various social networks to study how receivers react to the messages they receive. We varied whether the message is uplifting or depressing, ("I got a puppy" or "My dog just died") and whether or not a picture accompanied the message. We will also varied the relationship of the sender to the receiver (best friend or acquaintance). The subjects went online to a website where they completed their survey. When they went online, they read the same

message from three different types of social media: Facebook, Twitter, and a text message. Then they estimated what types of emotion the sender was feeling and reported their own emotional responses. Results will be shared at the expo.

Poster presentation: 5:00 p.m.

NMR Spectroscopy in the Analysis of Trapped Volatile Organic Compounds

Anthony Lake, Chemistry

Mentor: Dr. Matthew Gronquist, Chemistry

Methods for the collection and analysis of volatile, small-molecule chemical signals have applications in areas such as food science, air-quality analysis, and chemical ecology. A commonly employed strategy involves trapping gas phase small-molecules emitted from a sample onto a solid-phase adsorbent trap, followed by subsequent desorption and analysis by gas chromatography. We are investigating the feasibility of nuclear magnetic resonance (NMR) as a complimentary or alternate means of analysis for collected samples. By directly desorbing volatiles from adsorbent traps using deuterated solvents, NMR spectra may be acquired prior to further analysis by other methods, providing an additional level of structural information for mixtures of trapped volatiles.

Poster presentation: 1:00 p.m.

Visualization of Sqd-grk Interactions in Live Drosophila Oocytes Using Trimolecular Fluorescence Complementation (TriFC)

Nancy Levensailor, Biology

Mentor: Dr. Scott Ferguson, Biology

Gurken protein must be translated at the dorsal anterior during the later stages of Drosophila oogenesis to ensure proper development of the oocyte. Sqd protein binds to grk mRNA and precludes translation until it reaches this desired location. To better understand this important pathway in development, localization of the Sqd-grk complex was visualized using a novel approach: Trimolecular Fluorescence Complementation. Fluorescent Venus protein was halved, with one domain incorporated into a construct containing MCP viral protein, which binds stem loops engineered into grk mRNA, and the second containing sqd. After mating transgenic stocks containing these constructs, fluorescence appeared in an anterior cortical ring and ring canals via the reconstitution of Venus upon juxtaposition of its domains, revealing these as Sqd-grk interaction sites. However, auto-fluorescence contamination by egg yolk was observed. To reduce this interfering background, this approach is being repeated using RFP, which has a different excitation wavelength than yolk.

Poster presentation: 1:00 p.m.

The Silent Killer of the New World

Kelly Lewis, History

Mentor: Dr. Nancy Hagedorn, History

My project focuses on the epidemic diseases of the New World. This project examines the European and Native American view of disease in the 16th Century. It explores the effects of disease on the relations between conquistadors and the natives.

Poster presentation: 3:30 p.m.

Mad Men and Marriage: Betty Draper and the Visibility of Emotional Abuse

Courtney Loiacono, Communication

Mentor: Dr. Jessica Akey, Communication

My project is a content analysis of the first season of the television show Mad Men. I set out to study the relationship between the main couple, Betty Draper and Don Draper. For this study, I researched signs and symptoms of emotional abuse and using that information created a worksheet to be filled out during each episode. The worksheet was broken up into two sections, "Inside the Home" and "Outside the Home." "Inside the Home" focused on the private relationship between Don and Betty. "Inside the Home" was further broken down into two categories, the first analyzing physical abuse, and the second analyzing

verbal abuse. This project found that the Draper marriage is emotionally abusive, which calls for more in depth research of emotionally abusive relationships in popular culture.

Oral presentation: 2:00 p.m.

The Progression of Birth Control

Kathryn Lucas, Abby Blinn, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

We are looking into how birth control has progressed over time. Starting with the colonial period up until modern day, we will look into the innovations and methods along with the problems

Poster presentation: 5:00 p.m.

Domestic Rape

Ariella Lusterman, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

I will be doing my project on Domestic Rape. Up until the 1970s, domestic rape was not questioned. Around the 1960s, it was brought into the spotlight and started to become illegal throughout the past 30 years. I will discuss the outlook on it, including in today's rape culture.

Poster presentation: 5:30 p.m.

Little Rock 9

Kara MacIntyre, History
Mentor: Dr. Emily Straus, History

I plan on discussing the relation of Brown V. Board to the Little Rock 9.

Poster presentation: 1:00 p.m.

Speedy 3-D: Spatial Ability in Adolescence and How it Varies by Age, Gender, and College Major

Sara Maiorana, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

This research investigates how spatial ability varies by age, gender, college major, and other additional factors. Specifically, it explores students' abilities to visualize two-dimensional air nets corresponding to two-dimensional illustrations of three-dimensional cubes. It also examines how the use of a tangible air net manipulative will affect performance. It is hypothesized that factors including age, gender, and college major will influence students' spatial ability in visually matching two-dimensional air nets with two-dimensional illustrations of three-dimensional geometric figures. It is also hypothesized that students with access to a hands-on manipulative will perform better on these types of questions than students without access to a hands-on manipulative. Furthermore, it is hypothesized that male college students majoring in science or mathematics fields will be able to successfully match these figures more accurately than their female counterparts.

Poster presentation: 3:30 p.m.

Attributions of Blame for a Sexual Assault on a College Campus

Alexandria Maley, Megan Favale, Psychology
Mentor: Dr. Jack Croxton, Psychology

The purpose of this study was to determine how individuals perceive sexual assault as a function of the following variables: Age (teenage or college aged victim), type of drug involved, and choosing to take a drug versus being tricked into taking the drug. The subjects were asked to read one out of eight different fictional scenarios involving a sexual assault which took place at a college party. They were asked to estimate the victim's and perpetrator's emotions, assigned blame, and attributed responsibility for the incident. They were asked how much empathy they had toward the victim and assigned punishment to the perpetrator. The victim was blamed more and the perpetrator was blamed less when it was a teenage

victim. More blame was placed on the perpetrator when marijuana was the drug that was taken and more blame was placed on the perpetrator when there was deception employed. A number of interactions were found and will be discussed at the Expo.

Poster presentation: 2:00 p.m.

Un-Veiling Alison: Deconstructing Chaucer's Most Infamous Wife

Melissa A. Mallaber, English

Mentor: Dr. Jeannette McVicker, English

Alison, the Wife of Bath, has been the subject of critical debate among medieval scholars for centuries. She has served as a platform for political and social commentary, and her overt objection to conventionality and tradition makes her an increasingly widely studied subject of gender discourse. Amidst the misogynistic literature of a time when female empowerment was not in vogue, her narrative is so compelling that critics are torn between declaring her the hero, or the villain of the Canterbury Tales. Chaucer's audience may have viewed her comedic satire as nothing more than an exaggerated stereotype, yet Alison's desire for social and economic dominance provides valuable insight into the ways that patriarchy, as a social system, supports the oppression of women through social institutions that have historically privileged men and subjugated women, not only in medieval culture, but in contemporary society as well.

Oral presentation: 2:00 p.m.

Gender in Jazz

Christopher Malone, History

Mentor: Dr. Jennifer Hildebrand, History

For my presentation I will be researching different Jazz and Harlem Renaissance performers. I will focus on the gendered aspect and look at what type of performances and styles of music as well as musical venues these performers played. I want to look at the question of who contributed more to the Harlem renaissance as well as looking at their contributions to music in general.

Poster presentation: 1:30 p.m.

