Fifteenth Annual

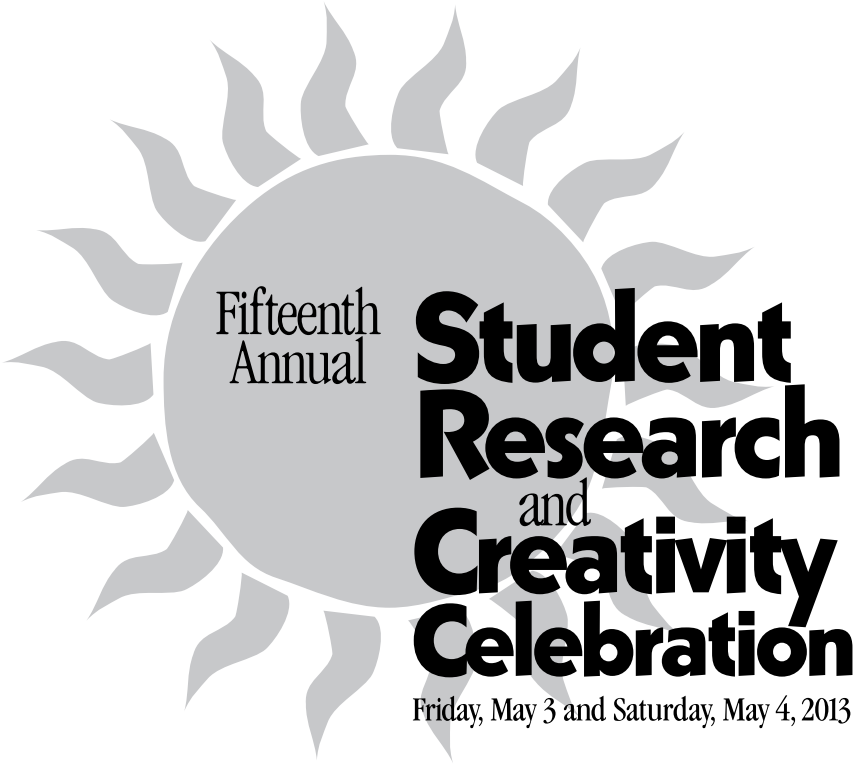
Program & Abstracts

Student Research and Creativity Celebration

Friday, May 3 and Saturday, May 4, 2013

BUFFALO STATE
The State University of New York

15th Annual Student Research and Creativity Celebration, SUNY Buffalo State



Program & Abstracts

Editor

Jill K. Singer, Ph.D.
Director, Office of Undergraduate Research

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Department and Program Coordinators for the Fifteenth Annual Student Research and Creativity Celebration

Lisa Anselmi, Anthropology
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Jill Norvilitis, Psychology
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Cory Rogge, Art Conservation
Stephen Saracino, Design
Lynne Scalia, Business
Jim Shea, Engineering Technology
Gary Solar, Earth Sciences and Science Education
Sandra Washington, McNair Scholars Program
Jo Yudess, Center for Studies in Creativity

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Buffalo State's Student Research and Creativity Celebration, one of the premier events on campus, showcases the wealth of research across disciplines carried out by our dedicated undergraduate students. It also highlights our institution's ongoing dedication to engaged learning as an important part of academic life to broaden and strengthen the learning experience of our students.

By integrating research into our programs, Buffalo State students discover an exciting way to gain knowledge in their field of study while also developing important skills such as critical thinking, problem solving, creativity, and effective communication. It's inspiring to know so many of our students are pursuing this type of scholarly activity. The benefits from these first-hand experiences serve our students well in their academic and professional lives.

We are proud to mark the 15th year of Student Research and Creativity Celebration and to feature the high quality work of our students accomplished under the guidance of their outstanding faculty mentors. Congratulations to all Buffalo State student participants, and thank you for sharing the knowledge and insights you have gained through your research endeavors.

Aaron Podolefsky, Ph.D.
President

This is a milestone year for Buffalo State's Student Research and Creativity Celebration. For fifteen years, we gather each spring to acknowledge the wonderful intellectual, artistic, and creative accomplishments of our undergraduate and graduate students. For fifteen years, the program and celebratory event demonstrates Buffalo State's commitment to the rigors, joy, and fulfillment of intellectual discovery. For fifteen years, the dedication of Buffalo State students, faculty, and staff to the program has transformed lives of all involved.

The Student Research Program at Buffalo State is a shining example of incorporating high-impact and deep learning practices in student's educational experiences. The design and delivery of such experiences requires thoughtful planning, supervision, and mentoring by faculty. The student is likewise obligated to dedicate attention and meaningful time on task to the experience.

With the 15th Student Research and Creativity Celebration, we acknowledge and applaud all who make this possible – students, faculty, Research Foundation, and all others involved with the event. Dr. Jill Singer continues to provide leadership to advance Buffalo State's programming and national prominence in undergraduate research. I express appreciation to Dr. Singer on behalf of the Buffalo State community.

Dennis Ponton, Ph.D.
Provost

Welcome!

Welcome to the Student Research and Creativity Celebration!

This weekend marks the 15th anniversary of the Student Research and Creativity Celebration. Reaching this milestone provides me the opportunity to reflect on an event that has become an institutional tradition. The level of support and enthusiasm for this celebration of research, scholarship, and creativity grows stronger each year. I gratefully acknowledge the enthusiastic commitment to this event by the Buffalo State administration. I deeply appreciate the efforts of all the individuals and offices that help make this event successful. The quality and breadth of the presentations, displays of works of art, and performances confirms the excellence of the mentoring provided to Buffalo State students by dedicated faculty. As well, it speaks to myriad opportunities afforded to them and their strong desire to create new knowledge and works of art.

Since the program's inception we have transitioned from paper applications to electronic submissions and from conventional posters to digital large format posters designed by students with the use of poster templates. Over the past fifteen years, there have been over 3000 abstracts and artists statements authored and co-authored by more than 5000 students. However, it is not the advances in technology or the metrics that best define the impact of this program. It is best captured by a remark made by a student more than ten years ago. The student made a point of seeking me out to tell me how she had just spent the day listening to talks, viewing artwork, and talking to students presenting posters. She ended her account by saying that she had no idea how talented her classmates were and how proud she was to be graduating from Buffalo State. I agreed with her then and am even more convinced of her words today. It has been a very rewarding fifteen years and I have derived great satisfaction from developing and running a program that has been embraced by the campus community. The inclusion of students across all academic disciplines places Buffalo State among those institutions that value the teacher-scholar model and consider undergraduate research as a transformative and high impact educational practice and one of the best ways to engage all students. Buffalo State is proud to contribute its voice in conversations about effective models for integrating undergraduate research into the curriculum and evaluating the impact of undergraduate research.

I hope you enjoy listening to and meeting the student presenters. I am certain you will be impressed by the diversity and quality of their presentations. Thank you for attending this event and supporting our student presenters and their faculty mentors.

Enjoy the program!

Sincerely,

Jill Singer

Jill Singer, Ph.D.
Professor of Earth Sciences
Director, Office of Undergraduate Research

Our Research and Creativity Celebration showcases the kind of engaged learning to which Buffalo State is committed. The work we all enjoy during this two-day event highlights the interaction between students and faculty members that occurs all the time on our wonderful campus. As research and scholarship are the hallmarks of a graduate education, the Graduate School is proud to support this work. I warmly congratulate all the students participating in this great weekend of intellectual and artistic expression – especially the graduate students – and sincerely thank all the faculty mentors for their commitment to student excellence. As always, we extend a special thanks to Dr. Jill Singer for her passionate leadership and for organizing the Research and Creativity Celebration, now in its 15th year!

Kevin Railey, Ph.D. Associate Provost and Dean, The Graduate School

It is my pleasure to welcome the students, faculty, staff, and friends of Buffalo State to the Student Research and Creativity Celebration. Buffalo State aspires to engage students in the life of the mind. We do not only consume information. We inquire, learn, imagine, create, and share. It is a significant achievement in the life of a university to watch as students develop their knowledge and skills in ways that allow them to contribute art and knowledge that enriches us all. I join with the entire Buffalo State community in celebrating the achievements of our outstanding students and faculty as they present their work at the 15th Annual Student Research and Creativity Celebration.

Scott L. Johnson, Ph.D., Dean, University College and Associate Vice President for Undergraduate and International Education

Welcome to the 15th Annual Student Research and Creativity Celebration, where we share the exceptional scholarly and creative accomplishments of many talented students. The faculty of the School of Arts and Humanities, national and international leaders in a myriad of forms of creative expression, mentor and inspire students to explore the diversity of scholarly pursuits available in the arts and humanities. We are honored to showcase student achievement in this Buffalo State hallmark event. On behalf of the School of Arts and Humanities, I am delighted to congratulate all participants.

Benjamin C. Christy, A.Mus.D., Dean, School of Arts and Humanities

I am delighted to welcome the students, faculty, staff, and friends of Buffalo State to the 15th Anniversary of the Annual Student Research and Creativity Celebration. Your work speaks so boldly of your own innovation and energy and of the dedicated mentorship of faculty and staff who encouraged and supported you. As Dean of the School of Education, I could not be more hopeful for the advancement of peace and social justice in our global community than when I walk through this room and see the evidence of how you construct the future. Bravo!

Wendy A. Paterson, Ph.D., Dean, School of Education

I am very pleased to congratulate the students and their faculty mentors taking part in Buffalo State's annual Student Research and Creativity Celebration, and to welcome students and their guests to the 15th year anniversary of this event. Student participation in research and creative work is one of Buffalo State's highest priorities, because students find it to be an extremely important part of their education. This impressive showcase of the outstanding work of Buffalo State undergraduate and graduate students demonstrates our commitment to student engagement in scholarship, as well as the talent, creativity, and accomplishments of participants.

Mark W. Severson, Ph.D., Dean, School of Natural and Social Sciences

Congratulations to all the student presenters participating in the 15th annual Student Research and Creativity Celebration! We applaud you on achieving this significant academic accomplishment, and your work is inspiring to us all. Thanks also to the faculty mentors that encouraged and supported these students. This wonderful event highlights the outstanding work done across our many different academic programs, and we are proud of the research you have done this year.

Rita M. Zientek, Ph.D., Interim Dean, School of the Professions

Program at-a-Glance

Friday, May 3, 2013

Dr. Margaret Eschner Bacon Student Gallery, Upton Hall

Photographic Exhibit: "Census Statistics Illuminated"

Keri Gould
12:00 p.m. – 9:00 p.m.
Note: Saturday, May 4, 10:00 a.m. – 5:00 p.m.

E.H. Butler Library

5:00 p.m. – 6:30 p.m.

President's and Provost's Opening Reception

A culminating activity by students in HTR 400: Catering Management

Nicole Mokhiber, Michael Hanely, Troy Benson, Jordon Thomas, Jamie Blumrick, Yonatan Thomas, Brielle Clontz, Jenna Watts, Letitia D'Aviler, Emmanual Williams, Tarrah Devito, Alexandra Esmonde, Susan Fimbel, Ivena Ford, Jaleel Harris, Chantia Hutchinson, Lindsey Kessel, Raven Owusu, and Michael Pericozzi

Posters in Atrium

Exhibits on Mezzanine Level

An Exploration Of Colors: Through Paint and the Lens

Sarah Westphal, Photography and Painting

Philosophy Takes Form

Joshua DeMont, Philosophy

Flexible Theatre, Donald Savage Building

One Act Festival: Student-Directed One-Acts

Student Performers and Directors: Erika Frase, Krystina Lucas, Meg Johnston, Rebecca Wall, Lakia Lucas, Rachel Wach, Ashley Brovo, Malik Griffin, Shakora Purks, Rhiannon Sherlock, Pam Mendoza, Emmé Lazarcszak, Rachael Jamison, Fanta Fofana, Chrissy Kramer, Abe Platt, Tiesha Thomas, Michelle Meer, Julia Smith, Cassie Conrad, Laura Mooney, Ricky Needham, Allison Monaco, Adrianna Goethl, Frances Hughes, Kaitlyn Smith, Brittany Wysocki, Lee Becker, Travis Carlson, Monae Dudley, Alvin Flemming, Michael Esposito, Iana Kadlev, and Sean Tresmond,
8:00 p.m.
Note: Festival also runs May 2 and May 4 @ 8 p.m.

Saturday, May 4, 2013

E.H. Butler Library

Posters and Displays

Lobby Atrium and Mezzanine Levels
8:30 a.m. – 4:30 p.m.
Sessions I to VIII, each session one hour in length

Session I: 8:30 a.m. – 9:30 a.m.
Session II: 9:30 a.m. – 10:30 a.m.
Session III: 10:30 a.m. – 11:30 a.m.
Session IV: 11:30 a.m. – 12:30 p.m.
Session V: 12:30 p.m. – 1:30 p.m.
Session VI: 1:30 p.m. – 2:30 p.m.
Session VII: 2:30 p.m. – 3:30 p.m.
Session VIII: 3:30 p.m. – 4:30 p.m.

Oral Sessions

Business, CIS, and Engineering Technology
Room 208, 8:30 a.m. – 10:15 a.m.

Humanities I
Room 210, 8:30 a.m. – 12:30 p.m.

Sciences, Mathematics, and Health
Room 210B, 10:30 a.m. – 12:00 noon

Social Sciences
Room 208, 10:30 a.m. – 1:15 p.m.

Humanities II
Room 210B, 12:30 p.m. – 3:00 p.m.

Humanities III
Room 210, 1:00 p.m. – 4:45 p.m.

Education
Room 208, 1:15 p.m. – 4:45 p.m.

Rockwell Hall Louis P. Ciminelli Recital Hall

3:00 p.m.
Stephen McLean
Senior Capstone Recital: Trumpet

Flexible Theatre, Donald Savage Building

3:00 p.m.
Laura Mooney
"**Theater Under Fire**"

Saturday, May 4, 2013
E.H. Butler Library

Oral Papers
Rooms 208, 210 and 210B

Business, Computer Information Systems, and Engineering Technology
Room 208

8:30 a.m. – 10:15 a.m.

Presenting:

8:30 a.m. – 9:30 a.m. (*each paper 15 minutes*)

Achieving World Class Overall Equipment Effectiveness and First Time Quality
Shawn Witkowski, INT 689: Research Design and Methods

From Buff State To Central University of Finance and Economics (CUFE)
Jeffrey Gryglewicz, **Michelle Reinhart**, **Alex Sgroi**, **Kari Beyers**, and **Victoria Church**, INE 390: Chinese Culture and Business Practices

Party Like It's $19.99: Infomercial Tactics and Success
Andrew Henning, HON 400: All College Honors Colloquium

Efficient Verification Of Medical Device Software Focused On Quality and Compliance
Jason Strong, INT 689: Research Design and Methods

9:30 a.m. – 10:15 a.m. (*each paper 15 minutes*)

The Effect Of the Revised ADA 2010 On Hotels
Min Yi Luo, HTR 470: Legal Issues in Hospitality

Evaluating an Automated Data Input Protocol To Increase Process Capability
Kelly Sabo, INT 689: Research Design and Methods

A Systematic Review Of Marketing Literature On Atmospherics
Thao Nguyen, Business

Humanities I
Room 210

8:30 a.m. – 12:30 p.m.

Presenting:

8:30 a.m. – 9:30 a.m. (*each paper 15 minutes*)

A "Recipe" For Disaster Or Success: Social Media and the Hospitality Industry
Kevin Robida, COM 450: Communications and Society

Consumer Culture Vs. Catholicism: How a Media Driven Culture Is Affecting Religion Globally
Kelsey Tender, COM 450: Communications and Society

Consuming Cars, Consuming Lovers: The Social Consequence Of Consumer Culture
Steven Wagner, COM 450: Communications and Society

Media Globalization and Consumer Cultures: The Hegemonic Spread Of Consumer Culture and the Consumption Of Cultures
Kiasia Truluck, COM 450: Communications and Society

9:30 a.m. – 10:30 a.m. (*each paper 15 minutes*)

It's OK To Be Gay: The LGBTQ Community In Young Adult Literature
Taylor Watson, HON 400: All College Honors Colloquium

Censorship By the Corporate News Media: Researching an Underreported and Ignored News Story
Andrea DiNatale, **Katie Farnham**, **Michael Canfield**, and **Conor Rohan**, COM 389: Alternative Press

Google It: The Role Of Mobile Media In a Know-Nothing Society
Brian Alexander, COM 450: Communications and Society

Digging Through the MUD: A Look Inside the Virtual World
Tyeisha Prior, COM 450: Communication and Society

10:30 a.m. – 11:30 a.m. (*each paper 15 minutes*)

Popular Mass Media Consumption and the Increase Of Anxiety and Depression In Consumer Culture
Andrea DiNatale, COM 450: Communications and Society

LGBT In Sports: Where We've Been and Where We're Going
Mackintosh Barker, COM 389: Sports Documentary Analysis

How Has Corporate Media Influenced the Perception Of African American Men?
Jeneva Hall, COM 450: Communications and Society

Are Reality Shows Racist?
Tajh Lewis, COM 450: Communications and Society

11:30 a.m. – 12:30 p.m. (*each paper 15 minutes*)

Working Class Bias On Television
Meaghan Maess, COM 450: Communications and Society

Safety In the NHL
Sam Mines, COM 389: Sports Documentary Analysis

Squash: Will It Ever Make The Olympics?
Charles Rockwell, COM 389: Sports Documentary Analysis

Buffalo State Intercollegiate Ethics Bowl Team: Developing a High School Ethics Bowl
Jenna Tomasello, **Joshua DeMont**, **William Watkins**, **Troy Caruana**, **Casey Brescia**, **Cassidy Karpovage**, **Samantha Wezowicz**, **Daniel Stewart**, and **Eric Szymborski**, PHI 300: Ethics Bowl National Team

Sciences, Mathematics, and Health

Room 210B

8:30 a.m. – 12:00 noon

Presenting:

8:30 a.m. – 9:30 a.m. (*each paper 15 minutes*)

Drug In Human Calculator: Applied Math In Pharmacokinetic Models
Enmanuel Payano, AMT 495W: Applied Mathematics Project

Mathematical Modeling Of Tuberculosis
Corinne Monette, AMT 495W: Applied Mathematics Project

Decision, Decision, Decision
Nicholas Fiorello, AMT 495W: Applied Mathematics Project

Zero Exists and Imaginary Numbers Are Real
Jason Greig, MAT 491: Capstone Research in Mathematics

9:30 a.m. – 10:30 a.m. (*each paper 15 minutes*)

Algorithmic Results Of Intersection Graph Optimization
Alexander May, AMT 495W: Applied Mathematics Project

Which Pitching Statistic Is the Best Predictor Of Success?
Breanna Fenski, AMT 495W: Applied Mathematics Project

A Beautiful Numbers Game: What Makes a MLS Player Most Valuable?
Samantha Strapason, AMT 495W: Applied Mathematics Project

Is Stephen Curry Really an All-Star?
Chris Dundon, AMT 495W: Applied Mathematics Project

10:30 a.m. – 11:30 a.m. (*each paper 15 minutes*)

Does Money Grow On Trees? A Study Of the Value Of Our Natural Resources
Emily Schiller, AMT 495W: Applied Mathematics Project

Range Reduction Strategies For Optimization Problems Involving Groundwater Remediation
Shirmin Aziz, AMT 495W: Applied Mathematics Project

The Influence Of Temperature Upon Decomposition In Western New York: A Study In Accumulated Degree-Days
Jessica Stabell, Anthropology

The Total Synthesis Of Indian Yellow
Jade Welch, Chemistry, **Andrew Schick**, Chemistry, and **Muhammet Cetin**, Chemistry

11:30 a.m. – 12:00 noon (*each paper 15 minutes*)

Get the Lead Out! The Risk Of Lead Paint In Buffalo Homes
Nick Faso, SWK499: Housing Problems

We're Not Vampires: But Your Blood Is Needed
Shari Lynn Ingle, Journalism and Public Communication

Social Sciences

Room 208

10:30 a.m. – 1:15 p.m.

Presenting:

10:30 a.m. – 11:30 a.m. (*each talk 15 minutes*)

Evaluating the International Law On Armed Conflicts and Humanitarian Intervention, Case Study: The 2011 Conflict In Libya and Its Aftermath
Greta Crisan, Political Science

Hazing: The Past, Present, and Future
Cinthia Avelar, HON 400: All College Honors Colloquium

The Absence Of the Guerrilla
Gabriel Maldonado, History

Contraceptive Prevalence: A Study Of the Main Impact On Abortion Rate
Sara Sweeney, PSC 470W: Senior Seminar

11:30 a.m. – 12:30 p.m. (*each paper 15 minutes*)

How an Individual's Self-Awareness Affects Their Press
Danielle Spagna, CRS 499: Independent Study

Three Focus Points For the Black Agenda: Cultural Pride, Social Accountability, and Social Injustice
Jenny Nunn-Stanley, HON 400: All College Honors Colloquium

Lesbian-Identity and the Male Gaze: A Study Of Exotic Dancers
Aileen McCluskey, SOC 499: Advanced Qualitative Methods

In Times Of Great Challenge: The Shaping Of the Executive Office
Daniel Darnley, History and Music Education

12:30 p.m. – 1:15 p.m. (*each talk 15 minutes*)

Barriers To African-American Males Who Want To Attend College
Shawniqua Moultrie, HON 400: All College Honors Colloquium

The iChange! Project: Changing the World One Community At a Time
Aitina Fareed, Educational Technology

An All-American City: Building Buffalo With Pride
Destiny Gregoire, Spanish

Humanities II

Room 210B

12:30 p.m. – 3:00 p.m.

Presenting:

12:30 p.m. – 1:30 p.m. (*each talk 15 minutes*)

Something Old, Something New: Stylistic Interaction In Béla Bartók's Twenty-Seven Two- and Three-Part Choruses
Abigail Spoth, Music

Franz Liszt and the Music Of the Gypsy
Aaron Masters, MUS 440: Ethnomusicology

African Musical Influences In Minimalism: A Look At Steve Reich's Drumming
John Smigielski, MUS 440: Ethnomusicology

Melodies Of Life: Music In Japanese Gaming
Sarah Brenneman, MUS 440: Ethnomusicology

1:30 p.m. – 2:30 p.m. (*each talk 15 minutes*)
A Costumers Journey from Present To 1790 and Back Again
Benjamin Streeter, Theater

Curtain Up! A Ticket To the Chinese Opera
Brenna Helfer, MUS 440: Ethnomusicology

Broadway: Then and Now
Mandi Torres, MUS 440: Ethnomusicology

Music On Your Mind: Unlocking Our Inner Musician
Daniel Darnley, Music Education and History

2:30 p.m. – 3:00 p.m. (*each talk 15 minutes*)
Resonance: A Sonic Approach To Healing
Patrick Allison, MUS 440: Ethnomusicology

Still Knee-Deep In Seaweed
Alyssa Haj, MUS 440: Ethnomusicology

Humanities III
Room 210
1:00 p.m. – 4:45 p.m.
Presenting:
1:00 p.m. – 2:00 p.m. (*each talk 15 minutes*)
The Byzantine Strategy: How a Declining Empire Took Over the Near East, 867-1025 C.E.
Jonathan Rutter, History

Damsel In Distress: An Academic Detective Story
Todd Geise and **Ashley Wodzinski**, FRE 594: French North America

Chaucer's Game Of Chess
Dave Buczek, English

You Say You Want a Revolution? Michel Foucault and Prison Reform In Post 1968 France
Troy Caruana, FRE 498: Joli Mai

2:00 p.m. – 3:00 p.m. (*each talk 15 minutes*)
The World We Live In: The Perils Of Indifference
Shenette Richardson, SPC 321: Rhetorical Criticism

Disembodied Presences: Reflection On Narrative Voice In Virginia Woolf
Tamara Burross, English

I Think Sense Datum; Therefore, Sense Datum I Am
Joshua DeMont, Philosophy

The Ballot Or the Bullet
Jasmine Holder, SPC 321: Rhetorical Criticism

3:00 p.m. – 4:00 p.m. (*each talk 15 minutes*)
Rhetorical Break-Down Of Paul Ryan's "You Did Build That" Speech
Stephen Williams, SPC 321: Rhetorical Criticism

Sexual Harassment and Objectivity: Why We Need Not Ask Women If They Are Victims
Jenna Tomasello, Philosophy

Miss Ogynistic: Sexism In the Media and the Damaging Effects On Women and Relationships
Leah Barco, COM 450: Communications and Society

Kavita Krishnan On the Rape Culture In India
China Stephens, SPC 321: Rhetorical Criticism

4:00 p.m. – 4:45 p.m. (*each talk 15 minutes*)
Unsung Philosophers: Uncovering the Influence Of Women In Philosophy
Sarah Caputi, **Carissa Handiman**, **Rachael Saathoff**, and **Samantha Wezowicz**, PHI 495: Special Project

Over-Worked and Under-Dressed: The Theft Of the American Childhood
Nadra Dennis, COM 450: Communications and Society

The Objectification Of Women In Globalized Media
Rachel Summers, COM 450: Communications and Society

Education
Room 208
1:15 p.m. – 4:45 p.m.
Presenting:
1:15 p.m. – 2:15 p.m. (*each talk 15 minutes*)
The Annual Professional Performance Review: One Teacher's Story
Arianna Ferri, SCI 690: Master's Project

Newton, We Have a Problem: Misconceptions In Physics
Jennifer Gazdovich, SCI 690: Master's Project

Implementing Technology Into the Chemistry Lab and Its Effectiveness On Student Performance
Chelsea Aldridge, GES 690: Master's Project

Stuck In the Middle With You: Survival In the Ruins Of the War On Science
Amy Miller, SCI 690: Master's Project

2:15 p.m. – 3:15 p.m. (*each talk 15 minutes*)
Teaching Science To English Language Learners
Wadith Montalvo, SCI 690: Master's Project

Student-Centered, Real-Life Experiences In the Classroom: A Comparison Of Effective Teaching Methods For Both Elementary Foreign Languages and Science
Julie Brown, HON 400: All College Honors Colloquium

Improv(ing) Students, One Laugh At a Time
Beth Slazak, CRS 690: Master's Project

A Study Of Science Instructional Methods That Increase Student Motivation
Jolene Samanka, SCI 690: Master's Project

3:15 p.m. – 4:15 p.m. (*each talk 15 minutes*)

Using the Eastern Hellbender Salamander In a High School Genetics and Ecological Conservation Activity
Sarah Chudyk, Master of Science in Biology Education

Window Into Teaching: Utilizing Power Structures To Improve Overall Classroom Management In a Ghanaian Classroom
John Guzda, History and Social Studies Education

Think Outside the Box, Kid!
Youssouf Kaba, Mechanical Engineering Technology

The Zambian Classroom Culture: The Effects Of a Lack of Resources
Margaret Henry, EDU 690: Master's Project

4:15 p.m. – 4:45 p.m. (*each talk 15 minutes*)

Van Gogh Cuts Off His Ear; Administration Cuts Off the Arts
Naomi Skarupinski, Art Education

Mothers Who Fail To Rescue Their Children From Abusive Partners: Perception Of Guilt and Dispositions
Alicia Lacey, Family and Consumer Sciences Education

Poster Sessions and Displays

Butler Library Lobby

8:30 a.m. – 4:30 p.m.

Session I: 8:30 a.m. – 9:30 a.m.

Presenting:

Aboriginal Music and Its Significance
Mickayla Haynes, MUS 440: Ethnomusicology

Add Years To Your Life...Count Sheep
Corey Byrd, HEW 411W: Critical Issues in Health and Wellness

America's Obsession With Baseball
Nicholas Lange, COM 389: Sports Documentary Analysis

Analyzing "When We Were Kings"
William Whalen, COM 389: Sports Documentary Analysis

College Students' Attitudes Towards University Police
Melissa Noel, Criminal Justice

Development Of Whole-Number Place-Value Concepts and Number Sense: Student Understandings and Teacher Strategies
Sara Suranyi, EDU 651: Theory, Research, and Practice in Mathematics Instruction

Does Fluency Or Accuracy Determine a Student's Knowledge In Mathematics?
Julie Wojcik, EDU 651: Theory, Research, and Practice in Mathematics Instruction

The Effect Of Security Measures On Fear Of Crime and Victimization At a College Campus
Andrew Robinson, HON 400: All College Honors Colloquium

Electricity: When Science and Social Studies Collide
David Ring, EDU 690: Master's Project

Facilitating Secondary Students' Comprehension In Math and Science
Stephanie Mongielo, **Amy Criddle**, and **Peter Tunkey**, EDU 609: Literacy Instruction in the Upper Grades

Funky Fractions For Fifth Grade
Cassandra Gallegos, EDU 690: Master's Project

Get Tested, Not Infested
Angela Ragusa, HEW 411W: Critical Issues in Health and Wellness

The Hidden History Under Your Feet: Tunnel Systems At Buffalo State
Kelly Donovan, HON 400: All College Honors Colloquium

Integrating Vocabulary Strategies Into Middle and High School Science Instruction
Jessica Frain, **Courtney Knoph**, and **Allison Dauphin**, EDU 609: Literacy Instruction in the Upper Grades

Making a Splash In Academics: Participation In a College Athletic Program
Chelsea Saxe, HON 400: All College Honors Colloquium

Multiculturalism: Applying the Theory To the Global Classroom
Breanna McKenley, Early Childhood Education

The Music Of Haiti
Stephen McLean, MUS 440: Ethnomusicology

My Journey Toward Understanding Culture: Becoming a Language Learner Through Total Immersion
Jaquilla Vinson, Early Childhood and Childhood Education

One Day In September: The Munich Olympics Massacre Of 1972
Jasmine Willis, COM 389: Sports Documentary Analysis

The Psychology Of Design: What Makes a Good Designer
Rachel Frank, HON 400: All College Honors Colloquium

Stop the H8
Amanda Fiorentino, HEW 411W: Critical Issues in Health and Wellness

Stretch and Sketch: Structured Storeytelling
Anna Morton, Early Childhood and Childhood Education

Supermarket Sweep! Developing Savvy Shopping Skills: A Look At Ratios, Proportions and Unit Rate
Erin Cappello, EDU 651: Theory, Research and Practice in Mathematics Instruction

Teaching the Alphabet Through Literature and Other Effective Methods
Kimberly Vaughn, EDU 690: Master's Project

Teaching With Creativity For Higher Level Thinking
Jessica Sobczyk, MIITC Early Childhood and Childhood Education

Trigono-Taxicab-Ometry
Michael Filipski, HON 400: All College Honors Colloquium

A Trip They Will Never Forget
Shelby Harris, HEW 411W: Critical Issues in Health and Wellness

Using Positive Reinforcement To Establish Order In the Classroom
Cassandra Matuszak, HON 400: All College Honors Colloquium

Using Real-World Problems To Engage Physics Students and Teach Important Physics Concepts
William Hughes, Physics Education (7-12), M.S.Ed.

The Value Of the Game: Collegiate Athletics
Shytisha Taylor, COM 389: Sports Documentary Analysis

We Regret To Inform You
Danny Lewis, HEW 411W: Critical Issues in Health and Wellness

You're Ghana Love It: A Look At African Rhythm
Leanna Goddard and **Joey Daconto**, MUS 440: Ethnomusicology

Session II: 9:30 a.m. – 10:30 a.m.

Presenting:

Analysis Paralysis – When Every Moment Counts In Lives: The 2011 Somalia Famine
Kamila Mysiak, HON 400: All College Honors Colloquium

An Analytical Look Into Teacher Candidate Growth In a PDS
Ryan O'Rourke, Elementary Education

A Basic Qualitative Study To Examine Cultural Diversity In a Generalist Teacher's Classroom
Cindra Mendonca, Art Education and Art

Beyond the Classroom: Social Factors Affecting Students' Academic Performance In the United States and Zambia
Ariel Williams, Elementary Education

The Birth Of Afro-Cuban Jazz
Jacob Jay and **Nick Lippa**, MUS 440: Ethnomusicology

Concepts Of Money: Involving Hands On Activities
Ashley Malinowski, EDU 651: Theory, Research, and Practice in Mathematics Instruction

Cross-Cultural Relationships: From Buffalo, New York To Lusaka, Zambia
Holli Diez, EDU 312: The Teaching of Math and Science

Do You Have the Time? Tablas, Talas, and Rhythms Of India
Colin Sperrazza, MUS 440: Ethnomusicology

Effects Of Racism In Professional Sports
John Dorsey, COM 389: Sports Documentary Analysis

Emotion In Sport
Kelly Hooven, COM 389: Sports Documentary Analysis

"Fightville" and Return Of the Gladiator: A Look At Violence In Sports and Its impact On Culture
Mike Watts, COM 389: Sports Documentary Analysis

Finding Your Voice Through Online Discussion
Ginger McNeil Bidell, EDU 690: Master's Project

Fractions: Teaching Students Now
Erika Lindsay, EDU 690: Master's Project

Guided Tutoring: Gains For the Struggling Reader As Well As Their Instructor
Dylan Malone, **Vanessa Louis**, **Allyson Trolley**, **Sara Honsberger**, **Laura Imperiale**, **Karen Le**, **Heather Czaja**, **Rachael Norton**, **Charisma Allen**, **Rachelle Hovey**, **Jordan Delaney**, **James Hall**, **Kaylee Ristinev Kathryn Whalen**, **Tiffany Walters**, **Nicole Lattanzo**, **Catharine Liquori**, **Anna Morton**, **Ariel Williams**, **Joanelly Fermin**, and **Alfred Abankwa**, EDU311/EDU 511: Language Arts Methods

Helping Our Amigas Beat Cervical Cancer
Jamie McCarty, HEW 411W: Critical Issues in Health and Wellness

Here Today, Gone Tomorrow
Travis Riggins, COM 389: Sports Documentary Analysis

Hopi Secular Music: Pattern and Theme
David Brummer, MUS 440: Ethnomusicology

Interpretation Of the Ancients: Music Of Chen Yi
Jason Fiedler, MUS 440: Ethnomusicology

Let's Learn Together Across the Ocean: Cross-Cultural PenPals
Brunilda Reyes, EDU 312: The Teaching of Math and Science

Making Math Real: Can Real Life Problem Solving Make Understanding Decimals and Fractions Easier?
Sarah Wade, EDU 651: Theory, Research and Practice in Mathematics Instruction

Masculinity Portrayed In Sports Documentaries
Kaitlyn Wardour, COM 389: Sports Documentary Analysis

My BMI Is Not the Issue, But I Have a Condition
Yves Gnohoue, HEW 411W: Critical Issues in Health and Wellness

The Need For Technology To Assist Diverse Learners In the Classroom
Tonya Cowling, EDU 310: Teaching Social Studies in the Elementary School

Obesity Is Not the WEIGH, Get Our Youth Out To Play
Jordan Weixlmann, HEW 411W: Critical Issues in Health and Wellness

Put Your Butt Out
Adam Wenig, HEW 411W: Critical Issues in Health and Wellness

Sun Of a Beach
Elizabeth Sands, HEW 411W: Critical Issues in Health and Wellness

Tackling Tendinitis Through the TSM
Kaitlin Reynolds, Music Education

Teaching Fractions Through Meaningful Learning Experiences
Jenna Santora, EDU 651: Theory, Research and Practice in Mathematics Instruction

The Ultimate Team?
Adza Beda, COM 389: Sports Documentary Analysis

When Parents Kill: A Study Of Filicide
Melissa Reineke, HON 400: All College Honors Colloquium

You Play the Cello? Iraq the Santur
James Cole, MUS 440: Ethnomusicology

Session III: 10:30 a.m. – 11:30 a.m.

Presenting:

The 25,000-Mile Walk
Travis Carlson, HON 400: All College Honors Colloquium

The Art Of Democracy: The Role Of Museums In Forming National Identity
Deirdre Reynolds, HON 400: All College Honors Colloquium

Brand Structures and the Branding Of Fashion Goods
Lisa Pignatelli, FTT 355: Research in Fashion Merchandising

The Bully Spectrum
Robert Calvaneso, HEW 411W: Critical Issues in Health and Wellness

Children's Misconceptions About Telling Time
Colisha Smith, EDU 651: Theory, Research, and Practice in Mathematics Instruction

Coenzyme Q10 and Cancer Treatment
Megan Powell, NFS 330: Seminar on Complementary and Alternative Nutrition

A Comparative Study: The Teaching Of Social Studies In the U.S. and Zambia
Michaela Korczynski, EDU 310: The Teaching of Social Studies

Effects of Glucosamine/Chondroitin Sulfate/ Methylsulfonyl Methane On Joint Pain
Bianca Cornelius, NFS 330: Seminar on Complementary and Alternative Nutrition

Elementary Mathematics Teaching In China
Hongmei Lin, Math 7-12

Geographic and Trend Variation In Teen Childbearing Rates
Jeff Oyo, Economics

Help Me Help the Future You: Autoethnography Research On Education
Joy Van Dette, HON 400: All College Honors Colloquium

Hungarian Folk Music: A Journey Into My Heritage
Al Hury, MUS 440: Ethnomusicology

I Know It When I See It: Tango Argentina
Courtney Woods and **Rebecca Short**, MUS 440: Ethnomusicology

Jurors' Understanding Of Character Evidence Instructions
Erin Baccari, Psychology and Anthropology

The Life Of a Grad Student: PDS Involvement and the Development Of My Culturally Responsive Pedagogy
Brittany Fehskens, Masters Including Initial Teacher Certification

Ken Burns: Baseball: The Tenth Inning
Taylor Gesel, COM 389: Sports Documentary Analysis

Lambs To the Slaughter: The Psychology Of Sports Fans
John Szablewski, COM 389: Sports Documentary Analysis

More Than a Game: A Look At the Unpleasant Side Of Sports
Anthony Constantino, COM 389: Sports Documentary Analysis

Neurological Communication and Swallowing Disorders Following Stroke
Kristen Kleinfelder, HON 400: All College Honors Colloquium

Pick On Someone Your Own Size
Mariah Mergler, HEW 411W: Critical Issues in Health and Wellness

Probiotics and Prebiotics As Dietary Supplements
Kellie Kehoe, NFS 330: Seminar on Complementary and Alternative Nutrition

Recent Discoveries In Omega-3 Fatty Acids: Health Benefits Of EPA and DHA
Racquel Praino, NFS 330: Seminar on Complementary and Alternative Nutrition

Recently Found Biological Effects Of Vitamin D
Jenna Rath and **Kassi Patrei**, NFS 330: Seminar on Complementary and Alternative Nutrition

Rhythms For the End Of Time: Indian Tala and the Music Of Olivier Messiaen
Anthony Henry, MUS 440: Ethnomusicology

Ring Ding Diddle Diddle I De: Exploring Celtic Bagpipe Music
Julianne Palmer, MUS 440: Ethnomusicology

Teaching To the Test: Necessary In New York State, But What About In Lusaka, Zambia?
Amy Hudson, Elementary Education and Childhood Childhood Education

A Teacher's Secrets: Common Tricks To Behavior Modification
Lindsay Suchyna, HON 400: All College Honors Colloquium

Tell Me a Story: Stories and Literature In Zambian Education
Heather Bermingham, EDU 310: Teaching Social Studies in the Elementary School

Traditional Chinese Medicine
Robin Kieffer and **Sonia Mancuso**, NFS 330: Seminar on Complementary and Alternative Nutrition

When Cultures Collide: Spanish Artists In Paris
Valerie Spaeth, HON 400: All College Honors Colloquium

Within You, Without a Clue: The Westernized Indian Sitar
Kasey Heisler, MUS 440: Ethnomusicology

Women's Battle For Equality In Sport
Fran McCann, COM 389: Sports Documentary Analysis

Session IV: 11:30 a.m. – 12:30 p.m.

Presenting:

Alternative Genders In Native North America
Amanda Oldham, ANT 498: Honors Research

Carrying My Self-Esteem In My Purse
Stephanie Soto, HON 400: All College Honors Colloquium

Comparing Educational Environments: The Benefits and Drawbacks Of a One Room School
Kelsey Redden, EDU 310: The Teaching of Social Studies

Cracking the CAD Code
Veronica Keymel, DES 499: Independent Study in CAD

Creativity Comes From Within
Hayley Payne, HON 400: All College Honors Colloquium

The Denim Industry: Past, Present and Future
Hannah Davis, FTT 355: Research in Fashion Merchandising

DHEA: The Truth About Its Use As a Dietary Supplement
Michael Bedford and **Shawn Pitcher**, NFS 330: Seminar on Complementary and Alternative Nutrition

The Differences That Exist Between Honors and Non-Honors Students
Emily Marshall, HON 400: All College Honors Colloquium

Do the Gender and Physical Abuse History Of the Victim Influence Jurors' Decision-making?
Tessa Bechtold, **Michelle Granieri**, **Alyssa Grove**, and **Melissa Hoch**, Psychology Club

Does Cooperation Increase Competitiveness? Evaluating the Connection Between Regional Governance and Economic Competitiveness
Sarah Caputi, PLN 430: Senior Thesis

Eat This.....Not That
Dawn Piehler, HEW 411W: Critical Issues in Health and Wellness

Extraction and Analysis Of Plant Cuticles From Sonoran Desert Packrat Middens
Michael Borrelli, Geography

From the United States Of America To Zambia: A Cross-Cultural Comparative Study About English Learners
Katarina Silvestri, EDU 655: Seminar in Reading

Health Benefits Of Green Tea Vs. Black Tea Vs. Oolong Tea
Jamie Vallone, NFS 330: Seminar on Complementary and Alternative Nutrition

Is There Any Difference Between Traditional Crops and Genetically Modified Crops?
Carla Lanze, HON 400: All College Honors Colloquium

Learning In Two Worlds At Once: Through the Eyes Of Students
Kaleigh Nolan, Exceptional Education

Lessons From a Summer PET Course For In-Service K-12 Teachers
Justin Snook, Physics

Looking Beyond the Stitch
Stephanie Kahn, Metals/Jewelry

Marketing a Skill: Preparing a Graphic Design Exhibition
Jenna Hutzler, HON 400: All College Honors Colloquium

Performance Nutrition: Eating Habits To Boost a Dancer's Performance
Jane Calvert, DAN 499: Dance Nutrition

¿Por Qué No?
Louis Dangelo, HEW 411W: Critical Issues in Health and Wellness

Potential Jurors' Understanding Of Revised Jury Instructions For Character Evidence
Erin Baccari, Psychology and Anthropology

Steroids In Major League Baseball and the Effect On Young Baseball Players
Chris Dierken, COM 389: Sports Documentary Analysis

Stigmatization In Higher Education: Inside and Outside the Classroom
Kayla James, Forensic Chemistry and Sociology

Technology In the 21st Century Math Classroom
Matthew Dixon, EDU 651: Theory, Research and Practice in Mathematics Instruction

Technology: The New Beginning
Nicholas Galfo, Elementary Education

Theater Under Fire
Laura Mooney, HON 400: All College Honors Colloquium

Tibet Or Not Tibet? That Is the Question...
Cassondra Conrad, MUS 440: Ethnomusicology

Undergraduate Learning Assistants In a Hybrid Economics Course
Heather Dennis, **Jamie Howard**, **Michael Manoussos**, **Cory Lauber**, **Liza Sang Yan**, **Esther Ekong**, **Gabrielle Santos**, **Noor Aref**, **Daniel Flaherty**, **Amber Buchholz**, **David Aldridge**, **Mckayla Bidell**, and **Kait Fetes**, ECO 101: The Economic System

Universal Teaching Strategies: From Buffalo, N.Y. To Lusaka, Zambia
Kelly Jasinski, Elementary Education

You Can't Stop the Beat: Musical Evolution Under Afghanistan's Taliban Regime
Samantha Arcara, MUS 440: Ethnomusicology

Your Life Going Up In Smoke
Heather Becker, HEW 411W: Critical Issues in Health and Wellness

Session V: 12:30 p.m. – 1:30 p.m.

Presenting:

Aging Subadult Skeletons
Erin Baccari, Psychology and Anthropology

Analyzing the Statistics Of Statistics
Veronica Darlow and **Tara Sozio**, PSY 488: Internship

A Biotelemetric Study Of Habitat Use and Behavior Of Map Turtles and Spiny Softshell Turtles In the Niagara River
Brian Haas, Biology, **Jeremy Henderson**, Biology, and **Jacqueline Walters**, Biology

Cloning and Expression Of Innexin Extracellular Domains
Ashley Lapinski, BIO 450: Recombinant DNA Technology

Common Buckthorn (*Rhamnus cathartica*) Invasion Influences Soil Microbial Respiration In a Post-Industrial Woodland
Jeremy Brady, BIO 498: Honors Research

Cooking With Earth: Recreating Ancient Indigenous Cooking Technology From Poverty Point
Amanda Oldham and **Karen Hammer**, ANT 498: Indigenous Cooking Methods

Creating An Atmosphere: The Redesign Of the GFL Rotating Tank
Kari Clayton, Earth Sciences

Dorm Or Commute: Is There a Pothole On Your Road To Success?
Sarah Lippert and **Hannah Bronstein**, PSY488: Internship

Effects Of Nutrition and Physical Activity On Alzheimer's Disease
Kaitlin Andrews and **Michelle Szozda**, NFS 330: Seminar on Complementary and Alternative Nutrition

Effects Of Tonawanda Coke Company Air Pollution On Tonawanda Soil
Daniel Dienhoffer and **Christopher Schmitt**, GES 460: Environmental Field Methods

Examining the Relationship Between Personality and Musical Preference, Use and Engagement: Big-5, Boundaries, and Attachment
Tyler Sutton, Psychology and **Charles Petko**, Psychology

Expression Through Play: The Implications Of Gender Neutrality On Preschool Age Children
Kira Bruce, Psychology

Forced Assimilation: The Rise Of Native American Boarding Schools
Celia Mancuso, ANT 499: Historical Indigenous Studies

Improving Student Grades Through Concept Homework
Carolyn Rooney, Psychology

Improving Students' Understanding Of Algebra In the Elementary Classrooms
Alex Drozd, EDU 651: Theory, Research, and Practice in Mathematics Instruction

Increasing Young Learners Mathematical Development Through Play
Kate Kloss, EDU 651: Theory, Research, and Practice in Mathematics Instruction

Introspective Tapestry
Amanda Hippert, Fibers Design

Is This Gluten Free? An Inside Look Of Celiacs Disease
Victoria Deering, CWP 102: College Writing II

The Maud Gordon Holmes Arboretum: Development Of a Web-Based Mapping and Management Tool
Samantha Thomas, GEG 430W: Senior Thesis

Merchandising Store Design and Development: ChicAnistas
Emily Knauer and **Stephanie Villafranca**, FTT 450: Issues in Apparel and Textile Industry

Persons, Plans, and Potential: Regionalism and Flourishing In Western New York
Sarah Caputi, Philosophy and Urban Planning

Petrographic and Fabric Analysis Of the Log-Jam Schist and Surrounding Rocks, Western Connecticut
Kelsey Murphy, Geology

Preventing Bearing Frosting: Grounding Rod In a Compressor
Bill Gross, **Tom Poppenberg**, **Sharaya Walker**, **S M Faruk**, and **Tom Schneider**, ENT 422: Machine Design II

Princess Or Probability? Princess Priming May Have an Adverse Effect On Women's Self-Identification With Math
Katherine Mosier, Psychology

Properties Of Junctional Proteins In Non-Junctional Membranes
Dashawn Brown, Biology and **Shelby Rarick**, Biology

Soil Microbial Community Structure and Function Varies Along an Old Field Succession Gradient
Torri Ivancic, Biology

Transformation Of the Creative Process
Stephanie Kahn, Metals/Jewelry

Travel With Us: The Alba Region Of Italy
Alex Davis, **Kathryn Doyle**, **Brandon Dunkley**, **Stephanie Esten**, **Jennifer Gelormino**, **Amelia Gillman**, **Alison Gramza**, **Gina Losi**, **Meghan Marotta**, **Nicole Mokhiber**, **Brian Peck**, **Mathew Pfeiffer**, **Victoria Renodin**, **Yeishamaily Vega**, and **Sara Zuckerber**, HTR 318: Cultural Tourism

Turning To Suspension For Success
Eugenia Episcopo, **Zachary Sutton**, **Patrick Daigler**, **Richard Fedele**, **Christopher Blakowski**, and **Steven Czekowski**, ENT 422: Machine Design II

Wi-Fi Power Monitor
Jacob Kane, **David Gardina**, and **Matt Schwab**, ENT 465: Electrical Design

Session VI: 1:30 p.m. – 2:30 p.m.

Presenting:

Blocking Cell Communication With Innexin Mimetic Peptides
Kayla Schaeffer, Biology and **Saja Mohammed**, Biology

Children With Psychiatric Disorders: A Rhetorical Analysis Of DSM-IV Diagnostic Criteria For ADHD
Amanda Pratt, ENG 410: Composition and Rhetorical Theory

Conservation Genetics Of New York's Giant Salamander: The Eastern Hellbender
Meghan Jensen, M.A. Biology

Demonstration Of the Manufacturing Process Through the Design and Construction Of a Game Board
Eric Fiorello, HON 400: All College Honors Colloquium

Designing Clean Water Related Teaching Materials For a Developing Community In La Herradura, El Salvador
Joshua McGuffie, Earth Sciences

Does Military Corporations Influence Critical Decisions?
Devin Miller, PSC 470: Senior Seminar

Driving Synchronous Rotation Within the Geophysical Fluid Dynamics Tank
Kari Clayton, Earth Sciences and **Michael Ludwick**, Earth Sciences

Effectiveness Of Social Media In the Fashion Industry
Tanisha Rodriguez, FTT 450: Issues in Apparel and Textile Industry

Electro-Optical Effects Of LuFe2O4 Thin Films
Brandon Franks, Physics

Energy Drinks In College Students: Help Or Hindrance?
Susan Semeraro, Dietetics

Fur In the Textile and Apparel Industry – Ethical Or Harmful?
Emily Knauer, FTT 450: Issues in Apparel and Textile Industry

Grave Mistakes and the Greater Good: The Deficiencies Of NAGPRA
Sean Johnston, ANT 498: Honors Research

How Are Students Affected By Procrastination?
Jeffrey Weiss, HON 400: All College Honors Colloquium

How Do I Teach Students To Pursue Excellence?
Rachael Saathoff, HON 400: All College Honors Colloquium

Identification With Peer Crowds and College Drinking Outcomes: Drinking Motives As Mediators
Rachel Caputi, Psychology

Identifying With Peer Crowds and College Drinking
Rachel Caputi, PSY 498: Honors Thesis

The Impact Of Animated Television Shows On Verbal Aggression
Jaclyn Turley, Psychology

Indoctrination On the Nile: The Assertion Of Feminine Authority Through Temple Propaganda In Ancient Egypt
Alyssa Frijey, Anthropology

Innovation In the Textile Industry
Stefanie Troidl, FTT 450: Issues in Apparel and Textile Industry

Making Every Drop Count: Closed Loop Water Recirculation System
Jesse Morgan, **Steve Schweichler**, and **Richard Reuman**, ENT 422: Machine Design II

A Microsatellite Parentage Analysis For the Eastern Hellbender Salamander, *Cryptobranchus alleganiensis alleganiensis*
Sarah Chudyk, Masters Biology Secondary Education

Mine Hill Meta-Granite, Western Connecticut: Analysis Of S-C Fabrics and Their Interpretation
Sherman Wisor IV, Geology

Mother Nature Wears Prada: The Environmental Impacts Of the Textile Industry
Brittany Lingard, FTT 450: Issues in Apparel and Textile Industry

Natural Reactions: Art In Experimental and Reactive Metal Casting
Glen Stewart, Sculpture

The Photographic Art Of Emulation and Interpretation
Nicholas Butler, Photography

Product Placement and Its Effectiveness
Melinda Guaba, FTT 355: Research in Fashion Merchandising

A Raman Spectroscopic Study Of the Surfaces Of Modern and Historic 19th Century Daguerreotypes
Julia Wald, Chemistry and Fine Arts

A Revolution In Restaurants: How Servants Lost the Service Industry's Interest Through Innovation
Nathan Muka, HTR 480: Practicum in Hospitality Operation

Scoria Deposits As Splash Of Paleo-Lava Lakes?
Brandon Luther, Earth Sciences

Screening Of Fluorescence Quenchers Using a Microfluidic Device
Eric Snyder, Chemistry

Structural Mapping Of an Ancient Tectonic Boundary In Southeastern Pennsylvania
Albert Tahan, Geology

Waste In the Apparel and Textile Industry: Issues With Packaging
Lisa Pignatelli, FTT 450: Issues in Apparel and Textile Industry

Session VII: 2:30 p.m. – 3:30 p.m.

Presenting:
Children Of Law Enforcement: How a Career In Law Enforcement Influences the Parent Child Relationship
Chelsie Larson, Psychology

Cost Effective Enclosure Design For a FS Elliott P500 Compressor
Sharayah Walker, **S M Omar Faruk**, and **Thomas Schneider**, ENT 422: Machine Design II

The Effects Of Working Memory Capacity and Gesturing On Verbal and Visual Spatial Performance
Ashley Wolff, **Antonique Hooven**, and **Courtney McCowan**, PSY 499: Independent Study

Essential Knowledge and Skills For Career and Technical Education
Johnnishia Rouse, HTR 495: Special Project

Examination Of PCB and Heavy Metal Distributions In Eighteen Mile Creek, Niagara County, N.Y.
Matthew Kraft, **Nicholas Rinard**, and **Timothy Gamble**, GES 460: Environmental Field Methods

The Exploration Of Enameling: Forms and Processes
Stephanie Kahn, Metals/Jewelry

Fast Fashion
Hannah Davis, FTT 450: Issues in Apparel and Textile Industry

Going the Distance: Comprehending Pronoun-Antecedent Dependencies As Intervening Entities Increase
Bryan Wight, Psychology

Hate Crime Against the LGBT: An Unsolved Issue
Louis Guillermo, PSC 204: Political Statistics

How Can Nothing Be Something? A Look At Zero
Jamie Howard, MAT 491: Capstone Research in Mathematics

Hyperbolic Geometry and a New Definition of Parallel
Sarah Folmsbee, MAT 491: Capstone Research In Mathematics

InspirTech - Inspiring Young Minds To Pursue Technology
Matthew Barten, **Kristofer Wiktorowski**, and **Michael Collins**, ENT 465: Electrical Design

Koxinga: A Son Of Coastal China In an Era Of Transition
Jonathan Keenan, HIS 498: Honors Research

Lug Bolt Friction Performance
Justin Manning, **Mike Groves**, and **Faly Sy**, ENT 422: Machine Design II

Manhole Access Detection System
Faly Sy, **Justin Manning**, and **Michael Groves**, ENT 422: Machine Design II

Mapping the Genetic Identity Of Volcanic Deposits Using Scanning Electron Microscopy
Chelsea Tavormina, Geology

The Most Irrational Number and Its Consequences In the Natural World
Kerri Palmer, HON 400: All College Honors Colloquium

One Of the Boys: An Ideological Criticism Of Masculinity In "Breaking Bad"
Cynthia Delaney, Writing

Outsourcing: Is It Ethically Right?
Alicia Godfrey, FTT 450: Issues in Apparel and Textile Industry

The Positive Effects Of Textiles and Clothing In Developing Countries
Andrea Wright, FTT 450: Issues in Apparel and Textile Industry

Proposing a Political Party Postulation: What Causes Different Countries To Use Different Political Party Systems?
Nathan Kindred, PSC 470: Senior Seminar

A Relationship Of Functionality
Nathaniel Hall, DES 495: Furniture Veneer

Refining Labor Image In Asian Countries
Tina Reyes, FTT 450: Issues in Apparel and Textile Industry

Solar Power In Buffalo
Marcus Samerson, Electrical Engineering Technology and Technology Education

Spatial Analysis Of Beryllium Contamination In Soils At a USACE Remediation Site In Luckey, Ohio
Kathleen Hastings, GEG 428: Service Learning Project

Speech Perception In the Blind
Caley Wekenmann, PSY 498: Honors Thesis

SVAP Survey Results For Gill Creek In Niagara County, New York
Michael Borrelli, **Brandon Jerla**, and **Melanie Reinhardt**, GEG 421/521: Watershed Analysis

The Unique History and Culture Of the City Of Siena
Chelsea Kettle, HON 400: All College Honors Colloquium

Using the Iron Mossbauer Effect To Study Inks
Steven Tarasek, HON 400: All College Honors Colloquium

The Western Shoshone Defense Project and the Dann Sisters' Struggle For Sovereignty
Sean Johnston, ANT 499: Historical Indigenous Studies

What They Wore: An Examination Of 1920's-1930's Women's Intimate Apparel
Kaitlin Russo, FTT451: Senior Project

What's Personality Got To Do With It: Personality and Post-Graduation Plans
Hilary Olds, PSY 488: Internship

Session VIII: 3:30 p.m. – 4:30 p.m.

