



ONE
IDEA
AT A
TIME

2010 Scholarship and Creative Arts Day

This year, more than 350 of the College's best young minds are presenting, performing or exhibiting during our two-day celebration of scholarship and creativity. Eager to be a bigger part of the world, these students—with the guidance of their faculty mentors—have used their gifts to explore uncharted intellectual territory. Through their experiences, they have honed and refined their skills and have broadened their personal understanding of their field.

The pages of this program offer an exciting glimpse of the wealth of student research being done on our beautiful campus around The Dell. The caliber of the work and performances featured at this conference continue at the high level of excellence that is characteristic of Elizabethtown's students. We expect the energy created by today's celebration to spill over into future academic years, as students are energized by the process of investigation, and they experience the value of "digging deeper" and using their abundant gifts to serve.

Today, Elizabethtown College is honored to present Roya Hakakian as our keynote speaker. Ms. Hakakian—the author of *Journey from the Land of No: A Memoir of a Girlhood Caught in Revolutionary Iran*, her award-

winning memoir about life as a Jewish teenager in post-revolutionary Iran—personally has demonstrated the power of a life dedicated to intellectual service. As a member of the Iran Human Rights Documentation Center and the board of Refugees

International, she positively affects the circumstances of many around the globe. And, through her work and service to humanity, Ms. Hakakian inspires personal introspection about how we too can make this world a better place.

In closing, we would like to recognize the remarkable work of this year's planning committee, which was chaired by Associate Professor David Kenley. Through their energy, the committee members have once again created this marvelous forum for great ideas. We thank them for their commitment to our students and for providing them with an opportunity to be a bigger part of the world. ✍

President Theodore Long and
Provost and Senior Vice President Susan Traverso

Now in its third
year,
Elizabethtown
College's
Scholarship and
Creative Arts
Day showcases
our students
and celebrates
their ideas and
talents.

OPENING CEREMONY

Monday, April 26th

6:30 – 7:15 PM

Leffler Chapel Lobby

Remarks by President Long

Dessert Reception

Scholarship & Creative Arts Day Recital

Monday, April 26, 2010

Leffler Chapel and Performance Center

7:30 p.m.



PROGRAM

String Quartet, op. 18, no. 2Ludwig van Beethoven (1770-1827)

IV. Allegro molto quasi presto

Rachel Lane and Danielle Moyer, violins;

Edna Zhou, viola; Samantha Morgan, cello

Concerto in E MinorSaverio Mercadante (1795-1870)

III. Rondo Russo

Stephanie Crawford, flute

Dr. Justin Badgerow, piano

Hungarian Dance no. 5Johannes Brahms (1833-1897)

Abigail Eagleson and Erin Soltys, piano

Winter Spirits Katherine Hoover (b. 1937)

Sarah Johnson, flute

Original Monologues/Personal Stories

Peter Northrop

Angela Wright

Concerto for Clarinet, K. 622W.A. Mozart (1756-1791)

II. Adagio

Sarah Biedka, clarinet

Dr. Justin Badgerow, piano

First Arabesque.....Claude Debussy (1862-1918)

Elizabeth Shea, piano

Oh! quand je dorsFranz Liszt (1811-1886)

Alena Lerch, soprano

Dr. Justin Badgerow, piano

INTERMISSION



Scholarship & Creative Arts Day Recital



Original Monologues/Personal Stories

Clara DeAngelo

Linda Bateman

Trio, op. 11Ludwig van Beethoven (1770-1827)

II. Theme and Variations

Abigail Eagleson, piano

Leeann Hackett, violin

Erin Burg, cello

Original Monologues/Personal Stories

Stephanie La Chance

Rachel Witkovsky

Zueignung, op. 10, no. 1Richard Strauss (1864-1949)

Morgen, op. 27, no. 4

Travis Lucas, baritone

Dr. Justin Badgerow, piano

Concerto in C, op. 48 Dmitri Kabalevsky (1904-1987)

I. Allegro molto e con brio

Rachel Lane, violin

Dr. Justin Badgerow, piano

Faculty Mentors: Paula Nelson, Ellen Eager, Faith Shiffer, Sarah Daughtrey, Debra Ronning, Johanna Hartman, and Terri Mastrobuono.



Elizabethtown College
Graduate OT Research Symposium, 2010
Monday, April 26th
Masters Atrium

Development of the Electronic-Hand Assessment Tool (E-HAT): A Case Study

Erin Ensminger, B.S., MOTS
Anna Ford, B.S., MOTS
Michael Patrick
Faculty Advisors: Daniel Panchik, D.Sc., OTR/L;
Kurt DeGoede, Ph.D. *Special Thanks to Dr. Sanjiv Naidu, M.D., Ph.D.*

Handwriting as an Occupation: Development of the Handwriting Observation Tool

Megan Deldeo, B.S., MOTS
Jessica Lutz, B.S., MOTS
Shauna Witmer, B.S., MOTS
Faculty Advisors: Angela Salvadia, Ed.D., OTR/L;
Judy Beck Ericksen, Ph.D., OTR/L

The Kawa Model: Exploring How Women Overcome Intimate Partner Violence

Jaclynn L. Bistis, B. S., MOTS
Abby M. Mowery, B.S., MOTS
Faculty Advisor: Tamera Keiter Humbert, D.Ed., OTR/L

Leisure Satisfaction among Adolescents with High Functioning Autism Spectrum Disorder (HFASD) or Aspergers Disorder (ASP)

Brittany P. Coyle, B.S., MOTS
Allisen N. Stanley, B.S., MOTS
Jacqueline O. Trotter, B.S., MOTS
Faculty Advisor: Judy B. Ericksen, Ph.D., OTR/L

Occupational Balance and Health among the Well- Elderly

Amanda Gordon, B.S., MOTS
Jennifer Matlack, B.S., MOTS
Lisa Weeks, B.S., MOTS
Faculty Advisors: Angela Salvadia, Ed.D., OTR/L;
Ann Marie Potter, MA, OTR/L

Participation Patterns and Preferences in Children with Physical Disabilities: Exploring Out-of-School Activities

Emily Berger, B.S., MOTS
Chelsea Miles, B.S., MOTS
Jessica Parkes, B.S., MOTS
Faculty Advisor: Judy Beck Ericksen, Ph.D., OTR/L

Perceived Occupational Experiences of Men Living in a Shelter

Rachel Guss, B.S., MOTS
Jessica Hoffman, B.S., MOTS
Alicia Mull, B.S., MOTS
Faculty Advisor: Angela Salvadia, Ed.D., OTR/L;
Ann Marie Potter, M.A., OTR/L

Perspectives of Occupational Therapy Students and Practitioners Engaging in Other Cultures: Ways of Thinking

Allison Burket, B.S., MOTS
Rebecca Deveney, B.S., MOTS
Katelyn Kennedy, B.S., MOTS
Faculty Advisor: Tamera Keiter Humbert, D.Ed., OTR/L

A Pilot Study: Current Occupational Therapy Practice with Individuals who are Overweight or Obese

Samantha L. Evanko, B.S., MOTS
Angela M. Freeland, B.S., MOTS
Kristi M. Warner, B.S., MOTS
Faculty Advisor: Linda Madden Leimbach, M.S., OTR/L, CCRC

Sensory Processing Styles and the Work Environment in Adults with Schizophrenia/Schizoaffective Disorder

Autumn Atherton, B.S., MOTS
Kelsey Flasser, B.S., MOTS
Lindsey Kerlin, B.S., MOTS
Faculty Advisor: Deborah Waltermire, M.H.S., OTR/L

Through an Occupational Therapy Lens: Applying the Model of Human Occupation to Interventions for Well Siblings of Children with Cancer

Gabrielle Giannetti, B.S., MOTS
Christine Rosen, B.S., MOTS
Kelly Vanneman, B.S., MOTS
Faculty Advisor: Judy Beck Ericksen, Ph.D., OTR/L

● JURIED STUDENT ART SHOW ●

Lyet Gallery of Leffler Chapel and Performance Center

GALLERY OPENING

Tuesday, 3:00 PM

AWARDS CEREMONY

Tuesday, 3:15 PM

The College's 23rd Annual Student Art show will open with a reception on Tuesday, April 27, at 3 p.m. in the Lyet Gallery of Leffler Chapel and Performance Center. Selected by an outside juror, the art show will feature about 80 pieces of this year's finest art from Elizabethtown's students. An awards ceremony will begin at 3:15 p.m.,

during which prizes will be awarded for the best work in various disciplines, i.e. ceramics, computer art, drawing, painting, photography, printmaking and sculpture. The exhibit will run through May 7. The gallery is open from 9 a.m. until 9 p.m., Monday through Friday, and 1 p.m. - 5 p.m. on Saturday and Sunday. ✍

FAPA: Fine Arts Division			Lyet Gallery, Leffler Chapel	
Annual Juried Student Exhibition			# 002	
Presenters:			Mentors: Fine Arts Division	
Abbey Anderson	Margaret Cassels	Austin Hayes	Anna Meerbach	Hayley Rosser
Elyse Avchambeault	Bailey Craig	Samantha Hugg	Amelia Moon	Heather Schowe
Laura Bach	Monique D'Almeida	Kathryn Kellie	Matthew Orlando	Rachael Thorn
Alison Baklarz	Katie Fitzgerald	Sarah Knight	Ian Pape	Kent Troutman
Francisco Bertossi	Renée Fortinper	Katharine Kressler	Samantha Parker	Caitlin Vajdic
Scott Bozworth	Melanie Giardina	Katherine Leibrand	Anna Petrides	Samantha Weidel
Paul Brenner	Chadston Gibbs	Renea Martin	Alicia Risley	Brittany Williams
Katelyn Bucciaglia	Kristen Hain			

● STUDENT ART EXHIBITION ●

Tuesday, April 27, 2010

Steinman Lobby Gallery

Physics and Engineering		Architectual Renderings	Steinman Lobby Gallery
Presenter:		CAD Architectual Rendering Through the Influence of Frank Lloyd Wright	# 341
Bryan Kuppe		Mentors: Dr. Joseph Wunderlich, Dr. Patricia Ricci	
FAPA: Fine Arts Division		Steinman Lobby Gallery	
Presenter:		Independent Study Ceramics	# 003
Chadston Gibbs		Mentor: Mr. Milt Friedly	
Presenter:		Advanced Ceramics	# 004
Kathryn Kellie		Mentor: Mr. Milt Friedly	
Presenter:		Advanced Printmaking	# 005
Bailey Craig		Mentor: Mr. Milt Friedly	

Start Tuesday Sessions

Education	Portfolios	H-110
8:00 AM	A Framework for Teaching: Professional Portfolios for Educators	# 1
Presenter(s)/ Co-Author(s):	Jacqueline Elder, Denise Nott, Linnea Nygren, Sara Sementelli, Megan VanDenHengel	Mentor: Dr. Rachel Finley-Bowman
Pre-service teachers seeking certification in Elementary, Special, and Secondary Education in the state of Pennsylvania will present their professional portfolios in electronic formats, showcasing best practices in the four domains of teaching responsibility: Planning and Preparation, the Classroom Environment, Instruction, and Professional Responsibilities. The portfolio signifies the capstone project of a student teacher's career at Elizabethtown College, accentuating achievements in coursework, field experience, pedagogy, and professional development.		
8:30 AM	A Framework for Teaching: Professional Portfolios for Educators	# 2
Presenter(s)/ Co-Author(s):	Micah Albrycht, Kurt Amen, Nicole Blough, Darline Doty, Christopher Fairbanks, Adam Reynolds	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
9:00 AM	A Framework for Teaching: Professional Portfolios for Educators	# 3
Presenter(s)/ Co-Author(s):	Ryan Allard, Sarah Giunta, Suzanne Harris, Jamee Hertsensberg, Courtney Kistler, Mary Lang, Emily Swarr	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
History	Presentations	H-114
8:30 AM	Literary Responses to World War I	# 9
Presenter(s)/ Co-Author(s):	Deron Sharp	Mentor(s): Dr. Brian Newsome
Europe has witnessed many wars throughout its past. However, prior to 1914, no one imagined the destruction that would take place over the next four years. With over fifteen million people dead or wounded, and millions more suffering from the economic disaster on the home front, World War I was the largest and most violent engagement the world had ever witnessed at the time. As technology improved throughout the early 1900's, killing large numbers of people became easier and more efficient than ever before. This in turn caused damage across Europe far greater than anyone predicted. The aftermath of the Great War left many scholars, novelists, and poets who witnessed the war first hand questioning how European society could have taken itself so close to the brink of destruction. Most believed that the Great War led to an unconscionable scale of brutality and that it had a negative impact on Europe as a whole. These writers used their work to make a desperate plea to end such destructive warfare, and in some cases war altogether. However, a very few argued that the war gave rise to many positives, including progress and growth. This research paper argues for the overwhelming negative impact of the First World War on Europe, and uses numerous primary and secondary sources from scholars and authors who lived through the time period to help support the argument.		
8:45 AM	World War I: Romanticism and Disillusionment	# 10
Presenter(s)/ Co-Author(s):	Adam Liddle	Mentor(s): Dr. Brian Newsome
This presentation examines World War I and the effect it had upon the European soldier. More specifically, it deals with the initial romantic view of warfare held by much of Europe as well as how and why this view changed. The romanticizing of World War I was due to Social Darwinism and a young and impressionable generation. The trench warfare of World War I disillusioned many of these soldiers. New technology and increased manpower, two factors in creating trench warfare, had the biggest impact upon the soldiers in the trenches. The romantic view of warfare is described in several literary examples from English, French and German soldiers. This perspective changed as these soldiers came into contact with the new technology of rapid-fire artillery and the machine gun, creating an impersonal aspect of World War I and extremely high casualties. The commanding officers' view of warfare changed as well, as they came to see World War I as a war of attrition, shown in their language and strategies during major offensives. Many of the soldiers were severely disillusioned by war, but some still believed that warfare had positive aspects.		

Political Science	Presentations	H-211
8:00 AM	The International Criminal Court: An End to Impunity or an End to Sovereignty?	# 11
Presenter(s)/ Co-Author(s):	Danielle Acocella Mentor(s): Dr. Oya Ozkanca	
<p>The International Criminal Court (ICC) is an international criminal judicial body established by the Rome Statute, which was ratified on 1 July 2002. The explicit goal of the ICC is to end impunity. Its mandate is to investigate and try individuals for crimes against humanity, war crimes, and genocide, when a state is unwilling or unable to prosecute those in question themselves. Essentially this means that the ICC strives to identify, capture, and prosecute those individuals responsible for committing such crimes that have, until now, been able to evade accountability. My main research question then, is whether or not the ICC is an effective means of preventing impunity with regards to human rights violations? In order to answer this question, I will be conducting qualitative comparative case studies on two out of the four situations currently under investigation by the ICC, one being in the Democratic Republic of the Congo and the other in Darfur, Sudan. I intend to establish that, when the ICC investigates a situation that was brought under its jurisdiction voluntarily by the nation in which the crimes were said to have been committed and receives cooperation, both by that nation and other international sources, it is an effective means of preventing impunity. However, when the ICC is left to its own devices with little to no international help and/or cooperation from the nation in which crimes were committed, it is paralyzed and rendered ineffective as a means of prosecuting crimes and preventing impunity.</p>		
8:15 AM	Dreams Deferred: Possibilities for Peace in Northern Ireland	# 12
Presenter(s)/ Co-Author(s):	Kathryn Kauffman Mentor(s): Dr. Oya Ozkanca	
<p>The conflict in Ireland and Northern Ireland has been waging since 1160, and has continued in Ulster since 1960. While the physical violence in Northern Ireland has been put to an end, the society is still far from healed. This paper explores the possibilities for a long-lasting peace in Northern Ireland. In doing so, it examines the current consociational governmental structure of Northern Ireland and analyzes the possibilities for a long-lasting peace through transitional justice, power sharing, and peace and reconciliation commissions. This paper aims to answer how successful a peace and reconciliation committee can be in finding an enduring resolution of the Northern Ireland conflict. This thesis maintains that, although both warring factions have suffered oppression and feelings of victimhood, there is a solution to the long-lasting conflict in Northern Ireland. The solution requires a community effort for social healing and grass roots efforts at recovery rather than a top-down or government-imposed solution. This thesis furthermore argues that a Peace and Reconciliation Commission, like that of South Africa, South Korea, and Peru, could help in healing social memory, improving community relations, and offering outlets for those still grieving.</p>		
8:30 AM	Cooperative Security: The Future of EU-NATO Relations	# 13
Presenter(s)/ Co-Author(s):	Myles Lund Mentor(s): Dr. Oya Ozkanca	
<p>Given the dramatic changes to the organization of world politics in the two decades since the fall of the Berlin wall, questions arise about the role of alliances in the 21st century. As a direct result of this restructuring, both the North Atlantic Treaty Organization and the European Union have evolved in size and scope. After thoroughly examining the effects of enlargement as a form of foreign policy, this study proposes a possible future for both of these organizations and their interactions. NATO in many ways has had to adapt itself by creating a new niche designed around collective security efforts, acting out of area, in a modern age of insurgency-based warfare. It represents successful cooperation in transatlantic relations, but is limited to hard power policies. The EU, conversely, has become a “quiet superpower” in the realm of diplomatic relations as an economic and trade based union. Integration and centralization within the EU have their limits, however, as efforts toward a common security and defense policy have struggled to gain footing. With this in mind, an examination in comparative foreign policy follows, addressing areas of common interest to both parties while attempting to characterize more definite roles for both organizations. This analysis addresses recent developments such as France’s return to NATO’s military command structure, the adoption of the Lisbon Treaty, and synchronization (or lack thereof) of resources. In understanding both the history and current roles of both organizations, this study suggests a future of “cooperative security” in EU-NATO relations.</p>		
8:45 AM	European Enlargement: The Prospect of the Turkish Accession	# 14
Presenter(s)/ Co-Author(s):	Andrea Matz Mentor(s): Dr. Oya Ozkanca, Dr. E. Fletcher McClellan	
<p>Since 1952, the European Union has grown from a common market union to a political and economic union between 27 members. Over time, a set of requirements each candidate must achieve for full integration were developed. To date, this process has led to the successful admittance of every aspirant country with the exception of the Republic of Turkey. Currently, due to many issues including human rights concerns, a potential inability to meet all chapters of the EU acquis, and the division of Cyprus, there has been no clear solution to Turkey’s long-drawn-out accession. However, throughout its enlargements, there have been countries that have been marred with conflict and/or the inability to meet all of the Copenhagen criteria. Yet, they were able to “overcome” these difficulties and complete a successful accession and they remain among those counted as EU members. In fact, no country’s accession has lasted as long as Turkey’s. Is there conciliation between the official process and the current process being used for Turkey’s candidacy? How has the process been applied to other countries? Can Turkey’s accession be considered a ‘special case’ or is there a double standard being upheld? The aim is to pursue the prospect of the Turkish accession. The premise is the comparison to “successful” accessions; by drawing upon those experiences, I attempt to shed light on Turkey’s never-ending journey. The evaluation of the Turkish implementation of the Copenhagen criteria and the European acquis and comparative studies to the Greek and Cypriot accessions will achieve this.</p>		

Presentations

Concurrent Session I: 8:00 – 9:15

9:00 AM	International Relations and the Olympics: Examining the IOC as a Facilitator of Change in the Politics of States with Member National Olympic Committees	# 15
Presenter(s)/ Co-Author(s):	Andrew Winegar	Mentor(s): Dr. Oya Ozkanca
The modern Olympics, as an important development of the Twentieth Century, remains as a powerful political event based on the magnitude of the diverse nation-states involved. As such, the International Olympic Committee affects the domestic policies and foreign affairs of states with recognized national olympic committees and illustrates the various tenets of international relations theory. The International Olympic Committee has been routinely involved in world politics and has shown success in fostering changes in several states, despite statements to the contrary. While it has delved into facilitating state cooperation amongst conflicting states yet shown little success, the International Olympic Committee has proved more viable in spreading international norms into domestic affairs, especially domestic affairs of Olympic hosting nation-states.		
Education	Presentations	H-212
8:15 AM	Beyond the Basal: Using Alternatives to Textbooks	# 16
Presenter(s)/ Co-Author(s):	Brooke Travers	Mentor(s): Dr. Rachel Finley-Bowman
This project investigates possible alternatives to textbooks in social studies with an emphasis on their use in the American history classroom. Included are the pros and cons of using both popular culture artifacts and literature texts in both middle and high schools, and their role in motivating students to become more actively engaged in their social studies education.		
8:45 AM	Response to Instruction and Intervention (RtII) in Pennsylvania: District Level Implementation and Professional Development	# 17
Presenter(s)/ Co-Author(s):	Kristin Roberts	Mentor(s): Dr. Susan Pitcher, Dr. Mimi Staulters
Response to Intervention (RtI) is a framework intended to provide quality education to all students through the use of evidence-based instructional and assessment practices. The purpose of this research study was to determine the implementation and available professional development of RtI within Pennsylvania. An electronic survey was distributed to 497 school districts in Pennsylvania to describe the implementation and available professional development of the Pennsylvania model, Response to Intervention and Instruction (RtII). Of the surveys distributed, 117 school districts responded. Of those, 78.63% reported that they are currently implementing RtII and 48.91% of the districts implementing RtII, provide professional development for RtII. This survey also identified professional development providers, attendees, and methods used to inform district staff about RtII. Additional findings and recommendations for research will be presented and discussed.		
9:00 AM	Discrete Trial Training in an Early Intervention Program for Children with Autism: A Focus on Teaching How to Gain Attention	# 18
Presenter(s)/ Co-Author(s):	Leighanne Spitzer	Mentor(s): Dr. Carroll Tyminski, Dr. Mimi Staulters
This research utilizes five case studies as well as surveys of parents' perceptions to address the following research questions: 1) Does the number of unprompted socially appropriate interactions to gain attention change when the behavior is instructed through discrete trial training in an early intervention program for children with autism? 2) Do parents perceive a change in their child's ability to initiate socially appropriate interactions to gain attention after discrete trial training intervention has taken place in an early intervention program for children with autism? Applied behavior analysis (ABA) is an evidence-based educational intervention for children with autism. Discrete trial training (DTT) is a specific component of ABA that offers opportunities for repetition and mastery. In an early intervention setting with young children, the effects of DTT have proven beneficial. The use of ABA, and more specifically, DTT, for the education of young children with autism has been reported to improve overall development (Eikeseth, et al., 2007; Harris & Handleman, 2000). Since autism is a growing concern and children with autism have such a difficulty with socially appropriate interactions, teaching these skills at an early age is critical to ensure further language development and social interactions. Gaining the attention of other individuals is the first step in initiating conversations and therefore should be taught early. Although the data was not conclusive in answering the first research question, this study suggests that parents perceive a positive change in their child's ability to gain attention.		

