

17TH ANNUAL
OSCAR\$
STUDENT RESEARCH & CREATIVITY EXPOSITION **2015**

THURSDAY

**APRIL 30TH
1-6 PM**

**WILLIAMS
CENTER**

4:00 PM

Remarks by administrators
204 Williams Center

4:15 PM

Keynote Address:
Roslin Smith
Assistant Professor of
Communication

"THE 3 M'S: THE STORY
OF MY STUDENTS, MY
MENTORS, AND MY LIFE"

RECEPTION TO FOLLOW

POSTERS

PRESENTATIONS

DOCUMENTARIES

DISPLAYS

PERFORMANCES

DEMONSTRATIONS

 **FREDONIA**
STATE UNIVERSITY OF NEW YORK



FREDONIA IS AN INSTITUTIONAL MEMBER OF
THE COUNCIL ON UNDERGRADUATE RESEARCH.
LEARNING THROUGH RESEARCH.

OK FOR POSTING—CREATIVE DESIGN

Student Research and Creativity Exposition Committee:

Ziya Arnavut, Computer and Information Sciences
Paul Benson, Sponsored Programs
Jack Croxton, Office of Student Creative Activity and Research
Jennifer Dyck, Psychology
Gloria Hobbs, Curriculum, Assessment, and Academic Support
Tracy Horth, College of Liberal Arts and Sciences
Megan Kane, Graduate Representative
David Kinkela, History
Carol Smith, Communication
Susan Sturm, Curriculum and Instruction
Charlene Takacs, Undergraduate Representative
Jonathan Titus, Biology
Peter Tucker, Visual Arts and New Media
Ivani Vassoler-Froelich, Politics and International Affairs

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

Teresa Brown, Provost and Vice President for Academic Affairs
Patty Herkey, Publication Services
Kevin Cloos, Mark Delcamp, and Facilities Services
Michael Lemieux and Lisa Noody, Campus Life
Stephanie Teachman, College of Liberal Arts and Sciences
Megan Valentine, Athletics
Information Technology Technicians
Faculty Student Association

“Congratulations to the students and mentors whose work is featured in the 2015 Student Research and Creativity Exposition! As you can see from the program and from interactions with the many students



who are involved in today’s program, Fredonia offers opportunities for authentic scholarly and creative work across a range of disciplines, and this year we are featuring work that models community engagement as well. Our campus has the most important resources for accomplishing this kind of work: talented, curious students and faculty with the creativity, expertise, and commitment to guide those students in their projects. Regardless of what’s next after graduation—advanced studies or professional work in their fields—Fredonia students have the research, performance, and presentation skills to succeed.”

Sincerely,

Virginia Horvath, Ph.D.
President

Congratulations to the students and faculty mentors who are participating in the 2015 Research and Creative Activity Exposition. The annual Research and Creative Activity Exposition reflects the university’s commitment to undergraduate research as a high-priority activity for both faculty and students. The National Council of Undergraduate Research has identified several characteristics of excellence in undergraduate research on university campuses, including scholarly faculty who are committed to mentoring students in their field, broad participation from faculty and students across disciplines, accessible opportunities for undergraduates, and integration with other engaging high-impact opportunities such as community engagement. I am very pleased to see Fredonia possesses the essential characteristics of excellence in undergraduate research, scholarship and creative activity. Thank you to the faculty and staff who make these transformative learning experiences possible for our students, and congratulations to our students for their good work on display today.



Sincerely,

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

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



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

Judith Horowitz, Ph.D.

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



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

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

Sincerely,

Jack Croxton, Ph.D.

Director of the Office of Student Creative Activity and Research

Creative activity and research go hand-in-hand. In the arts, sciences, and humanities, the best work takes discipline and flexibility, inspiration and practice. The Exposition shows our students' work at its best.

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 Fredonia Student Exposition are perfect illustrations of our baccalaureate goals of students becoming “**Skilled, Connected, Creative, and Responsible**” during their years at Fredonia. 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. Many of these projects and creative efforts demonstrate all four Learning Goals values here at Fredonia.*

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 opportunities presented at the 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, April 30, 2015
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.

Retrospective Analysis of The Boys and Girls Club

Julia Aleksandrowicz, Psychology

Future Mating Expectations of the Male Praying Mantis

Tyler Christensen, Chris Wemmer, Meredith Nugent, Biology

Flipping the Switch on Bluetooth Security

Jason Davison, Computer and Information Sciences

#AbortAbortionStigma

Nicole DeFilippis, Merique Suliveras, Women and Gender Studies

The Beneficial Effects of Research on Clinical Experiences in Communication Disorders and Sciences

Kearstin Derrenbacher, Nicole Angelone, Emily Ackles, Communication Disorders and Sciences

What Affects Team Wins?

Joe DiRaimo, Mathematical Sciences (Statistics)

Feleap The Frog and The Great Big Circus Adventure

Brittany Georgalas, Visual Arts and New Media

Fredonia NSSLHA: Students Engaging in Volunteer and Community Service

Olivia Kaltenbach, Communication Disorders and Sciences

Retrospective Analysis of Mark's Pizzeria

Nicole Krauth, Psychology

Protecting Open-Air Microalgal Culture Ponds from Zooplankton Contamination

Sara Lawler, Biology

Experiential Learning

Lauren Lind, Vanessa Taylor, Business Administration

How To Build It So They Come: Using QFD to Design a Student Club

Nate Luciano, Tyler Lokietek, Business Administration

Development of Visual Appeals And Content of Reproductive Health Materials

Krista Lutz, Kiyahara Cousins, Sociology (Public Health)

Retrospective Analysis of Sigma Gamma Phi

Melissa Mapes, Psychology

SPJ Media Conference Trip

Sean McGrath, Alex Kaluzny, Sarah Fuller, Communication

Retrospective Analysis of Deerfield Country Club

David Miner, Psychology

Crusading military tactics

John Nesbitt, Nich Caccamise, Megan Reeves, History

Retrospective Analysis of Buffalo Sabres

Anthony Polvino, Psychology

Groups and People During the Crusades

Jordan Reed, Shawn Sprankle, Craig Lavery, History

Justice at the Border

Alicia Rutkowski, Venessa Anania, Cielo Ornelas Macfarlane, Ethnic Studies

Developed Survey to Determine Barriers to Breastfeeding

Chelsey Sengillo, Public Health (Sociology)

Rape myth acceptance, psychopathy and acceptance of interpersonal violence

Courtney Smith, Delaney Dretto, Psychology

Retrospective Analysis of Saratoga Bridges

Emily Spain, Psychology

Goodbye paper, Hello Digital?

Kathleen Urtz, Mathematical Sciences (Statistics)

Senior Project: Video Game

Rhiannon Vercant, Computer and Information Sciences

Recrystallized Olivine Grain Size Showing Tectonic Emplacement History of Ultramafic Rocks in the Blue Ridge Mountains of Western North Carolina

Sierra Wiegman, Geology

Black Sexual Politics Through History

Cedric Wilson, Graham Caulfield, Brittney Herbst, Alice Mezhibovsky, Women's and Gender Studies

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

Allelopathic Effect of Centaurea jacea on Native Plant Species

Mona Alabbadi, Biology

Characterizing Novel Solid-State Reaction Intermediates Using Advanced In Situ X-ray Diffraction Techniques

Cassidy Benson, Chemistry

Steroids and Baseball

Anthony DiMonte, Mathematical Sciences (Statistics)

Effects of Aerobic Exercise on Cognitive Function

Cheyenne France, Charlotte Brockway, Lee Lande, James Winney, Exercise Science

Retrospective Analysis of Peaches and Cream

Cheyenne France, Psychology

Probing Structure/Function Relationships in the gurken 5' UTR

Phil Frankino, Biology

Alternative Break Program

Jeannie Galbraith, Danny Galusha, Sociology, Anthropology, Social Work and Criminal Justice

How extraversion personality traits and distraction levels affect math performance, while looking at high-school class size

Brittany Graw, Jacob Abraham, Robert Cooper, Psychology

LINGOE

Katharine Hertweck, Visual Arts and New Media

"Did the Bills Harm Tom Brady" - an overview of the temporal comparative account of harm

Ryan Holt, Philosophy

Retrospective Analysis of Buffalo Sabres

Margaret Horan, Psychology

Does being a part of Greek life in college help you with post grade life?

Keeri Ingallina, Business Administration

The Role of Song in Male-Male Aggression in Crickets

Jenna Johnson, Kawthr Sendi, Biology

Retrospective Analysis of Jefferson's Ferry Retirement Community

Michael Margo, Psychology

Is Sexual Fluidity Influenced by Biological or Cultural Factors?

Bridget McKnight, Psychology

Total Tankination

Adam Moncure, Randel Butts, Computer and Information Sciences

Cross-Cultural Differences in Attitudes Toward Altruism, Forgiveness and Gratitude

Gabriella Pietropaolo, Felicia Schiefer, Curtis Wojick, Psychology

Butch & Femme Gender Roles

Amanda Pruden, Psychology

Engaging in our Community: Blackhorse Women's Rugby

Marie Scime, Volunterer & Community Services

One dimension of bifactor acculturation moderates the relationship between just world beliefs and rape myth acceptance in Hispanic students

Courtney Smith, Delaney Dretto, Avishai Afek, Ariana Grisanti, Psychology

Retrospective Analysis of Tottenville High School Varsity Girl's Lacrosse Team

Stephanie Soboleva, Psychology

"I Saw My People": Prairie Socialism

Jeffrey Taylor, English

FredASSIST Sexual Health Intern

Amanda Thornton, Sociology

Retrospective Analysis of East Mud Lake Association

Genevieve Vanzile, Psychology

Bossy vs. Boss: The Role of Feminist Stereotypes and Identification in the Endorsement of Leadership Gender Roles

Curtis Wojcik, Kara Hall, Bradley Volz, Psychology

Intersectional Audio/Journalism Media Project

Claire Woodcock, English

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

The Effects of Aspartame Use on Spatial Orientation and Memory Span

Jennifer Beaton, Matthew Bussmann, Psychology

The Impact of Augmentative and Alternative Communication Use on Parent-Child Relationships

Grace Bonasera, Alexandra Shanahan, Communication Disorders and Sciences

Digital Forensics

Randall Butts II, Computer and Information Sciences

How does an athlete's temperature affect performance?

Ryan Carmody, Exercise Science

Retrospective Analysis of Quaker Boy Game Calls

Michael Catuzza, Michael, Psychology

Molecular Analysis of Microbial Films

Miles DeAngelis, Jorge Escobar, Michaela Kinney, Joe Grieco, Biology

Unwind The Mind

Chris Danton, Communication

The Effects of Dynamic Stretching on Power Output

Anthony Dillsworth, Jakob Persons, Steven Shaw, Christopher Partridge, Biology

Women's Reproductive Health

Bridget Doyle, Meghan Bartok, Amanda Thronton, Women's and Gender Studies

Retrospective Analysis of Art Forum

Colleen Finlayson, Psychology

Risky Behavior of High Schoolers

Keeri Ingallina, Mathematical Sciences (Statistics)

Survey of early intervention at the Chautauqua County Department of Health and Human Services

Kristen Kucia, Sociology (Public Health)

Lock Down of the Internet of Things

Zachary Moore, Computer and Information Sciences

Retrospective Analysis of Holiday Valley Children's Learning Center

Katlyn Nuttall, Psychology

Leaving Correctional Facilities: Understanding what it means and how it shapes the transition to adulthood

EmilyAnn Pleszewski, Louise DeCosta-Bacher, Javier Pagan, Casey Springer, Social Work

Lossless Compression of Medical Images Using Burrows-Wheeler Transformation with Inversion Coder

Collin Preston, Computer and Information Sciences

Analyzing the Impact of Employee Attitudes on Customer Satisfaction in Service Settings

Alison Scaringi, Business Administration

Physics Applied to Baseball

John Tucker, Sarah Chamberlain, Physics

Effect of Voice Therapy on Acoustic Vocal Parameters and Self-Perception of Gender in Transgender Patients

Ashley Tyson, Communication Disorders and Sciences

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

Creation of Simple Contact Management System Using Open Source PHP & MySQL

Nicholas Albanese, Computer and Information Sciences

Implementing Burrows Wheeler Transformation Algorithm Using Suffix Array

Tugce Boduroglu, Computer and Information Sciences

Retrospective Analysis of Eastside Grille

Allison Burdick, Psychology

Lesson Project and Activities Grade 5-12 Mathematics

Amanda Buzard, Dillon Castro, Madison Cole, Brianna Garland, Leigh Gates, Tristin Hageman, Sean Larson, Dylan Leitner, Nicholas Liberatore, Konner Liebermann, Brett Martin, Joseph Nelson, Collene Sikora, Emily Tronolone, Justin Cunningham, Lorenzo Amato, Mary Plum, Cora Abraham, Luis Flores, Benjamin Soto, Zachary Jones, Mathematical Sciences

German's Occupation of France During World War II: The Necessity of Allies in War

Rita Cain, Politics and International Affairs

Engaging in Our Community: Students in Service, Delta Chi Fraternity

Nicholas Calhoun, Volunteer and Community Service

Retrospective Analysis of Black Student Union

Jakera Cooper, Psychology

The Effects of Large and Small Muscle Mass Exercises on Cognitive Function

Chelsea Costello, Olivia Kurbs, Micheala Maselli, Jonmichael Knapp, Biology

Using Science Fiction to Help Students Look to the Future

Jill Durland, English

Creating a Healthier Community

Anna Ferrante, Sociology (Public Health)

Evaluating Standardized Testing Results in BUAD: Why the Difference and What Now?

Cody Fuller, Nathan Jones, Michael Biscotto, Megan Condidorio, Business Administration

Correlation between Body and perception of others

Ariana Grisanti, Devan Nichols, Lauren Ciulla, Psychology

Balm in Gilead Scenic Design / It's a Wonderful Life Costume Design

Chad Healy, Theatre and Dance

The role of agreeableness in sexist attitudes

Raven Hess, Avishai Afek, Psychology

Integrating Water Systems of Dunkirk, Fredonia, and Brocton: A graphic analysis of pipe sizing and routes for proposed and existing waterlines

Zakkary Hess, Geosciences

Retrospective Analysis of Operation Smile

Alfred Molinari, Psychology

Religious Issues of the Crusades

Emily O'Sullivan, Rachel Skopinsky, Julian Ferris, History

Using Leadership Theory in Practice

Charlotte Passero, Honors Program

On the road Towards Activism...

Jeany Melendez Santiago, Ernesto Mercado, Nadia Herrera, World Languages and Cultures

Using Experiential Learning to Improve Disability Services on a College Campus Using Quality Techniques: A Case Study

Alison Scaringi, Business Administration

Autonomous Robots

Baris Can Secim, Computer and Information Sciences

From Gender to Genre: Working with Youth to Promote Social Justice

Rachel Teets, English

Parent Modifications to a Dialogic Reading Program Based on Child and Other Characteristics

Kelsey Travers, Psychology

Relations Between Academic Year and Internal Locus of Control, Academic Self-Efficacy, and Effective Study Habits in College Students

Nichole Whiteford, Psychology

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

How a Rule Change Affected Fumbles in the NFL

Nicholas Ahlstrom, Mathematical Sciences (Statistics)

Historical Sexual Discriminations

Lindsey Bauza, Dean Bavisotto, Megan Collins, Richard Sanders, History

Retrospective Analysis of Old Navy

Taylor Cirrito, Psychology

Behavioral differences in grooming of Big Brown Bats (*Eptesicus fuscus*) are correlated with ectoparasite density, bat gender, and bat forearm length.

Taylor Coleman, Biology

History of Inclusive Sex Education

Kaitlin Cox, Margaret Keefer, Danielle Backus, Women's and Gender Studies

Angiotensin Converting Enzyme: A look into the various binding interactions of ACE Inhibitors

Gretchen Elwell, Chemistry

Retrospective Analysis of Walgreens

Ericka Gaye, Psychology

Identifying Novel Drosophila Mutations That Affect gurken Translation in spindle B Mutants

John Hasper, Biology

Students' Writing Can Be Better.

Christina Kennison, English

Retrospective Analysis of Fredonia's Women's Tennis Team

Phoebe Langdon, Psychology

"The Most Dangerous Game" Animatic

GiAnna Ligammari, Alex Glazier, Matthew Pellegrino, Jack Weaver, Zachary Tietje, Rhiannon Vercant, Richard McKaba, Amanda Gusmano, Alex Jun, Animation/Illustration

Volunteering in Community: Fredonia for St. Jude

Alison Malcolm, Career Development/Volunteer and Community Services

The developmental and behavioral effects of neonatal exposure to lithium

Kelli Michel, Psychology

Dating and Friendship in Lesbian Relationships

Jessica Miller, Kathleen Urtz, Psychology

Social Studies Education Program Co-ordinator

Kali O'Day, Benjamin Schrantz, Chad Szymkowiak, History

SUNY Model European Union Simulation

Jason Pandich, James Coughlin, Heather Pandich, Politics and International Affairs

Evaluation of the Binding of Zn(II) Complexes to G-Quadruplexes Using a PCR-Stop Assay

Melyssa Shively, Mariya Shapovalova, Biochemistry

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

Acculturation in the Crusader States

Abigail Bellavia, Jacob Schermerhorn, History

NHL Analytics

Michael Biscotto, Mathematical Sciences (Statistics)

Retrospective Analysis of Fredonia Anime Club

Caitlin Blaise, Psychology

Warm-up effect on exercise training

Mary Bolo, Brad Jarrett, Brooke Tobias, Alex Grace, Biology/Exercise Science

I Am.....

Deanna Buley, Victoria Mendiosa, Asia Strickland, Latino Studies

Spectroscopy of High Angular Momentum Rydberg States of H₂

Sarah Chamberlain, John Tucker, Physics

Can Music Alter Mood?