Presenting:

Biotite-Garnet Schist: Evidence For Residual Enrichment Of Immobile Elements In Rocks Found In Western Maine
Alexandra Fletch, Geology

Changes In Nutrient Levels In Tonawanda Creek During the 2013 Spring Melt
Matthew Hensley and **Jennifer Pigeon**, GES 529: Environmental Field Methods and Analysis

Continued Research Into Mineralogical and Structural Aspects Of Rocks From the Roxbury, Connecticut Area
Steven Wilson, Geology and **Amy Sondel**, Geology

Control Panel Mounting System With Vibration Isolation
Bill Gross and **Tom Poppenberg**, ENT 422: Machine Design II

The Development Of Cyber-Warfare and Deterrence In the 21st Century
Mark Coons Jr., PSC 470: Senior Seminar

Escher's Artwork: The Laws Of Mathematics Are Not Merely Human Inventions Or Creations
Diana Veliz, MAT 491: Capstone Research in Mathematics

A Fresh Look For Buffalo State Bengals Athletics
Samantha Tilkins, HON 400: All College Honors Colloquium

Global Warming: A Cold, "Hot" Look At Western New York's Climate Change
Frederick Bloom, Geography

I Can't See! Air Pollution In China
Emily Wolf, GEG 495: China Air Quality

In A League Of Their Own: The Impact Of Increased Money In Modern Sports
Max Borsuk, HON 400: All College Honors Colloquium

Laser Optical Keyboard Instrument: Inspiring Kids One Light At a Time
Jared DeRosa, **Edgardo Cruz**, and **Al Polanski**, ENT 465: Electrical Design

Live Free Or Try: Liberian Refugee Employment Experiences Compared
Khadijat Olagoke, PSC 470: Senior Seminar

Niagara Escarpment Scenic Byway
Luke Work, PLN 430: Senior Thesis

Parental Mental Health and College Student Success
Lauren Zawadzki, Psychology

Phineas Gage: A Better Case Of Neural Recovery Than Neural Loss
Meghan Batt, HON 400: All College Honors Colloquium

Preterism: This Is Not the End
Christopher Parker, HON 400: All College Honors Colloquium

Python Gaming: Space Invaders
Timothy Anderson, HON 400: All College Honors Colloquium

Rat Model Of PTSD: Combined Effect Of Predator Scent and Startling Auditory Stimulus
Katherine Oak, Psychology and **Daniel Moscow**, Psychology

The Relationship Between Subjective and Objective Cognitive Decline In People With Multiple Sclerosis
Jillian Roupp, HON 400: All College Honors Colloquium

Runway 6.0: Sweet Bites Collection
Lucile Ragot, FTT 451: Senior Project

Spacer Replacement Materials
Jesse Morgan, **Steve Schweichler**, and **Richard Reuman**, ENT 422: Machine Design II

The Struggle Of the Nez Perce: Land and Fishing Rights
Matthew James, ANT 499: Historical Indigenous Studies

Student Retention Of Chemistry Content: A Look At What Students Recall From Earlier Courses
Ari Darlow, HON 400: All College Honors Colloquium

Studying the Reduction Of Contaminants In the Niagara River
Stephen LaGamba, Earth Science and **Nadezda Mease**, Earth Science, GES 460: Environmental Field Methods

A Time and a Place: A Financial Investigation Of Physics
Antonio Galbier, HON 400: All College Honors Colloquium

Weighting
Jacqueline O'Brien, Sculpture

What the Frack Is Hydraulic Fracturing?
James Doyle, HON 400: All College Honors Colloquium

What the Frack: State Support For Hydraulic Fracturing
Melanie Dingeldey, PSC 470: Senior Seminar

What's In Our Groundwater? Buffalo State Groundwater Monitoring
Amanda Pratt, GEG 430W: Senior Thesis

Who's Line Is It Anyway: How Party Control Affects State Higher Education Funding
Ryan Gadzo, PSC 470: Senior Seminar

Xylem Inc. Scrap Metal Separation
Michael Lasker and **Justin Scott**, ENT 422: Machine Design II

Xylem Inc. Tapping Machine Redesign
Philip Graziadei, **Michael Lasker**, and **Justin Scott**, ENT 422: Machine Design II

Recipients of Undergraduate Summer Research Fellowships in 2012

Erin Baccari, Psychology and Anthropology
Faculty Mentor: Professor Jennifer Hunt, Psychology
Abstract Title: **Jurors' Understanding Of Character Evidence Instructions**

Erin will graduate in December 2013 with a dual major in Psychology and Anthropology. After graduating, she plans to pursue a master's degree in forensic anthropology and a doctorate in biological anthropology.

Erin's research examined whether lay people who could serve as jurors in criminal trials understand jury instructions dealing with character evidence. Her research involved collecting and cataloging all available pattern jury instructions for character evidence from U.S. states and circuit courts and then conducting an experiment to assess potential jurors' understanding of these instructions relative to other types of jury instructions. Erin presented her research to the American Psychology-Law Society conference in 2013 and is writing a manuscript about her work.

Michael Borrelli, Geography and Planning
Faculty Mentor: Professor Camille Holmgren, Geography and Planning
Abstract Title: **Extraction and Analysis Of Plant Cuticles From Sonoran Desert Packrat Middens**

Michael Borrelli is a Physical Geography major with a Meteorology and Climatology minor. He will graduate in May 2013, after which he plans to attend graduate school. His eventual goal is to become a professor of geography at a community college or an undergraduate institution.

Michael's research involved identifying and analyzing plant cuticles (epidermis fragments) preserved within the fecal pellets from packrat middens. From this, he was able to determine which plant species the rodents were preferentially eating, and which were likely over- and under-represented in the midden assemblages. He was also able to track how rodent diets have changed over the past ~50,000 years in response to climatic and vegetation changes.

Rachel Caputi, Psychology
Faculty Mentor: Professor Michael MacLean, Psychology
Abstract Title: **Identification With Peer Crowds and College Drinking Outcomes: Drinking Motives As Mediators**

Rachel Caputi will graduate in May 2013 with a Bachelor of Arts degree in Psychology. After graduating, she plans to pursue a doctoral degree in clinical psychology. She hopes to use psychology and her background in art therapy to work with people in impoverished areas such as Native American reservations and Aboriginal territories in the Australian Outback.

Rachel's research involved examining how college students' self-identified peer crowds (e.g., jocks, geeks, pot heads, serious students) predicted their alcohol use and whether they experienced alcohol-related problems. She also examined whether peer crowd differences in alcohol outcomes were because crowds differed in their reasons for drinking. Rachel will be submitting her work for presentation at a national conference and for publication.

Sarah Caputi, Philosophy and Urban Planning
Faculty Mentor: Professor Jason Grinnell, Philosophy
Abstract Title: **Persons, Plans, and Potential: Regionalism and Flourishing In Western New York**

Sarah Caputi is majoring in Philosophy and Urban and Regional Planning. She will graduate with a B.A. degree in May 2013, after which she plans to attend graduate school.

Sarah's project consisted of integrating her two majors with an eye toward analyzing the ethical implications of urban planning policy in Western New York. Sarah relied on work from Plato, Aristotle, Immanuel Kant, Martha Nussbaum, Kevin Gaughan, and others, to examine regionalism as an approach to urban planning. She also considered alternatives such as localism, cosmopolitanism, and Aristotelian community building. The intent was to evaluate whether one method will better promote individuals' ability to flourish.

Kari Clayton, Earth Sciences
Faculty Mentor: Professor Jude Sabato, Earth Sciences and Science Education
Abstract Title: **Creating an Atmosphere: The Redesign Of the GFL Rotating Tank**

Kari Clayton is an Earth Sciences major with minors in Physics and Meteorology. She is planning on graduating in May 2014 and plans to pursue graduate studies in Atmospheric and Planetary Sciences.

Kari's project involved the engineering redesign of the rotating fluid dynamics apparatus. Testing of the apparatus has demonstrated the ability to conduct experiments with high-resolution video, the ability to virtualize an experiment with real-time data transmission via the Internet, and the ability to utilize electricity on the rotating apparatus for additional data-capture equipment. Kari plans to continue work on the tank itself and also to publish a research article on the efficacy of the tank in Earth science education.

Brandon Franks, Physics
Faculty Mentor: Professor Ram Rai, Physics Department
Abstract Title: **Electro-Optical Effects Of LuFe2O4 Thin Films**

Brandon Franks is a Physics major and will graduate in May 2014 with a B.S. degree. After graduation he plans to earn a master's degree in physics.

Brandon's research centered on the investigation of high quality multiferroic lutecium iron oxide, LuFe2O4, thin films on crystal substrates of magnesium oxide and sapphire to understand the electro-optical properties at various temperatures. He discovered that the thin films display strong electro-optical effects in applied electric voltage up to 200 Volts at 170 K, but these effects were very weak at other temperatures. The electro-optical results will be published in a peer-reviewed article.

Keri Gould, Art Education
Faculty Mentor: Professor Meg Knowles, Communication
Abstract Title: **Census Statistics Illuminated: Photography From a Visual Sociologist's Perspective**

Keri Gould is an Art Education major with a minor in Sociology. She will graduate in May 2013 and plans to attend graduate school abroad in Museum Studies or Russian Culture and the Arts. Her ultimate plan is to teach art to high school students.

Keri studied correlations between 2010 Census statistics from Buffalo, Boston, and New York City and the visual appearance of neighborhoods in each city representing selected statistics. Using practices established in the field of visual sociology, she developed a presentation consisting of sets of three photographs illuminating similarities and differences across the three cities in 12 census categories such as population density, race, and income. She is submitting the work for exhibition in these communities.

John Guzda, History and Social Studies Education
Faculty Mentor: Professor Misty Rodeheaver, History and Social Studies Education
Abstract Title: **Window Into Teaching: Utilizing Power Structures To Improve Overall Classroom Management In a Ghanaian Classroom**

John Guzda graduated in December 2012 with a degree in Social Studies Education. He will be teaching Secondary Social Studies in New Orleans beginning in August 2013.

John traveled to a Ghana for a two-month teaching experience. While teaching, he engaged in action research to evaluate a classroom management technique where the teacher utilizes existing student power structures to decrease behavioral disturbances. John presented his findings in Seattle, Washington in November 2012 at the International Assembly conference held in tandem with the National Council for the Social Studies (NCSS) conference.

Torri Ivancic, Biology
Faculty Mentor: Professor Daniel Potts, Biology
Abstract Title: **Soil Microbial Community Structure and Function Varies Along an Old Field Succession Gradient**

Torri Ivancic is a Biology Major and will graduate with a B.A. degree in May 2013 after which she plans to attend graduate school. Torri hopes to pursue a career in scientific research pertaining to ecology and conservation.

Torri performed a laboratory experiment in which she examined how plants influence the contribution of bacterial and fungal communities to soil microbial respiration along an old field succession gradient. Her results inform the carbon cycling consequences of changing land-use patterns associated with agricultural abandonment. Torri presented her findings at the 2012 Rochester Academy of Sciences Paper Session and is preparing a manuscript for potential publication.

Stephanie Kahn, Metals/Jewelry
Faculty Mentor: Professor Stephen Saracino, Design
Abstract Title: **The Exploration Of Enameling: Forms and Processes**

Stephanie Kahn will graduate in May 2015 with a dual degree in Metals/Jewelry Design and Dietetics with minors in sociology and creative studies. After graduating, she plans to use her Dietetics degree to help others by joining the Peace Corps or another similar program.

Stephanie's research expanded on existing contemporary enameling techniques on metal, focusing on the technique, plique-à-jour. Using a mortar and pestle, lump frit glass was ground and specific colors were created to be used in her final piece. The process involves suspending small particles of glass into pierced areas of the metal and then through successive kiln firing, the enamel is built up. After the space has been filled the glass is then ground down to be flush with the metal. By the end of her research, Stephanie was able to create the neckpiece titled, Evolution, which is currently on display in the Dean's gallery.

Alicia Lacey, Family and Consumer Sciences Education
Faculty Mentor: Professor Nanci Monaco, Career and Technical Education
Abstract Title: **Mothers Who Fail To Rescue Their Children From Abusive Partners: Perception Of Guilt and Dispositions**

Alicia Lacey is a Family and Consumer Sciences Education major and will graduate in May 2013. Alicia is interested in teaching middle or secondary students in New York State, eventually earning a masters or a doctoral degree.

Alicia's research project explored the treatment (civil and criminal) of individuals who do not rescue children from abuse including mothers that did not rescue their children from physically abusive partners and coaches/priests that did not rescue children from abuse perpetrated by colleagues or actively attempted to cover up the situation. Data from New York State and Texas were compared, examining the consequences of harsher criminal penalties in Texas.

Chelsie Larson, Psychology
Faculty Mentor: Professor Robert Delprino, Psychology
Abstract Title: **Children Of Law Enforcement: How a Career In Law Enforcement Influences the Parent Child Relationship**

Chelsie Larson is a Psychology major. She will graduate with a Bachelor of Arts degree in May 2013. She is the recipient of the McGinnis Award in Psychology that recognizes exemplary academic excellence among graduating psychology majors. After graduation, she plans to attend graduate school. Chelsie's ultimate career goal is to be a practicing clinical psychologist's focusing on family counseling.

Chelsie's research explored how relationships between officers and their children are affected by their parents' career as a police officer from the perspectives of the officer, spouse, and the child. Data in the form of survey questionnaires and focus groups were collected from a small town law enforcement agency. Comparisons were made between the groups based on perceived work family conflict, parental style and communication. Differences in perceived parenting style as well as the amount and type of job related information shared were identified between groups. Her research has been presented at the annual meeting of the Eastern Psychological Association.

Cindra Mendonca, Art Education and Art
Faculty Mentor: Professor Shirley Hayes, Art Education
Abstract Title: **A Basic Qualitative Study To Examine Cultural Diversity In a Generalist Teacher's Classroom**

Cindra Mendonca is earning a B.S. degree in Art with a minor in Art Education, with a focus on drawing and printmaking. Cindra will graduate in May 2013 and plans to pursue teaching visual art at the elementary school level.

Cindra's qualitative research focused on how a fourth grade teacher met the challenges of cultural diversity in the classroom. As a participant observer, she collected data from observations in the classroom and interviews with the teacher and principal of the school. Her findings indicated that while there is an effort to promote and develop multicultural education, there is a gap between theory and practice. Cindra observed missed opportunities due to outside demands on teachers, lack of adequate teacher education and professional development in diversity. Cindra found that multicultural education needs to be conceptualized and implemented more broadly and in more depth to bring about meaningful transformation in public education.

Thao Nguyen, Business
Faculty Mentor: Professor Daniel Gaygen, Business
Abstract Title: **A Systematic Review Of Marketing Literature On Atmospherics**

Thao Nguyen is a Business Major with a Marketing Concentration. She will graduate in May 2014.

Thao conducted a systematic review of the academic literature on the topic of atmospherics in the area of consumer behavior. Thao found that there is a narrow range of research methodologies and an even narrower scope of theoretical motivation used in conducting atmospherics research. Thao is a co-author of a manuscript to be submitted to a marketing/ consumer behavior journal.

Susan Semeraro, Dietetics
Faculty Mentor: Professor Carol DeNysschen, Dietetics and Nutrition
Abstract Title: **Energy Drinks In College Students-Help Or Hindrance?**

Susan Semeraro is a Dietetics major and will graduate with a B.S. in Dietetics in May 2013. After graduation, Susan plans to attend graduate school at the University of Buffalo and earn a master's in nutrition science.

Susan's fieldwork consisted of advertisement to and recruitment of college student participants regarding their consumption of energy drinks and effects on sleep deprivation and anxiety levels. The study data were analyzed, graphed and documented. These data indicated that college students obtain less than the optimal number of hours of sleep for health and often rely on caffeinated beverages.

Abigail Spoth, Music

Faculty Mentor: Professor Carolyn Guzski, Music
Abstract Title: **Something Old, Something New: Stylistic Interaction In Béla Bartók's Twenty-Seven Two- and Three-Part Choruses**

Abigail Spoth is an Honors College student who plans to graduate with the B.A. degree in Music in May 2014. She hopes to pursue graduate study in the discipline of music theory.

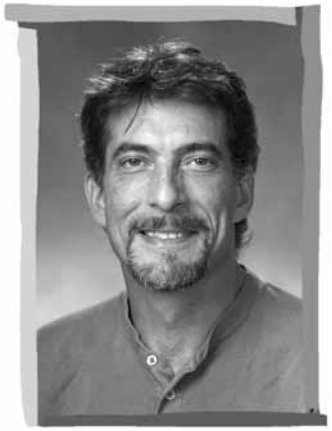
Abbey's research explored the intersection of tradition and modernity in the music of the great Hungarian composer Béla Bartók (1881-1945). She applied a variety of methodological approaches to a work composed at the height of his powers, the Two- and Three-Part Choruses. Abbey produced a series of formal analyses that illuminated seminal techniques of 20th-century modernism. She was also able to make a significant ethnomusicological contribution by locating several original folksong sources, collected by Bartók himself in travels throughout Eastern Europe, that inspired sections of the work.

Jessica Stabell, Anthropology

Faculty Mentor: Professor Julie Wieczkowski, Anthropology
Abstract Title: **The Influence Of Temperature Upon Decomposition In Western New York: A Study In Accumulated Degree-Days**

Jessica Stabell is an Anthropology major, with minors in Forensic Anthropology and Indigenous Studies. She will graduate in May 2013 and plans to attend graduate school for forensic anthropology and paleopathology.

Jessica investigated the rates and stages of decomposition of a pig carcass in Western New York. Jessica observed the carcass each day, recording the decompositional changes and measured average daily temperature. She created an Accumulated Degree Days (ADD) index of decomposition for Western New York. Jessica presented her findings at the American Association of Physical Anthropologists' meeting in Knoxville in April 2013.



Glen Stewart, Sculpture

Faculty Mentor: Professor Elena Lourenco, Fine Arts
Abstract Title: **Natural Reactions: Art In Experimental and Reactive Metal Casting**

Glen Stewart is graduating in May 2013 with a B.A. in Sculpture. He is considering continuing his education goals in a graduate program to earn a master's in Sculpture, after which he hopes to sustain a career in his studio art while also working as an art instructor.

Glen embarked on a rather unconventional path of foundry techniques in his summer research to achieve directed, yet unpredictable effects in his cast aluminum forms. He did so by setting up environments within his foundry molds that produced an explosive and reactive atmosphere when the molten aluminum made contact. Glen is now working with inclusions such as figurative forms and molds packed within his foundry molds. These become actual forms embedded in the latticework of his reactive castings.

Benjamin Streeter, Theater
Faculty Mentor: Professor Erica Fire, Theater
Abstract Title: **A Costumers Journey From Present To 1790 and Back Again**

Benjamin Streeter graduated in December 2012 with a B.A. in Theater. His major focus was in costume design and construction. He plans to pursue a career in costume and clothing design.

Benjamin researched the clothing collection of the Tonawanda Historical Society. He curated and mounted an exhibit of several clothing pieces for public display and created a new cataloging system for the clothing collection based on the system already in use at the Metropolitan Museum of Art. The new catalogue will make the collection searchable by researchers from around the world. Ben plans to mount future public exhibits, including an exhibit of clothing made in Tonawanda and an exhibit highlighting clothing of the same time period as "Downtown Abbey."

Albert Tahan, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education
Abstract Title: **Structural Mapping Of An Ancient Tectonic Boundary In Southeastern Pennsylvania**

Al Tahan is a major in Geology and will graduate in May 2013. He plans to attend graduate school and pursue a master's degree in Geology.

Al's research consisted of fieldwork in southeastern Pennsylvania and laboratory work on his field data and collected specimens. Al produced a geological map and a specimen map of part of a tectonically-important Appalachian boundary located west of Philadelphia known as the "Martic Line", the presumed edge of North America at about 500 million years ago. Al is co-author on a manuscript in progress on the rocks of the area, and will co-lead a field trip for professionals and students in March 2014. He presented his research findings at the Northeastern sectional meeting of the Geological Society of America in March 2013.

Jaclyn Turley, Psychology
Faculty Mentor: Professor Dwight Hennessy, Psychology
Abstract Title: **The Impact Of Animated Television Shows On Verbal Aggression**

Jaclyn Turley is a Psychology major and will graduate in May 2013.

Jaclyn's study examined the influence of verbal aggression in animated television programs on subsequent verbal/symbolic aggression. Participants watched either a verbally or non-verbally aggressive show and then completed a puzzle task that was either unsolvable (frustration task) or easy to solve. Finally they were provided with some questions regarding the television show, the puzzle task, and ratings of the researcher. She found no differences in aggression across either the television or frustration task groups.

Julia Wald, Fine Arts and Chemistry
Faculty Mentor: Professor Patrick Ravines, Art Conservation
Abstract Title: **A Raman Spectroscopic Study Of the Surfaces Of Modern and Historic 19th Century Daguerreotypes**

Julia Wald is majoring in fine arts and chemistry and will graduate in May 2013. She is interested in pursuing a graduate degree in art conservation or cultural heritage science.

Julia investigated the surface chemistry of modern and historic 19th century daguerreotypes using Raman spectroscopy. She considered each step of the daguerreotype making process and compared it to results of 19th century plates. Some of her findings are questioning published results of colleagues in the Department of Scientific Research at the Metropolitan Museum of Art. Julia will share her findings with them to clarify the differences.

Sarah Westphal, Photography and Painting
Faculty Mentor: Professor Lin Xia Jiang, Fine Arts
Abstract Title: **An Exploration Of Colors: Through Paint and the Lens**

Sarah Westphal is a double major in Photography and Painting. Sarah will be graduating with a B.F.A. in May 2013, after which she plans on becoming a full time photographer's assistant. Sarah hopes to continue her Photography career as a commercial photographer as well as a fine art photographer and painter.

Sarah pursued her painting style by developing a color technique that is unique to her. With HDR photography and her use of vivid colors in oil paints, Sarah discovered that she wants to find new exciting colors that the world has to offer through both mediums. She found that by expanding color into the artificial realm instead of using colors of the Baroque era, she was able to deepen the experience the viewer would have in each piece, proving the relationship between paint and pixels. She hopes to continue in her search for new colors and interesting compositions. She is working toward submitting her work to galleries and shows.

Bryan Wight, Psychology
Faculty Mentor: Professor Stephanie Foraker, Psychology
Abstract Title: **Going the Distance: Comprehending Pronoun-Antecedent Dependencies As Intervening Entities Increase**

Bryan Wight is a Psychology major. Bryan graduated in December 2012. Applying his interests in human behavior, he is currently working for a marketing company based in Syracuse, NY.

Bryan's summer research project used a computational modeling technique to understand pronoun-referent dependencies in language, showing converging evidence for a direct-access memory cues account. Along with his previous independent study (PSY 499) experiment using eye-tracking measures of reading, Bryan's research was presented at the international CUNY Human Sentence Processing conference in March 2013.

Arts

The 25,000-Mile Walk

Travis Carlson, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Meg Knowles, Communication and Professor Andrea Guiati, Modern and Classical Languages

This 15 minute video documentary will include footage I gathered from a recent circumnavigation of the globe to examine the sharply contrasting ways of life on our planet and the ways in which all of mankind are glaringly similar. While the film will include sequences from 13 different countries, tied together with transitional shots of the world's terrain beneath my feet, we will focus on Cambodia and the horrific genocide that cripples that nation. This scrutiny will be framed by depictions of the sensitive line between being a respectful traveler and a selfish tourist. As a filmmaker I have chosen to implement an uncommon technique to provide a new and fresh "voice." All footage will remain in an honest, raw form rather than developing "sweeteners" or cinematic stylization to promote a skewed view of the location. I intend to leave viewers with thought provoking content that will help them form their own opinions of the world, human interaction and their place in it. Subordinate to that focus, viewers will catch an honest glimpse at the sights and sounds of their world.

Presentation Type and Session: Poster III

Aboriginal Music and Its Significance

Mickayla Haynes, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

My research will look at musical meaning and significance among the Aboriginal people of Australia. I will detail indigenous traditions involving song, dance, and instrumentation. Song and dance are important to the preservation of Aboriginal history. The Aborigines lack an extensive recorded history but have long used traditional song to honor historical and spiritual events that are significant to them. Using scholarly sources and musical analysis to pursue this topic, my findings at this point indicate that the Aborigines are purely oral in expression. They learn traditional ancestral songs and chants through direct imitation of their parents and extended family. I found this intriguing as an individual living in today's American culture, where everything is written or recorded in many different ways, including Western musical notation. I plan to transcribe songs representative of the spiritual and traditional events of the Aborigines as examples of my thesis.

Presentation Type and Session: Poster I

African Musical Influences In Minimalism: A Look At Steve Reich's Drumming

John Smigielski, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

My research explores the link between the music of Africa and the contemporary compositional style of Minimalism. I will be examining the piece Drumming by Steve Reich to determine how his trip to Ghana in 1970 influenced the overall structure of the piece, as well as the ways in which African music influenced Reich's earlier works. My methodology will include writings by and about Reich, ethnomusicological studies focusing on West African traditions, and my own musical analyses of Reich's music in relation to the global influences that began to enter his work during the 1960's. Minimalism is a style of composing that emerged during the 1960's. Four main composers are credited with its development: La Monte Young, Terry Riley, Phillip Glass, and Steve Reich. These composers all had their own unique styles of composing, and drew influences from many varied sources. Reich himself credits Bartok, Perotin, John Coltrane, African drumming, and the Balinese Gamelan with the development of his unique compositional style. Reich solidified his aesthetic intentions in 1968 with the publication of his famous essay "Music as a Gradual Process." Drumming takes its influences from African drumming that Reich observed in Ghana, as well as his earlier tape compositions such as It's Gonna Rain. The piece uses the concept of gradual phase shifting, which Reich discovered by playing two tape loops in and out of sync with each other. Reich's music continues to inspire musicians and listeners alike, and I hope to show my audience how African music provided much of the inspiration to an artist who has been called "the greatest living American composer."

Presentation Type and Session: Oral – Humanities II

The Birth Of Afro-Cuban Jazz

Jacob Jay and **Nick Lippa**, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

From the rhythms and clave-based beats of Afro-Cuban music, to the harmonies and techniques of improvisation, Afro-Cuban jazz was born. The musician Machito introduced Afro-Cuban to the world in 1943. In 1947, Dizzy Gillespie and Chano Pozo brought the style to the forefront of jazz. Then the Cuban group Irakere exploded onto the world jazz scene at the 1978 Newport Jazz Festival and introduced audiences to Paquito D'Rivera and Arturo Sandanval. The Afro-Cuban genre is distinguished by the habanera rhythm, which is based on an African motif. In the early development of jazz, the habanera directly influenced the musicians of Havana and New Orleans and became an integral part of the music. Scott Yanow's study

"Afro-Cuban Jazz" explains the music's history as a confluence of several different musical cultures. Additional sources on the subject include historical recordings and documentation on the musicians themselves. Their innovations included new rhythmic and harmonic languages that imparted a new flavor to the creation of a distinctly Afro-Cuban sound.

Presentation Type and Session: Poster II

Broadway: Then and Now

Mandi Torres, MUS 440: Ethnomusicology
Faculty Mentors: Professor Carolyn Guzski, Music and Professor Andrea Guiati, Director, All College Honors Program

My research project seeks to answer the question of how the Broadway musical has evolved, and to explore the ways in which this happened, from both a musical and dramatic perspective. I've elected to focus on two shows from before the 1980s, "How to Succeed in Business without Really Trying" and "Carousel," and contrast them with "Les Miserables" (1980), a major marker of change in compositional style and form. To represent the Broadway of today, I will focus on two recent and very well-received productions, "Next to Normal" and "Rent." My research includes prior sources that have delved into these topics, among them the PBS documentary "The American Musical." My own close analyses of the plots and particularly the musical scores of my selected shows will investigate the reasons behind the popularity of their premieres and question how well this initial audience appeal survived the stylistic shift Broadway has recently made, with a more rock and pop vibe in the musical scores combined with cutting-edge dramatic narratives. I will also discuss the fact that traditional Broadway was never confined to the "boy meets girl" story so closely associated with the classic American musical.

Presentation Type and Session: Oral – Humanities II

A Costumers Journey From Present To 1790 and Back Again

Benjamin Streeter, Theater
Faculty Mentor: Professor Erica Fire, Theater

I will be discussing the journey I took and what I accomplished through my Undergraduate Summer Research Fellowship. I began on one track with concerns of historical clothing construction. After working with the Historical Society of the Tonawanda's I found that I was no longer where I had originally planned on going, instead I was learning how a museum worked. During the summer months I made dress forms to mount garments for an exhibition, I catalogued garments to better the museum, I researched many different aspects of museums work, like finding grants, proper storage climates and housing, I also saw period garments and how they were constructed. My work was very hands on; I feel like that is the only way to get a better understanding of clothing as so one can explain historic clothing to other individuals. By explaining this journey I hope to show individuals how the conservation and research of historical clothing helps to tell a bigger story concerning the artisans who made the clothing and the people who wore them, and then to the people who donated them and how we trace all that information back to explain the artifact's significance to a new audience.

Presentation Type and Session: Oral – Humanities II

Cracking the CAD Code

Veronica Keymel, DES 499: Independent Study in CAD
Faculty Mentor: Professor Tara Nahabetian, Design

Jewelry, like many other professional fields, is increasingly reliant on computers to save time and material when designing products for customers. There are many computer aided design (CAD) programs available to do this, but Rhinoceros is perhaps the most popular 3D modeling software for jewelers and other craft artists. Now in its fifth version, I set out to see how the newly released Rhinoceros meshes with the latest developments of Flamingo nXt, a popular rendering plugin that assists users in making their 3D object look fairly realistic in the computer. Since it is now standard for design students to learn at least the basics of this CAD software at Buffalo State College, I set out to put Rhino and Flamingo to the test and develop a basic tutorial for current design students. This tutorial demonstrates how to navigate the overwhelming number of options available within the software program, and how to make a 3D model look its best. Things such as bad reflections, shadows, lighting, and unfortunately planned backgrounds are all variables that could turn potential clients away if the student relies on CAD in their future careers as artists. By creating a guide for students it is hoped that it will clarify some aspects of this software and prevent later difficulties.

Presentation Type and Session: Poster IV

Creativity Comes From Within

Hayley Payne, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Katherine Hartman, Art Education and Professor Andrea Guiati, Director, All College Honors Program

There are many stigmas attached to individuals who do not possess the ability to hear. Some people erroneously assume that because many deaf individuals choose not to speak or are unable to speak, that they lack the mental capacity to do many of the activities we take for granted. "Art therapy is a mental health profession in which clients, facilitated by the art therapist, use art media, the creative process, and the resulting artwork to explore their feelings, reconcile emotional conflicts, foster self-awareness, manage behavior and addictions, develop social skills, improve reality orientation, reduce anxiety, and increase self-esteem. A goal in art therapy is to improve or restore a client's functioning and his or her sense of personal well-being. Research supports the use of art therapy within a professional relationship for the therapeutic benefits gained through artistic self-expression and reflection for individuals who experience illness, trauma, and mental health problems and those

seeking personal growth. Art Therapy is beneficial to individuals who are deaf because it gives them a means to effectively express their feelings. It is especially effective for deaf individuals who are going through a difficult time. Expressing themselves through different mediums of art helps them portray ideas or thoughts that are too difficult to convey through other forms of communication. I will explore this topic through a review of case studies with deaf individuals and how art therapy has improved their lives.

Presentation Type and Session: Poster IV

Curtain Up! A Ticket To the Chinese Opera

Brenna Helfer, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Chinese Opera is an art form that has existed for centuries as a combination of theatre, music, and dance. The Chinese culture thrives in its arts. Various regions in the Northern and Southern regions of China perform opera; among them are the Beijing Opera (Northern China) and the Cantonese Opera (Southern China). Today there are about 300 regional styles of opera. Beyond the music is the lavish costuming and makeup. The bright full gowns with the heavy blush and lipstick help the singers come dramatically to life and communicate elements of character: someone with a red face, for example, shows bravery and loyalty. After World War II, traditional Chinese Opera began to diminish in popularity. Coincidentally, opera in the Western world began to see the same effects after the 1960s. How does something with such power and history nearly become a dead art form? Opera is seldom performed today throughout China. It can mainly be seen in the Chinese Opera houses and during traditional festivals. This project will explore the rise and decline of opera in China, and its promise for revival.

Presentation Type and Session: Oral – Humanities II

Do You Have the Time? Tablas, Talas, and Rhythms Of India

Colin Sperrazza, MUS 440: Ethnomusicology
Faculty Mentors: Professor Carolyn Guzski, Music and Professor Andrea Guiati, Director, All College Honors Program

This project will focus on the rhythmic elements of traditional Indian music–specifically through Tabla–and its subsequent influence on Western music. Tabla drumming is performed using rhythmic blocks known as Talas. There are over 140 Talas in existence, each having its own unique grouping and combination of Matras (subdivisions) and Talis (beats) within the Angas (measures). The Tabla player knows exactly how to strike the drum based on the solkattu or boles that are mnemonic devices comprised of spoken syllables. My research will be based upon findings in a wide variety of scholarly sources. I will discuss compositional techniques and rules of Tabla drumming, as well as pedagogical approaches to mastering the instrument and style. My ultimate goal is to make connections from the research to musical elements in the West. These include the Indian solkattu and the counting system of Takadimi, as well as the use of the Indian rhythmic systems in Western music examples such as Vital Information's "Interwoven Rhythms" and Bob Becker's composition "Mudra."

Presentation Type and Session: Poster II

An Exploration Of Colors: Through Paint and the Lens

Sarah Westphal, Photography and Painting
Faculty Mentor: Professor Lin Xia Jiang, Fine Arts

My recent work has been based around the idea of proving the existence of hyper vivid colors in our world. We go day to day without noticing anything special in our surroundings but to me everywhere I go I see the colors that most are blind to. An average person would normally never notice how a hand or foot has a much pinker tone than the rest of the body, or how there are purples, yellows, and greens in a "white" wall. But when I paint I see them. Always challenging myself to see the many different colors and tones that make up an arm or torso. I find it invigorating to discover an olive green in a shadow or a bright purple on a contour of a curve. I pondered how I could show people the true colors of our world through my art. With the help of technology, a new form of Photography has developed, HDR (Hyper Dynamic Range). With this new form of Photography I am able to capture the colors that weren't visible to the average eye. Giving a real sense that these colors exist. By showing the HDR photograph alongside my painting of the same subject would prove how each intertwine with one another. I want my work to be the reason someone stops and studies a room or an object. To get them to open their eyes and see how many colors make up something would be thrilling.

Presentation Type and Session: Library Mezzanine Level, Friday Opening Reception and Saturday, 11 a.m. – 1 p.m.

The Exploration Of Enameling: Forms and Processes

Stephanie Kahn, Metals/Jewelry
Faculty Mentor: Professor Stephen Saracino, Design

My research started out with kiln firing samples of various different traditional enameling techniques. Among these were the technique of plique-à-jour. Typically this technique is done using a fine frit, store-bought enamel. Commercial enamel can be purchased from a supplier; however, the artist is limited in the selection of colors and opacity. Grinding one's own enamels is time intensive, but affords the artist complete control over the final piece. The process of plique-à-jour puts the main focus on the suspended enamel and thus I wanted to be able to play with the opacity, something an artist can't do with purchased enamels. Also, grinding enamels allows the artist to play with the resulting frit size. If a larger frit is used, texture

can be achieved. By combining this new technique with shapes and forms that I have developed in my work over the years, I produced a neckpiece titled, Evolution. The clasp, which is about 3 ½" x 1 ½" is the focal point of the piece and sits just below the collar bone on the wearer's right side, with three small ½" accent pieces along the chain on the left side. The neckpiece has hooks that were soldered after the enameling process and which attach the pieces to the byzantine chainmail chain.

Presentation Type and Session: Poster VII

Franz Liszt and the Music Of the Gypsy

Aaron Masters, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Hungarian composer Franz Liszt (1811-1886) was a dazzling piano virtuoso who shaped the piano recital into the standard concert format we know today. He was also a pioneer in transcribing music originally written for orchestra or soloists (e.g., Beethoven's symphonies, Schubert's Lieder) into scores for piano performance. In the process, he increased the popularity of the piano among the growing population of 19th-century musical amateurs, propagating much of the music we now take for granted. I am focusing my research on another of Liszt's passions: the music of the Romani people, known to the Romantics as Gypsies. The art of improvisation and musical motifs implemented by these people had a hypnotic effect on the young Liszt that he never forgot. Many elements of their musical expression and life are portrayed in the Hungarian Rhapsodies composed by Liszt for solo piano. I will explore how Liszt accrued and developed these artistic motifs and what he was trying to convey by infusing them throughout many of his most memorable compositions.

Presentation Type and Session: Oral – Humanities II

A Fresh Look For Buffalo State Bengals Athletics

Samantha Tilkins, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Peter Bella, Communication Design and Professor Andrea Guiati, Director, All College Honors Program

Professional sports teams' logos are constantly changing and evolving over time, whether subtly, or dramatically. One of the most difficult parts of sports logo design is keeping the essence of the team, while giving the logo a new and improved fresh look. Although impossible to please every fan, the goal is always to keep the logo modern and up to date with the times without losing its roots. For my project I researched different sports teams and their logo evolutions and evaluated the improvements, as well as those that took a step backward. Then, using my knowledge of what makes an effective logo, I redesigned the Buffalo State Athletics logo. I showed my entire process of how I got to the new logo from the thumbnail sketch phase all the way to the final rendering. The logo is shown as it can be altered for each sport, as well as how it would look on the athletic department practice shirts.

Presentation Type and Session: Poster VIII

Hopi Secular Music: Pattern and Theme

David Brummer, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

The purpose of my research is to identify recurring patterns and themes in Hopi secular music from a Western musical and theoretical perspective. The Hopi people are a Native American tribe whom have occupied a desert reservation in Northern Arizona since 1882. Having had many negative experiences with anthropologists and historians, the Hopi share an inherent distrust of those who are non-Hopi and prefer to maintain a shroud of secrecy over their customs and traditions. Fearing that assimilation, forced or otherwise, will destroy the purity and sanctity of their sacred music, non-Hopis are not permitted to sing, record, or transcribe it. Despite holding no such reservations about their secular music, the Hopi musical catalog is sparse at best. As with many Native American tribes, oral tradition is the preferred method of musical dissemination. The death of elders who neglected to share their knowledge of song before passing, as well as the conversion of many Hopi to Christianity, has prevented the creation of a true compendium of their work. My examination specifically details the identification and relevance of recurring patterns and themes throughout Hopi secular music. I intend to determine the existence of distinct categorical periods showing a marked progression throughout its linear evolution. Finally, I hope to gain a consummate understanding of the music of this enigmatic and misunderstood Native American tribe.

Presentation Type and Session: Poster II

Hungarian Folk Music: A Journey Into My Heritage

Al Hury, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

I am amazed that my global cultural studies have produced many discoveries about my own Hungarian cultural ancestry. Through research in anthropology, for example, I have learned how similar foods migrated throughout the European continent, often identified by various names and origins. Similarly, in my musical research, I have identified deeper clues to my ethnic heritage. I never imagined that it could be traced back to the area between Russia and Pakistan. Nomadic tribes ventured through the borderland mountains, bringing with them their folklore expressed in music and folktales. In my presentation, I will use scholarly sources to explain the traditional musical foundations of native Magyar folksongs of this region. I will also contribute my own musical analyses to describe the forms employed, the sources of their derivations, and the paths of their cultural evolution.

Presentation Type and Session: Poster III

I Know It When I See It: Tango Argentina

Courtney Woods and **Rebecca Short**, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Our presentation will focus on the sultry music of Argentine tango. In order to understand global music, it is necessary to piece together an artistic portrait of the people. Argentina, the second largest nation of the South American continent, possesses a unique fusion of song and dance. Our research posits a correlation between the roots of Argentinian folk music and the formation of tango. We will focus on the historical impact of the arrival of Juan Diaz in 1516. The Spanish explorers entrusted the education of South America's indigenous peoples to Roman Catholic friars. During the nineteenth century, Argentine folk music began to develop its own characteristics that were partly influenced by the native population and partly by Europeans. Spanish dances such as fandango, bolero and seguidilla were adapted for native performance. Our focus will be on how these forms developed into the genres we know and love today. We will question the historical impact Europeans actually had on this cultural development. We will also be researching the emergence of tango, the most popular form of music in Argentina, and the extent to which it is intertwined with Argentina's national identity.

Presentation Type and Session: Poster III

Interpretation Of the Ancients: Music Of Chen Yi

Jason Fiedler, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

History was made in Asian culture in the year 1953. A composer was born who would bring honor to her country as the first Chinese woman to complete a graduate degree in composition and count a Grammy among the many prestigious musical awards she has won. Chen Yi is a Chinese composer who draws on traditional influences and multicultural ideas to bring diversity to her work in various compositional styles. She's even credited with producing the first multimedia concert in the United States. Not only does she write for symphony orchestra, but also creates music for diverse ethnic ensembles and arranges for solo saxophone and saxophone quartet. I will compare her compositions with traditional Chinese music to show how she is able to translate artistic expression across various platforms of instrumentation. Chen Yi's renown is well deserved: her ability to integrate style and sound in her music certainly produces unique works of art. From personal experience, I hope to testify to the fascinating cross-cultural experience of playing her music.

Presentation Type and Session: Poster II

Introspective Tapestry

Amanda Hippert, Fibers Design
Faculty Mentor: Professor Jozef Bajus, Design

The connection of transcendence within a technique is crucial to what you want others to see and feel. My interaction with tapestry has evolved mostly as an internal journey, helping me to understand the connection between creativity and my own spirit. My first encounter with tapestry was at Haystack Mountain School of Crafts, where I learned very methodical techniques. At first, I found it very difficult to tap into my creativity: I felt rather limited, not just due to technique newness and difficulty; it also demanded a great deal of effort at a trying time in my life. Tapestry strikingly taught me lessons that made me all the more eager to continue learning and exploring the challenges it constantly posed. This introspective work project has allowed me to set my own limits and to transform a 2-D piece into an object that is highly interactive with viewers. My exploration integrates mistakes as part of the design, allowing threads to speak through transformation of the tapestry with textures and irregularities. My works are inspired by the personal journey of Magdalena Abakanowicz, a tapestry artist who ultimately evolved her pieces into sculptures. She ushered in a new perspective on tapestry, morphing her work into a journey through yarn arrangement. My exploration consists of three artworks of approximately 8" x10," each requiring roughly one month of work. I chose to use up-cycled yarn remnants discarded by Fibers Department students; this makes my pieces challenging yet very unique because my design is based solely on randomly available materials. I evolved this process in lieu of employing methodically measured designs and specific color pallets. This exploration has opened my mind and soul to a new perspective on the meaning of tapestry and has helped me to transform my emotions into yarn expressions.

Presentation Type and Session: Poster V

Looking Beyond the Stitch

Stephanie Kahn, Metals/Jewelry
Faculty Mentor: Professor Melissa Crowell, Design

This research project encompassed a study of pattern between different needlecrafts. The main needlecrafts that were examined were needlepoint, embroidery, crossstitch, and sashiko. These needlecrafts were then merged with the drawing process of Zentangle. Sashiko, is a sophisticated Japanese technique of embroidery traditionally used as a decorative mending process. The method involves a mathematical pattern of running stitches on counted fibers of the warp and weft grid of the linen. The repetitive nature of sashiko stitching can have a meditative effect on the needleworker, much like the meditation invoked from the drawing process of Zentangle. Zentangle utilizes many patterns that can be seen in needlecraft work. The parallels between the two techniques are astonishing. By combining sashiko and Zentangle techniques, a work is created with a new sense of character. Each process is allowed to grow into something new when they break free of their

traditional uses. The final stitched piece will be framed and will inspire other complimentary pieces in the future.

Presentation Type and Session: Poster IV

Marketing a Skill: Preparing a Graphic Design Exhibition

Jenna Hutzler, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Gerald Mead, Design and Professor Andrea Guiati, Director, All College Honors Program

I am currently facing the challenge of setting up an exhibition of my graphic design work. For a fine artist, organizing an exhibition often comes naturally. As a graphic designer, I find myself struggling to visually market my skills. My design knowledge allows me to find solutions to a variety of graphic dilemmas but that ability often goes unnoticed or unappreciated. I am able to solve a wide range of visual problems, but how can I showcase that skill? Our exhibitions are required to be held in a gallery/space that is an appropriate size for our work. It must also be based around a theme and ideally help us make connections in our field. I am gaining first hand experience about the process of setting up an exhibition because it is a requirement for my DES414 Senior Seminar class that prepares us for real world situations. Since January, I have been sketching, planning, studying the layout of the gallery, researching other effective art installation methods and creating the works for the exhibition. The first step was finding an available, appropriate gallery. Since most galleries are booked 8-12 months in advance, this was a significant challenge. I decided on 464 Gallery, located on Amherst St. It is a small intimate setting with adequate wall space for two dimensional work and pedestals available for three-dimensional work. My poster will incorporate all aspects of the preparation of my exhibition: title, invitation design, advertising, presentation (framing/matting my work), documentation, event promotion and preparing the opening reception. A time lapse video will illustrate the actual gallery set up.

Presentation Type and Session: Poster IV

Melodies Of Life: Music In Japanese Gaming

Sarah Brenneman, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Video games have had an undeniable impact on Japanese culture since the rise of the industry's popularity approximately 30 years ago. Some of the most memorable and culturally significant video games have been developed in Japan, and along with them, some of the most diverse and emotionally moving music, such as that composed by Nobuo Uematsu for the Final Fantasy series. Using this series as a lens, I will explore the cultural impact and musical significance behind Japanese video game soundtracks. For the past 25 years, Final Fantasy has created worlds for players to immerse themselves in, using music as a tool to create atmosphere, build emotional and sentimental landscapes, and intensify the possibilities of storytelling. From its origins in basic computerized sounds, to the grandiose orchestral and vocal arrangements that are incorporated into the most recent additions to the series, Final Fantasy has set a standard for video game soundtracks that remains unparalleled to this day. Throughout the history of gaming's technological advancements, Japanese video game developers and composers like Uematsu have continued to push the boundaries of what music can accomplish in the world of gaming, creating a modern cultural legacy throughout Japan and the rest of the world.

Presentation Type and Session: Oral – Humanities II

Music On Your Mind: Unlocking Our Inner Musician

Daniel Darnley, Music Education and History
Faculty Mentor: Professor Brad Fuster, Music

Everyone has heard of the supposed differences between "musicians" and "non-musicians". Musicians view non-musicians as unrefined, uncultured, or as a rabble of those who choose to ignore their creative potential, and artistic expression. Conversely, non-musicians view Classical musicians as an uptight, snobbish, minority that focus their lives around music that is misunderstood and stuck in the past. In this presentation, examine the logistics of Classical music, and how the aforementioned myth is simply untrue. In fact, unlocking one's inner musician is something that most people do every day without realization. Music is more than the learning and memorization of note-values. Music contains elements of science, mathematics, technology, history, and language, while attempting to connect both hemispheres of the brain in analytical and creative thought. Understanding music is a wholesome experience of visual, aural, and kinesthetic senses. Learn how similar "musicians" and "non-musicians" truly are, and perhaps, unlock your inner musician. This presentation will discuss what makes musicians think in the ways that they do, while examining the logistics to creating a Percussion Recital. Percussion instruments will be discussed, as well as what goes into the creation of a recital program order. Exercise your brain with this opening presentation.

Presentation Type and Session: Oral – Humanities II
Note: Percussion Recital, Ciminelli Recital Hall, Rockwell Hall, Monday, May 6 @ 7:30 p.m.

The Music Of Haiti

Stephen McLean, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

From its conception, Haiti has been a country where different ethnicities, ideals, and cultures have clashed. Undergoing such changes as French colonialism, heavy slave migration, and independence, a multicultural melting pot emerged on the island of Hispaniola. In 1804, Haiti gained its independence from France and became the first nation in the "New World" completely governed by African slave descendants. What was left was a state with a rich legacy of all the peoples that lived, fought, and died there.

As with most cultures, historical events and ancestry manifested themselves in the arts. The traditional music of Haiti holds within it the essence of Haitian heritage and customs and the progression that has taken place. This study will focus on the main components, instrumentation, and influences of traditional Haitian music, as well as its cultural, religious, and practical applications. I will focus primarily on three prominent styles. The first is the traditional Haitian music most connected with the popular religion of voodoo, which is called Rara. The second genre is the music of Kompa, which is the modern Haitian Meringue. The last Haitian genre I will discuss is Mizik rasin. This music is the most modern of the three, and has many artistic connections with pop icons as well as Haitian composers.

Presentation Type and Session: Poster I
Note: Senior Capstone Recital, Ciminelli Recital Hall, Rockwell Hall, May 4 @ 3:00 p.m.

Natural Reactions: Art In Experimental and Reactive Metal Casting

Glen Stewart, Sculpture
Faculty Mentor: Professor Elena Lourenco, Fine Arts

My work stems from contemplations centered on origins and interconnectivity: where things come from, how they came to be the way they are, what's acted on them and what impact they've had on the formation of other entities. From the base elements that comprise the fundamental make up of nondescript rock, to the complex structures of a fiery romance, all things have origins that are largely traceable and are manipulated by internal and outside forces to create their present selves. With my work I express these contemplations of interplay and connections, using natural objects and base elements as the structures of my sculptural forms. Currently, I am incorporating rock and wood in their natural state with molten aluminum in an experimental casting process in an effort to visually express these relationships of cause and effect and interconnectivity. Through my research on the process of reactive casting I learned to create controlled scenarios for molten aluminum to interact freely with other materials such as wood, rock and iron embedded in wet sand, causing spontaneous, while often explosive, reactions. The violent reaction between the molten aluminum and wet sand is captured in the final form of the cooled aluminum as it wraps around or through the integrated objects. The resultant castings are never assured and always a surprise: ugly, beautiful, or a glorious blend of both, just as nature can be. These castings and documentation of my process will be on displayed.

Presentation Type and Session: Poster VI

One Act Festival: Student-Directed One-Acts

Erika Frase, **Krystina Lucas**, **Meg Johnston**, **Rebecca Wall**, **Lakia Lucas**, **Rachel Wach**, **Ashley Brovo**, **Malik Griffin**, **Shakora Purks**, **Rhiannon Sherlock**, **Pam Mendoza**, **Emmé Lazarczak**, **Rachael Jamison**, **Fanta Fofana**, **Chrissy Kramer**, **Abe Platt**, **Tiesha Thomas**, **Michelle Meer**, **Julia Smith**, **Cassie Conrad**, **Laura Mooney**, **Ricky Needham**, **Allison Monaco**, **Adrianna Goethl**, **Frances Hughes**, **Kaitlyn Smith**, **Brittany Wysocki**, **Lee Becker**, **Travis Carlson**, **Monae Dudley**, **Alvin Flemming**, **Michael Esposito**, **Iana Kadlev**, and **Sean Tresmond**, THA 350: Directing I and THA 450: Directing II/Advanced Directing and Producing
Faculty Mentors: Professor Shaun McLaughlin, Theater, Professor Daniel Shanahan, Theater, and Professor Sever Vaughn, Theater

The One Act Festival being held May 2-4, 2013 is the inaugural of what the Buffalo State Theater Department hopes to make an annual event. This year's 'festival' includes 34 presentations - 30 one-act plays and 4 short films spread over three nights. A variety of theatrical forms will be presented spanning Greek verse drama, Neil Simon comedy, absurdist pieces and even Neil Simon comedy. The 'festival' provides aspiring directors an opportunity to present works before an audience while giving first and second year actors a chance to perform. It also provides an opportunity for student lighting designers and technical staff to further hone their skills. Each play or film is about 10 minutes in length. The plays will be simply staged in an intimate environment with seating on three sides. The emphasis will be on performance and storytelling more than the spectacle of theatre.

Location: Flexible Theater, Donald Savage building, May 2, 3, and 4 @ 8 p.m.

Philosophy Takes Form

Joshua DeMont, Philosophy
Faculty Mentors: Professor Nathan Naetzker, Art Education and Professor George Hole, Philosophy

I'm motivated to convey, through art, that 'moment' of philosophic understanding. The moment that occurs only as a resolution to a curiosity. Occasionally, inquiry is met with understanding, seeking is met with finding, doubt with assurance. How to convey that through art is the challenge here. The work should pose a philosophic question; the answers should be available in the piece to the observer, but the 'act' of understanding will occur only with the correct causal relation between the object and the inquiring perceiver. The piece, an oil painting of approximately 40" x 40", posits a philosophic challenge. The answers, if there are any, are entirely available to the inquiring mind by means of the content contained in the piece, but understanding is contingent on the questions asked.

Presentation Type and Session: Library Mezzanine Level, Friday Opening Reception and Saturday, 12 p.m. – 1 p.m.

The Photographic Art Of Emulation and Interpretation

Nicholas Butler, Photography
Faculty Mentor: Professor James Sylvia, Fine Arts

I have chosen two well-known photographers to emulate, Herb Ritts and Albert Watson. A number of photographs from each were chosen. I found there work to be well done and impactful, they where also using portrait skills that I was not yet familiar with. This project was not only very difficult but also challenging. Each had to be worked backwards in order to fine out how the original photography was actually created. I had to think about studio lighting and study the photograph to find out not only where the light was coming from, but learn and duplicate the quality of it. Most of the portraits I chose look simple but I spent hours working with my models just to get the pose or the lighting right. The right locations and subjects were essential in each photo, to make the emulation, detailed, the best it could possibly be. After doing the emulations I had to create my own variation and let each photo inspire me in its own way. This part of the project was more open and allowed me to be in my own creative space, but also be guided by the intent of work I had emulated by Ritts and Watson. I used the same models to maintain a constant in the body of work and truly show the difference between the emulations and my photographs. This is one of the most challenging but rewarding projects I have done here at Buffalo State. I hope you enjoy this experience as much as I did.

Presentation Type and Session: Poster VI

The Psychology Of Design: What Makes a Good Designer

Rachel Frank, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Amy Claroni, Interior Design and Professor Andrea Guiati, Director, All College Honors Program

Art and science are related to one another in many ways: the psychology of art and design. Many do not understand the connection and important influence that psychology has on design. Designers are built to be sensitive, critical thinkers, and to adapt and shape their designs to their target audience. This happens through a deeper understanding of psychology and how the audience relates to a design. All design is entirely dependent on the way in which the human mind works, perhaps more than people realize. I investigate this through an analysis of scholarly articles written by experts in the field that examine this connection, as well as study of successful design work. I also intend to describe various design theories such as the Gestalt Theory, and how it helps a designer make decisions. This will help show how these two disciplines are much more closely related that one would think which educates people on what knowledge helps to make someone a good designer. This research is significant because there seems to be a misconception nowadays with the advancement of technology that simply because one has the resources, that anyone is a designer. This causes a problem because this lack of knowledge of the link between psychology and design creates a smattering of projects, many of which, not being as successful as they could. It is necessary to know how to apply the elements of design to evoke desired perceptions and emotions from an audience.