English	Presentations	BLR (Steinman)
8:00 AM	What Is Modernism?: Joyce and Beckett	# 21
Presenter(s)/ Co-Author(s):	Nathan Caudill	Mentor(s): Dr. Mark Harman
<p>When one looks at one's daily life from the outside, everything can seem coherent. Underneath the surface of consciousness, however, is a turbulent sea of fragmented thoughts, unconscious desires, and random ideas. Modernist writers harness these chaotic thoughts to build complex narratives in which it is difficult to distinguish fantasy from reality, thought from action, dreams from waking states. Novelist-critic Malcolm Bradbury describes modernism as having four foci: "The complexities of its own form," the "representation of inward states of consciousness," the "freeing of narrative art from the determination of an onerous plot," and the exposure of the "disorder behind the ordered surface of life and reality." These ideas are vital for understanding the works of James Joyce and Samuel Beckett, who wrote extensively in a stream-of-consciousness style, punningly revealing the multi-layered nature of mental life in seemingly plot-less prose while also creating patterns that rescue these modern works from the charge that they merely reproduce the randomness of life. After a brief sketch of literary modernism, I will explore Joyce's <i>Portrait of the Artist as a Young Man</i>, as well as excerpts from his <i>Ulysses</i> and from Beckett's <i>Molloy</i>. I hope to use the four "preoccupations" of modernist literature to show how Stephen's fragmented and disorganized thoughts in <i>Portrait</i> characterize literary modernism and also to demonstrate that Beckett's <i>Molloy</i> is an innovative 'stream of consciousness' novel, conveying irony, humor as well as despair.</p>		
8:15 AM	Discerning the Indiscernible: Interpreting Samuel Beckett	# 22
Presenter(s)/ Co-Author(s):	Taryn Shank	Mentor(s): Dr. Mark Harman
<p>Interpreting Samuel Beckett is certainly no easy task. Initially, some readers dismiss works such as <i>Waiting for Godot</i> as meaningless, and there are even critics who contend that one should not even attempt to understand him. Rather than crafting compelling plots about love or war, Beckett writes about dull, monotonous, redundant everyday life. Unlike many authors, he refuses to decorate life by creating unrealistic intrigue. On closer inspection, however, it becomes clear that meaning in his writing lies not on the surface but buried deep underneath intricate and ambiguous symbolism that invites a variety of interpretations. To get to the heart of Beckett, one must delve deeply into his texts, reading not only between the lines but through them. After reading or viewing <i>Waiting for Godot</i> some readers are tempted to take the easy way out by claiming that the main characters Vladimir and Estragon are simply waiting for Godot—or God—to come, but, alas, he never does. In the case of Beckett such one-track interpretations are simplistic. To attempt to discern his complex meanings, one needs to delve further into other layers of this intricate play: into the partly gibberish, partly parodistic speech of the minor character Lucky, the strange relationship between Vladimir and Estragon that develops and changes over the course of the play, and the significant repetition of key ideas that may seem minor but could have symbolic significance. An analysis of a recent production of <i>Godot</i> by Philadelphia's EgoPo theatre will round off this presentation.</p>		
8:30 AM	The Role of Insanity in Shakespeare's <i>Hamlet</i>	# 23
Presenter(s)/ Co-Author(s):	Katherin Momenzadeh	Mentor(s): Dr. Louis Martin
<p>William Shakespeare's, <i>Hamlet</i>, is one of the most intriguing and intellectual plays in the English language. Questions involving Hamlet and Ophelia's insanity remain unanswered despite the hundreds of years stretching from its original performance. One of the most captivating themes of the play is the question of madness. Insanity gives Hamlet and Ophelia the ability to finally take action on their fates, furthering the tragic nature of the play.</p>		
8:45 AM	Alliteration in the Poem "Patience"	# 24
Presenter(s)/ Co-Author(s):	Sara Neumann	Mentor(s): Dr. Louis Martin
<p>The Old English poem "Patience" has been reviewed many times but in the translation by Brian Stone, there has been no notation of the effect of alliteration within the poem. This paper examines the importance of this literary device, notably the alliterations of /s/, /f/, /g/, and /w/, and how they reinforce the Old English ideas of an all-powerful God. Through intense research, including linguistics and historical background, the paper proves the stated thesis that without the alliteration that Brian Stone so carefully kept intact through his translation, much of the religious feeling within "Patience" would have been lost.</p>		
9:00 AM	Just a Little Too Friendly	# 25
Presenter(s)/ Co-Author(s):	Peter Northrop	Mentor(s): Dr. Jesse Waters
<p>Abstract: Just a little too friendly How much privacy do you think you really have? Living in the tech age, you may be surprised how readily your entire life can fall into the wrong hands. Just a Little too Friendly is an irreverent look at the new trend of internet stalking. It is a memoir piece in which the author relates his experience with Laura Suns, an admirer who, throughout the narrative, takes her seemingly innocent infatuation with the author to truly insane heights. She publically harasses the narrator via the popular website Facebook and text messaging. She is so oblivious to reality that the author has no choice but to hatch a convoluted scheme that will hopefully help him escape from her affections. Friendly is a story that is told with levity and humor. It is an exploration of how young adults deal with attraction and dating in the information age. It explores how the simple act of saying 'hello' on the internet can be viewed as harassment. It also will serve as a guide for young men who find themselves in a situation where simply saying "No, I am not attracted to you" to an admirer may not end their pursuit. Ultimately, Friendly will try to make its audience laugh, as well as explore that grey area that lies between romance and stalking on the internet's ephemeral stage.</p>		

Presentations

Concurrent Session I: 8:00 – 9:15

Modern Languages	Presentations	H-213
8:15 AM	<i>Mar Adentro: El Vínculo Entre La Gramática Y La Percepción</i>	# 26
Presenter(s)/ Co-Author(s):	Ashley Clark	Mentor(s): Dr. Kurt Barnada
<p>Language is a powerful tool. Writers often manipulate the structures, styles, tones, and the overall grammatical elements of their works in order to convey a particular message, meaning, or theme. As a result, pieces written about the same topic often portray vastly different, and in many cases opposing or contradicting, views and opinions. The medium and style a writer chooses affect a reader's perception of the topic at hand. This study examines several Spanish selections relating to the debate of euthanasia, or assisted suicide. The study will compare and contrast the different structures, styles, tones, and overall grammatical elements of each work, and analyze how these grammatical differences affect the overall messages and themes of each piece. The presentation will reference the acclaimed film, <i>Mar Adentro</i>, directed by Alejandro Amenábar. Note: Presentation conducted in Spanish.</p>		
8:30 AM	Why Go? Have Lives Been Changed in Honduras and Guatemala?	# 27
Presenter(s)/ Co-Author(s):	Alisha Sangrey	Mentor(s): Dr. Montserrat Linares-Farras, Dr. Conrad Kanagy
<p>This paper, written in Spanish, explores the history of the Mennonite missionaries who brought the Christian message to Honduras and Guatemala. The paper begins with background research on the theories of culture and religion from a sociological view point. Next it provides an overview of the religious history of Honduras and Guatemala. The paper explains the mission and beliefs of Eastern Mennonite Missions and illustrates the setting which the first missionaries experienced in Honduras (1950s) and Guatemala (1970s). It describes the formation of the Mennonite churches in Honduras and Guatemala. Using both survey and personal interview data, the paper concludes by analyzing how cultural differences in Honduras and Guatemala have affected interpretations of scripture and Christian beliefs of Mennonites today.</p>		
8:45 AM	ELL Programs: Which is Best for the Student?	# 28
Presenter(s)/ Co-Author(s):	Caitlin Russell	Mentor(s): Dr. Charla Lorenzen, Dr. Susan Pitcher
<p>For my senior project, I completed a literature review looking at the types of available programs for English Language Learning (ELL) educators who teach native Spanish speakers. Specifically, the focus is on Structured English Immersion, English as a Second Language, Bilingual Education, and Dual Language Programs. The advantages and disadvantages of each program are discussed along with stated examples of programs currently in place across the United States of America. I draw a conclusion based on published research as to which of the four programs is most advantageous to the ELL student. Following this research, I examined the ELL program that is in place at East High Street Elementary School in Elizabethtown, Pennsylvania. Based on that examination, I make a recommendation as to whether or not the school should modify its existing ELL program to better benefit the students. I also draw a conclusion regarding the need of the school to take into account the projected Spanish speaking population growth in the future.</p>		
Social Work	Presentations	H-214
8:00 AM	Parental Perspectives on Why Children Re-Enter Foster Care	# 31
Presenter(s)/ Co-Author(s):	Nina Longobardi	Mentor(s): Dr. Susan Mapp
<p>This research will focus on gaining insight from parents of children who recently re-entered foster care in Lancaster County. Through semi-structured interviews, the researcher will learn more about each family's current situation and what has led to their child's re-entry into care. It is the goal of this research to gain a better understanding of the parental experience when their children are in care and what supports they have to help them through the process of reunification with their children. The researcher will also seek to discover what risk factors parents feel have most affected their child's re-entry into foster care.</p>		
8:30 AM	Behavior Management At Milton Hershey School:Employee Perspectives	# 32
Presenter(s)/ Co-Author(s):	Cara Romanik	Mentor(s): Dr. Susan Mapp
<p>For my Honors in the Discipline project, I am conducting my research through Milton Hershey School, where I am doing my senior field placement in the social work department. MHS is a residential school for students whose families are economically disadvantaged. The school provides a very structured environment for students, including a specific discipline system. I am researching the perspectives the employees have of the rules at MHS and comparing them to the students' perspectives. A select group of employees, including teachers, administrators, Student Health Services employees, and house parents, will be surveyed. The results will be compared to existing statistics of the students' perceptions of rules to see if there is a gap between the two understandings, and what that could mean in regard to the current discipline system that is in place at the school.</p>		
8:45 AM	A Trip for Hope	# 33
Presenter(s)/ Co-Author(s):	Kalie Desimone	Mentor(s): Dr. Margaret McFarland
<p>"A Trip for Hope" is a video that I created while participating in a service trip to Vietnam with the College. The video contains footage from the various orphanages that we worked at during the trip. The presentation will also include a PowerPoint which will present background information about the country and what the service trip was about.</p>		

Sociology/Anthropology		Presentations	H-215
8:00 AM	Depression in Amish Society		# 36
Presenter(s)/	Syeda Ahmad	Mentor(s): Dr. Donald	
Co-Author(s):		Kraybill	
My presentation concerns how the Old Order Amish community understands and responds to the mental disorder of depression. Using primary and secondary accounts from Amish magazines, pamphlets and scientific studies, the emergence, opinion and treatment of the disease was observed. Depression was first identified in the early 20th century and it is now an established disorder in modern society. The Amish community has accepted the treatment of other medical conditions but remains wary of depression and has slowly integrated treatment into their society. The Amish reaction to depression represents their struggle with modernizing forces, as they try to maintain the “traditional” way of life.			
8:15 AM	The Amish and Modern Agriculture		# 37
Presenter(s)/	Matthew Doeing	Mentor(s): Dr. Donald	
Co-Author(s):		Kraybill	
This paper will answer the question “What role do the Amish play in modern agriculture and how is that role changing.” Using a collection of primary and secondary sources I will show the current position of Amish farmers and what they are doing that changes that position. My paper looks at the interaction between Amish and the agricultural market and shows how more technological businesses are affecting that market. From this I will show how modernization is affecting Amish life in different areas and what that means for the Amish identity.			
8:30 AM	Who Are the Delaware Amish?		# 38
Presenter(s)/	Melanie Hartman	Mentor(s): Dr. Donald	
Co-Author(s):		Kraybill	
The Amish community in Delaware is a commonly unknown and slowly deteriorating society. This paper will explore characteristics of the Delaware Amish and predict the future of the group. The Delaware Amish have distinctions in dress and transportation that set them apart from other Amish. One other distinction is that the community is, unlike most other Amish groups, declining. The reasons for the decline will be examined in the paper. Migration data is analyzed side-by-side with interviews with community members to show the future of the community. The information will show the grim future of the DE Amish. The changes in the economics of Dover have contributed greatly to the decline of the community because of high property taxes. If the Amish change to professions other than farming there is a chance that they could survive. The paper will delve into whether or not that will happen and what will actually become of the Delaware Amish.			
8:45 AM	Understanding of the Self in Amish Society		# 39
Presenter(s)/	Meghan Jones	Mentor(s): Dr. Donald	
Co-Author(s):		Kraybill	
This paper examines the understanding of the Amish self. The strong sense of community among Amish men and women sharply contrasts the highly individuated American culture. Through qualitative research, several factors that influence the development of the ‘self’ in Amish men and women are examined. One’s sense of self is largely dependent on childhood development, the period when early concepts of the ‘self’/‘other’ boundary are established. In Amish communities, significant importance on the religious concept of gelassenheit and obedience to the ordnung lead Amish men and women to automatically prioritize the well-being of the community as a whole before the self. Emphasis on personal achievement or pride for any reason is seen as a sinful self-indulgence. Consequently, children learn to identify primarily with the community. This holistic approach sharply contrasts the individuated approach of modern America that praises and rewards the very ideas on which the Amish place a severe taboo. The ‘self’ that develops is therefore primarily defined by the communal experience rather than any unique personal experience.			
9:00 AM	Amish Dress		# 40
Presenter(s)/	Ashley Lockwood	Mentor(s): Dr. Donald	
Co-Author(s):		Kraybill	
My research explores how the Amish have rejected modern dress and have retained a traditional style of dress in order to promote a sense of community and avoid individualism. Based on primary sources, including articles about the Amish in “Family Life”, my presentation outlines the basic beliefs and values of the Amish culture, which promotes a simple style of dress and separation from the world, while rejecting the styles of dress which encourage individual personality and uniqueness.			

Posters

Concurrent Session I: 8:00 – 9:15

Biology	Posters	Masters Atrium
8:00 AM	A Population Study of Freshwater Turtles on a Pennsylvania College Campus: The Effects of Suburban Habitat on Population Structure	# 41
Presenter(s)/ Co-Author(s):	Jennifer Schoonmaker	Mentor(s): Dr. David Bowne
<p>The population composition of freshwater turtles has been of interest as researchers are finding skewed age and gender ratios. Degradation and loss of habitat, high predator numbers, and roads commonly found in suburban areas may be causing male-skewed populations. In addition, unsuitable nesting habitat in these areas may be causing adult-skewed populations with low recruitment. To determine if the freshwater turtle population in Elizabethtown, Pennsylvania, is skewed, we conducted a mark-recapture study of painted turtles (<i>Chrysemys picta</i>) and snapping turtles (<i>Chelydra serpentina</i>) in three ponds at Elizabethtown College during the fall of 2009. The population of painted turtles caught demonstrated a male-skewed (25 adult male: 13 adult female) and adult-skewed (34 adults: 4 sub-adults/juveniles) population. The snapping turtle population was also adult-skewed (9 adults: 2 sub-adults). These results provide reasonable doubt for the long-term persistence of the freshwater turtle population at Elizabethtown College, as well for other populations currently residing in suburban landscapes.</p>		
8:00 AM	Amphibian Use of Agricultural Streams	# 42
Presenter(s)/ Co-Author(s):	Michael Torre	Mentor(s): Dr. David Bowne
<p>Amphibian populations are declining worldwide. Agriculture is a leading cause of this decline due to habitat conversion and resulting alteration of stream characteristics. Streams in agricultural settings in the northeastern United States often consist of a single, deeply incised channel, surrounded by steep banks, comprised of fine-grained sediments that rapidly erode. These stream characteristics may not be suitable to amphibians. Our goals were to document amphibian use of agricultural streams and determine which variables influence that use. We sampled eight streams in the Mill Watershed of Lancaster County, PA for the presence of amphibians and took measurements of physical stream variables (channel morphology, water conditions, and vegetation), biological stream variables (macroinvertebrates), and surrounding landscape characteristics. Based on macroinvertebrate surveys, all of the sampled streams had poor water quality. We found larval <i>Eurycea longicauda</i> (long-tailed salamanders) in five streams and <i>E. bislineata</i> (northern two-lined salamanders) in two streams. None of the measured variables were statistically significantly related to salamander presence. When salamanders were present in a stream, we found substrate size to be a likely factor affecting their distribution along the channel bed. Salamanders preferred larger substrate sizes, with larger interstitial spaces. This preference is likely due to foraging and predator avoidance behavior. Salamander populations do exist in a subset of impaired agricultural streams but we have not yet identified associated stream and landscape variables. This research is a step towards better understanding amphibian ecology and conservation in agricultural systems.</p>		
8:00 AM	Does Heat Shock Factor Play a Role in Causing Extreme Differences in Life Span Between Two Closely Related Invertebrate Species?	# 43
Presenter(s)/ Co-Author(s):	Stephanie Ellwood, Stephanie Gingrich	Mentor(s): Dr. Diane Bridge
<p>Existing data suggest that the simple invertebrate animal <i>Hydra vulgaris</i> does not experience physical deterioration with age. Instead, <i>Hydra vulgaris</i> individuals appear to be able to survive indefinitely in a healthy state. Interestingly, the closely related species <i>Hydra oligactis</i> shows increasing physical deterioration and eventually death following reproduction. We are investigating the possibility that the difference in lifespan between the two species is caused by differences in production of heat shock proteins. In organisms from bacteria to vertebrates, high temperatures and other stressful conditions trigger production of heat shock proteins. Heat shock proteins protect cells by reducing the levels of proteins that are not properly folded. As humans and other organisms age, the amounts of heat shock proteins that are produced in response to stress decrease. Experimentally changing levels of heat shock proteins can change the lifespans of fruit flies and nematodes. While <i>Hydra vulgaris</i> produces heat shock proteins in response to stress, <i>Hydra oligactis</i> does not. The transcription factor heat shock factor (HSF) normally triggers increased production of heat shock proteins in response to stress. To determine whether the amounts or activity levels of HSF1 differ in the two species of Hydra, we are cloning the HSF genes from both species.</p>		
8:00 AM	Alterations in Actin and Nucleophosmin in Melanoma	# 44
Presenter(s)/ Co-Author(s):	Stephanie Elwood, Alyssa Neill, Sarah Knapp, Jennifer Schiefer	Mentor(s): Dr. Jane Cavender
<p>This research project was designed to investigate cellular differences mouse melanoma B16F10 and spontaneously immortalized Black 6 mouse embryo fibroblast cells, B6SC17, in the hopes of determining causative factors of skin cancer. Melanoma, while only representing 4% of skin cancers, accounts for 79% of skin cancer related deaths. It has the highest case death rate for all the types of skin cancers. There are about 600,000 new cases of cancerous skin tumors reported each year. This project focused on actin and nucleophosmin protein characterization, nucleoli number and size, and enzyme analysis. Density gradient centrifugation was performed on the melanoma and normal cells to separate the organelles. Each fraction was assayed for protein concentration, Cytochrome c Reductase and Acid Phosphatase. It was found that the actin filaments of the normal mouse B6SC17 cells had a greater concentration than in the B16F10 mouse melanoma, and actin filaments were more distinctive in their fanned shape. The organization of the normal mouse cells were more spread out compared to the cancerous mouse cell line. The nucleoli in the cancer cell line were more numerous and/or larger in size. Although these differences were observed in the two cells lines, it must be noted that the control cells are embryonic and represent the undifferentiated phenotype. Preliminary data indicate that the acid phosphatase and cytochrome c reductase activity is greatest in the melanoma P3 fraction, containing lysosomes and light mitochondrial, fraction as compared to the B6sc17 line.</p>		