Population Study of *Lilaeopsis schaffneriana* ssp. *recurva* to determine genetic variability

Allison Martin, Biology

Mentors: Dr. Jon Titus and Dr. Scott Ferguson, Biology

Lilaeopsis schaffneriana ssp. *recurva*, also known as Huachuca water umbel (HWU), is an endangered species native to the Sonoran Desert. In order to support a reintroduction plan, a population study was undertaken utilizing newly discovered microsatellites to analyze the HWU representatives cultivated in the Fredonia greenhouse for genetic variation. This work was supported by a Holmberg Summer Research Scholarship and the Falcone Biology Endowment Fund.

Poster presentation: 2:00 p.m.

HRas/p21- A critical intermediate in signal transduction

Allison Martin, Chemistry

Mentor: Dr. Matt Fountain, Chemistry

HRas is a small protein that acts as a GTPase, transmitting and propagating signals within the cell. It serves as an On/Off switch for many pathways in the cell, particularly those that control growth and division. Mutant forms of HRas are found in multiple types of cancer, as hyper-functional HRas causes the cell to grow and divide uncontrollably. Here the structural changes in the protein that lead to this hyper-functioning state are examined.

Poster presentation: 2:30 p.m.

The Transgression of Language

Bryanna Martonis, English

Mentor: Dr. Theodore Steinberg, English

Georges Bataille's novella, *The Story of the Eye*, was condemned as a work of pornography by historical and contemporary critics alike. This paper locates the text as avant-garde literature using Henry Maes' distinctions of pornography while also arguing that Bataille's language use not only makes sexual transgression rather than sublimation possible, but makes a counter-division of objects, spaces, properties, and meanings that is in essence eroticism itself.

Oral presentation: 1:30 p.m.

Designing of Web Based Application for Computer Science and Information Systems Majors with MS Visual Studio.NET 2012 in Virtual Lab

Amy Masters, Computer and Information Sciences

Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

The latest version of MS Visual Studio.NET 2012 can create various kinds of applications using a bunch of built-in modern high level, object-oriented computing languages, and web development tools. Consequently, natural choice would be to pick web development tools to design and simulate Computer and Information Sciences (CIS) web-based applications for virtual class-room setting. Here, we will employ .NET APS.NET 4.5 Web development tools to design Graphical User Interface (GUI), simulate and discuss one interesting web-based application that can be used to appear in the NY State, Department of Motor Vehicles Written Driver's License Exam. Data collected from this web-based application can be dynamically linked to Database Management System (DBMS) such as MS Access/IBM DB2. It is interesting to mention that almost all the current SUNY Fredonia website links are designed using server-side web programming language - Active Server Pages (ASP), which is being used to design and develop the current two web applications.

Presentation: 1:30 p.m.

The Petrography of Ultramafic Rocks in the Blue Ridge Mountain Belt

Anna Maynard, Geosciences

Mentor: Dr. Katy Johanesen, Geosciences

In the southern Appalachian Mountain system, the Blue Ridge Mountains lie as a SW-NE-trending belt between the rocks of the western Valley-and-Ridge province and the eastern Piedmont. Ophiolites found as part of the southern Appalachian Blue Ridge Belt consist of amphibolite gneiss encasing ribbons of ultramafic rocks and gabbro. By studying the shape of the olivine crystals in these peridotites, the timing and conditions under which the metamorphism and deformation occurred can be determined. A macroscopic fabric exists in these rocks, which may be directly related to the metamorphic events that occurred during emplacement and subsequent deformation of the ophiolite. Samples of several peridotite bodies were taken and thin sections were produced for observations using a petrographic microscope.

Poster presentation: 1:30 p.m.

American Marketing Association Take 5 Case Competition

Ryan McConnell, Business Administrator

Mentor: Dr. Lei Huang, Business Administrator

During the Fall 2013 semester I worked on a case competition to remarket the Take 5 bar. With a small team, I developed a marketing plan as to how the Take 5 bar should be remarked and why. I would like to present my findings and the proposed solutions I had for the Hershey Company.

Poster presentation: 1:00 p.m.

Experiential Learning Research

Ryan McConnell, Erin Dorozynski, Business Administrator,

Mentor: Dr. Susan McNamara, Business Administrator

Under Dr. Sue McNamara, a student and I researched what experiences at Fredonia have had the most impact on success just before and after graduation. We interviewed alumni from the past five years and seniors from this current year. An abstract will be written by April.

Poster presentation: 2:00 p.m.

Math without Technology: A Study of Two Generations using Mental Math and Estimation to Accomplish Everyday Mathematical Tasks

Karla Mead, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This study examines the ability people have using only mental computation to solve real world math problems. It is hypothesized that 12th grade students will have difficulty computing everyday math without the use of technology. Students will struggle with mental computation, estimation, and counting techniques that could and should be used for everyday math instead of technology. Moreover, adult participants will be more adept at handling the tasks assigned to them.

Poster presentation: 3:30 p.m.

College Students' Accuracy in Measurement Estimation: The U.S. Customary Units vs. the Metric System

Ashley Melinski, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the accuracy of measurement estimation among students who measure using the metric system and the U.S. customary system. It is hypothesized that students who use the metric system, for example International students, engineering students, and science students, will be more accurate in their estimation than students who use the United States customary units. In addition, it is hypothesized that Engineering students and science students will be more accurate in measurement estimation than liberal arts students. Furthermore, it is hypothesized that students will be less accurate in estimating volume, temperature, and weight than estimating lengths and heights.

Poster presentation: 3:30 p.m.

IRES-Mediated Translation of grk mRNA During Drosophila Oogenesis

Jacob Merle, Biology

Mentor: Dr. Scott Ferguson, Biology

Gurken (Grk) expression is required to specify the polarity of the developing oocyte during *Drosophila* oogenesis. Proper localization and translation of grk transcripts is required to achieve accurate axis specification. grk translation is tightly regulated and, like many mRNAs, requires recognition of the 7-methylguanosine cap at the 5' end of the RNA to initiate translation. Cap-dependent grk translation initiation requires the activity of the DEAD-box RNA helicase, Vasa. In spindle-class mutants DNA double stranded breaks persist, thereby activating the ATR/Chk2-dependent meiotic checkpoint and resulting in inhibition of Vasa. The resulting loss of Vasa activity blocks cap-dependent translation of grk. The corresponding loss of Grk signaling results in ventralized eggs. We have found that blocking cap-dependent translation genetically or pharmacologically can stimulate grk translation in spindle mutants. These suppressive effects are caused by reduced TOR activity, thereby stimulating cap-independent translation. For example, PyK is able to modulate the kinase activity of TOR. We show that Pyk mutants also suppress the grk translation defect in spindle-class mutants. Translation of some mRNAs can be initiated via a secondary structure in the 5' UTR called an Internal Ribosomal Entry Site (IRES). This unexpected result, whereby grk translation is stimulated by conditions that favor cap-independent initiation, has led us to hypothesize that the grk 5' UTR contains an IRES. An IRES allows for translation of important mRNA's, even in the absence of canonical cap-dependent translation factors. We have developed in vivo reporter constructs to assess grk 5' UTR translation activity in response to genetic or nutritional manipulation. This will allow us to test the IRES hypothesis quantitatively. We have also probed the grk 5' UTR by SHAPE and found that it has structural elements consistent with an IRES.

Poster presentation: 3:00 p.m.