Presentation Type and Session: Poster I

A Relationship Of Functionality

Nathaniel Hall, DES 495: Furniture Veneer
Faculty Mentor: Professor Sunhwa Kim, Design

A relationship can be defined as a bond between two or more people or things. In this case, a relationship will be developed between two materials: porcelain and wood. Both are very different materials with drastically different working characteristics or personalities. Can they work in close proximity to each other in harmony? This is the challenge that I want to prove true with the collaboration of a ceramic artist, Sarah McNutt. Sarah and I have developed designs that require both wood and slip-casted porcelain to function as tableware. The porcelain objects possess a spherical, round base which when placed on a flat surface, will surely fall to gravity, rendering them useless as utilitarian objects. Their wooden partners have a sculptural, elegant quality, that really serve no purpose either, other than to be seen. But when the two parts come together, they work harmoniously and the tipsy porcelain objects now stand vertically with strength provided by the wooden, laminated bases. These two very different objects possess a close relationship and transform their functionally useless independence into beautiful utilitarian tableware.

Presentation Type and Session: Poster VII

Resonance: A Sonic Approach To Healing

Patrick Allison, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

This musical project will move out of the realm of aesthetics, instead discussing sound vibration as a means of facilitating healing (on many levels) and identifying sound healing as a global phenomenon. I will draw upon both traditional understanding and modern science to provide a broad basis for understanding the vibrational nature of the human organism. This demonstrates a shift in paradigm from the Newtonian, world-as-a-machine worldview to a more holistic world-as-codependent-patterns-of-energy approach. My research will address these questions: What is health and healing (as it pertains to the human being)? To answer this question I will discuss the energetic nature of the human being and the interrelatedness of each facet of our being (i.e., physical, mental, emotional, spiritual) from the perspective of both modern science and ancient traditions. How can sound be a catalyst for healing the human being? What are the social implications for this modality in our world today? During my presentation, I will provide an example of a specific sound healing technique.

Presentation Type and Session: Oral – Humanities II

Rhythms For the End Of Time: Indian Tala and the Music Of Olivier Messiaen

Anthony Henry, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Anyone who has heard Olivier Messiaen's Quartet for the End of Time would agree that it is unlike any other piece of music. Composed and premiered in a Nazi concentration camp, its origins are unique. But there is more to its otherworldly characteristics. Messiaen began studying Indian rhythmic theory (tala) and made use of it in several pieces he composed before the start of World War II. None of these early works, however, capture the ethereal elegance of the Quartet for the End of Time. This presentation will compare the authentic setting of Indian music with the Quartet's genesis in the context of a Nazi camp. I will focus on a number of issues: What is the significance of Indian music within traditional culture? How does it sound and why? What does it seek to communicate? Finally, how did its impact, together with the experience of WWII, influence Messiaen to create one of the most spectacular chamber compositions of all time?

Presentation Type and Session: Poster III

Ring Ding Diddle Diddle I De: Exploring Celtic Bagpipe Music

Julianne Palmer, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

The bagpipe is a global aerophone found in many regions of Europe. Multiple types of bagpipes with widely varying characteristics produce very different sounds in each region. Bagpipe history extends back centuries beyond its Celtic roots. The most popular bagpipe today is known as the Scottish Highland Bagpipe, which contrary to popular belief is played throughout Ireland as well. In fact, a number of bagpipe melodies are played in both the Scottish and Irish traditions but are known by different names. In my presentation, I will explore the similarities between Scottish and Irish bagpipe music. My sources include scholarly studies of this instrumental family and its aesthetic and cultural significance. In addition, I will contribute my own musical analyses of traditional melodies, such as "Scotland the Brave" and "The Irishman's Toast", that have survived for centuries.

Presentation Type and Session: Poster III

Something Old, Something New: Stylistic Interaction In Béla Bartók's Twenty-Seven Two- and Three-Part Choruses

Abigail Spoth, Music
Faculty Mentor: Professor Carolyn Guzski, Music

The Hungarian composer Béla Bartók (1881-1945) is renowned not only for his modernist compositional aesthetic, but also for his extensive ethnomusicological work with the folk songs of Eastern Europe (including present-day Hungary, Serbia, Croatia, Romania, Turkey, Transylvania, and Yugoslavia). An initial encounter with a Transylvanian maid singing her native songs while cleaning eventually led to a collection of nearly 14,000 Hungarian folksongs alone. While valuable in its own right, this expansive collection finds further value in Bartók's development of its characteristic folk elements within his own compositional style. The Twenty-Seven Two- and Three-Part Choruses, written in 1935 at the apex of Bartók's musical career, exemplify this idiom. While their sources are Hungarian folksongs and they feature original folksong text, the music for each chorus is newly composed and clearly reflects Bartók's technique of seamlessly blending traditional and modernist elements to create a new aesthetic. The combination of traditional techniques with modernist, often mathematical, approaches is a characteristically Bartókian compositional method found throughout the Twenty-Seven Choruses.

Presentation Type and Session: Oral – Humanities II

Still Knee-Deep In Seaweed

Alyssa Haj, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

I will discuss the topic of Irish folk music. Many musical styles are popular and well known, but then begin to fade away until they are only rarely performed. Irish folk music has been around since as early as the 6th century, yet much of its repertoire is still heard and performed regularly today. Since the topic is vast, I will focus on a few examples of the more popular folk songs to discover why they remain so frequently performed in today's culture. My research will use various studies in Irish musical history. I will then compare and contrast older performing renditions against current performances. My preliminary conclusion is that Irish music has endured because of the uniqueness of the instruments used, the transmission of its songs through translation into other languages, and the varying lyrics to which the songs are set to help keep them current. I will supplement my presentation with a video performance of the contemporary folk group Celtic Woman, which includes traditional Irish instruments.

Presentation Type and Session: Oral – Humanities II

Theater Under Fire

Laura Mooney, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Drew Kahn, Theater and Professor Andrea Guiati, Director, All College Honors Program

In America, theater has the creative freedom to range from Broadway spectacle to politically charged social activism. But, censorship still exists through media filters and government oppression. Our theater closely resembles a small Eastern European company: The Belarus Free Theater. Under a totalitarian dictator, Belarus performs secretly in apartments and coffeehouses. Belarus' mission mirrors that of the Mercury Theater, the Living Theater, the Group Theater and the Labyrinth Theater. My research demonstrates how theater can be used as a vehicle for social change. As a result, I want my audience to reflect on the state of the arts in their community and in the world and inspire them to

create their own artistic pieces or support their local art community by attending shows or going to galleries. My project will include information about the political state of Belarus and the obstacles the company faces when they attempt to perform, a video compilation from cut from YouTube showing Belarus' performances, and information about our very active local buffalo theater community. I am collaborating with my fellow student, Daniel Dienhoffer, to devise a play that demonstrates theater's ability to promote social change. The play is a work in progress, but completed scenes will be performed at the Celebration. I plan to continue working on this project and present it to students at high schools around the area to make them more aware of what is happening in the world and inspire them to use their creative talent to make a difference.

Presentation Type and Session: Poster IV
Note: Flexible Theatre, Donald Savage Building, Saturday, May 4, 3:00 – 4:00 p.m.

The Third Expedition

Travis Carlson, TFA 480: Advanced Directing and Producing I
Faculty Mentor: Professor Shaun McLaughlin, Theater

The Third Expedition will be a short film adaptation of Ray Bradbury's short story of the same title published in The Martian Chronicles. The suspenseful science fiction tale follows two astronauts that crash-landed on Mars and discover that Mars is a recreation of the Earth of their childhoods. The project will challenge my skills in adaptation, film production, video equipment, directing and editing. It is a good example of using science fiction to hold up a mirror to society and uses the tropes of story telling to question the very nature of home, family and even reality in a Descartes way. This is part of a class project focused on concept, working with actors and visual storytelling. It's especially focused on how the theme and concept are communicated through visual means. It will be filmed locally in the City of Buffalo and is cast with Buffalo State students and faculty. Besides the nature of the storytelling, it will challenge creativity and the art of collaboration.

Location: Friday, May 3, 8:00 p.m. Flexible Theatre, Donald Savage Building

Tibet Or Not Tibet? That Is the Question...

Cassondra Conrad, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Tibet is a lost country struggling with oppression and exile. While Tibetans have remained strong culturally, they are divided as a people: half are subject to Chinese rule and the remainder live in Dharamsala, India in exile. Their traditional culture under these circumstances is continually exposed to new music. Musical borrowing by Tibetan youth with multicultural identities has created a new form of music. Ancient music in Tibet derives from religious ceremonies and the expression of core spiritual values. Young Tibetans take pride in their heritage but have succeeded in adapting to new traditions. As Tibet continues to face political issues, its music has served as a political voice as well. Combined with Western, Chinese, and Indian influences, its musical practice is in flux. I will explore how this confluence of factors has affected both Tibetan music and society. In addition, I will question whether the changes have remained representative of Tibetan culture.

Presentation Type and Session: Poster IV

Transformation Of the Creative Process

Stephanie Kahn, Metals/Jewelry
Faculty Mentor: Professor J. Michael Fox, Center for Studies in Creativity

The objective of my research is to merge the creative process taught in creative studies with the design process taught to artists by examining various creative tools to see how they can assist an artist in the design process. I focused on analyzing the facilitation of creativity in regards to brainstorming and idea generating techniques. I tested my design process with pattern design. With successful tools, I will be able to produce printed fabrics that will work successfully together in a quilt. The designs are made in illustrator and Photoshop and sent to a company to be printed. Traditional design techniques are modified and become something new once they are merged with the creative process.

Presentation Type and Session: Poster V

The Unique History and Culture Of the City Of Siena

Chelsea Kettle, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Frances Gage, Fine Arts, Ms. Josephine Zagarella-Behrens, Director, International Education, and Professor Andrea Guiati, Director, All College Honors Program

The Coliseum. Gondolas. Pasta and wine. Vespas and cobble roads. All of these things are only some of the wonderful characteristics that make up the country of Italy. The Tuscan region is perhaps more of the well -known areas of Italy, an area that is home to cities like Florence and Pisa. Directly in the heart of Tuscany is the medieval city of Siena. Although possibly less well-known to foreigners than Florence, Siena is a city that has been relatively untouched by tourism, allowing its rich history and culture to remain intact. Because of its unique isolation, Siena has a culture and traditions that are unlike any other regions in Italy and that continue to this day. Examples of this are the Palio–the annual horse race that takes place in the Piazza del Campo, one of the major landmarks in Siena–and the Contrade, or neighborhoods, that make up the structure of the city. Siena is also home to many famous artworks, like the Maestà by Duccio di Buoninsegna that was completed in 1311 that are seen in many art history books. In addition to all of these things, the profound and deep pride of the Sienese people only adds to the city's beauty and uniqueness. This research project will essentially address the following: How has the history of Siena impacted its culture and traditions to make it such a unique city?

Presentation Type and Session: Poster VII

Weighting

Jacqueline O'Brien, Sculpture
Faculty Mentor: Professor Elena Lourenco, Fine Arts

There is an observable movement in things that have been weighed down. The object takes on a long stretch, lunging as gravity pulls it to the ground. In my research project I would like to explore the energy of movement in regards to weight and physical stress, using fabric to articulate these forms. My desire is to study the effects of "weight" on various fabrics after they have undergone different kinds of stresses, i.e., burning, staining, thinning, ripping, sewing and painting, and to translate these observations into evocative, emotional sculptural forms. In this project I plan to use lace, muslin, cotton, expandable foam, latex, stain and paint, burlap, salt, cement and sand. As I conduct experiments, using these materials in different combinations, I will learn how to credibly articulate a visual language that communicates feelings of weight, gravity and heavy burdens.

Presentation Type and Session: Poster VIII

Within You, Without a Clue: The Westernized Indian Sitar

Kasey Heisler, MUS 440: Ethnomusicology
Faculty Mentors: Professor Carolyn Guzski, Music and Professor Andrea Guiati, Director, All College Honors Program

This project will explore the complexity of the traditional East Indian musical instrument, the sitar. This fretted lute chordophone is often compared to the guitar, the most closely related instrument in Western culture. Many western popular musical artists of the 1960's and 70's attempted to expand their stylistic horizons globally to include the intriguing sound of the sitar. I will investigate the traditional role of the instrument and the reasons for the dramatic increase in mainstream appeal it experienced in the West. My research encompasses the pedagogical traditions of sitar playing as well as its complex theoretical guidelines. I am exploring comparisons with the guitar and considering how the two instruments differ in both sound and cultural significance. My goal is to understand what makes the sitar such a complex instrument that seemingly proficient Western guitarists cannot play with any level of actual skill, despite valid professional instruction. Using the model of George Harrison and Ravi Shankar as a case study, I hope to reveal the roots of the instrument's popular reception in the West and the reaction to this evolution in India.

Presentation Type and Session: Poster III

You Can't Stop the Beat: Musical Evolution Under Afghanistan's Regime

Samantha Arcara, MUS 440: Ethnomusicology
Faculty Mentors: Professor Carolyn Guzski, Music and Professor Andrea Guiati, Director, All College Honors Program

The Taliban's model for a fundamentalist Islamic revolution rejected moderate Muslim and Western influences. In its attempt to eradicate foreign influences, the Taliban jeopardized Afghani culture, especially through music. Music in Afghanistan prior to 1996 had been played in celebration at weddings and religious ceremonies, as well as in shops, hotels, and vehicles. After seizing power, the Taliban's regime immediately banned instruments and their characteristic sounds, including all forms of instrumental and vocal music (except for unaccompanied religious singing). Tragically, Afghanistan's traditional music fell under this ban. As a result, instruments were burned and destroyed with punishment for their use varying from confiscation and a warning to severe beatings and imprisonment. Forced to find other ways to make a living, musicians fled into exile. Surprisingly, the Taliban crackdown on music did not engender stagnation: a new genre known as the Taliban tarana was created, and a thriving underground music scene developed. I will explore traditional techniques and modal tonality in this music through techniques of analysis and transcription. Using scholarly journals and current events articles, I will investigate the significance of music in Afghani culture and the impact of artistic censorship on its citizens.

Presentation Type and Session: Poster IV

You Play the Cello? Iraq the Santur

James Cole, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Each region of the world holds its own unique musical identification derived from the traditions and beliefs of its culture. Today many musicians disregard these traditions to compose and perform contemporary music, while still specific to the regional culture of release. Finding the balance between contemporary new ideals and traditional techniques can be difficult, and many artists disregard traditions for this reason. This poses the question, "How are contemporary Iraqi composers keeping tradition in their composing?" Daoud and Saleh Al-Kuwaiti, two Iraqi brothers, were the highlighted ensemble supplying Iraqi Radio with their music in the 1930s. The two brothers were able to lace the traditional Iraqi ensemble with the sounds of the ney and the cello with an accepting response from their audience. By further researching composers and artists of 20th century Iraqi music through mediums of Internet search engines, books, and online articles, understanding of traditional and contemporary composition methods can be uncovered. Understanding the pitch system of Iraq, maqām, and traditional instrumentation of Iraqi music will enable theoretical and aural analysis to decipher a better understanding of the meshing of these two musical eras into one within the Iraqi cultural region.

Presentation Type and Session: Poster II

You're Ghana Love It: A Look At African Rhythm

Leanna Goddard and **Joey Daconto**, MUS 440: Ethnomusicology
Faculty Mentor: Professor Carolyn Guzski, Music

Our research investigates the West African country of Ghana and the diverse musical styles practiced there. We will draw on our performance experience with traditional djembe in the West African Drumming Ensemble at Buffalo State. In addition, Leanna recently studied abroad in Ghana, traveling to Medie, Elmina, and Accra and studying djembe as well as gyil, an African xylophone. The goal of our scholarly exploration is to learn more about the specific styles of drumming within this region. An essential component of African music is its accompaniment with dance, a vital part of cultural life. Our presentation will include a live musical demonstration on authentic instruments of intricate rhythms transcribed from practice in Ghana. The drums were hand-carved in Ghana and have traditional goatskin drum heads. The difference in sound from American mass-produced plastic drum heads is dramatic, and one can immediately hear the difference between the two timbres. We hope to build on this project's significance in future musical travels to Ghana.

Presentation Type and Session: Poster I

Business and Fashion & Textile Technology

Brand Structures and the Branding Of Fashion Goods

Lisa Pignatelli, FTT 355: Research in Fashion Merchandising
Faculty Mentor: Professor Liza Abraham, Fashion and Textile Technology

The structure of brands has become an important part of the branding of goods in the fashion industry. Branding will be defined and its importance highlighted. Branding strategies and managing a brand as a whole will be discussed. Some of the key concepts highlighted in this research include techniques and strategies for brands in today's economy, brand positioning in the marketplace, national versus store brand, and the practice of branding.

Presentation Type and Session: Poster III

The Denim Industry: Past, Present and Future

Hannah Davis, FTT 355: Research in Fashion Merchandising
Faculty Mentor: Professor Liza Abraham, Fashion and Textile Technology

The Denim Industry has changed dramatically since the fabric was first created back in the 17th century and made its way to America to become the beloved fabric it is today. With the huge influences of Levi Strauss and the eventual acceptance of jeans by the entire world, this fabric has really stood the test of time. The research looks at denim's current influence on the economy and the environment as well as the changes in trends overtime. Today, denim is seen everywhere and on everyone, it is sold at many different price points and is even used in high fashion runway shows. Since the denim industry is so large, the impact on the environment is a big one. While most people today are embracing a greener lifestyle, the denim industry is making strives to make themselves greener as well. Secondary data was analyzed to research and determine the results of this study. Through this research, we learned the history of denim, the current economic status of jeans, the environmental implications of jeans and what the denim industry is doing to decrease theses impacts.

Presentation Type and Session: Poster IV

The Effect Of the Revised ADA 2010 On Hotels

Min Yi Lu, HTR 470: Legal Issues in Hospitality
Faculty Mentor: Professor Lori Till, Hospitality and Tourism

On July 26, 1990, President George Bush signed into law the Americans with Disabilities Act (ADA), which is modeled after the Civil Rights Act of 1964. ADA helped to remove barriers and limit discrimination that consumers with disabilities face daily. The goal of ADA is for consumers with disabilities to gain access to the same services and goods that consumers without disabilities enjoy. The revised regulations in ADA of 2010 further enforce that goal and compliance of the new regulations is effective March 15, 2012. Title II (State and local government services) and Title III (Public accommodations and commercial facilities) greatly affect the hotel industry. The purpose of this project is to identify the specific changes for accessibility that were made in the revised ADA 2010 regulations post 1990 and what challenges this may pose to the hotel industry.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

Effectiveness Of Social Media In the Fashion Industry

Tanisha Rodriguez, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

This research is designed to determine the effectiveness of social media on the textile and apparel industry. Focus will be first drawn to the beginning promoting of a brand, from newspapers to the present virtual community. The first usage of the virtual community will be discussed along with the expansion caused through new tactics of exposing a brand. The purpose for social media marketing, such as developing a brand through consumer's main interest and feedback of a product, essentially maintaining loyalty with customers. Techniques of building and maintaining a brand of the fashion industry will be examined and its results. Techniques used to expose a brand will be examined from a positive and negative perspective. The economic impact of the present day social media tactics for the fashion industry will be examined based on expenses to use the social media. Focus will also be drawn to the expenses of old promotion tactics to determine the tremendous increase of businesses in the fashion industry. This research will also determine the customer loyalty factors on the increase of business for companies, brands, etc.

Presentation Type and Session: Poster VI

Essential Knowledge and Skills For Career and Technical Education

Johnnishia Rouse, HTR 495: Special Project
Faculty Mentor: Professor Kathleen O'Brien, Hospitality and Tourism

Graduates of hospitality programs who are about to enter the workforce require essential knowledge and skills in order to be successful. Institutes of higher learning have designed hospitality curriculum which seeks to provide students with numerous opportunities to learn and experience "real-life" work situations, and encounter conditions which typify the world of work and grow into their roles as professionals before they get there. This exploratory research project answers the question "What essential knowledge is needed to lead and manage in the hospitality industry?" This research is important to me because I would like to understand the effectiveness of a dominant "hands-on" learning curriculum versus

a curriculum that is predominantly based on traditional classroom experiences. I will search for answers by focusing on identifying "eye opening experiences" students have as part of their lab which lead to the knowledge and skills they need to compete in the hospitality job market. A survey of students in Campus House will be analyzed to learn how students feel about the essential knowledge and skills as a result of their "hands-on" experience.

Presentation Type and Session: Poster VII

Fast Fashion

Hannah Davis, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

This purpose of this research is to examine the effects of the "fast fashion" industry on environmental and economic issues. We are living in a consumer driven world where disposable goods are valued and sought after, especially in the fashion industry. Consumers are looking for trendy, low price items and want them very quickly; these fast fashion retailers give it to them. This industry has grown immensely in the past years and with that growth has fueled many heated discussions on the topic. Many people criticize the industry because of environmental impacts and the waste these retailers produce. Other people applaud fast fashion retailers due to their innovative supply chain model and job creation. This paper examines both sides of the debate in order to better understand the impact of fast fashion retailing.

Presentation Type and Session: Poster VII

From Buff State To Central University of Finance and Economics (CUFE)

Jeffrey Gryglewicz, **Michelle Reinhart**, **Alex Sgroi**, **Kari Beyers**, and **Victoria Church**, INE 390: Chinese Culture and Business Practices
Faculty Mentors: Professor Christine Lai, Business and Ms. Josephine Zagarella-Behrens, Director, International Education

Studying abroad provides a valuable educational experience for students. It allows pupils to travel to new and unique places while simultaneously advancing their studies. The January 2013 study abroad experience in Beijing, China allowed its eleven participants to experience the culture, learn the Chinese language, and explore the history of an ancient civilization. Students used face-to-face interaction and observation to compose their reflective journals. The presentation will include a video showcasing some of the events of the program as well as the benefits of learning about China. After our experience in China, we now understand the meaning of Alice Morse Earle's quote: "Yesterday is history. Tomorrow is a mystery. Today is a gift. That's why it is called the present."

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

Fur In the Textile and Apparel Industry - Ethical Or Harmful?

Emily Knauer, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

The purpose of this research is to examine the use of fur in the apparel and textile industry. It will explore the impact it has on the animals, as well as environment; and if there are comparable textiles to substitute. Extensive research through journals and articles has been done to provide information on both views of the argument. Explanations for why fur is making a come back in the fashion industry, as well as re-branding of designers for economic issues will be examined. In conjunction with the negative impact fur has on animals and the environment. Direct quotes will be examined from fashion leaders in the industry offering opinions on both sides of the argument. Data has shown that this is an ongoing issue that will require attention in the years to come.

Presentation Type and Session: Poster VI

Innovation In the Textile Industry

Stefanie Troidl, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

The purpose of this research is to investigate new innovations in the textile industry focusing on the apparel and footwear sector. Through examination of new practices, it can be determined that technology plays a major role in the advancement of textiles. Spinning methods, inspection techniques, and smart textiles all require computer-based software. Processes have become more efficient and clothes are able to inform us of our heart rate and other bodily functions. Researchers are constantly working to create something even more advanced to improve our quality of life. In the future, less human labor will be necessary and our clothes may be able to change the face of medicine.

Presentation Type and Session: Poster VI

Merchandising Store Design and Development: ChicAnistas

Emily Knauer and **Stephanie Villafranca**, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Liza Abraham, Fashion and Textile Technology

The goal of this project is to create a fictional fashion boutique located in Syracuse, NY. Data collection and research has been completed to prepare the boutique, ChicAnista's, to be potentially realistic with detailed planning. Our mission is to make ChicAnista's the preferred destination for classy women of all ages. Our customers are our employees' top priority and inspire our brand to improve and fit their needs on a daily basis. We strive to work as a team while creating similar bonds with all of our customers. In order to create ChicAnista's to the best of our abilities, stores with comparable price

points and product mixes have been analyzed. With ChicAnistas' location in Syracuse, NY, the proper target market as well as consumer demand has been evaluated to determine the boutique's success. A six-month plan provides the basis for the success of ChicAnistas' first year in business, along with a variety of other necessary store planning elements. The journey to ChicAnista's final development will be presented along with visuals to exhibit these steps to the audience.

Presentation Type and Session: Poster V

Mother Nature Wears Prada: The Environmental Impacts Of the Textile Industry

Brittany Lingard, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

The purpose of this research is to examine the environmental impacts of the textile industry. When people think of fashion they think of style and beauty; but, they rarely think about the origins of the textiles in their garments or how they are produced. There are some environmental concerns related to the textile industry, such as fabric waste and water pollution from dyes and chemicals. This research will discuss the environmental challenges in the textile industry, how industry members are addressing environmental concerns, and what consumers can do to be more aware of these issues when making decisions about their purchases.

Presentation Type and Session: Poster VI

Outsourcing: Is It Ethically Right?

Alicia Godfrey, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

The purpose of my research is to address ethical issues, including sweatshops and child labor, as it is related to outsourcing. Outsourcing helps cut cost due to cheaper labor. Ethical issues can arise when outsourcing manufacturing of apparel. People may be forced to work in unsafe and unhealthy working conditions. Children may be forced to work long days taking away from their childhood. This is why many people question if outsourcing is worth the price. The Fair Labor Standards Act (FLSA) was put in place in attempt to help the rights of workers. Campaign organizations such as the "no sweat" campaign or the United Students Against Sweatshops are groups who fight the use of sweatshops while bringing attention to this serious issue. Outsourcing has both positive and negative factors. People involved in outsourcing must keep in mind the serious ethical issues involved with child labor and sweatshops.

Presentation Type and Session: Poster VII

Party Like It's $19.99: Infomercial Tactics and Success

Andrew Henning, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Bruce Sun, Mathematics and Professor Andrea Guiati, Director, All College Honors Program

Infomercials are often used to advertise original ideas and inventions that aren't sold in retail outlets. They must convey a large amount of information in a short period of time since potential consumers can't go to the store and check the product for further details. To achieve this end, pitchmen use a variety of tactics in an attempt to inform and entice the viewer to purchase the advertised product as soon as possible. However, each pitchman uses a similar set of tactics, and infomercials appear to follow the same basic structure. This suggests that the format of today's infomercials is generally successful and well received. In this presentation, I will explain the tactics pitchmen use to persuade viewers to buy their products. I also hope to conclude why these tactics work so well and why they haven't changed much over the years.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

The Positive Effects Of Textiles and Clothing In Developing Countries

Andrea Wright, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

Being one of the oldest and largest industries in the world, textile and clothing manufacturing plays a major part in production, trade and employment in many countries. The purpose of this research is to examine the economic, social, and political factors that facilitate textile production in developing countries. I will describe the importance of textiles and clothing in incomes, employment and growth and development strategies of developing countries. Through examination of statistics and case studies I will provide evidence on how the clothing and textile industry affects developing countries in the short term and long term.

Presentation Type and Session: Poster VII

Product Placement and Its Effectiveness

Melinda Guaba, FTT 355: Research in Fashion Merchandising
Faculty Mentor: Professor Liza Abraham, Fashion and Textile Technology

This project investigates the product placement industry through literature and by interviewing a personnel in the industry. Types of product placement and effectiveness of methods used in the industry are discussed. This paper also looks into the different aspects of this multi-million dollar industry and its potential for expansion. Findings suggest that a combination of different types of product placement methods may be the most effective form to use to promote products.

Presentation Type and Session: Poster VI

Refining Labor Image In Asian Countries

Tina Reyes, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

The government's role in Asia as it deals with human rights issues such as labor exploitation, child labor and forced labor in the apparel and textile industry have been under a lot of scrutiny when discussing globalization. These labor policies continues to be a serious social problem in many Asian countries. Examination of these issues will be based on researched efforts of countries such as China, Japan, Korea and India mandating new laws in order to sustain a stronger social appeal as well as a thriving economy. This study will provide information that highlights the many labor laws being developed in order to improve the labor image of the textile and apparel manufacturing businesses. These human rights issues are examined using the perspective of the state vs. international norms.

Presentation Type and Session: Poster VII

A Revolution In Restaurants: How Servants Lost the Service Industry's Interest Through Innovation

Nathan Muka, HTR 480: Practicum in Hospitality Operation
Faculty Mentor: Professor Kathleen O'Brien, Hospitality and Tourism

As our industry evolves, the influx of technology has reared its head in almost every facet of the restaurant world. From reserving a table, to arrival at a location, through ordering and even food delivery, our industry has drastically changed from a respected profession to a series of tech savvy, behind the scenes operators, changing servers to order takers and chefs to mere prep-cooks. This presentation will reveal a few of the basic ways in which we have crossed a new threshold into a world of digital reliance and loss of the true humanistic quality our great industry once held. I will be focusing on both the pros and cons, from employers and employees, regarding the "tech wave" that has crashed on our shores. In particular, I will be focusing on computer inventory and ordering systems, replacement of menus with electronic tablets, and the new trend of on-line reservation systems. Overall, I expect to find both the practical and realistic applications of these services and the affect it has on the common employee as well as the business owner.

Presentation Type and Session: Poster VI

Runway 6.0: Sweet Bites Collection

Lucile Ragot, FTT 451: Senior Project
Faculty Mentors: Professor Lynn Boorady, Fashion and Textile Technology, Professor David Brinson, Fashion and Textile Technology, and Professor Elaine Polvinen, Fashion and Textile Technology

This year the theme of our 2013 Runway show being: "The city of Buffalo, City bits/City bytes", I named my line Sweet bites in reference to Buffalo's food culture, and the European atmosphere created by the stores on Elmwood Avenue. My inspiration came from my own cultural background and experience, as well as the local history. This line transports the viewer in a different world were elements of the past and the future coexist to make a parallel between modern industrialism and natural romantic elements. The style range goes from casual chic to evening wear in order to mimic the broad selection of styles that would be presented in a designer's runway show. Transparencies, metallic colors and structured shapes are the main focus of this line. The fabrics used for this collection are made out of cotton, a natural fiber, and polyester, a man made fiber. With the generous help of Cotton Inc., the textile patterns I designed using Adobe Illustrator were printed on a sateen cotton fabric. This experimental line uses other materials for the structure such as metal wire and plastic boning; all combined using couture techniques.

Presentation Type and Session: Poster VIII

A Systematic Review Of Marketing Literature On Atmospherics

Thao Nguyen, Business
Faculty Mentor: Professor Daniel Gaygen, Business

This systematic review focuses on the research conducted over the years on the effects of environmental characteristics, known as "atmospherics", on the consumers' behavior. Our goal is not to construct or evaluate any studies, but solely to identify problems and weaknesses in the particular field of atmospherics research. After conducting an in-depth investigation on over 100 different journals articles, our findings reveal three main problems with marketing literature on atmospherics. First, there is not a variety of method used when conducting researches. Because every measurement method has strengths and weaknesses, a variety of them should be applied during research in order to foster the confidence in the outcomes. Second, Mehrabian-Russell model is the only background study used to develop new theories upon. Current studies need to evolve with different frameworks that can support and advance the development of new theories. Last but not least, researchers need to be careful not to over-interpret the outcome when concluding their research. An experiment needs to be conducted with different treatments and on several randomly assigned variable groups in order to validly establish causal link.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

Travel With Us: The Alba Region Of Italy

Alex Davis, **Kathryn Doyle**, **Brandon Dunkley**, **Stephanie Esten**, **Jennifer Gelormino**, **Amelia Gillman**, **Alison Gramza**, **Gina Losi**, **Meghan Marotta**, **Nicole Mokhiber**, **Brian Peck**, **Mathew Pfeiffer**, **Victoria Renodin**, **Yeishamaily Vega**, and **Sara Zuckerber,** HTR 318: Cultural Tourism
Faculty Mentors: Professor Kathleen O'Brien, Hospitality and Tourism and Professor Rebecca Dowsey, Hospitality and Tourism

What cultural assets and events impact tourism in the Alba Region of Italy? An overview of the attractions, facilities,

infrastructure, transportation, and hospitality is analyzed using a study abroad experience by the class. By visiting the Alba Region we will be able to observe the impact that tourism has on the culture of that area. Students will then explain how and why cultural tourism may be used as the basis for planning and developing the visitor experience. The class will make recommendations for enhancing destination attractiveness and outline impacts on the host communities. We will be visiting many diverse attractions and hospitality sites. We will start by studying the slow food movement in Bra and then touring many places where food is made (such as an olive press, chocolate factory, and ham factory among others). We will also visit a University and have a pasta making demonstration. Some non-food attractions are the Duomo and the Gates of Paradise. Through our visit and observations we gain a greater knowledge of how tourism impacts the region.

Presentation Type and Session: Poster V

Waste In the Apparel and Textile Industry: Issues With Packaging

Lisa Pignatelli, FTT 450: Issues in Apparel and Textile Industry
Faculty Mentor: Professor Arlesa Shephard, Fashion and Textile Technology

My research examined the issues with packaging and shipping waste in the apparel and textile industry. I considered the effect packaging and shipping waste has on the overall supply chain and its management in the fashion industry. By examining sustainability in the supply chain, packaging and shipping issues, and the innovations in the supply chain, I determined some of the issues and innovations that are successful in mitigating and correcting these issues.

Presentation Type and Session: Poster VI

What They Wore: An Examination Of 1920's-1930's Women's Intimate Apparel

Kaitlin Russo, FTT451: Senior Project
Faculty Mentor: Professor Lynn Boorady, Fashion and Textile Technology

The focus of this presentation is the study of 1920's-1930's women's intimate apparel including tap pants, chemise, bralette and panty styles. This research explores the period styles of women's undergarments, historically accurate color choices, garment construction, and traditional fabrics used to create them. Critical study of accurate periods styles were utilized through resources including extant period garments, extant sewing patterns, extant photographs, and museum fashion collections. Scholarly sources were referenced for selection of accurate color choices. Proper garment construction was achieved by studying couture sewing techniques and practices. Selections of proper materials were achieved through research of appropriate materials. A total of six historically accurate garments were designed and constructed for this project. Researching undergarments from this time period was an exciting and challenging venture. I will be presenting the audiences with an accurate visual representation of historical 1920's to 1930's women's intimate apparel.

Presentation Type and Session: Poster VII

Computer Information Systems & Engineering Technology

Achieving World Class Overall Equipment Effectiveness and First Time Quality

Shawn Witkowski, INT 689: Research Design and Methods
Faculty Mentor: Professor John Earshen, Engineering Technology

In the increasingly competitive global manufacturing marketplace, maintaining high quality at low cost is prerequisite to business survival. This investigation explores ways to monitor and improve manufacturing production capability at Jiffy-tite Company, a Clarence, NY-based injection molding firm that supplies customers internationally. The initial focus of the study was on the scrap rate of output from a semi-automated assembly machine (leak tester #27) integral to the manufacturing operation. A data collection protocol was developed to evaluate Overall Equipment Effectiveness (OEE) and to benchmark current levels of performance. Research activity then focused on the identification, analysis and elimination of root causes for scrap on the leak tester. Subsequent analysis focused on the identification and reduction of production constraints overall – with the aim of achieving First Time Quality (FTQ) consistent with six-sigma levels of reliability (no more than 3.4 errors per million opportunities). The objective of this study was to bring operation of the leak tester #27 (and the manufacturing process which it supports) to a world-class level of performance.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

Control Panel Mounting System With Vibration Isolation

Bill Gross and **Tom Poppenberg**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

FS-Elliott Co. LLC is a leading manufacturer of oil-free, centrifugal, air and gas compressors. Each compressor in their PAP-Plus series is custom built to their customer's specific needs. These compressors include an instrument rack attached to the side of the unit where transmitters and control panels are mounted. The equipment mounted to the rack measure temperatures and pressures throughout the compressor and is vital to protecting the machine during operation. All of the instrumentation mounted to the rack was sensitive to vibrations and were failing in some situations because of exposure during operation and shipment of the machine as well as external vibrations from other machinery in their customer's facilities. FS-Elliott was seeking a universal solution to this problem that could be easily applied to each of their custom units with the cost of materials and labor remaining under $1,500. After completing research and weighing solutions to the problem a design was pursued using multiple types of cushions mounts to dampen the vibrations that the units were experiencing. A rubberized pad was used at the bottom of the rack to start the dampening process. The remainder of the vibration traveling along the rack was stopped by the individual pillow mounts used to mount each unit to the rack. Another source of vibration that occurred was along the ridged tubing that connected to each unit, which was replaced with flexible tubing was less ridged therefore reducing vibration.

Presentation Type and Session: Poster VIII

Cost Effective Enclosure Design For a FS Elliott P500 Compressor

Sharayah Walker, **S M Omar Faruk**, and **Thomas Schneider**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

FS-Elliott Co., LLC is a leading compressor manufacturer, specializes in oil-free centrifugal compressor. Currently the noise level generated by the FS-Elliott P500 compressor is over 90 decibels (DBA) that is greater than the standard limit set by OSHA. A cost effective and efficient full enclosure will be designed in order to resolve this issue. Close examination and analysis has been conducted on the current full enclosure in order to determine the most important design components and materials. Since noise level reduction is one of the primary targets, sound insulation was considered as a key component. By working with the sound insulation manufacturer we have established the best possible product for this project. Competitor's design and FS-Elliott's design of the full enclosure were compared in order to determine the most important components for the proposed design. The specifics of the components will be discussed in the presentation.

Presentation Type and Session: Poster VII

Demonstration Of the Manufacturing Process Through the Design and Construction Of a Game Board

Eric Fiorello, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Clark Greene, Engineering Technology, Professor Barry Yavener, Interior Design, and Professor Andrea Guiati, Director, All College Honors Program

There are three key components of the manufacturing process in current industry when turning raw materials into a finished product. First, design of the desired product and acquisition of desired material. The second step is the actual construction of the product. Thirdly, the product must be finished with paint or other similar products. I will be demonstrating these components of the manufacturing process through the design and construction of a game board, box, and playing pieces. The material of choice used in this design will be wood because of its flexibility, durability and longevity. Walnut and ash will be used in order to show light/dark contrast in the product.

Presentation Type and Session: Poster VII

Efficient Verification Of Medical Device Software Focused On Quality and Compliance

Jason Strong, INT 689: Research Design and Methods
Faculty Mentor: Professor John Earshen, Engineering Technology

In the United States, all Medical Device Software must be fully verified and validated prior to seeking clearance from the FDA for product launch. For this project I will refer to validation as the critical phase of "customer like" testing in which tests are performed that mimic normal customer usage. Verification will refer to the process of ensuring that each feature of a product works the way it was intended to work. This study examines the efficiency of those activities at Ortho-Clinical Diagnostics that constitute medical device verification. The process of verification can be lengthy, depending on the number of product features. The number of product features determines the quantity of system requirements and therefore the amount of test steps that need to be formally executed prior to making the FDA submission. The intent of this project is to show that it is possible to shorten the overall verification phase by creating risk based requirement categories and then using those categories to dictate the type and amount of testing required in order to fulfill all FDA requirements without compromising quality.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

Evaluating an Automated Data Input Protocol To Increase Process Capability

Kelly Sabo, INT 689: Research Design and Methods
Faculty Mentor: Professor John Earshen, Engineering Technology

Rapid advances in data management and analysis allow a company, in any field, to implement a data input protocol that can improve process capability. With the help of individualized business platforms and programs, Bureau Veritas (BV) – a world leader in testing, inspection and certification – expects to increase customer satisfaction by providing more accurate reports to clients. BV clients who use an electronic Test Request Form (TRF), are provided a level of automated data entry directly into BV's internal database, known as 'BV Lab'. This automated TRF eliminates a manual data transfer step in the data collection process, which is expected to improve overall process capability by decreasing the likelihood of human error. The purpose of this study is to compare error rates before and after adoption of the TRF platform. The objective is to determine the extent to which implementation of the automated data collection process is proving effective. The results of monthly report audits for clients currently using TRF are expected to yield fewer critical report errors, thus resulting in fewer requests for report revisions and improved customer satisfaction.

Presentation Type and Session: Oral – Business, CIS, and Engineering Technology

InspirTech–Inspiring Young Minds To Pursue Technology

Matthew Barten, **Kristofer Wiktorowski**, and **Michael Collins**, ENT 465: Electrical Design
Faculty Mentor: Professor Stephen Andre, Engineering Technology

According to the National Math and Science Initiative the U.S. may be short as many as three million high-skills workers by 2018. Our project addresses this topic. The objective of this project is to design and build a small tabletop system that can be used to motivate young students to take an interest in technology. Our plan is to build a system of actuators and lights that can be controlled using a PLC . The system will use an electric solenoid to launch small plastic balls at a number of xylophone keys. An electric stepper motor will be used to position the xylophone keys in the target area. The use of a programmable logic controller to position the stepper motor, activate the solenoid and control timing allows music to be played. Any number of songs can be played based on the programming commands written. By making the programming effort enjoyable and rewarding, the student will practice longer and become a more proficient programmer. A number of LED lights will also be included to enhance the effect. Our goal is to create a device that attracts and keeps the interest of potential future technologists. The anticipated outcome of this project is a tabletop electrical technology demonstration system that can be brought to local middle schools and high schools in an effort to spark interest in the technology field. On the day of the presentation we will have a poster along with the tabletop system for demonstration.

Presentation Type and Session: Poster VIII

Laser Optical Keyboard Instrument: Inspiring Kids One Light At a Time

Jared DeRosa, **Edgardo Cruz**, and **Al Polanski**, ENT 465: Electrical Design
Faculty Mentor: Professor Stephen Andre, Engineering Technology

The Laser Optical Keyboard Instrument, L.O.K.I., is a musical device that produces eight notes by user interaction. We have put a modern perspective on a time-tested instrument to spark children's interest in technology and music. Instead of physically striking a key the user interrupts one of eight laser beams with their hand to produce the tones. Photosensing diodes will detect when someone has broken the beam and send a signal to the microcontroller. The LOKI will have the ability to switch from playing through internal speakers and external ones done simply with an axillary output jack. An Arduino microcontroller will detect the laser triggers inputs and output the audio signals. Also programmed as a Musical Instrument Digital Interface (MIDI) controller the LOKI will be able to connect to a computer where the eight tones could be change to any variety of sounds and effects. This functionality will allow children to explore the power of technology in an entertaining and educational toy. We will present a prototype of the LOKI playing the standard

eight notes. The functionality through a computer to alter the tones will also be shown.

Presentation Type and Session: Poster VIII

Lug Bolt Friction Performance

Justin Manning, **Mike Groves**, and **Faly Sy**, ENT 422: Machine Design II

Faculty Mentor: Professor David Kukulka, Engineering Technology

McGard, located in Orchard Park, New York manufactures a variety of automobile wheel fasteners which are either studs or bolts. The bolt variant allows for easy implementation of floating seats that are required by many original equipment car manufacturers and commonly used in aftermarket applications because of its torque-tension benefits. A more consistent torque-tension relationship leads to a safer connection between the wheel and car. This 'floating seat' acts the same as a bolt/washer combination in any other assembly. The under head friction surfaces of the joint is changed from the fastener/aluminum rim to the fastener/floating seat. This gives designers more flexibility in fine-tuning the torque tension characteristics of the fastener by altering the floating seat material and coating without affecting the materials and coating of the base fasteners (wheel, bolt). To protect the wheel, the floating seat rotation during torqueing and un-torqueing needs to be limited. Otherwise, the wheel's protective finish and eventually some of its material will be stripped away. By adding a knurl to the interface between the wheel and floating seat, the rotation has been eliminated and a consistent clamping load is produced.

Presentation Type and Session: Poster VII

Making Every Drop Count: Closed Loop Water Recirculation System

Jesse Morgan, **Steve Schweichler**, and **Richard Reuman**, ENT 422: Machine Design II

Faculty Mentor: Professor David Kukulka, Engineering Technology

Xylem is an innovative engineering and design company that focuses on the engineering and designing of various water solutions for industrial and residential purposes. Xylem currently uses about five million gallons of water annually at it Cheektowaga, New York plant. About twenty five percent of the water consumed is used on its gasket plate heat exchanger (GPHE) test line. The goal was to reduce the 1.2 million gallons used during hydrostatic testing. According to water usage figures provided by Xylem the annual cost of wasted water for testing heat exchangers is estimated to be about $3000.00. After analyzing the current testing process, a need for saving and reusing was needed. The solution to this problem was implementing a closed loop water recirculation system in which water used during testing was put back into a storage tank after testing. Since implementing the closed-loop water recirculation system, there has been a significant savings in the water usage. The return on investment for implemented design is expected to be less than one year.

Presentation Type and Session: Poster VI

Manhole Access Detection System

Faly Sy, **Justin Manning**, and **Michael Groves**, ENT 422: Machine Design II

Faculty Mentors: Professor David Kukulka, Engineering Technology and Professor James Mayrose, Engineering Technology

Security is a vital component for providing safety and wellbeing to people around the globe. One of the best ways to provide this service is simply to block access. Access to sensitive information, vital structural components and utility infrastructures are only a few of many that should be safeguarded. One local company that provides quality security services is McGard located in Orchard Park, New York. They are a manufacturer of high quality security products that include wheel locks for top automotive manufacturers, government agencies, the military, municipalities and the fuel industry. Within their security products, McGard has a line of manhole cover locks that use a security system to trigger an alarm when the manhole is accessed. Although the current detection system works properly, the cost, appearance, ruggedness, enclosure seal, and sensing algorithm did not meet their requirements. Design Criteria such as environmental factors, function, security, and power consumption are being looked at through a prioritization matrix while evaluating ideas. McGard now has all necessary information to build a fully functional access detection system for their full line of manhole covers.

Presentation Type and Session: Poster VII

Preventing Bearing Frosting: Grounding Rod In a Compressor

Bill Gross, **Tom Poppenberg**, **Sharaya Walker**, **S M Faruk**, and **Tom Schneider**, ENT 422: Machine Design II

Faculty Mentor: Professor David Kukulka, Engineering Technology

FS-Elliott Co., LLC is a leading manufacturer of oil-free centrifugal air and gas compressors. This research was conducted to investigate the issue of bearing frosting on the pinion bearings of FS-Elliott's compressors. Bearing frosting is the pitted surface on the inside of a bearing as a result of an electrical discharge moving from the shaft in the center of the bearing to the bearing itself. The pitted surface that results from bearing frosting will create an imbalance in the bearing and eventually affect it so much that it needs to be replaced. This predicament is a costly problem because the normal bearing life of eight to ten years is being decreased to about four months. In order to solve this problem research was conducted to create a grounding rod with a carbon fiber tip. This material was chosen for its extremely low resistance to electricity to provide the current with a path of lesser resistance. A prototype was created from 3/8" – 16 UNC threaded rod with the highly conductive carbon fiber tip attached to the end. By threading the grounded rod into the gearbox on the compressor and touching the carbon fiber to the pinion shaft, the electrical charge effectively was removed from the bearing so that it no longer caused any damage.

Presentation Type and Session: Poster V

Python Gaming: Space Invaders

Timothy Anderson, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Sarbani Banerjee, Computer Information Systems and Professor Andrea Guiati, Director, All College Honors Program

Python is a high-level programming language that supports free and open source software that allows a programmer to freely copy, study, change, and improve program design. For my research project the classic game of Space Invaders has been recreated and each step in creating the game along with the learning process has been documented. A combination of Youtube videos and textbooks have been used to learn and implement the Pygame language to reconstruct the Space Invaders game. The objective of this game is to destroy alien space ships without dying. This research project will show the steps involved in making a game. The research is based on the use of Python programming or Pygame per se as a gaming platform. At the Student Research and Creativity Celebration I will be presenting a final version of the game with the steps and details of what it took to complete a fully functional game.

Presentation Type and Session: Poster VIII

Solar Power In Buffalo

Marcus Samerson, Electrical Engineering Technology and Technology Education
Faculty Mentor: Professor James Mayrose, Engineering Technology

My research investigated the viability of a solar thermal approach for Western New York's domestic solution for heated water. In my study, I selected a recirculation system to measure whether or not it can be used as a viable alternative to electric and gas power for heating domestic water. My goal was to answer the following question: With the given heat energy from the sun in Buffalo, will the recirculation system produce and maintain the standard temperature of 120 degrees Fahrenheit given the amount of sunlight under different loading conditions? To measure this, I installed a solar thermal (closed loop) system to simulate how efficient it could operate given a domestic load situation. The important variable to control was water tank temperature. My goal was to obtain a water heater tank temperature of 120 Fahrenheit (standard temperature for a water heater tank) and bleed three household showers while simultaneously maintaining a temperature at a tolerance of -4 degrees Fahrenheit decline. The results showed that this solar thermal system can be utilized in the Buffalo climate, but would need an electric or gas backup heat source for extensive use of the water tank. The overall impact of this project should demonstrate the versatility of solar power systems and to explain the benefits of incorporating this renewable energy system in their household.

Presentation Type and Session: Poster VII

Spacer Replacement Materials

Jesse Morgan, **Steve Schweichler,** and **Richard Reuman**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

Xylem is an innovative engineering and design company that focuses on the engineering and designing of various water solutions for industrial and residential purposes. The current process Xylem uses to build shell and tube heat exchangers requires a steel spacer of specific length be placed over a tie rod, which holds the tube support baffles at a certain length. There are multiple baffles for each heat exchanger at varying distances from the head cover that require various lengths of spacers. The main purpose of these is to provide structure and rigid support to the empty baffles until they are fully assembled. Xylem was interested in researching whether other materials would be a cheaper alternative to the steel tube used currently as spacers. According to figures obtained from Xylem, the annual cost of these spacers is approximately $6400 at a cost of $0.011 per linear inch of steel tubing. In order for a different material to be considered as a suitable replacement for the steel tubing, there has to be at least a 25% cost reduction to be worthwhile. After researching various different materials that could be used as spacers, the current method using steel tubes has been verified as being the most cost effective solution.

Presentation Type and Session: Poster VIII

Turning To Suspension For Success

Eugenia Episcopo, **Zachary Sutton**, **Patrick Daigler**, **Richard Fedele**, **Christopher Blakowski**, and **Steven Czekowski**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

Buffalo State College participates in an international Baja car design competition sponsored by the Society of Automotive Engineers (SAE). Baja cars are small, off road vehicles that are designed, built and raced by students from over 100 universities around the world. Design involves major components such as drive train, suspension, braking, and steering. This year the focus is on the suspension system. Two important elements of suspension design are caster and length of A-arm supports. Caster is the angle that the path of the suspension makes with the ground. Through several calculations, it was determined that a caster angle of about fifteen degrees from vertical would allow the operator to navigate efficiently into a turn, while still retaining a light steering feel. The correct length A-arm supports will correct the outward roll of the tire in a turn. After extensive testing, it was determined that with a shorter top arm the tire will gain angle in a turn which will be in the opposite direction of the body roll. We will thoroughly test the car before the competition in Rochester. With our new suspension, the team hopes for great success.

Presentation Type and Session: Poster V

Wi-Fi Power Monitor

Jacob Kane, **David Gardina**, and **Matt Schwab**, ENT 465: Electrical Design
Faculty Mentor: Professor Stephen Andre, Engineering Technology

The Wi-Fi Power Monitor is a device that allows people to examine the power used by heavy household appliances and typical industrial machinery. Analyzing the power used throughout the day can allow for changes to be made on the runtime of certain devices. Typical methods for measuring current in a conventional line would require a break where an ammeter can be placed in series. The Wi-Fi Monitor is a product that detects current activity within a line without interfering with the circuit. A current sensor is clamped around a single wire to detect the current activity. This signal is then sent through a signal conditioning circuit for easy interface with the microcontroller. The wireless capabilities of the microcontroller allow for the data to be sent to a remote location where analysis can be done. Our presentation will consist of a working model of the Wi-Fi Power Monitor that will be demonstrated. A poster board will also be presented which will display simulated use of the device alongside a description of all of its components. The current clamp, signal conditioning circuit, and microcontroller will all be discussed in detail. Analysis of the retrieved information will be broken down to create a visual that illustrates how energy could be saved.

Presentation Type and Session: Poster V

Xylem Inc. Scrap Metal Separation

Michael Lasker and **Justin Scott**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

Xylem Inc. is an innovative global water company with a local facility located in Cheektowaga that specializes in the production of heat exchangers. Brazed plate heat exchanger plates are punched out at the press and the scrap from that process is collected in a bin. The scrap is a mix of stainless steel and copper sheet. Since they are punched out together the two metals are compressed so that separation is difficult. These metals are important to separate because currently the client is getting mixed metal prices when they sell their scrap. Mixed metal prices are much lower than the price they could be getting if the metal was separated. There are a few solutions to achieving the separation of these metals. The first option is to heat the metals to the melting point of copper. Stainless steel melts at a higher temperature, so that the copper can drain out leaving just the stainless steel behind. The second option is to design a system that uses the density of each metal to separate it by placing them into a water bath that is agitated and have them fall into different bins. The final design could save Xylem Inc. upwards of $20,000 annually for this scrap line alone.

Presentation Type and Session: Poster VIII

Xylem Inc. Tapping Machine Redesign

Philip Graziadei, **Michael Lasker**, and **Justin Scott**, ENT 422: Machine Design II
Faculty Mentor: Professor David Kukulka, Engineering Technology

Xylem Inc. is an innovative heat exchanger manufacturer that is always looking for continuous improvement in their industrial operations. Xylem's manufacturing process consists of chamfering and tapping holes on the carry and guide bars used in the assembly of the plate and frame heat exchanger. The current process uses an out dated radial drilling machine or a hand operated impact gun that is unsafe, costly, time consuming, and inaccurate. Objectives of this project are to create an easier, more efficient way to tap the aluminum carry and guide bar extrusions for Xylem's gasketed plate and frame heat exchangers and make this process safe, fast, and cheap. Tapping has to accommodate several different guides and carry bar part types. Requirements for the new design include speed and ease of use. In research for the best design, time trials, CAD designing, cost analysis, and comparing the old operation to the new operation was looked at. Possible solution to this problem includes the design of a flexible arm tapping machine that is very quick, light weight, versatile, and easy to operate. This new machine design will cover all of the part types and meet the new criteria for improvement of the process.

Presentation Type and Session: Poster VIII

Education

An Analytical Look Into Teacher Candidate Growth In a PDS

Ryan O'Rourke, Elementary Education
Faculty Mentor: Professor Leslie Day, Elementary Education and Reading

This research study will examine the basics of the Professional Development School experience here at Buffalo State. At the heart of the PDS experience are the teacher candidates who are able to grow exponentially by participating in courses that foster personal growth in students. Teacher candidates must rise to meet the challenges these courses place upon them. One such course here at Buffalo State is EDU 311W, Teaching Reading and the Other Language Arts. This methods course, taught in a PDS school is vital to the development of teacher candidates. This course requires students to spend extensive time in the classroom preparing and teaching lessons on their own with guidance from their professor and mentoring teacher. This course gives students their first significant experience in the teaching profession, and all of the challenges that come with being an educator. This poster session examines the confidence levels of college students as they enter into EDU 311W and their confidence levels after they complete the course in order to assess teacher candidate growth. This course offers a unique experience that is designed to foster growth in teacher candidates. Using pre and post surveys, five main areas were targeted including teaching, lesson planning, and classroom management, to assess just how much students develop as a result of this PDS course.

Presentation Type and Session: Poster II

The Annual Professional Performance Review: One Teacher's Story

Arianna Ferri, SCI 690: Master's Project
Faculty Mentor: Professor Catherine Lange, Earth Sciences and Science Education

This presentation will address some of the issues that surround the Annual Professional Performance Review (APPR), an evaluation instrument that currently affects all K-12 teachers across the United States. This presentation is based on the research question "How does the APPR directly impact a suburban grade 9 Earth Science Teacher?" This case study model began in the Spring 2012 and will continue through Spring 2013. Anonymous student data collection included quantitative information such as; pre-test scores, unit test scores, and demographics. Qualitative data was collected through teacher interviews, participation in Professional Development about the APPR, research on the history of the APPR and other assorted documents presented to the teacher. Of great value in this case study is the role of this teacher, who has a successful record of working with inclusion students. He is well known in the district and has a reputation for being a highly effective educator. He also is a leader in the district in the development of science department testing materials associated with the APPR. The following will be covered in the presentation: history of the APPR; purposes of the APPR; case study design; data collection; and preliminary analysis.