Rachel Dunn, Benjamin Carlson, Elizabeth Mastro, Psychology

Legislative Advocacy Training Day

Kelly Forstbauer, Daniel Galusha, Kathryn Oakes, Antonio Regulier, Social Work

Increasing Student-Athlete Excellence

Sara Gillmeister, Sociology (Public Health)

"Hair" dramaturgy

Maggie Gilroy, Theatre and Dance

Retrospective Analysis of Sigma Kappa

Brittany Graw, Psychology

Retrospective Analysis of Target

Victoria Gray, Psychology

Stopping Sexual Assault Silence

Bianca Grazioplene, Women's and Gender Studies

Temperament and Cognition Through Adulthood

Hailey Griewisch, Amanda Cocchiara, Psychology

Challenges of Working with the Elderly

Hailey Griewisch, Amanda Cocchiara, Psychology

Informal vs. Formal Mathematics Vocabulary: A Study of Middle School Students' Mathematical Vocabulary Comprehension

Heidi Gunio, Mathematical Sciences

The Effect of Calculator Use on Students' Abilities to Compute Basic Operational Mathematics Problems Using the Activation of Prior Knowledge

Leah Kleiman, Mathematical Sciences

College Students' Perceptions of Literary Characters

Rebecca Kohl, Cassandra Weiner, Richard Belz, Psychology

Developing Materials to Increase Awareness of Important Public Health Issues

Haley Meier, Sociology

Comparing The New York State 2005 School Performance Indicators And Past Regents Examinations With The Current New York State Common Core School Mathematics Standards And Assessments

Travis Mirabella, Mathematical Sciences

Investigating fundamentals of digital image processing and dithering algorithms

Volkan Oztuzun, Computer and Information Sciences

Retrospective Analysis of Deep Tanks Studio

Brandon Perdomo, Psychology

Parent-Kindergartener Shared Reading Pilot Intervention

Brooklyn Ruggieri, Melissa Guida, Psychology

Retrospective Analysis of Aviation Sectors

Tugce Sezer, Psychology

Retrospective Analysis of Girl Scouts of America

Rebecca Shulman, Psychology

The Study of Image Conversion Algorithms

Samuel Simpson, Computer and Information Sciences

Student Choice in Relation to Test Anxiety and Performance

Erin Thompson, Mathematical Sciences

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

Retrospective Analysis of Fredonia's Bookstore/Convenience Store

Aminata Barry, Psychology

Statistics in College Hockey

Taylor Bourne, Mathematical Sciences

Retrospective Analysis of ENACTUS

Jillian Burgess, Psychology

Slut Stigma: The History of Shame Surrounding Women's Sexuality

Francesca Gerace, Emma Clark, Bridget Burch, Terese Caiazza, Women's and Gender Studies

Iberia in the Crusades

Alex Gonzalez, Samuel Hoffman, History

Building and Maintaining a Living and Learning Community: The Honors' House

Julianna Grabowski, Kenneth Starr, History

Literature in Action: Dunkirk Community Garden

Jordan Holmes, Alexandra Shanahan, Rachel Fischer, Randall Fox Jr., World Languages and Cultures

Retrospective Analysis of Fredonia's Track and Field Team

Olivia Kurbs, Psychology

Therapist Availability

Shannon McNally, Sociology

Erasure of Trans Identities

Amanda Rae Ongley, Deanna Buley, Kira Goidel, Women's and Gender Studies

Fashion, Privilege, and the Formation of Trans Identities

Rae Ongley, Women's and Gender Studies

Retrospective Analysis of 2014 Wegmans LPGA Championship

Jeffrey Phillips, Psychology

Dangerous: an exploration of a soul in bondage

Cecelia Price, Visual Arts and New Media

Young children in nature

Analisyia Ramos, Curriculum and Instruction

Retrospective Analysis of Transit Valley Country Club

Anthony Schiro, Psychology

Retrospective Analysis of Alternative Break Program

Jennifer Scofield, Psychology

***Volunteer and Community Services, Students in Service Making a Difference:
Delta Phi Epsilon***

LeighAnn Shaffer, Volunteer and Community Services

Kintsugi

Hannah Shea, Visual Arts and New Media

Peer Advocacy Programs

Merique Suliveras, Women's and Gender Studies

Designing of Music Database Management Application on a Local Host

Amanda Sutter, Michaela Yehl, Computer and Information Sciences

Barriers of Service Learning

Sarah Titus, Psychology

Retrospective Analysis of JCC Hultquist Library

Katie Young, Psychology

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

The Graduates

Minju Kim, Communication

Retrospective Analysis of Fredonia's Women's Tennis Team

Emily Fulkerson, Psychology

Retrospective Analysis of Cam's Pizzeria

Holly Lavin, Psychology

Retrospective Analysis of Denny's

Rico Nelson, Psychology

A Day In The Life Of A Whiteboard

Sarah Pietras, Communication

The Undefined Korean Peninsula

Jiyeon Seung, Politics and International Affairs

Retrospective Analysis of Family Video

Brandon Torrance, Psychology

ORAL PRESENTATIONS

Room G103A

2:30 p.m.

How the Internet Has Affected Views of Homosexuality in the Middle East
Krista Sion, International Studies

3:00 p.m.

Waking Nightmares Exposed through Horror Anthology Television
Cassandra Riggio, Communication

3:30 p.m.

Virginia Woolf and Sylvia Pankhurst: Radical Pacifists
Wendy Dunst, English

5:00 p.m.

Lily Dale: Crossroads of Spiritualism and Women's Suffrage
Codee Spinner, American Studies

Room G103C

1:00 p.m.

WiseFork
Christian Hy, Business Administration

1:30 p.m.

An investigation of movement types and frequencies during preschool music class
Marisa Esposito, Music Education

2:00 p.m.

Colonial Cannibalism

William Lista, English

5:00 p.m.

Thanatos

Giacomo Tucker, English

5:30 p.m.

"The Kitty": How I Did It

Edward Gallivan, Visual Arts and New Media

Room S204E

2:00 p.m.

"I Saw My People": Prairie Socialism

Jeffrey Taylor, Music/American Studies

2:30 p.m.

Analyzing mRNA Secondary Structure Using SHAPE Chemistry in Search of an Internal Ribosomal Entry Site

Allison Martin, Biology/Biochemistry

3:00 p.m.

ENACTUS

Sarah Smith, Justin Cunningham, Lorenzo Amato, Mary Plum, Cora Abraham, Luis Flores, Benjamin Soto, Jillian Burgess, Business Administration

3:30 p.m.

Oneidas/Designers & Forests

Cassandra Perry, Visual Arts and New Media

5:00 p.m.

Writing for the Future: An Overview of the National Creative Writing Conference

Rianna Seelig, Emily Wynn, Patricia Albro, Riley Straw, English

MUSICAL PERFORMANCE

Room G103A

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

Reflections on the Nature of Water

Christopher Keeler, Music

Gamelan in Fredonia

Paul Chambers, Music

THEATRE PERFORMANCE

Room G103C

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

Physical Theatre

Brittany Partridge, Miquon Jackson, Theatre and Dance

DANCE PERFORMANCE

Dance Studio – 148 Dods Hall

1:30 p.m.

Telegraph

Choreographer:

Danielle Izzo

Presenters:

Adam Ali, Courtney Stewart, Molly Carriero, Jasmine Mattar,

Tess Grosvenor, Joan Cusick

Understudy:

Rachel Prikazsky

Orion III

Choreographer: Sam Kenney, Associate Professor, Theatre & Dance
Presenters: Adam Ali, Lauren Dewey-Wright, Danielle Izzo, Jasmine Joyner, Michelle Kirisits, Noelle Lazor, Alexa Lindberg, Jasmine Mattar, Courtney Stewart, Kathryn Straub
Understudies: Bianca Dam, Nicole Miller, Mercedes Smith

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.

Engaging in Our Community: Students in Service, Delta Chi Fraternity

Nicholas Calhoun, Volunteer and Community Service

Fredonia NSSLHA: Students Engaging in Volunteer and Community Service

Olivia Kaltenbach, Communication Disorders and Sciences

Volunteering in Community: Fredonia for St. Jude

Alison Malcolm, Career Development/Volunteer and Community Services

Engaging in our community; InterVarsity Christian Fellowship Community Service Trip

Michael Palazza, Volunteer and Community Services

Volunteer and Community Services, Students in Service Making a Difference: Delta Phi Epsilon

LeighAnn Shaffer, Volunteer and Community Services

Engaging in our Community: Blackhorse Women's Rugby

Marie Scime, Volunteer & Community Services

GRADUATE STUDENT PRESENTATIONS

As part of the OSCAR Student and Creativity Exposition, graduate students from all programs are invited to stop by the WC Room G103C for a general informational session on thesis and capstone projects. All graduate research submitted to the Expo will be highlighted at this session. Undergraduates are also encouraged to stop by to learn more about opportunities at the graduate level here at Fredonia.

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

Allelopathic Effect of *Centaurea jacea* on Native Plant Species

Mona Alabbadi, Biology

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

Warm-up effect on exercise training

Mary Bolo, Brad Jarrett, Brooke Tobias, Alex Grace, Biology/Exercise Science

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

Gamelan in Fredonia

Paul Chambers, Music-Percussion

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

Future Mating Expectations of the Male Praying Mantis

Tyler Christensen, Chris Wemmer, Meredith Nugent, Biology

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

Behavioral differences in grooming of Big Brown Bats (*Eptesicus fuscus*) are correlated with ectoparasite density, bat gender, and bat forearm length.

Taylor Coleman, Biology

A Study of Middle and High School Teachers Performance on the Math CST

Shelby DePew, Mathematical Sciences

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

Using Science Fiction to Help Students Look to the Future

Jill Durland, English

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

Angiotensin Converting Enzyme: A look into the various binding interactions of ACE Inhibitors

Gretchen Elwell, Chemistry

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

Informal vs. Formal Mathematics Vocabulary: A Study of Middle School Students' Mathematical Vocabulary Comprehension

Heidi Gunio, Mathematical Sciences

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

Identifying Novel Drosophila Mutations That Affect gurken Translation in spindle B Mutants

John Hasper, Biology

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

Students' Writing Can Be Better

Christina Kennison, English

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

The Effect of Calculator Use on Students' Abilities to Compute Basic Operational Mathematics Problems Using the Activation of Prior Knowledge

Leah Kleiman, Mathematical Sciences

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

Comparing the new york state 2005 school performance indicators and past regents examinations with the current new york state common core school mathematics standards and assessments

Travis Mirabella, Mathematical Sciences

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

Student Choice in Relation to Test Anxiety and Performance

Erin Thompson, Mathematical Sciences

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

Effect of Voice Therapy on Acoustic Vocal Parameters and Self-Perception of Gender in Transgender Patients

Ashley Tyson, Communication Disorders and Sciences

REMARKS

Room S204ABC

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 S204ABC

4:15 p.m.

Ms. Roslin Smith
Assistant Professor, Communication

***THE 3 M'S, THE STORY OF MY STUDENTS, MY MENTORS
AND MY LIFE.***

Roslin Smith was Managing Director of Scottish media company Fierce Films, based in Edinburgh, UK. As an early champion of digital media, Fierce Films won a 'Best New Business' award in 1998. In addition she co-founded and developed The Film School Scotland, which attracted over 2000 students and cemented educational ties with Ireland and Denmark.

Concentrating on documentary/drama, broadcast credits include the BBC and Yorkshire TV. Working with clients such as The Commonwealth Heads of Government and Edinburgh Grand Opera enabled her work to be distributed as far afield as Greece and New Zealand. As Scottish Correspondent for Sky News Medical Channel, assignments took her all over Britain.

After arriving in Charleston in 2003, she worked on many local projects, some of which were screened at The Gibbes Museum and the CFADA Art Walk. Published work

includes book critiques for The City Paper and Post & Courier newspapers and a review for the UFVA quarterly journal. Her most recent work, *Priscilla's Legacy*, is a documentary about a slave girl who worked for 50 years on a South Carolina Plantation. The film won Best Regional Short at The Charleston Film Festival in 2014, and has been jury selected by the Buffalo Film Festival for screening in April.

Having taught all aspects of digital filmmaking at The Art Institute of Charleston for over 6 years, Ros joined the Fredonia Communication Department in September 2014. Her poetic documentary, *Views from Within*, recently won Chautauqua Tourist Board's *I Love Chautauqua* contest. She is currently producing a documentary feature, *Sleepwalkers. How we are nurturing a nation on speed*, that investigates ADHD and amphetamine use.

RECEPTION IMMEDIATELY FOLLOWING

ABSTRACTS

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

Dance Performances

Retrospective Analysis Psychology Abstract

Allelopathic Effect of Centaurea jacea on Native Plant Species

Mona Alabbadi, Biology

Faculty Mentor: Dr. Jonathan Titus, Biology

Centaurea jacea (brown knapweed) is a successful non-native invasive species in western New York of European origin. The mechanism of how this plant establishes and dominates the ecosystem is still not understood. However, "the novel weapon" hypothesis describes the role of allelopathic chemicals which are released by invasive plant species into the environment and affect the neighboring plants. My study involves one invasive species (*Centaurea jacea*) and two native plant species that grow in western New York State (*Elymus virginicus* and *Erigeron karvinskianus*). Conducting research on allelopathic plants is important due to the various ecological and economic impacts they have on native plants and crops. Invasive plant species are one of the main reasons behind the loss of biodiversity.

To investigate if *C. jacea* has an allelopathic effect on *E. virginicus* and *E. karvinskianus*, two individuals of one native species were planted into 64 plastic pots and one *C.jacea* was planted into half of these pots. Activated carbon at a concentration of 20% was added to half of the pots. Activated carbon absorbs allelochemicals from the soil and shows the effect of the invasive still being present in a pot but without the allelochemicals. This experiment took place in the greenhouse. After 120 days, the plants were harvested, cleaned and dried. Shoots and roots for each individual were separated and weighted. The length and biomass of each plant shoots and roots were recorded.

This experiment is still in progress and further information about the potential of allelopathic chemicals being released by *C. jacea* will be provided at that time.

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

Creation of Simple Contact Management System Using Open Source PHP & MySQL

Nicholas Albanese, Computer and Information Sciences

Faculty Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

This scholarly article involves creation of several online graphical user interfaces (GUIs) and their algorithm development using high level, object oriented, open source programming languages, PHP & MySQL. Creation of GUIs and their algorithms require sound knowledge of PHP/MySQL and mastery of writing the correct software for this

research project. The basic function of this research project is to provide an opportunity to undergraduate students of Fredonia University on how to tackle real-time computer information systems problems using Apache and MySQL software installed on the Department of Computer Science, Linux Operating System (OS) based server. There are a number of steps involved in the designing of interfaces of current scholarly work: (a) Defining of administrative tasks and creation of a menu system, (b) modification of table-creation script to create primary keys and their auto-incremental, (c) to define and create contracts table and (d) finally to add new contacts and delete the old ones from the contact management database system.

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

Retrospective Analysis of The Boys and Girls Club

Julia Aleksandrowicz, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Fredonia's Bookstore/Convenience Store

Aminata Barry, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

How a Rule Change Affected Fumbles in the NFL

Nicholas Ahlstrom, Mathematical Sciences (Statistics)

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences (Statistics)

This research examines trends in the number of fumbles in the NFL from 2002 until 2014. In examining this data I looked at trends of teams based on conference, division, type of stadium, and record. I am interested in the given period of time because in 2006 there was a major rule change that allowed the away team to bring the balls they would be using to the game. I am studying the effect of this rule change on one specific aspect of football, fumbles. Also I analyzed the effect on specific players who were strong advocates of the rule change to see how the years after compare with the years prior. In all cases I attempted to show significant correlation between number of fumbles and other variables. My data comes from www.pro-football-reference.com and www.espn.com.

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

Historical Sexual Discriminations

Lindsey Bauza, Dean Bavisotto, Megan Collins, Richard Sanders, History

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

We will be addressing the discriminations that are still legal to people in the queer community. Using this information to base what has been thankfully made illegal and what is still permitted

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

The Effects of Aspartame Use on Spatial Orientation and Memory Span

Jennifer Beaton, Matthew Bussmann, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

Aspartame is a chemical sweetener used as a sugar alternative in over 6000 food products and has been the subject of decades of controversy. While some research has shown that the consumption of aspartame has no negative effects, other studies have found evidence that aspartame has possible negative cognitive and neurological effects. Participants were asked to complete a survey about aspartame consumption as well as the Visual Memory Span and the Cube Comparison Tests to determine memory and spatial abilities, respectively. Participants who consumed high levels of aspartame for a long duration scored lower on the Cube Comparisons Tests, but not on the Visual Memory Span Test. These findings indicated that aspartame consumption can have negative effects on spatial abilities.

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

Acculturation in the Crusader States

Abigail Bellavia, Jacob Schermerhorn, History

Faculty Mentor: Dr. John Arnold, History

Our presentation will focus on acculturation within the Crusader States from the 11th to the 13th Centuries. An interactive WordPress website will be created, which is designed to educate people on the extent of hybridization that occurred between the Muslims, Christians, and other minorities during the Crusades. Over all, we are attempting to use information we have gathered from primary and secondary sources to reflect the type and degree of cultural exchange in each of the Crusader States.

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

Characterizing Novel Solid-State Reaction Intermediates Using Advanced In Situ X-ray Diffraction Techniques

Cassidy Benson, Chemistry

Faculty Mentor: Dr. Thomas Janik, Chemistry

In permanently porous metal-organic frameworks (MOFs) there exist continuous channels that allow for the dynamic exchange of guest molecules. X-ray diffraction remains one of the most powerful techniques for determining the structure of crystalline MOFs at atomic resolution. This work highlights recent progress in the design and construction of a novel apparatus for monitoring the process of guest exchange in situ

by XRD, with the ultimate goal of developing a molecular-level understanding of the fundamental processes occurring within these materials

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

NHL Analytics

Michael Biscotto, Mathematical Sciences (Statistics)

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences (Statistics)

My project is a study on NHL Analytics. I have compared statistics and run tests to determine which players are the most efficient scorers in the National Hockey League. I have used statistics such as goals, assists, and total points to determine this. Then I looked to see if these players are consistent on a year-to-year basis, and if so, does their performance translate to wins for the respective teams. There are requirements for the players that I take data from. They must have played a minimum of four NHL seasons, minimum 750 minutes per season, and a minimum 3000 minutes over a four-year span. After looking at the performances of individual players, I am looking at what other factors translate to team success such as team goals, puck possession, shots on goal, corsi (all shots taken), blocked shots, power play percentage, penalty kill percentage, even strength goal differential, and even luck.