Friends Across Borders

Zora Middleton, Alexandria Marcott, Brittany Probst, Emily Jones, Language, Learning, and Leadership/Volunteer and Community Services

Mentor: Dr. Janiel Rey, Language, Learning, and Leadership/Joyce Smith, Volunteer and Community Services

The Belize Service Learning Project is an annual experience in which a group of approximately 30-35 SUNY Fredonia students have the opportunity to teach both general education or special education for two weeks in Belize City over J-Term. Each student prepares ten age and learning level appropriate lessons plans, including handouts and supplies for hands on activities for use in their assigned classroom. The Belize children's families and the schools are economically diverse and they appreciate the assistance these students provide; in the forms of educational support and much needed school supplies. The organization known as FAB(Friends Across Borders) does fundraising throughout the year to purchase school supplies and sponsors events for school supplies donations. I am currently the president of FAB. This past J-Term we were able to bring over a thousand dollars worth of school supplies. We also brought suitcases filled with shoes that were fitted and given to the students in Belize. I found this experience to be very rewarding both personally and professionally.

Oral presentation: 3:00 p.m.

Traditional Ghanaian Gyl Music

Brandon Minicucci, Donald Malone, Music

Mentor: Ms. Tiffany Nicely, Music

In January of 2014, Brandon Minicucci and Donny Malone traveled through Fredonia's study abroad program to Ghana, West Africa to study traditional music. One area of their study was the Gyl, a pentatonic keyboard instrument with buzzing gourd resonators that resembles an American xylophone. This instrument is used in all types of life-cycle events such as weddings, funerals, and celebrations by the Dagara people, an ethnic group of northern Ghana. Through traditional aural methods they learned music, including pieces to be performed here. In their performance Brandon and Donny will demonstrate polyrhythm and pattern layering, traditional elements of Gyl music.

Performance: 3:40 p.m.

Undergraduate College Students' Success In Exponential Expression Estimation Tasks

Travis Mirabella, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research investigates student ability and accuracy when presented with estimation tasks involving exponential expressions. It is hypothesized that when provided with an exponential expression estimation task, undergraduate college students will struggle to provide a reasonable approximation. Furthermore, it is hypothesized that due to a lack of comfort with exponential growth, students will resort to proportional reasoning.

Poster presentation: 3:30 p.m.

Michaela's Artwork

Michaela Nelson, Visual Arts and New Media

Mentor: Dr. Peter Tucker, Visual Arts and New Media

I will be showing my illustration pieces and my small clay sculptures. There will be digital paintings, acrylic paintings, and oil paintings at various sizes. I will also be showing my clay creations, small clay creatures made with polymer clay, all of them under 5 inches tall.

Presentation: 3:30 p.m.

Exploring Racial Relations: The 3-Way Relationship between the Master, the Mistress and the Female Slave

Pilar Nelson, Interdisciplinary Studies Self Design African American Studies

Mentor: Dr. Jennifer Hildebrand, History

I will be examining and analyzing the three way relationship between the master, the female slave, and the mistress. Some key questions that I will be addressing: How do these past relationships help defined power constraints existing within our societal hierarchy today? What issues and barriers did it cause for women and African Americans, specifically the 'black woman'? How did these past relationships help develop, form and effect interracial relations? Why does this topic matter today?

Poster presentation: 2:30 p.m.

Christianity and Sexuality

Hanna Neumann, Women's and Gender Studies

Mentor: Dr. Jeffrey Iovannone, Women's and Gender Studies

This will be the presentation of my critical-creative project for the course: Sexuality in America. This project will respond to the issue of Christianity and Sexuality in America. I will provide an argument on this issue and create a response to the issue as well. I am hoping to explore the ways in which sexuality (between genders) is perpetuated and influenced through Christianity and its teachings.

Poster presentation: 1:30 p.m.

Chautauqua County Agriculture and Gender

Hanna Neumann, English

Mentor: Dr. Jeanette McVicker, English

I am researching agriculture in Chautauqua County in a gender perspective. I hope to tell the story of the land and the people on it. Some research threads that might appear include: the experience of women on farms/division of labor on farms (historically and contemporary), formation of agricultural organizations and the role women played or didn't play with these organizations, how technology and machinery affect/ed Chautauqua County farmers and how this in turn affects gender roles on the farm, who owned the land and in what circumstances did women own land, and finally, how the emergence of migrant labor affect Chautauqua County and the experience of women migrant workers in this county.

Poster presentation: 1:00 p.m.

Construction Estimation: Mathematical Estimation and It's Real-World Application in the Construction Fields

David Newcomb, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research investigates the gap that exists with regards to students' understanding of Mathematical Sciences estimation and calculation in real-world applications, such as construction, carpentry, and masonry. It is hypothesized that students with construction backgrounds will perform better than all other college students, including Mathematical Sciences and engineering majors. Furthermore, it is hypothesized that students will neglect to round up to estimate the amount of material needed to complete a given project.

Poster presentation: 3:30 p.m.

Where Are the Women?

Ken Olsen, History

Mentor: Dr. Jennifer Hildebrand, History

I will present on the disappearance of prominent African American women during the Civil Rights Movement of the 1960s. The investigation why Rosa Parks is remembered for her contributions to the Civil Rights Movement by many Americans, but not Septima Poinsette Clark, Fannie Lou Hamer, and other prominent women towards Black rights.

Poster presentation: 2:00 p.m.

The Study of Sexual Abuse in American Slavery

Emily O'Sullivan, Ashley Bertolini, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

An in depth look at sexual abuse of slaves through American history. This will be based upon research surrounding the personal hardships of slaves in early America.

Poster presentation: 5:00 p.m.

SUNY Model European Union Simulation

Jason Pandich, Laura Hirst, Alexander Stone, Victoria Banach, Political Science
Mentor: Dr. Alexander Caviedes, Political Science

Each year students attend the SUNY Model European Union simulation to participate in an intergovernmental simulation of the European Union with students from other SUNY schools as well as a number of European universities. Students take the roles of Head of Government, Economics and Finance Minister, Foreign Affairs Minister, and Coreper to negotiate proposals that reflect debates currently taking place within the European Union. This year the simulation took place at Vesalius College in Brussels, Belgium on January 6-13 where we represented the countries of France and the Czech Republic. There was also a press core run by students that provided a newspaper with the current events from each meeting as well as holding a press conference to ask questions about the meetings. This presentation gives a description of each student's experience of the conference and what they learned about international negotiations and cooperation.

Poster presentation: 1:00 p.m.

Green Algae Research

Alexander Payne, Biology
Mentor: Dr. Fred Harrington, Biology

Green algae are currently being studied to achieve a wide variety of results. In addition to their ability to produce lipids that can be utilized as a renewable fuel source, they can produce other substances that are of interest. I have been conducting studies to isolate and identify a specific compound produced by the green algae species, *Selenastrum capricornutum*. The compound appears to be an Astaxanthin derivative, a compound used by humans as a dietary supplement and for aquaculture feed to turn salmon and shrimp flesh pink. Thus far I have performed thin layer chromatography to compare the substance produced by the algae to known samples of Astaxanthin. Results have shown similarities between the algae sample and the standard. As of now I have performed NMR on the different forms of the Astaxanthin standard to obtain atomic structural results that I will use to compare to NMR results obtained from the algae sample. The goal is to determine which Astaxanthin derivative is produced by the algae and what its commercial use might be.

Poster presentation: 2:00 p.m.

Delta Phi Epsilon Community Service

Olivia Phillips, Santana Phillips, Volunteer and Community Services
Mentor: Ms. Sara Maiorana, Volunteer and Community Services; Ms. Joyce Smith, Volunteer and Community Services

The Delta Phi Epsilon sorority is a proud, greek organization that participates in many community service events, on and off campus. Each semester, we accomplish our goal to help support both the surrounding community and our charitable philanthropies. As a sisterhood, we take pride in the amount of community service hours we do, along with our fundraising events- both allow sisters to give to the community, make a difference in lives across the nation, and to feel a sense of honor within themselves.