Presentation Type and Session: Oral – Education

A Basic Qualitative Study To Examine Cultural Diversity In a Generalist Teacher's Classroom

Cindra Mendonca, Art Education and Art
Faculty Mentor: Professor Shirley Hayes, Art Education

My research explored how a fourth grade teacher met the challenge of cultural diversity in her classroom. I wanted to determine how a teacher took opportunities to focus on the accomplishments, contributions, values, beliefs, and traditions of children from culturally diverse backgrounds. My methodology was basic qualitative research in which I observed in the class for four weeks, took field notes, and interviewed the teacher and principal. Analysis of the data began with categorizing the methods of teaching for this diverse population and the ways students responded. I compared these observations to the ideology expressed in the interviews with teacher and principal and linked research done by educational scholars on multicultural education and cultural diversity. I found that even with the best of intentions of the teacher and principal, often there were missed opportunities to focus on the strengths that diversity might bring to the classroom because of outside demands on teachers, and a lack of adequate teacher education and professional development in diversity. I found that while there is an effort to promote and develop multicultural education in the school, there is a gap between theory and practice. I concluded that multicultural education should be conceptualized and implemented more broadly and in more depth in order to bring about meaningful transformation in public education.

Presentation Type and Session: Poster II

Beyond the Classroom: Social Factors Affecting Students' Academic Performance In the United States and Zambia

Ariel Williams, Elementary Education
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Research and experience, suggests that students' economic situation, social class, diseases and disorders affect students' ability to perform to the best of their ability in the classroom. Teachers/school officials cannot completely eliminate these factors that students experience but they can aid the situation to lead to the improvement of students' performance. Qualitative study addresses factors outside of school that affect students in the elementary schools in Lusaka, Zambia and in Buffalo, New York. The ongoing study explores/highlights strategies used and programs implemented in The U.S and in Zambian elementary schools that help students reach their potential despite hardships. Through The Research Foundation of SUNY, I am a Public School Mentor and I support students

both academically and socially who are faced with social factors that affect their performance. My sources for information were a Charter and public school I currently partner with. I interviewed school officials/teachers to inquire about tactics, strategies and programs that are used to support students at each school. My observations from the past two years support my research in the Buffalo community. As I gather information on struggling students in Zambia, I will refer to scholarly articles/texts about their school system. I will conduct an interview with a researcher of two community schools in Lusaka. In Zambia, fifty percent of the population is below eighteen years old. Consequently, the children are valuable to the progression of the society; exploring/improving their capabilities would make an impact on their future. My research will prepare me to be an effective educator, as well as inspire other educators.

Presentation Type and Session: Poster II

Children's Misconceptions About Telling Time

Colisha Smith, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

This is an ongoing study on the misconceptions that students have when reading time. The participants will be two females, aged seven and eight, one first grader and one second grader. They both will have been working on time for the last 3 months. I chose this topic because during student teaching I noticed that several students were struggling to tell time and needed lots of one on one time. Students also do not have the opportunity to explore time. Telling time is often taught as a rote skill, without ensuring that children understand the duration of time and its relation to the numbers and hands on a clock (Thompson and Van de Walle 1981). The participants will explore reading time in a series of activities such as telling the researcher what they think of when they see a clock, what they know about telling time, and what they know about parts of a clock. They will also set time using clocks. These activities will be used to determine if the participants can read time. Previous research has shown that telling time is difficult, thus more research needs to be done to help minimize the difficulties (Harris 2008). This poster will share findings.

Presentation Type and Session: Poster III

A Comparative Study: The Teaching Of Social Studies In the U.S. and Zambia

Michaela Korczynski, EDU 310: The Teaching of Social Studies
Faculty Mentors: Professor Hibajene Shandomo, Elementary Education and Reading and Professor Sherri Weber, Elementary Education and Reading

The major drive to doing this research was my curiosity to identify the similarities and differences in the Social Studies Curriculum of the U.S. and Zambia. I believe this will be a very interesting topic because I know when I was younger history was a big part of the curriculum in schools. At present it is sad to say schools don't really focus on it as much because no one is tested on it. In the U.S., Social Studies is centered on the learning and teaching of topics such as economics, American studies, participation in government, global studies, geography, and western civilization. Most topics are learned via projects, memorization of dates and people, and preparation for state testing. My poster includes a KWL chart summarizing what we know about the teaching and learning of Social Studies in New York State. These data were collected through interviews with eighteen fifth graders in an International public school in the U.S., ten elementary school teachers, two professors, and one principal in a public school in the U.S. The complete picture will show major topics of fifth grade Social Studies in elementary schools in Zambia. Data will be collected by interviewing eighteen fifth graders in an International public school in Zambia, two professors, and one principal in the International Professional Development School in Zambia. I will also observe what methods are used to teach social studies in Zambia. I believe this kind of research paves my way to becoming a global teacher.

Presentation Type and Session: Poster III

Comparing Educational Environments: The Benefits and Drawbacks Of a One Room School

Kelsey Redden, EDU 310: The Teaching of Social Studies
Faculty Mentor: Professor Sherri Weber, Elementary Education and Reading

I will explore the foundations in which the one room schoolhouse stands on while in Zambia. Data will be collected through observation and student interviews from both classrooms and students in America as well as in Zambia. How can we build into our American classrooms the positive affects that the one room schoolhouse has to offer? Positive student interaction and learner-centered pedagogy are two important factors for running an effective classroom, and I will explore this idea through first hand experiences and through commentary with the students. Getting down to the nuts and bolts of classroom dynamics and researching what is really essential for running a successful classroom.

Presentation Type and Session: Poster IV

Concepts Of Money: Involving Hands On Activities

Ashley Malinowski, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

This is an ongoing study of the diverse ways teachers can implement the teaching of concepts about money into their classrooms. The misconceptions children make while learning the significance of money will be highlighted. Individuals must be able to grasp the concept of money at a young age. The importance

of money is crucial, considering it is necessary for daily life into adulthood. Previous research shows that coin value lessons should focus on "purchase power", meaning that a nickel can buy the same thing that 5 pennies can buy. As teachers, we are encouraging our children to become critical thinkers when we expose them to problem solving skills associated with real world responsibilities. This paper will explore multiple ways teachers use hands on activities while teaching money at a second grade level. The one participate used in this study is a second grade girl, who attends an Elementary School in the Williamsville School District. Williamsville is a suburb in Western New York; the district has thirteen schools, and holds approximately a little over ten thousand, K-12 students. This student will complete activities to develop a better understanding of the value of coins and bills. I chose this student because I already knew she was struggling with Mathematics. I hope that the participant in my study will be motivated to do mathematics and her enthusiasm toward the subject will increase. The findings of this study will be shared in this poster presentation.

Presentation Type and Session: Poster II

Cross-Cultural Relationships: From Buffalo, New York To Lusaka, Zambia

Holli Diez, EDU 312: The Teaching of Math and Science
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Second graders at a Public Professional Development School, Discovery School # 67 in Buffalo, New York, had a strategically arranged cultural pen pal experience with fifth graders at a Government School, Libala Basic School in Lusaka, Zambia. The three-fold goal of the project was to develop elementary school students' curiosity and knowledge about a foreign country, to have children communicate with other children from a different country and continent, and to determine the academic, personal, and psychological effects the communication had on both American and Zambian elementary students, teacher candidates, and mentor teachers who were involved throughout this project. The pen pal project has facilitated collaboration between different cultures, global awareness, and the formation of cross-cultural relationships. For me this was the beginning of my journey toward becoming an effective global educator.

Presentation Type and Session: Poster II

Development Of Whole-Number Place-Value Concepts and Number Sense: Student Understandings and Teacher Strategies

Sara Suranyi, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Students' understandings of whole-number place-value concepts and number sense are key in their overall understanding of mathematics. Understanding is a developmental process where students move to various stages in their comprehension of whole-number place-value concepts and number sense. The use of various manipulatives aids in the learning process of ideas, allowing students to visualize numbers. I chose this research topic as a result of teaching in a first-grade classroom and "seeing" students' struggles with this concept of whole-number place-value. This qualitative study examines a seven-year-old first grade male student's development of whole-number place-value concepts. To evaluate the strategies used and their effect on the participant's development of whole -Number Place Value Concepts and Number Sense, I will use strategies that I deemed suitable for promotion of conceptual understanding with the participant in four mini-lessons. After each lesson, the student will complete an activity to assess understanding or attainment of the concept of whole-number place-value. Findings will be shared in this poster.

Presentation Type and Session: Poster I

Does Fluency Or Accuracy Determine a Student's Knowledge In Mathematics?

Julie Wojcik, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shadomo, Elementary Education and Reading

Many teachers struggle to get their students to be proficient and fluent in math facts especially multiplication. Students who are fluent can perform tasks quickly and accurately. Students who struggle to be fluent in math must rely upon their cognitive resources to perform tasks such as memory and strategies. If students don't become fluent, they may have problems with higher order math skills. The focus of this study is to determine if assessing students' fluency in math is an accurate assessment on what they know. Three research questions are posed in this study. (1). Should teachers focus on students' fluency or accuracy when assessing their math skills? (2). In learning multiplication, are students given the chance to use their critical thinking and creativity to express their own strategies to find the answer to a given question? Or is sufficient time denied to students because more time needs to be spent on getting students fluent with their math facts? (3) Is timing students on their multiplication facts too stressful for some students? The answers to these questions will be determined by interviewing, Colin, a third grade student who displays a moderate level of enjoyment in mathematics. Colin will also do a pre-assessment and post-assessment of multiplication facts and definitions to determine his knowledge on multiplication facts. Colin had previously expressed his concern with multiplication facts. Colin will participate in several interviews to find out how his teacher taught him his multiplication facts and how he feels during math class. I will observe his fluency vs. accuracy in multiplication facts to determine multiplication facts he knows.

Presentation Type and Session: Poster I

Electricity: When Science and Social Studies Collide

David Ring, EDU 690: Master's Project
Faculty Mentors: Professor Coralee Smith, Elementary Education and Reading and Professor Jevon Hunter, Elementary Education and Reading

This project focuses on the contribution that electricity has made throughout Western New York. Learning is primarily based on how the development and implementation of electricity has contributed to society. Social studies is the vehicle being used to study this topic. The goal is to show students how people and technology have changed the world in which we live. It is only fitting that these two core subjects, social studies and science, are intertwined. Studying the very scientists that have made electricity possible will lead into experiments of our own. Once students are able to have a firm understanding of why this field of science is possible and have a strong understanding of how it works, then they will be able to look into the social impact of our community. The use of technology has always benefitted the haves neglecting the have-nots. This has been the case since the beginning of time. Children often have a misconception that everyone has benefited equally from the use of technology. This curriculum project will push the envelope by asking children to consider the digital divide and why it exists. How is the digital divide today similar to those who could not afford electricity at the turn of the last century? The power of cross-curricular activities is an aspect that has been carefully researched to provide rational. This project has intertwined science, social studies and social justice into one well-constructed curriculum that children can relate to.

Presentation Type and Session: Poster I

Elementary Mathematics Teaching In China

Hongmei Lin, Math 7-12
Faculty Mentor: Professor David Wilson, Mathematics

This poster presentation highlights important teaching practices from grade 1, 4 and 6 "public" math lessons videotaped in Chengdu, China. The "public" lessons take place with other teachers, administrators, guests and an expert teacher observing. Videos were analyzed to show how and what students learned in each grade with a focus on the teacher's organization of the lesson and class. The videos showed some common characteristics of teaching math at the elementary school in China. Specifically, using real-life contexts to get students interested, getting students to think through patterns and finding efficient calculation methods, and sharing students' work as a way to value different ways of solving a problem. Teachers introduced the lessons with a situation or problem to get students involved and ended each lesson with a summary that asked students to share what they learned today. The poster presentation will show detailed information about how math students in China learn and score at a higher level on international tests and provide some ideas about successful math teaching in China.

Presentation Type and Session: Poster III

Facilitating Secondary Students' Comprehension In Math and Science

Stephanie Mongielo, **Amy Criddle**, and **Peter Tunkey**, EDU 609: Literacy Instruction in the Upper Grades
Faculty Mentor: Professor Ellen Friedland, Elementary Education and Reading

The new Common Core Standards address the increased need for teachers to incorporate literacy strategies into all secondary subjects. Teachers can and should use a variety of strategies to accomplish this task. Research supports the use of vocabulary instruction, visual literacy, and technology to strengthen student comprehension and boost involvement in math and science. Using these strategies helps teachers diversify their lessons and units to meet the needs and interests of all their students. Additionally, a review of the literature indicates that students benefit when literacy support is integrated within instruction.

Presentation Type and Session: Poster I

Finding Your Voice Through Online Discussion

Ginger McNeil Bidell, EDU 690: Master's Project
Faculty Mentor: Professor Coralee Smith, Elementary Education and Reading

Traditional class discussions of literature are typically teacher-centered and involve a limited number of students. These discussions often include teachers posing specific questions and asking students to fill in the blanks. There are several problems with this type of discussion. First, students are often left with the impression that there is only one correct interpretation of the text. Second, questions are usually answered by a small number of volunteers; other students have a passive role or may even tune out completely. Asynchronous online discussions have the potential to address some of these challenges. Research shows that online discussions offer several benefits. One advantage is that students have time to reflect, consult resources, and compose thoughtful responses. This is especially beneficial for shy or struggling students. Online discussion provides the opportunity for all students to participate without interruptions, participate in more than one conversation at the same time and revisit ideas. Online discussions provide students with an opportunity to form opinions and develop more concrete understandings that prepares them for class discussions. Finally, online discussions are not hindered by time constraints or the need to move on to other topics. This research project will explore how the utilization of online discussions can be used to promote critical thinking and improve student participation in both online and in-class discussions.

Presentation Type and Session: Poster II

Fractions: Teaching Students Now

Erika Lindsay, EDU 690: Master's Project
Faculty Mentor: Professor Coralee Smith, Elementary Education and Reading

It is often said that mathematics is all around us and is in everything that we do. It has become more and more important that students have a knowledge and understanding of mathematics and its many concepts. As they use many mathematical operations, students as young as 3rd grade are being introduced to the mathematical concept of fractions. Whether adding, subtracting, multiplying, dividing, ordering, or comparing fractions, students need to first grasp the concept of equal parts and understand that a fraction is part of a whole.

Presentation Type and Session: Poster II

From the United States Of America To Zambia: A Cross-Cultural Comparative Study About English Learners

Katarina Silvestri, EDU 655: Seminar in Reading
Faculty Mentors: Professor Hibajene Shandomo, Elementary Education and Reading, Professor Keli Garas-York, Elementary Education and Reading, and Professor Sherri Weber, Elementary Education and Reading

In the United States, the demographic of school-age English Learners is rapidly increasing. Further, vocabulary acquisition seen in the early school years is incredibly linked to the academic success of English Learners. Native English speakers and English Learners alike can benefit from varied and strategic vocabulary instructional approaches. Effectively teaching English Learners requires a pedagogically knowledgeable and culturally responsive teacher; it is crucial that educators are aware of practices that advance their students' vocabularies and, potentially, their academic successes. This ongoing qualitative study will take place in two phases. The first will examine teachers' approaches to teaching vocabulary to young English Learners in a Western New York public school. The second (taking place this coming June) will examine approaches to teaching vocabulary to young English Learners in Zambia, where English is considered to be the medium of instruction in schools. The final presentation will be a cross-cultural comparative study showcasing two different schools' (one in the U.S. and one in Zambia) attitudes, beliefs, and instructional approaches about the vocabulary acquisition of English Learners. The study will use similar age groups of English Learners for the U. S. and Zambia.

Presentation Type and Session: Poster IV

Funky Fractions For Fifth Grade

Cassandra Gallegos, EDU 690: Master's Project
Faculty Mentor: Professor Coralee Smith, Elementary Education and Reading

With the adaption of the new common core learning standards, many new topics have been brought into the classroom causing both students and teachers to have to learn and develop new ideas along with confusion and anxiety of new topics. Within the fifth grade standards, fractions have been big push. Students are expected to not only know and understand the concept of a fraction, but be able to complete operations with fractions as well. Being in a fifth grade classroom has proven that fractions are a topic with difficulty for students. Constant struggle causes anxiety among students leaving them frustrated and disappointed in themselves. Teachers, as well, become equally frustrated as they cannot spend extra time on topics due to the demanding common core standards and pace. This project has been derived to give teachers a new outlook on a different approach to teaching fractions. With a focus on active learning, small group instruction, and hands on learning activities, this project focuses completely upon the successful mastery of fractions within each and every individual student. Multiple adaptations are also included to include all ability levels and needs of students. The goal of this project was to assist in taking a difficult and tricky topic and turn it into something easily achievable and simple to understand.

Presentation Type and Session: Poster I

Guided Tutoring: Gains For the Struggling Reader As Well As Their Instructor

Dylan Malone, **Vanessa Louis**, **Allyson Trolley**, **Sara Honsberger**, **Laura Imperiale**, **Karen Le**, **Heather Czaja**, **Rachael Norton**, **Charisma Allen**, **Rachelle Hovey**, **Jordan Delaney**, **James Hall**, **Kaylee Ristine**, **Kathryn Whalen**, **Tiffany Walters**, **Nicole Lattanzo**, **Catharine Liquori**, **Anna Morton**, **Ariel Williams**, **Joanelly Fermin**, and **Alfred Abankwa**, EDU311/EDU 511: Language Arts Methods
Faculty Mentor: Professor Maria Ceprano, Elementary Education and Reading

During fall of 2012, K-6 teachers at Enterprise Charter School each selected one child from their classroom whom they believed would benefit from individual tutoring. The children that participated throughout the 2012-2013 academic year were tutored by teacher candidates (TCs) enrolled in EDU 311 or EDU 511. Using miscue analysis as a pretest, the course instructor evaluated each of the participants while the appointed tutor observed. Immediately after the pretesting, the results were discussed and instruction was mapped for the child in terms of instructional level and instructional strategies to apply. The Write-Aloud strategy (Routmann) was used with K-2 participants, all of whom were emergent readers. Because all grade 3-6 participants assessed demonstrated difficulties in reading comprehension, silent Guided Reading (Fountas and Pinnell) was used for instruction. Each child was tutored as prescribed for approximately 20 sessions of at least 15 minutes each. Post miscue analyses were administered by the TCs of each respective semester. Preliminary results indicated significant gains for the K-2 children. Reading levels of grade 3-6 participants showed slight improvement trends with apparent improvements in oral retelling. Teacher candidates reported perceptions of mastery on teaching strategies used with assigned case study children.

Presentation Type and Session: Poster II

Help Me Help the Future You: Autoethnography Research On Education

Joy Van Dette, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Sherri Weber, Elementary Education and Reading and Professor Andrea Guiati, Director, All College Honors Program

Autoethnography will be used to measure how one teacher candidate's experiences and interactions with urban learners change and alter her understanding and perspectives of them. How these experiences affect what she will bring into the classroom as a teacher are also analyzed. The experiences and interactions will occur on four various Saturday mornings at a local book club. After each book club, a reflection will be written which will discuss various questions and items to improve upon from that week. It will conclude by explaining what will help her be a more effective teacher with urban students.

Presentation Type and Session: Poster III

How Are Students Affected By Procrastination?

Jeffrey Weiss, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Andrea Guiati, Director, All College Honors Program and Professor Albert Grande, Social and Psychological Foundations

The focus of this project is on procrastination, specifically, the effects that it has on students (stress levels, quality of production, etc.) The study uses information collected from various journals and online sources to look at procrastination in an attempt to prove or disprove common thoughts about the effects of waiting until the last minute to do things. It will also explain how these findings can be applied to real situations and offer solutions to problems created by procrastination. The primary target of the study is students, although the hope of the study is that its findings will be able to be applied to all people, whether or not they are students.

Presentation Type and Session: Poster VI

Implementing Technology Into the Chemistry Lab and Its Effectiveness On Student Performance

Chelsea Aldridge, GES 690: Master's Project
Faculty Mentor: Professor Catherine Lange, Earth Sciences and Science Education

With rapid increases in the amount of technology available to teachers today, yet often limited use of this technology, many educators are anxious to learn of the evidence that technology is effective in enhancing classroom learning. Podcasts and tutorials are effective tools that allow teachers access to student minds at home more so than ever before. The effectiveness of this technology will be studied by creating and implementing podcasts into introductory chemistry labs at Buffalo State College. Each podcast contains information for assisting students with anticipated struggle with pre-lab and post-lab questions, demonstrations on new techniques being utilized in lab, and step-by-step explanation of how to perform calculations necessary for data interpretation. Information will then be interpreted based on examining student response, grade improvement, and student dependency on lab instructors. Upon analysis of the results of the study, it is anticipated that the podcasts will have high use for students that are self motivated to achieve high grades, will increase understanding of concepts and thus grades in both the class and the lab, and will decrease dependency of students on the instructor. This technology is another outlet to provide resources to students with a need for additional instruction outside of the classroom. Podcasts give students the opportunity that is necessary to be successful in learning.

Presentation Type and Session: Oral – Education

Improving Students' Understanding Of Algebra In the Elementary Classrooms

Alex Drozd, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

In this poster I will show how an eight year old student from a public school in Buffalo helped me realize how children learn and are capable of understanding and applying algebraic thinking. Algebra can be a very abstract for students, especially for students in the primary grades. However, with the new shifts in the Common Core Standards, it is imperative students develop a solid foundation in algebraic thinking. Consequently, teachers will need to find ways to help students develop their algebraic thinking through meaningful activities. Explicitly teaching the meaning behind symbols used in algebra is a great start to breaking down the complexity of algebraic thinking as well as using visuals and manipulatives. Also, bringing in and linking real world experience to students' algebraic thinking will also simplify the concept.

Presentation Type and Session: Poster V

Improv(ing) Students, One Laugh At a Time

Beth Slazak, CRS 690: Master's Project
Faculty Mentor: Professor Cyndi Burnett, Center for Studies in Creativity

Teachers are asked to do the impossible today - train students for a future that includes professions that do not exist, with a training system invented centuries ago, overrun by ever changing stipulations from administrators. As such, these teachers are continually looking for tools to help them achieve this impossible dream. One of these tools that provide real world results is the use of improv in education. It helps build self-esteem in students, encourages their public speaking abilities, and builds confidence in decision-making. I have been working on a program that teaches improv to students, with the theory that the aspects used in improv translate to real

life applications for the students. My experience thus far has been positive. The students have taken to the experience and have begun using the skills outside of our time together. In this session, the audience will be given the opportunity to learn and participate in a number of improv games to add to their educational toolbox. They will experience the humor and excitement that students feel when they engage in a new activity that stretches their comfort level.

Presentation Type and Session: Oral – Education

Increasing Young Learners Mathematical Development Through Play

Kate Kloss, EDU 651: Theory, Research, and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

This is an ongoing study to examine the role of play in young learners' mathematical development. While many people may think that students in preschool are far too young to understand and practice mathematics, the research suggests otherwise. In actuality, this is the time in a child's life that the foundations for later critical mathematical practice and thinking are developed. Research over the years suggests that when students as young as preschool are able to explore the world through play, a number of mathematical concepts arise, these concepts range from geometric thinking, patterning, counting, comparing sizes, and many more. This paper will further explore this research and challenge the idea that "playing" is not "learning". For this project, a 4 year-old preschool student will serve as the participant. Through interviewing and meeting with the student a total of four times minimum, the following three questions will be addressed. First, is a student as young as four years old actually able to understand and apply mathematical thinking through play? Second, is it possible to accurately assess a young student's mathematical understanding and abilities while they play? And third, what types of materials are needed or most effective when using play to promote mathematical thinking with preschool students? The effectiveness of play on developing mathematical thinking will be analyzed by using a pre and post assessment with the participant.

Presentation Type and Session: Poster V

Integrating Vocabulary Strategies Into Middle and High School Science Instruction

Jessica Frain, **Courtney Knoph**, and **Allison Dauphin**, EDU 609: Literacy Instruction in the Upper Grades
Faculty Mentor: Professor Ellen Friedland, Elementary Education and Reading Department

Science teachers often use the approach of having students learn vocabulary through the process of copying definitions into their notes. This rote process is often ineffective and does not incorporate the current research findings regarding how students process vocabulary. Science is a particularly challenging subject for many students because the informational texts are often laden with technical vocabulary, which at times is entirely new for the student. In order to address the Common Core Standards, science educators need to view themselves as teachers of both literacy and science. In order to spark interest and improve understanding, science educators need to make an effort to integrate vocabulary strategies into their daily instruction.

Presentation Type and Session: Poster I

Learning In Two Worlds At Once: Through the Eyes Of Students

Kaleigh Nolan, Exceptional Education
Faculty Mentor: Professor Sherri Weber, Elementary Education and Reading

Students all over the world learn in different ways. Many subjects and concepts taught in schools all around the world are the same, but how these ideas are taught are very often different. This research has begun and will continue to be conducted through June of 2013. Students will learn about other cultures and communities while using letters and the enhancement of technology to teach each other cross-culturally. It is one thing to teach a third grader in Western New York about Africa using textbooks. It is a whole other experience to allow another student actually from Africa to teach another student about their culture and vice versa. Using the enhancement of technology, this conducted research will allow third grade students to teach each other about their culture and environment cross-culturally using technology. As a researcher I will study the effects skyping and the use of technology has on the cross-cultural learning of students. Studies have shown that enhancing learning with technology increases students' knowledge and ability to take in information, so why not allow these students to learn about a culture first hand while using technology to enhance their ability to learn. This research will take place during my teaching placement here in Western New York and will continue throughout my journey this June to Zambia, Africa. Qualitative data will be collected to determine how the use of technology has helped learning as well as to determine these students' cross-cultural perceptions of an international classroom learning environment.

Presentation Type and Session: Poster IV

Lessons From a Summer PET Course For In-Service K-12 Teachers

Justin Snook, Physics
Faculty Mentors: Professor Dan MacIsaac, Physics, Mr. David Abbott, Physics, and Professor Kathleen Falconer, Elementary Education and Reading

In Summer 2012, fifteen K-12 teachers from struggling, low-income schools in an urban school district attended a two-week, credit-bearing course at SUNY Buffalo State College using the Physics and Everyday Thinking (PET) curriculum by Goldberg et

al. The course featured whiteboard driven discourse and significant use of hands-on activities linked to probeware and simulations, all of which were unfamiliar to the participants. We reported on pre and post PET diagnostic data and student learning journals. Additional course characterization from video and instructors' comments were included. Findings and lessons learned was presented for this and similar courses.

Presentation Type and Session: Poster IV

Let's Learn Together Across the Ocean: Cross-Cultural PenPals

Brunilda Reyes, EDU 312: The Teaching of Math and Science
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

One sixth grade classroom from the Professional Development School, the International School #45, in Buffalo, NY will be connected to a sixth grade classroom in a Professional Development School, Libala Basic School in Lusaka, Zambia through the concept of lifelong pen-pals. Elementary school Students from both countries will be introduced to each other via photos, video activities in their school and classrooms. These photos and videos of their classroom activities will allow students to conceptualize where their pen-pals live. Students will share geographic maps and national flags and their meanings. This pen pal project is envisioned to be a lifelong activity. The purpose of this project is to expand these students' cultural awareness, sensitivity towards other races, and encourage cross-cultural friendships.

Presentation Type and Session: Poster II

The Life Of a Grad Student: PDS Involvement and the Development Of My Culturally Responsive Pedagogy

Brittany Fehskens, Masters Including Initial Teacher Certification
Faculty Mentor: Professor Leslie Day, Elementary Education and Reading

The MIITC program is the Buffalo State Masters Including Initial Certification program offered for students with Bachelor's Degrees who are now seeking teacher certification. It is a program that takes students who have their degree in a subject other than education and prepares those students to become future teachers through a rigorous and very active program heavily involved with PDS. Initially upon being selected into the MITTC program, it was evident that the deep understanding as to what PDS meant was not fully obtained due to having no experience with PDS from my previous institution. However, as a student immediately immersed within the PDS program, it is evident to see that Buffalo State has a remarkable opportunity and PDS program to offer its candidates. What is even more amazing is the method by which students, such as myself, who have no prior experience in the education field or with PDS quickly learn the benefits of having this hands-on field experience regularly. These experiences have developed my growth, and that of other MITTC colleagues, in an understanding of culturally responsive pedagogy throughout the field-experience. It is evident, that many cultures, differentiated learners, and ethnic learners fill the majority of our suburban and urban classrooms. How is PDS, in relation to MIITC students, shaping and benefiting these changes and diversities that will one day be the class that we will teach? Through qualitative analysis, the challenges and barriers that MITTC students overcome with the guidance and experience offered through PDS will be highlighted.

Presentation Type and Session: Poster III

Making a Splash In Academics: Participation In a College Athletic Program

Chelsea Saxe, HON 400: All College Honors Colloquium
Faculty Mentor: Professor Andrea Guiati, Director, All College Honors Program

I will research the effects, both positive and negative, of participating in a college sport. I will cover aspects a student-athlete faces from many different topics. Academic effects: such as if practices interfere with class times, if the time devoted to sport will limit one's effort into schoolwork and studying, the effects of taking a class with a teammate, etc. Social effects such as by participating in a sport will leave enough time to spend with family, friends, significant other. How do teammates affect one's mood? Physical effects: such as strengthening one's body and looking/feeling better, possible consequences one could face from a sport related injury; maybe one won't be able to work. Participating in a school sport has a huge impact on the life of a college student; I know personally and will share my experiences in this presentation along with my research. My goal is to raise awareness for incoming freshmen having to decide whether to be a scholar in the classroom, an athlete or both.

Presentation Type and Session: Poster I

Making Math Real: Can Real Life Problem Solving Make Understanding Decimals and Fractions Easier?

Sarah Wade, EDU 651: Theory, Research and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Many times, students are forced to think of mathematics as a class in itself and not as a part of their daily lives. They do not see the purpose of mathematics except to pass a class. A 6th grade male student was interviewed in order to find out about his mathematical understandings and misunderstandings. After the interview, it was discovered that he had some difficulty with decimals and fractions. It was also revealed that his teacher failed to show how mathematics had real life connectivity and purpose. With these findings, a pre-assessment was given and follow up lessons were conducted for the participant to discover if real life problem solving would help him develop a better understanding of fractions and decimals. This poster will share the findings.

Presentation Type and Session: Poster II

Mothers Who Fail To Rescue Their Children From Abusive Partners: Perception Of Guilt and Dispositions

Alicia Lacey, Family and Consumer Sciences Education
Faculty Mentor: Professor Nanci Monaco, Career and Technical Education

Two states, New York and Texas, were compared with respect to differential patterns of charging women who fail to protect their children from death by abusive partners. Texas, more commonly, has harsher criminal penalties for these women. Many district attorneys asserted during their campaigns that this will serve as a deterrent for other mothers hearing about these cases; fearing harsh punishment, they should be moved to protect their children. In New York, many such mothers are offered limited immunity in exchange for their testimony against the perpetrator or are charged with neglect through Family Court. Despite the appeal for the general public with the tough criminal charges against these mothers frequently exhibited in Texas, statistics comparing the two states indicate that this approach does not actually reduce future incidents of mothers failing to intervene on behalf of their children under comparable circumstances. Eighty social workers and lay individuals were asked to watch a video summarizing two cases reflecting the two positions outlined above. They responded to a series of questions about the attribution of blame for the children's death, considering the role of the mother, the partner, and the child protection workers who failed to remove the children, despite having been contacted about the potential dangers they faced. They were also questioned about different potential dispositions for the various parties. Their conclusions were then compared to those offered by an Erie County Family Court Judge and the Director of a child legal advocacy center discussing effective remediation in these situations.

Presentation Type and Session: Oral – Education

Multiculturalism: Applying the Theory To the Global Classroom

Breanna McKenley, Early Childhood Education
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

As a student of the Buffalo State College teacher education program, I have been taught to be sensitive to the diverse cultures in the classroom. To completely understand multiculturalism and gain a global perspective, I traveled to Zambia with the Elementary Education and Reading Department so I could be immersed in a culture other than my own. I will present the culture in which I was immersed for approximately three weeks. The information demonstrates how I grew as a pre-service teacher and explores how I plan on applying this new sensitivity to multiculturalism in my U. S. classroom. This trip to Zambia opened me to experience diversity. I was able to live and socialize with natives of Zambia, teach in the Zambian schools and thus prepare me to succeed as a citizen of a diverse and multicultural world.

Presentation Type and Session: Poster I

My Journey Toward Understanding Culture: Becoming a Language Learner Through Total Immersion

Jaquilla Vinson, Early Childhood and Childhood Education
Faculty Mentor: Professor Pixita del Prado Hill, Elementary Education and Reading

During my poster presentation I will share my journey of becoming a language learner while becoming an elementary teacher. This process has happened through experiences offered by the Buffalo State Elementary Education & Reading Department where I have had the opportunity to participate in a Global Book Hour, complete my literacy and social studies methods courses on site at a bilingual school, and then travel to work at the newly established International PDS school in Santiago, Chile. Through the poster presentation I will highlight my intellectual growth through examples taken from my blog, excerpts from my Culturally Responsive Education Embracing Diversity (CREED) project and photos that highlight my developing understanding of language learning. I will also discuss how being totally immersed has deepened my understanding of what it means to be a language learner and what I plan to do as a teacher to make sure that the language learners in my own classroom will benefit. Lastly, I will talk about the skills I have acquired and plan to enhance since returning from Santiago, Chile.

Presentation Type and Session: Poster I

The Need For Technology To Assist Diverse Learners In the Classroom

Tonya Cowling, EDU 310: Teaching Social Studies in the Elementary School
Faculty Mentor: Professor Sherri Weber, Elementary Education and Reading

Technology has vastly changed the way students learn and the way teachers teach. When students need extra practice they are sent to a computer to play games that support the content of the lesson. Technology is taking the place of teachers having to differentiate their instruction to suit the diverse learners. With the technology overhaul in our classrooms, I will be comparing the technology used to help diverse learners and how teachers address their student's diverse needs without technology. I will compare the use of technology between one public school in Buffalo, New York and a government or public school in Lusaka, Zambia. Technology is a great resource but we should not depend on it to educate our students. I believe that I will become more culturally diverse and adapt new strategies of teaching that will help every child without the use of technology.

Presentation Type and Session: Poster II

Newton, We Have a Problem: Misconceptions In Physics

Jennifer Gazdovich, SCI 690: Master's Project
Faculty Mentor: Professor Catherine Lange, Earth Sciences and Science Education

The reason why I chose to research misconceptions in physics is because I have noticed that a wide-range of people have the same misconceptions about forces and motion. Through my research I have realized elementary, middle and high school students as well as adults (some being teachers) have misconceptions about conceptual ideas in physics. What I am focusing on is defining a force as a push or pull, forces don't always causes objects to move, defining gravity as a force and having them understand gravity is always pulling down at the same rate (on Earth). So far I have done a lesson on these misconceptions in three 4th grade classes. One class lesson was a story and a demonstration. Another class lesson was just a demonstration. The last class lesson was just a story. I had the students take a pre- and post-test for comparison. Not only did I want to show that elementary students can do physics but I wanted to test different teaching methods to show the most effective way to teach physics in elementary schools. Most students in all of the classes were able to answer almost all of the questions correctly on the post-test. I would like to use these results to show that physics can be taught in elementary school so that more advanced physics can be taught in high school.

Presentation Type and Session: Oral – Education

Stretch and Sketch: Structured Storeytelling

Anna Morton, Early Childhood and Childhood Education
Faculty Mentor: Professor Maria Ceprano, Elementary Education and Reading

Stretch and Sketch is a strategy that can be used to support structured retelling of stories that are either read by the children, or ones to which they have been asked to listen. Stretch and Sketch was used to support the retelling of stories by 3rd graders at Enterprise Charter School. A rubric was used to assess their efficiency in retelling with and without the strategy. Chilean students of about the same age and grade level will be assessed on their retelling of stories, orally read or listened to, with and without the support of Sketch and Stretch. Findings will indicate reading process similarities and differences between the two groups.

Presentation Type and Session: Poster I

Stuck In the Middle With You: Survival In the Ruins Of the War On Science

Amy Miller, SCI 690: Master's Project
Faculty Mentor: Professor Catherine Lange, Earth Sciences and Science Education

Parasites have latched onto science education. Hidden within textbooks or sound-bites, like hungry tapeworms they appear in the mouths of students. Infecting not only the young, but colleagues, school boards, and parents as well, their epidemiology used to be easy as vectors of anti-science movements often came from conservative/fundamentalist sources. Now engaged in a two-fronted war, teachers see old adversaries revived and new idols emerge. While religious pseudoscience undermines the value of actual science, paranoia and misinformation leech into schools from the ordure of leftist "woo woo". Between the Scylla on the Left and Charybdis on the Right, what's a 21st-century science teacher to do? A qualitative analysis of scholarly journals reveals that anti-science movements like Intelligent Design and Anti-Vaccination have gained popularity. Facades of legitimacy spring from divergent sources and seek integration within culture, politics, and education. The great red dragon behind Intelligent Design is the ironically named Discovery Institute, the flush vanguard behind the discreditation of scientifically established theories, whose intent is to impose religious dogma. Contrastingly, vaccination hysteria, and sensationalistic mistrust of science is frequently fronted by widely influential liberal celebrities. Regardless, the end result is stagnation and damaged global credibility. The effect is putrefactive, but the remedy is not radical. Physician, heal thyself: Requiring meta-examination, teachers investigate the sources of pseudoscience and misconceptions and alter their pedagogy responsively. Forthright confrontation: Disinformation/misinformation is directly denounced by exposing its unscientific foundations. Negligent defense of science is as deleterious as the efforts of those who intentionally desire to destroy it.

Presentation Type and Session: Oral – Education

Student-Centered, Real-Life Experiences In the Classroom: A Comparison Of Effective Teaching Methods For Both Elementary Foreign Languages and Science

Julie Brown, HON 400: All College Honors Colloquium
Faculty Mentors: Professor William White, Modern and Classical Languages, Professor Kathleen Falconer, Elementary Education and Reading, and Professor Andrea Guiati, Director, All College Honors Program

My main objective is to create a set of foreign language education standards with which teachers can gauge the effectiveness of their lesson plans. I will compare the student-centered and authentic learning principles of RTOP (Reformed Teaching Observational Protocol) to teaching a foreign language, hoping to dispel the myth that foreign language education is different. I will explore current research that promotes teaching at least 90% in the target language, as well as the controversy and apprehension associated with this method. I am seeking to grow in my understanding of effective foreign language education and in my ability to explain it well to others. Lastly, due to science and foreign language education consistently being pushed aside, I desire to reaffirm their great value for students and for our global economy as a whole. For in recognizing the extent of their worth, we may slowly

be able to reject the cheap imitations for quality education that hinder our development.

Presentation Type and Session: Oral – Education

A Study Of Science Instructional Methods That Increase Student Motivation

Jolene Samanka, SCI 690: Master's Project
Faculty Mentor: Professor Catherine Lange, Earth Sciences and Science Education

This presentation will highlight the findings of a science education research study conducted in the fall of 2012. The study involved 336, 9-12th grade students from a variety of schools including private and public, urban, and suburban. The anonymous survey consisted of 15 questions addressing demographics, the instructional methodologies that the students found most helpful to their learning experience and a variety of other questions pertaining to the learning of science. Of particular interest was a question that asked students to identify which methods helped them learn science on a deeper level from a list of 20 possibilities. The results from this list, that contained selections such as; group work, video and visual aids and review games revealed extremely interesting patterns about what students found most and least effective. The presentation will provide the following: survey; explanation of how the data were collected; breakdown of the results; and suggestions of what this means for science instruction and student motivation.

Presentation Type and Session: Oral – Education

Supermarket Sweep! Developing Savvy Shopping Skills: A Look At Ratios, Proportions and Unit Rate

Erin Cappello, EDU 651: Theory, Research and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

This is an ongoing study about middle school students and their conceptual understanding of proportions, ratios, and unit rates. The topic was chosen based on real world use of proportions and unit rate to solve real world/everyday problems. This study will determine if the knowledge taught in the math classroom can be applied to real world situations, like shopping at the grocery store. The participant in this study is an 8th grade female student who struggles in most areas of math. After the first interview, I concluded that the participant has adequate knowledge of multiplication and division facts. The participant seemed to have a conceptual understanding of basic mathematic operations (addition, subtraction, multiplication, and division.) The participant also has some understanding of proportional relationships and ratios. The student's instructional needs seemed to be: content vocabulary (ratio, proportion, and unit rate), knowledge on how to write a ratio and a proportion, and the ability to solve word problems with these relationships being described. The instructional needs of the student will be met with research based activities in hopes of improving the students understanding of these concepts.

Presentation Type and Session: Poster I

A Teacher's Secrets: Common Tricks To Behavior Modification

Lindsay Suchyna, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Thomas Scheira, Social and Psychological Foundations and Professor Andrea Guiati, Director, All College Honors Program

Reinforcement and operant conditioning are routinely used in today's education system to shape a student's overall behavior or to adjust a specifically targeted behavior. In the classroom, there are predominantly three different types of reinforcers used: social reinforcers, activity reinforcers, and tangible reinforcers. I will explore how these types of reinforcers can be most effectively applied, in what way each influences the student, and how each expects to continue providing positive results. Through my research, I will also examine the critics' perspective of reinforcement and the projected negative effects; reinforcers are said to overlook a child's developmental needs and cause concern for a decrease in intrinsic motivation. I will address the relationship between operant conditioning and reinforcement, and how operant conditioning can be most effective in varying circumstances. My research will present both supporting and adverse views on reinforcers and operant conditioning in an effort to gain a more complete understanding of what these behavior modifiers are, as well as how they are used. Overall, this presentation will provide insight to and increase awareness of teachers' techniques for behavior control in the classroom; studying frequency and comparing the consequences.

Presentation Type and Session: Poster III

Teaching Fractions Through Meaningful Learning Experiences

Jenna Santora, EDU 651: Theory, Research and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Having worked with high schools aged children on a regular basis outside of a school setting, it is clear to me that many high school students never mastered the basic building blocks of learning fractions. Fractions are a very difficult area for many students, numerous students never master the basics for learning fractions and they continue to struggle with fractions at a more advanced level. Difficulties with fractions lead to issues with fraction computation, decimals, percent concepts, and algebra. This paper will explore why students struggle with fractions and the difficulties fractions pose for students. The participant was a 16-year-old boy that is currently in 9th grade attending a public school school in a suburban neighborhood. The participant was interviewed on math as a whole and how he felt about fractions. He took a pretest to diagnose his weaknesses in his understanding of fractions, and those weaknesses were further explored during several lessons on fractions. After

instruction the participant took a posttest that was used to determine any improvement on the concept of fractions.

Presentation Type and Session: Poster II

Teaching Science To English Language Learners

Wadith Montalvo, SCI 690: Master's Project
Faculty Mentor: Professor Joseph Zawicki, Earth Sciences and Science Education

This master's project is design to measure the effectiveness of instruction using SIOP and Literary Lab methods in improving the academic achievement of English Language Learners in science. The setting of this investigation is a seventh grade science class with students at different levels of ESL as well as mainstream. The end goal is to develop a program that addresses the needs of all students with such a diverse range of abilities. Educational programs have failed to teach English Language Learners science and science instruction has failed to contribute to the progress in oral and written expression in English of English Language Learners (Lee, 2005).

Presentation Type and Session: Oral – Education

Teaching the Alphabet Through Literature and Other Effective Methods

Kimberly Vaughn, EDU 690: Master's Project
Faculty Mentor: Professor Coralee Smith, Elementary Education and Reading

Children in preschool and kindergarten are often expected to learn the alphabet. Children not only have to learn how to identify what the letters are, but also what they sound like, and what words begin with which letters. Teachers are handed this great task and some methods seem to work better than others. There are many different theories and practices on how teachers should teach the alphabet. I used many different keywords when searching for how teachers can effectively teach the alphabet. Research topics associated with keywords such as use of literature, environmental print, mnemonics, and scaffolding. Many of the research suggest fully immersing children in literature and print. Parents and teachers both were encouraged to provide children with a print rich environment. Having books for children to look through particularly alphabet books was a common suggestion. It was also mentioned that students use environmental print to associate letters with what they know from their own surroundings. Many teachers in the past have traditionally taught a letter of the alphabet a week. Teachers are encouraged to find creative ways to bring in the alphabet to everyday learning. I specifically searched for the research that I thought would contain fun and creative ways to teach children the alphabet to give teachers different ideas on how to teach.

Presentation Type and Session: Poster I

Teaching To the Test: Necessary In New York State, But What About In Lusaka, Zambia?

Amy Hudson, Elementary Education and Childhood/Childhood Education
Faculty Mentors: Professor Hibajene Shandomo, Elementary Education and Reading and Professor Sherri Weber, Elementary Education and Reading

Tests play a major role in the assessment of both students and teachers in New York State. Common Core Standards impact what will be on the test. Often the pressure for schools to do well in New York State leaves the teacher no choice but to teach to the test. Although Zambia is said to have a centralized educational system, is this education system as test obsessed as the education system of New York State? This poster addresses the questions "How Is the Role of Testing in New York State similar or Different from that of Lusaka Province of Zambia?" How do teachers use assessment to drive instruction in the U.S and in Zambia? How do teachers in Zambia use the centralized curriculum? Do teachers in Zambia adhere to the curriculum as strictly as the teachers in New York? I will be teaching for three weeks in Lusaka, Zambia in June of 2013. During that time I will research the education system there and interview those who are very familiar with all the components of Zambia's education system. I will interview a principal, the chief Education Officer in Lusaka, and teachers at the International professional development school where I will teach. Are you ready for an in-depth comparison?

Presentation Type and Session: Poster III

Teaching With Creativity For Higher Level Thinking

Jessica Sobczyk, MIITC Early Childhood and Childhood Education
Faculty Mentor: Professor Christopher Shively, Elementary Education and Reading

Ken Robinson (2011) in "Out of our minds: Learning to be creative," defined creativity as "Creativity is possible whenever we're using our intelligence. Being creative does usually involve playing with ideas and having fun, enjoyment and imagination. But creativity is also about working in a highly focused way on ideas and projects. Crafting them into their best forms and making critical judgments along the way about which work best and why." Based on Robinson's definition of creativity, the research question for the study is: In what ways, if any, do Zambian teachers deliver instructional content in a creative manner? To answer this question, my study will be conducted in third grade classrooms in five elementary schools in Zambia, a country located in the southwest region of Africa. Data will be collected from classroom observations, interviews with teachers and lesson artifacts created by students. Data will be analyzed using the lens of creativity as defined by Robinson.

Presentation Type and Session: Poster I

Technology In the 21st Century Math Classroom

Matthew Dixon, EDU 651: Theory, Research and Practice in Mathematics Instruction
Faculty Mentor: Professor Hibajene Shandomo, Elementary Education and Reading

Technology has seen an increase in usage over the past 30 years. This shift towards a technologically driven society has changed the way people live, communicate, and work. Technology is now making a push into the classrooms and educators are being faced with many new challenges; one of those major challenges is to implement technology or not. Fifty years ago the classroom was a different place than it is now. A more traditional approach–"show and tell" methods to learning occurred and the teacher was trained to use textbooks, pencil and paper to implement the curriculum. Today the classroom is a completely different picture and is continuing to change on a yearly basis. Teachers are now focusing on more conceptual methods and using modern tools to achieve these goals. This study focuses on the math classroom in a 21st century environment and weighing the benefits of having a conceptual and problem solving approach, rather than an instrumental and procedural understanding of mathematics. The study also examines different research in the area of technology/21st century learning in the classroom.

Presentation Type and Session: Poster IV

Technology: The New Beginning

Nicholas Galfo, Elementary Education
Faculty Mentor: Professor Leslie Day, Elementary Education and Reading

Technology is taking over the way of communication throughout the world. As a result, Buffalo State College has created a PDS website to enlighten teacher candidates and spread the word on what is being accomplished in our Consortium. Since the website has been created the number of visitors has sky-rocketed. Seeing these numbers climb and wanting to attract a larger audience of teacher candidates, we have since built a PDS FaceBook page that has also been a huge success when posting consistent information to the followers. As a PDS representative, I have been monitoring these numbers. Noticing such a huge impact encourages a continuation down the technology path for informing teacher candidates. This year the PDS representatives have developed an acronym site that will provide many educational acronyms that teacher candidates and professionals will be using as their careers continue. Our thought is that this will help future candidates transition into classes and also improve their interviewing skills. The acronym website is up and running at acronyms4teachers.wordpress.com. Current technology such as Blogging is discussed in educational classes at Buffalo State. In the future PDS would also like to use blogging to inform our teacher candidates. A team of monitored students will be motivated to create a blog to post their experiences as they travel through the life of a future teacher.

Presentation Type and Session: Poster IV

Tell Me a Story: Stories and Literature In Zambian Education

Heather Bermingham, EDU 310: Teaching Social Studies in the Elementary School
Faculty Mentor: Professor Sherri Weber, Elementary Education and Reading

Stories and literature have always had an important place in culture, with different cultures weaving storytelling into daily life in different ways. For this project, I will study the role of storytelling and literature in Africa and the Zambian classroom. In the first phase, I will focus on research and background information. I will read about the importance of storytelling in the African culture and look at a number of African tales and children's storybooks. I will then travel to Zambia for three weeks in June. While there, I will compare what I read in anticipation of the trip to the reality of the Zambian classroom. I will observe how stories and literature are used in the classroom and talk to teachers and students about their feelings regarding storytelling and how important it is to them.

Presentation Type and Session: Poster III

Think Outside the Box, Kid!

Youssouf Kaba, CRS 302: Creative Approaches to Problem Solving
Faculty Mentor: Professor Jo Yudess, Center for Studies in Creativity

Young people are not being exposed to creativity enough at an early age in their school careers. In what ways might a program be designed to introduce creativity for six-to ten-years-olds in first to fourth grade? We are all creative every day because we are constantly changing the ideas we hold about the world. Creativity does not have to be about developing something new to the world, it is more to do with developing something new to ourselves. Creative thinking is the process we use when we come up with a new idea. Brainstorming is one form of creative thinking: it works by allowing yourself freedom to express all ideas or by merging someone else's ideas with your own to create a new one. The result of creativity can impact students' performance in school and decision-making on daily basics for the rest of their lives. On a basic level, a training will be designed to introduce ways of brainstorming and evaluating ideas.

Presentation Type and Session: Oral – Education

Undergraduate Learning Assistants In a Hybrid Economics Course

Heather Dennis, **Jamie Howard**, **Micheal Manoussos**, **Cory Lauber**, **Liza Sang Yan**, **Esther Ekong**, **Gabrielle Santos, Noor Aref, Daniel Flaherty**, **Amber Buchholz**, **David Aldridge**, **Mckayla Bidell**, and **Kait Fetes**, ECO 101: The Economic System
Faculty Mentors: Professor William Ganley, Economics and Finance and Ms. Meghan Periera, Senior Instructional Designer

Undergraduate Learning Assistants, also referred to as ULA's, are undergraduate students that are chosen by the professor to assist with teaching and learning activities. The responsibility of the

Undergraduate Learning Assistants in the Economics 101 course is to manage the online activities, track the progress of students, and provide some face-to-face interaction as well. ANGEL is used in a variety of ways. We have weekly online discussion forums where the students post a response to a given question and then respond to their peers' questions. This is a good way for students to think critically about course material and to help others in the class do the same. There are also weekly quizzes to be used as a study aid for exams. Students have the opportunity to take these quizzes an unlimited time to improve their scores. In addition, there is a ToonDoo activity where the students can create their own cartoon based on their knowledge of the course. This activity provides students the opportunity to express their understanding of the material in a creative way. Besides online activities we hold office hours and encourage students to come see us with any questions or help that they may need in the course. All ULAs have previously taken economics 101. A positive aspect to this is we see what works and what doesn't. We use this advantage to change or add new activities to help facilitate student learning. We believe that Undergraduate Learning Assistants are beneficial because students may feel they can connect with us on a more personal level.

Presentation Type and Session: Poster IV

Universal Teaching Strategies: From Buffalo, N.Y. To Lusaka, Zambia

Kelly Jasinski, Elementary Education
Faculty Mentors: Professor Hibajene Shandomo, Elementary Education and Reading and Professor Nancy Chicola, Elementary Education and Reading

This qualitative study involved a comparison of teaching strategies that are used in the learning and teaching of mathematics at a professional development school between a Buffalo Public School in Buffalo, New York and a government school in Lusaka, Zambia. During my three-week stay in Lusaka, Zambia in May/June 2012, I used several techniques in this study including participant observations, field observations, and interviews to collect data from classrooms in which we worked as teacher candidates. My findings included the following: In Zambia teachers' primary pedagogical methodology was direct instruction, choral response was often used to answer questions in the classroom, many lessons were focused on life skills, and class sizes averaged between 45 and 60 students. In Zambia students were also at different levels of English of Language proficiency. In the U. S. school teachers' pedagogical methodology was differentiated instruction, individual responses were used to respond to questions, class sizes averaged between 25 and 30 students. This poster shows a full comparison between the U. S. and the Zambian school. My findings have helped me become a reflective teacher and should help me to become an effective teacher for students from different cultural backgrounds. It is my belief that as we become more culturally diverse and adopt new strategies of teaching that we will help every child to reach mathematical literacy when we teach.

Presentation Type and Session: Poster IV

Using Positive Reinforcement To Establish Order In the Classroom

Cassandra Matuszak, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Dianne McCarthy, Elementary Education and Reading and Professor Andrea Guiati, Director, All College Honors Program

At a particular preschool and after school care center in Western New York, the school year started off just like any other. Rules were established and expectations were set. Fast forward six months, and one can clearly see that many of the rules that were established are no longer being followed. Why? There has been no motivation or recognition for students who exhibit the proper behavior. This is the driving force behind classroom management and without it, chaos ensues. To get order back into this school, positive reinforcement will be used. Positive reinforcement involves giving something that is either valued or desired by the student right after they display a desired behavior. By doing this, it is the hope that there will then be an increase in the desired behavior. At this school, the positive reinforcement that will be used is a Lottery/Raffle Ticket System. In this system, tickets are given to students who exhibit a behavior that the teacher wishes to increase. These tickets enter students for the chance to win prizes. Students can get disqualified from a certain lottery drawing if they do not display a specific target behavior. The goal of this study is to examine the effects of positive reinforcement in a classroom.

Presentation Type and Session: Poster I

Using Real-World Problems To Engage Physics Students and Teach Important Physics Concepts

William Hughes, Physics Education (7-12), M.S.Ed.
Faculty Mentors: Professor Luanna Gomez, Physics and Professor Jill Singer, Earth Sciences and Science Education

My master's project in physics secondary education illustrates ways to help students connect real world problem solving to introduce and solidify introductory physics concepts. The 'problems' being solved reflect those that I have encountered over the past several years while conducting fieldwork on the Buffalo River. Much of this research has utilized a 24' workboat, the RV Seiche, named for the interesting phenomenon that occurs in the Buffalo River when Lake Erie seiche events reverse the flow direction in the Buffalo River. This work has involved the deployment and recovery of a variety of scientific instruments including temperature sensors, Acoustic Doppler Current Profilers (current meters), and water level gages. The operation of the vessel and the array of sensors translate into a suite of meaningful lessons for secondary physics students.