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

Retrospective Analysis of Fredonia Anime Club

Caitline Blaise, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Implementing Burrows Wheeler Transformation Algorithm Using Suffix Array

Tugce Boduroglu, Computer and Information Sciences

Faculty Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

In this work, I undertake investigation of Block-sorting loss-less data compression algorithm, which was introduced by Burrows and Wheeler in 1994. The algorithm achieves extremely good compression rates as context based methods such as Prediction by Partial Matching but with very high execution speed similar to Zempel-Liv methods. In particular, I implemented the Burrows Wheeler Transformation algorithm using suffix arrays in order to reach better execution speed.

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

Warm-up effect on exercise training

Mary Bolo, Brad Jarrett, Brooke Tobias, Alex Grace, Biology/Exercise Science

Faculty Mentor: Dr. Todd Backes, Biology/Exercise Science

This study demonstrated the effect that three different warm-up training methods had on different fitness parameters. The warm-up methods were passive stretching, PNF stretching and active functional movement. The fitness parameters were cardiorespiratory fitness, muscular endurance, muscular strength and muscular power. Six athletic subjects between the ages of 20 and 30 performed 12 randomized bouts of prescribed warm-up followed by prescribed exercise. The subjects were familiar with all warm-up and prescribed exercises. Each bout of exercise was performed on a separate day within a 2 month period during the spring semester of 2015. Each research trial began with ten minutes of either passive stretching, PNF stretching or active functional movement prior to either a cardiorespiratory fitness test, muscular endurance test, muscular strength test or muscular power test. The cardiorespiratory fitness test performed was either 1 mile running or biking. The muscular endurance test performed was either 1 minute of push-ups, pull-ups, sit-ups, or plyometric jump squats. The muscular strength test was 1 repetition max test of bench, squat, or deadlift. The muscular power test was either a broad jump or a vertical jump. Testing protocols are included. Heart rate measures were taken the morning of the trial and recovery heart rate was taken immediately after the trial.

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

The Impact of Augmentative and Alternative Communication Use on Parent-Child Relationships

Grace Bonasera, Alexandra Shanahan, Communication Disorders and Sciences
Faculty Mentor: Dr. Katrinia Fulcher-Rood, Communication Disorders and Sciences

Children with complex communication needs (CCN) have difficulty understanding and generating language in the same manner as their typically developing counterparts. Typically, children with CCN will rely on Augmentative and Alternative Communication (AAC) technologies, which encompasses all forms of communication other than oral speech, in order to construct language output. Currently, research and development of AAC devices focuses on information transfer and rate enhancement as markers of communicative success, with little attention paid to the personal experiences of the individuals who utilize this technology. The current study sought to understand and evaluate the quality of communication and relationships before and after an AAC device was introduced to a child with CCN. Specifically, the study examined if social closeness, efficiency of communication, and quality of life changed after an AAC device was introduced. The current investigation worked with three individuals who utilized AAC technologies and their parents. The participants in this study completed interview questions, surveys, and a naturalistic observation in order to understand communication patterns before and after AAC device implementation. Results will show how AAC has impacted social relationships among parents and their children, as well as understanding specific device features that aid in social closeness. The findings will be essential to the field of AAC, identifying the strengths that these specific devices hold in social communication, as well as identify areas that need improvement to increase the quality of life for AAC users. Keywords: Augmentative and Alternative Communication, parent-child relationships, quality of life, social closeness, technology development

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

Statistics in College Hockey

Taylor Bourne, Mathematical Sciences

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences

Can the production levels of players on the Fredonia State Division III Men's Hockey Team be predicted using the application of "Enhanced Statistics"(according to NHL.com) to a multiple regression? The data was collected using the game film from the Fredonia Men's Hockey Team from the 2014-2015 season. The "Enhanced Statistics" collected were Corsi For, Corsi Against and Zone Starts. Using the "Enhanced Stats" the production of an athlete was predicted.

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

I Am.....

Deanna Buley, Victoria Mendiosa, Asia Strickland, Latino Studies

Faculty Mentor: Dr. Carmen Rivera, Latino Studies

Our goal for this project is to use Cherríe Moraga's work as a springboard, to allow individuals to explore their own identities. In "Loving in the War Years", Moraga uses the world around her, influences such as her family, romantic partners, and friends to create and reform her own identity. Moraga's use of self-reflection creates a space for discovery of herself as it pertains to sexuality, gender, race, and other identities. By using these ideas it allows our audience to further examine the way they view themselves and how these identifiers place them in society. In many ways, it helps individuals realize that they can be both the oppressor and the oppressed in different ways in society. With our project, our goal is to create an interactive activity that gives the audience a chance to open their eyes to different identities, whether it be their own or others around them.

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

Retrospective Analysis of Eastside Grille

Allison Burdick, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Enactus

Jillian Burgess, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

The Effect of the Actor-Observer Bias on Moral Decision Making

Jillian Burgess, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

The actor-observer bias states that actors attribute their behaviors to situational factors and observers attribute actors behavior to permanent personal characteristics. This study examined how an individual's judgment of morality varies depending on if they are the actor or observer. Subjects completed an online survey that asked them to read two different moral dilemma problems, and then answer questions about each one. The experimental manipulation was whether the participants were placed in an "actor" or "observer" perspective for the moral dilemma problems. Those in the "observer" condition attributed more to the moral context of the situation while those in the "actor" condition attributed more to the situational factors. The actor observer bias has been studied in many contexts, but has not been examined in a moral context. These findings show that the actor observer bias holds true when subjects are placed in moral scenarios.

poster presentation

Digital Forensics

Randall Butts II, Computer and Information Sciences

Faculty Mentor: Mr. Robert Olson, Computer and Information Sciences

Maintaining a valid investigation on a machine that has been infected with a virus or that has had its security breached by a malicious party is a difficult balance between level of access and intrusiveness of the tools used. The more intrusive the measures taken on a machine, the more likely that critical information like open connections, running processes, and open files may be lost. With security breaches at large companies a dime a dozen and our increasing reliance on services to protect our personal information, there are more frequent calls for investigations into how these breaches occurred. The field of digital forensics has grown to accommodate that gap, teaching the skills needed to performing investigations of integrity. This research is an exploration into the field of digital forensics and includes an investigation of a computer compromised by actual hackers in the wild.

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

Lesson Project and Activities Grade 5-12 Mathematics

Amanda Buzard, Dillon Castro, Madison Cole, Brianna Garland, Leigh Gates, Tristin Hageman, Sean Larson, Dylan Leitner, Nicholas Liberatore, Konner Liebermann, Brett Martin, Joseph Nelson, Collene Sikora, Emily Tronolone, Justin Cunningham, Lorenzo Amato, Mary Plum, Cora Abraham, Luis Flores, Benjamin Soto, Zachary Jones,
Mathematical Sciences

Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

Innovative projects and activities are on display in this multi poster presentation highlighting Fredonia mathematics education students. Senior methods candidates showcase their invited work from the Association of Mathematics Teachers' of New York State (AMTNYS) annual conference. From calculus to fractions (and plenty in between) candidates offer classroom-ready material for novice and veteran teachers alike.

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

German's Occupation of France During World War II: The Necessity of Allies in War

Rita Cain, Politics and International Affairs

Faculty Mentor: Dr. Ivani Vassoler-Froelich, Politics and International Affairs

The role of France in World War II proved to be essential for who would win the war. For this reason, the lack of communication with its allies caused France to fall and become occupied by Germany in 1940 after France had tried to fight Germany alone. The fall of France not only hurt France but also hurt France's allies, especially Great Britain. It was crucial that France was freed from Germany for the Allies to gain France's resources and have France be able to fight against Germany once again. Through the efforts and collaboration of the Allies, France was freed from German occupation in August 1944, which allowed the Allies to gain the upper hand and eventually win the war against Germany.

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

Engaging in Our Community: Students in Service, Delta Chi Fraternity

Nicholas Calhoun, Volunteer and Community Service

Faculty Mentor: Ms. Joyce Smith, Volunteer and Community Service

For more than a decade, The Delta Chi Fraternity has worked with the Volunteer and Community Service office to make our community a better place to live. Logging over 900+ hours annually for the past five 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 2:30 p.m. to 3:00 p.m

How does an athletes temperature affect performance?

Ryan Carmody, Exercise Science

Faculty Mentor: Dr. Todd Backes, Exercise Science

An athletes temperature greatly affects performance. As Core temperature decreases, physiological changes occur. There is reduced blood flow to muscles, and nerve impulses to move muscles slow down. What happens to muscles Range of Motion (ROM) as temps decrease? What happens to muscles power output as temps

decrease? A similar study done measured the effects of lower leg muscles in 10° water for 20 minutes, and found that there was significant decrease in isometric maximal force of the tibialis anterior. We believe that as temps decrease range of motion and power output will decrease significantly. Our methods include running our subjects through 2 separate tests. The sit and reach test, and max leg extension test. Multiple times without first icing down, and also multiple times after icing down. Our results and discussions are a work in progress at this point.

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

Retrospective Analysis of Quaker Boy Game Calls

Michael Catuzza, Michael, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Spectroscopy of High Angular Momentum Rydberg States of H₂

Sarah Chamberlain, John Tucker, Physics
Faculty Mentor: Dr. Erica Simoson, Physics

Obtaining precise values of the fine structures of high-angular momentum Rydberg states of rotationally excited H₂⁺ (R=2 and R=3) were previously limited to theoretical calculations and several non-adiabatic models. Since the H₂⁺ ion does not have many stable excited states, approaching the basic model of H₂ in high-angular momentum Rydberg states with the detection technique of Resonant Excitation Stark Ionization Spectroscopy (RESIS) allows measurements of this fine structure. By measuring this fine structure, the scaling of the pattern leads to the polarizability of the core ion, H₂⁺.

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

Gamelan in Fredonia

Paul Chambers, Music-Percussion
Faculty Mentor: Dr. Karolyn Stonefelt, Music-Percussion

A brief presentation will be made on the process of how the SUNY Fredonia Percussion Guild acquired a set of the Indonesian ensemble of instruments collectively known as Gamelan. A discussion of how the ensemble was formed as well as how the music is being learned and presented in Fredonia while maintaining the oral traditions of this genre of folk music. A performance by the group will follow.

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

Future Mating Expectations of the Male Praying Mantis

Tyler Christensen, Chris Wemmer, Meredith Nugent, Biology
Faculty Mentor: Dr. William Brown, Biology

Female praying mantids are notorious for cannibalizing their sexual partners after copulation. If a male was to survive a mating event, what is the likelihood that he mates again? In this study, we aim to examine the mating opportunities and the future mating expectations of male mantids after their first mating experience. We have selected two field sites that are optimal habitat for local praying mantis species (*Tenodera sinensis* and *Mantis religiosa*). We will utilize techniques such as mark and recapture, DNA extraction, PCR methods, and analysis of microsatellites. From the data we gather, we should be able to determine the possibility of males to mate multiple times within a season, thus giving an idea of whether or not there are high or low future mating expectations after the male's first mating encounter.

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

Retrospective Analysis of Old Navy

Taylor Cirrito, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Behavioral differences in grooming of Big Brown Bats (*Eptesicus fuscus*) are correlated with ectoparasite density, bat gender, and bat forearm length.

Taylor Coleman, Biology

Faculty Mentor: Dr. Karry Kazial, Biology

Surveys of bat colonies have been done to assess the occurrence and prevalence of ectoparasites, but few studies have investigated grooming behaviors in response to ectoparasite density in the US. A sample of Big Brown Bats (*Eptesicus fuscus*) were collected and housed to observe grooming behaviors resulting from manipulations of ectoparasite density. Data on bats' method of grooming and time spent grooming were collected and analyzed for a range of ectoparasite densities. As predicted, the total time bats spent grooming significantly increased with ectoparasite density. Female bats groomed significantly more than male bats, which can be attributed to the colonial nature of females. Additionally, bats with shorter forearms used scratching significantly more as a method of grooming than bats with longer forearms. Using scratching as the primary grooming method is more efficient for smaller bats, whereas larger bats do not show a preference for grooming strategy.

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

Retrospective Analysis of Black Student Union

Jakera Cooper, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

The Effects of Large and Small Muscle Mass Exercises on Cognitive Function

Chelsea Costello, Olivia Kurbs, Micheala Maselli, Jonmichael Knapp, Biology
Faculty Mentor: Dr. Todd Backes, Biology

For our research we are conducting an study that will show the different affects of working certain muscle mass will have on cognitive function. The exact study will have a group of participants performing burpee's followed with a concussion test; while the other group of participants will perform leg press reps also directly followed with a concussion test. Both groups will perform until a specific heart rate is reached (heart rate not yet determined). Previous studies have shown that having some type of physical activity prior to being cognitively test will improve test results. The question being proposed for this study is, will there be a difference in post concussion test scores between the two groups and why, as well as if the difference is seen what is the cause? Our hypothesis is that the group performing burpee's will score higher on the test due to of the amount of muscle being used during the exercise as apposed to doing a single joint leg press. Our results are not yet determined, as the study is still in progress.

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

History of Inclusive Sex Education

Kaitlin Cox, Margaret Keefer, Danielle Backus, Women's and Gender Studies
Faculty Mentor: Dr. Jeffrey Iovannone, Women's and Gender Studies

This project focuses on the LGBTQIA+ inclusivity and history of sex education in the United States.

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

Unwind The Mind

Chris Danton, Communication
Faculty Mentor: Ms. Roslin Smith, Communication

Poster for my upcoming documentary exploring yoga and it's benefits.

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

Flipping the Switch on Bluetooth Security

Jason Davison, Computer and Information Sciences
Faculty Mentor: Mr. Robert Olson, Computer and Information Sciences

The concept of the Internet of Things has been established as a world where nearly every physical device is connected to the internet in order to provide better service and also identify itself with other devices. The Bluetooth protocol was introduced in 1994, and it has since quickly become one of the most widely used close range wireless protocols. As the protocol continues to grow in popularity, it will become more of an

interest and target for attackers. Unfortunately the Bluetooth protocol falls victim to many of the same vulnerabilities that its wireless predecessors have. The focus of this research is spoofing Bluetooth addresses and sniffing the Bluetooth packets that allow the master (smartphone) and slave devices (smart bulb) within the piconet to communicate. This would allow for the discovery and identification of possible attack vectors to potentially exploit the software on the light bulb.

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

Molecular Analysis of Microbial Films

Miles DeAngelis, Jorge Escobar, Michaela Kinney, Joe Grieco, Biology
Faculty Mentor: Dr. Theodore Lee, Biology

Biofilms are naturally occurring bacterial growth formations. Many are famously seen in Yellowstone National Park. On a more local level, Canadaway Creek has biofilms of its own. These dark films are located on or near the shoreline of the creek. We are using a genetic approach to identify organisms in the biofilm. Genomic DNA was isolated from the biofilms. This DNA was amplified and then inserted into plasmid vectors. Recombinant plasmids were transformed into *Escherichia coli*, purified and sequenced to determine what organisms are present in the biofilm. This analysis has yielded five bacterial families that contain iron cycling members. Fluorescence In situ Hybridization is being used to determine the percent composition of different groups of bacteria in the biofilm.

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

#AbortAbortionStigma

Nicole DeFilippis, Merique Suliveras, Women's and Gender Studies
Faculty Mentor: Dr. Jeffrey Iovannone, Women's and Gender Studies

For our Sexuality in America class we will be working on a group project that involves a social media campaign about an issue relating to sexuality that we are passionate about. Our topic is Abortion Stigma. Through the use of Instagram we will be posting Abortion Inforgraphics, that we will make. Our main goal is to show people the truth about getting an abortion, and statistics to ensure that abortion is no longer a taboo topic.

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

A Study of Middle and High School Teachers Performance on the Math CST

Shelby DePew, Mathematical Sciences
Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

This study explores mathematics teacher's retention of mathematical concepts. Specifically, the concepts that are deemed most important by the New York State's Mathematics Content Specialty Test (Math CST)

poster presentation

The Beneficial Effects of Research on Clinical Experiences in Communication Disorders and Sciences

Kearstin Derrenbacher, Nicole Angelone, Emily Ackles, Communication Disorders and Sciences

Faculty Mentor: Dr. Anny Castilla-Earls, Communication Disorders and Sciences

As students working under Dr. Castilla-Earls in the Child Language Lab here at Fredonia we have gained significant knowledge on research approaches and applications to our field of study: Communication Disorders and Sciences. We have experienced multiple stages of the research process, including data collection and data analysis. We would like to show how these experiences have integrated into our current studies and the benefits it will give us in graduate school and future clinical settings as a certified professionals. In the first stage of research we administered and scored multiple standardized tests to children in local school districts. The second stage was to transcribe the collected language samples using the SALT program system to analyze their language capabilities. Through these stages, we have gained significant knowledge and experiences in the clinical field and it has enlightened us to what research in our field entails.

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

The Effects of Dynamic Stretching on Power Output

Anthony Dillsworth, Jakob Persons, Steven Shaw, Christopher Partridge, Biology

Faculty Mentor: Dr. Todd Backes, Biology

Stretching is a technique that is commonly practiced in efforts to prevent injury and increase athletic performance. While stretching may increase one's flexibility, stretching has also shown to have negative effects on the power output of muscles. Power output is an important aspect of "explosive" movements, such as jumping. We believe that dynamic stretching will result in a decrease in the post-stretch vertical jump. This is being assumed based off of the premises that stretching one's muscles acutely before an event lengthens the fibers and reduces the tension force of the muscle. There will be four subjects for the experiment, who are all adult white males between the ages of 21 to 22. A flexibility test will be administered to assess the general flexibility of subjects. All subjects will participate in dynamic stretching exercises for approximately ten minutes. The subjects will then have three different trials of vertical jump which will be measured using a vertical jump mat.