Poster presentation: 2:00 p.m.

Social Facilitation and Cognition

Gabriella Pietropaolo, Felicia Schiefer, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

Pertaining to the phenomenon of social facilitation, this study examined the impact of the presence of others on performance, and whether the impacts it had were more or less severe for varying levels of cognitive tasks. Participants completed two tests, both containing 25 simple math problems (low difficulty) and 10 paper-folding tasks (high difficulty). Researchers were either absent or present while the tests were taken. Results revealed that while researchers were present, performance was enhanced for the simple mathematical tasks, but worsened for the difficult paper-folding tasks. Results also indicated that while researchers were not present, performance was enhanced for both tasks. This suggests that the mere presence of others has the ability to hinder or enhance our performance on certain tasks, and the extent to which we are impacted will depend on the difficulty of the task at hand.

Poster presentation: 1:00 p.m.

Modern Brazil: A Preliminary Assessment of Government Initiatives to Combat Corruption, Inequality, and Crime

Vasil Popjanevski, Political Science,

Mentor: Dr. Ivani Vassoler-Froelich, Political Science

Most people associate Brazil with its beautiful sun soaked beaches and leisurely approach to life, however, most are unaware of the complications that plague this paradise from underneath. Many Brazilian cities such as Rio De Janeiro are littered with shantytowns called favelas. The favelas are characterized by drug trafficking and high rates of gang violence, and the gangs often serve as the local government which poses a large array of problems for citizens. This paper will examine the multiple socio-political issues that Brazil currently faces today including corruption, drug trafficking, and poverty; and what measures the Brazilian government has taken to help solve these issues under the social democratic government of Dilma Rousseff.

Poster presentation: 2:00 p.m.

Indian Boarding Schools: Forced Assimilation and an End to a Way of Life

Anna Prince, History

Mentor: Dr. Emily Straus, History

With the passage of the Dawes Act in 1887, the United States began its quest to assimilate Native Indians into American society. Another tactic used during this time of assimilation was the use of Indian Boarding Schools. Here, students of Native background had their culture, language, religion, and way of life stripped from them. In its place, the ideals of the white Anglo-Saxon class were taught as the American culture. Through the use of boarding schools to assimilate Native Americans into American society, a distinct culture and way of life was forced into near extinction.

Poster presentation: 5:30 p.m.

NAEYC Conference Poster

Analisyia Ramos, Curriculum and Instruction

Mentor: Dr. Mira Berkley, Curriculum and Instruction

Four students attended the National Association for the Education of Young Children conference in November 2013. We went to various sessions and learned a plethora of information. This was a fulfilling and outstanding opportunity and with the help of OSCAR funds it was made possible. The conference featured many important early childhood professionals including Fredonia's own Mira Berkley. This experience has enriched us all as future educators in early childhood.

Poster presentation: 2:30 p.m.

Terminology of Prostitution in America

Kathryne Rapp, Women's and Gender Studies

Mentor: Dr. Jeff Iovannone, Women's and Gender Studies

I am exploring the changing terminology and schemas attached to prostitutes in America from the 19th century to present. I will be using real life examples from various media to analyze the language and

terms used to talk about prostitution and I will touch on the results of how these people are treated and laws that are put in place for them.

Poster presentation: 5:00 p.m.

Combatting Hunger in Latin America and the Caribbean

Kelsey Rausch, International Studies

Mentor: Dr. Ivani Vassoler, International Studies

To have a comprehensive understanding of Latin America's efforts to combat hunger, it is crucial to view their methods in 4 approaches: Individual governmental approach, Individual governmental approach with cooperation of intergovernmental agencies, multilateral cooperation approaches and local government initiatives. I will use examples to thoroughly explain how each method works, why it was or was not successful and how the countries of Latin America have fared from their experiences

Poster presentation: 2:00 p.m.

Affirmative Action and Income Equality

Jordan Reed, History

Mentor: Dr. Emily Straus, History

As part of the History 201-honors class, I have chosen the subject of affirmative action's influence on income equality for a research project. The overall question of the paper will be whether affirmative action truly helps increase the income equality of the recipients, thereby increasing the economic mobility.

Poster presentation: 2:30 p.m.

Childhood Lead Poisoning Prevention: Using Social Work Practice to Solve a Public Health Crisis

Antonio Regulier, Public Health

Mentor: Dr. Linda Dorsten, Public Health

Social Work and Public Health are interdisciplinary by nature; "helping" people to "prevent the spread of diseases." Studying the National Center for Healthy Housing's Summary Report for New York State's Childhood Lead Poisoning Primary Prevention Program, this mind map will demonstrate research on the socio-psycho effects of lead poisoning and the disparity amongst victims. Working with the Chautauqua County Department of Health and Human Services, I have developed a standard procedure for detecting lead poisoning in the homes of New York State residents. Using social work practice skills and the knowledge of public health, this mind map will explore how community efforts along with professionalization in the field can lower the risk of childhood lead poisoning.

Poster presentation: 3:30 p.m.

4G LTE Scheduling

Shaun Reich, Patrick Hodge, Thomas Gourdine, Computer and Information Sciences

Mentor: Dr. Junaid Zubairi, Computer and Information Sciences

Research of 4G LTE compared to WiMax. Contents include analyzing and documenting techniques and algorithms used in bandwidth allocation/packet scheduling techniques of 4G LTE. These techniques are compared with those used in WiMax. WiMax is a direct competitor with 4G LTE, the latter of which is now used in a rapidly growing market of smartphones as carriers roll out infrastructure for faster speeds beyond that of simply 3G. The information from this research is utilized for the creation of a simulation program to simulate the bandwidth load on a 4G LTE system and what this means and looks like.

Poster presentation: 5:00 p.m.

Drag in America

Valerie Reynolds, Maegan Clark, Women's and Gender Studies

Mentor: Dr. Jeffry Iovanonne, Women's and Gender Studies

This will look at the history of drag in America, and dressing in drag.

Poster presentation: 3:30 p.m.

Constructing Meaning from Doodles

Amanda Rockwood, Language, Learning, and Leadership
Mentor: Dr. Cindy Bird, Language, Learning, and Leadership

In the 1950s, Roger Price originally used the word “Doodles” to describe drawings that consist of both doodles and riddles. Doodles are sometimes challenging, yet fun to interpret. To construct meaning from a Doodle, prior knowledge needs to be accessed and applied. This poster presentation focuses on the role that prior knowledge has in comprehending and constructing meaning from Doodles.

Poster presentation: 2:30 p.m.

The Effect of pH Modulation on α CA3 & β CA6 in *C. reinhardtii*

Ramses Rodriguez, Biology
Mentor: Dr. Frederick Harrington, Biology

Carbohydrates derived from algae can be converted to bioethanol through the process of fermentation. The efficient induction of carbohydrate synthesis and storage in algae can thus be used to supplement energy demands in our global economy. *Chlamydomonas reinhardtii* is a photosynthetic alga in which the mechanisms of carbohydrate synthesis and storage can be studied using variable pH conditions. *C. reinhardtii* consumes atmospheric carbon dioxide. It uses a CO₂ concentrating mechanism (CCM) associated with its pyrenoid complex that is responsible for the internal mobilization of inorganic carbon (Ci) that will be used for carbon fixation. The CCM requires the function of carbonic anhydrases to facilitate this internal mobilization of Ci and to facilitate its conversion to a form usable by RuBisCo in the pyrenoid complex. Carbonic anhydrases (CAs) are a group of enzymes responsible for the rapid interconversion of carbon dioxide and carbonic acid. Because *C. reinhardtii*'s genome has been sequenced, RT-PCR was employed to analyze the mRNA of the carbonic anhydrases CA3 and CA6, which reside in the chloroplast of the alga. Our data shows that the mRNA expression of these two CA's decreased over the period of 48 hours when grown in media of pH 5.5 and pH7.5. Confocal microscopy imaging has revealed that the overall size of the pyrenoid complex increases by an average of 1 μ m in algae grown in these two pH conditions suggesting that pH variation can induce carbohydrate synthesis and storage in *C. reinhardtii*.