Specifically, challenges encountered in river operations include transporting large and heavy equipment, raising and lowering (recovery and deployment) of sensors, and even the launching of the research vessel itself. For all these operations, I have relied on applying a range of physics concepts such as tension force, coefficient of friction, center of mass, impulse, and momentum to solve in the moment problems. To date I have developed six physics units that scaffold basic information into progressively more complex physics concepts and principles. The lessons are built around problems rather than presenting definitions and simplistic or artificial problems. This approach to teaching physics is informed by the literature that demonstrates that real learning occurs when students tackle problems and transfer knowledge. It is my desire to bring this type of instruction, supported by education reform, into the classroom, and inspire other educators to do the same. While I have used this approach in physics, it is not unique to physics and can be implemented in other subjects. My presentation will highlight the correlations among real-world experiences on the Buffalo River, the NYS curriculum standards, and physics education reform.

Presentation Type and Session: Poster I

Using the Eastern Hellbender Salamander In a High School Genetics and Ecological Conservation Activity

Sarah Chudyk, Master of Science in Biology Education
Faculty Mentors: Professor Catherine Lange, Earth Sciences and Science Education and Professor Amy McMillan, Biology

Teachers face many challenges in today's high school science classrooms. Many students are disengaged, find science to be difficult, or fail to see science as having any relevance in their lives. Because of this, it is of paramount importance that teachers develop lessons to engage students and that help them to realize the importance of science and its impacts on society. Based on my research with Eastern hellbender salamanders (*Cryptobranchus allenganiensis alleganiensis*) and conservation genetics, I have developed a lesson plan and activity to be used in high school biology classes. Current applications commonly used with the genetics unit include crime scene investigation and paternity testing. Creating a lesson plan and activity based on conservation genetics for the Eastern hellbender salamander will serve as a new application to be used with the high school genetics unit. The lesson and activity are designed to engage students, provide students a real-life application of genetics, expose students to a species they most likely do not know even exists, and increase an awareness of how genetics research plays an important role in the conservation of population ecology.

Presentation Type and Session: Oral – Education

Van Gogh Cuts Off His Ear; Administration Cuts Off the Arts

Naomi Skarupinski, CRS 302: Creative Approaches to Problem Solving
Faculty Mentors: Professor Jo Yudess, Center for Studies in Creativity and Ms. Judy Kosinski, Alden High School

With the recent decline in the nation's economy, schools are forced to find ways to save funds in anyway necessary. In these schools, the arts are more often than not the first programs cut. I pose the question of why, when it comes to deficient budgeting, are the Arts the first programs cut in schools? According to the Partnership of 21st Century Learning, "Within the context of core knowledge instruction, students must also learn the essential skills for success in today's world, such as critical thinking, problem solving, communication and collaboration." They go on to explain the learning and innovation skills, when mastered and comprehended to their fullest, can set apart individuals who are competent for increasingly complex life and work environments and those who are not. Under these skills fall creativity and innovation: both of which are relevant to the arts. In my research I intend to explore the reasons and perhaps answers to why such essential skills in a person's life such as the topic of arts seem to most commonly be the first programs cut in schools.

Presentation Type: Oral – Education

Window Into Teaching: Utilizing Power Structures To Improve Overall Classroom Management In a Ghanaian Classroom

John Guzda, History and Social Studies Education
Faculty Mentor: Professor Misty Rodeheaver, History and Social Studies Education

This research examined and established American classroom management techniques in a Ghanaian classroom. The research was predicated upon Milner and Tenore's (2010) conclusions that student power structures are an important consideration when managing a classroom. Through a detailed, quantitative action research approach, this research analyzed and utilized the student power structure to manage classroom behavior. The researcher implemented an AB research model (4 week baseline phase, 4 week treatment phase). Disruptive behaviors were charted during both phases, as well as general researcher observations. Artifacts were also collected. During baseline, there were 205 behavioral disruptions over a 42 class period span, averaging 4.88 disruptions per class. During the treatment phase, there were 209 disruptions over the course of a 42 class period span, averaging 4.96 disruptions per class. The study was greatly impacted by an unforeseen variable, the caning of students. The practice has been outlawed since 1992, but still occurred on a regular basis and greatly impacted student behaviors. Caning could not be eliminated. It should be noted that the number of canings decreased from baseline to treatment phase. Additionally, the lack of lesson planning impacted the researcher's

ability to conduct the study. The school administration dictated the lesson topics at the beginning of the day, leaving teachers no time to plan. This impacted the researchers ability to record behavioral disruptions and effectively implement management techniques as he was creating the lesson during the class. There was an increase in disruptions from phase A to phase B, suggesting that this particular method of behavioral management was not successful. However, one must consider the caning instances. Phase A saw a greater number of canings compared to Phase B, which most likely impacted the instances of behavioral disruptions. Canings are powerful punishers and greatly confounded this study.

Presentation Type and Session: Oral – Education

The Zambian Classroom Culture: The Effects Of a Lack of Resources

Margaret Henry, EDU 690: Master's Project
Faculty Mentors: Professor Nancy Chicola, Elementary Education and Reading and Professor Hibajene Shandomo, Elementary Education and Reading

This presentation addresses the results of an experience at a Professional Development School in Lusaka, Zambia, Africa. This experience offers an opportunity to recognize the importance of reflecting on classroom cultures across international borders. Teaching is universal; however, the methods, strategies, resources, and environments differ throughout the world. Recognizing components of effective classroom culture in any country can strengthen the field of education. In the four basic schools in Lusaka, Zambia (specifically Grade 5 & 6), the observations concluded that the Zambian classroom culture lacked resources, which ultimately affected the teaching and learning in the classroom. A lack of resources causes instruction to be conducted in a teacher-centric manner and the students are not able to be creative because of the classroom culture. Students in Zambia are encouraged to be passive learners as the teacher is their sole source of information. In order to produce progress, especially needed in a developing country, students need a wealth of resources with multiple perspectives and the opportunity to be creative. Awareness of education practices across international borders increases understanding, appreciation, and reflection of local education practices.

Presentation Type and Session: Oral – Education

Health and Wellness

Add Years To Your Life...Count Sheep

Corey Byrd, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

According to Healthy People 2020, approximately 70% of all adults in the United States suffer from insufficient sleep; adults aged 20 - 39 report the shortest sleep duration. Categorized as less than 7 - 8 hours of sleep per night, insufficient and inconsistent sleep are more likely to lead to depression, overweight and obesity, and an increased risk of accidental death and/or injury in those individuals who experience these afflictions. Insufficient sleep disrupts the normal function of every system within the body. Sleep deprivation increases our energy expenditure during wakefulness. Therefore, at a time when energy reserves are low, they are depleted more rapidly. During sleep, the human body resets and rejuvenates from the stresses incurred throughout the day. Adequate sleep is at the crux of transforming our health care system from one that treats to one that prevents disease. The healthcare system must start with the individual. A cultural shift is in order in which we focus our healing from within. This project examines the consequences of insufficient sleep on the human body and offers suggestions on how to change our relationship with sleep.

Presentation Type and Session: Poster I

The Bully Spectrum

Robert Calvaneso, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Bullying has become a major issue as of late. With numerous recent suicides of high school aged children due to bullying, the media has shifted its focus to the causes and effects. But, this is not the first time that the problem of bullying has come under the microscope. Forty-eight percent of high school students have been a victim of bullying in some fashion. The question still remains, what can be done about bullying? Programs such as zero-tolerance and bully-bullied interventions have been implemented into the school systems in response to bullying, but have not solved the problem. The issue of bullying should be addressed in a case-by-case basis, focusing on preventing the issue, and perceiving the signs of bullying before a problem arises. Another question that must be raised is why are high school students being bullied? Should the teachers or the parents be held responsible? Parenting styles play an important role in the development of children as well as having a significant role on where the child will fall within the bully spectrum. Research suggests students with authoritarian parents usually become the bullies while children with overprotective parents become the victim. Future research must be conducted regarding the conflict between improving the involvement of the parent and if it has a positive correlation with bullying prevention.

Presentation Type and Session: Poster III

Coenzyme Q10 and Cancer Treatment

Megan Powell, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Coenzyme Q10 is an organic compound that is naturally synthesized in the body, and is also marketed in the US as a dietary supplement. Coenzyme Q10 is required for cellular respiration, and also used as an endogenous antioxidant that protects cells from free radicals that damage cells. Most tissues contain Coenzyme Q10, especially the heart, liver, kidneys and pancreas. Tissue levels of coenzyme Q10 decrease as we age, which may be due to increased requirements, decreased production or insufficient intake of the precursors needed for synthesis. Low blood levels of coenzyme Q10 have been shown in patients with some types of cancer. Coenzyme Q10 has been shown to protect the heart from anthracycline, and to stimulate the immune system in patients with cancer. Anthracyclines are a group of chemotherapeutic drugs, which may cause damage to the heart. The immunostimulatory potential of this compound has been observed in studies with animals and humans without cancer, because of this, Coenzyme Q10 has been used as an adjuvant therapy in patients with different types of cancer. There is also some evidence that suggest that analogs of Coenxyme Q10 can directly inhibit cancer growth. Similar chemicals of coenzyme Q10 have been shown to hinder proliferation of cancer cells in vitro and the growth of cancer cells transplanted into rats and mice. Therefore, these analogs may be useful as a short term chemotherapeutic agent. Although no serious side effects of coenzyme Q10 have been reported, it can cause mild nausea, stomach upset, or loss of appetite. More research is needed to determine if Coenzyme Q10 is safe and effective with cancer therapy.

Presentation Type and Session: Poster III

DHEA: The Truth About Its Use As a Dietary Supplement

Michael Bedford and **Shawn Pitcher,** NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Dehydroepiandrosterone (DHEA) is a endogenous steroid hormone that is produced within an organism, tissue, or cell. In the human body DHEA is produced in the adrenal glands that are located at the top of the kidneys. DHEA is the most abundant steroid in circulation and acts as the precursor for synthesis of testosterone and estrogen. In adults DHEA production peaks around the age of 25 and then begins to decline as we age. DHEA has been marketed as the anti-aging supplement and said to have an adverse effect on any undesired traits of aging for both men and women. These traits include decreased libido, reduced bone density, diminished skin health, menopause in women, as well as diminished brain function and even Alzheimer's. Due to the extensive lists of claims, a plethora of studies have been conducted to determine the actual positive and negative effects of DHEA supplementation. There have been

mixed reports from all the research conducted on DHEA ultimately confusing and misleading to the general public. As future dietetics professionals we review and compile research reports on DHEA as a dietary supplement and present our findings to help educate the general public on the truth of DHEA supplementation.
Presentation Type and Session: Poster IV

Eat This.....Not That

Dawn Piehler, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Adolescent obesity has tripled in the past twenty years, increasing from 5% to 17.6%. The indirect and direct costs associated with obesity in 2003 were $139 billion. The National School Lunch Program (NSLP) created in 1946, ensured children received a nutritional lunch. During 2004 - 2005 school year, 85% of school lunches met standards for protein, vitamins, calcium, and iron; 26% of school lunches met the saturated fat requirements; and 25% met standards for total fat requirements. Of the children participating in the NSLP, 72.5% have a higher body mass index (BMI) than those who do not participate. A La Carte (ALC) items offered in schools are not regulated by government standards, with the generated revenue used to support school programs, including the NSLP. In the early 80s when government funding was cut for schools the number of school vending machines increased from 4% to nearly 30%. ALC items are generally higher in fat, sugar, salt, and calories. Nine out of 10 public schools offer ALC items, with close to 55% of adolescents purchasing one ALC item daily. Changing the ALC policy would be a significant change in reducing the epidemic of adolescent obesity. Allowing only 100% juices, water, and healthy snacks would be a way to offer ALC items without sacrificing the extra revenue generated by such items. Offering incentives for these changes to be met might be one way to make sure the goals of the NSLP are actually achieved.

Presentation Type and Session: Poster IV

Effects Of Glucosamine/Chondroitin Sulfate/Methylsulfonyl Methane On Joint Pain

Bianca Cornelius, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

More than 21 millions of American adults suffer from joint pain osteoarthritis (OA), costing over $30 billion annually. Glucosamine/Chondroitin Sulfate/ Methylsulfonyl Methane (MSM) in combination has been used as dietary supplements to relieve joint pains and, therefore, there were growing interests and concerns in their effectiveness and safety. The purpose of this study from literature review is to find research evidence in their efficacy and safety. Glucosamine and chondroitin sulfate are natural substances found in and around the cells of cartilage. Supplementations of GCSMM help the body renew the cartilage around joints and keep them lubricated for smoother joint movement and flexibility. Methylsulfonyl methane is a sulfur containing substance that helps support muscles and tendons in the body. The combination product is usually sold as a herbal supplement over the counter but not yet approved by the US Food and Drug Administration (FDA). There are two prominent studies on glucosamine/ chondroitin sulfate, called the "GAIT" (Glucosamine/Chondroitin Arthritis Intervention Trial) and the "GUIDE" Glucosamine Unum-in-Die (Once a Day) Efficacy. GAIT was a randomized, double-blind, placebo controlled study with over 1,500 patients with osteoarthritis. The study reported that the combination of glucosamine and chondroitin sulfate is effective in treating moderate to severe knee pain due to osteoarthritis. GUIDE took place in 13 European countries and compared supplement of a 1,500mg daily dose of glucosamine sulfate with a 3,000 mg dose of acetaminophen as a placebo in 318 patients. After 24 weeks of monitoring osteoarthritis subjects, the study showed superior effectiveness of the glucosamine dietary supplement on many levels of discomfort and mobility than the placebo group. These studies confirmed that glucosamine may be more effective than the most commonly used pain reliever, acetaminophen. The overall effects of GCSMM supplementation on joint pains of OA and safety are discussed in the presentation.

Presentation Type and Session: Poster III

Effects Of Nutrition and Physical Activity On Alzheimer's Disease

Kaitlin Andrews and **Michelle Szozda**, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Alzheimer's disease is a progressive, degenerative disease that destroys memory and other important cognitive functions. It is the most common cause of dementia, affecting 1 in 8 Americans over the age of 65. Although there is currently no cure for Alzheimer's disease, studies have shown that there may be ways to delay or possibly prevent the onset of this disease. Our research focused on three main areas in combating Alzheimer's disease: nutrition and diet, medication and supplementation, and exercise and physical activity. One example of how nutrition may play a role in Alzheimer's is research on the Mediterranean diet. Many studies have shown beneficial effects of the Mediterranean diet on Alzheimer's disease. There have been a number of studies done on medications and supplements such as resveratrol, antioxidants, folate/vitamin B12/ homocysteine, and fish oil supplements. Several of these studies have concluded that certain medications and supplements may have positive effects on brain function and memory. Lastly, we wanted to look at research that focused on the effects of physical activity. Physical activity has been proven to increase cognitive function. Research is now looking for a link between physical activity and delay in progression of Alzheimer's. Although the research on Alzheimer's is not complete, results have pointed toward a promising future in the postponement and maybe even prevention of Alzheimer's disease.

Presentation Type and Session: Poster V

Energy Drinks In College Students: Help Or Hindrance?

Susan Semeraro, Dietetics
Faculty Mentor: Professor Carol DeNysschen, Dietetics and Nutrition

Sleep deprivation and anxiety levels pose a major concern amongst college students. The amount of time in a sleep cycle is important to support healthy brain function, and mental health, as well as growth development that occur during all sleep cycles. To understand where the problem may originate, examination into various aspects of college life (course load, employment demands and major of study requirements) should be examined. The purpose of this project was to evaluate college student's consumption of energy drinks. Forty college students were recruited. Participants were provided with a questionnaire focusing on the amount of energy drinks consumed, employment demand during semester, caffeinated product consumption, as well as other factors that have a role in sleep deprivation. Participants identified factors that could impact their quantity, quality of sleep such as work schedules, credit hours per semester, and physical activity. Thirty of the 40 participants stated they consumed more energy drinks during the school semester with an average consumption between seven and 14 cans a week. Results from the project further showed the average college student participant was in fact sleep deprived, resulting in an average of 7 hours per night. There are a variety of factors that could contribute to college students' lack of sleep, such as caffeine consumption (from energy drinks and other sources), alcohol, increased levels of anxiety due to exams schedules, and work hours. Support systems should be developed to attempt to alleviate stress-causing factors that may intrigue students to rely on energy drinks for perceived added energy.

Presentation Type and Session: Poster VI

Get Tested, Not Infested

Angela Ragusa, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Chlamydia Trachomatis has become one of the most common sexually transmitted infections (STIs) among young adults; specifically women aged 16 - 25 years. Discovering a successful preventive approach in order reduce the incidence is crucial. Research suggests a critical reason for the rapid spread of chlamydia is due to embarrassment associated with STI screenings. This research explained a more in-depth focus as to why women were embarrassed to be tested, and how prevention can be more readily available, discrete, and inviting. As a result, conclusions drawn indicated that if clinics and physicians could develop comforting testing processes and better explain the procedures to these young women, they would not feel as discomforted and testing rates could be positively affected. This work increases the knowledge base as to how health professionals can make STI testing more inviting and successful. A possible conclusion to this research suggests a more comforting and inviting setting in order to ensure the STI testing rates increase in the young women community.

Presentation Type and Session: Poster I

Get the Lead Out! The Risk Of Lead Paint In Buffalo Homes

Nick Faso, SWK499: Housing Problems
Faculty Mentor: Professor Patrick Dexter, Social Work

Lead paint is still a risk in many homes in the Buffalo area that can cause developmental problems in young children. Residents either do not know their house is a lead hazard or cannot afford to have the lead paint removed. Because of lead paint being present, homes can fall below housing code and owners and residents are responsible to bring the house up to code before it is condemned. Multiple appearances to City of Buffalo Housing court and interviewing Judge Patrick Carney has provided information on how many houses are contaminated with lead paint and what the penalties are. Interviewing OSHA workers from AmeriCorps who specialize in lead paint removal have provided facts and data about finding out if a home has lead paint in it. What are contributing factors to residents not taking care of their lead paint issue? What can the community do to help? And how can social workers help homeowners who cannot afford to maintain their homes?

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Health Benefits Of Green Tea Vs. Black Tea Vs. Oolong Tea

Jamie Vallone, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Teas have been used as a complementary and alternative medicine since the Han Dynasty in China. Some types of teas used for complementary and alternative medicine include green tea, black tea, and oolong tea. Although they all stem from the same plant, the camellia sinensis, each tea is processed differently and has different health benefits. Therefore the question arises, does one type of tea provide more health benefits than the others? Green tea has shown some protective properties against cancer and heart disease. Black tea has other health benefits including reduction of LDL cholesterol levels in men and, therefore the risk of coronary artery disease. Black tea also is used to treat headaches, and to reduce the risk of Parkinson's disease and certain cancers. Oolong tea has shown to be useful in preventing dental caries, and reducing the risk of osteoporosis and the risk of certain cancers. However, in a study where all three types of teas were consumed, they all had beneficial effects on cardiovascular disease mortality risk. Another study with Chinese women found that regular tea consumption lead

to a decrease in ovarian cancer risk, with no distinction among the teas or regardless which type of tea was consumed. Although these teas have different effects on different diseases, none of the teas are regarded as having substantially more health benefits than the others.

Presentation Type and Session: Poster IV

Helping Our Amigas Beat Cervical Cancer

Jamie McCarty, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

National cervical cancer mortality rates have drastically decreased in recent years due to success in screening. However, some populations are not experiencing the same decline. Disparities in survival rates are evident in women who are low income or live in rural areas. Hispanic women living on the Texas-Mexico border tend to live in a rural area with limited access to health care and be low income and therefore uninsured. Cervical cancer rates are significantly higher in Texas border counties compared to the national average. Additionally, Hispanic women have higher incidence and mortality rates than other races. The mortality rates of border Hispanics is more than double the rate for all races. Because cervical cancer is one of the most preventable forms of cancer, programs such as The National Breast and Cervical Cancer Early Detection Program have sought to extend screening services to lower income women. Reasons for the remaining disparity after income is removed include cultural beliefs, as Hispanic women are less inclined to initiate screenings or to be screened frequently. Regular screening via Pap test and early detection are key factors in increasing odds for successful treatment. By the time some Hispanic women are diagnosed, the disease has progressed into a more invasive, harder to treat late stage cancer. Identifying and addressing cultural factors for lack of screening among Hispanic women in Texas border counties would help reduce cervical cancer mortality rates.

Presentation Type and Session: Poster II

Is This Gluten Free? An Inside Look Of Celiacs Disease

Victoria Deering, CWP 102: College Writing II
Faculty Mentor: Professor Emily Barry, College Writing Program

I found out that I have Celiacs disease this past August. I have noticed that many products, restaurants do not disclose if their product is gluten free. I have been documenting what it's like to have Celiacs disease through photos, but I am currently working on a research paper for my CWP 102 class and my thesis revolves around what is gluten free and what is not. Through this paper I am explaining the struggles someone with Celiacs Disease endures with finding labeled food. In my presentation I give a unique perspective on what I can and cannot eat, how hard it is to find food and also what it is like looking at what others are eating and being able to eat what ever they please. I plan to use pictures I have taken myself, recipes, articles and my own words to show life with Celiacs Disease along with my research paper as a work in progress. I hope everyone sees what it's like to live with this digestive disorder. For my presentation I am creating a tangible "Pintrest" board using pictures I have taken myself that include, gluten free food, product labels, and different ways restaurants label their products or their lack of labeling.

Presentation Type and Session: Poster V

My BMI Is Not the Issue, But I Have a Condition

Yves Gnohoue, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Metabolic syndrome is a complex condition presented by risk factors that affect many people in this generation. Metabolic syndrome is characterized by having three or more of the following conditions; cardiovascular conditions, abdominal visceral fat, increased blood pressure, obesity, and diabetes. The research correlates to the objective of Healthy People 2020s mission statement of eliminating health disparities among all and improving quality of life for years to come. Individuals diagnosed with metabolic syndrome have increased weight as well as experience health concerns due to obesity. This research identifies the risks of metabolic syndrome in specifics to African-American women as their risks are higher than those of Caucasian women. Although the risks of MS can affect anyone, the condition can be monitored with recommended moderate high to low physical activity with a duration of 30 minutes 3 to 5 times per week. The importance of physical activity is highly recommended for those at high risk for metabolic syndrome. This research is important in setting the stage for future interventions to better improve the quality of all individuals facing health concerns relating to weight.

Presentation Type and Session: Poster II

Neurological Communication and Swallowing Disorders Following Stroke

Kristen Kleinfelder, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Constance Dean Qualls, Speech Language Pathology and Professor Andrea Guiati, Director, All College Honors Program

This presentation will discuss the speech, language, and swallowing impairments that can accompany stroke. Around the world, people are living longer and living longer with disabilities. In the U.S., stroke is the fourth leading cause of death and disability. Anyone can have a stroke; however, people ages 65 years and older are at greater risk of having a stroke because of associated medical conditions such as hypertension and diabetes. Stroke is the leading cause of aphasia, a language disorder, and dysphagia, a swallowing disorder. This presentation will describe the: a) neuroanatomical and neurophysiological processes of stroke, and b) speech, language, and swallowing disorders that can result from stroke.

Presentation Type and Session: Poster III

Obesity Is Not the WEIGH, Get Our Youth Out To Play

Jordan Weixlmann, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Childhood obesity rates in the United States are progressively increasing. This epidemic spirals into chronic illnesses including diabetes, hypertension, osteoporosis, and heart disease. The amount of time a child engages in physical activity is a major health determinant that requires modification. According to Healthy People 2020, approximately 3.8% of elementary schools required daily physical education (PE); only 6 states required PE in grades K - 12. Nearly 51% of states require assessments in PE. These requirements have worked for past generations but are no longer effective for our current plump youth. The purpose of this study is to examine the states with specific physical activity requirements versus those without, and to determine how the obesity numbers correlate. Research has shown that schools with specific PE requirements average more than 27 - 60 minutes a week of activity and correspondingly revealed increasing PE lead to the reduction in obesity prevalence. Florida is one state without specific requirements. Further research has shown 58% of Florida's children do not attend gym class in any given week and 32.5% of youth aged 10-17 years were obese. Schools must initiate strict programs to adhere to the needs of recommended daily physical activity. Increasing PE time is an effective measure against childhood obesity.

Presentation Type and Session: Poster II

Performance Nutrition: Eating Habits To Boost a Dancer's Performance

Jane Calvert, DAN 499: Dance Nutrition
Faculty Mentors: Professor Joy Guarino, Theater and Professor Tejaswini Rao, Dietetics and Nutrition

We all have heard about "eating right" how we should consume more fruits and vegetables, eat fewer sweets, and avoid drinking soda pop. In the case of athletes, nutrition can play an integral role in how an athlete feels and performs. For dancers, the benefits of proper nutrition is extremely important as they must be prepared not only for a technique class but for long rehearsals, that may vary in intensity and duration, and finally the actual performance for an audience. Despite this, many dancers are not aware of--or rarely practice--nutritional habits that may improve their energy and endurance when dancing. The goal of the Performance Nutrition project is to teach a group of dancers a few tricks and tips to eating for performance; supporting them through tech week rehearsals and the following weekend of shows. In so doing, the dancers may learn what works for each of them individually so that they can continue to improve their eating habits for performance throughout their dancing careers.

Presentation Type and Session: Poster IV

Pick On Someone Your Own Size

Mariah Mergler, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Prejudice against obese adolescents has become an epidemic that is creating increasing negative consequences for this priority population. Stereotypes, weight-based teasing, bias statements, and ignorance are just a few actions obese adolescents have to deal with during their school day that potentially affects school performance. Weight-based teasing in schools occurs in 63% of obese females and 58% of obese males. Researchers have discussed that an obese adolescent's weight status does not directly affect the student's school performance but the weight stigma that is placed on the student does greatly affect their school performance. Peer victimization is causing obese adolescents to develop negative attitudes, depression, and low self-esteem that ultimately hurt their academic achievement. Instructors tend to have lower expectations for obese students and find them less likely to succeed. Obese adolescents who are teased are found to have a 50% less chance of succeeding in school. Examining more closely weight-based teasing and victimization could create successful interventions to remove the negative behaviors towards obese adolescents as well as create a more functional school environment for these students.

Presentation Type and Session: Poster III

¿Por Qué No?

Louis Dangelo, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellnes

The objectives and goals of Healthy People 2020 (HP) were set to improve the health of our nation. Unfortunately, there still exist disparities in health related to many determinants. Diabetes Self-Management Education (DSME) is a tried-and-true technique that allows diabetics to improve quality of life and reduce the number of diabetes-related illnesses, injuries, and deaths. DSME is also shown to reduce hospitalizations and lower medical costs that are associated with diabetes. HP has set forth a goal to increase the number of elders that utilize DSME benefits. Minority elders, specifically Latino and Hispanic, do not use this benefit despite availability via insurance. When examining rates of Caucasian and Latino elders enrolled in DSME a large gap exists. Latino elders do not use DSME benefit due to cultural differences and availability of DSME that is specifically tailored to Latinos. Access to quality care is an issue that is affected by transportation, education levels, and availability of health professionals that are educated on Latino culture and language levels.

Presentation Type and Session: Poster IV

Probiotics and Prebiotics As Dietary Supplements

Kellie Kehoe, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Probiotics and prebiotics are exciting dietary supplements for both consumers and food manufacturers for they offer proven health benefits and popular products for market. They are natural remedies to promote either the growth of beneficial bacteria in the gastrointestinal tract (prebiotics) or living micro flora that help create a healthy balance of bacteria in the gut (probiotics). Two particular prebiotics fully met this definition: trans-galactooligosaccharide and inulin. Other authorities also classify fructooligosaccharide (FOS) and lactulose. The purpose of the present research is to examine the function and pathophysiology of probiotics and prebiotics as dietary supplements, and also to verify the validity of health claims based on research findings of prebiotics and probiotics. Probiotics refer to intestinal flora such as lactobacillus and bifido-bacteria are viable microbial dietary supplement that benefit the host through its effects in the intestinal tract. Probiotics are widely used to prepare fermented dairy products such as yogurt or freeze-dried cultures. In the future, they may also be found in fermented vegetables and meats. Prebiotics are non-digestible food ingredients that stimulate the growth and/or activity of beneficial bacteria in the digestive system. Evidence shows a strong association between consumption of probiotics and health benefits on irritable bowel syndrome, diarrhea, certain intestinal infections, bladder cancer recurrences and other gastrointestinal problems. Probiotics and prebiotics and their health benefits are becoming more widely recognized throughout modern society and are becoming increasingly popular. The details of supplementation with probiotics and prebiotics and their health benefits will be presented in my poster.

Presentation Type and Session: Poster III

Put Your Butt Out

Adam Wenig, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Smoking is the leading cause of preventable death and disease in the United States, where 1 in 5 Americans die from a tobacco-related disease. It has been estimated that 46 million U.S. adults currently smoke cigarettes and almost half of them have no plans to quit. Many of these smokers are uneducated and are of low socioeconomic status. With the rising cost of health care, steps must be taken to reduce mortality and increase smoking cessation attempts. Individual states such as New York and Massachusetts have implemented laws that prevent smoking in public places such as bars and restaurants, but what limit of government involvement is acceptable to prevent smoking and increase cessation attempts in the United States? Individuals in lower economic situations are also linked with lower education levels and may not have the tools necessary to attempt smoking cessation. Research has indicated that items such as nicotine patches are harder to find in low economic neighborhoods and are more expensive than if they were found in wealthier neighborhoods. This problem is one that needs to be addressed to increase smoking cessation attempts by increasing free nicotine replacement therapy and smoking education. With these additions, individuals looking for an escape from smoking can finally kick the habit.

Presentation Type and Session: Poster II

Recent Discoveries In Omega-3 Fatty Acids: Health Benefits Of EPA and DHA

Racquel Praino, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Over the past three decades, there have been tremendous progresses in research on omega-3 fatty acids and new discoveries of health benefits of omega-3 polyunsaturated fatty acids. Evidence shows both eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), are highly polyunsaturated omega-3 fatty acids, have remarkable biological roles in the body. EPA is converted to prostaglandins that exert diverse effects including reduction of blood pressure, inflammation, platelet aggregation and muscle contraction, whereas DHA plays roles to enhance brain functions, vision acuity, sperm agility and reservoir for EPA playing structural role in hippocampus, retina cells and sperm. According to the Journal of the American College of Cardiology, there is a distinct correlation between increased consumption of EPA and DHA and the prevention of cardiovascular disease, inflammatory conditions and an overall benefit to heart health. Many studies reported in the peer-reviewed national and international journals have underscored the beneficial impact of consumption of omega-3 fatty acids both from fish and fish oils. The purpose of the present presentation is to examine key research findings on omega-3 fatty acids and shed lights on the possible mechanisms.

Presentation Type and Session: Poster III

Recently Found Biological Effects Of Vitamin D

Jenna Rath and **Kassi Patrei**, NFS 330: Seminar on Complementary and Alternative Nutrition
Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Sources of vitamin D are limited to certain foods and exposure to the sunshine. Some good food sources include oily fish such as salmon, tuna, sardines, etc., Vitamin D deficiency is extremely common in the United States especially for those in the northern half above 41° altitude due to lack of sunshine seasonally. The biological importance of vitamin D goes beyond its essential role in bone health. The brain, heart, muscles, and the immune system

all have receptors for vitamin D implicating that this nutrient is needed at certain levels in order for them to function properly. A deficiency in vitamin D can lead to an increased risk of colon cancer, breast cancer, high blood pressure, osteoarthritis, cardiovascular disease, and a variety of autoimmune disorders such as type 1 diabetes and multiple sclerosis. Our research shows that a lack of Vitamin D can cause reduced aktomyosin content of myofibrils, low calcium content of mitochondria, reduced calcium uptake into the sarcoplasmic reticulum, and low serum levels of muscle enzymes, which reduces muscle function. Since vitamin D is a key regulator of cellular metabolic pathways it plays a role in preventing cancer. Vitamin D can also prevent pancreatic beta-cell destruction, reducing incidences of diabetes. Hypertension is a risk factor for cardiovascular disease. Our research showed that vitamin D can significantly reduce systolic blood pressure by -6.18mm Hg. Through review of the literature we examined the recently found important biological roles of vitamin D besides bone health. The mechanisms of vitamin D's roles in biological functions are discussed in this presentation.

Presentation Type and Session: Poster III

Stop the H8

Amanda Fiorentino, HEW 411W: Critical Issues in Health and Wellness

Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

With recent suicides attributed to bullying identified among the adolescent lesbian, gay, bisexual, and transgender (LGBT) population, it is important to recognize determinants of the situation. First, how can school faculty and staff be better prepared to deal with the effects of adolescent LGBT bullying? Second, what are schools doing to prevent the bullying of LGBT adolescents? The suicide rate of adolescents has climbed from 6.3% in 2009 to 7.8% in 2011, with a substantial increase due to bulling because of sexual orientation. Research indicates that a need exists for additional support from faculty and staff of schools for the victims of bullying. Along with such support, anti-bullying training should be implemented for the students to learn about the harmful effects of bullying as well as measures they can take if they are bullied themselves. To reduce the incidence of LGBT adolescents being bullied each year, research also recommends that more information is presented in school settings regarding sexual orientation to broaden the students' views regarding homosexuality. Bullying is a serious problem that continues to occur; implementing faculty and staff support coupled with anti-bullying training, lower percentages could be realized.

Presentation Type and Session: Poster I

Sun Of a Beach

Elizabeth Sands, HEW 411W: Critical Issues in Health and Wellness

Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

What we thought was a relaxing and comfortable way to get the "healthy tan" we want, actually puts one at higher risk for developing skin cancer. Melanoma is the most common form of cancer with more than 6,000 new cases and 800 deaths reported during 2008, in the state of California alone. Melanoma, most often occurring among the young female Caucasian population is the deadliest form of skin cancer, and is often associated with lifetime exposure to ultraviolet rays. One of the least supported risk factors of melanoma is the role of sun burning, of which most people are not aware. The California Cancer Registry stated that melanoma was the 5th most common cancer among young women during 2005-2009; approximately 13,000 women were diagnosed during that period. There are many preventative programs for melanoma but incidence and mortality rates still increase. What might be the problem? An incorrect diagnosis can lead to untreated cancer. Young Caucasian females should always check their bodies for suspicious moles that change color, shape or size, and receive 6-month routine checkups, as melanoma is often overlooked as a deadly disease. With many women using tanning beds or sun bathing, it appears as if they do not take the ramifications seriously. Many women are more concerned with their looks rather than the damaging exposure done to their bodies during the tanning process.

Presentation Type and Session: Poster II

Tackling Tendinitis Through the TSM

Kaitlin Reynolds, Music Education

Faculty Mentor: Professor Jo Yudess, Center for Studies in Creativity

Seventy percent of musicians face injury as a result of performing. We focus on having the right mouthpiece, perfect reeds, swabbing, and polishing, but we frequently neglect the most important instrument involved–our own bodies. I am guilty of this myself; I began having issues with tendinitis when I was a junior in high school and it has recently gotten to the point where I have had to stop playing my main instrument–flute. I am past being able to benefit from conservative treatments and am scheduled for a surgery, but I want to avoid recurrence and to raise awareness so that other musicians might not have to go down the same road. I plan on applying the Thinking Skills Model of Creative Problem Solving to guide me in my research and assembly of my presentation. My poster/slide show will also demonstrate my own personal findings as to how effective/practical I find each of the preventative measures that the research points me towards.

Presentation Type: Poster II

Traditional Chinese Medicine

Robin Kieffer and **Sonia Mancuso**, NFS 330: Seminar on Complementary and Alternative Nutrition

Faculty Mentor: Professor Suk Oh, Dietetics and Nutrition

Traditional Chinese Medicine Traditional Chinese Medicine (TCM) is rooted in the ancient philosophy of Taoism and still practiced side by side with Western medicine in China. TCM is based on the belief that normal health is maintained by the balance of yin and yang forces that sustain life and all matters including the

universe, and that disease and health problems are caused by an imbalance of yin –yang forces. TCM practices include herbs, diet, meditation, massage, qi-gong and acupuncture to treat a wide range of disease conditions. The latter was derived from the concept that normal health is maintained by smooth flow of qi, a vital energy that keeps normal functions of the body, but any blockage of qi in the body causes illness. Acupuncture opens the blockage of qi and restores health. Four different methods are used to diagnosis the health concern/disease. They are observing, hearing/smelling, asking/interviewing, and touching/palpating. Once the disease is determined, a treatment is tailored for individuals to meet the patients' needs. Although TCM is used by the American public in combination with conventional primary medicine or as an alternative medicine for certain disorders such as pains, scientific evidence of its effectiveness is, for the most part, limited. We therefore examined the prevalence of TCM practice and the evidence for effectiveness and safety of TCM.

Presentation Type and Session: Poster III

A Trip They Will Never Forget

Shelby Harris, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

The quality of life of adults aged 65 and older is at risk due to falling. The goal of Healthy People 2020 is to reduce the rate of emergency room department visits due to falls of older adults. Falls among older adults continue to rise which increases their fear of falling. Men and women have different outcomes from falls due to osteoporosis, medication side effects, and other risk factors. Based on research completed by the Centers for Disease Control and Prevention, women fall 17% more the time as compared to men. According to the Healthy People 2020 objective baseline, there were 5,235 emergency department visits per 100,000 patients due to falls among older adults in 2007. How does the fear of falling increase one's risk of falling? When older adults develop a fear of falling they eliminate physical activity and begin to live sedentary lives, which will not help improve their balance or the strength needed in order to not fall again. Older adults require encouragement to remain active and continue with regular daily activities. Once an older adult falls recovery is difficult; the key is to incorporate preventive methods prior to the fall occurring or before numerous falls take place.

Presentation Type and Session: Poster I

We Regret To Inform You

Danny Lewis, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

The number of health disparities among ethnic groups continues to grow, however, health disparities among communities of color seriously affect the incidence of HIV. In these communities of color adolescents aged 10-19 years comprised mainly of African American, Native American, and Hispanic youth are usually living in poverty and experience more severe health outcomes in a variety of areas, including HIV. Adolescents face barriers for receiving adequate health care such as being uninsured or underinsured as well as a lack of comprehensive and culturally competent sexual and reproductive health care. According to Healthy People 2020, one of the leading causes of illness among adolescents is HIV. Health outcomes for this priority population are prevalent because of risky behaviors and social environment. The behavior of this priority population is largely influenced at all social levels by peers, family, school, and community. By the age of 17 more than half of all teens have had a sexual experience. Most teens believe that their friends are sexually active and due to peer pressure they eventually become sexually active as well. During 2009, adolescents aged 10 - 19 years totaled 15% of the population in the United States; throughout this stage behavioral patterns developed help determine their health status and risk factors for contracting diseases such as HIV. Although HIV continues to grow in communities of color the spread of HIV can be prevented in adolescents with the proper guidance and adherence to treatment.

Presentation Type and Session: Poster I

We're Not Vampires: But Your Blood Is Needed

Shari Lynn Ingle, Journalism and Public Communication
Faculty Mentor: Professor Jo Yudess, Center for Studies in Creativity

Working with The American Red Cross has allowed me to really be associated with the blood donating process. The research activity that I wish to conduct is based around the questions of why people donate blood and why people do not donate blood. By collecting data from college students at SUNY Buffalo State I can compare the results to the national average of how much blood is actually needed. This research will help with the recruitment process of donors and finding out key reasons why people do not donate to help increase the numbers of blood donors especially across campus. I will be conducting this research by tabling in the Campbell Student Union asking students to write why they donate blood or why they do not donate blood on sticky notes and pasting them on two separate boards. I will be tabling every Tuesday and Thursday during Bengal Pause until April 22, 2013. I will have taken results and processed information by April 26, 2013.

Presentation Type: Oral – Sciences, Mathematics, and Health

Your Life Going Up In Smoke

Heather Becker, HEW 411W: Critical Issues in Health and Wellness
Faculty Mentor: Professor Barbara Olivieri, Health and Wellness

Cigarette smoking is the most preventable cause of death and disease in the United States. In 2003, New York State passed an anti-smoking law that bans smoking in nearly every restaurant, bar, and workplace. Watching television during the past few years, one has witnessed an increasing number of anti-smoking advertisements during prime time viewing hours. The ban on smoking along

with the increasing number of advertisements is aimed towards a healthier environment, focusing on the younger, more vulnerable population as potential long-standing customers. The objectives of Healthy People 2020 target key areas for effective advertisements to reduce tobacco use among young adults as well as promote the use of smoking cessation services and treatments. Some suggestions for decreasing cigarette smoking in the young adult population is to increase the price of cigarettes or tobacco products, limit the access to these products for young adult individuals, reduce promotion advertisements, and encourage and help cigarette users to quit. These recommendations can help reduce the number of cigarette smokers and decrease the prevalence of death and disease in New York State, as well as the United States.

Presentation Type and Session: Poster IV

Humanities

America's Obsession With Baseball

Nicholas Lange, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

I will be using Ken Burns' documentary "The Tenth Inning," (2010) as a jumping-off point for a research project focused on the idea of American obsession with the sport of baseball. I will be studying the social effects baseball has on the citizens of the United States, where it is considered the great national pastime. I present theories explaining how and why baseball acts as an important coping mechanism for people affected by hardships. In particular, I will examine the baseball strike of 1994, which acted as a tipping point in the history of baseball. The results of this strike were a new way of thinking about the monetary structures of the game as well as the actual structure of the season, the leagues and the players. The fans' reaction to the strike, which was not especially sympathetic to the players' position, is in direct contrast to their hero-worship of many players. Less than a decade later, baseball helped New York City and Americans handle the aftermath of the September 11th attacks on New York and Washington.

Presentation Type and Session: Poster I

Analyzing "When We Were Kings"

William Whalen, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

My research paper is a stylistic analysis of the documentary film "When We Were Kings: The Untold Story of the Rumble in the Jungle," released in 1996, directed by Leon Gast. This film is a biographical look the heavyweight championship boxing match between Muhammad Ali and George Foreman in 1974, which took place in Zaire, Africa. I will discuss the film's style, production methods and structure. I will be looking at elements such as the "voice" of the documentary, as posited by documentary theorist Bill Nichols. Each documentary presents a point of view coming from the filmmaker, and utilizes a variety of tactics to speak to the audience. I will look at the film's voice in relationship to other documentaries, and the impact of using techniques such as voiceover and archival footage. "When We Were Kings" covers a major event in boxing history and I will also explore how the filmmaker's technique affects the story of the film, which involves racism, nationalism and super-stardom.

Presentation Type and Session: Poster I

Are Reality Shows Racist?

Tajh Lewis, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

This paper focuses on how popular reality television depicts certain demographics and communities of people as well as its psychological and social effects on society. My research examines how the negative portrayal of groups of people as ignorant and trashy influences societal perceptions of these groups. Particularly, my research argues that reality TV depicts minorities, especially African-Americans and Hispanics, in a negative and derogatory light. It asks if this is simply entertainment or does this type of television reinforce certain stereotypes in our society. This paper discusses and analyzes these topics while shedding light on the reality of the way reality shows work.

Presentation Type and Session: Oral – Humanities I

"Fightville" and Return Of the Gladiator: A Look At Violence In Sports and Its impact On Culture

Mike Watts, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This study is a look at violence in sports and culture through the world of MMA, Mixed Martial Arts, the full contact sport where fighters use different styles of martial arts to try to knock out opponents or make them submit. The project focuses on the film "Fightville" (2012) by Petra Epperlein and Michael Tucker, which depicts the rise of two young fighters and the struggle they face in a world where you can count on only yourself to win. It also shows the promotion and appeal of violence to the younger generation who are desensitized to violence through media exposure. The articles used in my research show how culture affects what is popular and how MMA displays values reflected by society. Recently, the identity of MMA has changed from an unadorned street fight to become a spectacle for all ages. The film helps to show the reason why violence in MMA is seen as more than just a brawl. Research reveals how MMA is becoming a major part of life for the next generation of audiences and is connected to the glorification of the brutality in sports. The project demonstrates the desire for more violence and how we should embrace this sport as an outlet for it.

Presentation Type and Session: Poster II

Here Today, Gone Tomorrow

Travis Riggins, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This research project will consider the financial success of professional athletes and how that success may lead to inappropriate spending. My focus for this research will come from The ESPN "30 for 30" documentary "Broke," directed by Billy Corben and Alfred Spellman in 2012, which explores the commodification of professional sports in America. Many professional athletes are given lucrative contracts for their services when they enter the professional sports profession, but are unprepared for sudden financial success. They have inadequate backgrounds in budgeting, investing and business and frequently select poor or risky investments, gamble, or simply just blow their money in a short time. The project examines

the choices athletes make as well as how these athletes are now coping with the reality of mounting debt or financial ruin. It will also look at the overall culture of money in sports. High paychecks lure many young people to the profession, but the proposed rewards benefit only a few over time. This trend both affects athletes and reflects class and educational gaps in our society.

Presentation Type and Session: Poster II

A "Recipe" For Disaster Or Success: Social Media and the Hospitality Industry

Kevin Robida, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

The purpose of this research is to examine the connection between social media and the hospitality industry, documenting how different types of social media impact marketing efficacy and destination perception by either aiding or undermining the marketing of specific destinations. My methodology involves both an academic literature search a survey of social media sites and a survey of industry publications. Specifically, I focus on the effects of websites that allow consumers to write testimonials on different businesses or destinations. Since the emergence of social media in our culture, marketers must now be cognizant of the increased power of both satisfied and unsatisfied consumers in impacting the online perception of a business or destination. With careful planning and research, this increased power and presence can be beneficial for select businesses and destinations.

Presentation Type and Session: Oral – Humanities I

The Ballot Or the Bullet

Jasmine Holder, SPC 321: Rhetorical Criticism
Faculty Mentor: Professor Ann Liao, Communication

This project is to conduct a rhetorical analysis on Malcolm X's 1964 speech, "The Ballot or the Bullet". Malcolm X's rhetoric strategy and courageous character help gain his audience. He uses the five basic moves of rhetoric to keep the attention of his audience. Moreover, when analyzing his arguments, I found that Malcolm X uses the logic of persuasion by utilizing emotion, association, and credibility. He must have the audience believe that he too is a victim, thus he is also being audience dependent. As he speaks to the audience, you can hear the emotion in his voice. He is stern with his words and delivers powerful messages when communicating with his listeners. He associates and credits himself with the audience, while he unburdens, distracts, enlarges, elongates, names, empowers and adapts. Malcolm X is a Black Activist and Freedom Fighter. He uses his experiences from the misled behavior of the white supremacists to gain the eyes and ears of his targeting audience and he succeeds.

Presentation Type and Session: Oral – Humanities III

Buffalo State Intercollegiate Ethics Bowl Team: Developing a High School Ethics Bowl

Jenna Tomasello, **Joshua DeMont**, **William Watkins**, **Troy Caruana**, **Casey Brescia**, **Cassidy Karpovage**, **Sam Wezowicz**, **Daniel Stewart**, and **Eric Szymborski**, PHI 300: Ethics Bowl National Team
Faculty Mentors: Professor Julian Cole, Philosophy and Professor Barbara Olsafsky, Philosophy

On February 28, 2013, Buffalo State competed in the 17th Annual National Intercollegiate Ethics Bowl held by the Association of Practical and Professional Ethics (APPE) as part of its 22nd Annual Meeting. This was the first time Buffalo State competed at the national level or attended the conference. Thirty-two teams from around the country, consisting of those whose performance was excellent at ten regional competitions, gathered to argue and defend their moral assessment of fifteen case studies published by the APPE. The cases addressed a wide array of ethical issues from professional and personal relationships to social and political affairs. While Buffalo State did not do well in the national tournament, we found participating in the competition to be an extremely valuable experience. The critical thinking and oral communication skills we have developed in preparation for the competition, as well as the clearer understanding we have gained about society and the problems facing it, have greatly enriched our undergraduate careers. Our experience has motivated us to consider developing a High School Ethics Bowl Program that would involve writing cases, coaching local high school teams, and coordinating a competition each year. Our mission would be to expose high school students to philosophical inquiry by examining pertinent societal issues in order to help them develop the same thinking and communication skills from which we have so greatly benefited. It is this program that we will discuss in our presentation.

Presentation Type and Session: Oral – Humanities I

The Byzantine Strategy: How a Declining Empire Took Over the Near East, 867-1025 C.E.

Jonathan Rutter, History
Faculty Mentor: Professor Martin Ederer, History and Social Studies Education

Entering the ninth century C.E., the Byzantine, or Eastern Roman, Empire was in a shambles. The previous two centuries had been a desperate struggle for survival, and the future looked as bleak as the past. But by the middle of the ninth century, the Byzantines began a slow recovery that, in the tenth century, they would exploit to become the predominant power in the Near East, dominating their neighbors politically and militarily. By what means were the Byzantines able to achieve this ascendency over the Near East? This paper will attempt to answer this question, arguing that a deliberate, complex, and multifaceted strategy was used by the Byzantines

to deal with the diverse hurdles they overcame in becoming the dominant power in the region. In making this argument, this paper will examine sources contemporary with the period. A number of narrative sources dating from the tenth and eleventh centuries will be considered. Another major source, De Administrando Imperio, a set a strategic documents compiled by a Byzantine emperor, offers unique insights into the secret strategies of the highest levels of government. Also valuable are diplomatic documents from foreign countries, such as those of Liudprand of Cremona, which offer views of the empire by outsiders. Finally, a number of treatises on military strategy, along with a diversity of other shorter sources, will be explored.

Presentation Type and Session: Oral – Humanities III

Censorship By the Corporate News Media: Researching an Underreported and Ignored News Story

Andrea DiNatale, **Katie Farnham**, **Michael Canfield**, and **Conor Rohan**, COM 389: Alternative Press
Faculty Mentor: Professor Michael Niman, Communication

Our research examines the censorship by the corporate media of a news story concerning Afghani children being deliberately targeted by the U.S. Army in the War on Terror. Our exploration into the intentional targeting of children began as work to validate a news story for the California based organization, Project Censored. Project Censored works to publish important news stories that have been underreported or ignored altogether by the mainstream media. As student researchers, our job is to find and validate as credible, significant news stories that mainstream sources have omitted or disregarded. Uncovering censored news stories is important because it exposes truths that society should know about. Our research into the U.S. Army actively pursuing children as military targets is important because it fuels an important dialog questioning the morality of U.S. involvement in Afghanistan.

Presentation Type and Session: Oral – Humanities I

Chaucer's Game Of Chess

Dave Buczek, English
Faculty Mentor: Professor Angela Fulk, English

Many critics have sought to shut down the notion that in Chaucer's The Book of The Duchess, he uses symbolism to convey not only his intelligence on chess, but also to tie the game of chess with the game of life. The purpose of this paper is to prove that in The Book of The Duchess, Chaucer tries to set up the reader with an organized approach of the game of chess using characters, the setting, actions, and speech. Chaucer uses these analytical approaches to give meaning to the game of chess in a life like scenario. Chaucer's knowledge of chess and his fascinating strategies as to how he placed all of his characters allow readers to imagine the wonderful aesthetic beauty of chess and life together. Margaret Connelly published a journal that explains that Chaucer only had knowledge of chess through Roman de la Rose written by, Jean de Meun in 1237. Chaucer's description of the setting and the actions that are taking place by the characters not only discredit the notion that Chaucer was not knowledgeable of chess, but rather proves that he had a great understanding of chess. The understanding of chess along with the great knowledge of life that Chaucer has, allows him to play with the words and poem aesthetically and cleverly all while maintaining the sequence of the plot. He is able to convey the game of chess throughout The Book of The Duchess and allows the reader to think outside of the box. Chaucer uses the movement of the characters to convey the movement of chess pieces. The dialog between the characters connects the ideologies between both Fortune and Death as they play their game of chess in life. Fortune and Death in the story both joust for the upper hand, but when it comes down to it they are both one in the same. It is through the life game of chess that Chaucer tries to show the differences and similarities between these two major roles in life. Chaucer not only challenges Death and Fortune in the game of chess, but also shows the reader that they are not in control of their lives.

Presentation Type and Session: Oral – Humanities III

Children With Psychiatric Disorders: A Rhetorical Analysis Of DSM-IV Diagnostic Criteria For ADHD

Amanda Pratt, ENG 410: Composition and Rhetorical Theory
Faculty Mentor: Professor Ralph Wahlstrom, English

From 2000 to 2002, the number of prescriptions written to treat Attention-Deficit Hyperactivity Disorder (ADHD) increased 46%. In this analysis, I will use fantasy-theme and cluster rhetorical criticism to expose terministic screens in the rhetorical language of DSM IV diagnosis criteria for ADHD. By uncovering the specific avenues by which diagnostic criteria rhetoric affects the proper diagnosing of children with psychiatric disorders, I will determine possible causes behind the shift in the way our society views children. I will then be able to make a judgment on whether or not the motives behind diagnosing ADHD are in children's best interest. The ultimate goal of an analysis such as this is to affect positive change via awareness. At the very least, it should cultivate a greater understanding of the dangers inherent in administering psychiatric drugs based strictly on rhetorical language, for children especially.

Presentation Type and Session: Poster VI

Consumer Culture Vs. Catholicism: How a Media Driven Culture Is Affecting Religion Globally

Kelsey Tender, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

My research examines the role that our emerging homogenized media culture plays in the transformation taking place in the Catholic Church. In particular, I examine the affect on heavy media users whose lives revolve around consumption and consumer

culture. Through an in-depth literature search, I document the changes religion, specifically the Catholic Church, has undergone to keep in tune with today's media and consumption-obsessed culture. In particular, my research examines the effects culture has on values, morals, and relationships within the church as the Catholic Church evolves to accommodate a consumer society. I question whether these changes are good, bad, or neutral.

Presentation Type and Session: Oral – Humanities I

Consuming Cars, Consuming Lovers: The Social Consequence Of Consumer Culture

Steven Wagner, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

Automobiles are central to our cultural geography. We not only use them as transportation appliances - we romanticize them. Developing nations around the world are following our model and changing their landscape to accommodate cars over pedestrians and other types of transportation. In developed consumer economies, having a nice car is extremely important for both social status and the development of self-confidence. Having the nicest car, I argue, makes us overconfident – and self-absorbed. The paper shows how driving an expensive car supports a false sense of worthiness in us. It also explores the link between automobile marketing and the objectification of women.

Presentation Type and Session: Oral – Humanities I

Damsel In Distress: An Academic Detective Story

Todd Geise and **Ashley Wodzinski**, FRE 594: French North America
Faculty Mentor: Professor Deborah Hovland, Modern and Classical Languages

The truth behind a sixteenth century damsel abandoned on an archipelago in 1542, known as the Isle of Demons, served as the leading question of research for FRE 594: French North America. At the center of the research, two accounts of the legend offering differing backstories and ultimately differing rescue accounts were analyzed. A comprehensive comparison too place between the accounts of Marguerite de Navarre and Andre Thevet's written legends, both in old French. Modern literature yielded only romanticized versions of the tales with no concrete proof that Marguerite de la Rocque was in fact aboard the ships destined to colonize what we now know as Canada. Further, no evidence was found that she was either an adoring and religious wife who followed her husband ashore, nor the mistress of another passenger punished for her tawdry affair. The results yielded information concerning the actual exploration in question by Jacques Cartier and Jean Francois de la Rocque de Roberval. The investigation additionally yielded some level of plausibility, but no data was found that could substantiate the existence of the damsel in question. While inconclusive, and requiring more in-depth archive analysis in Paris or Newfoundland, this investigation that involved five hundred year old manuscripts and old French proved to be the initial clues for the graduate detectives, and a key learning example for discussion.

Presentation Type and Session: Oral – Humanities III

Digging Through the MUD: A Look Inside the Virtual World

Tyeisha Prior, COM 450: Communication and Society
Faculty Mentor: Professor Michael Niman, Communication

My research examines Multiple User Domains (MUDS). These are online multi-player virtual worlds, incorporating elements such as online chatting, Role Playing Games (RPGs), chat rooms and interactive games. Focusing solely on browser-based MUDS, my research examines how browser-based MUDS entice and lure people in, to the point where some players become obsesses with and addicted to the idea of escaping their real world lives and taking on new identities in a virtual world. This research paper also touches on the social ties between players, how browser based MUDS function, and the stigmas and the judgments people apply to participants. My methodology includes participatory observation as well as an analysis and contextualization of MUDS.