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

Steroids and Baseball

Anthony DiMonte, Mathematical Sciences (Statistics)

I examined statistics related to Major League Baseball and more specifically with numerous players who have or were rumored to have taken steroids during their careers. I used both complexsports.com and baseballreference.com to obtain my data. I elected to use the 21 top alleged and confirmed steroid users in baseball history (Judged by complexsports.com). Brett Boone, Ken Caminiti, Wally Joyner, Mo Vaughn, Ryan Braun, David Justice, Jason Giambi, Juan Gonzalez, Mike Piazza, Jeff Bagwell, David Ortiz, Miguel Tejada, Jose Canseco, Mark McGwire, Ivan Rodriguez, Sammy Sosa, Gary Schefield, Manny Ramirez, Rafael Palmeiro, Alex Rodriguez and Barry Bonds. My objective was to look at each player's career and find out what differences from year to year can be used to detect steroid use. The variables I used are Batting Average (BA), On Base Percentage (OBP), Home Run (HR) and Runs Batted In (RBI).

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

What Affects Team Wins?

Joe DiRaimo, Mathematical Sciences (Statistics)

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences (Statistics)

What variables determine the amount of wins a MLB team has throughout the year? I used statistics from the 2013 and 2014 season. My response variable is number wins. Some of my predictors are runs per game, hits, batting average, ERA, WHIP, and payroll. I found my data from www.baseball-reference.com. I found out which predictors are strongly correlated with number of wins and which are less correlated with number of wins. General Managers and owners can use my findings to help them find players that help the team win more games.

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

Women's Reproductive Health

Bridget Doyle, Meghan Bartok, Amanda Thronton, Women's and Gender Studies

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

This presentation will be an educational opportunity through various social media outlets. We will present our research through an oral presentation and poster. We will be drawing connections from various historical movements to today's modern debate on women's reproductive rights in our presentation.

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

Can Music Alter Mood?

Rachel Dunn, Benjamin Carlson, Elizabeth Mastro, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

Music has been shown to change perceptions and evoke emotions. This study investigated music's ability to specifically change the overall mood of the listener in accordance with the type of music they heard. College students were randomly

assigned to one of five different music conditions. Participants completed current mood surveys prior to music exposure and again 10 minutes after exposure and a distracting task. The results showed that the participants' current mood was correlated with the aggressiveness and emotional tone of each music condition. The cognitive, emotional and even cultural effects of music can be tied to varied mental states and may contribute to the treatment of mood disorders and other aspects of mental health.

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

Virginia Woolf and Sylvia Pankhurst: Radical Pacifists

Wendy Dunst, English

Faculty Mentor: Dr. Jeannette McVicker, English

Although Virginia Woolf and Sylvia Pankhurst were born only months apart, they thought, wrote, and acted much differently about World War I.

Woolf battled emotional problems during World War I, twice suffering mental breakdowns and surviving a suicide attempt. Her actions started internally, with deep contemplation and far-reaching vision. She publicly wrote about the war only after it had been over by several years.

Pankhurst, by contrast, was already publicly active when the war started. She had been working for women's suffrage and workers' rights before the war, and wrote extensively in support of these issues.

Vociferously opposed to the war, Pankhurst was active in helping to alleviate some of its hardships by organizing legal centers to assist soldiers' wives, setting up food centers for the poor, and establishing employment opportunities for women.

I will discuss each writer's war work, and how this work affected their personal and professional lives.

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

Using Science Fiction to Help Students Look to the Future

Jill Durland, English

Faculty Mentor: Dr. Bruce Simon, English

Educators are often tasked with the role of helping students look to an ever changing future while helping to keep an eye on the present. The goal of education should be to create citizens of the world that are prepared to take up a role in society once they leave the classroom. The genre of science fiction has a long history of creating a vision of the future, often reflecting current fears and challenges within society. Scott Westerfeld's *Uglies* and Matthew Tobin Anderson's *Feed* are two YA novels that address current issues in society. Both books could tie into lessons with media literacy that challenge students to look critically at images presented online and in advertisements. Using such science fiction texts, with readings about current events, can help students critically examine the impact of society's current decisions and look to a future they will be asked to handle.

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

Angiotensin Converting Enzyme: A look into the various binding interactions of ACE Inhibitors

Gretchen Elwell, Chemistry

Faculty Mentor: Dr. Matthew Fountain, Chemistry

Angiotensin Converting Enzyme (ACE) plays a key role in the renin-angiotensin system; an important function of the body that controls blood pressure and regulates fluids in the body. ACE inhibitors have been developed to combat hypertension and congestive heart failure. The purpose of the poster presentation was to compare the binding mechanisms of various ACE inhibitors. Four inhibitors were modeled within the three dimensional structure of ACE protein molecule- Captopril, Lisinopril, Angiotensin II and bradykinin potentiating peptide (BPPb). The results show that three of the inhibitors, Captopril, Lisinopril and Angiotensin II, share similar binding mechanisms with little change to the conformation of ACE. BPPb inhibitor had similar binding but caused slight conformation changes to the ACE protein and eliminated the Zn ion which the other inhibitors use for binding.

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

An investigation of movement types and frequencies during preschool music class

Marisa Esposito, Music Education

Faculty Mentor: Ms. Jill Reese, Music Education

Early childhood development has been extensively researched, and studies repeatedly support the fact that the preschool years are a critical period for the development of musical abilities. Because most fundamental motor skills and patterns have already emerged by age 5, children are ready and able to move musically and with purpose during the preschool years. Children may develop sensitivity to emotional meaning to music, which opens the door to personal expression through movement (Gooding and Stanley, 2011). Most importantly, children are active learners who crave kinesthetic and tactile participation in their environments. Movement-based musical education is not only developmentally appropriate, but vital.

While the total number of movements performed by children during live music decreased slightly over time, the total number of movements during recorded music increased. This is an important finding because, although recorded stimulus only made up about 7% of the class (two one-minute recordings were played during a 30 minute class), movement frequencies during recorded music consistently hovered at about 20% (tables 1.2 and 2.2) of all movements observed during class. This evidence strongly supports the idea that one minute spent with recorded stimulus was more movement rich than one minute of spent with live music (frequency vs. time ratios for recorded and live music measure 285% and 80% respectively.) The value of exposing preschool children to recorded stimulus in addition to live musical play is underlined with this data. Moving this way to recorded music is a productive outlet for many children

because they are not expected to be singled out or to adhere to a specific task. This may be especially beneficial to preschoolers who are spending a lot of energy adapting to the structure of school, rules, and staying on task.

Future researchers might consider investigating what causes certain movement types to emerge and fluctuate based on age and physical development as well as whether or not a correlation exists between movement preference and developmental stage.

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

Poetry BroadSides: Re-Visioning Poems

Caeli Feist, Tish Albro, Rachel Beneway, Zack Coffey, Joshua Harris, Katarina Kleine, Michael Limoncelli, Leslea Moss, Kelsey Mussen, Katryna Pierce, Daniela Rodriguez, Rianna Seelig, Joe Smith, Riley Straw, Emily Wynne, English
Faculty Mentor: Ms. Aimee Nezhukumatathil, English

The students of ENGL 460, Advanced Poetry Writing, will display and informally talk about poetry broadsides--the craft of visual poetry. The poems presented will be from a selection of contemporary poems we have studied during the semester.

Will be displayed all day

Creating a Healthier Community

Anna Ferrante, Sociology (Public Health)
Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

Using the 2015 Village of Fredonia Safety Survey as part of the Fredonia Active Community Enhancements project, responses from 522 community members were used to understand their opinions on proposed improvements to the intersection of Temple Street and Central Avenue. These improvements include a timed crossing device at all crosswalks, the addition of a right turn arrow and the addition of bicycle lanes and narrow travel lanes on Central Avenue to the college. The variables used to cross tabulate the results include the activities for which people use the streets and sidewalks, how often people walk, bike or jog in the Village, their employment status and where they live in relation to the village. In support of local health efforts to enhance the ability to walk and bike in the village, the results will be used to help earn funding for the implementation of the proposed improvements.

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

Retrospective Analysis of Art Forum

Colleen Finlayson, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Legislative Advocacy Training Day

Kelly Forstbauer, Daniel Galusha, Kathryn Oakes, Antonio Regulier, Social Work
Faculty Mentor: Dr. Rolanda Ward, Social Work

The BSW Social Action Group is an undergraduate research team that has been researching the impact of additional child welfare training at the BSW level for those working in the Child Welfare field. Findings from this research showed there is a benefit to having caseworkers receive additional child welfare training before entering the field. However, the BSW Child Welfare Scholarship program which provided this training at the BSW level was defunded in 2013. With this knowledge, the BSW Social Action Group created the Legislative Advocacy Training Day. Our conference took place in Albany, NY in partnership with the University of Albany to teach students how to advocate at the legislative level. Twelve students from Fredonia partnered with students in Albany to learn about the research collected on this project, learn advocacy and lobbying techniques, and meet with legislators to advocate for the reinstatement of the BSW Child Welfare Scholarship program.

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

Treadmill motor for automation

Michael Forster, Theatre and Dance
Faculty Mentor: Mr. David Stellhorn, Theatre and Dance

My presentation will demonstrate how to utilize recycled DC permanent magnet motors for theatrical automation systems. At SUNY Fredonia, we used this system for a large rotating turntable and an elevator in two separate live theatre productions. Michael Forster was involved in the electronic control systems for both of these projects.

group Presentation

Retrospective Analysis of Peaches and Cream

Cheyenne France, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Effects of Aerobic Exercise on Cognitive Function

Cheyenne France, Charlotte Brockway, Lee Lande, James Winney, Exercise Science
Faculty Mentor: Dr. Todd Backes, Exercise Science

Cognitive function is defined as an intellectual process by which one becomes aware of, perceives, or comprehends ideas. Cognitive function naturally decreases with age, but exercise can slow this decrease by increasing blood and oxygen flow to the brain. Our hypothesis is that moderate aerobic exercise will improve cognitive function and that as duration of exercise increases, so will the increase in memory recall. We will compare

control group (no exercise) to an exercise group with a 10, 20, and 30 minute exercise on a stationary bike. The subjects will see 20 images, and will then have to sort out those 20 from a group of 60 images. This image recall test will be repeated 2 days following the first testing to see if there is lasting memory recall.

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

Probing Structure/Function Relationships in the gurken 5' UTR

Phil Frankino, Biology

Faculty Mentor: Dr. Scott Ferguson, Biology

The protein Gurken (grk) is a developmentally important morphogen that helps to determine dorsal/ventral polarity in the developing oocyte of *Drosophila melanogaster*. Like many mRNAs, grk is translated by the canonical binding of the pre-initiation complex to the 5' 7-methyl-guanasine cap. We hypothesize that grk mRNA also has structural features in the 5' UTR that facilitate internal ribosomal entry site (IRES) activity. This hypothesis was made based on the observation that grk translation persists when cap dependent translation is repressed, via nutrient deprivation or ingestion of rapamycin. SHAPE RNA structural analysis suggests that there are two hairpin stem loops in the 5' UTR that coincide with the general characteristics of known IRES structures. In vivo reporter constructs with mutations in the stem loops have been generated and transgenically inserted in *Drosophila*. Luciferase assays were performed, concluding a possible negative regulatory function of these stem loops. Further mutations were made in the 5' UTR to investigate the role of a downstream sequence, complementary to the essential AUG start codon, providing possible secondary structure that may contribute to IRES translation. These mutations will be cloned into reporter constructs and transgenically inserted in *Drosophila*. The resulting data will provide insights into the function of these structures in grk translation during *Drosophila* development.

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

Retrospective Analysis of Fredonia's Women's Tennis Team

Emily Fulkerson, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Evaluating Standardized Testing Results in BUAD: Why the Difference and What Now?

Cody Fuller, Nathan Jones, Michael Biscotto, Megan M Condidorio, Business Administration

Faculty Mentor: Dr. Lisa Walters, Business Administration

This project sought to understand the changes in overall standardized testing scores between two cohorts within the school of business. The analysis determined that the high school GPAs of the lower performing cohort were statistically lower than that of the

higher performing cohort, while the SAT scores for each cohort did not demonstrate statistical differences. Further, the evaluation of business administration curriculum in terms of benchmark competitors resulted in no real differences in content delivered. These findings suggest that high school GPAs might be a better indicator of academic performance in terms of business administration curriculum.

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

Alternative Break Program

Jeannie Galbraith, Danny Galusha, Sociology, Anthropology, Social Work and Criminal Justice

Faculty Mentor: Dr. Rolanda Ward, Sociology, Anthropology, Social Work and Criminal Justice

The Mission of the Alternative Break Program at The State University of New York at Fredonia is to promote service-learning through direct public service across communities within the United States. This program seeks to heighten social awareness, enhance and encourage personal growth as well as advocate for life-long social action. The ABP participants seek to learn about and comprehend underlying causes of social problems, and in doing so seek social change and social equality.

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

"The Kitty": How I Did It

Edward Gallivan, Visual Arts and New Media

Faculty Mentor: Ms. Jill Johnston, Visual Arts and New Media

I would present to the audience how I created one of my short films. I would talk about how I filmed it, how I did the effects, and what happened when certain equations came together to form the animation.

video/documentary 5:30 p.m. to 6:00 p.m.

Retrospective Analysis of Walgreens

Ericka Gaye, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Feleap The Frog and The Great Big Circus Adventure

Brittany Georgalas, Visual Arts and New Media

Faculty Mentor: Ms. Jill Johnston, Visual Arts New Media

Feleap The Frog and The Great Big Circus Adventure is an inspiring children's book written and illustrated by Brittany Georgalas. The book uses live photographs digitally

edited to create a fun and exciting environment used to tell the story of Feleap and his dream on performing in the circus. All of the characters in the book are unique and created solely from twisting balloons. "Feleap may be the smallest frog in all of Pollywog Pond but he definitely has the biggest dream!"

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

Slut Stigma: The History of Shame Surrounding Women's Sexuality

Francesca Gerace, Emma Clark, Bridget Burch, Terese Caiazza, Women's and Gender Studies

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

For our presentation, we would like to shed light on the social stigma surrounding the term "slut". With the title "'Slut' Stigma" we intend on branching off into the different categories that make up this topic. Firstly, we'd start with the "Why," and focus on "slut-shaming" and the shame and stigma surrounding women and women's sexual expression. Then, we move on to the "Who." Who is most commonly victimized by slut-shaming? Sex workers and Pornstars face stigma surrounding their areas of work. And finally, we want to address "What" this stigma is, specifically surrounding STDs, and debunking STD myths.

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

Increasing Student-Athlete Excellence

Sara Gillmeister, Sociology (Public Health)

Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

Working with the University at Buffalo's student-athlete services staff, I have helped to mobilize community partnerships to investigate the mental and physical hardships encountered by student-athletes. These athletes include those which are involved in athletic programs from every college and institution in New York State. I have worked to understand the causes or roots of these hardships, while researching new insights and solutions to these problems. Using a survey to gather information from all SUNY institutions, we determined the types of services being provided to athletes to have a better overall experience in terms of balancing both their academics and athletics. The best-practice of participating universities were chosen to be incorporated into the current program to enhance the support for student-athletes.

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

"Hair" dramaturgy

Maggie Gilroy, Theatre and Dance

Faculty Mentor: Ms. Jessica Hillman-McCord, Theatre and Dance

This project will display research conducted for the mainstage production of "Hair: the American tribal Love-Rock musical," including program notes, a lobby display and research presentation for the cast and crew members.

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

Iberia in the Crusades

Alex Gonzalez, Samuel Hoffman, History
Faculty Mentor: Dr. John Arnold, History

A observational contrast of Muslim and Christian cultures, exposing societal trends where the cultures blended and conflicted.

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

Building and Maitaining a Living and Learning Community: The Honors' House

Julianna Grabowski, Kenneth Starr, History
Faculty Mentor: Dr. David Kinkela, History

As the two SUNY Fredonia Honors House Interns for the 2014-15 academic year, we are responsible for creating events for the students living in the Honors House to attend. In doing so, we have discovered much about living-learning communities, which is what the Honors House is. In our presentation, we hope to share with others the role of a living-learning community, the types of events we planned for these students and the purpose they served, as well as the impact the Honors House has had on its residents.

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

Retrospective Analysis of Sigma Kappa

Brittany Graw, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

How extraversion personality traits and distraction levels affect math performance, while looking at high-school class size

Brittany Graw, Jacob Abraham, Robert Cooper, Psychology
Faculty Mentor: Dr. Jennifer Dyck, Psychology

Previous research suggests that many factors come into play with academic achievement in college students. In this study, we tested the effects that the personality trait of extraversion may have on math achievement. We also took into account the size of the high school from which subjects came. Using distraction levels we attempted to distinguish between introvert's and extravert's scores. Subjects consisted of psychology students from SUNY Fredonia. We hypothesized that extraverts will perform better on

the SAT math problems than introverts in the distraction condition. However, both will perform similarly in the no distraction condition.

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

Retrospective Analysis of Target

Victoria Gray, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Stopping Sexual Assault Silence

Bianca Grazioplene, Women and Gender Studies

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

Sexual assault has been a subject that often gets avoided or tip-toed around. The way that college campuses respond to sexual assault discourages the topic from being discussed openly, and in turn keeps victims from reporting incidents. The negative stigma attached to victims, and the harsh judgements they endure after reporting the incident, prevents victims from speaking out. We believe it is extremely important to change the discussion of sexual assault on college campuses to change the social stigma.