8:00 AM	Cytological and Enzymatic Alteration in Neuroblastoma	# 45
Presenter(s)/ Co-Author(s):	Elizabeth Bahr, Nevin Brown, Joseph Sheehan, Zachary Wendler	Mentor(s): Dr. Jane Cavender
<p>This research project was designed to examine mouse neuroblastoma (Neuro-2A) and a control immortalized Black 6 mouse embryo fibroblast cell line to compare similarities and differences between the cell lines. Neuroblastoma is a childhood cancer arising in the nerve cells of the sympathetic nervous system. Two proteins, actin and B23 (nucleophosmin) were assessed by immunofluorescence to determine if there were differences in their localization, accumulation or organization. Data showed the delocalization of intracellular actin in N2A cells compared to the control B6 cell line. The localization and accumulation of B23 were similar in both cell lines. Biochemical assays were employed to assess the activity levels of acid phosphatase and cytochrome c reductase. The overall protein concentration was larger in N2A cells, yet preliminary data indicates that the enzyme activity is lower than that of the control B6 cell lines.</p>		
8:00 AM	Does Heat Shock Factor Play a Role in Causing Extreme Differences in Life Span Between Two Closely Related Invertebrate Species?	# 46
Presenter(s)/ Co-Author(s):	Stephanie Gingrich, Stephanie Ellwood	Mentor(s): Dr. Diane Bridge
<p>Existing data suggest that the simple invertebrate animal <i>Hydra vulgaris</i> does not experience physical deterioration with age. Instead, <i>Hydra vulgaris</i> individuals appear to be able to survive indefinitely in a healthy state. Interestingly, the closely related species <i>Hydra oligactis</i> shows increasing physical deterioration and eventually death following reproduction. We are investigating the possibility that the difference in lifespan between the two species is caused by differences in production of heat shock proteins. In organisms from bacteria to vertebrates, high temperatures and other stressful conditions trigger production of heat shock proteins. Heat shock proteins protect cells by reducing the levels of proteins that are not properly folded. As humans and other organisms age, the amounts of heat shock proteins that are produced in response to stress decrease. Experimentally changing levels of heat shock proteins can change the lifespans of fruit flies and nematodes. While <i>Hydra vulgaris</i> produces heat shock proteins in response to stress, <i>Hydra oligactis</i> does not. The transcription factor heat shock factor (HSF) normally triggers increased production of heat shock proteins in response to stress. To determine whether the amounts or activity levels of HSF1 differ in the two species of <i>Hydra</i>, we are cloning the HSF genes from both species.</p>		
8:00 AM	Cytological and Biochemical Characterization of the HeLa Cervical Carcinoma Cell Line	# 47
Presenter(s)/ Co-Author(s):	Brian Frantz, John Fuesler, Matthew Rimbey, Daniel Silver	Mentor(s): Dr. Jane Cavender
<p>A cytological characterization of the HeLa cervical carcinoma cell line studying multiple proteins and enzymes is described. The HeLa cervical carcinoma cell line is the result of HPV 18 genome integration. In 1951 the cell line was first cultured, and since, has been used in biomedical research and novel discoveries and therapies for HPV infection. The non-cancerous human diploid fibroblast (HDF) cell line was used as a control for comparison throughout this investigation. Immunofluorescence was used to demonstrate differences in actin and nucleophosmin (B23) localization, modification and concentration in HeLa and HDF cells. Nucleophosmin is a nucleolar protein involved in ribosome assembly and is expected to have abnormal localization, size and number in HeLa cells due to the cancer cell's increased need for protein expression. Actin filaments in HeLa cells were found to be distorted and less well defined than those in HDF cells. Furthermore, this study supported the data that HeLa cells have atypical nucleophosmin localization. Immunofluorescence microscopy revealed nucleophosmin only in the nuclei of HeLa cell; in HDF cells, nucleophosmin was found in the nuclei and cytoplasm. Enzyme marker assays of differential centrifugation fractions will be performed in order to localize specific organelles and determine enzymatic activity.</p>		
8:00 AM	Simian Virus 40 T Antigen is Capable of Transactivating the Nucleophosmin Promoter	# 48
Presenter(s)/ Co-Author(s):	Margaret Kench, Randall Derstine	Mentor(s): Dr. Jane Cavender
<p>The present study was designed to elucidate the relationship between the host nucleolar protein nucleophosmin (B23) and the simian virus 40 (SV40) large T antigen proteins. SV40 T antigen transforms cells in culture in part by inhibiting the tumor suppressors p53 and Rb. B23 is a multifunctional nucleolar protein that resides primarily in the nucleoli. However, B23 shuttles rapidly between the nucleoli and the cytoplasm and has been associated with numerous functions in each location. Within the nucleoli, B23 is involved in ribosome biogenesis, oligopeptide formation, RNase activity, control of DNA polymerase α activity, and interactions with ARF tumor suppressor. Cytoplasmic B23 has been associated with centrosome duplication, molecular chaperone activity, and nuclear import of peptides containing nuclear localization signals. This study has found that large and 17K T antigens are able to transactivate the B23 promoter by using a reporter gene assay. Additionally, it has been found that this activation does not require the T antigen hsp70-, Rb, or p53 - binding domains. Furthermore, cytoplasmic T antigens are capable of stimulating the B23 promoter activity. Preliminary data has indicated that this activity may require the N-terminal function of binding to Bub or Cul-7 (p193), suggesting that centrosome duplication and E3 ligase may be involved in the signaling of the B23 promoter.</p>		

Posters

Concurrent Session I: 8:00 – 9:15

8:00 AM	Effect of SV40 T-Antigen Transformation on B23 Expression and Nucleolar Accumulation	# 49
Presenter(s)/ Co-Author(s):	Michael Nelson	Mentor(s): Dr. Jane Cavender
<p>B23 (Nucleophosmin) is a multifunctional nucleolar protein involved in cell proliferation, centrosome duplication, apoptosis, and ribogenesis. Simian virus 40 is an oncovirus that encoded three early transforming proteins, 17K, large T, and small t antigens. Large T antigen alone is sufficient to transform cells in culture. T-antigen transformed cells exhibit increased protein synthesis and growth rates. To determine if there is a relationship between viral transformation and B23, nucleolar alteration within SV40 T-antigen cells was studied. B23 localization was assessed in B6MEF (primary mouse), B6MEFT1-708 (T-antigen transformed), and B6scl7 (spontaneous) cell lines by immunofluorescence. Primary B6MEF cells contained the lowest number of B23 positive nucleoli (mean= 4.98); whereas, B6MEFT1-708 and B6scl7 exhibited 6.27 and 7.99 nucleoli/nucleus, respectively. In addition to B23 localization, the amount and phosphorylation state of the protein was assayed by a western blot. Our results show that wild type T antigen cells expressed higher amounts of total B23 in comparison to the spontaneously immortalized cells. Moreover, in the presence of T/t antigens B23 phosphorylated at the T199 residue accumulated to detectable levels. This suggests that T-antigen promotes the phosphorylation of B23 by CDK2/cyclin E in order to induce centrosome replication and could partially be responsible for the higher growth rate observed within T-antigen transformed cells. Preliminary data indicates the involvement of small t in post-translational phosphorylation of B23.</p>		
8:00 AM	Screening of an Arrayed Human Genomic Library in the PAC Shuttle Vector Pjcpac-Mam2	# 50
Presenter(s)/ Co-Author(s):	John Fuesler, Stephanie Bireley	Mentor(s): Dr. Jonathon Coren
<p>Human genomic libraries constructed in the PAC shuttle vector pJCPAC-Mam2 allow scientists to recover ample quantities of DNA from any clone in bacteria, and then introduce the PAC clone into a variety of human cell lines for functional genomic studies. We have constructed an arrayed 115,000 member library housed in twelve hundred 96 well plates. The library was then pooled in a columns and rows fashion. Each column (12 clones) was pooled into a single well of a second-generation plate (100 total). Next, entire second-generation plates were pooled. Two additional rounds of pooling resulted in the production of 19 cryovials containing ~6,000 PAC clones/vial. PCR screening with oligonucleotides representing nine genes (p53, DNA ligase, Beta-polymerase, AP endonuclease, HPRT, BRCA2, Pax6, HSA and c-myc) was employed in order to determine library coverage. It appears that this library represents a two to three-fold coverage of the genome.</p>		
8:00 AM	Seasonal Changes in Water Quality in a Small Pond in Auburn, PA: A Pre-Restoration Study	# 51
Presenter(s)/ Co-Author(s):	Derek Faust	Mentor(s): Dr. Thomas Murray
<p>The goal of this project was to document the seasonal changes in water quality in a small oligotrophic pond in Auburn, Pennsylvania. The pond was monitored for eleven months prior to a pending restoration project that will deepen the pond and re-introduce native plants to the littoral zone. The pre-dredging data presented include water temperature, dissolved oxygen, pH, turbidity, nitrate, ammonium, orthophosphate, calcium, potassium, sodium, magnesium, zinc, and iron. In addition, plankton samples were collected throughout the summer. As might be expected, the orthophosphate levels were extremely low throughout the study. There was a decrease in the nitrate levels from inlet to outlet, especially during the growing season. There were no significant differences in the ammonium levels from inlet to outlet, except during the months of February and April 2009. The biological samples reflect the water chemistry with low species diversity and abundance. It is hoped that the dredging and replanting will add some more diverse habitat to this oligotrophic system.</p>		
8:00 AM	Itchy? Your Birth Day May Be to Blame	# 52
Presenter(s)/ Co-Author(s):	Stephanie Dougherty, Kaity Snyder	Mentor(s): Dr. Debra Wohl
<p>The underlying cause of atopic dermatitis, a chronic, relapsing, inflammatory skin disease, commonly referred to as eczema, has not yet been identified. Research has shown that antibiotic exposure during delivery can disrupt the microbial colonization of the newborn's gut, thereby altering the development of the immune system. Based on such findings, we are examining the current practice of using antibiotics during the birthing process to determine whether or not it may contribute to the prevalence of eczema. Our specific aims are to: (1) conduct a retrospective cohort study to collect survey data along with medical records of women who gave birth by vaginal delivery either with or without intrapartum antibiotics and the medical records of their children, (2) determine whether children delivered by vaginal delivery with intrapartum antibiotics have a greater risk of developing atopic dermatitis before the age of 2 than their counterparts, and (3) use the study results to provide physicians with additional information with which they may reevaluate the benefits and risks of administering intravenous antibiotics during the intrapartum period. Currently in the second year of a three year study we have invited 861 women and enrolled 190 in the study; 28% of the women have more than one eligible child. The target enrollment goal is 1200 children. At this time, along with inviting individuals to enroll in the study, we are abstracting data from the medical records (i.e., labor and delivery records, pediatric files) and merging it with the completed survey data.</p>		

8:00 AM	Increasing the Immunogenicity of a Tumor Rejection Antigen	# 53
Presenter(s)/ Co-Author(s):	Stephen Hurst	Mentor(s): Dr. Jodi Yorty
Cells transfected with the oncoprotein from Simian Virus 40 (SV40), large tumor antigen (Tag), can form tumors in Balb/c mice due to the weak immune response generated against amino acid residues 499-507 of Tag. This peptide binds to MHC I (H2-Kd) and is presented on the tumor cell surface. The complex is then recognized by cytotoxic CD8+ T lymphocytes which kill the tumor cell. Previous studies have demonstrated that the anchor residues of this peptide (positions 2, 5, and 9) are not ideal for binding to MHC I. It was hypothesized that changing the anchor residues to the ideal amino acids would stabilize the MHC I:peptide complex and therefore increase the immunogenicity of the tumor cells. However, purified peptides containing the altered anchor residues, did not exhibit increased binding affinity to MHC I. These altered peptides also failed to stabilize MHC I on the cell surface. Current studies are examining the in vivo response to the various purified peptides. Additionally, the role of antigen processing is being examined by immunizing mice with cells transfected with full-length Tag containing altered anchor residues.		
Chemistry and Biochemistry	Posters	Masters Atrium
8:00 AM	Atomic Hartree-Fock Method Using STOS: Programmed in Python	# 54
Presenter(s)/ Co-Author(s):	Justin Mitsch	Mentor(s): Dr. Gary Hoffman
This project aims to develop a program that has an appealing and easily usable Graphic User Interface (GUI) for performing electronic structure calculations on atoms. Python was chosen as the language for the program because of its GUI creation tools, the NumPy computational package, and because Python was developed to be easily portable. The use of STO's instead of the more commonly used GTO's was chosen because they better represent the nature of atomic orbitals. Using this program as a pedagogical tool, the student has control over several variables for atomic calculations, such as atomic species, and basis set construction. The overall goal is to have a convenient and numerically accurate program for possible use in either physical chemistry lecture or laboratory exercises.		
8:00 AM	Luminescence-Based Oxygen Sensors with Quantum Dots as Internal Reference	# 55
Presenter(s)/ Co-Author(s):	Laura Krieger	Mentor(s): Dr. Kristi Kneas
Luminescence-based sensors are of interest because of their high sensitivity and selectivity, ease of miniaturization and remote sensing, and non-consumptive analyte measurement. They are also low in cost and easily used, require minimal sample preparation, and allow continuous and rapid real-time monitoring. Hindering the performance and commercial viability of intensity-based sensors are signal changes resulting from fluctuations in the light source, variation of detector sensitivity, and photodegradation of the sensing molecule. With narrow emission bands and synthetic control of size and emission wavelength, quantum dots can serve as internal references to correct for such errors. Results will be presented for prototype luminescence-based oxygen sensors with a ruthenium complex as the sensing molecule and a cadmium selenide quantum dot as the internal reference. Embedded in the same polymer support, quantum dots function successfully to minimize errors, and reasonable sensitivity is observed for sensors composed of both elastomeric and thermoplastic polymer supports.		
8:00 AM	Low Cost Preparation of Membrane Electrode Assemblies for Polymer Electrolyte Membrane Fuel Cells	# 56
Presenter(s)/ Co-Author(s):	Zachary Kulp	Mentor(s): Dr. Kristi Kneas
Fuel cells are an excellent alternative to more traditional non-renewable energy sources that produce harmful greenhouse gases and contribute to global warming. Of the fuel cell types, polyelectrolyte membrane fuel cells show great promise for many applications because of reasonable running temperatures and ease of portability. Unfortunately, membrane electrode assembly (MEA) production and the individual components are costly, thus hindering fundamental research, mainstream use, and the ability to expose undergraduates to the technology. Described here are efforts to produce MEAs more economically using thermal inkjet printing for deposition of the catalyst inks. A T-shirt press is used instead of a high temperature, high pressure heat press to fuse membrane layers together. Reasonable MEAs have been produced, and continued work is directed at optimization of their performance and durability. Applicability of the current work to commercial MEA production and preparation of MEAs for research and teaching applications will be discussed.		
8:00 AM	High Performance Liquid Chromatography Investigations of Ink Degradation Products to Authenticate Questioned Documents	# 57
Presenter(s)/ Co-Author(s):	Mollie Mares	Mentor(s): Dr. Kristi Kneas
The separation and measurement of ink degradation products by high-performance liquid chromatography (HPLC) is an emerging area of great relevance to forensic investigations of forged or questioned documents. Based on differences in degradation products of an ink, it should be possible to discern between writing that is original to the document and that which has been added later. To date, only controlled investigations of a limited number of inks extracted from hand-drawn, straight lines have been conducted. In the current work, methods of ink sampling, extraction, and detection are under development for HPLC analysis of handwritten ink samples. Variations of ink degradation products with ink type, paper type, and thickness of ink deposited on the paper are also under investigation to determine their impact on the aging of ink. The feasibility of the experimental approach for use in both the crime laboratory and the teaching laboratory is discussed.		