Presentation Type and Session: Oral – Humanities I

Disembodied Presences: Reflection On Narrative Voice In Virginia Woolf

Tamara Burross, English
Faculty Mentor: Professor David Ben-Merre, English

Virginia Woolf's short story "The Lady in the Looking-Glass: A Reflection" is ostensibly an exploration of the character Isabella Tyson, as compiled by the narrator through the impressions gleaned from inside Isabella's home and the reflections observed in a looking-glass. There are two sources of reflection in this story: the physical mirror in the hall and the observations and imaginings of the unidentified narrator on the sofa. However, the story fails to examine the narrator's lone presence on Isabella's sofa and offers no identification of the person who watches rather than accompanies Isabella. Where some critics emphasize and embrace the non-identity of Woolf's disembodied narrators in order to generate readings of Woolf's work, I will question the narrator's presence and identity, and explore the different readings of "The Lady in the Looking-Glass" that are made possible by asking such questions. I argue that considering the mysterious identity of the narrator contextualizes the meditations on Isabella Tyson and provides critical insights that inform new possible readings of this story. I will examine evidence from the text to focus on two possible identities of the narrator, and how these identities undergird two very disparate readings of this short story.

Presentation Type and Session: Oral – Humanities III

Effects Of Racism In Professional Sports

John Dorsey, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

The 2008 documentary film "Black Magic," directed by Dan Klores for an episode of the ESPN sports series "30 for 30," is about the struggles that African American basketball players and coaches at historically black colleges and universities endured during the 20th century. My research shows that racism has plagued professional and collegiate sports since they began, as exemplified by the film's depiction of the painful integration of the NBA, but more recently laws have been enacted protecting players of different races. My paper explores the struggles non-political people endured to gain the same rights in sports that others already had, and show that these struggles paralleled those of civil rights leaders during the time of segregation. Today, many professional athletes are treated with the same rights no matter what race they are, but there is evidence that racism is still present in professional sports. Although baseball players from the Negro Leagues are included in Baseball Hall of Fame, for example, basketball players from historically black colleges are still being excluded from the Basketball Hall of Fame to this day. Playing strategies, like Run and Gun, favored at historically black colleges are also widely discussed as "savage" in the basketball world. These examples tell a story of culturally embedded racism in spite of more progressive laws.

Presentation Type and Session: Poster II

Emotion In Sport

Kelly Hooven, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This research looks at emotion in sport and its effect on both the participant and viewer. I will examine James Marsh's film, "Man On Wire," (2010) which presents Philippe Petit, famous tightrope walker, as a living example of the connections between sport and emotion. The film follows Petit's infamous wire walk between the World Trade Towers in New York City more than thirty years ago. I am constructing an analysis of Petit's experiences in relationship to psychological and sociological research on emotions evoked surrounding extreme athletic undertakings. The array of emotions that Petit, as well as those assisting him experience, as seen in the documentary, will be analyzed in connection with attempts to achieve an ultimate performance. Petit's experience can be tied to previous studies on emotion in relationship to other sports such as ski jumping and soccer. Audience reception entertainment involving death defying athletic feats is also considered.

Presentation Type and Session: Poster II

Google It: The Role Of Mobile Media In a Know-Nothing Society

Brian Alexander, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

Most of us have undoubtedly found ourselves in a situation where we wanted or needed to know a piece of information, either for a class, work or curiosity. Finding this information formerly involved locating printed books or periodicals. Now, we just "Google it" from our smart phones, our tablets, or, maybe soon our glasses. Anywhere there's 4G or wifi, we are connected to most the world's collected knowledge. The downside of accessibility to this convenient treasure trove of data is that our habit of "Googling" is creating a society where repeating the first few results from a search engine is replacing thorough comprehension of material. My research explores how this global dependence on search engines and the expanding use of mobile media undermines cognitive and social development in children, and memory function in adults.

Presentation Type and Session: Oral – Humanities I

How Do I Teach Students To Pursue Excellence?

Rachael Saathoff, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Jason Grinnell, Philosophy and
Professor Andrea Guiati, Director, All College Honors Program

In Nicomachean Ethics Aristotle discusses the nature of excellence and its acquisition. He sees excellence as a tool aiding in the function and purpose of a human being. I am examining several other models of moral education from the last sixty years and comparing or contrasting them with Aristotle. I will examine each model in light of Aristotle's four causes: material, formal, efficient, and final. Specifically, I am interested in what role a teacher in a high school classroom has in implementing these various models. Not including Aristotle's model of excellence cultivation, I intend to examine to varying degrees the values clarification movement, the moral cognitive movement, and the character education movement. Specifically, I am interested in what methods (or formal cause) a teacher is asked to apply in achieving a specific end (or final cause) in his or her students. I also intend to examine the varying goals of these movements. For example, the values clarification model seeks to develop students' personal values while the character education model pushes students to cultivate more specific values such as honesty or respectfulness. Each view promotes a view of human nature and shapes a methodology for developing excellence according to that nature.

Presentation Type and Session: Poster VI

How Has Corporate Media Influenced the Perception Of African American Men?

Jeneva Hall, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

Mass Media has the ability to manufacture and transmit perceptions and stereotypes. My research examines the history of male representation in the media looking specifically at how corporate media portrays African American men. I argue that often these representations have negative connotations that influence how African American males see themselves. Using films, peer reviewed

journals and novels, I will explore the impact of these representations in contemporary society.

Presentation Type and Session: Oral – Humanities I

I Think Sense Datum; Therefore, Sense Datum I Am

Joshua DeMont, Philosophy
Faculty Mentor: Professor Julian Cole, Philosophy

I will present my argument for a modified account of Sense Datum Theories of perception. Many arguments against Sense Datum Theories of Perception (SDTP) presuppose a distinction between objects in the world and objects in our mind. When we see objects like a flame or an apple, sense datum theories suggest that we have an object of direct perception in our mind. But what would it mean to have an object in our mind? Consider a flame; we think it less like 'an object' and more like 'energy'. We consider an apple less like energy and more like an object; but these are almost non-distinct. There are indeed different physical 'things' in the world. They are comprised of atoms arranged in different ways, and their arrangements dictate how we can perceive them; the different arrangements are 'doing' different things with energy. What we have in our minds then is not merely a direct perception of an apple or an flame; it is apple energy or flame energy that we perceive and have in our minds. Realist arguments that the conditions for sense data are not fulfilled may be incorrect. The presupposition that there is a distinction between the objects we perceive in the world and the objects in our minds is false. What we directly perceive has never been 'objects', only the energy from those spatio-temporal locations where we think objects exist. Therefore Sense Data can exist in the mind since it is the same thing that exists in the world.

Presentation Type and Session: Oral – Humanities III

In A League Of Their Own: The Impact Of Increased Money In Modern Sports

Max Borsuk, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Joe Marren, Communication and Professor Andrea Guiati, Director, All College Honors Program

My research examines how an increased amount of money available to athletes, owners and coaches has affected modern sports both economically and socially over time. With players and coaches making more money than ever before and team sales at an all-time high, money is looked at in a whole new way in recent years. For example, the sale of the Los Angeles Dodgers has gone up from $430 million in 2004 all the way to $2 billion in 2012. I will look at how increased money has affected how owners spend and manage their money. Players also are experiencing major changes when it comes to their money. With huge endorsement deals higher than ever and just as high team contracts, these players have access to more money and belongings than ever before. I will also examine how the increased availability of money to players and even coaches has led to the spread of social issues such as egotism and greed and how it is being perceived among their fans. For example, in a poll held by ESPN SportsZone, 83% of Americans believe that athletes are committing more crimes compared to 25 years ago.

Presentation Type and Sessionn: Poster VIII

It's OK To Be Gay: The LGBTQ Community In Young Adult Literature

Taylor Watson, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Adrienne Costello, English and Professor Andrea Guiati, Director, All College Honors Program

The media we consume as a culture shapes the way we define ourselves as a society. Literature, for example, can give a voice to those who are underrepresented in society. For young adults, literature can shape their definition of themselves and how they view the world. The emergence of lesbian, gay, bisexual, transgender, and queer (LGBTQ) characters in young adult literature has given a new voice to teens figuring out their sexuality. But what is the literature saying and how can that voice affect the identity of both straight and LGBTQ teens alike? By compiling numerous young adult novels that reflect the LGBTQ community as well as scholarly articles, this presentation plans to uncover common themes in LGBTQ literature and its evolution through time, from painting LGBTQ characters as "tragic" to embracing them as fully dimensional and unique characters. This includes not only the main character, but also the community as a whole including parents, friends, and role models.

Presentation Type and Session: Oral – Humanities I

Kavita Krishnan On the Rape Culture In India

China Stephens, SPC 321: Rhetorical Criticism
Faculty Mentor: Professor Ann Liao, Communication

On December 19, 2012 a woman was attacked with rods and raped repeatedly on a public bus in New Delhi, India. Her injuries were so severe that she suffered from a heart attack and died in a hospital on December 28th. This horrific event sparked worldwide riots and exposed the rape culture that continues to persist in India. Many women in India are not only at risk of being raped but are also stigmatized and ignored by the government and their society. Most women are "punished" for even reporting assaults that imply a government and society that condones and perpetuates the rape culture. This story is just one of many that occurs not only in India but all over the world. This paper focuses on how Kavita Krishnan, an advocate for women's rights and for the fight to end the rape culture, finds and prosecutes offenders and protects all women. I will examine the rhetoric of her speech, highlighting the effectiveness of its delivery, the rhetor herself, her intended audience as well as the mediums that served as platforms for her speech. I intend to demonstrate my evaluation of rhetorical situations and style, with Krishnan's speech as an example, and to provoke discussion of rape culture and its implications on societies all over the world.

Presentation Type and Session: Oral – Humanities III

Ken Burns: Baseball: The Tenth Inning

Taylor Gesel, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

Ken Burns' 2010 documentary, "Baseball: The Tenth Inning" focuses much effort on telling the stories of major league players that were at the top of their game. After Burn's original nine-part television documentary "Baseball" debuted during the 1994 Major League Baseball (MLB) strike, the attention given to the sport has been on statistics and the incredible breaking of records. Most notable was the race between Sammy Sosa and Mark McGwire to break Roger Maris' regular season home run record, and Barry Bonds' efforts to chase Henry Aaron's all-time home run record. The great accomplishments of these men have been overshadowed by illegal steroid use. My research considers the phenomenon of drug use as part of professional sports, and its effect on the notion of the athlete-hero in our society. The project also surveys opinion throughout professional baseball on the legitimacy with which these records are viewed. A comparison is drawn between high profile record-breakers and the accomplishments of players who have avoided steroids and still succeeded in the sport.

Presentation Type and Session: Poster III

Lambs To the Slaughter: The Psychology Of Sports Fans

John Szablewski, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

Spectator sports are a billion dollar industry annually, drawing in fans from all over the world who are simultaneously stimulated by witnessing and becoming part of a spectacle. Fans often develop subcultures around their favorite teams. This research project examines the 2006 documentary film, "Once in a Lifetime: The Extraordinary Story of the New York Cosmos," directed by Paul Crowder. An analysis of the film will focus on the theme of fandom and the manipulators of the sport fan psyche. In particular, the tycoon who introduced Soccer in the United States brought a sport that the American public didn't even care about until a creative marketing strategy was delivered to them. Superstar athletes, like Pele, who was introduced in the 1970s, become gods in the eyes of the public. I will also consider the lengths to which the sport fan will go to root for their favorite team. The development of the rituals that fans perform before games, and how commercialism feeds into this need to be trendy will also be discussed. The American Public will do anything to be caught up by the latest trends, and is easily manipulated into becoming fans of just about anything. Sports are no exception.

Presentation Type and Session: Poster III

LGBT In Sports: Where We've Been and Where We're Going

Mackintosh Barker, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

The pressure that a professional athlete endures is tremendous, both on and off the field. For a closeted lesbian, gay, bisexual, or transgendered athlete, that pressure may be magnified to an incredible degree. No athlete in a "big four" sport (football, baseball, basketball, hockey) in the United States has ever come out while they were an active player, however quite a few have come out after retirement. This is likely because sports are often viewed as hyper-masculine, with perceived notions of homophobia and intolerance. A few organizations exist to combat these notions. One example is the You Can Play Project, which aims to "challenge the culture of locker rooms and spectator areas" by educating athletes and fans about "casual homophobia." It has the support of over 50 NHL players, as well as college, semi-pro, and other professional league athletes. In this audio documentary project, which will be a five-minute podcast, I will interview the founder of You Can Play, Patrick Burke or another key representative of that organization. In addition, I will include an interview with a transgendered hockey player about her personal story. The project will establish the potential of sports to become a harbor of homophobia, and deconstruct the attitudes that shape these views. In addition, I will look at changes the sports industry is making and the ground still left to cover. I will accomplish this through the use of a variety of primary and secondary sources, as well as firsthand accounts, which will provide an in-depth look at the cultural significance of LGBT athletes and the fans who support them.

Presentation Type and Session: Oral – Humanities I

Masculinity Portrayed In Sports Documentaries

Kaitlyn Wardour, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

The documentary film is a film that highlights an aspect of reality. Sports documentaries tell stories of sports played, teams going after goals and athletes competing and immersed in the sport. Masculinity can be exaggerated or exploited by the directors of sports documentary films to help portray the characters and tell a compelling story. Based upon the choices a director makes, characters can be shown in a hyper-masculine light. These choices can range from camera placement to lighting or in editing selections. Three sports documentaries that present masculinity in contrasting ways are: "Hoop Dreams" (Steve James, 1994), "Murderball" (Henry Alex Rubin, Dana Adam Shapiro, 2005), and "Dogtown and Z-boys" (Stacy Peralta, 2001). The films cover sports ranging from basketball to wheelchair rugby and skateboarding. Analyzing the films and looking at how the characters and sport are portrayed in a masculine light will reveal different emotions and

connections with the audience. The analysis will examine how the films show masculinity, and how that portrayal affects the message to the audience.

Presentation Type and Session: Poster II

Media Globalization and Consumer Cultures: The Hegemonic Spread Of Consumer Culture and the Consumption Of Cultures

Kiasia Truluck, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

My paper focuses on conspicuous consumption in consumer cultures in both developed and developing countries. Entertainment media such as movies and television shows, and advertising, both glorify conspicuous consumption in media-saturated societies. As Third-World nations develop their economies, their citizens consume more. As these economies grow, they are gaining access to consumer goods in the global marketplace. I explore this cultural and economic transition and examine the different reasons nations embark on the path to become consumer societies. My paper will also examine the idea of cultures consuming cultures through cultural hegemony. Ultimately, I argue, developing nations mimic the mediated perception of developed nations' consumer culture, while modifying or completely abandoning their own culture as the world moves toward a homogenized consumer culture.

Presentation Type and Session: Oral – Humanities I

Miss Ogynistic: Sexism In the Media and the Damaging Effects On Women and Relationships

Leah Barco, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

Raising a child in this society means bringing it up in a misogynistic culture that still teaches that girls are inferior to boys, and that they are objects for male pleasure. Countless images in the media dehumanize women and fuel self-objectification by women and objectification of women by men, in the process undermining relationships between the sexes. This constant portrayal of women as slender, submissive and overtly promiscuous, while simultaneously being virginal and demure, holds women to a distorted and destructive standard. In this cultural environment, some men hold their female partners to impractical and dangerous standards while women are in constant competition to be the best product on the shelf. My research is inspired by the classic pioneering media deconstruction work of Jean Kilbourne. This paper explores the media and how it thrives on sexism, insecurity, and the objectification of women. My research documents how the media sells insecurity to women and then sells them products to overcome this insecurity and conform to a mediated definition of femininity . It also examines how men's expectations in relationships conform to this facilitated notion of a woman, and shows how the U.S media industry exports this image of womanhood globally and how it has shifted many cultures' view of femininity and damaged intimate relationships.

Presentation Type and Session: Oral – Humanities III

More Than a Game: A Look At the Unpleasant Side Of Sports

Anthony Constantino, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

Much of what we see and hear about sports is presented with a positive spin. Members of the media, coaches, and players never hesitate to list all of the advantages sports can bring into our lives. There is truth is many of the things they claim. Sports can build relationships, increase confidence and self-esteem, and provide excellent health benefits. However, young athletes must be aware of the dangers sport can introduce into their lives. This research project will study "More Than A Game" (Belman, 2008), a documentary that weighs both sides of the story. We get to see five friends grow up playing basketball together and develop a relationship that transcends the game. At the same time, we also see the pressures that a high school star athlete, in this case, LeBron James, can bring to a team. These pressures are not only coming from the community, but the media as well. The paper focuses on the way the professional sporting world can build celebrity out of a star athlete, and the media is always ready to label "the next big thing" to market and endorse. Sports have two distinct sides. The side we are bombarded with everyday is the positive spin and the lighter side of sports. The other side of sports is the dark and dangerous place where exploitation lies, and media bears some responsibility.

Presentation Type and Session: Poster III

The Objectification Of Women In Globalized Media

Rachel Summers, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

My research examines the objectification of women in global media and the effects this objectification has on gender relations in our global society. Media has become a central force in our culture. We cannot escape from mediated messages. Many of these messages, whether received by televised entertainment, advertisements, or music, objectify women as objects, often times as sexual objects positioned for the male gaze. Mainstream mass media has defined a very narrow "ideal" of what a woman should be, how she should look and how she should act. My research demonstrates the multitude of ways these messages shape how men perceive women, the way that women perceive themselves and the way that society perceives love and intimacy. My research paper explores this topic and discusses the effects that media globalization is having on intimate relationships within our global society.

Presentation Type and Session: Oral – Humanities III

One Day In September: The Munich Olympics Massacre Of 1972

Jasmine Willis, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This research project will examine British filmmaker Kevin MacDonald's 1999 Oscar winning documentary, "One Day In September." The documentary explores in depth the events of the tragic kidnapping and murder of 11 Israeli Athletes at the Munich Olympics in 1972 by the Palestinian group Black September. The film had a controversial reception due to the version of the incident McDonald presented and ongoing political tensions over the continuing Palestinian-Israeli conflict. My research project explores whether MacDonald did his job and met ethical standards as a documentary filmmaker. Ethics are paramount in all documentary productions, and the subject of much documentary theory, which studies the relationship between the producer, subject and audience. By including the Palestinian viewpoint in his film, MacDonald angered some of his audience, and his critique of the German government's response was also negatively received. The focus of my research will be on perceived betrayals of audiences and the documentary filmmaker's responsibility to his subject, his vision and history.

Presentation Type and Session: Poster I

One Of the Boys: An Ideological Criticism Of Masculinity In "Breaking Bad"

Cynthia Delaney, Writing
Faculty Mentor: Professor Ralph Wahlstrom, English

AMC's award-winning television show, "Breaking Bad," integrates contemporary issues of everyday life with masculinity and criminality. Throughout the show, each of the main characters has an arc of transformation that represents ideology present within American society: man as ultimate breadwinner, wife as ultimate co-pilot, drug dealer as ultimate criminal. "Breaking Bad" manages to braid each of these together with surprisingly realistic and relatable characters. In each episode I've viewed, I've found references to and symbolism of everyday gender issues from subliminal to blatantly obvious. The writer, Vince Gilligan, introduces the idea that, regardless of what occupation each of the men in the show have, power and strength prevail as the defining characteristics of masculinity. I will present an ideological criticism (as described by Sonja K. Foss's "Rhetorical Criticism: Exploration and Practice") of "Breaking Bad," deconstructing the sociocultural and gendered ideology that exists in the show and why it appeals to its wide target audience (particularly adult males). I will also examine how the show's storyline, dialogue, and characters uphold or dismiss certain gender stereotypes or facets of American culture including family life, gang mentality, and fascination with the anti-hero. I plan to integrate current scholarly articles about gender statutes and television, and will compare my findings with their claims.

Presentation Type and Session: Poster VII

Over-Worked and Under-Dressed: The Theft Of the American Childhood

Nadra Dennis, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

This paper examines how producers of American "reality" television programs exploit children. It argues that producers of these shows regularly overwork and under-dress them. In shows like Dance Moms, we see cameras follow a group of 9-12 year old girls from home to studio. We see that their school attendance is infrequent; their socialization with students at school is abnormal to nonexistent; their rehearsals go late into the night for performances where they wear revealing adult styles. A 2010 report from the American Psychological Association provides evidence linking the lifestyles depicted on examined programs in music videos and lyrics, cartoons and animation, common television shows (and other media sources) as a contributing factor in a range of health problems such as eating disorders, low self-esteem and depression, suffered by both children featured in these shows and by young fans. With television entertainment being a major American cultural export, this problem is spreading globally.

Presentation Type and Session: Oral – Humanities III

Persons, Plans, and Potential: Regionalism and Flourishing In Western New York

Sarah Caputi, Philosophy and Urban Planning
Faculty Mentor: Professor Jason Grinnell, Philosophy

Various studies show there is a great disparity between the city and its surrounding suburbs regarding education levels, employment rates, household income, and etc. A more pertinent question though, is whether urban planning can help resolve the problems that result from such disparity. Regionalism is a controversial planning approach that has been gaining popularity in the last two decades in the United States. It encourages cooperation between municipalities within a metropolitan area in order to benefit the region as a whole. The debate between regionalism and the more commonly used planning approach, localism, is reminiscent of the ancient debate between Cosmopolitanism and an Aristotelian method for cultivating flourishing in a community. Regionalism and Cosmopolitanism promote a lifestyle in which individuals consider all humans as members of a larger human community and therefore are not persuaded to act in a way simply based on culture, ethnicity, economic background or geographic location. Proponents of these views claim that the cooperation and understanding will help solve large-scale problems, promote values of justice and equality, and encourage individuals to reclaim the essential elements of their humanity. Drawing on works from Nussbaum, Gaughan, and others, this project will examine the relationship between the current regionalism movement and Stoic Cosmopolitanism in contrast with that between localism and Aristotelian community-building. The intent is to evaluate whether one method will better promote individuals' ability to flourish.

Presentation Type and Session: Poster V

Popular Mass Media Consumption and the Increase Of Anxiety and Depression In Consumer Culture

Andrea DiNatale, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

My research examines the relationship between popular mass media consumption and mental disorders such as anxiety and depression. According to NBC News, Americans consume over 1.27 trillion hours of media a year. The National Institute of Mental Health estimates 57.7 million people aged 18 and older suffer from a mental illness. Both of these numbers have increased radically over the past two generations. My preliminary research findings indicate that media consumption in a consumer culture plays a significant role in causing or exacerbating depression and anxiety. My methodology involves examining and contextualizing qualitative and quantitative research studies published in scholarly journals, books, articles, and academic online databases. Documenting this causality is significant as it sheds light upon dangerous effects of consumer culture.

Presentation Type and Session: Oral – Humanities I

Preterism: This Is Not the End

Christopher Parker, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Marianne Ferguson, Philosophy and Humanities and Professor Andrea Guiati, Director, All College Honors Program

In Christianity there exists a belief that the world will someday come to an end; otherwise known as the Apocalypse. This apocalyptic belief came about due to an interpretation from the Biblical book, Revelation. Books such as Left Behind, events such as an "end" to the Mayan calendar, and television shows such as The Walking Dead, have sensationalized this phenomenon and have led to humanity's belief that the end is near. In the Christian world the apocalypse is defined by the second coming of the physical Christ and concludes with a battle in which God puts a final end to Satan's reign on earth; creating an opportunity for Jesus to call his people home. This begs the question is this correct; does the Bible really say that the world is coming to an end? The answer is a startling no. A theological movement known as Preterism holds the belief that events described in Revelation have already come to pass. According to Preterist research, the culmination described in Revelation was fulfilled in AD 70. To fully understand this topic one must first understand how the average Christian interprets the Bible. It is a common belief that the Bible is GOD's word, not mans'. In other words, the Bible is truth without contradiction and should be treated as the Holy work of the divine. With this lens in mind, I will provide evidence to support the idea that the events written in the Book of Revelation did in fact conclude in AD 70. I will explore the apocalyptic beliefs of modern day Christianity and provide contradictory evidence for this interpretation. I will then explore the beliefs, scriptural text, historical context, and the profound symbolism Revelation allows readers to discover through the eyes of Preterism. The pinnacle of my research will exist to illustrate these unfamiliar interpretations and to provide evidence that suggests they may in fact be correct.

Presentation Type and Session: Poster VIII

Rhetorical Break-Down Of Paul Ryan's "You Did Build That" Speech

Stephen Williams, SPC 321: Rhetorical Criticism
Faculty Mentor: Professor Ann Liao, Communication

This aim of this study is to conduct a detailed rhetorical analysis of Paul Ryan's iconic "You Did Build That" speech, which he delivered after he was confirmed as a candidate for the Vice Presidency in 2012. He is touted as being part of a new generation of young conservatives in a time when the party is seeking to broaden its appeal while still holding true to its fiscal obligations. Winning and losing aside, what will be observed here is how effectively he can manage the challenge of outlining his vision for America while simultaneously portraying the current administration as an ineffective leadership. His use of inclusive language is a classic example of how the conservative movement has been trying to renew its image amidst the rise of progressive politics in America.

Presentation Type and Session: Oral – Humanities III

Safety In the NHL

Sam Mines, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

I made a 5-minute audio documentary podcast discussing safety in the game of hockey. As an ongoing project, I plan to focus on the use of equipment such as visors and Kevlar socks in the NHL which help better protect the players as the game has become faster and the players stronger. The documentary should include interviews with George Babcock or Rip Siminock, Equipment Managers for the Buffalo Sabres, who provided expert commentary and analysis on the subject from the professional hockey point of view. I also plan to interview the Buffalo State men's hockey team head coach, Nick Carriere, to learn how safety is regulated at the college level as well as Buffalo Sabres' Forward Jason Pominville, who has suffered a leg injury when he was cut by another player's skate while playing in the NHL. Several studies have been done looking at injury in active sports like hockey, resistance to the use of safety equipment, and medical outcomes for players over the course of a career. My documentary will present some of these data, along with first person interviews, to inform others about the importance of safety equipment in hockey.

Presentation Type and Session: Oral – Humanities I

Sexual Harassment and Objectivity: Why We Need Not Ask Women If They Are Victims

Jenna Tomasello, Philosophy
Faculty Mentor: Professor John Draeger, Philosophy and Humanities

This paper argues that we need not ask women if they are victims of sexual harassment. Sexual harassment is often identified as a problem only after a woman comes forward to reveal that she has been victimized. I find this conception problematic because it relies on an overly subjective interpretation of events rather than objective justification. 'Subjectivity' refers to an individual's perspective, feeling, or belief on a given matter, whereas 'objectivity' refers to the reality or truth about a given matter independent of an individual's perspective. It seems reasonable to suppose that sexual harassment can make women feel uncomfortable or threatened and thus it seems reasonable to suppose that a woman will know when she has been sexually harassed. For this reason, sexual harassment has come to be understood by many as something that can only be subjectively determined. I will argue, however, that sexual harassment can and should be objectively determined. In making my case, I will apply an objective conception of sexual harassment to the U.S. Supreme Court case Meritor Savings Bank v. Vinson by drawing on the feminist view of sexual harassment given by Anita Superson and the role of equality and autonomy as motivated by the views of Ronald Dworkin and James Griffin, respectively.

Presentation Type and Session: Oral – Humanities III

Squash: Will It Ever Make The Olympics?

Charles Rockwell, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

Squash is a popular global racquet sport played in a four-walled court with a small hollow rubber ball. It is played in over 180 countries and has been featured in multi sport events such as the Commonwealth and Asia games since 1998. In my documentary audio podcast I explore the quest to get squash added to the Olympics. For years now there has been a serious movement from inside the squash world to make this happen, however, bids for the 2012 and 2016 games have already been rejected. Some think this is unfair because of the number of countries and participants that play the sport as well as having a popular Professional tour which many other Olympic sports don't. I include recordings of people playing squash and an interview with squash-professional John Rooney at the Buffalo Tennis & Squash club who is a former top 50 player in the world. I incorporate research into the criteria sports need to qualify for the Olympic Games and the process it takes to apply. The podcast is framed by a voice over with a history of the sport, statistics on global participation, and comparisons to other sports either accepted or in consideration for the Olympic Games.

Presentation Type and Session: Oral – Humanities I

Steroids In Major League Baseball and the Effect On Young Baseball Players

Chris Dierken, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This research paper will focus the issue of steroid use in Major League Baseball, as it is presented in Ken Burn's documentary, "Baseball: The Tenth Inning" (2010), which highlights stories from the previous 15 years of baseball history. Steroid use has cast a pall over the sport in recent times, which have seen the rise and fall of heroes like Barry Bonds and Mark McGuire. Ultimately, steroid use affects the way players are perceived. My analysis incorporates studies about steroids in baseball, specifically how they affect the stories of individual players. Since major league sports stars present role models for fans and young people in particular, the project also concentrates on how steroids in Major League Baseball affect steroid use among younger players of high school age or younger, and attitudes about drugs in general. An increase in steroid use among high school or younger players may be the result of steroid use among professional players.

Presentation Type and Session: Poster IV

The Ultimate Team?

Adza Beda, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

The documentary "A State of Mind," by British director Daniel Gordon (2004) covers many social and political issues along with the primary story of two girls and their struggle to perform in The prestigious National Games in North Korea. The Pyongyang Mass Games of 2003 consisted of a several-day long gymnastic performance display by North Korean youth. Thousands of school children worked over the course of year to prepare to present their group gymnastic routines to supreme Korean leader Kim Jong-il. It was considered a tremendous honor to be selected to compete for a final spot in the display, and the families of children involved gained certain privileges due to their participation. In the documentary, the two young athletes incorporated their beliefs in teamwork and Communism into their journey through a series of auditions and grueling preparations for the event. The film is a very beautifully constructed story, which unexpectedly reveals much about North Korean values and home life, also shows the practical implementation of socialism in sports. Theories that examine Communism in foreign countries are utilized in the analysis of the film, which shows both weaknesses and benefits of the North Korean belief in teamwork.

Presentation Type and Session: Poster II

Unsung Philosophers: Uncovering the Influence Of Women In Philosophy

Sarah Caputi, **Carissa Handiman**, **Rachael Saathoff**, and **Samantha Wezowicz**, PHI 495: Special Project
Faculty Mentors: Professor Kimberly Blessing, Philosophy and Humanities, Leigh Duffy, Philosophy and Humanities, and Professor Andrea Guiati, Director, All College Honors Program

While today's society champions the progress made in promoting gender equality, sadly, this progress has seemingly failed to have much effect on the discipline of philosophy. Philosophy, more so than any other humanities discipline, employs the lowest number of women in full-time positions (under 20%). Additionally, among the cannon of philosophical literature, and even in regular course reading lists, the contributions of women are rarely, if ever incorporated. As such, we decided to investigate this disparity. This project looks at the role women have played in philosophy historically from antiquity through the present. Our research revealed a vast amount of women who have been influential thinkers in their time despite underrepresentation and limited access to education. Rather than dwelling on the underrepresentation of women, our research examines the role women have played on the philosophical stage throughout history. Through an on-line blog site and weekly meetings based primarily on the four-volume set "A History of Women Philosophers", by M. E. Waithe, we discussed the evolution of women's contribution to philosophy as well as the efforts taken to attain their education and participate in the arena of their male contemporaries. As our research has uncovered, the dominant perpetuation of western male thought in philosophy seems to have an exclusionary effect on the contributions of women. It thus seems essential to incorporate the work of women philosophers into a regular syllabus; this can both increase diversity in a philosophical education, as well as provide encouragement and role-modeling for women desiring pursue a career in philosophy.

Presentation Type and Session: Oral – Humanities III

The Value Of the Game: Collegiate Athletics

Shytisha Taylor, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

This study looks at some of the issues and pressures a successful athlete may face at the collegiate level through an analysis of Jason Hehir's film, "The Fab Five." The documentary tells the story of 5 NCAA players: Chris Webber, Juwan Howard, Jalen Rose, Jimmy King and Ray Jackson. The players all attended the University of Michigan and made a name for themselves because of their great accomplishments on the basketball court, but faced much controversy during the course of their careers. Some individuals argue that if college athletes generate a certain level of revenue through sporting events, they should be considered professionals. Insight will be given into the rise and fall of the athletes, including a six year investigation which resulted in the NCAA censuring the basketball program and removing the group and all evidence of their accomplishments. My analysis will focus on the ethical question of whether athletes should accept money beyond their scholarships. These five men were exposed in the media's spotlight. Sometimes they were perceived as heroes while at other times they looked like villains.

Presentation Type and Session: Poster I

When Cultures Collide: Spanish Artists In Paris

Valerie Spaeth, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Deborah Hovland, Modern and Classical Languages and Professor Andrea Guiati, Director, All College Honors Program

In the years following World War I (1914-1917), Paris attracted hundreds of artists and intellectuals from all over the world to its ateliers, cafés, and concert halls. They were united by a common mission: the drive to reinvent their preferred art form by reframing its presentation and interpretation of the human condition … The communal aspect of art in this period is often discussed through the lens of the influence of the city upon the artists who immigrated there. However, these individuals were by no means blank cultural slates before their arrival in France's capital city -- they had their own ideas and histories to contribute to the cultural and ideological melting pot they found there. Spanish artists were certainly no exception…. When artists such as Picasso, Buñuel, and Dali came to Paris, they brought their often tortured pasts with them, and shared their experiences with the French compatriots with whom they collaborated on joint artistic ventures. The result of this bicultural artistic creation was a hybrid movement that both Spain and France are proud to claim as their own. This presentation will assess both the extent to which Spanish artists influenced Parisian artists, as well as the larger implications for Parisian culture.

Presentation Type and Session: Poster III

Women's Battle For Equality In Sport

Fran McCann, COM 389: Sports Documentary Analysis
Faculty Mentor: Professor Meg Knowles, Communication

Since the inception of the equal rights movement, women have been fighting for equality in work, at home and at play. Even today they still strive for equal rights with men. In my study, I will explore how women are trying to fight for equality in professional sports such as basketball, hockey, tennis and soccer. My paper analyzes the HBO Films 2006 documentary "Dare to Dream: The Story of the U.S. Women's Soccer Team," which chronicles the struggles of a stellar American soccer team to find corporate sponsorship and support despite numerous Olympic and World Cup championships. I will compare the experiences of the women in the film to those brought

forward in scholarly articles about women in various sports to determine the extent of the gender gap in professional sports in the United States today. I will also compare women and men working in professional sports based on salary, popularity, and other aspects of the games.

Presentation Type and Session: Poster III

Working Class Bias On Television

Meaghan Maess, COM 450: Communications and Society
Faculty Mentor: Professor Michael Niman, Communication

Characters in television shows overwhelmingly depict "white collar" professions and lifestyles. We seldom see a program where the main character is an electrician or factory worker. If these professions are depicted, the character is usually presented negatively. My paper examines how consumer culture has affected our society's attitude toward trades and manual labor jobs. It focuses on how occupations held by characters on popular television shows are depicted and how this representation compares to labor statistics. I also compare our society's attitudes with the attitudes of people in other countries who have had less media exposure and may not have the freedom to choose their occupation.

Presentation Type and Session: Oral – Humanities I

The World We Live In: The Perils Of Indifference

Shenette Richardson, SPC 321: Rhetorical Criticism
Faculty Mentor: Professor Ann Liao, Communication

The purpose of this study is to conduct rhetorical criticism on the speech "The Perils of Indifference" by Elie Wiesel. I examined the speech by using various methods of rhetorical criticism. First, I approached the speech as a speech act and conducted a situational analysis by examining the following variables: rhetor, audience, topic, persuasive field, setting, the media, and rhetorical conventions. I broke down the speech by paragraphs and provided textual evidence from the speech to support my observations. I examined the context of the speech in order to see what speech acts stood out more than others. Second, I isolated logical devices used in the speech to see how the rhetor used the logic of emotion to relate to and to persuade the audience. Third, I interpreted this speech to see if the rhetor used any type of lexicon in order to get across to his audience. I identified god terms and devil terms in the speech to see what values the rhetor appeals to. Lastly, I provided a comprehensive interpretation and evaluation on this speech.

Presentation Type and Session: Oral – Humanities III

You Say You Want a Revolution? Michel Foucault and Prison Reform In Post 1968 France

Troy Caruana, FRE 498: Joli Mai
Faculty Mentor: Professor Deborah Hovland, Modern and Classical Languages

1968 is a year marked by a whirlwind of events with the Vietnam War, Civil Rights Movement, and unrest on college campuses worldwide. Tensions were particularly high in France. A three-week wildcat strike took place, starting at the universities and eventually including factory workers' occupation of factories, and prisoners' occupation of prisons. These "forces of occupation" demanded institution-wide reform and an end to the authoritarian policies of President Charles De Gaulle. Violent clashes and riots forced the government to negotiate with the people. Many of France's intellectuals backed the students, workers, and in-mates, helping them to formulate their demands and negotiate with government representatives. Michel Foucault (1926-1984) was one of the most prominent of the intellectual spokespersons during the events that unfolded in May of 1968 and after. He worked to raise public consciousness of the authoritarian ideology and politicize France's prisons, making them a topic of social and political discourse. This paper introduces some of the social and historical conditions that contributed to the 1968 French revolt, and identifies some of the sources of Foucault's interest in prison reform, continuing on to examine the larger goals and repercussions of Foucault's involvement with the prisons.

Presentation Type and Session: Oral – Humanities III

Physical Geography, Sciences, and Mathematics

Algorithmic Results Of Intersection Graph Optimization

Alexander May, AMT 495W: Applied Mathematics Project
Faculty Mentors: Professor Valentin Brimkov, Mathematics, Professor Robin Sanders, Mathematics, and Professor Hongliang Xu, Mathematics

Graph theory is a branch of mathematics that studies graphs. Informally, graphs can be viewed as mathematical representations of relationships between objects from a specific collection. Graphs are composed by two main elements - vertices and edges, the former representing the objects of interest and the latter representing the relations between them. Intersection graphs assign vertices to a given family of sets; when two sets share common elements, their vertices become connected by an edge. Finding maximum/maximal cliques, chromatic numbers, and independence numbers is of great interest in intersection graph theory and is relevant to areas such as bioinformatics. The above-mentioned three fundamental combinatorial problems are too complex (NP-complete) to be efficiently solved on general graphs, but often become much less complex when defined on intersection graphs. Developing polynomial-time algorithms for solving optimization problems on specific classes of intersection graphs can lead to a better understanding of these graphs and their possible applications. Currently, very little literature is available that provides a computational standpoint overview of problems defined on intersection graphs. The goal of this research is to produce a survey on algorithmic results related to the computation of clique, chromatic, and independence numbers for various types of intersection graphs. It would support the advancement of the topic and its expansion to a wider audience. Some yet unstudied classes of intersection graphs will be defined and considered as well.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

A Beautiful Numbers Game: What Makes a MLS Player Most Valuable?

Samantha Strapason, AMT 495W: Applied Mathematics Project
Faculty Mentors: Professor Bruce Sun, Mathematics and Professor Hongliang Xu, Mathematics

Have you ever wondered how an athlete is ranked? Is it by their performance, their popularity, or some other factors, how is it determined? Soccer (or preferred by everyone outside of the United States, Football) is the world's most popular sport. In Europe, players are better known and receive more recognition than Americans. In America, the professional league is known as the MLS (Major League Soccer). They have recently used a system called the Castrol Index. This system tracks approximately 1,800 movements of a player during a game. The system determines whether each movement has a positive or negative impact on the team's ability to score a goal. I will be using the rankings of the Castrol Index to determine what factors positively and negatively impact a players ranking. A few variables include numbers of goals scored, nationality, and number of fouls a player committed. Finding the correlation between these and many other factors I will create a model using Multiple Linear Regression. This model will be able to determine what players are the best to have on the field when you need to score a goal. This model will also help players determine what they need to improve on for the next year to make them a more valuable player. The audience can expect to hear more about the methods and results when attending my talk.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

A Biotelemetric Study Of Habitat Use and Behavior Of Map Turtles and Spiny Softshell Turtles In the Niagara River

Brian Haas, Biology, **Jeremy Henderson**, Biology, and **Jacqueline Walters**, Biology
Faculty Mentor: Professor Ed Standora, Biology

Little is known about the northern map turtle (*Graptemys geographica*) or the eastern spiny softshell turtle (*Apalone spinifera*) in the upper Niagara River. We will be using biotelemetry to study habitat use and behavior of both species. Up to twenty individuals of each species will be collected using baited hoop and basking traps. Radio and sonic transmitters and temperature/depth data loggers will be affixed to each individual. Turtles will be tracked and coordinates recorded with GPS units, and entered into GIS software to generate home ranges. Turtle movements throughout the water column will be interpreted from collected depth data. Sonar mapping instruments will be used to precisely define underwater features. The goal is to pinpoint the location and characteristics of key habitat requirements including sites for, basking, feeding, nesting, and brumating. Our findings will be incorporated into further conservation and management efforts, with a focus on habitat enhancement and restoration.

Presentation Type and Session: Poster V

Biotite-Garnet Schist: Evidence For Residual Enrichment Of Immobile Elements In Rocks Found In Western Maine

Alexandra Fletch, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education

When rocks melt in the lower parts of the continental crust, at a critical percentage, the melt produced escapes the source rock, leaving a residual composition of the rock behind characterized by minerals stable to grow in those conditions, and with greatly altered rock chemistry relative to the original rock. The melt (as a magma)

moves upward due to buoyancy, carrying the removed chemistry with it. Rocks in western Maine have recorded this process, and rocks there are melt-depleted compositions. For my work, I studied a meter-scale block of relatively strongly residual rock characterized by a dominant biotite-garnet schist. This rock is a local variation of other such melt-depleted migmatites (partially melted rocks) where the residual enrichment is comparatively extreme. The block is within a meter-scale granitic plutonic body within less-strongly residual migmatites. In the field, it appears the block was trapped within the granite magma that could have facilitated the extreme melt loss (and residual enrichment) relative to other rocks in the exposure. I researched specimens collected from the block, and mineral components are consistent with residual enrichment (via melt-loss and subsequent crystallization). Methods of study included mineralogical analysis using the point-count method, textural analysis evidence derived from study of the preferred orientation of mineral optical properties under the petrographic microscope. My results are compared and contrasted to both the granitic body that surrounds the block, and the relatively less-residual migmatite surrounding that rock.

Presentation Type and Session: Poster VIII

Blocking Cell Communication With Innexin Mimetic Peptides

Kayla Schaeffer, Biology and **Saja Mohammed**, Biology
Faculty Mentor: Professor Martha Skerrett, Biology

Multicellular organisms rely on cell-to-cell communication through gap-junctions. Vertebrate and invertebrate gap junctions form and function by very similar mechanisms, however, the protein constituents are different. The innexin family of proteins makes up invertebrate gap junctions while the connexin family of proteins makes up gap junctions in vertebrates. Both innexins and connexins have four transmembrane domains, cytoplasmic amino and carboxy termini, and two extracellular loops. The extracellular loops are the regions we are interested in targeting because compounds do not need to cross the plasma membrane in order to bind to the loops. When gap junctions form, enabling direct cell-cell communication, the extracellular loops interact with extracellular loops of similar proteins in adjacent cells to form gap junctions. We plan to design peptides that will interact with these loops to render them nonfunctional, thus blocking communication. The problem is being addressed from two angles. A Xenopus oocyte expression system will be used to test the effects of the peptides on full-length proteins. In addition the extracellular loops are being expressed and purified for protein binding assays.

Presentation Type and Session: Poster VI

Changes In Nutrient Levels In Tonawanda Creek During the 2013 Spring Melt

Matthew Hensley and **Jennifer Pigeon**, GES 529: Environmental Field Methods and Analysis
Faculty Mentor: Professor Elisa Bergslien, Earth Sciences and Science Education

Nitrates and phosphates make up a large part of the non-point pollution from agricultural land use. These pollutants are introduced to fields during fertilization processes. During large run off events, such as spring snow-melt during the months of March and April, these pollutants can be introduced into local streams. The nutrients that enter streams can cause an algal bloom in the affected stream. An algal bloom occurs when excess nutrients in the water cause a rapid increase in algal growth exceeding the limit of other organisms in the environment to consume the algae. This results in the oxygen in the water being used up and the formation of a dead zone. During the course of our research project we will be observing nitrate and phosphate levels in the Tonawanda Creek during the course of the spring melt. We will be recording these levels as well as salinity, conductivity, and pH. We will be focusing on the stretch of the creek from Alexander, NY to Batavia, NY that is rural agricultural land. We will be able to use this data to map changes in concentration levels along the stream with regard to the spring melt. Over the course of the spring melt a rise in the nutrient levels should occur due to the agricultural fertilization that took place during the previous year.

Presentation Type and Session: Poster VIII

Cloning and Expression Of Innexin Extracellular Domains

Ashley Lapinski, BIO 450: Recombinant DNA Technology
Faculty Mentors: Professor Martha Skerrett, Biology and Professor Gregory Wadsworth, Biology

Direct cell communication through gap junctions is mediated by the innexin family of proteins in pre-chordates. A single gap junction channel is formed by the head-to-head docking of hemichannels from adjacent cells. It has been shown that each hemichannel is composed of six innexin subunits. Sequence analysis confirms that each of the six contributing subunits has four membrane-spanning domains, cytoplasmic amino- and carboxyl-termini as well as two extracellular domains (loops). These loops are believed to play key roles in the docking interactions that take place between hemichannels during the formation of intercellular channels. The extracellular loops are therefore key targets for drugs or peptides that block cell communication and cloning and expression of extracellular loop domains is expected to facilitate assays of protein and drug interactions. As part of a class project, several groups of students aimed to transfer the sequence of extracellular loop domains from c. elegans Unc9, D. melanogaster ShakBL, and D. melanogaster ShakBN+16, as well as a related vertebrate gene encoding Pannexin1, to vectors designed for protein expression and purification. Working with the first extracellular loop (EL1) of

ShakBN+16 my group performed sequence analysis to identify the target region of the gene, designed primers, successfully amplified the targeted domain and performed the cloning reactions to insert the sequence into pET100 vector for protein expression. Restriction analysis was used to confirm the orientation or the insert.

Presentation Type and Session: Poster V

Common Buckthorn (Rhamnus cathartica) Invasion Influences Soil Microbial Respiration In a Post-Industrial Woodland

Jeremy Brady, BIO 498: Honors Research
Faculty Mentor: Professor Daniel Potts, Biology

Ecosystem structure and function are shaped by plant-microbe interactions. Common in urban ecosystems of the northeastern United States, post-industrial woodlands contain novel plant communities that reflect frequent disturbance, non-native species invasions, and a complex pattern of land-use history associated with industrial activity and subsequent abandonment. Buffalo's Tifft Nature Preserve presently hosts woodlands, meadows and wetlands and was once an industrial site. Last autumn, I characterized plant communities and collected soils in adjacent patches of invasive common buckthorn (*Rhamnus cathartica*) and a diverse urban meadow. To better understand the linkage between plant community composition, soil nitrogen availability, and microbial activity, I will perform a labile carbon addition experiment in which I will measure microbial respiration responses to simulated root exudate additions that vary in their C:N ratio. Because of the relative abundance of shallow fine roots and labile organic matter in the soil of the meadow patch, I predict microbial activity in these soils will be nitrogen-limited and will respond more positively to a decline in C:N ratios of simulated root exudate additions than buckthorn soils. Documenting buckthorn-mediated shifts in soil microbial activity will improve our understanding of invasive plant ecology and carbon cycling in post-industrial ecosystems.

Presentation Type and Session: Poster V

Conservation Genetics Of New York's Giant Salamander: The Eastern Hellbender

Meghan Jensen, M.A. Biology
Faculty Mentor: Professor Amy McMillan, Biology

The hellbender, Cryptobranchus alleganiensis, is North America's only giant salamander and is endemic to the eastern United States. Like many species of amphibians worldwide, hellbender populations are declining at alarming rates. Management efforts are essential to the continued survival of the hellbender. The Buffalo Zoo is raising hellbenders collected from the wild by the New York State Department of Environmental Conservation. These animals will be released back into the wild in an attempt to increase the overall population size. In order to understand the impact these animals will have on extant populations, both the genetic structure of the wild populations and the genetic composition of the released animals must be determined. Unfortunately, little is known about the genetic diversity and structure of hellbenders in New York. Therefore, this study used nine microsatellite loci to assess the genetic relationships of over 200 hellbenders from various locations throughout the Allegheny River drainage of New York and Pennsylvania and of the captive-raised individuals from the Buffalo Zoo. Based on previous research, hellbenders from different drainages differ strongly, while those from the same drainage are genetically similar. However, we found significant genetic differences between Allegheny tributaries. These genetic differences have implications for management as releasing captive-raised animals may alter the genetic structure of subpopulations.

Presentation Type and Session: Poster VI

Continued Research Into Mineralogical and Structural Aspects Of Rocks From the Roxbury, Connecticut Area

Steven Wilson, Geology and **Amy Sondel**, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education

This project is a continuation of research efforts by previous undergraduate students affiliated with the Laboratory for Orogenic Studies, Department of Earth Sciences, that have been concerned with the tectonic history of rocks in western Connecticut area. A geological map and a suite of metamorphic rock specimens collected at 24 outcrops have been started in the sample preparation process for laboratory analysis. At this stage of the work, but a few have been progressed farther than hand-specimen examination, but ongoing work will see the investigation extended farther into the suite. For our work, we have been using this suite to examine microscopic aspects of mineral patterns. However, we have identified places on the geological map of the area where further sampling would permit completion of the microanalysis. This presentation is a document of the progress made thus far, and the dissemination of the plan to continue the work in summer 2013 when we will return to the lab to process specimens for microscopy by cutting the rocks according to mineral patterns, and making thin sections (taking the rock and polishing down to 30 microns on a glass microscope slide) that permit analysis and documentation of mineralogical data. Some rocks are presented where the microscopy is completed including the determination of the mineral composition and textures, and comparing the results to the previous mapping. We compare structural aspects (mineral patterns and textures) in order to determine how the rock is composed and was formed, and what tectonic activity the rocks have recorded. These data will permit petrogenesis (rock origins) to be determined.

Presentation Type and Session: Poster VIII

Creating An Atmosphere: The Redesign Of the GFL Rotating Tank

Kari Clayton, Earth Sciences
Faculty Mentor: Professor Jude Sabato, Earth Sciences and Science Education

A rotating fluid dynamics tank within a laboratory setting provides the foundation for students to replicate observations of the real world into scaled models and apply applicable theory. Examples include the re-creation and visualization of complex atmospheric phenomenon such as boundary layers, jet streams and baroclinic instability. The fluid dynamics tank project is part of a continuous improvement initiative to the turntable apparatus. Project goals focused on integrating previously purchased technologies and improving upon the educational context and "hands-on" experience for students and faculty. Project needs analysis identified the need for a higher definition video and capture; removal of the rotating arm; consistency in data transmission streams and the ability to plug-in electrical equipment on the rotating table. The apparatus is a 24-inch diameter water tank on a rotating platform. The improvements include the apparatus framing to support a high definition Power-over-Ethernet (PoE) network camera and secondary motor for camera rotation in tandem with the tank. The addition of carbon fiber brushes on the lower slip ring allow consistent data transmission and electricity to be delivered to the rotating table. Lastly the addition of the upper slip ring and network camera allow for qualitative and quantitative data collection, as well as virtual learning, experimentation and teaching exploration. Project outcomes successfully met the identified needs. The apparatus though not in a fully completed state has been tested and results are positive. The future experiments are anticipated to yield a higher quality learning experience as a result of improvements.

Presentation Type and Session: Poster V

Decision, Decision, Decision

Nicholas Fiorello, AMT 495W: Applied Mathematics Project
Faculty Mentor: Professor Hongliang Xu, Mathematics

If you are a fan of a team in the NFL, then you definitely have seen your team kick a field goal on 4th and 1 before. Well on some occasions, these may be good decisions, but would you be surprised to know there is mathematical evidence that this is almost an insult? Philadelphia Eagles' new head coach Chip Kelly had coached aggressively at the University of Oregon, did you know that his decisions were, more often than not, the mathematically-correct ones? The aims of this research project are: (1) to establish a mathematical model for the 4th down situations; (2) to determine the expected scoring points from different game situations; and (3) to make recommendations for decision makings on 4th down. Owing to lack of enough real data from NFL games, the project will use simulated data from the Madden 13 video game to determine the probability of successful conversion on 4th downs based on three different scenarios: from the own goal line to own 35, from own 35 to the opponent's 35, and from the opponent's 35 to the opposite goal line.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Designing Clean Water Related Teaching Materials For a Developing Community In La Herradura, El Salvador

Joshua McGuffie, Earth Sciences
Faculty Mentor: Professor Bettina Martinez-Hackert, Earth Sciences and Science Education

This project will involve production of teaching materials for, and later teaching and service hours, devoted to educating the residents of a small village that is being relocated so that the residents will no longer live in a mangrove swamp near La Herradura, El Salvador. The goals for this project include designing the teaching materials that will help teaching children and their parents about modern conveniences (fully plumbed bathrooms, showers, hot running water). In addition, parents will be taught skills to encourage proper sanitary practices. The teaching will be multi-faceted, including teaching songs, providing written materials and leading hands-on activities for practicing proper sanitation. Given the lack of multimedia capability, the lessons will have to be engaging as well analog. The educational materials will be created just for this context in order that they will be useful for the initial lessons as well as for long-term reference in form of booklets, pamphlets, handy reference cards and signs. This project ties research in the Earth Sciences on basic water quality issues to the cultural experience of the people living in the field area. In this way the scientific pursuit becomes grounded and tethered to the people of the area and will be an opportunity for practicing educational techniques.

Presentation Type and Session: Poster VI

Does Money Grow On Trees? A Study Of the Value Of Our Natural Resources

Emily Schiller, AMT 495W: Applied Mathematics Project
Faculty Mentors: Professor Lorena Mathien, Mathematics, Professor Andrea Guiati, Director, All College Honors Program, and Professor Joaquin Carbonara, Mathematics

The natural resources in the Buffalo-Niagara region have slowly been depleted in lieu of what developers see as a better economic opportunity, such as new housing or businesses. People rely on the language of money in this day and age, thus seeing the monetary-equivalent value of the natural resources that are being replaced is quite difficult. Focusing on the wetlands in the Buffalo-Niagara region, this study aims to put an actual monetary value on the environmental services that we receive from the natural wetlands. Existing economic models will help in the creation of a single equation that incorporates the five main environmental services provided by wetlands, including carbon sequestration,

water filtration and storage, habitat value, and soil erosion. One cohesive, mathematical equation can be used to assign the monetary value to our region's wetlands; hopefully showing that keeping natural resources is more beneficial than constructing buildings for economic value.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Driving Synchronous Rotation Within the Geophysical Fluid Dynamics Tank

Kari Clayton, Earth Sciences and **Michael Ludwick**, Earth Sciences
Faculty Mentor: Professor Jude Sabato, Earth Sciences and Science Education

A rotating fluid dynamics tank within a laboratory provides a "hands-on" visual-learning experience that simulates real world phenomena into scaled models. In combination with mathematical and geophysical theory the Geophysical Fluid Dynamics (GFD) tank provides an invaluable educational component to an Earth-Atmospheric Sciences curriculum. As a part of the continuous improvement initiative to the turntable apparatus project goals focused on developing, purchasing and engineering the necessary components to drive synchronous rotation between the rotating tank, and the rotating camera. Previous needs analysis identified the challenge of synchronous rotation as an obstacle to overcome during the design process. Without synchronous rotation, experimental images transmitted are subject to a rotational "mismatch" resulting in a drifting image, impacting the visual component of the experiment. Synchronous rotation centered about the axis of the tank is achieved through manipulation of the two independent motor drivers, which in turn is wired into one main control. A single point of control for both the rotating tank and the camera is integral to the successful execution of all GFD labs and experiments. As a demonstration of the above improvement we present some preliminary simulations of the general circulation of the Earth's atmosphere.