Poster presentation: 5:00 p.m.

Experience Based Learning

Angel Roopnarine, Lauren Hargraves, Emmanuel Guzman, Communication Disorders and Sciences
Mentor: Dr. Anny Castilla, Communication Disorders and Sciences

Under the guidance of Dr. Anny Castilla, we wish to present a creative piece based on our experience of doing a research-based independent study in the field of speech-language pathology. At the start of the semester, we met once a week to discuss the responsibilities in the research. Our roles consist of assessing children between 4 -6 years of age. Each child will receive 5 different assessment types during 30 minute sessions over a period of 3-4 days. Prior to the start of our data collection, we trained and familiarized ourselves on each assessment type. We meticulously planned the process of data collection. Following the first week of data collection it was necessary for us to regroup and collaboratively modify the assessment protocol to suit the needs of both the participants and the study. After the first week of administering our delegated assessments, administration of the assessments became a lot easier. It is evident that we are practicing desired proficiencies of administration and familiarization of assessments as we progress through this study. Over the course of this assignment, we are also improving our team building skills, which is of equal importance in the workplace.

Poster presentation: 2:30 p.m.

Mud to Music

Danielle Brooks, Visual Arts and New Media
Mentor: Dr. Peter Tucker, Visual Arts and New Media

The ocarina is a wind musical instrument—a type of vessel flute. Variations exist, but a typical ocarina is an enclosed space with four to twelve finger holes and a mouthpiece that projects from the body. It is traditionally made from clay or ceramic. Ocarina-type instruments have been of particular importance in Chinese and Mesoamerican cultures. I propose to create a number of different sized ocarinas in different tonal variations to show the wide range of these instruments.

Poster presentation: 3:30 p.m.

Communication Disorders Student Society Volunteer and Community Services

Julia Santini, Communication Disorders and Sciences

Mentor: Ms. Christine Gerber, Communication Disorders and Sciences; Ms. Joyce Smith, Volunteer and Community Services

The purpose of Communication Disorder Student Society is to educate student, both majors and non-majors, about the field of Communication Disorders and Sciences beyond the classroom setting through interactions with peers, community members, and professionals. Volunteer work is an essential part of our group. Our display will showcase the various community service projects that CDSS participates in. These projects include: Fall Sweep (leaf-raking for community members), Stroke Awareness Walk (fundraising for American Stroke Association), Relay for Life (fundraising for American Cancer Society), Fredonia Place (serving as companions to the elderly), and Buffalo News Kids Day (fundraising for Children's Hospital of Buffalo).

Poster presentation: 1:30 p.m.

Understanding and Misconceptions of Rates of Change and Unit Conversions

Elizabeth Schake, Mathematical Sciences

Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the misconceptions of college students in regards to rates of change and unit conversions. It is hypothesized that college students have misconceptions of rates of change and unit conversions. Specifically, students will make the most mistakes when solving multi-step unit conversion rate problems. In addition, textbook approaches will most frequently be used on problems where context is unfamiliar.

Poster presentation: 3:30 p.m.

Human-Animal Interaction: Storytelling

Brooke Schutrum, Joshua Andrzejewski, Kimberly Molfetto, Samantha Galloway, Psychology

Mentor: Dr. Nancy Gee, Psychology

The purpose of this study was to determine whether or not the presence of a therapy dog would improve language production during the telling of a story by school-aged children. Prior research has indicated that the presence of a dog can reduce symptoms of stress or discomfort like heart rate and blood pressure. The presence of a dog seems to have a positive effect on a child's willingness to communicate. Forty children, aged 36 months to 12 years, acted as participants in this study. In the presence of either a human listener or a therapy dog, the children were asked to describe the events depicted in a picture book. Although data collection is still underway we expect to find more, and greater complexity of, language in the presence of a dog, which could lead to new ways to improve the academic success of young children. Actual findings will be presented at the conference.

Poster presentation: 5:00 p.m.

Students Taking Active roles in Service: Social Work Club

Shannon Schwarberg, Social Work/Volunteer and Community Services

Mentor: Dr. Brian Masciadrelli, Social Work/Ms. Joyce Smith, Volunteer and Community Services

The mission of the social work club is to give students the opportunity to perform and engage in various acts of community service. Students become more involved within the community and increase their interpersonal skills and sense of self-worth. The social work club has performed a variety of community service activities such as food drives for local food pantries, school supply drives to assist the Boys and

Girls Club, provide certified workshops in the area of Child Sexual Abuse Prevention and making holiday card for the elderly.

Poster presentation: 3:00 p.m.

The Importance of the Affordable Care Act's Contraceptive Mandate

Thomas Schwob, Women's and Gender Studies

Mentor: Dr. Jeffry Iovanonne, Women's and Gender Studies

President Obama's healthcare overhaul, the Affordable Care Act, has been scrutinized on every level from its implementation of the individual mandate, to its slow roll-out. However, the fight now has turned to the contraceptive mandate in the upcoming Supreme Court decision in *Sebelius v. Hobby Lobby*. Requiring businesses to cover contraceptives under preventative care to their employees, this key provision is under attack due to Hobby Lobby's claim that their religious beliefs don't allow them to provide contraception and that their company should have its religious views recognized. If found in favor of Hobby Lobby, this could mean the dismantling of the contraceptive mandate leaving many Americans without the ability to plan their family. This presentation will explore the importance of providing contraceptives through the AFA and the case presented against it.

Poster presentation: 2:00 p.m.

Effects of Multitasking on Academic Performance

Chelsey Sengillo, Psychology

Mentor: Dr. Jennifer Dyck, Psychology

The use of cellphones in today's society is growing, and with access to social media and texting at the tip of our fingers, there is increased interest in the effects these devices have on academic performance. The purpose of this study was to examine whether or not multitasking on a cellular device while reading has an effect on test performance. The study consisted of 60 students in which each group read a passage followed by answering several multiple choice questions. The expected group to perform worse on the memory test is the three distractions group. Multitasking appears to have a negative impact on test performance and demonstrates that students who frequently use their cell phones while learning may have lower test scores than those who do not.

Poster presentation: 1:00 p.m.

Regression Investigations on Weight and Exercise from NHANES National Youth Fitness Survey

Christopher Shartrand, Mathematical Sciences

Mentor: Dr. Andrea Austin, Mathematical Sciences

The National Youth Fitness Survey was conducted in 2012 collected data on the health 1,576 American children from ages 3 to 15. The intention of the program was to use the data to create a more targeted approach for improving health in children across the United States. The largest aspect of the survey was the recording of each of the children's weight, while further information was collected on their physical activities. It is the goal of this model to use linear regression based on body measurement variables and an exercise variable, aerobic or non-aerobic, to investigate the body weights of the 1,576 children. That is, it is the purpose of this research to determine whether children who are regularly involved in aerobic based sports are more likely to weigh less than children who are regularly involved in non-aerobic based sports.

Poster presentation: 5:00 p.m.