Posters

Concurrent Session I: 8:00 – 9:15

8:00 AM	Biological Sensors Based on “Smart” Hydrogels and an Environment-Sensitive Luminophore	# 58
Presenter(s)/ Co-Author(s):	Matthew Myers	Mentor(s): Dr. Kristi Kneas
A luminescence-based sensing approach using “smart” hydrogels and an environment-sensitive luminophore is described. The “smart” hydrogels swell and contract in response to the analyte, bringing about a change in the local environment of an embedded luminophore. Changes in emission intensity and wavelength allow for real-time and quantitative measurement of the analyte of interest. The approach is versatile since it can be adapted readily to numerous analytes with modifications to the hydrogel, it affords control of dynamic range by alteration of polymer composition, and it allows for measurement in vapor or aqueous phase. Results are presented for prototype, thin film sensors constructed from pH, glucose, and lactate-responsive hydrogels, and recommendations are made for application of the sensing methodology to other environmentally and biologically significant analytes.		
8:00 AM	Hydrogels As Transducers in Highly Adaptable Luminescence-Based Humidity Sensors	# 59
Presenter(s)/ Co-Author(s):	John Tellis	Mentor(s): Dr. Kristi Kneas
Relative humidity (RH) measurement and control are essential in environmental and industrial monitoring, food processing, and medicine. Diverse applications include use in respiratory systems and greenhouses, the production of chocolate coatings, and the storage of books, all of which require measurement over widely different ranges of RH and temperature. Commercial sensors are limited by slow response times, poor accuracy and precision, and difficulty of calibration. Results are presented for a luminescence-based RH sensor that utilizes the swelling properties of a hydrogel to induce an emission wavelength shift and intensity change in an embedded, polarity-sensitive luminophore. The sensing approach allows tailorability of sensor performance (i.e., dynamic range, sensitivity, and response time) to meet the demands of specific applications, while exploiting the high sensitivity and low cost of luminescence-based sensing methods.		
8:00 AM	The Synthesis of β-Lactam Antibiotics for Antibiotic Resistant Bacteria	# 60
Presenter(s)/ Co-Author(s):	Kathryn Diamond, Ayusa Sinha	Mentor(s): Dr. James MacKay
With an ever-increasing resistance of bacteria to modern antibiotics, a need for new drugs is of high importance. Many antibiotics, such as penicillin, are β -lactam derivatives that act to inhibit the synthesis of the cell wall thus compromising the integrity of the cell, leading to cell death. In spite of this, bacteria have devised a method to use a defense enzyme, a β -lactamase, to destroy the antibiotic. These β -lactamases are specific for different types of bacteria, thus one β -lactam is not resistant to all β -lactamases. The MacKay research group is investigating a novel way to make β -lactams; however the method is not yet fully developed. In the meantime, β -lactams similar to the penicillin class of antibiotics are being synthesized using known approaches. The current approach uses a Straudinger reaction to construct the β -lactam from a Meldrum's acid derivative and a Δ^2 -thiazoline. The Meldrum's acid derivative will be synthesized from Meldrum's acid in acid chloride. The Δ^2 -thiazoline has been isolated in 86% yield from L-cysteine methyl ester hydrochloride and triethylorthoformate. Once the β -lactam is synthesized, a biological growth assay will be used to establish the effectiveness of the antibiotic to control bacterial growth of microbes with and without resistance.		
8:00 AM	Studies on an Allenolate Variant of the Morita-Baylis-Hillman Reaction	# 61
Presenter(s)/ Co-Author(s):	Zachary Landis	Mentor(s): Dr. James MacKay
Our research group is interested in the synthesis of compounds with rings that contain many different functional groups. This is significant, because rings are components of many natural products and pharmaceuticals. The intramolecular vinylogous Morita-Baylis-Hillman reaction is a synthetically valuable reaction that can be used to make rings. We are investigating the effect of an alkyne as the initial acceptor, activated by a variety of electron withdrawing groups. This presentation will demonstrate the generality of the reaction and using a deuterated substrate, further elucidate the reaction mechanism. Insight into the effect of the electron withdrawing groups and the mechanism will help deduce the scope of the reaction for the formation of highly functionalized five and six-membered rings.		
8:00 AM	Substrate Synthesis, Yield Optimization, and Application of the Intramolecular-Morita-Baylis-Hillman Reaction	# 62
Presenter(s)/ Co-Author(s):	Steve Motika, Zachary Landis	Mentor(s): Dr. James MacKay
The medical field frequently utilizes compounds that contain rings. Drugs often have a wide range of functionality allowing them to possess different chemical properties. Our research is focused on developing a reaction called the Morita-Baylis-Hillman reaction that is useful for forming functionalized five and six membered rings. Typically, the substrate involved in this reaction includes two electrophilic alkenes. Changing one of the alkenes to an alkyne is under investigation. The synthesis of this substrate involves a multi-step process then the key reaction is catalyzed by a nucleophile. A variety of different electron withdrawing groups on the alkyne have been studied. However, in this research a tert-butyl ester was chosen and reaction conditions will be optimized to increase product yields. Finally, the ultimate goal of this research is to further functionalize the cyclized product to produce additional compounds that could be utilized as drugs or for other purposes.		

8:00 AM	Intramolecular Cyclization Strategy for the Synthesis of Pyrrolidines and Other Nitrogen Heterocycles	# 63
Presenter(s)/ Co-Author(s):	Rob Panish	Mentor(s): Dr. James MacKay
<p>β-lactams are an important structural component in many pharmaceuticals such as the antibiotic penicillin. Our research aims to develop novel β-lactams that possess antibiotic activity in resistant bacteria. The molecules we aim to make contain two rings. To date, these methods have resulted in the synthesis of only one of the two rings. Specifically, an intramolecular reaction of an isocyanate with an electron poor alkene is performed using a nucleophile. Various nucleophiles have been studied to form 2-substituted pyrrolidines. While neutral nucleophiles do not afford cyclized products, we have been successful using anionic nucleophiles. It appears that the counter-cation plays a significant role in this reaction where potassium alkoxides afford the cyclic product, and sodium and lithium alkoxides do not afford cyclization and result in the isolation of acyclic carbamate products. Current efforts are aimed at using catalytic nucleophiles and extending to chiral catalysis. Furthermore, future experimentation lends itself toward extending this method toward the asymmetric synthesis of β-lactams.</p>		
8:00 AM	Synthesis of Chiral Tetrahydropyrans from Gamma-Lactols Via a Tandem Wittig/1,4-Addition Reaction	# 64
Presenter(s)/ Co-Author(s):	Nicholas Wetzel	Mentor(s): Dr. James MacKay
<p>A one-pot preparation of chiral tetrahydropyrans has been proposed utilizing gamma-lactols and stabilized Wittig reagents. The lactol substrate forms an α,β-unsaturated carbonyl after a Wittig reaction. The alcohol undergoes an intramolecular 1,4-conjugate addition to yield a tetrahydropyran, forming a chirality center. In order to affect enantioselectivity of the tetrahydropyran, several chiral amine catalysts have been investigated and increase the rate under a variety of conditions. This presentation will demonstrate effects of conditions on the enantioselectivities and yields for this reaction.</p>		
8:00 AM	Alkaline Earth Metal Catalysts for Ring Opening Polymerization Reactions	# 65
Presenter(s)/ Co-Author(s):	Geoffrey Quinque	Mentor(s): Dr. Jeffrey Rood
<p>Propylene oxide (PO) is a petrochemical intermediate of great significance, finding use in a variety of markets such as urethanes and resins. Its polymeric form, polypropylene oxide (PPO) serves as a precursor material for liquid crystal technology. The efficient formation of PPO using organometallic catalysts is of great interest. Alkaline earth metal complexes are attractive candidates as initiators of PO polymerization reactions due to their high reactivity. Highly reactive catalysts are of interest because of their ability to decrease reaction times to make polymeric materials. This project aims to investigate a new class of alkaline earth metal species involving bis(imino)pyridine ligands as catalysts. We report herein the initial investigations into the synthesis of these compounds as well as a rationale for their further use as initiators of polymerization reactions.</p>		
8:00 AM	Humidity Sensors Based on Smart Hydrogels and a Rigidochromic Rhenium Complex	# 66
Presenter(s)/ Co-Author(s):	Justin Warner	Mentor(s): Dr. Jeffrey Rood, Dr. Kristi Kneas
<p>The development of luminescent-based sensors for measurement of relative humidity sensing is of current interest for applications in chemical, environmental, pharmaceutical, and food industries. Current sensor technology is often limited by sensitivity, slow response time, and high cost. A novel approach to the development of new sensors involves the use of hydrogels, flexible and highly absorbent polymeric materials, embedded with an environment-sensitive luminescent compound. Initial studies involving the use of the rhenium complex, $\text{ClRe}(\text{CO})_3\text{-}2,2'\text{-bipyridine}$, as the luminescent compound will be detailed. Due to its asymmetry, this complex is known to be rigidochromic; when placed in a structured environment, such as a hydrogel, the compound's luminescent behavior becomes highly dependent on the rigidity of the environment. Changes in the luminescence of the rhenium compound will be dependent on the swelling/shrinking of the hydrogel due to humidity changes in the surrounding environment.</p>		
8:00 AM	Metal Organic Frameworks: Synthesis and Characterization	# 67
Presenter(s)/ Co-Author(s):	Michael White	Mentor(s): Dr. Jeffrey Rood
<p>Metal-organic frameworks (MOFs) are a dynamic and increasingly prevalent class of materials being studied due to the potential of these materials for applications in catalysis, chemical separation, and small molecule storage. Most research has thus far been focused primarily on metal-carboxylate frameworks as porous materials. To recognize the full potential of this exciting field, compounds aside from metal carboxylates need to be explored as new porous materials. This project will focus on metal phosphinate compounds as new routes to porous materials. These compounds have the potential to form novel porous structures useful for the applications described above. Temperature and solvent system variations have been reported to influence framework structure and as such are experimental variables being tested. Reported herein are the effects of varying temperature, solvent system, and ligand derivatives on the overall structure of the metal-organic framework.</p>		

Posters

Concurrent Session I: 8:00 – 9:15

8:00 AM	Synthesis and Multinuclear NMR of Germanium-Phosphorus Complexes	# 68
Presenter(s)/	Cameron Gettel	Mentor(s): Dr. Charles
Co-Author(s):		Schaeffer
<p>In contrast to the significant amount of germanium research in organometallic chemistry, coordination chemistry between Ge(II) and Ge(IV) halides with Group 15 elements has received little attention. Literature suggests that reactions with 1:1 stoichiometry involving GeX_4 ($\text{X} = \text{Cl}$ or Br) and tertiary phosphines result in a redox reaction, forming the ionic germanium (II) complex $[\text{R}_3\text{PX}][\text{GeX}_3]$. We will expand series preparation with the reactants PR_3 ($\text{R} = \text{Me, Et, n-Pr, n-Bu, t-Bu, Cy, Me}_2\text{N}$) and $\text{GeR}'_{4-n}\text{Cl}_n$ ($\text{R}' = \text{Met, Et, Ph}$), forming $[\text{PR}_3\text{Cl}][\text{GeR}'_{3-n}\text{Cl}_n]$. Due to the moisture-sensitivity of the compounds, all of the germanium complexes were prepared in the same manner in an anaerobic atmosphere. Through ^{31}P and ^{73}Ge NMR spectroscopy, the objective of the research is to understand the interaction between the cation and anion in these complexes.</p>		

Education	Portfolios	H-110
9:30 AM	A Framework for Teaching: Professional Portfolios for Educators	# 71
Presenter(s)/	Katy Boone, Lauren deDufour, Christine Gustavsen, Tamara Kase,	Mentor(s): Dr. Rachel
Co-Author(s):	Ashley Marciniak, Brittany McConnell, Ashley O'Neill, Alyse Woodman	Finley-Bowman
Please see the abstract for presentation #1		
10:00 AM	A Framework for Teaching: Professional Portfolios for Educators	# 72
Presenter(s)/	Kara Geiger, Megan Momenzadeh, Nichole Opdyke, Kristina Psitos,	Mentor(s): Dr. Rachel
Co-Author(s):	Kristin Roberts, Leighanne Spitzer, Christina Sweger, Janette Williams	Finley-Bowman
Please see the abstract for presentation #1		
10:30 AM	A Framework for Teaching: Professional Portfolios for Educators	# 73
Presenter(s)/	Melissa Lukacsy, Katherin Momenzadeh, Kayla Moose, Brittany	Mentor(s): Dr. Rachel
Co-Author(s):	Patton, Adrienne Wesley, Kristi Will, Jaclyn Young, Lindsay Zampier	Finley-Bowman
Please see the abstract for presentation #1		
Sociology/Anthropology	Presentations	H-114
9:30 AM	Modern Forms of Gaming and Their Effects on Communities	# 76
Presenter(s)/	Maggie Stromoski	Mentor(s): Dr. Conrad
Co-Author(s):		Kanagy
Gaming has become a prominent part of modern culture, spilling over into mainstream media and entertainment. Role playing and trading card games have been at the forefront of this movement, providing the foundation for Massive Multiplayer Online RPG's (such as World of Warcraft), the constantly evolving Alternate Reality Games and the societies and the communities that form around them. Despite the negative stigmas revolving around them, they have created separate, independent and international communities. They provide usable learning tools and can have both positive and negative impacts on our culture and the world at large. This presentation aims to provide a small summary of the games' history and purpose and the impact they have created in our global cultures.		
10:00 AM	Are You Afraid of Your Neighborhood? The Effects of Age, Residence, and Political Affiliation on Perceptions of Community Safety	# 77
Presenter(s)/	David Spelfogel	Mentor(s): Dr. Michele Lee
Co-Author(s):		Kozimor-King
Current statistics shows that Americans fear their neighborhoods despite dropping crime rates. Previous research suggests that when individuals do not feel safe, they tend to be less active and participate in fewer outdoor activities, as well as avoiding certain places. Some even carry weapons for protection. This study examines the effects of age, residence, and political views on perceptions of community safety. The data were obtained from the General Social Survey (GSS) conducted by the National Opinion Research Center at the University of Chicago for the year 2008, with a sample size of 565 respondents. Approximately, 33 percent of respondents stated that there were areas nearby where he or she would be afraid to walk alone at night. Contrary to the hypotheses, results from bivariate correlations found no significant relationships between fear of neighborhood and age, residence, or political views. However, fear of neighborhood was associated with housing type, suggesting that the traditional view of residence based on urban, suburban, and rural designations may be outdated. Fear of neighborhood was inversely correlated with both sex ($r = -.319$; $p < 0.001$) and race ($r = -.139$; $p < 0.01$). Additionally, there were positive correlations between fear of victimization and both socioeconomic status ($r = .182$; $p < 0.001$ and $r = .239$; $p < 0.001$) and age ($r = .206$; $p < 0.001$ and $r = .197$; $p < 0.001$). There was a negative correlation between race and fear of victimization ($r = -.208$; $p < 0.001$ and $r = -.173$; $p < 0.001$). This research provides further exploration of factors affecting perceptions of neighborhood safety. The results of this research have important implications for policy analysts, urban planners, and those interested in demographic patterns and community safety.		
Political Science	Presentations	H-211
9:30 AM	The Christian Component in Thomas Hobbes	# 81
Presenter(s)/	Alexandra D'Angola	Mentor(s): Dr. Paul
Co-Author(s):		Gottfried
Commentators have often portrayed Thomas Hobbes as a materialist philosopher. They have cited selectively his work <i>Leviathan</i> to prove their case. This father of the modern sovereign state was a religious skeptic as well as materialist, who wrote with apparent respect about Christianity to please popular sentiments in the middle of the sixteenth century. However, the affirmations of Christian faith and frequent references to Christ as Savior in Hobbes' work cannot go unnoticed, and this essay attempts to demonstrate an alternative view of Hobbes as a conflicted Christian who shows evidence of having been influenced by St. Augustine. Although this study will elaborate on the reasons for the conventional view of Hobbes, it will also, more significantly, examine the evidence for the alternative reading. This portrayal of Hobbes' theological and moral positions, provided by such English scholars as Francis Hood and Howard Warrender, should cause us to reconsider the once settled opinions about his atheism and naturalist view of human behavior.		

Presentations

Concurrent Session II: 9:30 – 10:45

9:45 AM	Tear Down this Firewall: Twitter's Function as a Political Tool in China	# 82
Presenter(s)/ Co-Author(s):	Edna Zhou	Mentor(s): Dr. April Kelly- Woessner, Dr. Kirsten Johnson
In the last three years, microblogging platform Twitter has become popular in mainstream culture as a method of allowing users to provide status updates to the rest of the world via internet and mobile phones. While these updates may be mundane and trivial, sometimes they play a bigger role in citizen journalism, where they begin to create the news and define what is deemed important. In China, Twitter is proving to be an effective tool in combating the government's Great Firewall, which routinely restricts access to websites and regulates the flow of information. Through a case study of Twitter's use in disseminating information during the Xinjiang riots of early July 2009, this paper examines what role social media sites like Twitter play in this new information age, and the future of censorship in China, as the Chinese government rethinks and revamps its methods of information control.		
10:00 AM	The Right Against Self-Incrimination: Analyzing New Zealand's and the United States' Application of the English Common Law Principle to Corporations	# 83
Presenter(s)/ Co-Author(s):	Megan Bean	Mentor(s): Dr. E. Fletcher McClellan
Despite extensive research on the implementation, impact and consequences of judicial rulings, there is little research in the area of comparative constitutional law to assess whether common law principles have developed uniformly in common law legal systems. Previous studies have revealed that judicial selection methods observably influence the decisions judges make; partisan considerations dominate justices' votes to invalidate or uphold legislation; precedent exerts a limited path dependency in constitutional law; and there is an increasing trend to cite foreign precedent outside the scope of one's native legal system to pursue legal transformation. Through a focused comparison, I address a discrepancy in the application of the right against self-incrimination to corporations between the common law countries of New Zealand and the United States by considering prior research as well as analyzing political context, judicial interpretation, historical development and foreign influence. From the variances revealed by the application of those four theories, I will determine why incongruous precedents have emerged between the two countries.		
Computer Science Presentations		H-211
10:15 AM	ActiveOctave: Collaboratively Creating Electronic Music Over a Network	# 84
Presenter(s)/ Co-Author(s):	Todd Lewellen	Mentor(s): Dr. Barry Wittman
Today, there are numerous software packages that allow for the effortless creation of electronic music using MIDI (Musical Instrument Digital Interface) sequencing. Typical MIDI sequencing programs arrange musical compositions as a series of timed events, with each event containing information about the note and instrument being played. These sequences of events can be edited in real time and played through a software synthesizer, resulting in elaborate electronic musical compositions that are not only entertaining to hear, but to create as well. ActiveOctave is a MIDI sequencing application that capitalizes on that entertainment factor by allowing multiple users to edit the same MIDI sequence over a network. Each user takes over one or multiple instruments in the program and edits the instruments' musical scores, which are then programmatically combined into one master score in real time. Users must react to the stylistic choices of others and edit their instruments' scores appropriately, allowing for a truly collaborative experience. This presentation will focus on the software design challenges of ActiveOctave, as well as a live demonstration of the working program. ActiveOctave is done for the fulfillment of CS490: Readings and Projects in Computing, a requirement of senior Information Systems majors.		
10:30 AM	Artificial Intelligence in a Real-Time Strategy Game	# 85
Presenter(s)/ Co-Author(s):	David Tileston	Mentor(s): Dr. Barry Wittman
This project involved programming an artificial intelligence module for Starcraft: Broodwar using the Broodwar API. The AI module will be entered into the AIIDE 2010 Starcraft Competition at UC Santa Cruz. Highlights of the module include unit group movement, coordinated attacks, and strategy formulation.		

Education	Presentations	H-212
9:30 AM	Achieving Academic Success by Integrating Social Emotional Learning	# 86
Presenter(s)/ Co-Author(s):	Linnea Nygren	Mentor(s): Dr. Susan Pitcher, Dr. H. Elizabeth Coyle

The purpose of this study was to determine to what extent teachers observe the integration of social emotional learning competencies in the context of the school setting. Administrators, guidance counselors, and teachers from two schools in two school districts were surveyed to determine their perceptions of the impact of social emotional learning on the students in their schools. Questions sought participants' impressions regarding the amount of time students take to apply social emotional competencies to daily school routines as well as the faculty's opinion of how students apply the social emotional competencies in the school setting. Follow-up interviews were conducted with the administrators and guidance counselors from each school to determine specific application procedures of social emotional competencies in the school setting. Results indicated that social emotional learning was equally integrated during both instructional and non-instructional periods throughout the day. Further, a majority of administrators, teachers, and guidance counselors observed students applying the social emotional learning competencies five to ten days after taught in the classroom. Follow-through was an important aspect in retaining the competencies for future application during both instructional and non-instructional periods. Of the five social emotional learning principles, responsible decision making and relationships skills were observed to align most closely with academics. Administrators, teachers, and guidance counselors stated relationship skills and self-awareness were the two most frequently transferred competencies outside of the academic content areas.

Called to Lead	Presentations	H-212
10:00 AM	Informal Servant Leadership: A Case Study	# 87
Presenter(s)/ Co-Author(s):	Jonathan Gamble	Mentor(s): The Rev. Tracy Sadd

This paper will present a case study to explore a phenomenon that might be called "informal servant leadership." While proponents of servant leadership theory generally presuppose that the leader holds a position or exercises formal leadership, Ronald Heifetz of Harvard University argues that people can lead even when they hold not formal position. What does servant leadership look like when the servant leader holds no formal position? The criteria for and potential results of informal servant leadership will be elucidated through a case study of one student's experience in the Washington Semester Program at American University during the spring of 2009.