Bianca has been interested in the stigma around sexual assault since learning more about the subject both academically, and socially in college. Through information gained from literature read in classes, articles read leisurely, and personal experience, Bianca has become dissatisfied with the injustice surrounding sexual assault. Bianca feels that Fredonia State handles sexual assault fairly well, but knows that until the negative stigma no longer follows the issue of sexual assault, victims will still feel uncomfortable reporting incidents.

Kara has been interested in changing the way sexual assault is handled off and on college campuses since her sister was sexually assaulted her freshman year. Watching the complex steps she had to take and the blatant sexism that forced her not to report and let the man go free caused Kara to become determined to make a change. Kara knows too many girls who have been sexually assaulted and who were too ashamed and uneducated on the process to file an appropriate report. Kara also knows too many people who make light of and joke about rape, and feels that these people truly don't have a grasp on the brutal facts that surround sexual assault and just how common it really is.

The few cases of sexual assault that are reported are often closed with not guilty verdicts. This is partly due to the common act of victim blaming, where actions made by the victim are dissected and put to fault instead of the actions of the attacker. These acts usually include how the victim dressed, and what they could have done differently to prevent the incident. When a victim is blamed it discredits them, and voids their rendition of the attack. This is an institutionalized act, but also a general stigma of the

populous. Victims should not be afraid of being put to blame after an attack, but it is so common, that it often forces them to keep quiet.

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

Temperament and Cognition Through Adulthood

Hailey Griewisch, Amanda Cocchiara, Psychology
Faculty Mentor: Dr. Joseph McFall, Psychology

This research was done to look for possible relationships between temperament and cognitive status across different age spans.

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

Challenges of Working with the Elderly

Hailey Griewisch, Amanda Cocchiara, Psychology
Faculty Mentor: Dr. Joseph McFall, Psychology

This presentation will highlight the characteristics and obstacles faced when working with the elderly population residing in an assisted living/retirement home.

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

Correlation between Body and perception of others

Ariana Grisanti, Devan Nichols, Lauren Ciulla, Psychology
Faculty Mentor: Dr. Darrin Rogers, Psychology

This examines the linear correlation between levels of body mass index (BMI) and the rating of agreeableness. Participants were asked to give their height and weight, which BMI was calculated from, and asked to judge descriptions of individuals using items from the five factor model. This poster will describe the results of judgements of individuals with both extreme high and low BMI and the factor of agreeableness. Previous research has shown connections between weight and personality traits, and our interest is to determine if an individual's weight has an impact on both how an individual is judged by others and how an individual judges others.

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

Informal vs. Formal Mathematics Vocabulary: A Study of Middle School Students' Mathematical Vocabulary Comprehension

Heidi Gunio, Mathematical Sciences
Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores student understanding of mathematics as a language and the technical vocabulary that the subject requires. Specifically, it examines whether or not

students struggle with formal mathematics vocabulary versus informal mathematics vocabulary. It is hypothesized that middle school students will score less on isomorphic paired questions where formal language is used rather than when informal mathematics language is used. In particular, algebraic vocabulary terms such as irrational and reciprocal will have the greatest discrepancy in scores.

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

Crusading and Jihad Thought

Daniel Halewski, Daniel Ward, Rusty Wallace, Patrick Murray, History
Faculty Mentor: Dr. John Arnold, History

We will be exploring the origins of the Crusading and Jihad movements. This will include a comparative analysis as well as an in-depth look at how these movements have changed over time.

Computer presentation

Identifying Novel Drosophila Mutations That Affect gurken Translation in spindle B Mutants

John Hasper, Biology
Faculty Mentor: Dr. Scott Ferguson, Biology

We have taken advantage of positional cloning and next-generation sequencing approaches to identify candidate mutations in various 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. 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. The best suppressor lines were subject to whole-genome re-sequencing using the Illumina HiSeq 2000 platform. These data have allowed us to generate a list of candidates for the causative mutations in the suppressor lines. To complement the data garnered from the Illumina sequencing, a positional cloning experiment was performed with the use of SNP markers. The positional cloning experiment has enabled us further refine the list of candidates. We are currently evaluating this shorter list of candidate mutations to elucidate the mechanism by which grk translation has been restored.

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

Balm in Gilead Scenic Design / It's a Wonderful Life Costume Design

Chad Healy, Theatre and Dance

Faculty Mentor: Mr. David Stellhorn, Theatre and Dance

I am a Bachelor of Fine Arts - Theatrical Production and Design major. My concentration is scenic design. This year I had the experience of costume designing *It's a Wonderful Life: A Live Radio Play* in the fall semester and *Balm in Gilead*, my capstone scenic design, was put up in the Bartlett Theatre this March. In March I took both of these designs down to Chattanooga, Tennessee for the Southeastern Theatre Conference. The conference pulls in over 4000 theatre representatives from all over the country. There, I entered both designs into a undergraduate design competition that is open to any undergraduate student in the Nation. The judges of the competition are all distinguished Broadway designers. I won honorable mention for my costume design and first place for my scenic design. For the exhibition I would set up the same displays that I set up for the competition.

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

LINGOE

Katharine Hertweck, Visual Arts and New Media

Faculty Mentor: Mr. Peter Tucker, Visual Arts and New Media

LINGOE is a mobile mini gallery or kiosk that aims to get the community of Fredonia to be more expressive. It offers a whole chalk board wall, dry erase wall, coloring pad and materials, and a wall to submit drawings to Instagram. LINGOE offers people many opportunities to be creative and collaborate with each other. LINGOE is project that I have been working on through my internship with Peter Tucker and I would like to present it at the Expo. I also would like to present another project of mine alongside LINGOE that is a small ceramic sculpture that is also a participatory project. The sculpture is a head that has Post Its as a tongue and holes in the head where fresh flowers will be placed. People are invited to write something they feel they would be made fun of for, take a flower and place the Post It through the hole where the flower was. This sculpture is called tender thoughts and its based off of Shel Silverstein's cartoon Thinker of Tender Thoughts

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

The role of agreeableness in sexist attitudes

Raven Hess, Avishai Afek, Psychology

Faculty Mentor: Dr. Darrin Rogers, Psychology

A large body of knowledge has been collected on sexism and it's expressions in society. There are examples of very obvious and unconcealed negative sexism as well as obscure positive sexism; these have been defined as hostile sexism and benevolent sexism (Glick & Tartaglia, 2014). Evidence supports the idea that hostile sexism and benevolent sexism are negatively correlated with the big five personality trait agreeableness (Ekehammar & Akmani, 2007). Agreeableness has been found to have varying amount of sub factors, some of which have been described as compliance, and

altruism. This study explores if increased levels of agreeableness and its sub factors will have a correlation with hostile and benevolent sexism and its possible implications.

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

Integrating Water Systems of Dunkirk, Fredonia, and Brocton: A graphic analysis of pipe sizing and routes for proposed and existing waterlines

Zakkary Hess, Geosciences

Faculty Mentor: Mr. Randy Woodbury, Geosciences

A geospatial study of the integration of Dunkirk, Fredonia and Brocton drinking water systems was made with Geographic Information System tools (robust freeware QGIS was used). The study – with maps, graphs, and text analysis and calculations – shows, for example, that rather than a proposed 8-inch pipe that a 20-inch pipe should be used for long-term performance and economy to combine the water systems. The Hazen-Williams equation was used to calculate pipe flow, and installation costs were determined, with these calculations graphed using the unit of dollars per gallon-per-minute to show performance and economy. With a demand of 1.9 million gallons per day (MGD) between the villages of Fredonia and Brocton an 8-inch pipe that provides 0.288 MGD would not suffice. A 20-inch pipe could supply an estimated 3.31 MGD for present demand and also enable future expansion westerly to Westfield and Ripley. Further, an analysis using the data from QGIS shows that at all points along the study-determined waterline there will be at least the necessary 40 pounds per square inch reserve pressure.

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

Literature in Action: Dunkirk Community Garden

Jordan Holmes, Alexandra Shanahan, Rachael Fischer, Randall Fox, Jr, World Languages and Cultures

Faculty Mentor: Dr. Carmen Rivera, World Languages and Cultures

A community is a group of people living in the same place or having a particular characteristic in common. In the novel “The House on Mango Street”, Sandra Cisneros creates a community of hispanic families struggling with their sense of self, their sense of family, and their sense of community. As a group, we aim to promote a sense of pride and dignity within our neighborly community of Dunkirk by planting a community garden. This will be a safe space for people to gather, socialize, and contribute to the garden in town. We want to create this place of sanctuary in Dunkirk, NY. It is our vision to beautify the community and create a place in which residents may come together and have pride in their neighborhood.

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

"Did the Bills Harm Tom Brady" - an overview of the temporal comparative account of harm

Ryan Holt, Philosophy

Faculty Mentor: Dr. Neil Feit, Philosophy

I wrote a philosophy paper defending the temporal comparative account of harm, I gave a powerpoint presentation at Clayton State University in Morrow Georgia. So, I have a powerpoint on the paper prepared to present at the Expo.

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

Retrospective Analysis of Buffalo Sabres

Margaret Horan, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

WiseFork

Christian Hy, Business Administration

Faculty Mentor: Dr. Susan McNamara, Business Administration

I am co-owner of a healthy option, online food ordering company. We take local restaurants menus and break them down into different dietary categories.

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

Does being a part of Greek life in college help you with post grade life?

Keeri Ingallina, Business Administration

Faculty Mentor: Dr. Mojtaba Seyedian, Business Administration

This project reflects the research I did on whether being a part of Greek life in college affects post grade life and your future. It is meant to show the benefits of being a part of Greek life and the opportunities you gain from it as well. I conducted surveys from Greek Alumni and non-Greek alumni and stated my results.

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

Risky vehicle behavior of Highschoolers

Keeri Ingallina, Mathematical Sciences (Statistics)

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences (Statistics)

This project analyzes data from a survey done by Centers for Disease Control and Prevention. The study collected data on a large number sexual identity, sex of sexual contacts and health-risk behaviors of students, 9th-12th grade. I examined data students 9th-12th grade comparing the gender vs. the variables of how often they texted while driving, drank while driving, wore a seatbelt in a car, and if they rode in a car with a driver who was drinking. I also am comparing the different grade levels using the same variables. I conducted appropriate tests to see if there is any significant different

and which groups I compared have significant difference. From there I stated my conclusion.

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

The Role of Song in Male-Male Aggression in Crickets

Jenna Johnson, Kawthr Sendi, Biology
Faculty Mentor: Dr. William Brown, Biology

The purpose of our experiment is to study the effect of three different song types in crickets. These three songs are played by the crickets based on different social interactions. The three different song types that are made and their social interactions are calling songs with a single male calling in a female, courtship songs with a male trying to court the female for mating, and aggression songs with two males present. Our hypothesis is that aggression will be reduced by aggression song but not courtship or calling song. We predict that aggression song uniquely functions to reduce fighting in male-male interactions. We tested this hypothesis by pairing equal sized, muted males in a contest over food and played the three different songs while measuring the level of aggression that we observed.

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

Fredonia NSSLHA: Students Engaging in Volunteer and Community Service

Olivia Kaltenbach, Communication Disorders and Sciences
Faculty Mentor: Dr. Katrinia Fulcher-Rood, Communication Disorders and Sciences

The purpose of Fredonia NSSLHA is to educate students, both majors and non-majors, about the field of Communication Disorders and Sciences. As an affiliated chapter of NSSLHA (National Student Speech Language Hearing Association), our club looks to expand the knowledge for those interested in learning about speech-language pathology and audiology outside the classroom setting through interactions with peers, community members, and other professionals. Volunteer work is an essential part of our group. Our display will showcase the various community service projects that Fredonia NSSLHA participates in throughout the academic year. These projects include: Fall Sweep (leaf-raking for community members), Stroke Awareness Walk, Fredonia Place (serving as companions to the elderly), Chautauqua Nursing and Rehabilitation Home (engaging in activities with the elderly), Relay for Life (fundraising for the American Cancer Society), and Buffalo News Kids Day (fundraising for Children's Hospital of Buffalo).

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

Reflections on the Nature of Water

Christopher Keeler, Music
Faculty Mentor: Dr. Karolyn Stonefelt, Music

Written in 1986 for solo 4-mallet marimba, "Reflections on the Nature of Water" by Jacob Druckman has been held in high regard among collegiate scholars and international competitions since. Druckman's "Reflections" are written in the contemporary style and they draw inspiration from Claude Debussy's piano solo "Reflets Dans L'eau." Each movement represents a different characteristic of water such as crystalline, fleeting, profound, tranquil and relentless. If chosen to give a presentation, I would perform 5 of the 6 movements and hand out a synopsis that breaks down the ideas represented in each of the movements.

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

Students' Writing Can Be Better.

Christina Kennison, English

Faculty Mentor: Dr. Scott Johnston, English

This paper focuses on an overview of data on students' performance in writing from the Nation's Report Card, and discusses research that identifies factors contributing to below standard writing. Some reasons I concentrate on are pressure of conformity from privileged identity, teaching for Standardized tests, and students' view of writing. There are key reasons for raising the quality of students' writing. I list three as employability, the tie of freedom to literacy, and problem-solving through invention. Studies on different approaches shown to raise students' interest and abilities in writing are journaling/reflective writing, personal essay writing, the use of portfolios, and using the five-paragraph essay as an entry-level organizational strategy contrived in aiding developing principles of composition. My review concludes with recommendations for educators to improve student writing by initiating students' interest by allowing self-discovery.

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

The Graduates

Minju Kim, Communication

Faculty Mentor: Mr. Elmer Ploetz, Communication

It is a story of former international students who attended SUNY Fredonia. It contains stories of how and why they chose Fredonia as their undergraduate, how much of it helped them achieve their personal/career goals, and what they've been up to these days. It consists of print with visuals such as pictures or videos of their college and current life.

I will be using print media for the most and adding visuals. I will be using resources such as Skype, voice recorder, Facebook, Email, and Adobe Premiere. My sources will be former international students, official school documents of International Education Department, former director of IEC, current staff member at IEC, Dr.Herman and Ted Schwalbe.

I will find necessary information using my Facebook, school website, news articles and archives through IEC. I would like to share this story with other international students who are struggling to figure out what they want to get out of the school and what they want to do after they graduate. Also, I would like to see how helpful and resourceful the school can be to international students in terms of personal and social growth.

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

The Effect of Calculator Use on Students' Abilities to Compute Basic Operational Mathematics Problems Using the Activation of Prior Knowledge

Leah Kleiman, Mathematical Sciences

Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

This research examines the effect that the use of calculators has on students in the mathematics classroom. Specifically, it explores the effect calculators have had on a student's ability to use their basic operational skills to complete problems of addition, subtraction, multiplication and division. It is hypothesized that when given an assessment made up of questions that test a students' basic operational mathematics skills, non-major undergraduate college students will use a calculator more than necessary. Furthermore, it is hypothesized that students that use the calculator more will take longer on the assessment, but have the same accuracy as those who use mental math.

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

College Students' Perceptions of Literary Characters

Rebecca Kohl, Cassandra Weiner, Richard Belz, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

We examined characteristics of an open-ended literary character, subjects' own characteristics, and whether their imagination was spontaneous or controlled. Male and Female participants read an original short story and answered two short questionnaires, one regarding their perception of the character in the story, and one regarding their own personal characteristics. The results showed that participants were more likely to perceive a fictional character as more closely related to themselves when the gender of the character matched the participant's own gender and when the participants scored higher on the Two-Factor Imagination Scale. It appears that there is strong evidence that people with higher levels of imagination will consider their own personal characteristics when reading about a fictional character, especially when the gender of that character matches that of their own.

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

Retrospective Analysis of Mark's Pizzeria

Nicole Krauth, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Survey of early intervention at the Chautauqua County Department of Health and Human Services

Kristen Kucia, Sociology (Public Health)

Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

The purpose of this internship project is to update the child outcome survey spreadsheet. My internship is at the office of early intervention at the Chautauqua County Department of Health and Human Services. The office of early intervention focuses on serving children ages 0 to 3 with developmental delays. They link the appropriate service providers to those who need them and track the child's progress. Children receiving services are given an estimated exit date and at that time the service providers are asked to complete an exit survey, evaluating the child's progress. My role is to identify the service provider(s) for each child on the spreadsheet and ensure that they receive the exit survey for completion prior to the listed exit date.

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

Retrospective Analysis of Fredonia's Track and Field Team

Olivia Kurbs, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Fredonia's Women's Tennis Team

Phoebe Langdon, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Cam's Pizzeria

Holly Lavin, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Protecting Open-Air Microalgal Culture Ponds from Zooplankton Contamination

Sara Lawler, Biology

Faculty Mentor: Dr. Frederick Harrington, Biology

Algae is being studied for its interconnections with biofuel production, ability to remediate pollution (including CO₂), and as a food source for animals and humans. One

of the major issues to scaling up algae culture is the open-air culture ponds becoming contaminated with organisms from the ambient environment. This includes, but is not limited to, zooplankton contaminants feeding on the algae. Large-scale solutions to preventing contamination can be costly, and need to not harm the growth of the algae or inhibit its downstream use. Presently, solutions are being investigated on a lab-scale, where algae are being fed to several Daphnia species as test species of zooplankton. Of interest are the growth rates of the Daphnia fed different amounts of algae, induction and hatching from the dormant ephippial stages, and reproductive rates. A search of the scientific literature is being conducted to identify potential zooplankton inhibitors. Since both Daphnia magna and the algae Selenastrum capricornutum have been used for biological toxin testing, their response to numerous chemicals is known. We are looking for a chemical at a specific concentration that is not deleterious to humans nor algae but greatly inhibits Daphnia at some point in their life cycle. Zinc, for example, across a narrow concentration range appears to have minimal effects on S. capricornutum and negative effects on D. magna. We hope to identify other examples which can be used safely to allow us to make progress on decreasing zooplankton contamination, thus benefiting the developing algae industry.