The Effects of White Privilege Awareness in Freshman Undergraduate Students in Relation to their Attitudes and Behavior Toward Others

Kimberly Smith, Psychology

Mentor: Dr. Andrea Zevenbergen, Psychology

The concept of White privilege and racial awareness are discussed. A sample of White college freshman (n = 51), completed measures regarding racial awareness, White guilt, White privilege awareness, and attitudes toward affirmative action. Measures also examined participant characteristics such as

openness, altruism and personal belief in a just world. Data analysis compared participant characteristics to racial awareness and attitudes towards race-related concepts. These characteristics did not have an impact on any of the racial constructs. Consistent with other findings, this study found that White privilege awareness, White guilt, and attitudes towards affirmative action were correlated to the construct of racial awareness (color-blindness). Personal belief in a just world was found to be correlated with White guilt.

Poster presentation: 1:30 p.m.

Generational Tattoo Tolerance: Employing the Millennial Generation

Sarah Smith, Joshua Hodge, John Elerick, Karl Deck, Business Administration
Mentor: Dr. Lisa Walters, Business Administration

The purpose of this qualitative exploratory study was to determine if generational differences exist in terms of the perception of tattoos. The results of this study can be used by business practitioners to facilitate equitable employment for those situations not mandated by law. Our study hypothesized that discrimination against tattoos is generationally-based. To evaluate the hypothesis, we used secondary research to evaluate the growth of tattoo receipt in society throughout time. We then employed both secondary and primary research to determine how tattoos are perceived in the workplace. The results suggest that discrimination against tattoos is generationally-based. We found 76.47% (n = 52) of our respondents feel that future generations will become desensitized to visible body art in the workplace. Thus, it is likely that tattoos will be more accepted in the workplace as later generations mature into the higher levels of organizational management.

Poster presentation: 5:00 p.m.

Keeping Lucy Out of The Act: "I Love Lucy" as Reinforcing and Subverting Postwar Culture

Natalie Sowa, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

My research focuses on the ways in which the television show "I Love Lucy" reinforced and also problematized traditional cultural norms surrounding female roles and the home in 1950s America. I argue that "I Love Lucy" did not simply fall in line with traditionalist values but often worked to change and broaden views about women, marriage, and home life in the significantly stratified postwar American culture for which it was produced.

Poster presentation: 5:30 p.m.

Examining Associations Between Digital Calendar Use and Prospective Memory

Keith Stam, III, Jillian Burgess, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

Prospective memory (PM), or remembering to perform an intention in the future has an important impact on everyday life. The current research examined whether external memory aid use, such as calendars, cell phones, and computers, are associated with better PM. College students completed online questionnaires on PM and use of paper and digital memory aids, as well as questionnaires on busyness, routines, punctuality, and conscientiousness. Results indicated that the use of only digital technology to aid PM was considerably less than expected, and that the type of memory aid used varied with the type of event that was to be remembered. Additionally, participants with poorer PM used more memory aids, were late more often, were less conscientiousness, and had fewer routines in their life. Understanding use of memory aids by college students and the relationship to PM may ultimately have implications for development of better digital memory aids.

Poster presentation: 2:00 p.m.

Sexualization of the Disabled Body

Joshua Steffen, Women's and Gender Studies
Mentor: Dr. Jeffry Iovannone, Women's and Gender Studies

The purpose of this poster is to generate discussion about disability and sexuality. Representations of people with disabilities challenge industry standards of beauty and the intention is to challenge that

idealization through imagery and text. Observers of this work should realize that a disabled person is still a sexual being with the same sexual voice as anyone else, regardless of what characterizes their body image. Visual campaigns such as “American Able” use mainstream representations of sexuality to highlight and challenge implicit definitions of what is acceptable, beautiful, and sexy.

Disabled people with gender or sexual persuasions that fall outside the realm of typical sexual standards can feel invalidated, and those who identify with gender and sexual minorities reinforce constitution of legitimate sexual expressions. Broadening mainstream dialogue about disabled sexuality on a global scale is an invitation to include previously marginalized and oppressed bodies.

Poster presentation: 5:00 p.m.

Involving a Therapy Dog in a Preschool Classroom as a way of Enriching the Learning Environment

Jenna Steinmiller, Sarah Anderson, Psychology
Mentor: Dr. Nancy Gee, Psychology

Previous laboratory based research has demonstrated that the presence of a therapy dog impacts categorization performance by preschool children. For example, children make fewer errors on the task and they correctly categorize animate objects better than inanimate ones when the dog is present. In the current study the children are asked to categorize a wide variety of category types, half of which include dog related stimuli and half do not. This manipulation is crossed with the presence/absence of the therapy dog. What is unique about this study is that it is actually conducted in preschool classroom as part of the instructional curriculum of the class. The results of this study will have implications for the role of therapy dogs in the enhancement of preschool learning environments.

Poster presentation: 2:30 p.m.

Working Memory and Health

Kirstie Surrena, Nikole Lindquist, Catherine Guth, Exercise Science
Mentor: Dr. Todd Backes, Biology/Exercise Science

Insulin functions to regulate the delivery of glucose to all cells in the body. Glucose is metabolized by neurons of the brain in order to carry out cognitive tasks. It is hypothesized that the body’s perception to “sweetness” contributes to the stimulation of the brain, and is also thought to be relative to an individual’s body mass index (BMI). We will examine: the relationship between working memory and perception of sweetness to BMI, and cognitive performance. We expect our results will demonstrate a direct relationship between perceived sweetness, BMI, and cognitive performance. This information is relevant to the diabetic and insulin resistant population, as our results would demonstrate an effect on working memory and health.

Poster presentation: 2:00 p.m.

Quakers Among the Seneca Indians

Penny Sutton, History
Mentor: Dr. Jennifer Hildebrand, History

The American Revolution (1775-1783) marked the birth of a new nation and sparked new political ideas around the world. However, Indian Nations located within the new United States found themselves in a precarious position when no provisions were made for them in the Treaty of Paris. The Seneca Nation of western New York who had supported the British during the Revolution found themselves occupying an ambivalent place within the newly established country. The Seneca faced missionaries, land speculators, poachers, squatters, timber-cutters, and politicians from the state and federal governments. In response, Seneca communities fought to preserve their territories and traditional culture throughout a barrage of economic, social, religious, and political change. The Seneca succeeded due to the guidance of a Native prophet named Handsome Lake and the assistance of some very unique Quakers. Through the prophecies of Handsome Lake and the Christian message of the Quaker missionaries the Seneca were able to adapt to white society and economy while preserving Indian traditions and practices.

Poster presentation: 2:00 p.m.

Dusty Vent: Rapid Game Prototyping using HTML5/Javascript and C++/Simple DirectMedia Layer

Jeffrey Swift, Computer and Information Sciences

Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

We modified a version a 2-dimensional video game that is capable of running with multiple browsers on multiple platforms. This allows one to rapidly prototype, test, and revise large game levels. At Hack Upstate 2013 in Syracuse, NY, we built an interface of a top-down orthographic game engine using HTML5 and Javascript. Movement and collision were programmed, followed by some basic artificial intelligence. A fully functional map editor, supporting transparency and graphic layering was created as well, allowing for large game worlds to be created quickly and effortlessly. There is a strong emphasis on efficiency for this project, and we were ultimately able to represent maps containing thousands of tiles in files less than 10 KB in size. As our research continues, we aim to improve scalability, stability, and resource management.

Presentation: 3:00 p.m.