English	Presentations	BLR (Steinman)
9:30 AM	Building an Understanding	# 91
Presenter(s)/ Co-Author(s):	Jamie Alcorn, Britney Gladhill, Amy Haun, TaLisa Ramos, Corrine Zannetti	Mentor(s): Dr. Louis Martin

Over our Spring Break this year, we donated our time to follow the school's motto, "Educate for Service." We went to Washington, D.C. to educate ourselves about urban poverty and related issues such as hunger and homelessness. Throughout the week, we gained a greater understanding of how we could help with those issues and make a difference in those lives of people who need it. These are the experiences that changed our lives.

Communications	Presentations	BLR (Steinman)
10:15 AM	Among Saints: A Documentary of a Life-Changing Experience	# 92
Presenter(s)/ Co-Author(s):	Chelsea Decker, Sean Duetsch	Mentor(s): Dr. Kirsten Johnson

On January 8th, 2010, Elizabethtown College students joined Lend-A-Hand volunteers on a week-long service trip to Houma, Louisiana. Volunteers worked on six different homes that were all affected by a series of hurricanes within the past decade. Together, this diverse group comprised of individuals of all ages, backgrounds, and skill levels that came together with one single purpose in common: to give back to the community. This life-changing trip inspired two students to produce a documentary titled "Among Saints" in order to tell others of this experience and to promote various service opportunities at Elizabethtown College.

Mathematics	Presentations	H-213
9:30 AM	Grapheme-Color Synesthesia and the Permutation Cipher	# 96
Presenter(s)/ Co-Author(s):	Craig Rixham	Mentor(s): Dr. Timothy McDevitt, Dr. Catherine Lemley

A cipher is a cryptographic system that transposes or substitutes units within a group according to a specific method or process. Most often, ciphers are applied to text in order to conceal information. With the permutation cipher, text is broken into blocks of a given size. The letters within those blocks are rearranged to match the order given by a key. For example, if a key of {234561} were applied to the text "CIPHER", it would be rearranged as "IPHERC". This effect can also be applied to bitmap images. Rearranging the pixels in an image with the permutation cipher will encrypt that picture, though with small key sizes the image is still readily identifiable. Since it is sometimes possible to read ciphertext or discern an image that have been encrypted using a small key, the number of effective keys becomes smaller. My specific mathematical question is to determine exactly how complex a key must be to practically conceal an image. The second question is based from a psychology viewpoint. Synesthetes have a condition where one sense involuntarily triggers another, such as seeing colors and shapes when hearing a specific sound or tone. In this particular situation, I am interested in grapheme-color synesthetes who see colors in response to specific letters or numerals. Could grapheme-color synesthetes be more able than others to discern encrypted images that contain letters or numbers?

Presentations

Concurrent Session II: 9:30 – 10:45

9:45 AM	A Discrete Analysis of Hold'em Poker	# 97
Presenter(s)/ Co-Author(s):	Doug Summerson	Mentor(s): Dr. Timothy McDevitt
<p>The game of poker has grown rapidly in popularity over the last decade, and Texas hold'em is the most common form played today. Mathematical models of poker were first proposed by Borel and von Neumann, but their models include multiple simplifying assumptions that there is only a single round of betting between two players who are dealt independent random hands from a continuous uniform probability density. Nevertheless, their models have successfully demonstrated that bluffing is not just a psychological phenomenon; it is actually an optimal strategy in certain circumstances. This study investigates a more realistic, discrete two-player model of Royal hold'em, which is played with 20 cards (10 through ace) and five community cards. Optimal strategies still include bluffing, but they differ from Borel's and von Neumann's results.</p>		
Occupational Therapy	Presentations	H-213
10:00 AM	Adapting American Sign Language for Individuals with Single-Hand Use	# 98
Presenter(s)/ Co-Author(s):	Katharine Huylebroeck	Mentor(s): Dr. Nancy Carlson
<p>American Sign Language (ASL) is an integral part of the Deaf culture. Due to the manual nature of ASL, physical impairment of an upper extremity may impair functional communication, and take away the ability of an individual to participate in his or her culture. There is currently little evidence in the literature exploring the impact of physical impairment on signing ability. The purpose of this study was to assess the efficacy of an adapted form of ASL that could be utilized to facilitate the functional communication of individuals with an upper extremity impairment. A post-test only design was implemented to measure the perceived effectiveness of unilateral signing. A video-recorded sample of adapted signs and phrases was distributed via the internet to participants who met inclusionary criteria. Participants viewed the video-recording and completed a survey that assessed their level of understanding for each sign and phrase presented. Outcomes were described through descriptive and correlational statistics to analyze the participants' understanding of the adapted signs and phrases. The findings suggested that further research is needed to fully understand the efficacy of an ASL adaptation system.</p>		
10:30 AM	Exploring the Effect of Creature Leisure Participation on Coping Skills and Self Expression in Women Who are Living in Transitional Housing for the Homeless	# 99
Presenter(s)/ Co-Author(s):	Sara Brown	Mentor(s): Dr. Louise Schellenberg
<p>The purpose of this study was to implement an interactive mural, a resource for creative leisure, in a local homeless shelter and to evaluate the effect of creative leisure on coping skills and self expression in the context of homelessness. The mural was designed with the intention of providing a means for artistic expression in the setting of community transitional housing while the participants were engaging in the four month rehabilitation program of the shelter. Each of the ten residents was provided a blank canvas and access to supplies to develop a personal piece to hang in mural form. Seven of the residents participated in 2 evenings of unstructured activity and discussion with the purpose of working on their personal canvases in a social environment. Following the installation of the mural, 4 of the participants were interviewed to gather data on their personal experiences. Themes and conclusions drawn from these structured interviews were reviewed by the participants. Findings from this study support the hypothesis that homeless women who engage in unstructured creative leisure will experience higher feelings of self-worth, a decrease in stress, an increase coping mechanisms, and discover a new medium for reflection. Occupational therapists can support people who become homeless by re-introducing creative leisure, which can act as a reminder of the importance of remembering individuality and encourage the formation of coping mechanisms, the externalization of problems, developing the ego, developing relationships with others, and constructing a personal narrative.</p>		
Physics and Engineering	Presentations	H-214
9:30 AM	Client-Server Data Application System for High Steel Structures Inc.	# 101
Presenter(s)/ Co-Author(s):	Than Lwin Aung	Mentor(s): Jean Fullerton, P.E.
<p>As the information is essential part of business organizations, developing an efficient information system has become a primary concern for software developers and software engineers. Mainly due to the complexity associated with the software development, many organizations, such as ISO (International Standard Organization) and SEI (Software Engineering Institute) have implemented and standardized different software development models, namely Water Fall Model, V Model, RAD (Rapid Application Development), ISO 12207 and etc. Although the primary goal of these models is to deliver the software product to meet the user requirements within time and budget constraints, they provide different development environments. While the water-fall model provides a more structured approach of developing software systems, RAD is more suitable for systems which are dynamic in nature. My goal for the senior project is, by applying the software development principles, to develop a client-server data application system, which will facilitate the part of information systems used in the Production Drawing Department of High Steel Structures Inc.</p>		

10:00 AM	Development and Efficiency of Green Roofing Systems	# 102
Presenter(s)/ Co-Author(s):	Ashley Soltis	Mentor(s): Dr. William Stuckey
Green roof systems have just recently become popular as a method of decreasing carbon footprints of buildings. In the past, green roof systems existed mainly in the form of rooftop gardens, popular in urban areas for the natural atmosphere they provided. City planning slowly developed green roof systems as a way of decreasing water run-off from buildings during storms to better facilitate storm water drainage. Now alternative effects of green roofs are being considered. The energy conservation of green roof systems in terms of thermal insulation provided to the building is a major role under study. In a world of rising energy costs and environmental concerns, will green roof structures become a common occurrence, even in less urban settings? What level of green roof structure will prove most efficient in helping reduce our carbon footprint? It remains to be seen what exactly our future holds in terms of environment and economy, but in the meantime, green roofs have a comforting appearance as a potential part of our solution.		
Sociology/Anthropology	Presentations	H-215
9:30 AM	Amish Faith in the First Amendment	# 106
Presenter(s)/ Co-Author(s):	Paul Mackey	Mentor(s): Dr. Donald Kraybill
This presentation examines the impact of Amish faith and practices on religious freedom in the United States. The First Amendment to the Constitution provides the basis for freedom of religion along with Supreme Court decisions which have served as transformative elements. My research will provide an in-depth analysis of the Wisconsin vs. Yoder case as a pivotal event in this development alongside an overview of various interactions between the United States Government and the Amish, including a study of the history and importance of the National Committee for Amish Religious Freedom. The central question to be addressed is the extent to which Amish presence in American society has augmented and/or minimized the amount of religious freedom all Americans enjoy under their government today.		
9:45 AM	Old Order Stauffer Mennonites: The Power to Resist Modernization	# 107
Presenter(s)/ Co-Author(s):	Alisha Martin	Mentor(s): Dr. Donald Kraybill
My presentation examines how the Stauffer Mennonites are able to preserve their conservative lifestyle. Using the writings of Jacob Stauffer and interviews with members of the Stauffer Mennonite community, I will provide an account on the beliefs of Stauffer Mennonites both past and present. The Stauffer's are bound to their traditional values. This creates high expectations for members, as well as a deep sense of unity within the group. These aspects allow the Stauffer Mennonites to successfully defy modernization.		
10:00 AM	Amish Family Life: Amish Education, Care of Elderly, and Marriage in a Modernizing Society	# 108
Presenter(s)/ Co-Author(s):	Katie Niznansky	Mentor(s): Dr. Donald Kraybill
This paper examines various aspects of Amish family life, such as the rearing of children, care and treatment of the elderly, and the institution of marriage. Using qualitative research methods including primary sources from the monthly journal, "Family Life", the research explores values, traditions, and ideals that are critical to the structure and function of modern Amish families. Elements of modernization and outside society, including consolidated schooling, nursing homes, and divorce rates are also discussed in terms of the challenges they present to current values of Amish families.		
10:15 AM	From Pacifism to Peacemaking	# 109
Presenter(s)/ Co-Author(s):	Emily Reigart	Mentor(s): Dr. Donald Kraybill
This presentation examines the evolution of the Church of the Brethren's stance on nonviolence from passive nonresistance to active peacemaking. I will reference Church of the Brethren journal articles as well as the minutes from their annual meetings in order to track changes in attitudes and Church teachings about peace. I will include the history of the shift as well as the theological basis which the Brethren use to support their position of nonviolence. The alternative service of registered conscientious objectors will be compared and contrasted with modern peacemaking efforts by members of the Church of the Brethren. The paper will demonstrate theological and practical transformations which one of the historic peace churches has enacted throughout the twentieth century.		
10:30 AM	When a Loved One Dies: A Comparison of Amish and Non-Amish Funeral Practices	# 110
Presenter(s)/ Co-Author(s):	Caitlin Taylor	Mentor(s): Dr. Donald Kraybill
My presentation explores how Amish funeral practices differ from non-Amish modern funeral practices. Primary and secondary sources including interviews and personal observances will be used to perform a comparison of the practices of both cultures. My presentation will examine the characteristics of modern societies including the ability to choose. Modern communities face a variety of choices when preparing for the death of a loved one; whereas, Amish communities follow similar simple practices for all funerals. My research demonstrates the similarities and differences of funeral practices of modern and Amish cultures.		

Posters

Concurrent Session II: 9:30 – 10:45

Fine and Performing Arts	Posters	Masters Atrium
9:30 AM	Effects of Exercising to Preferred Tempo-Matched Music Versus No Music	# 111
Presenter(s)/ Co-Author(s):	Stuart Lynd, Emma Monismith	Mentor(s): Dr. Gene Behrens
<p>The purpose of this study was to examine the effects of tempo-matched, preferred music versus no music on perceived exertion, motivation, and duration while exercising on a treadmill. Twelve male and female college students, selected as a sample of convenience, took part in two separate 15-minute exercise trials. The first trial was conducted with no music to obtain a baseline measure, and the second was conducted with music matched at the tempo at which the participant was exercising. Each participant's perceived duration, exertion, and motivation during the exercise session were assessed. No significant difference between the tempo-matched, preferred music and non-music ratings for perceived exertion, $t(9) = 1.50$, $p = .168$, and for perceived motivation, $t(9) = 1.50$, $p = .168$, was found; however, a medium effect size existed for both. There also was no significant difference for the measure of heart rate consistency during exercising with and without music, $t(9) = .831$, $p = .482$; and again a medium effect size was found. However, there was a significant difference between the music and non-music ratings for perceived duration of exercise, $t(9) = 4.06$, $p = .003$, and the obtained large effect size supports this finding. Although desired directions in the participants' responses were achieved for the music trials, significant differences only existed for perceived duration of exercise. The use of music during exercise may assist people in exercising longer and thereby possibly also result in lower dropout rates within medically-based exercise programs.</p>		
9:30 AM	The Effect of Relaxing Music on Perceived Emotional Responses of Males and Females	# 112
Presenter(s)/ Co-Author(s):	Leigh Ontiveros, Rachel Brackins	Mentor(s): Dr. Gene Behrens
<p>This study investigated the difference between males' and females' perceived emotional responses when listening to relaxing music after completing a stressful task. Twenty-one undergraduates were selected as a sample of convenience. The participants rated their level of relaxation using a visual analog scale (VAS), very relaxed to very stressed, and selected two emotions from a list of 22 as a second measure. The sequence involved completing the following tasks in order: the two relaxation measures, the stress-inducing task (involved questions from practice SATs), the two relaxation measures, the music-listening task (5'40" of relaxing alto flute music) while taking the two relaxation measures, and the two relaxation measures after the listening task. Since the main effect for gender was not meaningful and no significant interactions existed for both analyses, the main effects for Time of Measurement were evaluated. A significant difference was found across the four measures of stress for VAS, $F(1.91, 36.33) = .33$, $p = .715$, and for the selected emotional adjectives, $F(2.42, 45.93) = 40.31$, $p = .000$. Post-hoc dependent t-tests for both measures found significant decreases in stress from the pretest measure to most of the measures during music listening and to the post-test measures. The results from this study indicated that music could be effective in increasing perceived levels of relaxation. The changes in perceived relaxation occurred within the first 2-min measures and held thereafter.</p>		
9:30 AM	Effects of Verbal Versus Nonverbal Reinforcement on Specific Musical Elements in Improvisation	# 113
Presenter(s)/ Co-Author(s):	Michael Tschop, Stephanie Baumann	Mentor(s): Dr. Gene Behrens
<p>Using a modified multiple baseline design across conditions and a withdrawal condition, we investigated the differential effect of using positive verbal, positive nonverbal, or no reinforcement on the use of three different music components within improvisations performed on a marimba while a researcher provided an ostinato pattern. The participant was a 19-year-old female with no musical background; she improvised for 10 minutes each session. After three sessions of baseline with no reinforcement, only nonverbal positive reinforcement was provided during the fourth and fifth sessions to increase length of the participant's improvisations. During the sixth and seventh sessions, only verbal positive reinforcement was provided to increase the number of different notes used. Rhythmic complexity was the control condition receiving no reinforcement. The data was plotted for each improvisation and then smoothed by averaging across every three improvisations. Despite a very slight increasing baseline, visual analysis indicated that nonverbal positive reinforcement may have had an effect on length of improvisation, but additional data was needed to verify. Verbal positive reinforcement had no effect on the length of the improvisations. Visual analysis of rhythmic complexity revealed that the participant's responses possibly developed independent of reinforcement or were influenced by changes in how other music elements were employed. Overall, the results suggest how reinforcement of one type of response during improvisations may influence other responses as clients gain musical experience and confidence.</p>		

9:30 AM	Self-Reported Medical Problems of College Band and Orchestra Members	# 114
Presenter(s)/	Allison Andrews	Mentor(s): Dr. Karendra Devroop
Co-Author(s):		
Musicians' health and wellness are vitally important to their profession. Previous studies focused on professional musicians and college students illustrating the potential risks and injuries that have resulted from playing an instrument. The purpose of this quantitative study was to examine self-reported instrument specific prevalence rates of musculoskeletal and non-musculoskeletal medical problems among college instrumental musicians in band and orchestra. The survey instrument utilized in this study was used in the previous study by Allison Andrews and Bradley Eargle. This instrument was based on a survey instrument that was originally utilized by Kris Chesky and Eri Yashimoro. The dataset for this study was a subset of the original dataset used by Allison Andrews and Bradley Eargle. The data was reanalyzed using a statistical package (SPSS 16.0). The analysis included 1) descriptive statistics including frequencies, percentages, means, and standard deviations, 2) correlation statistics, and 3) tests for statistical significance. The prominent areas for self-reported musculoskeletal problems included neck (52.3%), left fingers (43.2%), lower back (43.2%), right fingers (36.4%) and right wrist (36.4%). The most common non-musculoskeletal problems included headache (55.7%), stage fright (45.5%), fatigue (40.9%), and eyestrain (38.6%). This study also analyzed prevalence rates across instrument type, thereby expanding upon the original study which only looked at ensemble type. The results from this study contribute to the current literature on medical problems of college musicians.		
9:30 AM	Architectural NURBS Rendering: Frank Lloyd Wright and Japan	# 115
Presenter(s)/	Bryan Kuppe	Mentor(s): Dr. Patricia Ricci, Dr. Kurt DeGoede
Co-Author(s):		
Discussion of the Japanese influence on American Architect Frank Lloyd Wright, through its impact and origins. In addition to the means by which the ideas were absorbed as well contributing factors to relationship. Information then used to create an original work of both inspirations, through a virtual rendering using 3D NURBS (Non-Uniform Rational B-Spline) Mathematics and basic CAD (Computer Assisted Drawing). Programs include Rhinoceros 4.0 NURBS Software and Flamingo 1.1 Rendering Software.		



Roya Hakakian

Keynote Speaker

Tuesday, April 27

11:00 – 12:00

Lauded Poet, Humanitarian, Author
*Journey from the Land of No: A
Memoir of a Girlhood Caught in
Revolutionary Iran*

Ms. Hakakian is the author of *Journey from the Land of No: A Memoir of a Girlhood Caught in Revolutionary Iran*, which is her award-winning memoir about life as a Jewish teenager in post-revolutionary Iran. The book was a Barnes & Noble's Pick of the Week, Ms. Magazine Must Read of the Summer, Publishers Weekly's Best Book of the Year, Elle Magazine's Best Nonfiction Book of 2004, and was named Best Memoir by the Connecticut Center for the Book in 2005. Ms. Hakakian also is a recipient of the 2008 Guggenheim fellowship in nonfiction.

In addition, she has penned two collections of poetry in Persian, the first of which, "*For the Sake of Water*," was nominated as poetry book of the year by Iran News in 1993. Ms. Hakakian was listed among the leading new voices in Persian poetry in the "Oxford Encyclopedia of the Modern Islamic World." Her poetry has appeared in numerous anthologies around the world, including *La Regle Du Jeu*, "*Strange Times My Dear: The Pen Anthology of Contemporary Iranian Literature*" and the forthcoming W.W. Norton's *Contemporary Voices of the Eastern World: An Anthology of Poems*. She contributes to the *Persian Literary Review* and served as the poetry editor of *Par Magazine* for six years.

Ms. Hakakian has collaborated on more than a dozen hours of programming for leading journalism units on network television, including *60 Minutes* and on A&E's *Travels With Harry*, and ABC Documentary Specials with the late Peter Jennings, Discovery and The Learning Channel. Commissioned by UNICEF, Ms. Hakakian's most recent film—*Armed and Innocent*, which is on the subject of the involvement of underage children in wars around the world—was a nominee for best short documentary at several festivals around the world.