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

"The Most Dangerous Game" Animatic

GiAnna Ligammari, Alex Glazier, Matthew Pellegrino, Jack Weaver, Zachary Tietje, Rhiannon Vercant, Richard McKaba, Amanda Gusmano, Alex Jun, Visual Arts and New Media (Animation/Illustration)

Faculty Mentor: Ms. Jill Johnston, Visual Arts and New Media (Animation/Illustration)

This is a semester-long collaborative project in Intermediate Animation where our class, a Typography class & Composition students all were put together on teams to adapt select short stories into an animatic. It's a really valuable experience working together on a team of different majors, and we're very proud of the progress we've made so far. The animation won't be finished until the end of the semester, but we've put a lot of hard work into this and we're having a lot of fun doing it. More importantly, this project shows exactly what creating dialogues and connections between different majors can produce.

collaborative animation project 3:00 p.m. to 3:30 p.m.

Experiential Learning.

Lauren Lind, Vanessa Taylor, Business Administration

Faculty Mentor: Dr. Susan McNamara, Business Administration

In this study techniques of Kolb's Experiential Learning Theory were implemented in several classes. Effective learning is seen when an individual progresses through a cycle of four different stages; concrete experience, reflective observation, abstract conceptualization, & active experimentation. In this study, students that participated in experiential classes were assessed to determine if the stated learning objectives were met & could be applied after graduation. Assessing student learning can help to inform

professors, improve learning outcomes & narrow the gap between employers expectations and student knowledge.

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

Colonial Cannibalism

William Lista, English

Faculty Mentor: Dr. Shannon McRae, English

For my American Studies class we had to write an interdisciplinary paper that focused on a topic from the colonial times up until the Revolutionary war, so I decided to write my paper on a rather disturbing topic; colonial cannibalism. It is a topic that hasn't gotten much attention, but there is proof it occurred during the harsh times of our founding colonies. Upon getting my paper back, Dr. McRae suggested that I submit it a proposal for entering this research expo. So I figured I could give an oral presentation of my research, but if there isn't enough time I could create a poster on my findings.

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

How To Build It So They Come: Using QFD to Design a Student Club

Nate Luciano, Tyler Lokietek, Business Administration

Faculty Mentor: Dr. Lisa Walters, Business Administration

This case study focuses on how the operational tool of Quality Function Deployment (QFD) was used by a group of operations management students to design an on-campus branch of a national professional organization, specifically the American Society for Quality (ASQ). To develop the QFD, secondary research was conducted to establish the Voice of the Customer (VoC) requirements in terms of potential future employers of business students. Because these requirements were derived from secondary sources, the weights of the importance of the requirements were considered uniform, as the research sources did not identify emphasis of any one requirement in preference of another. Primary research was also conducted by use of a business student focus group to identify the types of activities students would find desirable, thereby encouraging their alignment with the ASQ student group. Such activities constituted the design requirements of the group. These requirements were further weighted by the focus group and correlated to the VoC requirements to determine the specific student group activities that would be most advantageous to facilitate future employment opportunities for business students. The two key pursuits identified through the QFD process were live consulting projects and technical workshops. The results are useful for advisors and leaders of professionally-linked student groups in any profession as well as university career development offices.

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

Development of Visual Appeals And Content of Reproductive Health Materials

Krista Lutz, Kiyahara Cousins, Sociology (Public Health)

Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

The purpose of this internship project is to create both informational and visually appealing promotional materials for the Chautauqua County DHHS-Family Planning Clinics; primarily with the focus on the Jamestown clinic with site supervisor, Director of Patient Services for the Chautauqua County Department of Health and Human Services. The expectation as interns and the role we have is to create simple and understandable promotional materials focusing on reproductive health which includes a focus on birth control, other forms of contraception, sexually transmitted infection testing, along with family planning, immunization information, and insurance. As interns, our goal is to effectively create promotional materials that are not only just visually appealing and simple to follow, but also materials that are informative and beneficial to those visiting the Jamestown clinic. We are currently working on research to find the best and affordable services for clinic patients.

Once data is obtained from that research, we will be implementing it to create the promotional materials needed for the clinic waiting room focusing on reproductive health and family planning. Our ideas for the promotional materials include posters, small displays, informational pamphlets, and flyers that will all be at an easy literacy level and easily understandable.

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

Volunteering in Community: Fredonia for St. Jude

Alison Malcolm, Career Development/Volunteer and Community Services

Faculty Mentor: Ms. Jenn Wilkins, Career Development and Ms. Joyce Smith, Volunteer and Community Service

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. Also, we host Rock Out for Cancer which also raises money for the hospital where we have local performances by bands. Lastly, we help the community by hosting Blood Drives each semester.

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

Retrospective Analysis of Sigma Gamma Phi

Melissa Mapes, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Jefferson's Ferry Retirement Community

Michael Margo, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Analyzing mRNA Secondary Structure Using SHAPE Chemistry in Search of an Internal Ribosomal Entry Site

Allison HH Martin, Biology/Biochemistry

Faculty Mentor: Dr. Scott Ferguson, Biology; Dr. Matthew Fountain, Biochemistry

We are searching for a potential internal ribosomal entry site (IRES) in the 5' UTR of the Gurken (Grk) mRNA from *Drosophila melanogaster*. Grk is believed to have an IRES for several reasons, including steady regulation of Grk translation when canonical cap-dependent translation is repressed and the necessity of a RNA helicase for cap-dependent translation to occur. Selective 2'-hydroxyl acylation analyzed by primer extension (SHAPE) chemistry is used to elucidate secondary structure in RNA molecules. In this method, N-methylisatoic anhydride is incubated with folded RNA molecules and reacts with non base paired 2'-hydroxyl groups, forming an adduct which blocks primer extension. This information is used to calculate probable base pairing and secondary structure of the RNA strand. In collaboration with in vitro translation Luciferase assays and selective deletion or mutation of structural features, individual secondary structural features can be selectively analyzed and included or excluded as a potential IRES.

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

SPJ Media Conference Trip

Sean McGrath, Alex Kaluzny, Sarah Fuller, Communication

Faculty Mentor: Mr. Elmer Ploetz, Communication

As a group, we go to major media cities and tour a variety of journalism institutions as a way to learn and make connections.

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

Is Sexual Fluidity Influenced by Biological or Cultural Factors?

Bridget McKnight, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

A shift towards more flexible sexual orientation categories has come into our mainstream media and culture. This fluid category allows for individuals' sexual expression to have variability and ambiguity to their own personal choice. Desire and attraction have been found to have biological underpinnings, as well as being shaped by social, cultural and interpersonal contexts. With this being said there are many influences to one's attractions. Through my research findings I will be showing that

there is evidence of both biological and cultural factors that influence one's sexuality and how fluid it can or cannot be.

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

Therapist Availability

Shannon McNally, Sociology

Faculty Mentor: Ms. Melissa Lyon, Sociology

The purpose of this internship is to work with the Chautauqua County Department of Health and Human Services' Preschool Program for Children with Disabilities. As the intern it is my job to contact service providers in the county regarding their availability for the upcoming months. This information was then used and sorted into a database that will be used by all of the Chautauqua County School Districts to quickly identify which providers should be contacted whenever they are in need of a provider. This has provided me with the experience of communicating with multiple professional audiences, has improved my organizational skills to a more professional level, and has taught me how to contact and communicate with school districts on a professional level. This internship ties into the essential public health services by both linking people to needed personal health services and by developing policies and plans that support individual and community health efforts.

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

Developing Materials to Increase Awareness of Important Public Health Issues

Haley Meier, Sociology (Public Health)

Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

It is known that there are students on this campus who are not vaccinated for measles, mumps and rubella for various reasons. Through Fredonia's student health center I created a pamphlet for the purpose of educating students on the importance of being vaccinated. In addition a second pamphlet was created stressing the benefit of tuberculosis screenings. Early detection of tuberculosis is essential for the control of the disease and is important for limiting the numbers of people that are exposed and infected. These pamphlets are going to be distributed through the student health center to inform, educate and empower students about the importance of being vaccinated for measles, mumps and rubella, and being screened for tuberculosis. We hope to create a healthier population by spreading awareness and creating a disease free community.

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

The developmental and behavioral effects of neonatal exposure to lithium

Kelli Michel, Psychology

Faculty Mentor: Dr. Catherine Creeley, Psychology

Women being treated for bipolar disorder may remain on lithium therapy during pregnancy. Lithium is a known teratogen with a very narrow therapeutic window. Previous research has shown that lithium suppresses normal programmed cell death (apoptosis). This disruption in the normal cell death during fetal/neonatal development could have long-term effects. For example, neuroimaging studies have associated brain volumetric differences with autism, and abnormalities of some brain regions are implicated in the core autism social/cognitive behavioral deficits. The disruption of developing networks during the critical brain growth spurt period could play a role. We have addressed the question of whether a single dose of Li by itself causes long-term neurobehavioral disturbances. Neonatal mice were treated with a single dose of lithium (3 mEq/kg). Developmental and behavioral measures were evaluated throughout early development, followed by motor and cognitive testing to assess long-term neurobehavioral effects of lithium exposure in a neonatal mouse model.

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

Dating and Friendship in Lesbian Relationships

Jessica Miller, Kathleen Urtz, Psychology
Faculty Mentor: Dr. Jennifer Dyck, Psychology

This study included 56 self-identified lesbians from diverse geographical locations, and of various ages. Participants completed a survey, either online or on paper, on the differences between first and second dates, what activities they partook in when on these first and second dates, and what differences exist between a date and a friendship outing. A unique coding system was created in order to place qualitative data into an analytical format that could be used to show common themes across participants. It is expected that the results will show different themes (such as romance, sexual intentions, or getting to know each other) are more important for some age groups than for others.

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

Retrospective Analysis of Deerfield Country Club

David Miner, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Comparing The New York State 2005 School Performance Indicators And Past Regents Examinations With The Current New York State Common Core School Mathematics Standards And Assessments

Travis Mirabella, Mathematical Sciences
Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

This research explores the differences between two key curricular components of the new New York State Common Core Mathematics Curriculum and the former New York State mathematics curriculum. Specifically, a comparison between the New York State

Common Core Mathematics Standards and the 2005 New York State Mathematics Performance Indicators, as well as a comparison of the new New York State Common Core mathematics assessments and recent Mathematics Regents Examinations will be investigated. It is hypothesized that the 2005 New York State Mathematics Performance Indicators provide a more specific set of guidelines for teachers than do the New York State Common Core Standards. Furthermore, it is hypothesized that student achievement with traditional algebra topics from recent Integrated Algebra Regents Examinations and the new Common Core Algebra Examinations will not significantly differ.

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

Retrospective Analysis of Operation Smile

Alfred Molinari, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Lock Down of the Internet of Things

Zachary Moore, Computer and Information Sciences

Faculty Mentor: Mr. Robert Olson, Computer and Information Sciences

The Internet of Things is a concept in which objects, animals or people are provided with unique identifiers and the ability to transfer data over a network without requiring human-to-human or human-to-computer interaction. Basically anything and everything gets connected to the internet with the idea of convenience. Many devices on the Internet of Things have little to no security and are easily manipulated by skilled hackers. One of these things is a dead bolt lock that is connected with Bluetooth. The goal of my research is to attempt to find an exploit to this lock where I can then gain control over the lock and allow myself to whatever it is protecting.

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

Retrospective Analysis of Denny's

Rico Nelson, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Total Tankination

Adam Moncure, Randel Butts, Computer and Information Sciences

Faculty Mentor: Mr. Derrik Decker, Computer and Information Sciences

3D Interactive Tank Game

We intend to present a working copy of the 3D Tank Game we are creating as part of CSIT-208 under the mentorship of Professor Decker. Participants in the expo will be able to try the game and we will discuss the steps involved in its creation. The tank can maneuver around terrain, which will be procedurally generated using a marching cubes algorithm, and be destructible. The player must estimate the angle and power of the projectile they need to hit their targets, while avoiding return fire from the AI players.

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

Crusading military tactics

John Nesbitt, Nich Caccamise, Megan Reeves, History

Faculty Mentor: Dr. John Arnold, History

Meghan Reeves, Nicholas Caccamise, and myself would like to create a website on the development of the crusades through a militarily historical perspective. We will be looking at new developments in military technology as well as the use of cavalry on the battlefield. Along with this we will be looking at siege engines as well.

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

Retrospective Analysis of Holiday Valley Children's Learning Center

Katlyn Nuttall, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Social Studies Education Program Co-ordinator

Kali O'Day, Benjamin Schrantz, Chad Szymkowiak, History

Faculty Mentor: Dr. Peter McCord, History

New technology resulted in mass destruction after WWI. As a result, soldiers were faced with new and devastating injuries especially horrific facial disfigurement. Our mission was to uncover a part of history that has been long overlooked, and that after the war, not everything was alright for the soldiers who suffered horrific disfigured faces. We wanted to show how they became disfigured, and how men and women such as Sir Harold Gillies, Francis Wood and Anna Ladd were able to fix their faces and make them feel human again.

While this is a topic that is generally overlooked by most WW1 classes, we find this to be a very important topic in the development of war and medical history. Some people may find this topic disturbing and gruesome, but it is a real and present part in any war.

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

Erasure of Trans Identities

Amanda Rae Ongley, Deanna Buley, Kira Goidel, Interdisciplinary Studies

Faculty Mentor: Dr. Jeffrey Iovannone, Interdisciplinary Studies

A project focusing on different areas of erasure of trans history and identities and how the erasure of these ideas affect the trans community and the visibility of trans people and the issues they face every day.

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

Fashion, Privilege, and the Formation of Trans Identities

Amanda Ongley, Women's and Gender Studies

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

A project focusing on how fashion influences trans identities, the way those identities are expressed, and how privilege affects the availability of fashion to minority gender identities.

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

Religious Issues of the Crusades

Emily O'Sullivan, Rachel Skopinsky, Julian Ferris, History

Faculty Mentor: Dr. John Arnold, History

Our proposal for the Oscar presentations reflects our in class work and study of the Crusades. This project focuses on Religious issues surrounding miracles and phenomena, as well as particular religious figures that influence the outcome of this time period. Connecting our separate topics brings an interesting point of view when exploring various forms of religious ideals and beliefs. Each of our specific topics looks at a different aspect regarding religion in the crusades. We hope to depict an interesting interpretation of religion that would not normally be researched.

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

Investigating fundamentals of digital image processing and dithering algorithms

Volkan Oztuzun, Computer and Information Sciences

Faculty Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

This thesis project describes the basic Fundamentals of Digital Image Processing with special reference to image enhancements and its techniques. Some parts of Image Segmentation is also included such as dithering algorithms and implementations of these algorithms on images. Image enhancement is an application of certain alterations and changes to an input image in order to obtain a more pleasing image in terms of visuality. Image enhancements main task is to improve the image quality thus the altered image can be better than the original image itself for something specific such as altering the sharpening of an image by implementing edge detection. The thesis project will be presented in an Android mobile application which will include these special image processing algorithms.

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

Engaging in our community; InterVarsity Christian Fellowship Community Service Trip

Michael Palazza, Volunteer and Community Services

Faculty 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. Twelve students and one alumni spent five days serving at different locations such as Willow Missions, First Fredonia United Methodist Church, Salvation Army, Rural Ministries, WCA Home. Projects included Meal Preparation for impoverished families at Rural Ministries, Organizing Clothes and receiving deliveries at Salvation Army, Painting at Fredonia First United Methodist Church, helped with activities at WCA Home. Furthermore, made an overall impact in the Fredonia/Dunkirk area.

poster presentation

SUNY Model European Union Simulation

Jason Pandich, James Coughlin, Heather Pandich, Politics and International Affairs

Faculty Mentor: Dr. Alexander Caviedes, Politics and International Affairs

We attended the annual SUNY Model European Union simulation during March 26th to the 28th. Students from Fredonia represented the countries of Germany, Slovenia, and Portugal. Each country delegation was broken up into four meetings: Heads of Government, Foreign Affairs, Economics and Finance, and COREPER II. At each meeting students were given a topic to discuss with the goal of creating some form of proposal to be approved on so some action could be taken on the issue. Our poster explains the goals of each meeting and what agreements were reached in our effort to get a better understanding of the European Union and the challenges associated with creating legislation.

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

Physical Theatre

Brittany Partridge, Miquon Jackson, Theatre and Dance

Faculty Mentor: Mr. Thomas Loughlin, Theatre and Dance

I will be performing live theatre to demonstrate the research i will be doing this summer.

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

Using Leadership Theory in Practice

Charlotte Passero, Honors Program

Faculty Mentor: Dr. David Kinkela, Honors Program

This poster will focus using leadership theories in real life situations. Specifically through my leadership position on campus on the accounting society eboard.

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

Retrospective Analysis of Deep Tanks Studio

Brandon Perdomo, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Oneidas/Designers & Forests

Cassandra Perry, Visual Arts and New Media /Graphic Design

Faculty Mentor: Mr. Jason Dilworth, Visual Arts and New Media/Graphic Design

I will be presenting information and design work on the history and lifestyle of the Oneida Community in connection to the work and discoveries of Designers and Forests. Identifying the practice, process and history of the Oneida's aesthetic, Designers and Forests is using this information to create new ideas to connect the land and community to work together economically, ecologically and socially.

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

Cross-Cultural Differences in Attitudes Toward Altruism, Forgiveness and Gratitude

Gabriella Pietropaolo, Felicia Schiefer, Curtis Wojick, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

As a relatively new field of study, positive psychology has rarely been assessed in a cross-cultural context. The present study aimed to compare Chinese, Taiwanese, and American cultures in regards to five central aspects of positive psychology: altruism, forgiveness, gratitude, life satisfaction (SWL), and psychological well-being (PWB). Additionally, culture-based perceptions and stereotypes concerning these positive psychological principles were also addressed. A 67-item survey was administered to undergraduate students from universities in China (n=139), Taiwan (n=112), and America (n=75). Half of the participants in each sample answered as themselves and, to address potential stereotypes, the other half answered as they would if they were hypothetically a member of the other culture (e.g. a Chinese participant would answer as if they were an American). Altruism and gratitude were significantly correlated regardless of culture. In the Asian cultures there was a significant correlation between altruism and PWB, but this was not true for the American sample. The Chinese were more forgiving than either the Taiwanese or the Americans. Americans reported lower PWB than the Chinese and Taiwanese. The Chinese scored highest in altruism and the Americans scored the lowest. The American participants rated themselves higher in altruism than the Asian participants, and vice-versa. Although Americans scored highest in SWL, the Chinese and Taiwanese scored highest on the PWB subscale of

purpose in life. The implications of these findings and limitations of this research will be discussed at the conference.