Projectile Motion Analysis

Jeffrey Swift, Computer and Information Sciences

Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

Microsoft Software Company has pioneered in developing Windows based Operating Systems (OS) from mid-eighties till today. Not only Microsoft develops Windows based OS, but also it has been a leader of designing innovative MS Visual Studio .NET. The beauty of Visual Studio .NET is that one can design GUI for each application using two high-level, object oriented languages such as C# and Visual Basic (VB). In both cases, GUI designing is done in the "Design Window". On the other hand coding of the application is performed in the "Code Window". The latter part needs a quite a bit of coding practice, and involves sound knowledge of differential calculus. In the current scholarly article, we are using the latest version of MS Visual Studio.NET 2012 and harness the power of two high-level, object-oriented computing languages to investigate the motion of an object through 2D-space under gravity. We are in the process of developing the required algorithm and explore projectile motion under several boundary conditions.

Presentation: 3:30 p.m.

Native American Assimilation during the Colonial Period

Chad Szymkowiak, Michael Kowal, Erik Corrie, Michael Schreiner, History

Mentor: Dr. Nancy Hagedorn, History

The title of our proposal is "Native American Assimilation during the Colonial Period." We have decided to focus on this topic since we have talked about the assimilation process and relationships the Native Americans had with the European Powers during the Colonial Period in our Hist. 357 class with Dr. Nancy Hagedorn. We will focus on each of the main European powers that had contact with the Indians during colonial times.

Poster presentation: 2:00 p.m.

Sex Education: if not in schools, then where?

Kaylee Torre, Women's and Gender Studies

Mentor: Dr. Jeff Iovannone, Women's and Gender Studies

There exists an extremely controversial debate over what is, or is not acceptable to teach children in school. Teaching children about sex has been one of the most widely disputed among them, and it seems that we have yet to come up with a suitable answer. For this project I would like to examine how we have dealt with the idea of Sex Education in America in the last 30 years. I would like to explore the fundamental question: is it necessary to teach children about sex in schools? Then from there explore other questions pertaining to what kind of education they should receive; how the material should be presented; and what methods have seemed to be most effective or ineffective so far. I would also like to examine what factors influence beliefs or attitudes on both sides of the debate. Furthermore, I will look at

what other modes of education children are receiving and analyze what the implications are of such an education.

Poster presentation: 5:00 p.m.

A Breakdown of Computer Literacy and Computer Security Literacy by Demographic

Ibrahima Toure, Mohamed Sadek, Computer and Information Sciences

Mentor: Mr. Robert Olson, Computer and Information Sciences

After the boom of the personal computer in the 1980s, technology has secured a strong foothold in both the personal lives and in the workplace. People around the world are becoming accustomed to these powerful tools however, many people have been using these new devices without understanding their potential. This has led to a gap, in which the majority of users of these devices being taken advantage of by users who are familiar with the knowledge related to these technologies. Being technologically literate has become a necessity, especially with the expansion and emphasized use of resources, such as the Internet and Cloud storage. As every light gives off a shadow, the technologies that surround our society also have a darker side to them. Without being technologically literate, people are becoming exposed to this dark side, leaving them vulnerable to many security and privacy exploits. To be technologically literate is to be technologically informed about the technology that is being used. The demographics that are proven to be less technically literate will create a discriminatory nature in programs and policies put in place by the government that inherently violate both the privacy and security of these people.

Poster presentation: 2:00 p.m.

Identifying Important Habitat Features for Bat Conservation Using Acoustical Sampling and GIS

Jonathan Townsend, Biology

Mentor: Dr. Karry Kazial, Biology

Bat species worldwide have been under extreme pressure for decades due to habitat loss through fragmentation, pollution, and disease. Recently that pressure was exacerbated by the introduction of White Nose Syndrome (WNS), a fungal infection from the species, *Pseudogymnoascus destructans*, responsible for almost 6 million deaths nationwide. Using established vehicular transect protocol 20 bat surveys were conducted during the summer of 2013, with the goal of ascertaining the differing levels of habitat usage by bat species in Chautauqua County, as well as identifying other key environmental variables critical to foraging bats. A total of 1,273 bats were recorded, representing all nine species of bat present in New York State. Initial anecdotal observations reveal potential correlations between bat activity and forested or riparian habitats; as well as negative correlations between open (agricultural/meadow) habitats. Statistical analysis is ongoing.

Poster presentation: 3:00 p.m.

Vegetative Communities at SUNY-Fredonia College Lodge

Jonathan Townsend, Tiffany Wong, Rebecca Watro, Mona Alabbadi, Biology

Mentor: Dr. Jonathan Titus, Biology

The College Lodge is an 80 hectare nature preserve owned and operated by the Fredonia Student Association, an auxiliary not-for-profit of SUNY Fredonia. The forest varies in age from successional stands to mature stands with Eastern Hemlocks over 200 years old. In response to a proposed forest management plan for the Lodge's forests, a biological inventory has been initiated in conjunction with the Roger Tory Peterson Institute. Part of that inventory is a description of the plant communities at the Lodge. Sampling consisted of ten 20m x 20m tree survey plots for each forest stand, with three 3m x 3m quadrants in each plot for the understory shrub and herbaceous layer. Percent canopy cover and DBH was determined for the tree layer and percent cover was determined for the understory. Preliminary analysis indicates the presence of five forest types based on tree canopy cover.

Poster presentation: 3:30 p.m.

The Effects of GDP on the Environment

Rachael Tschari, Mathematical Sciences

Mentor: Dr. Nancy Boynton, Mathematical Sciences

I investigated the effects of Gross Domestic Product (GDP) and global population on environmental deterioration. Among the environmental factors observed, some were average global temperature, amount of carbon emissions and the surface area of the polar ice caps over time. The purpose of this study was to discover if higher production rates have detrimental effects on the environment. The data used was provided by the National Oceanic and Atmospheric Administration at Climate.gov.

Poster presentation: 5:00 p.m.

The First Sexual Revolution

Mariah Turk, Bethany George, Women's and Gender Studies
Mentor: Dr. Jeffrey Iovanonne, Women's and Gender Studies

The research conducted for this presentation discusses the first sexual revolution within the United States. It illustrates the extent to which sex had moved beyond its reproductive purpose and entered the realms of personal desire and intimacy by the turn of the century. This presentation will also focus on the emergence of the birth control movement specifically in the 1910s and how it correlates with the sexual revolution. What originally started as grassroots activism, the birth control movement turned into a revolutionary movement, but did not do so without having to prove itself as a cause worthy of such a fight.

Poster presentation: 1:00 p.m.

College Students' Misconceptions in Fractional Learning

Shannon Tydings, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

This research investigates the possible reasons why students struggle with the concept of fractions. It is hypothesized that college students taking classes required for their majors will have more success than college students in core curriculum classes in solving and evaluating problems involving fractions. Specifically, all participants will have more success in solving symbolic questions and have greater difficulty solving problems involving words. Regardless of the problem, all students will resort to solving by traditional algorithms.

Poster presentation: 5:00 p.m.

Fluid Interventions and Cognitive Function

Kristy Unkrich, Molly Morgante, Kristi Putzig, Ian Ellenberger, Exercise Science
Mentor: Dr. Todd Backes, Biology/Exercise Science

In science, "cognition" is the mental processing that includes the attention of working memory. Previous research has concluded that moderate exercise has shown to facilitate cognitive performance. For this study, however our focus will be on four different fluid interventions; water, Gatorade, liquor and beer, and their effect on cognitive performance following moderate exercise. Our team will be examining urine specific gravity and blood glucose after eight hours of fasting. We will then perform our first cognitive test by playing Perfection, followed by drinking our fluid intervention, perform a two minute step test and then play Perfection again to compare our results before the fluid intervention. Questions our team is interested in answering through the study are, moderate exercise facilitates cognitive function, but will alcohol negate this facilitation? Cognitive function is affected by low blood glucose levels, will Gatorade and beer (highest caloric values) help facilitate cognitive function?

Poster presentation: 2:30 p.m.