Her opinion columns, essays, and book reviews have appeared in *The New York Times*, *The Washington Post* and *The Wall Street Journal*. She is also a contributor to the Weekend Edition of NPR's "*All Things Considered*." Ms. Hakakian is a member of the editorial board of the journal, *World Affairs: A Journal of Ideas and Debate*.

Ms. Hakakian is a founding member of the Iran Human Rights Documentation Center and serves on the board of Refugees International. She was a fellow at Yale University's Whitney Humanities Center. She speaks on the subject of the Middle East and human rights and has appeared on CSPAN-Book TV, CNN International, *CBS Early Show*, and *Now with Bill Moyers*.

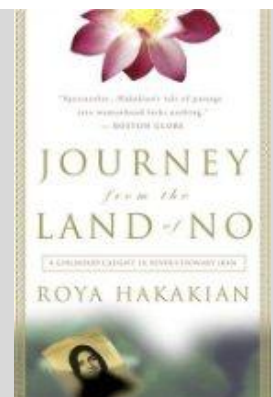
Born and raised in a Jewish family in Tehran, Ms. Hakakian came to the United States in May 1985 on political asylum. She lives in Connecticut. ✍

Book Signing

Noon until 12:30 pm

Leffler Chapel's McCormick Center

***Journey from the Land of
No: A Memoir of a Girlhood
Caught in Revolutionary
Iran***



SCHOLARSHIP AND CREATIVE ARTS DAY CLOSING RECEPTION

To Honor Student Presenters and their Mentors

&

Celebrate High Library's 20th Anniversary:
"BIGGER THAN BOOKS" BIRTHDAY PARTY

Tuesday, 5:00 p.m.

High Library
Hors d'oeuvres

The closing event for the conference will be a reception for Scholarship and Creative Arts Day participants, their friends, family and mentors plus a celebration of the 20th anniversary of Elizabethtown College's High Library.

The "Bigger than Books" birthday party and reception for student presenters and their mentors, held on the first floor of the library, will feature the presentation of the inaugural Anna Carper Excellence in Library Research Award, a photographer to document the event and refreshments for all.

The Anna Carper Excellence in Library Research Award recognizes excellent scholarship by first-year

students, who have demonstrated exemplary integrative skills in the use of print and electronic collections and other resources of the High Library. The Anna Carper Excellence in Library Research Award is supported by an endowment funded by the Carper family and named after Anna M. Carper '41, who was the College's librarian from 1960 to 1986. ✍

Portfolios & Presentations

Concurrent Session III: 1:00 – 2:45

Education	H-110	H-110
1:00 PM	A Framework for Teaching: Professional Portfolios for Educators	# 121
Presenter(s)/ Co-Author(s):	Jacqueline Coupe, Courtney Kofeldt, Julie Lindner, Katelynn Olsavick, Joanna Richard, Margaret Sabota, Lauren Shovlin, Catherine Wingard	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
1:30 PM	A Framework for Teaching: Professional Portfolios for Educators	# 122
Presenter(s)/ Co-Author(s):	Darren Frehulfer, Daniel Provence, Kelsey Schware, Matthew Torresani, Brooke Travers	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
2:00 PM	A Framework for Teaching: Professional Portfolios for Educators	# 123
Presenter(s)/ Co-Author(s):	Danielle Barus, Kelly Castor, Alison Cohen, Emma Hendel, Andrew Walker, Nicholas Wetzell	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
Biology	Presentations	H-114
1:00 PM	Where Are Elizabethtown's Prospective Students Coming From?	# 126
Presenter(s)/ Co-Author(s):	Elizabeth Cunningham, Paige Minka	Mentor(s): Dr. David Bowne
<p>The question our project seeks to answer is where people who show interest in the college and people who enroll in the college live. We collected data from the college in four different categories of people, over a total of five years. The people were broken down into those who show any type of interest in the college, those who apply, those who are admitted, and those who actually enroll in the college. We display the data by densities to form a map similar in appearance to a weather map. This map shows which zip codes have a high number of people for each of the four categories and which zip codes have a low number of people. The intended audience of our project is mainly the admissions staff but also any faculty from the college. This data will give the Elizabethtown College admissions staff a better idea of where to advertise and where to allocate some of their resources.</p>		
1:15 PM	Habitat Assessment for the Northern Goshawk at the Donegal Highlands Preserve	# 127
Presenter(s)/ Co-Author(s):	Adam Derkacz, Mike Torre	Mentor(s): Dr. David Bowne
<p>The northern goshawk, <i>Accipiter gentilis</i>, is common throughout its range, consisting of most of the northern hemisphere, but is listed as a species of special concern in Lancaster County. It is primarily found in forest interiors and tends to nest in large deciduous trees away from human disruption. Our study focuses on the Donegal Highlands Preserve, a forested tract of land recently acquired by the Lancaster County Conservancy in Elizabethtown. The goal of this project is to assess the viability of the habitat at the property with respect to the northern goshawk. This was accomplished by looking at land-use coverages within a Geographic Information System to determine the type of forest present. Habitat patches surrounding the preserve were also identified and evaluated based on proximity to the main property and forest type. The main patch was assessed by dividing it into transects, and determining the types of trees that are actually present along them. A final map coverage was made of the whole habitat patch system (the main property and all viable surrounding patches) and any nests found were added to this. The number of northern goshawks that this system could support was estimated based on the natural history of the species. We offer suggestions on how to improve this habitat from a conservation standpoint.</p>		
1:30 PM	GIS Ecological Map of Elizabethtown College	# 128
Presenter(s)/ Co-Author(s):	Derek Faust, Jennifer Schoonmaker	Mentor(s): Dr. David Bowne
<p>This GIS project provides an ecological map of Elizabethtown College for environmentally-based research. It was completed to provide more information on the type and location of different possible study sites on the property of Elizabethtown College. This map was created by integrating field surveys, GPS data, land use raster data, and aerial photography. The bodies of water in the map include Lake Placida, as well as peripheral ponds, wetlands, and streams. This project is based on the present locations of interest and will be of use to students and professors for future research studies. The project also helps to answer the types and sizes of ecosystems found at the college and where they are located. Specifically, this map provides information to answer questions about where and what vegetation types and bodies of water are available for study. The intended audience is students, professors, and others interested in using Elizabethtown College for environmentally-based research.</p>		

1:45 PM	Amish Population Distribution in North America	# 129
Presenter(s)/ Co-Author(s):	Stephen Scott	Mentor(s): Dr. David Bowne
In 2009 there were a total of 423 Amish settlements located in 27 states and the Canadian province of Ontario. Each Amish settlement (community) is comprised of one or more church districts, which are ecclesiastical units similar to parishes. Each district is normally comprised of only twenty to forty families since worship services are held in the homes of the members and only a certain number of people can comfortably be accommodated in a house. When the population in a district grows too large then the district is geographically divided. At last count there were 1727 Amish districts, but this number increases constantly, as the Amish population doubles every twenty years. The main purpose of this project is to show the location of each Amish district by showing the address of a minister in each district with a point on a map. This is part of an ongoing database which will be updated periodically. Since no official membership statistics are kept by the Amish this data may be used to estimate Amish population.		
2:00 PM	Susquehannock Settlement Patterns	# 130
Presenter(s)/ Co-Author(s):	Nathan Smith, Jess Duelfer	Mentor(s): Dr. David Bowne
The purpose of this project will be to track the settlement patterns of the Susquehannock Indians over the course of the five phases of Susquehannock culture. The data for this project will be obtained from the Pennsylvania CRGIS. The project will also focus on the types of artifacts found at the different locations. Such artifacts could include but are not limited to bone implements, trade goods, food and animal remains as well as pottery: Schultz Incised, Washington Boro Incised and Strickler Cordmarked. The project will start with an examination of known Proto-Susquehannock sites and will then move to studying the Schultz phase sites. The progression will follow through the remaining three phases(Washington Boro, Strickler, and Conestoga). The main focus of the project will be comparing and contrasting the different traits of sites from different phases to track the progression of the Susquehannock culture from its known formation to contact on to the final Conestoga stage.		
2:15 PM	Determining Water Quality Using Benthic Macro-Invertebrates as Stream Bioindicators on Lancaster County Conservancy Property	# 131
Presenter(s)/ Co-Author(s):	Joseph Trudeau, Brian House	Mentor(s): Dr. David Bowne, Dr. Thomas Murray
The scope of the proposed project will be to create a GIS using GPS within the Lancaster County Conservancy property. The collection points will be within a consistent interval or stream type area (pool, riffle, etc.) Our collections will occur in two separate time periods to miss an anomaly like a bloom of certain species hatching. The project will not only include the water itself but the riparian zone within ten feet of it and its qualities such as bed type, stream order, and bank scour. Our group will primarily answer what the overall health of the stream is as indicated by the presence or absence of bioindicating species. Secondly, the project will attempt to influence the proceeding management plan the LCC puts out to manage for the maintenance or restoration of the stream. Our information on the streams' secondary characteristics such as bed type and bank condition should help the plan be as specific as possible for this streams recovery. Therefore, we will also seek to answer what the management plans heading into the future should be not only in the stream but the surrounding terrestrial habitat.		
Religious Studies Presentations H-211		
1:15 PM	A Celebration of Love in Song of Songs	# 136
Presenter(s)/ Co-Author(s):	John Mackey	Mentor(s): Dr. Christina Bucher, Dr. Suzanne Webster Roberson
The Song of Songs is one of the most interesting books in both the Jewish and the Christian canons, in that its subject matter, erotic love and a prominent female protagonist, is not found in any other book in the Bible. My research began with a translation of the Hebrew text of the Song. Based on my translation it became clear that the man and woman in the Song were sexually active. This led me to examine the implications of such a relationship in the context of Ancient Israel. Ancient Israelite society viewed premarital sexual activity very negatively and, therefore, harsh consequences were imposed on individuals who were sexually active outside of marriage. Even so, I concluded that the couple in the Song was unmarried and sexually active. How then could such a book be included in the Jewish and the Christian canons? It is my conclusion that Song of Songs presents a celebration of love and sexuality without the constraints of family, marriage, children, or lineage. The Song provides a different voice within the Bible that unashamedly celebrates erotic love.		
1:45 PM	The Yoga Sutra Beyond Hinduism	# 137
Presenter(s)/ Co-Author(s):	Christopher McCooey	Mentor(s): Dr. Jeffery Long
My thesis explores how Patanjali's <i>Yoga Sutra</i> and the model it presents is applicable to and even applied within religious traditions and belief systems outside of Hinduism and how it can be used as an expression or act of faith. I intend to use the first part of the thesis to outline Patanjali's system as it pertains to Hinduism, where it originated, and then I intend to discuss how his model correlates to, is applicable to and at times already apparent in practice in Christianity and can be used even in an atheistic or secular worldview.		

Presentations & Panel Discussions

Concurrent Session III: 1:00 – 2:45

2:15 PM	The Responsibility of the Religious Scholar in Buddhism: How Does the Involvement of Western Scholars in Sri Lanka Relate to Tibetan Buddhism?	# 138
Presenter(s)/ Co-Author(s):	Sarah Merusi	Mentor(s): Dr. Jeffery Long
The involvement of Religious Scholars in advocating and practicing traditions such as Buddhism can give an “insider view” into the religion. But what happens when these views become skewed by preferences within the tradition? What is the responsibility of a scholar writing and presenting views on a tradition for use by the public? Through an analysis of the history of Western scholarly involvement in Sri Lanka and its current situation today, there is a common theme, which presents itself in the Tibetan Freedom Movement. Should scholars become involved in advocacy for these traditions? What is the responsibility of a scholar when presenting information on the history and practices of a religion?		
Education	Panel Discussions	H-212
1:30 PM	Successful Science with Service-Learning: Science in Motion is Civically Engaged!	# 146
Presenter(s)/ Co-Author(s):	Maggie Troutman, Lorin Mellinger, Kiera Green, Janette Howzexs, Imani Williams, Jermaine Howell, Izera Marshall, Nazir Simmons-Steward, Leroy Santos Jr., Jamel Cole	Mentor(s): Dr. Kathleen Blouch, Ms. Wendy Griest
In an effort to produce more scientifically literate students across the nation, there has been great emphasis on research-based science education reform. According to research by Dr. Larry Lowery from the Lawrence Hall of Science at Berkeley, children learn more and retain the learning better when they are provided with various opportunities that are developmentally appropriate, multi-sensory, inquiry-based and hands-on. In particular, science education must engage students and promote inquiry so they can acquire direct knowledge of what methods and thought processes are used by practicing scientists through real-world, hands-on experiences. As part of its effort to provide the students of Camp Curtin School with an engaging afterschool program supported by our 21st Century Community Learning Center grant, the Office of Civic Engagement, Science in Motion (EC-SIM Program) and our AmeriCorps Scholars incorporate service-learning to provide science enrichment programs relating to Pennsylvania Agriculture that supplement the current school curriculum and enhance student critical thinking and problem solving skills. The programs are comprised of inquiry and problem-based real-world experiences that are aligned with the PA Environment and Ecology Academic Standards, and are taught in an integrated manner to include other curricular areas such as Language Arts and other Science, Technology, Engineering and Math (STEM) related disciplines.		
Business	Presentations	H-212
2:00 PM	Business Schools and Emotional Intelligence: How Do They Feel About It?	# 147
Presenter(s)/ Co-Author(s):	Leah Shenk	Mentor(s): Dr. Cristina Ciocirlan
Emotional intelligence is defined by Daniel Goleman (1995) as “a person’s capacity to recognize his/her feelings and those of others, for motivating himself/herself, and for managing emotions well in himself/herself and his/her relationships.” Recent research on emotional intelligence suggests that it is the best single indicator of leadership, and further suggests a positive relationship between emotional intelligence and performance of business professionals and organizations. As a result, organizations have begun to include emotional intelligence in several functions of human resource management, specifically in relation to development and training. However, in spite of the results of research and the behavior of organizations, business schools focus on teaching business students ‘hard skills,’ such as accounting, finance, and marketing, as opposed to ‘soft skills,’ such as emotional intelligence. Thus, my research question is as follows: Have educational institutions incorporated emotional intelligence in their Business curriculums; if so, how have they incorporated it; has it been effective in increasing the learning of emotional intelligence among Business students? To answer my research question, I will use primary data collection through surveys, and administer it to Business professors, specifically in Management and Organizational Behavior area, that subscribe to an Organizational Behavior Teaching Society (OBTS) listserv. I expect to find even though educational institutions place more importance on hard skills as opposed to soft skills in their Business curriculums, they have incorporated emotional intelligence in their Business curriculum.		
2:15 PM	Operating Lease As Debt – A New Look on Cost of Capital	# 148
Presenter(s)/ Co-Author(s):	Rachel Rhoads	Mentor(s): Dr. Hongsong Neuhauser
Although off-balance sheet activities are often overlooked, they can have a substantial impact on the financial position of a company. In this study, I focus on the operating leases of publicly traded companies based on adjusted financial information. The leases are then used to analyze the companies’ risks as well as to discover their fundamental equity values. For this project, I examine firms across four different industries. I compared the two industry leaders based on market capitalization in each industry during two time periods in which the market behaved differently. The first time period is 2000-2003, and the second time period is 2004-2007. For each of the eight companies, I converted their operating lease obligations that are in the footnotes of the annual reports, into capital lease obligations. I argue that treating operating leases as regular debt provides a more accurate estimate on the risk and equity values of the companies; operating leases are essentially financing costs, not operating costs. This allows me to calculate and reassess the true value the companies, based off the adjusted financial information. I provide evidence, analyze, and discuss the overall deviations in the behaviors of the eight companies during the selected time periods. My research offers insightful and practical implications to investors who often focus heavily on reported financial statement information rather than digging into the underlying essence of critical information in equity valuation of publicly traded US companies.		

2:30 PM	Economics of College Tuition and Financial Aid	# 149
Presenter(s)/ Co-Author(s):	Ben Johnson	Mentor(s): Dr. Sanjay Paul, Dr. Thomas Scheiding
<p>This paper investigates the economics of college tuition and financial aid. In the United States, colleges set their tuition rates before each academic year. Most students, however, do not pay the full tuition rate, with 62.2% of full-time undergraduates receiving some type of financial aid in 2007-2008. Colleges price discriminate, attempting to figure out how much each particular student would be willing to pay, and charging that rate. College financial aid offices meet the difference between the full tuition rate and what the student is deemed able to pay with institutional loans, government-subsidized loans, and grants. This type of aid is based on financial need. The goal of providing financial aid to students is to ensure that lower-income students have an opportunity to attend college. In addition to this goal, colleges use price discrimination as a way to increase their revenue. This paper will explore the economic theory behind price discrimination and how the behavior of the college fits that of a profit-maximizing firm. This paper will analyze what a student could expect to pay as a percentage of total income at different income levels and the effects of the financial aid system on the labor market and retirement saving.</p>		
Communications	Presentations	BLR (Steinman)
1:00 PM	Effective Ways of Contributing to We-Town.Com	# 156
Presenter(s)/ Co-Author(s):	Frank Bertossi	Mentor(s): Dr. Kirsten Johnson
<p>We-town.com, a citizen journalism website launched by Elizabethtown College, is a multimedia platform created to inform residents and involve them in their community. The website allows people to create their own account after which they can log in and post stories online through many different mediums, such as video, audio, and still pictures. We-town also allows people to view and comment on others' stories. Research shows video production and editing is an effective way to contribute stories to citizen journalism websites, such as we-town.com.</p>		
1:00 PM	Impact of Social Media on Consumer Relations	# 157
Presenter(s)/ Co-Author(s):	Benjamin Brewer	Mentor(s): Dr. Kirsten Johnson
<p>A strong and consistent social media presence can have a significant impact on consumers' decisions and feelings towards a product, company or brand. Companies both large and small are using, or considering using, social media as a means of better understanding and communicating with their customer base. By leveraging social media, organizations are finding that they can significantly alter the perceptions and expectations that the consumer has about the company. Karns Quality Foods, a local grocery store chain, is looking to implement social media into their small business to better communicate what they are doing as a business and how they are helping to improve the community. Research shows that social media outlets such as blogs and twitter are powerful and affordable tools in altering consumers' perceptions.</p>		
1:00 PM	Effective Tools to Promote an Awards Ceremony for a Non-Profit Theatre	# 158
Presenter(s)/ Co-Author(s):	Katalina Deaven	Mentor(s): Dr. Kirsten Johnson
<p>The Hershey Theatre is a performing arts center that is a division of the non-profit M.S. Hershey Foundation. On May 23rd, 2010, the theatre will be presenting the Hershey Theatre Apollo Awards, which honor achievements by high school students in plays and musicals. This event is only in its second year and would benefit from increased awareness in the local community. Research was conducted in order to determine effective tools to promote the event. The findings show that effectively produced media pieces, including press releases and print articles, can successfully promote the event and increase awareness in the local community.</p>		
1:00 PM	Citizen Journalism: Making the News	# 159
Presenter(s)/ Co-Author(s):	Alexander Diegel	Mentor(s): Dr. Kirsten Johnson
<p>The Communications Department at Elizabethtown College has launched a citizen journalism website called we-town.com. This website is part of a revolution that has changed the news as we know it. Citizen journalism websites around the world are offering varying perspectives and opinions in a news world that once was dominated by the 'news media elite.' In the past, citizens had no choice but to accept the news as it was distributed to them from these media professionals. With websites such as we-town, citizen are now the writers, producers, content, and subject of the news. Videos can be used to effectively inform the community about the news and information important to the citizens of Elizabethtown.</p>		