Presentation Type and Session: Poster VI

Drug In Human Calculator: Applied Math In Pharmacokinetic Models

Enmanuel Payano, AMT 495W: Applied Mathematics Project
Faculty Mentor: Professor Joaquin Carbonara, Mathematics

Pharmaceutical companies sell medicines with recommended dosage. Having an appropriate dosage is crucial for a drug to do its purpose; too high concentration can cause side effects, and too low makes it ineffective for the user. Pharmacokinetics is a branch of Pharmacology that studies what the body does to the drug. In this project we will use Nadler's Method and one-compartment and two-compartment mathematical models to calculate a user's drug concentration over time. The outcome of this research project will include the analysis of simulations of how several common drugs' concentration levels fluctuate in the human body, and a user-friendly application that after recording an individual's weight, height, gender and with drug details will calculate the drug concentration over time.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Effects Of Tonawanda Coke Company Air Pollution On Tonawanda Soil

Daniel Dienhoffer and **Christopher Schmitt**, GES 460: Environmental Field Methods
Faculty Mentor: Professor Elisa Bergslien, Earth Sciences and Science Education

Tonawanda Coke Company has been releasing chemicals since 1917 into the air including but not limited to: benzene, formaldehyde, acetone, ethylene glycol, methylene chloride, xylene, nitrogen oxides, and sulfur dioxide. Since stricter regulations have been placed, there have been ongoing issues with compliance. At the turn of the 21st century, residents of Tonawanda began testing the air, finding a copious amount of air pollutants. The Clean Air Coalition of WNY began its own air sampling in 2006 and their findings brought the NYS Department of Environmental Conservation got on board to monitor Tonawanda Coke. The facility has been releasing pollutants into the air for an unknown amount of time and at varying quantities. Upon gathering proof of the facilities pollution, the federal government cracked down on the company to decrease its pollution. Recently, residents of Tonawanda have begun to complain that the pollution went beyond the air. Soil and water pollution have become a growing concern in the town and that the pollutants may still be in the air. Given the large list of pollutants released by the production of coke, we will be collecting soil samples from public parks and air samples from the town to test for benzene and acidity. Using core samples may allow us to test the pollution from Tonawanda Coke over time. Through using the core samples and testing from set depths of the soil column, we will examine the variance of pollutants in the soil and at what times they may have been released. Air samples and current air quality data will be used to determine current amounts of pollutants in the air.

Presentation Type and Session: Poster V

Electro-Optical Effects Of LuFe2O4 Thin Films

Brandon Franks, Physics
Faculty Mentor: Professor Ram Rai, Physics

The main objectives of this investigation were to deposit high quality multiferroic Lutecium Iron Oxide, $LuFe_2O_4$ (LFO) thin films onto crystal substrates, such as (111) Magnesium Oxide (MgO) and (001) sapphire, and to investigate electro-optical properties of LFO thin films at various temperatures. LFO was prepared by mixing stoichiometric proportions of Lu_2O_3 and Fe_2O_3 powder

samples, which were ground and pressed into pellets using a mortar and pestle, and a hydraulic press. Using these pellets, thin films of LFO were grown on two occasions by employing an electron-beam evaporation system in a high vacuum chamber. The first deposition resulted in thin films of 147 nm thickness, while the second resulted in 20 nm thick films. Both sets of films were annealed at 600 °C in a mixture of air and oxygen. To investigate LFO's electro-optical properties at various temperatures, LFO thin films of 147 and 300nm thickness were used in a dual beam spectrometer (200-3000nm) equipped with a continuous flow cryostat. The electro-optical properties were investigated by capturing LFO's absorption spectra at various temperatures, while systematically applying voltages up to 200V to the film. The temperatures of interest in this investigation were 78K, 170K, 230K, 293K, and 330K. Of all the temperatures investigated, only 170K showed strong electro-optical responses, which are in part due to LFO's ferroelectricity and magnetic property at this temperature.

Presentation Type and Session: Poster VI

Escher's Artwork: The Laws Of Mathematics Are Not Merely Human Inventions Or Creations

Diana Veliz, MAT 491: Capstone Research in Mathematics
Faculty Mentor: Professor Margaret Sherman, Mathematics

The work of Escher has created a bridge between art and mathematics. Although his work captivates the eye and admiration of people, it is his art that allows mathematics to be explored in a different way. In regards to Escher's art work, he meticulously combines mathematical concepts that may be difficult to identify. Through his work, he tactfully combines basic symmetries such as translations, rotations, and reflections and expands on these concepts. Escher also creates a playground with regular polygons, non-regular polygons, and other closed figures or a combination of these and transforms a plane. Escher's tessellations (a plane that is covered by one or more figures in a repeating pattern without overlapping) explore polygons, angles and side measurements within his art. It is in his art that he combines symmetries and various mathematical concepts in such a beautiful way that one may not considered the math to be included. Looking at Escher's work, it is undoubtedly attractive and engrossing. In order to fully appreciate his work, one must become familiar with these mathematical concepts and see how Escher explores with them to produce tessellations.

Presentation Type and Session: Poster VIII

Examination Of PCB and Heavy Metal Distributions In Eighteen Mile Creek, Niagara County, N.Y.

Matthew Kraft, **Nicholas Rinard**, and **Timothy Gamble**, GES 460: Environmental Field Methods
Faculty Mentor: Professor Elisa Bergslien, Earth Sciences and Science Education

Eighteen Mile Creek of Niagara County, NY serves a microcosm of the issues faced by areas with persistent organic environmental pollution. This stream serves as prime habitat for cold-water fish species such as Steelhead, Brown Trout, and Salmon. Contamination of Eighteen Mile Creek has affected its biological integrity and degradation of the health of aquatic life leading to restrictions on consumption of wild game and fish as well as other beneficial use impairments. Major contaminants in Eighteen Mile Creek are polychlorinated biphenyls (PCBs). These compounds bioaccumulate through trophic levels and have been found to have adverse health effects on humans and animals. Elevated levels of copper, lead, chromium, and mercury have also been observed in the Eighteen Mile Creek corridor. The suspected source of contaminants in Eighteen Mile Creek is upstream from Burt Dam. Sampling of sediment from the Eighteen Mile Creek corridor will be completed in order to better understand the distribution and nature of the contamination. Sample locations will be recorded using GPS for spatial analysis to determine the relationships between individual heavy metal and PCB concentrations at specific locations. Acquisition of this spatial data will aid in the determination of the number of potential contaminant sources. This investigation aims to determine any anomalies in the distribution of contaminants upstream and downstream of Burt Dam.

Presentation Type and Session: Poster VII

Extraction and Analysis Of Plant Cuticles From Sonoran Desert Packrat Middens

Michael Borrelli, Geography
Faculty Mentor: Professor Camille Holmgren, Geography and Planning

Packrat middens are a treasure trove of information for paleoclimatologists studying arid environments. Collecting a series of middens, radiocarbon dating, and analyzing the material within can allow scientists to reconstruct the vegetative assemblage of an area and show its climatological evolution. Vegetation that is found within these middens can be subject to the packrats dietary preferences. A cuticle analysis done on plant material removed from fecal pellets from middens can uncover any dietary biases that might be present. This research involved a cuticle analysis on 23 samples collected from Guadalupe Canyon in the Sonoran Desert, Mexico. The objectives were 1) to see what plants the packrats were eating, 2) to see if the rodents' dietary preferences changed over time as the climate and vegetation community changed, 3) to see if there are any plants present that are not currently in the fossil record, and 4)

to determine how the rodents dietary preferences may have impacted the abundances of these plant species within the middens. No plant species were found that were not already in the fossil record and the species that were most abundant in the macrofossil record were also the most abundant in the cuticle analysis as well. The rodent diets changed as the species in the area changed due to a warming and drying climate. It was clear from the cuticle analysis that their dietary preferences did have an impact on the species found in the macrofossil record.

Presentation Type and Session: Poster IV

Global Warming: A Cold, "Hot" Look At Western New York's Climate Change

Frederick Bloom, Geography
Faculty Mentor: Professor Stephen Vermette, Geography and Planning

A climate 'Normal' is defined as average climate over a defined 30 year period. Normals are used because they are of sufficient length to filter out many short-term anomalies between years, but short enough to reflect longer term climate trends. This study will use data from five Normal periods, beginning with the 1941-1970 period and ending with the 1981-2010 period, to assess possible changes in Western New York's regional climate. Data was obtained from National Weather Service sites in Buffalo, NY and Rochester, NY. Aside from annual values, the data was broken down by month and season. The Normals studied included average, maximum and minimum temperatures, as well as precipitation, snowfall, and heating and cooling degree days. Findings indicate that over the five normal periods studied, Western New York has seen an overall increase in both temperature and precipitation. This increase appears strongest for Buffalo NY, but somewhat weaker for Rochester, NY.

Presentation Type and Session: Poster VIII

How Can Nothing Be Something? A Look At Zero

Jamie Howard, MAT 491: Capstone Research in Mathematics
Faculty Mentor: Professor Robin Sanders, Mathematics

From a young age we learn the concept of zero. However, it is rare that we ever put much thought into it. What is zero? Is zero nothing or is it a number? Many people do not realize how much of a crisis zero caused when the idea of it was first brought into the world of mathematics. As I am researching, I am finding that many places in the world were not too fond of zero when it was introduced. Many places viewed zero as a placeholder and nothing more than that; they never considered it a number. As I continue to research, I am going to learn more about how certain countries in the world first viewed zero and how their concept of zero has changed over time. In addition to the problems that the beginning of zero caused, I am also discovering that zero had an impact on the ways people viewed arithmetic and gave way to new rules for arithmetic. I am going to continue to research on how zero changed mathematical notations and other parts of mathematics.

Presentation Type and Session: Poster VII

Hyperbolic Geometry and a New Definition of Parallel

Sarah Folmsbee, MAT 491: Capstone Research In Mathematics
Faculty Mentor: Professor Robin Sanders, Mathematics

The Parallel Postulate states that given a line l, and a point P not on the line, there is exactly one line through P that is parallel to l. To most people, who only know Euclidean geometry, this statement seems to be true. Since Euclid first compiled his work on geometry around 300 B.C.E., mathematicians have been trying to prove the Parallel Postulate. Every proof that came about contained a flaw until 1868, when Beltrami proved that there was no possible proof of the parallel postulate. It turns out that the negation of the parallel postulate is true in non-Euclidean geometries. In the nineteenth century, a new geometry hyperbolic geometry was discovered. J`anos Bolyai and Nikolai Lobachevskii published independent work around the same time. Although Gauss did not publish any work on hyperbolic geometry, he was also working on this new geometry around the same time. In hyperbolic geometry, given a line l, and a point P not on the line, there are infinitely many lines through P that are parallel to l. There are many different models of a hyperbolic plane that can show that the hyperbolic parallel postulate is true. Some of the models include paper and crochet annular models, the Poincar e disk model, the Beltrami-Klein model and the upper-half plane.

Presentation Type and Session: Poster VII

I Can't See! Air Pollution In China

Emily Wolf, GEG 495: China Air Quality
Faculty Mentor: Professor Stephen Vermette, Geography and Planning

During the move to a more industrialized economy, air pollution has had serious affects in European countries and the United States. Over time these countries have realized the impact of air pollution on the health of citizens, the economy and the environment, and have made serious efforts to mitigate existing air pollution sources, and to clean up historic pollution. China's industrial revolution started later than Europe and the United States. The resulting pollution in major Chinese cities, such as Beijing, has rivaled or surpassed that of London and New York. The impact of this air pollution is finally being acknowledged by the government of China resulting in a few cleanup efforts. The question is will they be enough. This poster will outline some of the similarities between London, New York and Beijing, and examine projected impacts on the health of citizens, the

economy and environment of China if Beijing continues to pollute at its current rate. What China is doing to counteract the air pollution problem will be reviewed along with some alternative options.

Presentation Type and Session: Poster VIII

Is Stephen Curry Really an All-Star?

Chris Dundon, AMT 495W: Applied Mathematics Project
Faculty Mentors: Professor Hongliang Xu, Mathematics and Professor Chiatali Ghosh, Mathematics

After the 2012-2013 NBA All-Star Selections many people were upset that Stephen Curry of the Golden State Warriors did not make the team. The controversy surrounding the selections leads to the examination and evaluation of the selection process to see if it is possible that Stephen Curry could have been selected to the 2013 NBA All-Star team. The players' season stats will be analyzed using Multiple Linear Regression to see if the selections would be the same if different criteria were to be used in the process. The NFL Power Rankings are a season long process where NFL "experts" analyze how each team performs on a weekly basis and then ranks them from 1, being the best, to 32, being the worst. The rankings vary from week to week depending on how each team performs in the previous weeks game. The rankings will be anlyzed using Correlation Coefficients to determine which site gives the most accurate rankings throughout the season, with a particular interest towards the initial ranking at the beginning of the football season.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Is There Any Difference Between Traditional Crops and Genetically Modified Crops?

Carla Lanze, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Jason Grinnell, Philosophy and Professor Andrea Guiati, Director, All College Honors Program

Many non-governmental organizations (NGOs) advocate banning genetically engineered (GE) crops in developing countries. Agricultural scientists forecast severe food shortages without a substantial increase in crop production; such increases will only be made possible by the use of GE crops. My literature review shows that there are no different adverse effects of using GE crops vs. traditional crops both in terms of human health and environmental well being. My hypothesis is: environmental NGOs are misrepresenting both the costs and benefits of GE crops. In order to study the role of NGOs in attempting to sway the public against GE crops, I selected Greenpeace for an intensive case study because it is among the most influential NGOs with respect to GE protests in developing countries. My data collection consists of a content analysis of Greenpeace's publications and peer-reviewed scientific literature. Can plant biotechnology help in solving our food and energy shortage in the future?

Presentation Type and Session: Poster IV

Mapping the Genetic Identity Of Volcanic Deposits Using Scanning Electron Microscopy

Chelsea Tavormina, Geology
Faculty Mentor: Professor Bettina Martinez-Hackert, Earth Sciences and Science Education

Using Scanning Electron Microscopy and regular microscopy ash samples that are believed to be part of the most recent eruption (2005) of the Santa Ana volcano in El Salvador are being analyzed. The purpose of the chemical analysis is to map out the fingerprint of the chemical composition of the ash. These samples are supposedly the same volcanic ash layer at different (spatial) locations. The samples were collected at different locations on the summit of the volcano, at an area that was not believed to have been covered by deposits of 2005. Confirming that these are indeed 2005 eruptive products would have an impact on the geological hazard analysis related to volcanic activity of this volcano. Also, a more detailed distribution of this layer on a map will be possible. In turn, this will prove that a plume collapse of the 2005 eruption covered the NW part of the crater as well as bringing possible lahars down towards the nearby towns. Confirming these layers will also introduce the characteristics of the terrain, whether it is compacted and can hold or loose and unstable. These findings will be used in the summer of 2013 to develop an idea of where possibly additional locale for this deposit may be found for further detailing and mapping of this layer.

Presentation Type and Session: Poster VII

Mathematical Modeling Of Tuberculosis

Corinne Monette, AMT 495W: Applied Mathematics Project
Faculty Mentor: Professor Saziye Bayram, Mathematics

Tuberculosis is an infectious disease caused by several strains of mycobacteria. Modeling a disease, such as Tuberculosis, could potentially aid in disease eradication. Our study uses an existing model of Tuberculosis developed by Dr. Carlos Castillo-Chavez and his collaborators published in the article "Tuberculosis models with fast and slow dynamics: the role of the close and casual contacts". In that study, fixed model parameters were used to analyze the model's dynamics. In our study, on the other hand, we use a range of values for each parameter involved in the model and derive a range of dynamical behavior accordingly. We use both sensitivity analysis and computing software, Mathematica, to analyze and present our study's results.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

The Maud Gordon Holmes Arboretum: Development Of a Web-Based Mapping and Management Tool

Samantha Thomas, GEG 430W: Senior Thesis
Faculty Mentors: Professor Mary Perrelli, Geography and Planning and Professor Wende Mix, Geography and Planning

The main focus of this project is to create an updated map of trees on the Buffalo State campus and develop a web-based management tool. The Maud Gordon Holmes Arboretum at Buffalo State was formally dedicated in 1962. The arboretum initially started with 300 trees and has grown to over 1,700 trees. The arboretum contains more than 100 needle and leaf-bearing varieties of woody plants and many ornamental trees. The Arboretum was initially mapped in 2007, after the "October Storm" in 2006. Since that time, many trees have been removed and/or relocated due to construction on campus. The current tree maintenance records are hand written and kept in binders. GIS and GPS technology will be used to map trees in the arboretum. Each tree will be visually inspected, tagged and photographed. The development of a mobile management application will allow crew to make updates in the field allowing for data to be updated in a more accurate and timely fashion. Converting the management system to an online tool is a necessary step for the long term management and care of the arboretum.

Presentation Type and Session: Poster V

A Microsatellite Parentage Analysis For the Eastern Hellbender Salamander, Cryptobranchus alleganiensis alleganiensis

Sarah Chudyk, Masters Biology Secondary Education
Faculty Mentor: Professor Amy McMillan, Biology

Populations of the Eastern Hellbender salamander, *Cryptobranchus alleganiensis alleganiensis*, are quickly declining, making this a species of special concern in New York State. Factors contributing to their decline include UV radiation, predation, disease, habitat modification, and changes in climate. Because of this, hellbender habitats are becoming fragmented. This leads to isolation among populations, which impedes gene flow between populations of hellbenders. In order to determine how to conserve hellbenders, the structure of their populations must be studied to determine the genetic diversity present. Microsatellite markers are a powerful tool used to study the genetic makeup of a population. Primers developed for the Eastern hellbender salamander were used to amplify microsatellite regions of hellbender DNA. The optimal annealing temperatures of these primers were determined to genotype 49 hellbender samples collected from the Buffalo Zoo, which was then used to conduct a parentage analysis with the COLONY software. The parentage analysis indicated approximately 16 parents (nine fathers and seven mothers) for the sample of 49 offspring. However, this result had very little statistical support. It is unlikely, based on hellbender reproductive biology, for this extreme number of parents (although allelic diversity indicates that there are at least four parents). Future parentage work with hellbenders is warranted and an increase in the number of loci sampled and the number of offspring genotyped should help narrow the parent number and increase statistical confidence.

Presentation Type and Session: Poster VI

Mine Hill Meta-Granite, Western Connecticut: Analysis Of S-C Fabrics and Their Interpretation

Sherman Wisor IV, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education

If granitic magma intrudes actively deforming rocks, many times the shape of the resulting body and/or the texture of the crystallizing minerals is controlled by that deformation. In Western Connecticut, a 1km by 3km body of granitic gneiss was metamorphosed circa 400 million years ago. During that time western Connecticut's rocks were at about 20km depth and recording continental collisions. The granitic rocks recorded this deformation in the form of preferred mineral orientations (fabrics). My research focused on a specimen from the granite as found in an active quarry at Mine Hill near Roxbury, CT. Rocks observed within the quarry exhibit schistosité - cisaillement (S-C) fabrics, referring to two distinct intersecting foliations (planar mineral alignments): C-planes formed parallel to shear sense and S-planes formed at an acute angle with respect to the C-planes. In general, the lower the angle between S and C-planes is, the higher the strain (amount of deformation). Methods of analysis include application of the Inverse SURFOR Wheel (Panozzo, J. Structural Geology, 1987) to quantify fabric intensity as well as to obtain the S-C angle, and an in-depth mineral assemblage analysis by standard petrographic point-counting. Given this information, the S-C angle illustrates and permits the construction of a strain ellipse for these rocks, and in doing so permits the inference of possible causes for ductile general shear in the area.

Presentation Type and Session: Poster VI

The Most Irrational Number and Its Consequences In the Natural World

Kerri Palmer, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Tina Carter, Mathematics and Professor Andrea Guiati, Director, All College Honors Program

I will write the irrational number $\phi = \frac{1+\sqrt{5}}{2}$ as a continued fraction and from that, obtain its best rational approximations. These fractions turn out to be the ratios of consecutive Fibonacci Numbers. Using these ratios and Hurwitz' Theorem on rational approximation of irrational numbers, I will establish ϕ as the most irrational number there is. This distinction in the world of mathematics makes ϕ nature's choice of a number to govern the efficiency of plant growth, reproduction and geometric beauty. As a plant grows upward, leaves and branches sprout off the stem in a spiraling pattern; in many but not all plants, the angle between a sprout and the previous one is exactly $\frac{1}{\phi^2} = 137.5^o$. This is also the angle at which successive seeds are packed into the seed head

of many flowers. I will show how the angle $\frac{1}{\phi^2}$ is the single angle that produces optimal design in plant growth and flower seeding. *Mathematica* will be used to show how even a very small variation in this angle will produce significantly less uniform and optimal seed packing. What is also interesting is the way in which this angle often produces two visual sets of spirals in the seed head, one clockwise and one counterclockwise. The numbers of spirals in these two sets are always consecutive Fibonacci numbers!

Presentation Type and Session: Poster VII

Niagara Escarpment Scenic Byway

Luke Work, PLN 430: Senior Thesis
Faculty Mentor: Professor Stephen Vermette, Geography and Planning

The Niagara Escarpment is a unique geological asset running through Western New York that has remained largely under-utilized. An example of this is the Canadian section of the escarpment, that has gained international recognition as a unique world biosphere. The purpose of my research is to assess whether or not the Niagara County portion of the escarpment possesses enough unique features to support a viable scenic byway. A resource inventory was conducted, which looked at nearby attractions such as wineries, parks, scenic vistas, and downtown areas along the escarpment to determine if there were enough distinctive features for a byway. The results suggest that a scenic byway would be a viable approach to recognize the Niagara Escarpment, while also attracting tourists to the region. A preview of what one can expect when attending my poster is a series of maps that visually outlines the data that was collected with the resource inventory as well as a promotional piece on the Niagara Escarpment Scenic Byway.

Presentation Type and Session: Poster VIII

Petrographic and Fabric Analysis Of the Log-Jam Schist and Surrounding Rocks, Western Connecticut

Kelsey Murphy, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education

Western Connecticut's "log-jam" schist is a unique rock unit of the Rowe schist. It is dominantly a granitic gneiss after metamorphism from a granitic protolith. The unit is famous by its very large crystals of the metamorphic mineral kyanite that are observed up to 1 meter in length. Surrounding matrix rock minerals include quartz, feldspars, chlorite and biotite micas, amphiboles, and sillimanite. The kyanite crystals are "porphyroblasts" because they are much larger relative to the matrix. They are the usual focus of study prior to the work done by students in our lab (starting in 2001). Studies of the matrix minerals and textures before then did not exist, so matrix mineral textures were not documented. My study builds on the work of 3 previous undergraduate student projects from our lab. The rock samples studied were collected previously, and prepared for microscopy. I studied 16 thin sections cut from these specimens because although they were analyzed for mineral composition, they have not been described at depth for mineral patterns between the kyanite and the matrix (the "fabric"). In my work, I documented grain size, arrangement of grains (texture), orientation of grains, grain boundary geometry, evidence of retrograde mineral growth (at lower temperature), mineral defects (such as crytallographic folds), and studying the fabric into further depth using the Inverse SURFOR Wheel (Panozzo, J. Structural Geology, 1987) to show an orientation to the fabric forming minerals. Using these detailed descriptions, we learn more about geologic history such as the pressure-temperature range in which the rock was formed, tectonic history, and post-formation. Results show a fabric orientation similar to that of the orientation of the Kyanite porphyroblasts and a mineral content that is high in aluminum. Comparing the "log-jam" schist to the rocks in the surrounding area, it can be suggested that the rocks went under a similar history and were subjected to hydrous flux in controlled horizons giving the rock its layering as well as its high aluminum content.

Presentation Type and Session: Poster V

Properties Of Junctional Proteins In Non-Junctional Membranes

Dashawn Brown, Biology and **Shelby Rarick**, Biology
Faculty Mentor: Professor Martha Skerrett, Biology

Gap junction proteins typically form intercellular channels that allow diffusion of ions and small molecules up to 1000 daltons between cells. Our research focuses on gap junction and related proteins including innexins, connexins and pannexins. Connexins form gap junctions in vertebrates while innexins make up gap junctions of inverterbrates. These distinct protein families involve similar structural elements including a cytoplasmic N-terminal domain, followed by four transmembrane segments that delimit two extracellular and one cytoplasmic loop, and terminate with a cytoplasmic C-terminal domain. Pannexins represent a family of vertebrate proteins structurally analogous to connexins and innexins, but related in sequence only to the innexins. Pannexins mediate ATP release across the plasma membrane and do not form intercellular channels. Our work involves analysis of a connexin (Cx26), and innexin (ShakB) and a pannexin (Pnx1) in non-junctional membranes. We anticipate that Pnx1 will mediate water movement across the plasma membrane as it is known to form transmembrane channels. We anticipate that Cx26 and ShakB, will mediate little if any water movement across the membrane because they are expected only to function when cells are paired. All proteins will be expressed in Xenopus oocytes, the swelling of oocytes will be recorded in a hypotonic solution (water) using a camera mounted on a dissecting microscope. Swelling rates will be calculated and compared. The results have implications for the role of hemichannels in regulating water movement across cell membranes.

Presentation Type and Session: Poster V

A Raman Spectroscopic Study Of the Surfaces Of Modern and Historic 19th Century Daguerreotypes

Julia Wald, Chemistry and Fine Arts
Faculty Mentor: Professor Patrick Ravines, Art Conservation

This study is focused on comparing the chemical nature of the 19th century daguerreotypes to their modern counterparts using Raman spectroscopy. The study was divided into two unique projects: an overview of the making and examination of contemporary daguerreotypes, and the analysis of two 19th century daguerreotype plates both with varying levels of degradation. The modern plates were made by the authors and followed 19th century photographic techniques as closely as possible. Modern specimen preparation was an integral part of this project since "clean" 19th century daguerreotypes are in short supply. In addition, it also enabled us to maintain a detailed record of the chemical process of the making of daguerreotypes, with specimens from each step, from the initial unpolished silver plate to the final gilded product kept along the way for further analysis by Raman spectroscopy. Results from historic plates included the identification of various silver compounds on the surface of deteriorated portions of 19th century plates, as well as unexpected laser damage due to the photosensitive nature of these silver compounds. Raman spectroscopy has been used to study the nature of surface degradation products on historic daguerreotypes (Centeno et. al. 2008), and no mention of surface deterioration due to laser use has been reported. This research project has shown that the Raman laser used to probe surface of 19th century plates at low power and short exposures has caused damage, and what was considered a non-perturbing analytical technique has been demonstrated to be an invasive and destructive approach. The use of Raman spectroscopy for daguerreotype studies will not detract from identifying surface compounds but the damaged caused will need to be considered and the approach looked at in a new light.

Presentation Type and Session: Poster VI

Range Reduction Strategies For Optimization Problems Involving Groundwater Remediation

Shirmin Aziz, AMT 495W: Applied Mathematics Project
Faculty Mentors: Professor Joaquin Carbonara, Mathematics and Professor Shawn Matott, Engineering (University at Buffalo)

Range Reduction Strategies for Optimization Problems Involving Groundwater Remediation In this research project, experiments were conducted investigating the options to enhance the performance of Simulated Annealing, a probabilistic heuristic employed when solving for global optimization problems. In previous experimentation, Simulated Annealing yielded unfavorable results in comparison to the observed data. The intent of this research is to enhance the optimizer, Simulated Annealing, through the implementation of five mathematical functions (linear, convex, convex-power, concave, delayed-concave) operating as parameter reduction strategies. The experiments consist of computer simulations using the Tufts University Watershed Model that dealt with a case study done on the Aberjona River near Boston. The model takes precipitation rates and temperature as input and simulates predictions of streamflow. The data collected will be charted and ranked assessing which of the reduction strategies, mentioned above, most effectively improved the performance of the Simulated Annealing algorithm. Lastly, we will be comparing the simulated and observed data evaluating the accuracy of the computer generated data.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Scoria Deposits As Splash Of Paleo-Lava Lakes?

Brandon Luther, Earth Sciences
Faculty Mentor: Professor Bettina Martinez-Hackert, Earth Sciences and Science Education

Many molten lava lakes have periodic eruptions of basaltic scoria and deposit a significant amount of fairly loose and unstable material in their immediate surroundings often building up significant volumes of a composite volcano. To determine if a sample of scoria was indeed part of a paleo-lava lake, I am studying this previously collected scoria from a roughly 40 m thick deposit within the crater walls of the summit of Santa Ana volcano, El Salvador. A current hypothesis posed by a volcanologist being tested by me is that a set of lava lakes existed at some point in the crater of the volcano, as nowadays can be identified within the cuts of the crater walls. These deposits are very heavy as they are literally dense blocks of basaltic rock and can cause catastrophic collapse of the volcanic edifice. The specific volcanic deposit I am looking at has not been previously surveyed nor studied and it is necessary to discover its genetic fingerprint to follow the deposit on the volcano and to compare it to samples that will be collected in the summer of 2013 on the lava lake remnants. Analyzing thin sections and using scanning electron microscopy to determine chemical composition, and the morphology of this scoria achieve the identification of characteristics unique to this deposit.

Presentation Type and Session: Poster VI

Screening Of Fluorescence Quenchers Using a Microfluidic Device

Eric Snyder, Chemistry
Faculty Mentor: Professor Jinseok Heo, Chemistry

Here we report that a microfluidic device incorporating multiple parallel channels can be conveniently used for fast screening of fluorescence quenchers. Ca2+ and Mg2+ ions are biologically important. Various fluorescent indicators have been developed to measure the intracellular concentrations of these ions. One of the

issues in using the fluorescent indicators is that some interfering metal ions can significantly reduce the fluorescence signal. Thus, fast screening of fluorescence quenchers will help to choose a proper fluorescent dye and develop more selective fluorescent dyes. We assembled a microfluidic device consisting of twelve microchannels, each of which can hold ~20 μl solution. Then, each channel was filled with a set of solutions containing different metal ions and a fluorescent dye. The quenching effect of several metal ions was quantified using fluorescence micrographs of the device acquired with a fluorescence microscope. We will present these results by comparing with those obtained with spectrofluorometer.

Presentation Type and Session: Poster VI

Soil Microbial Community Structure and Function Varies Along an Old Field Succession Gradient

Torri Ivancic, Biology
Faculty Mentor: Professor Daniel Potts, Biology

Widespread and accelerating anthropogenic climate change and shifting patterns of land-use demand an improved understanding of terrestrial carbon cycling. As a major contributor to ecosystem CO2 exchange, the potentially dynamic factors that control soil microbial respiration warrant close scrutiny. I examined how plants, via root exudates, mediate the soil microbial community structure and function along an old field succession gradient. I quantified soil microbial respiration (SMR) responses to the addition of simulated root exudates in soils collected from adjacent grass, shrub and forest patches using a series of laboratory incubation experiments. Additionally, I used substrate-induced selective inhibition to compare the contribution of bacteria and fungi to SMR. The positive effect of root exudates on SMR was least in grass soils and greatest in forest soils. Whereas the bacterial contribution to SMR was consistent across patches, the fungal contribution to SMR increased along the old field succession gradient. These results suggest that plant communities mediate soil microbial structure and function by influencing the quantity and quality of soil carbon inputs. By improving understanding of the linkages between plant communities and soil microbial activity, these results inform the carbon cycling consequences of changing land-use patterns associated with agricultural abandonment.

Presentation Type and Session: Poster V

Spatial Analysis Of Beryllium Contamination In Soils At a USACE Remediation Site In Luckey, Ohio

Kathleen Hastings, GEG 428: Service Learning Project
Faculty Mentors: Professor Tao Tang, Geography and Planning and Mr. Shawn McCabe, U.S. Army Corps of Engineers

Many projects in Geographic Information Systems (GIS) look at what happens on the surface of the Earth, whether it involves natural phenomena or the movement and patterns created by human activities. Special challenges arise when the area of interest is below the ground. Analyzing the concentration of contaminants in the soil at different depths becomes a three-dimensional problem. The United States Army Corps of Engineers (USACE) is managing the cleanup of a former industrial site in Luckey, Ohio under the Formerly Utilized Sites Remedial Action Program (FUSRAP). Soil contaminated by beryllium (Be) and other contaminants will be removed for offsite disposal in order to meet cleanup goals. Spatial and 3D Analyst tools in ArcGIS were applied to explore the concentration of Be throughout the volume of soil beneath the Luckey site. Regions with the highest concentrations of Be were identified and visualized using two ArcGIS modules, ArcMap and ArcScene. Surfaces were interpolated with Universal Kriging to show the concentration in soil slices at 1ft depth intervals; these slices were then stacked to explore the changes in Be concentration with depth. This study will allow the USACE to visualize and model the contamination in three dimensions to guide field cleanup activities, informing decisions about the location and depth of soil excavations.

Presentation Type and Session: Poster VII

Structural Mapping Of an Ancient Tectonic Boundary In Southeastern Pennsylvania

Albert Tahan, Geology
Faculty Mentor: Professor Gary Solar, Earth Sciences and Science Education

The lower-Paleozoic Martic line in SE Pennsylvania is the ancient metamorphosed and deformed edge of North America (~500 m.y.a.), where coastal plain sediment was caught in the Appalachian collision zone (~300 m.y.a.). This event caused Himalayan-scale mountains that have since eroded to the metamorphic root rocks. The Martic line trends sub-east-west as the contact between Octoraro Phyllite (meta-shale) in the south and Elsbrook and Conestoga Marbles (meta-limestones) to the north. Tectonics is recorded by preferred-oriented minerals (fabrics) that recrystallized during deformation. Martic line conventional wisdom calls on thrusting in a head-on collision, like at today's Himalayas. My work focused on testing this interpretation using structures in the field (mapping) and in the lab (microscopy). Field work was 14 days in an area 22km long and 3km wide along the Martic line. I recorded mineral composition, rock type, fabric styles and attitudes of foliations and mineral lineations, and crenulations (foliation folds). Sixty-nine oriented specimens were collected at 65 of the 83 stations. Mapping reveals five consistently-oriented separate hills composed of phyllite north of, and aligned sub-parallel to the Martic line. The hills are elliptical, within the marble units, and generally similarly sized (100m x 50m). In the lab, rocks were cut according to fabrics, and thin sections were made for microscopic analysis. From lab work I interpret Martic line rocks were deformed meta-sedimentary rocks. Although conventional wisdom interprets rocks to have undergone thrust tectonics my data suggest otherwise. Foliation

dips generally 70 degrees south, and mineral lineations are shallowly plunging along the strike of the foliation in the same rocks. The phyllite hills are interpreted as a mega-boudinage along the Martic line. These data are not consistent with thrusting, but with horizontal shear along the line. Therefore, tectonic models must reject "head-on" collision in favor of oblique.

Presentation Type and Session: Poster VI

Student Retention Of Chemistry Content: A Look At What Students Recall From Earlier Courses

Ari Darlow, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Maria Pacheco, Chemistry and Professor Andrea Guiati, Director, All College Honors Program

My research project encompasses the subject of content retention by students enrolled in lower level chemistry courses. Data will be gathered through the administration of a survey given to students enrolled in CHE 111-112, the introductory Chemistry sequence at Buffalo State College. This survey will require students to answer a few questions selected from a series of topics presented in high school chemistry and in CHE 111. Students will also be asked various demographic information questions such as gender, age, high school graduation date and when and where they took high school chemistry and/or CHE 111. The aim of this study is to see how much chemistry students remember from various Chemistry courses taken at a previous date. One of the objectives of introductory Chemistry courses is to promote long-term retention of the course content. This is very important for success in future chemistry courses, as the information presented in high school and general chemistry is the building block for more advanced courses. The data collected will be analyzed and compiled into a comprehensive report.

Presentation Type and Session: Poster VIII

Studying the Reduction Of Contaminants In the Niagara River

Stephen LaGamba, Earth Science and **Nadezda Mease**, Earth Science, GES 460: Environmental Field Methods
Faculty Mentor: Professor Elisa Bergslien, Earth Sciences and Science Education

Over 15 years the water quality in the Niagara River has been greatly affected by industries. Different organic and inorganic substances such as PCBs, Mirex, insecticides, benzene, toluene, xylene, chloroform, mercury, lead, cyanide, arsenic, organochloride pesticides, dioxins and furans were dumped in it. The chemical contamination of the river reached high levels and not only United States, but also Canada. In 1980s the international agreement between these two countries implied the reduction in chemical waste in Niagara River by 50%. We tested Niagara River water from Beaver Island State Park to Fort Niagara State Park stretch for several inorganic compounds listed above, phosphates and nitrates and compared it to study of Niagara River water quality of 2000. Since the water treatment facility was one of the contaminators, we collected water in 4 locations upstream from water treatment facility Beaver Island State Park, at the location of the facility, Whirlpool State Park (downstream from the facility) and at Fort Niagara State Park, to compare E. coli presence in waters. We predict reduction in organic and inorganic waste substances in waters of Niagara River according to international agreement with Canada and no major differences in E. coli distributions relative to water treatment facility.

Presentation Type and Session: Poster VIII

SVAP Survey Results For Gill Creek In Niagara County, New York

Michael Borrelli, **Brandon Jerla**, and **Melanie Reinhardt**, GEG 421/521: Watershed Analysis
Faculty Mentor: Professor Kelly Frothingham, Geography and Planning

In the fall of 2012 students in the GEG 421/521 Watershed Analysis class at Buffalo State, in conjunction with the Niagara County Soil and Water Conservation District (NCSWCD), set out to do a Stream Visual Assessment Protocol (SVAP) survey of Gill Creek in Niagara County. The SVAP is used to assess the physical, chemical, and biological conditions of a stream. It takes into account stream width, depth, and bed composition, as well as the following elements: channel condition, riparian zone, bank stability, water appearance, nutrient enrichment, pools and in-steam fish cover. Elements are scored on a 1 to 10 scale, with 1 being poor and 10 being excellent, and averaged to get an overall SVAP score for each reach assessed. Gill Creek had a wide range of scores. The highest score given was 8.9 for a reach in a more natural section of the stream in a residential area and the lowest scored reach was 4.7 along a channelized section of the creek located in the upstream section of the watershed. Overall, it was determined that the steam could use some restoration efforts and the results of this study were submitted to the NCSWCD for them to make a determination about which efforts were priorities for Gill Creek.

Presentation Type and Session: Poster VII

A Time and a Place: A Financial Investigation Of Physics

Antonio Galbier, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Ram Rai, Physics and Professor Andrea Guiati, Director, All College Honors Program

We may not fully understand it, but we find ourselves immersed in (and often times reliant on) the comforts and necessities given to us by our characteristically mathematical world. The purpose of this project is to examine and understand the short-comings and accomplishments of everyday life by merging economics and physics. In an attempt to understand the balances of comfort, finances, and optimization we will take a detailed look at the 'clockwork' of the Buffalo State College campus and its facilities (residential, academic,

and office buildings). We know that most buildings are capable of providing a multitude of amenities such as heating, cooling, lighting, plumbing, etc. The aim of this project is to analyze the efficiency (or inefficiency) of the campus's usages and rates as well as the devices providing these services and the people using them. From a physics standpoint we can understand how and why these things work and mathematically we can learn to optimize them. In practice, though, things are often more complicated, especially when dealing with the comfort and needs of people who often desire their environment to be warmer/cooler, brighter, and in general more providing and accommodating than need be. From units of measurement often used in practice (gas: ccp or btu, electric: kWh, etc.) we can find out (among various other services) how much gas is consumed to keep a residential building at a certain temperature, how many kilowatt hours are used when lights are left on (based on the consumption rate of the appliances), how much water is wasted from drippy sinks or how much water is needed to supply the pressure demands of showers, faucets, etc. From this we can gain a better understanding of how much money the college spends per hour/month/year, where it all goes, and ways in which money can be saved without sacrificing.

Presentation Type and Session: Poster VIII

The Total Synthesis Of Indian Yellow

Jade Welch, Chemistry, **Andrew Schick**, Chemistry, and **Muhammet Cetin**, Chemistry
Faculty Mentor: Professor M. Scott Goodman, Chemistry

Indian Yellow is an organic pigment used widely in art from the 17th century to the early 20th century. The pigment was manufactured in India from the urine of cows fed a diet exclusively of mango leaves and water. The process for the production of Indian Yellow was banned in 1908 due to the cruelty inflicted upon the animals. Art conservators are still interested in studying this pigment, so new means of production are desired. This natural pigment is reported to be the magnesium salt of a glycoside of euxanthone (1,7-dihydroxyxanthone). The total synthesis of Indian Yellow starting from 2,6-dimethoxybenzoic acid, 1,4-dimethoxybenzene, and glucuronic acid will be presented and discussed. The formation of the glycosidic bond between euxanthone and a protected glucuronic acid derivative proved to be the most problematic step of the synthesis. The product and all synthetic intermediates were characterized by NMR, FT-IR, and mass spectrometry whenever possible.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Trigono-Taxicab-Ometry

Michael Filipski, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Kelly Delp, Mathematics and Professor Andrea Guiati, Director, All College Honors Program

A metric, a function which defines the distance between two points, plays a significant role in determining geometric shapes, which in turn influence the trigonometric functions. The Euclidean metric provides us with the circles, triangles and trig functions that we all know and love, but what happens when we venture outside of Euclidean space? The taxicab metric defines distance as the sum of the absolute values of the differences of the x- and y-coordinates of the two points, which alters the geometry of the space. In taxicab space, the perfect circles we know become diamonds and the usual congruence properties of Euclidean triangles like SAS and SSS no longer hold. When dealing with the trig functions, the change in our unit "circle" means the sine and cosine functions will not be the same, which leads to an obvious question: What are the sine and cosine functions in taxicab space? Using elementary geometry, we generalize the sine and cosine functions in this metric space, and study some of their properties.

Presentation Type and Session: Poster I

Using the Iron Mossbauer Effect To Study Inks

Steven Tarasek, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Michael DeMarco, Physics, Professor Andrea Guiati, Director, All College Honors Program, and Professor Patrick Ravines, Art Conservation

In this experiment we used Mössbauer spectroscopy to analyze different ink samples containing the 57Fe isotope. We found that inks have a normal Fe state of either of $+2$ and some had $+3$. The isomer shift determined in the Mossbauer effect measures the ion state of Fe. If the Fe state changes from one state to another it is a signature that some properties of the ink or in the case of a manuscript, ink plus paper, have changed. This has possible applications in Art Conservation. Mössbauer spectroscopy is based on the Mössbauer effect, which involves recoil-free resonant absorption and emission of gamma rays in solids. This effect will take place when a nucleus emits a recoil free gamma ray and is resonantly absorbed by a nucleus of the same isotope. The ink samples were dried for the experiment. The volumes of the inks used varied from 0.2 mL to 0.6 mL, depending on the thickness of the sample after it had dried. Future studies involve aging paper/ink and seeing whether this causes changes in the degradation of the ink/paper and creates measurable changes using the Mossbauer effect with the eventual end product being use in observing manuscripts.

Presentation Type and Session: Poster VII

What the Frack Is Hydraulic Fracturing?

James Doyle, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Wende Mix, Geography and Planning and Professor Andrea Guiati, Director, All College Honors Program

Hydraulic fracturing, a method of retrieving trapped natural gas in shale bedrock of the earth's surface, has become a controversial topic lately. The practice is claimed by some to have been around for decades, but has become a more popular application recently. Fracking is done by drilling a well deep into the ground, cementing

a casing around it, and pumping water mixed with other materials into the shale bedrock, cracking it and releasing trapped gas which is sent back up through the well. Fracking has its pros and cons, but much more needs to be discovered about it before a conclusion can truly be formed. There are a variety of economic, social, and environmental costs associated with fracking. The question of how beneficial and worthwhile fracking may be has been contested with claims that it is not worth the risk, as there have been instances of the method failing. This presentation will explore the many issues related to the practice of hydro-fracking and compare them to the benefits. With the dependency on oil looking to staying constant, is fracking the next big thing to stay, or will it be exposed as a destructive force?

Presentation Type and Session: Poster VIII

What's In Our Groundwater? Buffalo State Groundwater Monitoring

Amanda Pratt, GEG 430W: Senior Thesis
Faculty Mentors: Professor Stephen Vermette, Geography and Planning and Professor Kelly Frothingham, Geography and Planning

This study centers on the sampling of a groundwater monitoring well on the Buffalo State College campus. The well was sampled about once a week between October 16, 2012 and March 9, 2013. In addition to groundwater levels, typical water quality parameters were monitored: temperature, dissolved oxygen, pH, total dissolved solids, total suspended solids, total solids, Escherichia coli (E coli), hardness, nitrate, phosphate, turbidity, and conductivity. Groundwater levels were compared to precipitation amounts to test the widely accepted theory that as precipitation increases, so too do groundwater levels. The recharge rate of the well is also noted in the study. Holding groundwater to the same water quality testing parameters as we do surface water bodies has seldom been done; most testing of groundwater wells in general is for specific suspected contaminants. As such, a major aspect of the study will serve the purpose of gathering data to establish a baseline of groundwater quality index measures.

Presentation Type and Session: Poster VIII

Which Pitching Statistic Is the Best Predictor Of Success?

Breanna Fenski, AMT 495W: Applied Mathematics Project
Faculty Mentor: Professor Bruce Sun, Mathematics

When it comes to baseball, pitching is a major component in winning games. I am going to look at a total of three hundred and twenty five pitchers from the fourteen American League teams in Major League Baseball. By using the Major League Baseball website, I will collect data from these pitchers in seven main categories. Using multiple linear regression, I will build a model to show how pitching statistics such as innings pitched, strikeouts, and earned run average correlate with a teams winning percentage. Since there are an average of twenty-three pitchers on a MLB team, a model like this can help management choose the most valuable pitchers based on statistics.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Zero Exists and Imaginary Numbers Are Real

Jason Greig, MAT 491: Capstone Research in Mathematics
Faculty Mentor: Professor Robin Sanders, Mathematics

Zero is widely known across the world today, to be the number that represents nothing. What most people do not know is the dark history that zero took place in Europe. I am researching the history of why zero was avoided to the point where it was banned from society. In the beginning of zero in Europe, they came up with many number systems that did not have a zero. It was the Arabs that found it useful to make zero become a number. Europeans also did not react to imaginary numbers very well. How can there be a square root of a negative number? Not only did imaginary numbers not exist, Europeans could not find a use for these numbers. This is why they were called imaginary. For a society that was so happy to advance and make discoveries, even take over the world, Europeans sure did not like the idea of adding strange or unknown concepts and symbols to their system of numbers. They were still in a time where a number had a meaning of quantity. There was no abstract, or algebra.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Psychology and Social Sciences

The Absence Of the Guerrilla

Gabriel Maldonado, History
Faculty Mentor: Professor Bridget Chesterton, History and Social Studies Education

Revolutions of the 20th century alone have defined the fate of much government's on a world stage either for the better or worst. Though, what can be concluded is that the less talked about revolution is the failed 1967 insurgency of Bolivia. Ernesto "Che" Guevara during the mid-1900s became the face of revolution due to his work in the successful revolution in Cuba. It was seen in Guevara's life that he himself represented a selfless dedication to the concerns of the underclass because he was willing to die for what he believed in was for the greater good. In the end the question that leaves many wondering is why did somebody so well known for his military career fail in causing a revolution in Bolivia and died doing so? One thing that can be said for sure is that Ernesto "Che" Guevara failed to effectively implement a guerilla insurrection in Bolivia because he himself failed to obtain enough peasantry support despite his well-known successful guerilla methods he used in the Cuban Revolution. It would be seen through his personal diaries that Guevara clearly identifies the root of his successes and failures.

Presentation Type and Session: Oral – Social Sciences

Aging Subadult Skeletons

Erin Baccari, Psychology and Anthropology
Faculty Mentor: Professor Julie Wieczkowski, Anthropology

The goal of this research is to estimate ages at death for two subadult skeletons in the Department of Anthropology's skeletal collection. Subadult skeletal remains are generally harder to age than adult skeletal remains because of variation in bone development and growth, eruption of dental elements, and fusion of bony elements. There is also less research done on aging subadult skeletal material compared to aging adult skeletal material. A literature review was completed and a table was constructed of all possible aging techniques for subadult remains. Accepted methods used in aging subadult skeletal material include examining the development of dentition, the length of the long bones, and union of epiphyses. Newer methods include measuring mandibular ramus height, examining microstructure of rib ends, and measuring the ilium. Appropriate methods were selected for use in aging the skeletons based on the equipment and skeletal material available and the effectiveness of the methods in regards to the skeletal material to be evaluated. The older, established method that was employed in aging the skeletal material consisted of examining the formation of four specific teeth, and the three newer methods that were used included using a regression equation with long bone measurements, measuring the mandibular ramus, and measuring the ilium.

Presentation Type and Session: Poster V

An All-American City: Building Buffalo With Pride

Destiny Gregoire, Spanish
Faculty Mentor: Professor Jo Yudess, Center for Studies in Creativity

When defining 'American', one word can encompass all people of this nation, diverse. Buffalo is an all-American city because of its diversity. Although diversity is complex, coexisting and building this city is possible and begins with the motivation of individuals. What can motivation do for a diverse community? In the vision for this project, community motivation can create a sustainable environment in which to live and grow. To be sustainable is to maximize internal and external resources to generate enough or more than enough to live happily. Considering the large topic of sustainability, it is necessary to break it down into smaller pieces. The piece chosen for this project is motivation. It will be studied with the combination of academic research and experiential learning at Buffalo State College. Tools to effectively communicate and connect with individuals in the community will be searched for and created. The goal of this project is to unite Buffalo's diversity and variety of people to give inspiration and guidance to the families and youth of Buffalo.

Presentation Type and Session: Oral – Social Sciences

Alternative Genders In Native North America

Amanda Oldham, ANT 498: Honors Research
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

Many indigenous North American societies did not hold the same strict dichotomous view of gender that we do in the West. Rather, gender institutions were often much more fluid and the existence of third and fourth genders has been noted in many indigenous cultures. Individuals in alternative gender categories, often referred to by anthropologists as berdache or two-spirit, often dress and engage in lifeways normally associated with the opposite biological sex. It is also common for these individuals to display a mix of gendered traits and have a distinct social role different to that either of men or women. Drawing from ethnohistorical accounts, ethnographic research and anthropological theory, this research explores social and spiritual roles held by alternative gendered individuals in Native North America. Various berdache institutions will be examined as they have changed throughout time, from early documented encounters with Europeans to modern Two-Spirit movements.

Presentation Type and Session: Poster IV

Analysis Paralysis – When Every Moment Counts In Lives: The 2011 Somalia Famine

Kamila Mysiak, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Mayra Velez-Serrano, Political Science and Professor Andrea Guiati, Director, All College Honors Program

The drought in Somalia in 2011 has taken many lives, most of

which were children. Warnings signs from Famine Early Warning Systems Network allowed many experts to know about the imminent drought over a year before. Despite of this, the international community's response (a year later) failed to avoid the scale of the disaster, which was declared the worst in last 60 years by United Nations. Why did the international community fail to act fast enough? This paper is a meta-analysis of the factors that influenced the humanitarian agencies' ability and willingness to act and the human life costs associated with the failed response. I found that the major obstacles to an effective response in Somalia included: the lack of a World Food Programme agency in Southern Somalia, lack of physical access to the affected populations, the militant group Al-Shabaab's confusing policies, Kenya's border procedures, and most importantly United States' policy against terrorism in the Horn of Africa. I argue that the international community could have avoided the humanitarian disaster if the necessary coordination structures were established a-priori instead as a reactive response after a crisis started. Finally, I suggest a new model to deal with drought and famine crises.

Presentation Type and Session: Poster II

Analyzing the Statistics Of Statistics

Veronica Darlow and **Tara Sozio**, PSY 488: Internship
Faculty Mentor: Professor Howard Reid, Psychology

This study is examining whether students' values and personality characteristics affect their grades in a required statistics course. It is evident that many undergraduates view psychology primarily as a helping profession, not as a science. It appears that these students tend to view statistics as an obstacle, not as an opportunity to learn valuable information. One goal of this study is, therefore, to determine whether those students whose focus in psychology is mainly on helping people do more poorly in the statistics course. A second goal is to examine whether students' personality characteristics, using the big 5 personality traits, will aid in predicting their statistics grades. It is anticipated that the results of this study will be of use in advisement and in assisting students to understand why the statistics course is a requirement.

Presentation Type and Session: Poster V

The Art Of Democracy: The Role Of Museums In Forming National Identity

Deirdre Reynolds, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Cynthia Conides, History and Social Studies Education and Professor Andrea Guiati, Director, All College Honors Program

Museums have a reputation of being elitist and stuffy, containing old and irrelevant artworks. However, museums were integral to the formation of national identity in fledgling nations and were thus one of the first institutions in a new country, second only to the administration of the government. This research comprised of a thorough examination of the origins of museums by utilizing various historical documents and interpretations, focusing specifically the Louvre in France and the Philadelphia Museum in the United States. This paper looked at the beginnings of these museums in the chaotic period of the early democracies, and based the interpretation of how the political figures of the time consciously used these institutions to create national identity on a speech given by Charles Wilson Peale, the father of American Museums. Using museological theory, history, and political strategies, this research focused on the role of the museum in creating a cohesive, national identity.

Presentation Type and Session: Poster III

Barriers To African-American Males Who Want To Attend College

Shawniqua Moultrie, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Dwight Hennessy, Psychology and Professor Andrea Guiati, Director, All College Honors Program

The goal of my research project is to understand the connection between potential barriers that African-American males may face and the low college attendance rate of these males. Though some African-American males do attend college and others graduate with their Bachelor's degree and go to graduate school in pursuit of a Master's or Doctoral degree, African-American males as a group have the lowest college attendance rate out of all the racial/ethnic and gender combinations. This study will explore the factors relating to the low college attendance levels of African-American males. Data will be collected through a series of questions in the form of a questionnaire. The questionnaire consists of background and demographic questions as well as 34 items that measure the impact of different barriers on the individual's decision to attend/not attend college. A convenient sample of African-American males who are currently attending college and those who have decided not to go to college and/ or have dropped out of college will be used. Approximately 60 to 80 African-American males will be administered this questionnaire. Participants will be compensated for their time and participation in this study. College students will be offered extra credit (if available by their professors) for participating in this study, while non-college students will be given $5 dollars as compensation for their participation in the study. Participants will be recruited from Buffalo State College and public organizations (i.e. community centers) around Buffalo, NY. This data will be analyzed and compared to understand why some African-American males attend college and others do not. The findings should reveal a connection between peer influence, Oppositional Culture, one's family/ role in the family, financial stability/ instability, the importance of having a positive male role, and college attendance levels for African-American males.

Presentation Type and Session: Oral – Social Sciences

Carrying My Self-Esteem In My Purse

Stephanie Soto, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Amitra Wall, Sociology and Professor Andrea Guiati, Director, All College Honors Program

The purpose of this study is to examine women and gender studies literature regarding factors related to college success. A systematic literature review will be conducted during April of 2013. The data for this study include twenty-five peer-reviewed articles. The same care and procedures will be used when critiquing. After searching research databases and selecting articles, the following steps will occur: Group articles by categories (thematically, theoretically, and/or methodologically); Take consistent notes; Identify definitions and key terms; Identify themes and patterns; and Identify relationships among the articles. A preliminary scan of the literature suggests that self-esteem, motivation, and encouragement lead to success for males and females.