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

Retrospective Analysis of 2014 Wegmans LPGA Championship

Jeffrey Phillips, Jeffrey, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

A Day In The Life Of A Whiteboard

Sarah Pietras, Communication
Faculty Mentor: Ms. Roslin Smith, Communication

A Day In The Life Of A Whiteboard is a short film that takes an ordinary to do list and brings it to life with a series of pictures and animations. This is a stop motion film so it is made up of over 300 pictures that all have very slight differences. When put together they look as if they are flowing together like a video typically would.

Video/Documentary 5:30 p.m. to 6:00 p.m.

Leaving Correctional Facilities: Understanding what it means and how it shapes the transition to adulthood

EmilyAnn Pleszewski, Louise DeCosta-Bacher, Javier Pagan, Casey Springer, Social Work
Faculty Mentor: Dr. Rolanda Ward, Social Work

When emerging adults leave correctional facilities, their time inside the prison walls may impact their ability to successfully transition back into society. Prison may offer programming to assist in the transition, but individuals may not always take the resources available to them, or these programs may not work based on individual differences. Participants were recruited from two counties for qualitative face-to-face interviews. Participants were asked about reentry programs offered inside the prison system and their participation. Interviews were transcribed, coded, and analyzed for key themes. Findings suggest that intimidation due to the prisoner code prevented many of the interviewed from actively participating in programs or talking with program directors, along with a lack of prevention programming for individuals before they reached emerging adulthood.

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

Retrospective Analysis of Buffalo Sabres

Anthony Polvino, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Lossless Compression of Medical Images Using Burrows-Wheeler Transformation with Inversion Coder

Collin Preston, Computer and Information Sciences

Faculty Mentor: Dr. Ziya Arnavut, Computer and Information

Medical imaging is a quickly growing industry where the need for highly efficient lossless compression algorithms is necessary in order to reduce storage space and transmission rates for the large, high resolution, medical images. Due to the fact that medical imaging cannot utilize lossy compression, in the event that vital information may be lost, it is imperative that lossless compression be used. While several authors have investigated lossless compression of medical images, the Burrows-Wheeler Transformation with an Inversion Coder (BWIC) has not been examined. Our investigation shows that BWIC yields better compression rates than well-known image coders, such as JPEG-LS and JPEG-2000.

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

Dangerous: an exploration of a soul in bondage

Cecelia Price, Visual Arts & New Media

Faculty Mentor: Mr. Alberto Rey, Visual Arts & New Media

Painting has been a meaning of expression since the days of cave paintings. I have come to use oil paint as my tool for transforming my thoughts and ideas to tangible visual images. The concept for this two-part series is based on my past, present, and future. The attitude that women are made for using and abusing would be the basis for almost every relationship I've had. More importantly, it empowers me and begins to provide a perspective on what happens in my future. I want to dominate my life, not sit back and let someone else control it or me. Together the two series come together and equal "Dangerous: an exploration of a soul in bondage." As an entrepreneurial painter, my goal is to share my creativity, my pain, & my survival with others.

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

Butch & Femme Gender Roles

Amanda Pruden, Psychology

Faculty Mentor: Dr. Lisa Denton, Psychology

My project is on the gender roles of queer women in relationships with other women. I am focusing on the specific identities of butch and femme and how queer women with these identities may perpetuate heteronormativity through them.

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

Young children in nature

Analisy Ramos, Curriculum and Instruction
Faculty Mentor: Dr. Mira Berkley, Curriculum and Instruction

My early childhood education class 412/432 went to Wheelock and used "Early childhood project learning tree" as a curriculum guide to get the children interacting with nature.

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

Groups and People During the Crusades

Jordan Reed, Shawn Sprankle, Craig Lavery, History
Faculty Mentor: Dr. John Arnold, History

We will be presenting a website that compares and contrasts the effects of the crusades on the Templars, the French Kingdom, and the Ismaili. We will be analyzing the major attributes of each of these groups, and how they were individually shaped by the events in the Crusades. Then our group will also show the similarities and differences between the collective experiences of each of these entities.

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

Waking Nightmares Exposed through Horror Anthology Television

Cassandra Riggio, Communication
Faculty Mentor: Mr. Vincent Quatroche, Communication

The horror and science fiction genres of literature and film have long worked to depict the unsettling distortions of reality found in nightmares. With the emergence of television as a popular medium in the middle of the twentieth century also came a new outlet for the genre to continue to unnerve audiences, but with a broader reach and an opportunity to expand the duration of stories. During this emergence was the creation of anthology series—shows that varied in plot and characters from episode to episode, but maintained constant elements such as themes, actors, and tropes. In this paper I argue that this form is a mechanism to depict parallels between the horrors of the shows and real, nightmarish social issues that have plagued America since the twentieth century, despite ever-changing technologies, aesthetics, and political contexts. I place focus on Rod Serling's *The Twilight Zone* and Ryan Murphy's *American Horror Story*.

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

Parent-Kindergartener Shared Reading Pilot Intervention

Brooklynn Ruggieri, Melissa Guida, Psychology
Faculty Mentor: Dr. Andrea Zevenbergen, Psychology

The purpose of this pilot study was to create and evaluate a shared reading program for kindergarten-aged children and their guardians. Based on research in the field, an

emphasis on dialogic reading was considered to be the most likely to increase the kindergarteners' reading skills. The children and guardians participated in three sessions with researchers. During the first session the children were tested on letter and word reading, and then the guardians and children were videotaped reading together. In the second session, each guardian was taught various dialogic reading skills to practice with their child, and also several feedback techniques to use while the child was reading. Last, in the third session the children and guardians were videotaped reading again and the guardians completed an interview to provide feedback about the program. The results from this pilot study will be presented at the conference.

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

Justice at the Border

Alicia Rutkowski, Venessa Anania, Cielo Ornelas Macfarlane, Ethnic Studies
Faculty Mentor: Dr. Carmen Rivera, Ethnic Studies

Our objective is to raise awareness on the social injustices that occur in the borderlands of Ciudad Juarez, Mexico and El Paso, Texas. There is a long history of violence toward women here which has not been addressed by either the U.S. or Mexican governments. In fact, over 400 women have disappeared and many of them later found killed in desert lands. We will use various mediums to inform our audience of the facts which include a collage, an interactive activity and excerpts of poems from Agosin's *Secrets of the Sand*. Our presentation culminates with the option for participants to sign a petition/s to advocate for a positive change.

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

"Who's Watching?"

Mohamed Sadek, Computer and Information Sciences
Faculty Mentor: Mr. Robert Olson, Computer and Information Sciences

The Internet has become an indispensable resource in the lives of many people. As of 2014, 40% of people are connected to the Internet in some way, from the smartphone in their pocket or the desktop at home. From this convenience came a new line of products that allowed consumers to link non-traditional household devices to the Internet, enabling access from anywhere. "Smart" devices began to move from cellular phones and mobile devices to light bulbs and locks. This concept of ordinary devices augmented with networking capabilities became known as the "Internet of Things". Tasks such as monitoring one's house with a web-enabled camera or being able to control room temperatures from a web or mobile application became possible with these new products. However, the increase of networked devices have created new avenues of attack for hackers. This research focused on analyzing and exploring methods used to discover and exploit vulnerabilities in a web enabled camera.

poster presentation

On the road Towards Activism...

Jeany Melendez Santiago, Ernesto Mercado, Nadia Herrera, World Languages and Cultures

Faculty Mentor: Dr. Carmen Rivera, World Languages and Cultures

In the novel by Julia Alvarez called "In the Time of the Butterflies," the Mirabal sisters became influential "heroines" in Dominican society by becoming activist against the Trujillo's regime during the mid-1900s. Their dedication, motivation, influence, and advocacy against the dictatorship and oppression that came with it, sparked a movement to reclaim the natural rights of the citizens of the Dominican Republic and countries with similar situations.

The Mirabal sisters were ordinary girls who were raised in a middle class family in the Dominican Republic. Minerva, inspired by her uncle, dreamed of becoming a successful lawyer. After overcoming major obstacles, Minerva became a political activist against the Trujillo's regimen becoming an inspiration for her sisters Patria, María Teresa, and, Dedé. Their hunger to make a difference and remove Trujillo from power was as immense as their dream to become successful women and inspiration to the people of the Dominican Republic.

This purpose of this project is to focus and educate our campus community, as well as surrounding areas, on the importance of involvement, participation, and activism in our campus' decision making process and the creation of new policies/rules that will better the lives of students and members of surrounding areas. We will do this by educating the public on the decision making process, how they can be part of it, and how important it is for them to become activists.

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

Analyzing the Impact of Employee Attitudes on Customer Satisfaction in Service Settings

Alison Scaringi, Business Administration

Faculty Mentor: Dr. Mojtaba Seyedian, Business Administration

Employee's attitudes and behaviors have a profound impact on the satisfaction level of customers during the interaction process. Although the employee may not recognize that their every move is being watched by customers, the customer can pick up on cues that give them insight on the employee's happiness and overall attitude about being at work. Surveys such as employee satisfaction, and customer satisfaction, allow researchers to analyze the impact of each variable. These variables play an important role in the overall success of a company.

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

Using Experiential Learning to Improve Disability Services on a College Campus Using Quality Techniques: A Case Study

Alison Scaringi, Business Administration

Faculty Mentor: Dr. Lisa Walters, Business Administration

Institutions of Higher Learning (IHLs) are well-advised to take proactive measures to ensure accessibility of critical academic services to ensure compliance with the Americans with Disability Act. Applied Operations Management (OM) students attempted a mechanism to improve the services to the disabled population of a medium-sized public college. Experiential learning not only benefits the students but also the institutions. The merits of Six Sigma methodology to enhance performance with its DMAIC model are discussed. A paired t-test was used to find the differences between the accommodated and the general population of students. The utilization of the DMAIC framework identified a need for more robust data collection from within the accommodated population and provided recommendations for that collection process to facilitate full and equal participation of the disabled population. This study is of interest to both administrators of Institutes of Higher Learning, particularly those involved with disability accommodation and risk management, as well as operations management instructors who wish to engage in experiential learning.

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

Retrospective Analysis of Transit Valley Country Club

Anthony Schiro, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Engaging in our Community: Blackhorse Women's Rugby

Marie Scime, Volunteer & Community Services

Faculty Mentor: Ms. Joyce Smith, Volunteer & Community Services

Since 1996 Blackhorse Women's Rugby has been giving back in both the community and on campus. In efforts to make the community a better place, Blackhorse Women's Rugby has given 200 hours back into the community in different event such as: The Fall Sweep, Kisses For Pups, WHOA Casino Night, and Get Your Head in the Game. Raising over 100 dollars for the Chautauqua Humane Society, Blackhorse Women's Rugby will continue to give back to the community and instill hope in the lives of others.

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

Retrospective Analysis of Alternative Break Program

Jennifer Scofield, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Autonomous Robots

Baris Can Secim, Computer and Information Sciences
Faculty Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

This work addresses the topic of real-time decision making by autonomous robots. Their ability to make appropriate decisions in simplified environment conditions. After addressing the state of research, the work presents the subcomponents which are relevant for decision making with respect to information input, information output, and the real-time decision making process.

The information input is a software component developed to fulfill the purpose of collecting information from perception and communication subsystems, maintaining an up-to-date view of the robot's environment, and providing the required input information to the Real-Time Decision Making algorithms.

The complex task of autonomous driving is subdivided into subtasks, called driving maneuvers, which represent the output of the real-time decision making process. Driving maneuvers are considered as implementations of closed-loop control algorithms, each capable of maneuvering the autonomous robot in a specific environment situation.

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

Writing for the Future: An Overview of the National Creative Writing Conference

Rianna Seelig, Emily Wynn, Patricia Albro, Riley Straw, English
Faculty Mentor: Ms. Aimee Nezhukumatathil, English

Four creative writing minors will showcase a general overview of our experiences at the national creative writing conference (Association of Writing Programs): how the conference was and is beneficial to students pursuing the Writing minor, and the opportunities provided concerning professional opportunities after your undergrad years (ex. seminars and workshops specifically geared toward grad school preparation and assistance). Furthermore, we will each create a piece of original work inspired by one of the individual workshops/seminars we attended, and will have said pieces of work on display in addition to general information concerning the conference. This will provide an opportunity to showcase the skills we learn after attending the conference, and will allow others to view and experience creative pieces they may be interested in further pursuing.

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

Developed Survey to Determine Barriers to Breastfeeding

Chelsey Sengillo, Sociology (Public Health)
Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

This project was developed by the New York Chautauqua County Department of Health in order to address the issue of breastfeeding barriers in the local area. A survey was conducted and consisted of three sections; about the mother and baby, barriers to

breastfeeding, and current support or lack of support. The survey was made available on the “Chautauqua County Breastfeeding Moms (and moms to be!)” Facebook page and local hospital and pediatrician offices. The survey will be further analyzed by the NY Chautauqua County Department of Health. In addition to the survey, a compiled list of journal articles and web-based training was completed to be administered as programs to breast-feeding friendly practices. This project allowed me to monitor health status and identify health problems. I was able to successfully promote and encourage healthy behaviors by providing mothers to be about the benefits of breastfeeding.

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

The Undefined Korean Peninsula

Jiyeon Seung, Politics and International Affairs

Faculty Mentor: Dr. Ivani Vassoler-Froelich, Politics and International Affairs

The issue that divided Korean Peninsula needs to be reunited has been discussed. That issue is also discussed in the other countries importantly in the perspective of security and international relationship. With this topic, I will discuss whether the reunification of divided Korean Peninsula is necessary or not.

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

Retrospective Analysis of Aviation Sectors

Tugce Sezer, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Volunteer and Community Services, Students in Service Making a Difference: Delta Phi Epsilon

LeighAnn Shaffer, Volunteer and Community Services

Faculty Mentor: Ms. Joyce Smith, Volunteer and Community Services

The mission of Delta Phi Epsilon Sorority is to develop in women a social consciousness and a commitment to think and act for the greater good. We assure continuous development and achievement for women through individual attention and smart strategic growth. At the Epsilon Eta chapter, we have participated in many philanthropic events such as our Cystic Fibrosis fundraiser, Deeper Dude, and fundraising and supporting awareness of eating disorders for ANAD. We have been involved in Adopt-a-Highway, Fall Sweep, Safe Halloween, Relay for Life, Tate's Totes, Adoption Days at a local animal shelter, Buffalo Kids News Day, and Karaoke For a Cause with Sigma Gamma Phi to fundraise for March of Dimes. Throughout the semester, our group collectively participates in over 150 hours of community service. We play a major role in the community at large and these special volunteer events will be displayed on our poster.

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

Kintsugi

Hannah Shea, Visual Arts and New Media

Faculty Mentor: Mr. Andrew Simmons, Visual Arts and New Media

This sculpture was my final project in Figure Modeling, taken in Fall 2014. When it was being loaded into the kiln, it was knocked over and broken. Instead of leaving it in pieces, I put as much back together as I could and made a new base for the sculpture to sit on. At the end of the repair process, I believe a stronger and more visually appealing piece was made. The process of Kintsugi, the title of this piece, focuses on how the brokenness of an object is just part of its history rather than something that should be covered up. Despite the shattered pieces of this sculpture, it is still a beautiful piece.

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

Evaluation of the Binding of Zn(II) Complexes to G-Quadruplexes Using a PCR-Stop Assay

Melyssa Shively, Mariya Shapovalova, Biochemistry

Faculty Mentor: Dr. Matthew Fountain, Biochemistry

G-quadruplexes have been identified as binding sites for zinc cyclen complexes resulting in the stabilization of the quaternary DNA structure. Stabilization of the G-quadruplex prevents the binding of certain molecules such as polymerase and telomerase which are responsible for DNA replication and transcription. Parallel and propeller G-quadruplexes are found on the *cmyc* gene promoter and telomeres respectively. The PCR stop assay was used to determine if stabilization of the G-quadruplex was occurring with several zinc cyclen compounds, and if so their specificity for both the DNA structures. Ligands such as dansyl chloride, acridine, and other compounds were studied using PCR stop assay. The dansyl chloride and acridine complexes showed reproducible stabilization of the G-quadruplex with increasing concentrations. The inhibition of *cmyc* gene transcription via G-quadruplex stabilization using zinc cyclen complexes can be used as a cancer therapeutic.

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

Retrospective Analysis of Girl Scouts of America

Rebecca Shulman, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

How the Internet has Affected Views of Homosexuality in the Middle East

Krista Sion, International Studies

Faculty Mentor: Dr. Ivani Vassoler-Froelich, International Studies

My research consists of examining attitudes in the Middle East towards homosexuality and gay and lesbian people. It will encompass historic perceptions in literature, modern attitudes and current events, the impact of the internet and social media, and estimations about the future of the gay & lesbian rights movements in Middle Eastern nations.

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

The Study of Image Conversion Algorithms

Samuel Simpson, Computer and Information Sciences

Faculty Mentor: Dr. Ziya Arnavut, Computer and Information Sciences

I will be presenting on my study of Image Conversion Algorithms from 32 bit to Grey scale and Pseudo color. I have written a program using OpenCV and have studied how it works.