Presentations

Concurrent Session III: 1:00 – 2:45

1:00 PM	Creating a Newsletter for Children's Hospital of Philadelphia	# 160
Presenter(s)/ Co-Author(s):	Aimee DiMichele	Mentor(s): Dr. Kirsten Johnson
<p>The department of nursing at the Children's Hospital of Philadelphia (CHOP) is comprised of a very diverse population of dedicated professionals. The Nursing and Respiratory Career Center (NRCC), a division of human resources, is responsible for recruiting nurses; no other CHOP personnel have a specific recruitment department. Nurses are clearly valued assets at CHOP, yet their accomplishments and stories are not highlighted in any CHOP publications. A department of nursing newsletter—for both internal and external use—will allow CHOP nurses to receive the recognition and publicity they deserve. CHOP's department of nursing encompasses medical nursing, surgical nursing, critical care, ambulatory nursing, nursing education and nurse practitioners, among other areas. The newsletter will serve as a way for nurses to learn about the achievements, personnel, events and other happenings of interest occurring within other areas of the department. Additionally, it can be sent to hospital alumni as a way to strengthen CHOP's relationship with former employees. In addition to printed copies of limited availability, the newsletter will also be accessible in pdf form on CHOP's intranet site (for employees) and through e-mail to the alumni. This presentation will explore the research conducted to effectively produce CHOP's nursing newsletter.</p>		
1:00 PM	Creating Podcasts for a Citizen Journalism Web Site	# 161
Presenter(s)/ Co-Author(s):	Brett Epps	Mentor(s): Dr. Kirsten Johnson
<p>We-town.com is a citizen journalism web site launched about 3 years ago by the Department of Communications at Elizabethtown College. The site needs multi-media content in order to inform and engage visitors to the site. Audio content is one way to inform the community about news and events that are going on. This presentation will explore the most effective way to produce podcasts for a citizen journalism web site.</p>		
1:00 PM	Effective Use of Videography in Citizen Journalism	# 162
Presenter(s)/ Co-Author(s):	Faisal Iqbal	Mentor(s): Dr. Kirsten Johnson
<p>The Department of Communications hosts a citizen journalism site, we-town.com. The purpose of the site is to provide hyper-local coverage to the greater Elizabethtown Community through videos, podcasts and text. Research has been conducted on citizen journalism, effective video production, and the methods to increase news content on the website. Neikamp (2009) conducted a research for Southwestern Mass Communication Journal and discovered the use of multiple media including videos. Although, both video and photos were accompanied by some text, it still supports prominent use of videos in citizen journalism today. Further evidence shows that videos can be used to effectively communicate stories to the public. Research questions on the standards of citizen-produced content are also addressed.</p>		
1:00 PM	Promoting Economic Development in Port Jefferson, NY	# 163
Presenter(s)/ Co-Author(s):	Stephen Juliano	Mentor(s): Dr. Kirsten Johnson
<p>Port Jefferson, NY is a Village on Long Island, New York with a strong summer tourism base. The Village is looking to further increase their economic development by attracting new visitors and businesses to their Main Street area year-round. As a function of the Economic Development Committee in 2005, the Village established the slogan "<i>A Destination for a Day, or a Lifetime</i>." The village is looking to extend the reach of this slogan beyond traditional print advertising into a 7 – 10 minute multimedia presentation. Research has been conducted and it was determined that an effectively produced video can be an essential tool in marketing a town as a destination for tourists and potential business owners.</p>		
1:00 PM	Improving the Market Research of a Non-Profit Organization Using Qualitative Methods	# 164
Presenter(s)/ Co-Author(s):	Laura Kuserk	Mentor(s): Dr. Kirsten Johnson
<p>The National Civil War Museum is a non-profit organization located in Harrisburg, Pennsylvania, which has over 24,000 artifacts from the period between 1850 through 1876. The current problem that The National Civil War Museum is facing is its ineffective way of conducting market research. Currently they have a survey that guests may fill out. However they have found that most guests either ignore the survey or are unaware that there is one. In order to determine the general public's opinion about the organization, the museum has decided to use a qualitative questionnaire that will be emailed to schools and tour groups that have visited the museum. A separate questionnaire will be emailed to schools and tour groups that have not visited in order to determine why they have not been to the museum. The museum also wants to conduct interviews with people visiting, as well as people located in the Harrisburg area, that may or may not have visited. Research was conducted that supports the thesis that a qualitative questionnaire and interview is an effective way to gauge public opinion about a non-profit organization.</p>		

1:00 PM	Marketing Varsity Branding	# 165
Presenter(s)/ Co-Author(s):	Kait McCaffrey	Mentor(s): Dr. Kirsten Johnson
Varsity Branding is the sister agency of Pavone, a full-scale advertising, public relations, media, and marketing firm in Harrisburg, PA. Varsity Branding offers all of the same services as Pavone but caters specifically to the mature market. As a sister agency, Varsity Branding is looking to get the notoriety essential to flourish within their field. One of the biggest components necessary to create the end product, a functioning marketing/public relations plan which will position Varsity in the field, is research. A profile of Varsity's two target demographics, the Baby Boomer Generation and the Silent Generation was devised. From there, a brief point-of-view piece about the primary concerns of the mature market was addressed, including concerns about retirement planning and how to deal with decreased mental and physical skills. Given all of this information, an effective marketing/public relations plan was conceptualized. This plan covered multiple facets the company wished to have addressed, including how to integrate social media and a strategy to increase attendance at trade shows.		
1:00 PM	The American Red Cross Youth Programming	# 166
Presenter(s)/ Co-Author(s):	Lindsay Riley	Mentor(s): Dr. Kirsten Johnson
The American Red Cross is a national non-profit organization that provides disaster relief to people in need all over the world. The organization also offers preventative and preparedness programs to the youth that include, Red Cross clubs, babysitting classes, and youth fundraising. The Red Cross of the Susquehanna Valley is having problems getting the word out to area high schools that these programs are available. Marketing research has been conducted to figure out the best way to promote these programs to high school students. This research has helped to develop a marketing plan that will open a line of communication between the high schools and The Red Cross in order to promote the programs. This marketing campaign will help to increase the use of youth programming offered by non-profit organizations.		
1:00 PM	Developing a Dynamic Annual Report for a Non-Profit Organization	# 167
Presenter(s)/ Co-Author(s):	Matthew Wagener	Mentor(s): Dr. Kirsten Johnson
The County Commissioners Association of Pennsylvania (CCAP) has served as a singular, unified voice for county government within the state since 1886. One of CCAP's programs, the Unemployment Compensation Trust (UC Trust), has provided unemployment insurance and compensation for more than 26,000 state employees, in 42 counties, for 30 years. To celebrate three decades of establishment and service, the UC Trust wanted to create and distribute a publication that paid homage to their anniversary, while reporting their annual financial figures to shareholders. To make the publication more visually appealing and effective, integration of the narrative and statistical sections was requested. Through extended research on design and layout techniques, branding strategies, annual report trends and marketing communications, an annual report that effectively communicates the organization's intended message was produced. Research findings and formative evaluation supported the thesis, that states an innovative, dynamic annual report that integrates creative design throughout the publication will effectively gain shareholders interest and celebrate CCAP's achievement.		
FAPA	Presentations	H-213
1:00 PM	Treatment Protocol for War Veterans Diagnosed with PTSD: Implications for Music Therapy	# 171
Presenter(s)/ Co-Author(s):	Rachel Brackins	Mentor(s): Dr. Gene Behrens, Dr. James Haines
This study investigated the use of music therapy in the treatment of soldiers diagnosed with PTSD. Limited research not only exists in the recent treatment trends for working with those diagnosed with PTSD but especially is lacking within the area of music therapy. Specifically, the objectives for the study were to learn about (a) the history of PTSD with soldiers, (b) the use of music therapy with individuals dealing with war-related trauma, and (c) the evolving implications for music therapy protocol when working with soldiers returning from war. To complete the project, I conducted a review of literature within three areas: the history of diagnosing PTSD, the symptoms and biological changes of soldiers dealing with PTSD, and existing music therapy protocol for veterans diagnosed with PTSD. In addition, I conducted three interviews with therapists presently working with the population — two music therapists and one counselor. Based on the compiled information, I developed implications identifying current music therapy protocol and future needs within the field.		

Presentations

Concurrent Session III: 1:00 – 2:45

1:45 PM	Effects of Verbal Versus Nonverbal Reinforcement on Specific Musical Elements in Improvisation	# 173
Presenter(s)/ Co-Author(s):	Stephanie Baumann, Michael Tschop	Mentor(s): Dr. Gene Behrens
Using a modified multiple baseline design across conditions and a withdrawal condition, we investigated the differential effect of using positive verbal, positive nonverbal, or no reinforcement on the use of three different music components within improvisations performed on a marimba while a researcher provided an ostinato pattern. The participant was a 19-year-old female with no musical background; she improvised for 10 minutes each session. After three sessions of baseline with no reinforcement, only nonverbal positive reinforcement was provided during the fourth and fifth sessions to increase length of the participant's improvisations. During the sixth and seventh sessions, only verbal positive reinforcement was provided to increase the number of different notes used. Rhythmic complexity was the control condition receiving no reinforcement. The data was plotted for each improvisation and then smoothed by averaging across every three improvisations. Despite a very slight increasing baseline, visual analysis indicated that nonverbal positive reinforcement may have had an effect on length of improvisation, but additional data was needed to verify. Verbal positive reinforcement had no effect on the length of the improvisations. Visual analysis of rhythmic complexity revealed that the participant's responses possibly developed independent of reinforcement or were influenced by changes in how other music elements were employed. Overall, the results suggest how reinforcement of one type of response during improvisations may influence other responses as clients gain musical experience and confidence.		
2:00 PM	Effects of Exercising to Preferred Tempo-Matched Music Versus No Music	# 174
Presenter(s)/ Co-Author(s):	Emma Monismith, Stuart Lynd	Mentor(s): Dr. Gene Behrens
The purpose of this study was to examine the effects of tempo-matched, preferred music versus no music on perceived exertion, motivation, and duration while exercising on a treadmill. Twelve male and female college students, selected as a sample of convenience, took part in two separate 15-minute exercise trials. The first trial was conducted with no music to obtain a baseline measure, and the second was conducted with music matched at the tempo at which the participant was exercising. Each participant's perceived duration, exertion, and motivation during the exercise session were assessed. No significant difference between the tempo-matched, preferred music and non-music ratings for perceived exertion, $t(9) = 1.50, p = .168$, and for perceived motivation, $t(9) = 1.50, p = .168$, was found; however, a medium effect size existed for both. There also was no significant difference for the measure of heart rate consistency during exercising with and without music, $t(9) = .831, p = .482$; and again a medium effect size was found. However, there was a significant difference between the music and non-music ratings for perceived duration of exercise, $t(9) = 4.06, p = .003$, and the obtained large effect size supports this finding. Although desired directions in the participants' responses were achieved for the music trials, significant differences only existed for perceived duration of exercise. The use of music during exercise may assist people in exercising longer and thereby possibly also result in lower dropout rates within medically-based exercise programs.		
2:15 PM	The Effect of Relaxing Music on Perceived Emotional Responses of Males and Females	# 175
Presenter(s)/ Co-Author(s):	Rachel Brackins, Leigh Ontiveros	Mentor(s): Dr. Gene Behrens
This study investigated the difference between males' and females' perceived emotional responses when listening to relaxing music after completing a stressful task. Twenty-one undergraduates were selected as a sample of convenience. The participants rated their level of relaxation using a visual analog scale (VAS), very relaxed to very stressed, and selected two emotions from a list of 22 as a second measure. The sequence involved completing the following tasks in order: the two relaxation measures, the stress-inducing task (involved questions from practice SATs), the two relaxation measures, the music-listening task (5'40" of relaxing alto flute music) while taking the two relaxation measures, and the two relaxation measures after the listening task. Since the main effect for gender was not meaningful and no significant interactions existed for both analyses, the main effects for Time of Measurement were evaluated. A significant difference was found across the four measures of stress for VAS, $F(1.91, 36.33) = .33, p = .715$, and for the selected emotional adjectives, $F(2.42, 45.93) = 40.31, p = .000$. Post-hoc dependent t-tests for both measures found significant decreases in stress from the pretest measure to most of the measures during music listening and to the post-test measures. The results from this study indicated that music could be effective in increasing perceived levels of relaxation. The changes in perceived relaxation occurred within the first 2-min measures and held thereafter.		
English	Presentations	H-214
1:15 PM	Faith of the Blind	# 181
Presenter(s)/ Co-Author(s):	Austin DeMarco	Mentor(s): Dr. John Rohrkemper
I will be presenting a science fiction story in which the protagonist, Mellie, works at a facility where human beings are grown to be servants and pets to their human masters. Through her interactions with one such specimen, a girl named Seraphim, Mellie realizes that her treatment of these human-like creatures is unethical and must make a decision as to whether she should carry on as she has for years or go against the social norms in which she once believed.		

1:45 PM	Fairy-Tale Language and the Struggle for Independence in Jane Eyre: A Bakhtinian Analysis	# 182
Presenter(s)/ Co-Author(s):	Megan Casey	Mentor(s): Dr. Kimberly Adams
While it is now commonly viewed as a sophisticated art form and an indispensable focus for literary studies, the novel was once dismissed as second-class literature that paled in comparison with the far-superior genre of poetry. One of the few critics of his time who dared to challenge the high status accorded to poetry was Russian theorist Mikhail Bakhtin (1895–1975), who made an invaluable contribution to the correction of this prejudice. His theories of heteroglossia and dialogism, which involve the interaction of opposing voices within a text, truly “novelized” how we read the novel. One novel especially receptive to Bakhtin’s theories is <i>Jane Eyre</i> (1847) by Charlotte Brontë (1816–1855). Without the assistance of Bakhtin, anyone may see that the story of <i>Jane Eyre</i> possesses many of the characteristics of a fairy tale, and many analyses have explored how this is so. If we utilize Bakhtin’s ideas, however, we find that beneath this stationery, concrete layer of poetic symbolism is a deeper, more abstract linguistic element—that is, the <i>language</i> of the fairy tale. Not content to exist in solitary stasis, fairy-tale language is dialogically opposed to other languages in the novel. The present essay examines how the intertextual struggle of fairy-tale language with these other languages underscores the character Jane’s own struggle for independence and autonomy within the story.		
2:00 PM	Love, Desire & the Universe: Understanding Lacan Through the Doctor	# 183
Presenter(s)/ Co-Author(s):	Lauren Driscoll	Mentor(s): Dr. Kimberly Adams
For Jacques Lacan, the fundamental role of psychoanalysis was not to heal or concede to the ego’s desires but rather to recognize the ego’s desires as unsatisfiable. Lacan, a psychoanalyst for whom the rereading and revision of Freud’s works was incredibly important, saw psychoanalysis as a tool to display what man lacks. This presentation seeks to analyze the Lacanian concept of desire through understanding of the Real-Imaginary-Symbolic triad. To illustrate both Lacanian desire and this triad in accessible terms, concrete examples will be taken from the popular BBC television series <i>Doctor Who</i> . In this television series, viewers might be misled to think that their most fundamental desire - that of the universe or Mother Object - can be fulfilled. While the Doctor initially fulfills his human companions’ desire for the universe with trips to strange planets and time periods, he does not give a satisfactory solution to Lacan’s question: “What does it matter how many lovers you have if none of them gives you the universe?” Here lovers might be replaced with, “What does it matter how many planets you can see if this can never last forever?” Lacan leaves implicit the response that human desires are meant to be unattainable, as they create the necessary conflict between the Mother Object and the Law-of-the-Father. This presentation hopes to illustrate how even such a fantastic television series as <i>Doctor Who</i> leads to the same necessary conflict between the Law-of-the-Father (or perhaps more accurately, the Law-of-the-Universe) and the Mother Object.		
2:15 PM	The Color Red Can Take Care of Itself	# 184
Presenter(s)/ Co-Author(s):	Andrea Georgic	Mentor(s): Dr. Kimberly Adams
The short fiction piece that I will be reading is a re-telling of the traditional Little Red Riding Hood folktale, in which a young girl is deceived by a wolf on her way to grandmother’s house. The story focuses on the power of natural elements as well as a stronger female voice, while also experimenting with supernatural elements similar to those used by Aimee Bender and Gabriel García Marquez.		
2:30 PM	Taking Flight- A Collection of Short Stories	# 185
Presenter(s)/ Co-Author(s):	Katherin Momenzadeh	Mentor(s): Dr. David Downing
This project is a collection of short stories all centered on a common theme. As a secondary education major, I take personal interest in the development of adolescents, particularly around the ages of fifteen to nineteen. It is a tenuous and chaotic period of life, when a person can be fighting crippling insecurities while attempting to establish his or her independence all at the same time. My stories explore the many paradoxes involved in that age range, specifically where it applies to young women.		
Sociology/Anthropology Presentations		H-215
1:00 PM	Brethren Missions: The Rise and Decline of Foreign Missions Within the Church of The Brethren	# 191
Presenter(s)/ Co-Author(s):	Laurel Taylor	Mentor(s): Dr. Donald Kraybill
This presentation investigates the historical development of missions within the Brethren, beginning with the first division of the church, and then focusing on its subsequent development specifically within the Church of the Brethren. Using a chronological perspective, this presentation explores how foreign missions became very popular within the Church, but through the 1930s – 1950s experienced a decline due to various changes in the Church of the Brethren. Finally, the presentation examines the current state of foreign missions, and any small movement within the church to revive foreign missions.		

Presentations

Concurrent Session III: 1:00 – 2:45

1:15 PM	Special Children in Amish Society	# 192
Presenter(s)/ Co-Author(s):	Elaina Truax	Mentor(s): Dr. Donald Kraybill
This presentation will investigate genetic disorders prevalent in Amish communities, primarily focusing on Ellis-van Creveld syndrome and Crigler-Najjar disease. While both diseases are found in other populations, the majority of cases are identified in the Amish due to a biological phenomenon called the founders affect. Using scientific papers, books, and online sources the presentation will address the genetics behind the disorders along with symptoms and possible treatments. In addition, the presentation will briefly address how modernity plays a significant role in this serious matter.		
1:30 PM	Shunning and Excommunication in Amish Society: A Ritual of Purity or a Ritual of Shame?	# 193
Presenter(s)/ Co-Author(s):	Ashley Yagielniskie	Mentor(s): Dr. Donald Kraybill
This presentation examines how shunning and excommunication are viewed in the Old Order Amish Church from the perspectives of current and ex-members. By using qualitative research methods, including various first-hand accounts and court cases, the research recognizes the impact of shunning and excommunication on the Amish society, despite the looming obstacle of modernity, specifically individualism and specialization that are lurking over their way of life. Church members believe in a ban, separation, and discipline within the church so that the pure may be distinguished from the impure; while the ex-members feel that shunning has caused them mental and physical strain, and therefore are angry towards the church. The Amish believe that because the practice of shunning is founded in the Bible, it reflects a long-standing Anabaptist practice and should therefore be adhered to, understanding them as commands from God. The results reveal how Amish culture, religion and community all play major roles in how shunning and excommunication are viewed on both ends of the spectrum.		
1:45 PM	Excommunication and Shunning in the Amish Community	# 194
Presenter(s)/ Co-Author(s):	Ashley Benner	Mentor(s): Dr. Donald Kraybill
My research project focuses on excommunication, known as “being under the Bann,” that occurs when a member of the Amish church is expelled from the church. Coupled with the excommunication is a social shaming process known as shunning, or Meidung. I conducted the research by reading both primary and secondary sources on Amish society. Defying the churches rules and refusing to repent results in excommunication. Members of the Amish church may not have business relationships or certain other interaction with ex-members until they have repented. My conclusion suggests that shunning is an important social process to maintain the purity of the church, protect the reputation of the church, and to make those excommunicated feel ashamed.		
2:00 PM	Abuse in the Amish and Modern World	# 195
Presenter(s)/ Co-Author(s):	Ambre Biehl	Mentor(s): Dr. Donald Kraybill
Through the use of books, newspaper and magazine articles and primary sources, I analyze child and domestic abuse in the English and Amish communities in this research project. Children and women are susceptible to abuse in both the Amish and modern worlds; however, those who reside in the Amish community are more likely to be victimized. The two cultures handle abuse situations very differently. The modern world does more to stop the violence than the Amish community does. Also, the authorities handle abuse situations occurring inside the Amish community differently than they would if it came from modern society. There are many ways that the English can help the Amish decrease abusive situations, but for the most part they are highly resistant to outside help. However, the Amish are beginning to be more willing to address this social problem.		
2:15 PM	The Amish and Mental Health: Depression, Bipolar Disorder, and Suicide	# 196
Presenter(s)/ Co-Author(s):	Bethany Dieffenderfer	Mentor(s): Dr. Donald Kraybill
My research project examines the unique cultural experiences of having a mental illness in Amish society. Specifically, it looks at depression, bipolar disorder, and suicide to determine how these illnesses manifest themselves in an Amish population. I used primary and secondary sources to study these illnesses in Amish culture. In conducting my research I compared the symptoms and treatment options for these types of mental illness with the broader American society. The results showed that although the Amish develop the same types of mental illnesses as other Americans, their unique belief system and societal values lead to slightly different symptoms and treatment plans.		