Comparing Positive and Negative Expectancy on Olfactory Perception

Kate Urtz, Jessica Miller, Kenneth Baum, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

Multiple tasks encountered throughout the day are influenced by our perception. Many times our perception can be altered by the way objects are presented to us. The experiment being presented is looking to see if the presence of positive and negative labels affects participant's perception of scents and their ratings on level of pleasant and unpleasant. Participants were tested on the effects of labels on

perception. Given ten different scents in three conditions, participants were asked to rate the scents they were presented after smelling them with positive, negative, and actual labels. With this experiment the expected results are that participants will rate the scents being more pleasant when the labels are positive. When the scents are labeled negatively it is expected that participants will have a more unpleasant rating for the scents.

Poster presentation: 2:30 p.m.

CFA Research Challenge

Aaron Valeska, Victoria Wessel, Nicole Sparks, Matthew Sullivan, Business Administration
Mentor: Dr. Taihyeup Yi, Business Administration

The CFA Institute Research Challenge is an annual global competition that provides university students with hands-on mentoring and intensive training in financial analysis. This year, we were assigned the publicly traded company Transcat, Inc. We assumed the role of research analysts in order to value the stock, write an initiation-of-coverage report, and present our recommendations.

Oral presentation: 3:30 p.m.

Effects of Female Quality on Mate Choice Tradeoffs and Consistency in a Predation Context in Crickets

Rebecca Watro, Biology
Mentor: Dr. Karry Kazial, Biology

When considering female mate choice and sexual selection, there are myriad influences that affect mating preference. When a female is deciding whom to mate with, what are the factors that contribute to her choice? In crickets, extrinsic factors affect female mate choice, such as risk of predation. Intrinsic variables such as time cost and female age have been associated with trends in mate choice as well. However, to our knowledge there is an intrinsic constituent of the system that is previously untested in the context of predation and choice: female quality. If females choose males based on their apparent quality (elicited in their calling song), might they also base these decisions upon their own quality level? We hypothesize that lower quality females will tend to choose the riskier trade-off preference thereby affording a higher quality mate because they have more to gain in terms of additive effects of genetic variation.

Poster presentation: 3:00 p.m.

Examining the effects of background music on memory recall in introverts and extroverts

Nichole Whiteford, Lauren Ciulla, Devan Nichols, Psychology
Mentor: Dr. Jennifer Dyck, Psychology

This study examines how background noise affects memory recall in differing personality types, specifically introverts and extroverts. Approximately 60 participants were tested on memory with no distractor by being asked to recall a number of words from a list after taking a personality test. The process was repeated with music added while the list of words was presented. The numbers of words recalled in each stage were then compared. Based on previous research (Dobbs, Furnham, and McClelland 2010), we anticipated finding that introverts were more negatively affected by the presence of the background music.

Poster presentation: 5:00 p.m.

Estimating, Percentages, and Area: Students' Ability to Accurately Estimate What Percentage of an Object's Area is Shaded

Kaitlyn Whitney, Mathematical Sciences
Mentor: Dr. Keary Howard, Mathematical Sciences

This study investigates student ability and understanding of area estimation of two dimensional shapes. It is hypothesized that students will overestimate more frequently than underestimate when asked to estimate the percentage of area of a partially shaded shape. Furthermore, it is hypothesized that

students of all ages will inordinately estimate quartiles (25%, 50%, 75%). In addition, age, gender, and major will likely have no statistically significant effect.

Poster presentation: 3:30 p.m.

Drag Queens and Transvestism

Renee Willett, Women's and Gender Studies

Mentor: Dr. Jeffry Iovanonne, Women's and Gender Studies

Since the origin of drag queens in America, these performers have been falsely associated with transvestitism. In understanding why drag queens were originally, and still are today, referred to as transvestites, it is important to look at the socio-historical context in which this association began.

Poster presentation: 1:00 p.m.

Photomorphogenic Effects of UV-B Radiation and Antioxidant Treatment on Brassica rapa

Tiffany Wong, Biology

Mentor: Dr. Jonathan Titus, Biology

UV-B radiation may cause morphological, physiological, and genetic damage to living organisms and prolonged exposure to UV-B radiation causes photooxidative damage to DNA and proteins. However, plants can protect themselves from UV-B by the production of antioxidants. In this study, *Brassica rapa* will be subjected to varying degrees of UV-B radiation and treated with a lipid-soluble antioxidant, α -tocopherol. Reactive oxygen species, formed by UV-B radiation, may be stabilized by α -tocopherol. The hypothesis is: *B. rapa* will develop efficiently when treated with an external application of α -tocopherol under UV-B exposure. Three racks containing two strains of *B. rapa* will either have no UV, low UV, or high UV exposure. Plants will receive a treatment of either α -tocopherol and water or only diluted ethanol. The external application of α -tocopherol on *B. rapa* may reduce photooxidative damage and prevent alteration of morphology or premature senescence.

Poster presentation: 5:00 p.m.

Advanced Poetry Writing

Keegan Johnston, Danielle Lorenzo, Bryanna Martonis, Sydney Thomas, Thomas Warmbrodt, Elizabeth Wenneman, Sarah Peace, English

Mentor: Ms. Aimee Nezhukumathil, English

The students of ENGL 460, Advanced Poetry Writing will display Visual/Video poems of Emily Dickinson to celebrate National Poetry Month. The poems presented will be reimagined as posters/broadsides featuring a unique "QR Code." When scanned with a smartphone or other QR code reader, the code will direct you to the poem's video on YouTube. Each video poem was "written" and directed by the students of Advanced Poetry ENGL 460, to further highlight the process of re-visualizing poems with new technologies in surprising ways.

Presentations will be available throughout the day.

Psychology Abstract

Organizational Psychology: Retrospective Analysis Projects

Mentor: Dr. Jack Croxton, Psychology

Students in PSY 347, Organizational Psychology, were required to critically analyze an organization that they were previously a member of or one that they are currently affiliated with. First, they provided an overview of the organization, followed by a description of their role within the organization. They analyzed it, using a set of concepts from the course. Finally, they provided a set of recommendations for improving the organization. Their presentations are taking place throughout the day and all begin with the title, "A Retrospective Analysis of....."

Presentations are scheduled at various times throughout the day.

Dance Performance Abstracts

Injustice?

Performers for 2:40 p.m. performance

Harley Branning, Molly Carriero, Lauren Dewey-Right, Michelle Kirisits, Noelle Lazor, Abigail Sullivan

Performers for 4:50 p.m. performance

Abigail Donegan, Jasmine Joyner, Alexa Lindberg, Nicole Miller, Mercedes Smith, Kerri Williamson

Inspired by the George Zimmermann/Trayvon Martin murder trial during the summer months of 2013, this choreography reflects the frustration, discomfort, and disbelief that some people may have experienced upon the verdict of the trial. The choreography does not pass judgment on the decision, but uses sounds, movements and body language to express the struggle to come to terms with the decision. The question remains in everybody's mind whether justice has been served.

Mentor: Ms. Angelika Summerton, Theatre and Dance

Painting Darkness

Choreographer: Sydney Thomas (senior); Performers: Adam Ali, Joan Cusick, Lauren Dewey-Wright, Sarah Peace, Steve Russell, Courtney Stewart; Understudy: Samantha Mazzalunga

This piece was choreographed for my senior project, as well as for preparation for potential MFA applications. While this piece was a loose exploration on changes that happen in our lives, and how we, as humans, react to change within ourselves and with others, it was also created from a short fiction piece of my own writing titled "Darkness."

Mentor: Ms. Angelika Summerton, Theatre and Dance