Presentation Type and Session: Poster IV

Census Statistics Illuminated: Photography From a Visual Sociologist's Perspective

Keri Gould, Art Education
Faculty Mentor: Professor Meg Knowles, Communication

According to the Visual Sociological perspective, photographic evidence captures many small details other methods miss, which are equally relevant when studying society. This project juxtaposes original photographs taken in Census tracts (neighborhoods) that share a common characterizing trait, from three different cities (Boston, New York City, and Buffalo). The traits focused upon are income (high median income and low median income), gender (predominance of males or females), race (high concentration of Black/ African American, Asian, Hispanic/Latino, or Caucasian/ White people), population density (high and low density areas), and age (high median age and low median age). The procedure included gathering the statistics from census.gov, mapping locations for shooting photographs on site, and editing and mounting the final results for display. Results show the strongest correlation between statistics and visual appearance of the Census tract represented are in population density and race-related categories. However, the visual nature of the research makes it subjective, thus validating the viewer's interpretation.

Location: Dr. Margaret Eschner Bacon Student Gallery, Upton Hall, May 3, 12 noon – 9 p.m. and May 4, 10 a.m. – 5 p.m.

Children Of Law Enforcement: How a Career In Law Enforcement Influences the Parent Child Relationship

Chelsie Larson, Psychology
Faculty Mentor: Professor Robert Delprino, Psychology

Law enforcement is an inherently stressful occupation and the career can have potential negative effects on family life. Limited research has focused on how the career affects the children of officers. The goals of this study was to explore how relationships between officers and their children are affected by their parents' career as a police officer through the perspectives of the officer, spouse, and the child. Data was collected through the use of survey questionnaires and focus groups. Officers, spouses, and children completed scales related to perceived work family conflict, parental style and communication. This study identified differences in perceptions of the job and communication between family members. For example, officers and spouses viewed themselves as being fairer in their parenting styles than did children. Communication patterns were also perceived differently between the groups. Officers are more likely to share information with other officers and their spouses Interestingly, children reported that their parents are talking to them about the job, but officers report that they do not. There is a misperception about the communication taking place within the family, specifically between the officers and their children.

Presentation Type and Session: Poster VII

College Students' Attitudes Towards University Police

Melissa Noel, Criminal Justice and African American Studies
Faculty Mentor: Professor James Sobol, Criminal Justice

College and university campus administrators hire university police to prevent crimes that are sometimes reflective of the outside community, such as fatal mass shootings, theft, drug use, and victimizations. A minimal amount of research has been done that studies the relationship between students and university police. Given the important role of university police on campus, it is vital to examine college students' attitudes towards university police. The purpose of this study is to examine individual characteristics and experiences that could be determinants of college students' perceptions of university police at SUNY Buffalo State. Specifically, in this research, students' past experiences with police and individual characteristics will be measured by using a survey questionnaire. Results from this study will allow one to gain an insight on any potential problems that may exist on campus.

Presentation Type and Session: Poster I

Contraceptive Prevalence: A Study Of the Main Impact On Abortion Rate

Sara Sweeney, PSC 470W: Senior Seminar
Faculty Mentor: Professor Peter Yacobucci, Political Science

According to the World Health Organization (WHO), there are 125,000 abortions per day around the world. While this statistic is indeed shocking, it corresponds with the reality that every year there is an estimated 40-50 million women faced with an unplanned pregnancy (WHO). Clearly there are countless explanations for why women feel an abortion is necessary. With approximately 206 existing countries across the world, it seems difficult to find one

common denominator behind having an abortion. Certain variables are argued for the ultimate push on the need for an abortion. Such variables include the accessibility of contraceptives, the economy of the country, and the law restrictions on the abortion procedure. Throughout the world, each country has its own limit on the abortion procedure. Some countries only allow an abortion when it is necessary to save a women's life, some for social economic reasons, others do not have such restrictions or have specific limits on this procedure. Unfortunately, the reality of these limits creates the issue of unsafe abortion. However, this research will only focus on legal abortion accounted for the fifty most populated countries in the world; with the largest population approximately 1.3 billion and the smallest population being over twenty- three million. Regardless of the economy and the limitation of the procedure, the foremost influence on the rate of abortion is a direct result of the accessibility of contraceptive prevalence throughout a country; the more access the country has towards contraceptive prevalence, decreases the abortion rate.

Presentation Type and Session: Oral – Social Sciences

Cooking With Earth: Recreating Ancient Indigenous Cooking Technology From Poverty Point

Amanda Oldham and **Karen Hammer**, ANT 498: Indigenous Cooking Methods
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

Many Native groups in North America developed sophisticated and diverse food processing technologies. The people of Poverty Point in Louisiana developed an incredibly efficient method for cooking that involved the use of silt balls in earth ovens, circa 1730-1350 B.C. These uniquely shaped silt balls, known by archaeologists today as Poverty Point Objects (PPOs), regulated cooking temperatures and held heat in earth ovens for specific periods of time. Earth ovens were constructed by digging a circular pit in the ground and creating a fire. Once the fire had died down, PPOs were added, along with wrapped food and the pit was covered with soil. Our experimental research seeks to recreate this intricate technology. Information will be drawn from archaeological data from various sites associated with Poverty Point culture. This includes analyses of floral and faunal assemblages, as well as material culture related to food processing. With this data, we will attempt to process and cook food in a similar manner as the indigenous peoples of Poverty Point while collecting information regarding the efficiency of this technology.

Presentation Type and Session: Poster V

The Development Of Cyber-Warfare and Deterrence In the 21st Century

Mark Coons Jr., PSC 470: Senior Seminar
Faculty Mentors: Professor Patrick McGovern, Political Science, Professor Peter Yacobucci, Political Science, and Professor Mayra Velez-Serrano, Political Science

At this time there is a shift occurring from the tactics and techniques used in traditional war and deterrence to the new cyber domain. The major effect of cyber war is that it equalizes the playing field. While before nations required massive defensive budgets and the latest kinetics based weapons systems, now all that is required are talented hackers and access to the Internet. The purpose of this paper is to demonstrate which societal, political and economic features would be necessary for a nation to build a cyber-war program. I hypothesize that because of the relative low cost and potentially high gains associated with cyber operations, that many nations the world over are developing their own cyber warfare and espionage programs. I also hypothesize that because of this shift from kinetic operations to non-kinetic operations there will be an increase in the frequency of war between nations, regardless if they are democratic or non-democratic regimes. In order to verify these hypothesizes, I have constructed a data set consisting of 198 nations and the types of critical components I feel are necessary to begin developing and maintaining a cyber-program. I will then run regression models to determine whether or not these components are indeed critical and what nations have all the necessary criteria to be considered a cyber-threat.

Presentation Type and Session: Poster VIII

The Differences That Exist Between Honors and Non-Honors Students

Emily Marshall, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Pamela Schuetze, Psychology and Professor Andrea Guiati, Director, All College Honors Program

There are many different aspects of intelligence. Educational institutions distinguish between honors students and non-honors students. Honors students are considered to have a higher intelligence then those who are not honors students. However, grade point average is not enough to properly distinguish between the different aspects of intelligence. Our study hopes to look at intelligence but also self-esteem, parental involvement and perceptions of achievement in students. Using information from past studies done on these topics, I hope to present a clearer picture on what makes an honors student, an honors student. I also hope to present a possible study that could be done here at Buffalo State using the Peabody Picture Vocabulary Test and other surveys that we hope to use to determine any significant differences in perceptual and cognitive functions in honors and non-honors students at Buffalo State.

Presentation Type and Session: Poster IV

Do the Gender and Physical Abuse History Of the Victim Influence Jurors' Decision-making?

Tessa Bechtold, **Michelle Granieri**, **Alyssa Grove**, and **Melissa Hoc**, Psychology Club
Faculty Mentors: Professor Robert Delprino, Psychology and Professor Jean DiPirro, Psychology

Battered spouse syndrome typically focuses on the physical abuse of women in heterosexual marriages. Past research has shown that women who report a history of abuse are perceived differently by jurors than are women who do not report a history of abuse (Ho & Venus, 1995). This study examines how the gender of the abused and the history of physical abuse influence a juror's verdict of innocence or guilt in cases that involve the abused taking the life of their abusive spouse. The design of this study is a 2 X 2 between-subjects factorial design. It is hypothesized that cases involving a history of chronic physical abuse will result in a lesser sentence from the jury. In addition, female defendants will receive a lesser sentence than will male defendants.

Presentation Type and Session: Poster IV

Does Cooperation Increase Competitiveness? Evaluating the Connection Between Regional Governance and Economic Competitiveness

Sarah Caputi, PLN 430: Senior Thesis
Faculty Mentor: Professor Vida Vanchan, Geography and Planning

In many city centers across the United States, sprawl and urban decline have left empty frames where bustling cities once stood. Although many factors may contribute to economic decline within these communities, some argue that short-sighted planning decisions made at the local level are to blame. The practice of regional planning or governance is one posed solution that promotes cooperation of municipalities within a region to improve equity and economic competitiveness. Although regionalism claims to promote regional competitiveness, there have been few studies that actually test whether or not regional planning accomplishes this goal. This study aims to do just that, proposing that regions implementing regional governance are more economically competitive than regions whose municipalities practice localized planning. It assesses the competitiveness of ten Metropolitan Statistical Areas (MSAs), including the Buffalo-Niagara Falls MSA, by comparing indices used to measure (1) economic competitiveness and (2) the extent of regional governance. In particular, it seeks to determine if implementing regional practices has the potential to help improve the economic competitiveness of Buffalo. If these findings support the hypothesis, it could provide further incentive for municipalities to participate in regional governance.

Presentation Type and Session: Poster IV

Does Military Corporations Influence Critical Decisions?

Devin Miller, PSC 470: Senior Seminar
Faculty Mentor: Professor Yacobucci, Political Science

Do Military corporate donations influence political decisions? Abstract There are ten top military corporations whom are foreseen as the top contributors to political candidates in exchange for contracts in favor of their particular corporation. However, there can be several other contributing factors in accordance to studies such as the location, the number if lobbyists, as well as the president at the given time. The most contributing factor as to the support of political figures in exchange for contracts is lobbying expenditures given to politicians on behalf of each corporation. The data gathered from an outsource containing the above stated variables dating from 2001-2012. After imputing the data I ran the test comparing each and, therefore reaching my conclusion proving the theory of corporate donations in exchange for contracts to be incorrect. This is due to a low statistical significance and a high f-score exemplified in each tested model both of which exemplify the validity or significance of the data in addition to the correlation between the independent and the dependent variable.

Presentation Type and Session: Poster VI

Dorm Or Commute: Is There a Pothole On Your Road To Success?

Sarah Lippert and **Hannah Bronstein**, PSY488: Internship
Faculty Mentor: Professor Howard Reid, Psychology

SUNY Buffalo State, the only urban comprehensive college in the SUNY system, has a large proportion of commuter as well as residential students. While previous research has identified numerous predictors of student academic success, relatively little research has differentiated between success in commuter and residential students. The present questionnaire study is examining a number of emotional and social variables to determine whether they equally influence both groups of students. Among these variables are stress, depression, anxiety, social involvement, extraversion, and alcohol consumption. Data will be collected from a range of classes across the four schools of study. The results of this study may provide valuable information to assist college students with making potential housing decisions, and administrators in determining how to best support a diverse student body.

Presentation Type and Session: Poster V

The Effects Of Working Memory Capacity and Gesturing On Verbal and Visual Spatial Performance

Ashley Wolff, **Antonique Hooven**, and **Courtney McCowan**, PSY 499: Independent Study
Faculty Mentor: Professor Stephani Foraker, Psychology

The purpose of our study is to see if gesturing interferes with working memory during a visual spatial task, but helps with

verbal recall during a working memory task. Previous research has indicated that gesturing while describing how to solve a math problem effectively increases one's working memory capacity (Wagner, Nusbaum, & Goldin-Meadow, 2004). For the purpose of our research we went further to determine (a) whether gesturing also helps when describing spatial relations (Segal, 2010 found null effects), and (b) whether or not a participant's spatial or verbal working memory capacity measured independently (Redick et al., 2012) can help explain their performance during these working memory tasks. Participants began by completing either a verbal or spatial task to measure their working memory capacity independently. Afterwards participants performed two working memory tasks simultaneously: describing the spatial locations of objects in a picture while memorizing a series of letters or a pattern of dots on a grid. Our hypothesis is that participants will experience interference (lower memory accuracy) when gesturing and memorizing the dot pattern, but will improve (higher memory accuracy) when able to gesture while memorizing the series of letters. Furthermore, we hypothesize an interaction: participants remembering a list of letters who have a high verbal WM score will have the best memory recall when they gesture and those who have a low verbal WM score will have the lowest recall when not able to gesture. We also expect participants who score higher on the visual-spatial WM test will have the best score on the tests when they do not gesture, and gesturing will hurt memory most for those with a lower visual-spatial WM capacity. Data collection is still in process. This study can show us whether or not gesturing is helpful during cognitive processing and if gesturing is more helpful in certain circumstances than others.

Presentation Type and Session: Poster VII

The Effect Of Security Measures On Fear Of Crime and Victimization At a College Campus

Andrew Robinson, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Elizabeth Szockyj, Criminal Justice and Professor Andrea Guiati, Director, All College Honors Program

The issue of safety on college campuses is an emerging concern among students, parents, administrators and policy makers alike. Several studies have been done, which cover various elements related to campus safety and how students perceive certain risks. Gover (2009), for example, focused on fear of crime, victimization, and related crime and safety issues in an urban university in Colorado. He found that fear of crime and the perception of safety were largely influenced by gender and certain environmental factors (Gover, 2009). In this study, it is hypothesized that the presence of security measures on campus will reduce students' fear of crime. An online survey was developed and administered to a convenience sample of Buffalo State students during the Spring 2013 semester. The survey includes questions on campus security measures, such as the effect of blue light phones, cameras, and lighting on students' fear of victimization. It is anticipated that the results will support the current hypothesis. The conclusions drawn from this study will not only help college students understand the role security measures play in affecting the fear of victimization on campus, but it will also illustrate student reactions to existing security measures and whether or not they have an overall sense of safety on campus.

Presentation Type and Session: Poster I

Evaluating the International Law On Armed Conflicts and Humanitarian Intervention, Case Study: The 2011 Conflict In Libya and Its Aftermath

Greta Crisan, Political Science
Faculty Mentors: Professor Laurie Buonanno, Political Science and Professor Kyeonghi Baek, Political Science

The international developments in the Post-Cold War era have shown major changes in state interactions and interrelations. The rise of non-state actors, their importance to world politics, and their impact on international peace and stability, are factors that require a change in the way the states handle any type of armed conflict in the overall international setting. Therefore, the international law on war and humanitarian intervention requires major modifications and the just war theory needs to be extended to cover post-conflict developments. States have to reach a unitary stand on international law in general, and all of its sub-domains in order to obtain a stable frame of international peace and security. The Libyan conflict reflects the contemporaneous state of the international context, as a regional conflict develops having regional and global effects. Moreover, the actions needed to restore the respect and guarantee of human rights ask for a stronger force, in order for the actions to be successful. Given that the issues cannot be properly tackled at the domestic level, the situation itself requires external help. This matter manifests proportionally with the differing views on peacekeeping missions in general, and with the conflicting positions about whether there is a need for such a mission in Libya.

Presentation Type and Session: Oral – Social Sciences

Examining the Relationship Between Personality and Musical Preference, Use and Engagement: Big-5, Boundaries, and Attachment

Tyler Sutton, Psychology and **Charles Petko**, Psychology
Faculty Mentor: Professor Michael Zborowski, Psychology

Given its ubiquitous nature within our everyday lives, music is often taken for granted. Rentfrow and Gosling (2003) discovered that people believe that an individuals' music says a great deal about their personality qualities. There exists a great deal of research for how the Big-Five personality factors correlate with various musical genres. Further, Chamorro-Premuzic and Furnham (2007) have

correlated the Big-Five personality traits to how individuals use music, such as emotional regulation, intellectual/cognitive purposes, and background noise. However, there is a paucity of research linking psychological boundaries, and attachment styles to musical genre and engagement. The present study intends to look at how musical genres and the uses of music correlate with psychological boundaries, the five-factor model of personality, and attachment style. We are looking to examine how personality relates to music preference, and one's relationship to music (interest, degree of engagement, etc.). Beyond degree of immersion, we are interested in the role music plays in their lives, and specific involvement (solitary, concerts, performance). Data are currently being collected through online and paper and pencil methods.

Presentation Type and Session: Poster V

Expression Through Play: The Implications Of Gender Neutrality On Preschool Age Children

Kira Bruce, Psychology
Faculty Mentor: Professor Jill Norvilitis, Psychology

Gender neutrality is a misunderstood concept within our culture, and often considered a deviation from traditional gender roles. The present study examined gender-neutral behaviors among preschool age children and the influences of their environments. Child participants were asked to choose a toy to play with, characterized as "boy toy", "girl toy", and "neutral toy", followed by a questionnaire. Teachers and parents were asked to complete surveys regarding the individual children, their styles of play, and methods used to educate the children about gender. Results demonstrated that although children report gender-neutral preferences they still engage in traditional gender behaviors. Additionally, although parents do not appear to perpetuate stereotypes, they do little to prevent their development.

Presentation Type and Session: Poster V

Forced Assimilation: The Rise Of Native American Boarding Schools

Celia Mancuso, ANT 499: Historical Indigenous Studies
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

The Civilization Fund Act was put in place by the United States Congress on March 3, 1819. The Act was established in order to educate Native Americans and provide them with a basic understanding of how to become a "productive" and "civilized" member of society. These boarding schools were designed to force assimilation on Native peoples, and to replace traditional ways of life with those approved by the United States government. This caused the removal of children from their families in order to eradicate their tribal culture and to force them to adopt a new American way of life. This research will explore the effects of forced assimilation seen in these boarding schools and how it has contributed to the loss tribal identity. Information will be drawn from biographical resources as well as historical accounts.

Presentation Type and Session: Poster V

Geographic and Trend Variation In Teen Childbearing Rates

Jeff Oyo, Economics
Faculty Mentor: Professor Theodore Byrley, Economics and Finance

The Purpose of this research was to explore geographic and trend variation in teen childbearing rates. Teen childbearing is widely perceived to be a socio-economic problem, often considered both a cause and consequence of poor economic circumstances. The broad research agenda we pursued was focused on the causes of teen childbearing. The main phase of this research explored aggregate correlates of teen childbearing rates, such as poverty and median household income. We also examined the relationship between income inequality and teen childbearing, which is a novel direction in this line of research. Today's initiatives addressing teen childbearing are focused on sex education or abstinence. This study moved away from a focus on the mechanics of pregnancy and investigated socio-economic causes and solutions. This focus will provide valuable information regarding teen birth rates and its underlying causes.

Presentation Type and Session: Poster III

Going the Distance: Comprehending Pronoun-Antecedent Dependencies As Intervening Entities Increase

Bryan Wight, Psychology
Faculty Mentor: Professor Stephani Foraker, Psychology

Pronouns create an indirect allusion to the entity to which they refer – the referent. Two competing explanations of how unconscious processes facilitate pronoun-referent comprehension within discourse are: direct-access, which states we make use of cues at the pronoun virtually automatically, matching their characteristics to the meaning of the referent in comparison to other entities (McKoon & Ratcliff, 1980; Foraker & McElree, 2007), and serial search, which states we scan our mental representations one by one without initially considering the meaning of the referent (McElree & Dosher, 1993; O'Brien, 1987; Sternberg, 1966). Past research has shown direct access to be the leading explanation for noun-verb linking (McElree, Foraker, & Dyer, 2003) and verb-phrase ellipsis (Martin & McElree, 2008; 2009). The present study manipulated the number of distractor entities (short, medium, or long distance) between the pronoun and its referent noun across two experiments. In the first experiment, 45 participants read sentences and answered comprehension questions while their eye movements were recorded via an infrared eye-tracking camera. Eye tracking analyses ruled out a serial search mechanism to bridge the

connection between the pronoun and its antecedent, thus supporting direct-access as the crucial mechanism. In the second experiment, using a speed-accuracy tradeoff mathematical modeling procedure, analyses showed that averaged over 15 participants, a 3-1-1 (three asymptotes, one slope, one intercept) model was the best fit for the data. This also rules out the serial search account because the rate and slope were not affected by the distance manipulation. In sum, these two experiments support the direct-access account of pronoun-referent resolution and indicate the importance of the meaning-driven cues available at the pronoun.

Presentation Type and Session: Poster VII

Grave Mistakes and the Greater Good: The Deficiencies Of NAGPRA

Sean Johnston, ANT 498: Honors Research
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

The Native American Graves Protection and Repatriation Act, otherwise known as NAGPRA, is a federal law that was enacted in 1990. The law was established to address issues regarding the repatriation of human remains and associated artifacts to federally recognized Native American nations. NAGPRA also protected unmarked graves on federal lands, ensured religious freedom and burial practices, solidified tribal sovereignty concerning graves, and prohibited the trafficking of Native American remains and associated artifacts. Although the intention was sound, the resulting piece of legislature was riddled with shortcomings. The application of the law itself only applied to institutions and organizations that received federal funding. This limitation failed to address private institutions, collectors, and land owners. Also, in order to file a claim citing NAGPRA, a tribal group must be federally recognized and be able to provide evidence of descendent lineage with the burden of proof falling on the Native nation. The apparent weaknesses of NAGPRA have been exposed through multiple court cases including the Kennewick Man controversy. A sampling of these cases will be examined including their NAGPRA interpretations as well as their legal ramifications. Research will also include recent legal publications that theorize how to rectify the multiple deficiencies inherent to NAGPRA.

Presentation Type and Session: Poster VI

Hate Crime Against the LGBT: An Unsolved Issue

Louis Guillermo, PSC 204: Political Statistics
Faculty Mentors: Professor Kyeonghi Baek, Political Science and Professor Mayra Velez-Serrano, Political Science

What kinds of legal steps are being taken towards the rise of hate crimes against the lesbian, gay, bisexual, or transgender community (LGBT) in the United States? I argue that all the states do not necessarily take the situation seriously to diminish the rate of these crimes. Certain states hardly even have laws for hate crimes based on a person's sexual orientation or even consider hate as a crime at all. People of a sexual orientation do not receive the adequate protection by law enforcement and sometimes do not report the crimes because of the unequal treatment or mistrust in the local legal system. I argue that states with laws and statutes for the gay community have higher rates of hate crime reports than states that do not, while controlling for other factors. I use statistical analysis to examine the effect of legal protection on the rates of LGBT crime.

Presentation Type and Session: Poster VII

Hazing: The Past, Present, and Future

Cinthia Avelar, HON 400: All College Honors Colloquium
Faculty Mentor: Professor Professor Andrea Guiati, Director, All College Honors Program and Ms. Kristen Catalano, Student Life

Hazing is a very broad subject that many people prefer not to talk about or simply are ignorant to what it is. Many schools, universities, and agencies have been cracking down on the amount of hazing that is going on but fail to see what the biggest problem of all is. People don't know what hazing really is. My sources will include journal articles as well as media (e.g., newspapers, movies, and television). I intend to gain insight into the reasons why people don't understand what hazing is, why the "hazers" do it, and also find what people's limits are. With this research, perhaps I will uncover truths about hazing that might contribute to solutions and help in better educating the student body and staff. Unfortunately, not every state has a hazing law, but with this research project, I hope to possibly find a way to make having such laws unnecessary.

Presentation Type and Session: Oral – Social Sciences

The Hidden History Under Your Feet: Tunnel Systems At Buffalo State

Kelly Donovan, HON 400: All College Honors Colloquium
Faculty Mentors: Mr. Daniel DiLandro, Archives and Special Collections and Professor Andrea Guiati, Director, All College Honors Program

On cold, wet and drafty days, both residential and commuter students wish there were underground tunnels through which to commute to class. Unbeknownst to many, there are. My research explores the campus construction that led to the current tunnel system and its eerie connections with the former Buffalo State Asylum for the Insane. It also uncovers the student and custodial usage over time, and mysterious closing off to students in the mid 1960's. Through the use of interviews and archival research, I will explore the tunnel system's history from a construction, student life, and University Police standpoint. Step back in time, into these tunnels, as I document first-hand the amenities students before our time utilized. Finally, voice your opinion on a few new plans for tunnels that could exist at Buffalo State in the future, including placement, safety concerns, aesthetics, and general design.

Presentation Type and Session: Poster I

How an Individual's Self-Awareness Affects Their Press

Danielle Spagna, CRS 499: Independent Study
Faculty Mentor: J. Michael Fox, International Center for Studies in Creativity

During my course (CRS 320, Applications of Creativity) in the spring semester 2012, I made connections between self-awareness and the ability to adapt to my surroundings. I posit that being self-aware in a college setting promotes greater success after graduation. To support this position, I developed a model to articulate how individuals interact with their internal and external social/psychological press (environment) and their creative problem solving processes. I wish to explore the efficacy of this model during this study. My hypothesis is that individuals who are self aware are more likely to adapt to their internal and external social/psychological environments than those that are not self aware. I have put together a research project that I propose will show how important creative thinking skills are to sustain a healthy life in and out of school. I plan to present my findings by articulating and supporting the steps I took to develop the model.

Presentation Type and Session: Oral – Social Sciences

The iChange! Project: Changing the World One Community At a Time

Aitina Fareed, Educational Technology
Faculty Mentors: Professor Jo Yudess, Center for Studies in Creativity and Ms. Gail Wells, Student Life

Buffalo has been deemed the third poorest city in the United States. The schools, neighborhoods and communities reflect this statistic. Many youth in the city's urban communities have little to no resources and some choose negative paths due to lack of guidance and hope. The purpose of The iChange! Project is to promote youth to be aware of social issues and become agents of change, actively taking part in the transformation of our city. Research will be conducted on the top social dilemmas that affect the US in relation to Buffalo NY and existing Human Service organizations and programs that actively tackle such dilemmas. Through the use of educational technology such as digital media, the data will be organized into a video presentation. This video will display the City of Buffalo's poorest neighborhoods and low performing schools, while also displaying the statistics of violent crime, poverty, and drop-out rates that plague the city. The hope is The iChange! Project can be implemented into a youth program where students in grades 6-8 can become functionally knowledgeable in the basics of conducting research. Students will learn to search out social dilemmas and become change agents, having the power and confidence to carry out ideas to become actively involved in the transformation of our city.

Presentation Type and Session: Oral – Social Sciences

Identification With Peer Crowds and College Drinking Outcomes: Drinking Motives As Mediators

Rachel Caputi, Psychology
Faculty Mentor: Professor Michael MacLean, Psychology

Drinking motives are robust predictors of level of alcohol use and related problems in college students. Therefore, it is important to identify additional factors that may account for individual differences in drinking motives. Building on a previous study (Caputi, MacLean & Lee, in progress) in which identification with certain peer crowds was found to predict alcohol use and related problems, the current study involves testing whether this relationship is mediated by drinking motives. This study will analyze responses of 18-24 year old participants from the Buffalo State College campus [N=706]. To test for mediation, a series of structural equation models will be run using AMOS 21 statistical software. I expect to find relationships between peer crowds and different drinking motives, and that these relationships will at least partially mediate how peer crowds are related to alcohol outcomes. In other words, it is anticipated that drinking motives will account for some of the variance in alcohol use and related problems across college peer crowds. For example, self-identified "party animals" and "loners" may both experience high rates of alcohol-related problems. However, mediational analyses may indicate that loners' problems are associated with coping motives while party animals' problems are associated with affect enhancement motives. Such findings would have implications for tailoring prevention and treatment interventions for different peer crowds based on their reasons for drinking.

Presentation Type and Session: Poster VI

Identifying With Peer Crowds and College Drinking

Rachel Caputi, PSY 498: Honors Thesis
Faculty Mentors: Professor Michael MacLean, Psychology and Professor Andrea Guiati, Director, All College Honors Program

Identification with peer crowds, or groups characterized by distinct patterns of behavior, has been associated with patterns of alcohol use among high school students. To investigate whether such an association exists among college students, analyses will be conducted on data collected from Buffalo State undergraduates. Students (N=706) self-reported crowd membership on the 15-item Social Identity Scale (adapted for this study). Participants also reported their reasons for drinking (DMQ; Cooper, 1994), their typical quantity and frequency of alcohol use over the past 12 months (NIAAA task force, 2003), and the alcohol-related problems they have experienced (RAPI; White & Labouvie, 1989). Responses will be analyzed using a person-centered approach to identify that crowds students endorse. Analysis of variance will be used to compare alcohol motives and outcomes across peer crowd groups. In addition, a variable-centered approach will be used to identify correlations between level of identification with each crowd

and alcohol use and related problems. We expect to find unique correlations between different peer crowds and alcohol use. For example, a negative correlation is expected between identification as a "serious student" and alcohol use, while level of identification as a "party animal" will be positively correlated with alcohol use. These findings will expand the literature on peer crowds and identity formation to include the relationship between peer crowds and college drinking, while also identifying those at a higher risk of experiencing alcohol related problems on college campuses.

Presentation Type and Session: Poster VI

The Impact Of Animated Television Shows On Verbal Aggression

Jaclyn Turley, Psychology
Faculty Mentor: Professor Dwight Hennessy, Psychology

Based on the Social Learning Model (Bandura, 1959), when we view actions from models that are presented as socially acceptable and desirable we often alter our schemas and interpretations of the appropriateness of those behaviors, which ultimately increases the chances that we will imitate those actions in a similar way in the future. The current research examined the possible interaction between viewing verbal aggression on television and subsequent frustration on the likelihood of verbal and symbolic aggression among students. Participants watched an 8 minute video of Sponge Bob Square Pants that either contained verbal aggression or not. They then completed a visual spatial task that was solvable or not (the frustration task). Finally they were given a chance to rate and grade the researcher with the instructions that poor ratings would harm the grade of the researcher. Results did not find a significant interaction. One possible reason may be that the same size was too small and therefore underpowered. Another possibility is the sample was not a good representation because it consisted of mostly psychology student gathered from summer classes. The participants may have changed their response because they wanted to help a fellow student even though they may have been frustrated by the task. Future research should repeat the study with a larger sample size that consists of more students from multiple majors to see if there is a significant reaction.

Presentation Type and Session: Poster VI

Improving Student Grades Through Concept Homework

Carolyn Rooney, Psychology
Faculty Mentor: Professor Jennifer Hunt, Psychology

We investigated whether homework assignments that involved describing and applying key concepts in Social Psychology improved students' performance on class exams. We studied the correlation between the number of homework assignments turned in, scores on the homework, and the students' first and second exam grades in a Psychology of Social Behavior class. Forty-four students participants could complete up to 12 homework assignments, earning full credit, half credit or zero credit. We found that as the number and quality of assignments turned in increased, so did the student's exam scores. The correlation between students' total homework score and their exam grades was .59, $p < .001$, and the correlation between the number of homework assignments turned in and the exam grades was .53, $p < .001$. These findings suggest that the more homework students complete and the better that they do on it, the more likely they are to do well on the exams and thus in the course. We currently are comparing exam scores from this section of the course to scores from previous classes to see whether the homework assignments improved overall class performance.

Presentation Type and Session: Poster V

In Times Of Great Challenge: The Shaping Of the Executive Office

Daniel Darnley, History and Music Education
Faculty Mentor: Professor Jean Richardson, History and Social Studies Education

In Times of Great Challenge: The Shaping of the Executive Office. Come and experience the history of the Executive Office of the United States of America. This presentation explores the ways in which Presidents Thomas Jefferson, Abraham Lincoln, and John Kennedy have overcome the challenges of their times. Each of these leaders expanded and shaped the Executive Office in some way. As Presidents during some of the most difficult times in our nation's history such as, westward expansion, Constitutional power, Civil War, and the Cold War, this presentation will be filled with information as to how each expanded of the powers of the President. An office that carries with it the challenges of a nation, we have called upon one person every four years to lead the United States through our most challenging times. Understanding the past is the key to understanding our present. As can be read on the exterior of the National Archives, what is past is prologue.

Presentation Type and Session: Oral – Social Sciences

Indoctrination On the Nile: The Assertion Of Feminine Authority Through Temple Propaganda In Ancient Egypt

Alyssa Frijey, Anthropology
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

Evidence in the archaeological record of ancient Egypt shows that individuals in positions of authority have often utilized propaganda as an effective means to exert their supremacy over a mass population. The royal/priestly women of ancient Egypt often enjoyed a great deal of freedom and, at times, limitless power which was secured through several forms of indoctrination. The purpose of this study is to analyze the ways that these women utilized iconography within temples as propaganda. Sites such as Beni Hasan, Deir el-Bahri, and Karnak offer evidence of this type. For

example, the walls of the mortuary temple of Queen Hatshepsut at Deir el-Bahri are blanketed in narrative relief scenes depicting the queen as a daughter of the gods, in full pharaonic regalia, among the riches secured during her successful expeditions to Punt. The assertion of feminine authority in ancient Egyptian history and the manner in which it evolved may be effectively noted through an analysis of such iconography.

Presentation Type and Session: Poster VI

The Influence Of Temperature Upon Decomposition In Western New York: A Study In Accumulated Degree-Days

Jessica Stabell, Anthropology
Faculty Mentor: Professor Julie Wieczkowski, Anthropology

This research project was an eight-week study of the rates and stages of decomposition in a pig carcass in Western New York, where no prior research on decomposition had been conducted. The research was based on the newly devised method of the Accumulated-Degree-Days (ADD) index. ADD measures the rate of soft tissue decay using average daily temperature. The carcass was observed every 24 hours. Photographs, notes, and data sheets were used to document the weather and decompositional changes. Minimum, maximum and average daily temperatures were recorded at 2:30 p.m.. The ADD index was calculated by adding the average daily temperatures from death until a certain stage or event of decomposition. It was hypothesized that the stages of decomposition would occur in the same order as in the published results, though the temperature it may take for the remains to reach those stages would differ. These hypotheses were found to be correct. Sequentially, the five stages of decomposition were found to be the same as in the literature. The temperature it took for the carcass to reach those stages and the sequence of events within the stages varied from prior studies due to the unique climate of Western New York. The drought in summer of 2012 also impacted the presence and time-span of wet and moist decay. The results of the ADD index emphasized the importance of creating an ADD index for each region, and how influential temperature and geographic location are to decomposition.

Presentation Type and Session: Oral – Sciences, Mathematics, and Health

Jurors' Understanding Of Character Evidence Instructions

Erin Baccari, Psychology and Anthropology
Faculty Mentor: Professor Jennifer Hunt, Psychology

This research examined whether lay people who could serve as jurors in criminal trials can understand jury instructions dealing with character evidence. This research first involved collecting and cataloging pattern jury instructions for character evidence from all states and circuit courts in the U.S. The second part of the research involved collecting data on potential jurors' comprehension of those instructions. We hypothesized that many potential jurors would not fully understand the pattern jury instructions. 308 participants (59.5% women, 77.9% White, mean age = 35.26 years) from across the U.S. completed an online questionnaire with actual jury instructions for character evidence as well as other types of jury instructions. The participants then answered multiple choice questions as well as open ended questions to test their understanding of the instructions. Participants were recruited through Amazon's Mechanical Turk and completed the study for a small monetary compensation. The results from our questionnaire showed that about 87-89% of participants understood the character evidence instructions based on answers to multiple choice questions. The open ended answers were coded for accuracy and content. We found that, although participants frequently could answer multiple choice questions correctly, they often failed to accurately restate the instructions in their own words. This research can contribute to the creation of better, more easily understood character evidence instructions which could be used in a court of law to improve juror decision making.

Presentation Type and Session: Poster III

Koxinga: A Son Of Coastal China In an Era Of Transition

Jonathan Keenan, HIS 498: Honors Research
Faculty Mentor: Professor Michael Lazich, History and Social Studies Education

This research project will focus on the historical circumstances surrounding the life of Koxinga (Zheng Chenggong), a Sino-Japanese scholar who became a pirate/entrepreneur along China's coast during the Ming-Qing transition of the mid-seventeenth century. This study will focus on how the historical developments of that era placed him in the foreground of events and made him a man of legend. His experience of having lost his home and family during a particularly tumultuous period of political transition in China and Japan shaped his character in a unique fashion and made him an exceptionally interesting historical figure. As a loyal supporter of the Ming dynasty, Koxinga committed his private militia forces to defending the empire against the Manchu conquerors who eventually established Qing dynasty rule over China. He also came into conflict with the Dutch over control of the lucrative trading networks of the China coast, ultimately dislodging the Westerners from their base on the island of Taiwan. In short, Koxinga played a major role in the political and commercial struggles of his era.

Presentation Type and Session: Poster VII

Lesbian-Identity and the Male Gaze: A Study Of Exotic Dancers

Aileen McCluskey, SOC 499: Advanced Qualitative Methods
Faculty Mentor: Professor Staci Newmahr, Sociology

This project explores whether and how lesbians negotiate the desire for sexual attention from men. Informal pilot discussion with lesbian-identified women suggests that this is something they are aware of and interact with. It is known that a number of exotic dancers identify as lesbians (Barton 2001); thus I examine the strip club as a place where lesbian-identified women may be able to explore their desire for male sexual attention or the male gaze and simultaneously escape scrutiny from the lesbian community. With the ability to dismiss these erotic encounters with men as simply a job, lesbian women may be using the club as a 'safe space' to explore a want for male sexual attention. I explore this through extensive interviews with lesbian-identified dancers. This presentation will discuss potential reasons for the lack of information exploring this relationship. It will also explore information gathered through interviews with lesbian-identified dancers and the concepts and experiences being illuminated through their conversations.

Presentation Type and Session: Oral – Social Sciences

Live Free Or Try: Liberian Refugee Employment Experiences Compared

Khadijat Olagoke, PSC 470: Senior Seminar
Faculty Mentor: Professor Patrick McGovern, Political Science

Many of the Liberian refugees who live in the United States are limited in their employment experience to menial jobs. On average, however, these refugees have a 12th grade education level. Research shows that more than half of Liberian refugees in the U.S have above a high school education level while the rest scatter between a college education and a post-baccalaureate education level. Research shows also that a majority of the Liberian refugees are fluent in English. The transition from Liberia to America with little to no work experience has made it difficult for Liberians to adapt in New York and other neighboring states. I hypothesize that Liberians are at disadvantage when it comes to seeking stable and high paying employment because of mix of discrimination, competing political agendas and the lack of state and federal support. To form my conclusion, I will conduct an empirical research design by developing my previous surveys and in depth interviews and comparing them to findings of other researchers. I have completed a survey that described the level of education, age, English proficiency, and work experience of 300 or more participants (Liberian refugees). I also have conducted a 5-week field study with three refugees from Staten Island that I will be including in my findings.

Presentation Type and Session: Poster VIII

Parental Mental Health and College Student Success

Lauren Zawadzki, Psychology
Faculty Mentor: Professor Jill Norvilitis, Psychology

Parental mental health and parenting styles have been shown to have a large impact on offspring's personality and mental health. Research has shown that children and adolescents raised by a parent with depression are 3 to 4 times more likely to develop depression. Depression has been positively correlated with lower self-esteem along with more difficulties in college. Parenting styles have also been shown to have an effect on offspring's personality, stress management, and college success. Previous research has shown that authoritarian parenting is related to low academic achievement and authoritative parenting positively correlates with academic achievement. There has been previous research on the direct effect of parenting styles and academic achievement but this current study will analyze how parenting styles and parental mental health affect academic success along with the students' self-esteem, and whether or not the levels of self-esteem and mental health of the student has an effect on their academic achievement. It is hypothesized that students who are raised by parents with permissive parenting or authoritarian parenting will have lower self-esteem and have poorer academic performance and that students raised by parents with evidence of mental illness will also have symptoms of depression, anxiety, low self-esteem and poorer academic performance.

Presentation Type and Session: Poster VIII

Phineas Gage: A Better Case Of Neural Recovery Than Neural Loss

Meghan Batt, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Jean DiPirro, Psychology and Professor Andrea Guiati, Director, All College Honors Program

While working as a foreman blasting rock in 1848 so that railroad tracks could be laid, Phineas Gage was struck with a large tamping iron that entered his head under his left cheekbone and shot through the top of his skull. Gage sustained serious injury to his left frontal lobe, but inexplicably survived the trauma. Friends and family of Gage reported that his personality changed dramatically as a result of the injury. However, a fascinating aspect of a careful and systematic analysis of Gage's history is that, as his facial injury healed, so too did his brain and personality. Gage's recovery of personality will be explained in this poster as an example of the plastic nature of the brain: neuroplasticity (i.e., experience-dependent modification in neural connectivity and neural function). The large scale advancement in our knowledge of brain function and neuroplasticity since Gage's accident makes possible a far better understanding of how he recovered function that he lost immediately after the "removal" of his frontal lobe. This recovery process will be the focus of the present discussion of Phineas Gage.

Presentation Type and Session: Poster VIII

Potential Jurors' Understanding Of Revised Jury Instructions For Character Evidence

Erin Baccari, Psychology
Faculty Mentor: Professor Jennifer Hunt, Psychology

Research indicates that potential jurors' understanding of pattern jury instructions for character evidence is low, which may contribute to misusing such evidence. The current research investigates comprehension of revised character evidence instructions as opposed to the pattern instructions that are already in use. Based on existing research, we predicted that the revised instructions using simplified language or a flowchart would improve understanding of jury instructions for character evidence by potential jurors. 226 people participated in this study (62.6% men, 82.5% White, mean age = 30.09 years). Participants were recruited using Amazon's MTurk, and completed an online survey. Participants were placed into one of four conditions: 1) original instructions which are currently in use, 2) revised instructions based on instructions currently in use, 3) model instructions which were constructed based on several existing instructions, and 4) a flowchart which was constructed based on current instructions for both character evidence and character witness cross-examination. Results showed that participants in the model instruction condition were most able to answer questions about the instructions correctly as well as to put the instructions in their own words. Unexpectedly, participants in the flowchart condition did not show a strong understanding of the instructions. This finding may have occurred because they were not given any preliminary explanation for the flowchart, and thus they might not have understood the context or how to properly use it. These findings suggest that at least some forms of simplified instructions may improve jurors' understanding of how to use character evidence.

Presentation Type and Session: Poster IV

Princess Or Probability? Princess Priming May Have an Adverse Effect On Women's Self-Identification With Math

Katherine Mosier, Psychology
Faculty Mentor: Professor Jennifer Hunt, Psychology

The typical characteristics associated with princesses reinforce communal or traditional gender roles by focusing primarily on beauty and helplessness (Do Rozario, 2004), rather than intelligence and autonomy. Due to its pervasiveness, "princess culture" may be a contributing factor in the low number of women found in STEM (science, technology, engineering, and mathematical) fields. We are investigating whether priming women with princess traits negatively affects their math self-concept, or casts doubt about their math interests and abilities on both explicit and implicit levels. To test our predictions, we are conducting an experiment in which college women are primed with princesses or superheroes traits or their own traits (control group) by dressing up and writing about their character/selves. They then complete the Cultural Icon Survey (CIS), explicit measures of math interest, and a math-Implicit Association Test (math-IAT). The CIS assesses the degree to which participants identify with princesses. The math-IAT is a computerized word association task that measures participants' math self-concept. Our study currently includes 46 women. Preliminary results show that women primed as princesses have lower math identification ($M = 1.62$) in comparison to the control group ($M = 2.33$) and the superhero prime condition, which had the highest identification with math ($M = 2.94$). Similar patterns found indicate lower interest in and evaluations of math careers in the princess condition.

Presentation Type and Session: Poster V

Proposing a Political Party Postulation: What Causes Different Countries To Use Different Political Party Systems?

Nathan Kindred, PSC 470: Senior Seminar
Faculty Mentors: Professor Patrick McGovern, Political Science and Professor Andrea Guiati, Director, All College Honors Program

Political scientists have long debated why different electoral systems exist within democracies. This question has traditionally fallen into two theories. The first asserts that electoral laws determine electoral systems in democratic nations (Duverger 1954; Reed 2001). The second, the theory this paper supports, asserts that political cultures determine the electoral systems and are more influential than electoral laws (Almond, Verba et al. 1974). My hypothesis is that the political culture of a nation has a stronger effect than the electoral institutions of a nation in determining electoral systems because the culture also controls the electoral laws, both forming and changing them. This research will study the relationships between the number of political parties in a nation, its majority religion, its location, its heritage, the time of a nation's democratization, and its level of freedom, examining how these affect electoral system type. This will be statistically analyzed through multinomial logistic regressions. I predict location, heritage, and time of democratization will have strong influences over what party system nations adopt, supporting the political culture argument. Conclusions from this research may be applied in the future to help determine what party systems new and developing democracies will use.

Presentation Type and Session: Poster VII

Rat Model Of PTSD: Combined Effect Of Predator Scent and Startling Auditory Stimulus

Katherine Oak, Psychology and **Daniel Moscow**, Psychology
Faculty Mentor: Professor Jean DiPirro, Psychology

Animal models offer one means by which to investigate both behavioral and pharmacological treatments of post-traumatic stress disorder (PTSD). Our laboratory has been developing a rat model of PTSD that uses predator-scent exposure – a natural aversive

stimulus to rats – to induce PTSD-like anxiety. In the present study, we will determine if PTSD-like symptoms (e.g., anxiety of long duration) are made more likely by combining predator-scent exposure (i.e., cat-scent exposure) with an auditory stimulus that is brief but startling and that is analogous to reported auditory PTSD-inducing stimuli in combat zones. This is important because at least some of the recent increase in PTSD incidence has been hypothesized to be a consequence of auditory trauma in the context of heightened defensive behavior (Rasmussen, Crites, & Burke 2007). The addition of an auditory stimulus in the present study increases the face validity of our PTSD model; we hypothesize that it will also increase the magnitude and/or duration of anxiety that is induced.

Presentation Type and Session: Poster VIII

The Relationship Between Subjective and Objective Cognitive Decline In People With Multiple Sclerosis

Jillian Roupp, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Andrea Guiati, Director, All College Honors Program and Professor Ellen Carl, Psychology

Multiple Sclerosis (MS) is an autoimmune disease that affects the central nervous system. People with MS most commonly experience physical, sensory, and emotional problems. It has been found that about half of the people who have MS will also have cognitive difficulties. Cognitive processing has been shown to be the primary aspect of cognitive decline. Perceived cognitive decline, and cognitive decline in general, have not been studied in depth to date. This study will look at the relationship between perceived cognitive decline and actual cognitive decline in people who have MS. Twenty people with relapsing-remitting MS and twenty sex and age matched controls will be given multiple measures to test perceived processing speed, actual processing speed, executive function, fatigue, and depression. After all data is collected, a Pearson r correlation will be used to detect relationships between depression and fatigue, executive functioning, perceived cognitive decline based on processing speed, actual cognitive decline based on processing speed. It is hypothesized that those who perceive a higher rate of cognitive decline, will show a higher rate of cognitive decline when tested as well.

Presentation Type and Session: Poster VIII

Speech Perception In the Blind

Caley Wekenmann, PSY 498: Honors Thesis
Faculty Mentors: Professor Stephani Foraker, Psychology, Professor Jean DiPirro, Psychology, and Professor Pamela Schuetze, Psychology

It has been proven through the McGurk Effect that, in addition to hearing, there is a visual element to speech perception. The purpose of this study is to gain insight into the perception of speech among the blind and how that compares to sighted individuals. The novel element of this study is that we will look specifically at whether visually impaired individuals are better at understanding phonologically difficult sentences (tongue twisters) and structurally difficult sentences (garden path sentences) than sighted individuals. The study is also examining the effect of a quiet or noisy environment and the presentation of a video and audio or audio only on speech comprehension. Data collection is ongoing. I predict that the blind will do significantly better comprehending the phonologically and structurally difficult sentences in both quiet and noise. Also, the blind may do slightly better listening to the neutral control sentences in quiet and noise. Finally, I also predict that sighted individuals that experience a video will do significantly better than sighted individuals hearing the audio portion only.

Presentation Type and Session: Poster VII

Stigmatization In Higher Education: Inside and Outside the Classroom

Kayla James, Forensic Chemistry and Sociology
Faculty Mentor: Professor Amitra Wall, Sociology

This descriptive study seeks to examine whether differences in perceptions and experiences, both in and out of the classroom, exist between African American and white undergraduate males. Specifically, Buffalo State College students' experiences and perceptions will be examined to ascertain whether stigmatization occurs. A questionnaire was distributed to undergraduate males enrolled in classes during the fall of 2012. Expected results are that African American males will report higher levels of stigmatization both in and out of the classroom than white undergraduate males. The benefits of this study are many. A future application of this study, for instance, can include the practice of informing the self-identified stigmatized males to the proper support area, like academic advisement and student welfare committees at the departmental level, so that the student can receive mentorship and guidance throughout their academic journey.

Presentation Type and Session: Poster IV

The Struggle Of the Nez Perce: Land and Fishing Rights

Matthew James, ANT 499: Historical Indegenous Studies
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

For this research I plan to cover the wide range of struggles the Nez Perce have dealt with in obtaining their land rights and areas for salmon fishing. The Nez Perce were traditionally nomadic and viewed salmon fishing as a sacred tradition. Ever since the Treaty of 1855 and continuing onto today, the Nez Perce have been fighting to regain areas where they had once been able to freely roam. Their original reservation size has been shrunk a great deal already, and the areas where they can fish are slowly being taken by commercial fisherman. Although they have made great strides, they continue to struggle and recently under the Bush administration they have once again had to fight for their rights. Most of my research will be done via scholarly articles and books that directly relate to the Nez Perce struggle. I also plan to search for any notable documentaries that

have been made based on this issue. The hope of this research is to bring awareness to the fact that these people are losing what makes them who they are.

Presentation Type and Session: Poster VIII

Three Focus Points For the Black Agenda: Cultural Pride, Social Accountability, and Social Injustice

Jenny Nunn-Stanley, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Staci Newmahr, Sociology and Professor Andrea Guiati, Director, All College Honors Program

The purpose of this study is to examine the pedagogy of what it means to be black in the 21st century. Can we use our political and social clout to ascribe new meanings for black normativity? The black agenda must be galvanized so we can form new pathways, and new models of leadership that embodies social responsibility while fighting institutional racism. For the last thirty-five years African American leaders keep having the debate about the Black agenda but there is little action and we are still the most impoverished group in the country. I want to examine why there is so much talk and no mobilization. The goal is to theorize on how to close the achievement gap for African Americans by analyzing the education quality, resources, family life, and complacency in the Black community. This research draws upon primary sources by Michael Eric Dyson, Marc Lamont Hill, Toure, Cornel West, Al Sharpton as well as a content analysis on the Black Agenda is the American Agenda presentation. The results of the analysis will allow me to present a solidified theory, centered on cultural pride, indignation, and social accountability.

Presentation Type and Session: Oral – Social Sciences

The Western Shoshone Defense Project and the Dann Sisters' Struggle For Sovereignty

Sean Johnston, ANT 499: Historical Indigenous Studies
Faculty Mentor: Professor Lisa Marie Anselmi, Anthropology

Carrie and Mary Dann are Western Shoshone elders and land rights activists who have been fighting to reclaim their tribal land from the United States government for over fifty years. The Western Shoshone lost their land in 1962 by what the Indian Claims Court ruled was gradual encroachment by outsiders. The Dann sisters' ranch was part of the land that was effectively seized by the United States government. Since the seizure, the Dann sisters have been organizing civil protests and refusing to pay government mandated grazing fees for their cattle. The government attempted to rectify this atrocity by offering a settlement to the Western Shoshone nation in 1979. The Western Shoshone tribal council voted against accepting the settlement and legal issues regarding land sovereignty have continued to this day. The Western Shoshone Defense Project was started with the help of the Dann sisters in order to promote awareness and raise money to reclaim the tribal lands. The Western Shoshone Defense Project has since gained United Nations support as well as a pair of Rights Livelihood Awards for the Dann sisters. Research for the project will include original treaty analysis, legal case studies, civil disobedience incident reports, and first-hand accounts of the ongoing struggle.

Presentation Type and Session: Poster VII

What the Frack: State Support For Hydraulic Fracturing

Melanie Dingeldey, PSC 470: Senior Seminar
Faculty Mentors: Professor Peter Yacobucci, Political Science, Professor Patrick McGovern, Political Science, and Professor Kyeonghi Baek, Political Science

Little is written on why states vary in their support for hydraulic fracturing. Hydraulic fracturing has been practiced since the 1940's, but advancements in horizontal drilling have created skepticism due to unknown factors associated with the practice. This paper introduces factors that influence state decision on whether to allow hydraulic fracturing. I hypothesize that states experiencing economic difficulties and high unemployment rates will display higher levels of state support for hydraulic fracturing then states whose economies are stable. Researchers have argued that other variables better explain state support for hydraulic fracturing, such as public health concerns, environmental concern, public debate and the amount of gas deposit by state. In a cross-sectional analysis, I will compare states throughout the U.S. to determine what drives support for hydraulic fracturing. Preliminary analysis on all five criteria used to assess state support for hydraulic fracturing, showed economic stimulation to have great significance over other variables.

Presentation Type and Session: Poster VIII

What's Personality Got To Do With It: Personality and Post-Graduation Plans

Hilary Olds, PSY 488: Internship
Faculty Mentor: Professor Howard Reid, Psychology

The present study sought to examine the relationship between students' personality characteristics and their post-graduation plans. To date, little research has examined the relationship between personality and students' plans after graduation. We studed this relationship by distributing a questionnaire to students in the psychology department during the Fall 2012 semester. The questionnaire contained a series of questions regarding students' personal background information, academic variables such as major and GPA, parental education, and personality measures chosen from the IPIP index. Additionally, the questionnaire contained questions such as whether or not the student planned on attending graduate school, if they were aware of the qualifications needed to get into graduate school, if they anticipated attending a private or public institution, how they would pay for their schooling, and if they

planned to attend graduate school in the Buffalo region. We have collected approximately 75 questionnaires. At the time of poster presentation, the results of this study will have been analyzed, and we will be able to identify if there is a relationship between a student's personality, or any of the other variables, and their post-graduation plans.

Presentation Type and Session: Poster VII

When Parents Kill: A Study Of Filicide

Melissa Reinek, HON 400: All College Honors Colloquium
Faculty Mentors: Professor Jawjeong Wu, Criminal Justice and Professor Andrea Guiati, Director, All College Honors Program

There are thousands of murders each year in the United States. However, the murder of a person's own child is the most gruesome, careless act someone could commit. Children are innocent and simply not capable of doing anything worthy of death. Filicide is when the child's parent actually commits the murder and is the perpetrator of the crime. This type of murder is so horrendous and strongly goes against the norms and values of our society. It seems difficult to comprehend a parent committing such a terrible act, but this is more common than one might believe. How often does filicide occur in our society? Are there warning signs? Is there anything that can be done in an attempt to prevent such incidents from occurring? This research will examine the trend of a parent's killing of a child; it will go further in depth on the causes, common motives behind such horrible acts, and preventative strategies.

Presentation Type and Session: Poster II

Who's Line Is It Anyway: How Party Control Affects State Higher Education Funding

Ryan Gadzo, PSC 470: Senior Seminar
Faculty Mentor: Professor Peter Yacobucci, Political Science

Many scholars have looked into what aids/hurts higher education funding from state to state. Studies have shown varying factors that have attributed to the allocation of higher education funds such as who controls the government (Republican/Democrat), state economic conditions, partisan divide (party line politics), and gubernatorial power. Previous studies have shown that states with a Democrat elected governor and state legislature tend to receive more higher education funding then their Republican counterparts. This project illustrates what happens when there is a partisan divide between the governor's office and the state legislature. My research design will incorporate all 50 states from 2004-2010, and look at what parties were in control of the state legislature and governor's office, how this effected funding, and if there was a split in control what governing body was the winner in the funding battle? After seeing how funding was allocated, we can draw conclusions on how funding in states with one controlling party in government will allocate funds, but also who wins the divide between governor and state legislature. From this we can predict future outcomes in states and how much or little higher education funding will receive.

Presentation Type and Session: Poster VIII

Fifteenth Annual Student Research and Creativity Celebration

BUFFALO STATE
The State University of New York