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

Rape myth acceptance, psychopathy and acceptance of interpersonal violence

Courtney Smith, Delaney Dretto, Psychology

Faculty Mentor: Dr. Darrin Rogers, Psychology

In this study, rape myth acceptance, psychopathy and acceptance of interpersonal violence were researched. Past research has found a positive relationship between rape myth acceptance (RMA) and interpersonal violence. Research has also found a relationship between psychopathy and RMA, as well as psychopathy and violence. In our current study, higher rape myth acceptance is expected to predict higher levels of acceptance of interpersonal violence. Due to past research indicating a relationship between psychopathy and violence, it is also hypothesized that psychopathy will predict higher levels of acceptance of interpersonal violence. Finally, it is expected that higher psychopathy will be related to higher rape myth acceptance. Undergraduate students filled out online surveys that assessed their rape myth acceptance, acceptance of interpersonal violence and psychopathy.

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

One dimension of bifactor acculturation moderates the relationship between just world beliefs and rape myth acceptance in Hispanic students

Courtney Smith, Delaney Dretto, Avishai Afek, Ariana Grisanti, Psychology

Faculty Mentor: Dr. Darrin Rogers, Psychology

In this study, the acculturation was seen as a moderator of the relationship between just world beliefs (JWB) and rape myth acceptance (RMA). It was hypothesized that JWB would predict RMA, while acculturation would moderate this relationship.

Undergraduate students filled out an online survey assessing their levels RMA and JWB, as well as levels of acculturation. To test for acculturation, a bifactor analysis of two interactions was used. Acculturation was split into two scales; one testing the level of separation versus assimilation, and the other testing for integration versus marginalization. The results showed higher JWB was a predictor for higher RMA. Alongside JWB, the interaction between assimilation-separation and JWB was a predictor for RMA showing that assimilation had a negative correlation with RMA. In contrast, the interaction between integration-marginalization and JWB did not have a significant effect on RMA.

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

ENACTUS

Sarah Smith, Justin Cunningham, Lorenzo Amato, Mary Plum, Cora Abraham, Luis Flores, Benjamin Soto, Jillian Burgess, Business Administration
Faculty Mentor: Dr. Susan McNamara, Business Administration

Fredonia Enactus is an international non-profit organization of student leaders that strive to create, a more sustainable world through a series of projects. Fredonia Enactus uses entrepreneurial skills to empower Chautauqua County by using their skills, knowledge and passion. Fredonia Enactus is comprised of four distinct teams, Fred Financials, O.R.E, L.I.F.E, and Green Wave. These four teams work together to boost financial literacy, income, sustainability, and leadership. We have grown from 10 members to 70 members and representing 19 majors. We put together our skills and as a team we are committed to empower those in needs to create better lives and a better world.

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

Retrospective Analysis of Tottenville High School Varsity Girl's Lacrosse Team

Stephanie Soboleva, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Retrospective Analysis of Saratoga Bridges

Emily Spain, Psychology
Faculty Mentor: Dr. Jack Croxton, Psychology

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

Lily Dale: Crossroads of Spiritualism and Women's Suffrage

Codee Spinner, American Studies
Faculty Mentor: Dr. Shannon McRae, American Studies

A product of the aftermath of civil war, the United States experienced a blossoming religious movement, especially in the “Burned-over district” of western and central New York State. These Spiritualist communities were generally in favor of progressive reform movements such as woman’s suffrage. Female members of these communities often had the opportunity to hold leadership roles. This project explores women’s roles in one particular community of this sort, Lily Dale. Their actions included creating a Women’s Day each year that featured the country’s leading female orators such as Susan B. Anthony, Isabella Beecher Hooker, and Rev. Anna H. Shaw. In order to compile this paper, I accessed primary and secondary sources from the Lily Dale Historical Society and Library. Primary correspondences and newspaper articles are used as a means in which to explore the role and power these women held in this small community

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

Peer Advocacy Programs

Merique Suliveras, Women’s and Gender Studies

Faculty Mentor: Ms. Julie Bezek, Women’s and Gender Studies

Incidences of sexual assault on college campuses are very propionate across the USA. I will be presenting statistics on campus sexual assault, the effectiveness of rape crisis center and the effectiveness of peer to peer education to argue the need and importance of having a sexual assault peer advocacy program on college campuses and presenting a mock version of what this program could look like on the Fredonia campus with the help of research collected from other colleges and universities across America that have programs like this on their personal college campus.

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

Designing of Music Database Management Application on a Local Host

Amanda Sutter, Michaela Yehl, Computer and Information Sciences

Faculty Mentor: Dr. Gurmukh Singh, Computer and Information Sciences

Recently, there has been considerable development of several dynamic web programming and database management languages in market. The advantage of PHP and MySQL languages is that these two languages are open source and one is not required to buy license for them. This research work could have been accomplished with proprietary software, e.g., MS Visual Studio.NET framework, which has built-in provision of web and database management languages such as Active Service Pages (ASP) and SQL. However, one has to shell out the money to purchase its license. On the other hand, PHP and MySQL are non-proprietary, and consequently they are most suitable for this scholarly work. Here, we present of results on designing of music database management web application on a local pizza.cs.fredonia.edu host that is owned/managed by the Department of Computer and Information Sciences, SUNY at Fredonia.

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

"I Saw My People": Prairie Socialism

Jeffrey Taylor, Music/American Studies

Faculty Mentor: Dr. Shannon McRae, American Studies

Woody Guthrie's 1940 "This Land Is Your Land" is unique among American patriotic song in its origins in radical left-wing politics. Among Guthrie's primary political influences was a variant of socialism prevalent in his native Oklahoma known as "prairie socialism". In this paper, I analyze three central features of prairie socialism: a strong attachment to Protestant Christianity, an agrarian-minded nativism, and progressive attitudes toward race relations. Although these ideas were not held by Guthrie throughout all of his musical career, they had formed the essential core of his political views by the time he wrote "This Land".

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

From Gender to Genre: Working with Youth to Promote Social Justice

Rachel Teets, English

Faculty Mentor: Dr. Heather McEntarfer, English

My research will investigate the prevalence and consequences of non-inclusive environments, (schools in particular) for transgender youth in the U.S. My goal in conducting this research is to demonstrate how socially-constructed binary gender discourse negatively impacts transgender youth. Further, the research will present the need for individuals to deconstruct, restructure, and/or otherwise improve the institutions in which they participate. I will offer positive ways to transform the roles we currently fill, and demonstrate how youth-serving organizations, especially immersive programs such as residential summer camps, can provide a safe, inclusive setting for children who identify outside of societal "norms."

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

Student Choice in Relation to Test Anxiety and Performance

Erin Thompson, Mathematical Sciences

Faculty Mentor: Dr. Keary Howard, Mathematical Sciences

This study examines the effects of giving students choice on assessments and the levels of mathematics anxiety in addition to the effects on student performance. It is hypothesized that when undergraduate non-mathematics majors are given choice on an algebra assessment, students will experience a decrease in mathematics anxiety. Furthermore, it is hypothesized that the students will score higher on questions that involve choice compared to questions that do not involve choice.

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

FredASSIST Sexual Health Intern

Amanda Thornton, Sociology

Faculty Mentor: Ms. Melissa Lyon, Sociology (Public Health)

For the Spring Semester, I have had a public health internship with FredASSIST on campus. FredASSIST stands for Fredonia Association of Students for Safer Intimacy and STI Testing. This is a student run club that provides safe sex products to the campus, weekly sexual health clinics and programming in the dorms to educate the students.

I think that knowledge is power, and a lot of students seem to be lacking that when it comes to their sexual life. This puts them at a severe disadvantage and can impact the rest of their life. This connects with the public health essential service of educating, informing and empowering.

My poster would be a summarization of what I have done all semester at my internship. I will provide samples of the pamphlets that I have mad and an outline of a program I did in the dorms and FredASSIST services on the poster.

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

Barriers of Service Learning

Sarah Titus, Psychology

Faculty Mentor: Dr. Andrea Zevenbergen, Psychology

Service Learning is a learning approach that incorporates community service with academic study to enrich the student's learning while teaching civic responsibility, and strengthening the surrounding communities. Service Learning opportunities are invaluable in helping the student further his or her studies and gain experience, as well as helping the local community with various projects. In this study, research was conducted using phone interviews to contact each SUNY campus, with at least one person from each campus being spoken to directly. The focus of this study is on what proportion of SUNY campuses offer a wide variety of Service Learning opportunities, as well as the barriers that campuses identify which hinder the growth of Service Learning. Preliminary analyses revealed that the majority of SUNY campuses have Service Learning components within their courses, or throughout extracurricular activity, but there are also other campuses that do not currently have any involvement with Service Learning at all.

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

Retrospective Analysis of Family Video

Brandon Torrance, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Parent Modifications to a Dialogic Reading Program Based on Child and Other Characteristics

Kelsey Travers, Psychology
Faculty Mentor: Dr. Andrea Zevenbergen, Psychology

This study examined dialogic reading how it can be tailored to the individual child's needs. Dialogic reading involves interaction between a parent and child during story book reading. Past research has suggested that dialogic reading can improve a child's overall language comprehension and production, which are important for school and overall life success. In this study, 55 parents of preschoolers were interviewed regarding their experiences in a 4-week dialogic reading program. The interview data were analyzed qualitatively to determine typical ways in which the parent deviated from the practices of dialogic reading in which they had been trained. Parents' deviations were categorized into four major themes: other untrained family members reading to child, not following dialogic reading principles in regard to asking questions, accommodating for child's interest and the use of add-on activities. Knowing the deviations that parents make is important because it can give insight as to what individual child needs. From the results of this research, one can learn how to adjust dialogic reading to better meet the needs of individual children.

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

Thanatos

Giacomo Tucker, English
Faculty Mentor: Ms. Kathryn Moore, English

This multi-media presentation in three acts includes ten renowned poems from around the world across the ages being dramatically recited with corresponding imagery which conveys a narrative about the human condition when faced with imminent death.

video/documentary 5:00 p.m. to 5:30 p.m.

Physics Applied to Baseball

John Tucker, Sarah Chamberlain, Physics
Faculty Mentor: Dr. Justin Conroy, Physics

We have collaborated with members of the Fredonia Technology Incubator in the development of a baseball application. The result of our research allows one to determine ball distance as a function of off-bat speed and angle, as well as other variables.

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

Effect of Voice Therapy on Acoustic Vocal Parameters and Self-Perception of Gender in Transgender Patients

Ashley Tyson, Communication Disorders and Sciences
Faculty Mentor: Dr. Bridget Russell, Communication Disorders and Sciences

The purpose of this study is to examine how voice therapy changes acoustic characteristics of voice and self-perception of gender in transgender patients. Subjects' acoustic parameters were collected before and after treatment to determine changes in perturbation, fundamental and formant frequency, as well as, perceptual qualities of voice that signal gender differences. The Multi-Dimensional Voice Profile (MDVP) program was used to collect acoustic data and the Transgender Voice Questionnaire (TVQ) was administered to measure self-perception of gender. Results include a comparison of acoustic measures before and after treatment and therapy strategies that improved perception of gender identification in transgendered patients.

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

Goodbye paper, Hello digital?

Kathleen Urtz, Mathematical Sciences (Statistics)

Faculty Mentor: Dr. Nancy Boynton, Mathematical Sciences (Statistics)

This study used survey methods to examine how SUNY Fredonia students used various memory aids (e.g., digital or paper calendars) to help remember 'future' events, such as homework assignments, and appointments. The study also measured students' conscientiousness to better understand what kind of students were using what type of memory aids. Demographics such as gender, grade point average, and academic standing were examined to see if they were related to the type of memory aid being used. The data analysis and results focus on whether there are significant differences in types of memory aids being used by those that have high, medium or low conscientiousness.

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

Retrospective Analysis of East Mud Lake Association

Genevieve Vanzile, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Senior Project: Video Game

Rhiannon Vercant, Computer and Information Sciences

Faculty Mentor: Mr. Derrik Decker, Computer and Information Sciences

This project is an independent study I have been working on this semester. I have been working to create a simple video game using the Unity game engine and Blender. I have been looking into many aspects of the game making process including character design, level design, character modeling, character animation , etc.

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

Relations Between Academic Year and Internal Locus of Control, Academic Self-Efficacy, and Effective Study Habits in College Students

Nichole Whiteford, Psychology

Faculty Mentor: Dr. Andrea Zevenbergen, Psychology

This study aimed to examine relations between academic year and age, academic performance, locus of control, academic self-efficacy, and effective study habits in college students. Previous research has shown that individuals with strong internal locus of control are likely to have greater academic achievement than individuals with strong external locus of control. Effective study habits and high academic self-efficacy have also been found to be positively correlated with higher academic achievement. It was hypothesized that more advanced (third and fourth year and beyond) students would have higher internal locus of control, higher academic self-efficacy, and more effective study habits than first and second year students. One hundred twenty participants completed measures of locus of control, academic self-efficacy, and effective study habits. Scores from these measures were analyzed in relation to age, academic year, and GPA range. Results supported earlier research that those with more effective study habits and higher academic self-efficacy tend to have higher GPAs than individuals with less effective study habits and lower academic self-efficacy. Results also showed significant correlations between internal locus of control, higher academic self-efficacy, and more effective study habits. No significant results were found between internal locus of control and higher GPA, and no significant differences in locus of control, academic self-efficacy, and effective study habits were found between first and second year students and more advanced students.

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

Recrystallized Olivine Grain Size Showing Tectonic Emplacement History of Ultramafic Rocks in the Blue Ridge Mountains of Western North Carolina

Sierra Wiegman, Geology

Faculty Mentor: Dr. Katharine Johanesen, Geology

The Appalachian Mountains were formed by a succession of collisions that moved to close the ocean between North America and Africa. The first of these collisions formed the rocks which are now exposed in the Blue Ridge Mountains of the Southeastern United States. These rocks include ultramafic bodies which most likely come from the Earth's mantle and have recorded part of the tectonic history of their emplacement. We sampled several of these bodies exposed in western North Carolina for detailed studies of their microscopic textures. The grain sizes of the peridotites vary between bodies and grains show annealed textures. This indicates the bodies could have a range of emplacement conditions.

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

Black Sexual Politics Through History

Cedric Wilson, Graham Caulfield, Brittney Herbst, Alice Mezhibovsky, Women's And Gender Studies

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

We would like to examine the history of black sexual politics. This will include researching what types of narratives dealing with black sexuality that we hear or not hear through specific points in history from enslavement of African people, through the Feminist movements, Civil Rights movement, Gay Liberation and to the present day. We will especially be researching narratives that are not a part of mainstream historical teachings and seeing why these alternative views have been tucked away in history. We will also explore what kind of effects this has towards black people today.

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

Bossy vs. Boss: The Role of Feminist Stereotypes and Identification in the Endorsement of Leadership Gender Roles

Curtis Wojcik, Kara Hall, Bradley Volz, Psychology

Faculty Mentor: Dr. Jennifer Dyck, Psychology

We investigated the effects of feminist stereotyping, feminist identification, and internalized misogyny on perceptions of different gendered leaders. Male and female college students read two passages about either a male or a female protagonist in a leadership position. One passage depicted the protagonist as a young child, the other depicted the protagonist as an adult. Participants then completed a survey about each of the passages and their views on women and feminists. It was predicted that the male protagonist would be evaluated more positively than the female protagonist with the protagonist's age, feminist stereotyping, feminist identification and internalized misogyny all moderating this effect. Because data collection is ongoing, results are forthcoming. This research is the first to address the interplay of all these factors in determining one's endorsement of gender roles.

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

Intersectional Audio/Journalism Media Project

Claire Woodcock, English

Faculty Mentor: Dr. Jeannette McVicker, English

My research applies gender theory to journalism through the medium of audio. Throughout the semester, I have been producing audio news stories that deconstruct complex social issues and the way that the media shapes them. The application of my research--the audio pieces-- bring awareness to current issues in areas of race, gender, class, and identity. My research also has a distinct focus on the language I use to narrate these stories.

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

Retrospective Analysis of JCC Hultquist Library

Katie Young, Psychology

Faculty Mentor: Dr. Jack Croxton, Psychology

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

Chapbooks and the Trident

Shannon Rochford, Kayla Brown, Tyler Degenfelder, Katryna Pierce, Brian Dibble, Margaret Drzewiecki, Savvy Payne, Jeffrey Emilson, Ashley Weinheimer, Emily Wynne, Melissa Feola, Garrett Grant, Rebecca Hale, Dananir Arafat, Michael Limoncelli, Curtis Lord, Christopher Malone, Riley Cole, Meghan McClelland, Jenna Palistrant, Brianna Barbarossa, Thomas Pezzulo, Alexander Rodriguez, Matthew Rudoy, Riley Straw, Sean Patrick, Lindsay Tomaka, Adam Ramos, Amanda Reimondo, English

Faculty Mentor: Mr. Dustin Parsons, English

students and the display will be available throughout the day

Dance Performance Abstracts

Abstract for Presentation I

Title of the choreography: Telegraph

Choreographer: Danielle Izzo / Senior BFA Dance & Acting

Presenters: Adam Ali, Courtney Stewart, Molly Carriero, Jasmine Mattar,
Tess Grosvenor, Joan Cusick

Understudy: Rachel Prikazsky

The inspiration for this choreography sprung from a set of evocative paintings by the Belgian surrealist artist, Rene Magritte, entitled The Lovers I and The Lovers II. Both paintings are a variation on a portrait of a man and a woman who have canvas bags covering their faces. This imagery summoned the movement that ultimately defined the relationship between the dancers.

Abstract for Presentation II

Title of choreography: Orion III

Choreographer: Sam Kenney, Associate Professor, Department of Theatre & Dance

Presenters: Adam Ali, Lauren Dewey-Wright, Danielle Izzo, Jasmine Joyner, Michelle Kirisits, Noelle Lazor, Alexa Lindberg, Jasmine Mattar, Courtney Stewart, Kathryn Straub

Understudies: Bianca Dam, Nicole Miller, Mercedes Smith

Premiered by the Fredonia Dance Ensemble in February 2014, *Orion III*, is the third in a ten-dance series inspired by and staged to Philip Glass's Orion cycle. The music and the choreography both investigate the beauty, power, and constant movement of the cosmos, as well as the wonder that people of all cultures experience when looking at a starry night sky.

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 then 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.