2:30 PM	Socialization of Amish Children as Taught Through the Family, School, and Church	# 197
Presenter(s)/ Co-Author(s):	Sarah Kittle	Mentor(s): Dr. Donald Kraybill
This presentation will focus on the specific ways in which children are socialized into the Amish society. By progressing through the four stages socialization (infancy, pre-schoolers, elementary school children, and young people) children learn what it means to be Amish. I conducted extensive research on primary Amish and secondary scholarly sources. The conclusion, drawn from all sources, shows that the family plays a significant role in a child's upbringing. The Amish especially teach obedience, belief in God, and the need for separation from worldly influences. Amish private schools reinforce everything that parents have taught children and do not try to change the views that the children learned at home. Upon age sixteen, children can choose to be baptized, officially accepting adulthood and vowing to conform to the religious standards that so define the Amish community, or they can leave it without penalty.		
Occupational Therapy	Posters	Masters Atrium
1:00 PM	Can Picture Slide Shows as Social Stories Improve Mealtime Behaviors of Children with ASD?	# 201
Presenter(s)/ Co-Author(s):	Samantha Price, Katie MacGregor	Mentor(s): Ms. Christine Achenbach
The present study evaluates the effectiveness of combining the concept of the Carol Gray Social Story™ with video modeling in two children with ASD. The purpose of the present study is to determine if Social Stories in the form of a picture slideshow improve mealtime behaviors for children with autism spectrum disorders. A one group pretest-posttest design was utilized for this study. One Social Story was developed for the participants according to Gray's basic Social Story format which described each target behavior and suggested response. The Social Story was shown to the participants in the PowerPoint program on their home computer during the intervention phase. Data was collected through questionnaires provided to the parents of the participants prior to and after the intervention phase. Data was also collected through a checklist of target behaviors recorded during a meal prior to and after the intervention phase. The data containing the frequency of behaviors prior to and following the intervention phase was analyzed using descriptive statistics and graphed to display the difference in frequency of the behaviors. The questionnaire data was analyzed using comparative analysis of both the pretest and posttest. The results of this study indicate that the Social Story was effective in decreasing the target behaviors for both participants over the course of three separate meal observations. This conclusion is supported by the decrease in the frequency of all the target behaviors from pre-test to the post-test.		
1:00 PM	Stem Cells: A Phenomenological Study of the Functional Recovery Post Adult Stem Cell Transplantation Treatment for Multiple Myeloma Through an Occupational Therapy Lens	# 202
Presenter(s)/ Co-Author(s):	Laura Festa	Mentor(s): Dr. Ann Marie Potter, Dr. Jonathon Coren
In its role of promoting quality of life and healthy lifestyles, occupational therapy must now become aware of the current and very relevant need to assist in the functional recovery of those who have undergone stem cell transplantation treatment. This poster will present perspectives from occupational therapists, an oncologist specialist, and a transplant recipient in regards to the recovery phase post adult stem cell transplantation treatment for multiple myeloma. The ethical controversy surrounding both adult and embryonic stem cell treatment will be addressed through the identification of specific medical advantages and disadvantages of each cell type, as well as identifying a more current cell type, (iPS) Induced Pluripotent Stem Cells, that could potentially eliminate present ethical concerns. Perspectives gathered from each study participant will be compared and contrasted and themes of recovery will be identified. Results noted in the study will articulate how occupational therapists can assist in ways that promote quality of life, restore identity and reconstruct prior lifestyle routines of client populations that undergo stem cell transplantation. At the completion of the presentation, listeners will be equipped with knowledge involving the ethical issues of stem cell transplants, attain insight into the lived experience of stem cell transplantation from a recipient and oncologist perspective, and recognize as well as appreciate the role of occupational therapy in the functional recovery process post transplant.		
1:00 PM	A Creative Occupation Group for the Well-Elderly	# 203
Presenter(s)/ Co-Author(s):	Lauren Rossi, Jillian Snyder	Mentor(s): Dr. Ann Marie Potter
The purpose of this study was to determine if participation in a creative group on a weekly basis had a positive influence on socialization and health in the well-elderly. The Assessment of Communication and Interaction Skills (ACIS), a needs evaluation and the SF-36 provided information to design our program around the strengths of the given population, and the barriers this group experiences in their daily lives. Seven participants engaged in a thirteen week creative occupations-based program at the Elizabethtown Community Senior Center. These creative occupations included sharing of narratives, sculpture and scrapbooking. Throughout the course of the program, the ACIS was used to monitor communication and interaction skills for each participant. Each week, detailed fieldnotes and reflections were recorded by the researchers. At the end of the program, one-on-one interviews were conducted and an overall group discussion was completed. The interviews showed positive results regarding enjoyment of crafts and increased communication. The following themes emerged through the data analysis: group trust emerges through expression of humor, communication skills increase through sharing, creating bonds emerged through mutual experiences, enhancement and awareness of creative expression, and emerging value of hand coordination. According to Jackson, Carlson, Mandel, Zemke, & Clark (1997), engagement in meaningful occupations is capable of reducing general health risks found in older adulthood. We instilled occupational therapy preventive and wellness values in our participants to facilitate carryover from the senior center to the home environment.		

Posters

Concurrent Session III: 1:00 – 2:45

Psychology	Posters	Masters Atrium
1:00 PM	Cross-Modal Time Perception for Naturalistic Stimuli	# 204
Presenter(s)/ Co-Author(s):	Renee Fortinper	Mentor(s): Dr. Amanda Price
This experiment examined time perception of positive and negative naturalistic stimuli under unimodal and multimodal trials relative to neutral control stimuli. For unimodal trials, there was a trend for both positive and negative stimuli to be rated as faster than the actual presentation time; however, there was a significant difference in ratings based on the modality. For multimodal trials, all stimuli were rated faster than actual presentation time; however, durations were rated shortest when affect was congruent between the two modalities.		
1:00 PM	The Effects of Emotional Stimuli on Change Blindness	# 205
Presenter(s)/ Co-Author(s):	Jennifer Knapp	Mentor(s): Dr. Amanda Price
This experiment examined the influence of emotional valence on photographs' susceptibility to change blindness. Research on emotionally enhanced memory has demonstrated improved memory for images with negative, as compared to neutral, valence. Further research examining memory for select elements of a visual scene found improved memory for central elements in negative scenes, as opposed to central elements of neutral scenes. Additional research found improved memory for peripheral elements in the neutral scenes, as opposed to negative. This research together suggests an allocation of attention dependent on the emotional significance of a stimulus. Research on change blindness can help provide further insight into automatic attention and the processing of visual scenes. Studies using naturalistic scenes as stimuli have demonstrated that focused attention is required to identify changes, as well as demonstrating that attention is automatically allocated to the foreground of such scenes. The present study examined the interaction between emotionally allocated attention and change blindness by examining susceptibility to change blindness in images of emotional significance. Images from the International Affective Picture System (IAPS) were manipulated to create changes in images of negative, neutral or positive valence, in both salient and contextual portions. The results indicated that negative and positive images were less susceptible to change blindness, as opposed to neutral. Additionally, data suggested an interaction between emotional condition and location of change within the scene. This suggests that susceptibility was mediated by the emotional valence as well as the location of the change within an image.		
1:00 PM	People Match Purebred Dogs and Owners Together Based on Perceived Personality	# 206
Presenter(s)/ Co-Author(s):	Stephen Marks, Keri Speicher	Mentor(s): Dr. Michael Roy
Previous research has found that people are able to match purebred dogs with their owners (Roy & Christenfeld, 2004; 2005). What is unclear is how people are able to do this. Here we examine whether the ability to match is due to a gut-level reaction or well thought-out reasoning. Pictures were taken of 14 purebred dog and owner pairs at various dog parks in central Pennsylvania. Every dog represented a different breed and pictures were taken so that background for dog and owner varied. Twenty-eight undergraduate participants were presented with pictures of a dog and six potential owners and asked to rank order the owners from most likely to own the dog (1) to least likely (6). Approximately half of the participants were asked to make their choices very quickly with little deliberate thought. The remaining participants were asked to take their time in forming their rankings and to describe how they made their choices. Overall, participants were able to match the correct dog and owner together significantly better than chance. There was no difference in the ability to match dog and owner based on condition. Self-report data for the deliberate condition indicate that participants based their groupings on personality matching. Results indicate that people are very good at matching purebred dogs and owners together no matter how their decision was made. It seems that people likely match dogs and owners together on perceived personality and that these thoughts can be both articulated clearly and brought to mind quickly.		
1:00 PM	Youtube and Identity	# 207
Presenter(s)/ Co-Author(s):	Lauren Fairweather	Mentor(s): Dr. Tara Smith
The Internet has provided a way for people to explore, experiment, and develop their identities thanks to its limitless reach across the globe and the anonymity it provides. Recently, more people are revealing their identities on the Internet in homemade videos that allow them to explore who they are and share these explorations with an audience. Up until now, psychology research has only considered Internet exploration in terms of the anonymity it provides and has not addressed this sort of open, honest Internet usage. Experienced video bloggers (N=28) between the ages of 18 and 35 were asked open-ended questions regarding how posting YouTube videos has affected their identities. Half of them reported attempting to appear more put together or attractive than they usually would, which suggests that the knowledge that their videos will be seen by others has affected their self-presentation. More than half claimed that they have become more confident as a result of their activities on YouTube. They also reported being more outgoing, open-minded, and motivated due to their experiences posting video blogs. While we cannot accurately say whether this experience would be the same for other age groups or people who have only posted a few videos, video blogging has positively affected this sample's identity development. Every reported effect that YouTube had on the participants was positive, so it is safe to say that the Internet, when used in this way, can be a healthy tool for identity exploration.		

Sociology/Anthropology	Posters	Masters Atrium
1:00 PM	She Feeds and Cleans, He Plays and Disciplines: A Content Analysis of Gender Equality in Parenting on Television	# 208
Presenter(s)/ Co-Author(s):	Stephanie Bireley	Mentor(s): Dr. Michele Lee Kozimor-King
<p>Tabloids scrutinize celebrities' parenting; this one is too young to parent, this person is too selfish of a parent and that person hands their kids off to a nanny most of the time. Most people have heard at least one of these criticisms in the media recently. The media is a constant presence in society today. There are various forms newspaper, radio, internet and television. Television is extremely prevalent. Recent statistics state that 99 percent of homes have a television and 66 percent of homes have three or more televisions. The television portrayal of family varies greatly from program to program. Many believe the media accurately reflects parenting realities, but do the television families truly represent American families of today? Parenting styles today are vastly different than they were 100, 50 or even 25 years ago. The evidence indicating the changing nature of parenting cannot be ignored, but scholars are torn on the state of the family and whether it is deteriorating, strengthening or just changing. This research will examine the portrayal of gender equality in parenting on a current television show Modern Family. The data will be obtained from a content analysis of the new television show Modern Family. Specifically, five episodes from season one, which aired during the 2009-2010 television season, will be analyzed. Results from the content analysis will be presented. The findings of this research would be useful for social scholars, family counselors and current or future parents.</p>		
1:00 PM	Bread Maker to Bread Winner: A Content Analysis of the Traditional Family and Changing Work and Family Roles of Women	# 209
Presenter(s)/ Co-Author(s):	Kristy Castellini	Mentor(s): Dr. Michele Lee Kozimor-King
<p>This research will focus on the new hit Television Drama series, <i>The Good Wife</i>. Gaining confidence every day, Alicia transforms herself from embarrassed politician's scorned wife to resilient career woman, especially for the sake of providing a stable home for her teenage children. For the first time in years, Alicia trades in her identity as the "good wife" and takes charge of her own destiny. This research will examine work and family conflict depicted in the media. More specifically, it will analyze media representation of the traditional family and changing work and family roles of women in a new television drama series, <i>The Good Wife</i>. Data of this research will be obtained from a content analysis of <i>The Good Wife</i>. According to <i>TV Series Finale</i>, <i>The Good Wife</i> debuted this year to 13.71 million viewers and a 3.1 rating in the 18-49 demographic. While examining this media, the whole first season of this television drama will be used for research in this content analysis. Results of this content analysis will be presented. Implications from this research would be valuable to politicians, marriage counselors, married couples and most importantly wives.</p>		
1:00 PM	The Not So Real Housewives: A Content Analysis of Marriage Representation on Television	# 210
Presenter(s)/ Co-Author(s):	Elizabeth Ellwood	Mentor(s): Dr. Michele Lee Kozimor-King
<p>The U.S. Census found that the amount of families who owned a television rose 11 percent between the years of 1960 to 2001. This significant rise of individuals bringing the media into their daily lives is influencing the way they view what a "normal" marriage should be. This study will examine how television portrays female employment. The data for this research will be obtained from a content analysis of <i>The Real Housewives of Orange County</i>. I will be using the most recent season, season five, and all 12 episodes. The fifth season became the most watched cycle to date, averaging 2.01 million total viewers. I predict this research will find that the media does not accurately portray the changes in female employment. Results from the content analysis will be presented. This research will be valuable for married couples and marriage counselors.</p>		
1:00 PM	Raising Children in an Individualistic Family: A Content Analysis of Three Parenting Magazines	# 211
Presenter(s)/ Co-Author(s):	Caitlynn Hill	Mentor(s): Dr. Michele Lee Kozimor-King
<p>As times change, so do our values, culture, relationships, and family structures. Scholars suggest that the current trend in American culture towards individualism is affecting our family relationships, making the family structure weaker. We find that evidence of such changes can be seen almost everywhere but are especially visible in the media as it has become more and more present in our lives. Often parents will turn to magazines as a source of advice and ideas for family and parenting issues. This study will observe whether the trend of individualism is perpetuated and reflected in popular parenting magazines. Data was obtained from a content analysis of three parenting magazine, <i>Central Penn Parent</i>, <i>Family Circle</i>, and <i>Parents</i>. Four issues from 2009, the months of January, April, July, and October, was examined from each magazine. Results from the content analysis will be presented. The results of this research are beneficial to the parents who are turning to these magazines for advice and to scholars who are analyzing the current family structure.</p>		

Posters

Concurrent Session III: 1:00 – 2:45

1:00 PM **The Who's Who of Married Life: A Content Analysis of Gender Roles in Marriage and Primetime Television Show, The Middle** # 212

Presenter(s)/
Co-Author(s): Tara Hollingsworth

Mentor(s): Dr. Michele Lee
Kozimor-King

The infamous Jon and Kate plus Eight Family has recently been a hot topic within all forms of media. One of the main criticisms of their family was the division of labor. Socialization of gender roles and marital expectations were also fodder for debate. The time spent exposed to various forms of media is an important issue for socializing society. Television is one of the leading forms of media with 99 percent of American households currently having at least one television. According to the A.C. Nielsen Co., it is estimated that on average the individual watches approximately 6.75 hours of television per day. The definition of family and the roles of husbands and wives are dramatically changing coinciding with the growth in media exposure. It is important to step back and critically examine the facts and the myths that the media presents to the public about gender expectations of marriage. This study will examine how primetime television reflects current gender roles within marriage. The data for this research was obtained from a content analysis of *The Middle*, a prime time television show. *The Middle*, currently airs on ABC, at 8:30 p.m. eastern time, Wednesday nights. This show is a comedy about the life of a married couple and their three children. Results from the content analysis will be presented. Implications of this research will be useful for anyone who intends to marry and/or raise a family, those who are currently married, and individuals working with families (such as marriage counselors, teachers, social workers etc.).

1:00 PM **The Secret Life Television: A Content Analysis of Family in the Media** # 213

Presenter(s)/
Co-Author(s): Elijah Jackson

Mentor(s): Dr. Michele Lee
Kozimor-King

Meaningful conversations between children and parents have become almost entirely replaced by television viewing. Roughly only 3.5 minutes of meaningful conversation is taking place in homes today. Children are the most frequent television viewers and therefore, are more susceptible to what they see and hear. Seeing images and hearing other peoples view on marriage and families will have long lasting effects. Television depicts marriage and family in ways that may not accurately reflect statistical trends. The data for this research will be obtained from a content analysis of the hit television show on ABC Family, *The Secret Life of the American Teenager*. *The Secret Life* is a new television series that has been getting mixed reviews because of its focus. Results from the content analysis will be presented. Changes in marriage and family trends and media presentation of these changes will be examined. Results from this research would be useful for parents, teachers, guidance counselors, marriage counselors, policy officials and many scholars interested in media influence on socialization.

1:00 PM **A Content Analysis of Family Structure Portrayed in the Media: Focusing Specifically on the "Not So Secret" Life of the American Teenager** # 214

Presenter(s)/
Co-Author(s): Tamara Kase

Mentor(s): Dr. Michele Lee
Kozimor-King

Studies have shown the average number of minutes per week that a child watches television is 1,680 minutes while the number of minutes per week that parents spend in meaningful conversation with their children is 3.5 minutes. With the increase in time spent in front of the television in the last few decades, the media has become important in defining the social norms and values in society. This research will look at how family structure is portrayed in the media focusing on primetime television analyzing the ABC Family hit series "Secret Life of the American Teenager." According to World magazine in 2009 the ratings for this show has given ABC Family its biggest audience with nearly 4 million viewers per episodes. The data for this research will be obtained from a content analysis of the television series focusing on the odd number of episodes of season two. Results from the content analysis will be provided. The implications of these results will be valuable to parents who are concerned with appropriate television shows for their children as well as school counselors who attempt to understand the current trends in society.

1:00 PM **Love Is a Battlefield: A Content Analysis on the Portrayal of Intimate Relationships, Marriage, and Commitment on the Radio** # 215

Presenter(s)/
Co-Author(s): Stephen Kauffman, Annette Sestito

Mentor(s): Dr. Michele Lee
Kozimor-King

According to previous research, more than 90 percent of all consumers in the United States aged 12 and older listen to the radio—a higher rate than television, magazines, newspapers or the internet. The media has played a crucial role in forming and reflecting public opinion and perpetuating myths regarding marriage and family. Its influence has had a strong social and cultural impact on society. It is imperative to examine media portrayals of marriage in comparison to actual statistics. This study will examine the portrayal of intimate relationships, marriage, and commitment on the radio. More specifically, we will analyze the Billboard Top 100 song lyrics for the years 1999 and 2009 in an effort to see the changing nature of intimate relationships. From the Top 100 songs from each year-end, we will select all songs relating to relationships and analyze the changing relationship by using a coding scheme. The results of this study will provide information for marriage counselors, individuals intending to marry, and parents who are listening to music during their daily commute.

1:00 PM	Contradictory Messages: Content Analysis of Marriage in the Simpsons	# 216
Presenter(s)/ Co-Author(s):	Maida Libic, Jessica Russell	Mentor(s): Dr. Michele Lee Kozimor-King
<p>The average American watches over eight hours of television per week. Television viewing has increased over the years and has become a central part of almost every Americans' daily routine. Americans have an idealistic view of marriage even though there has been an increase in divorce. This could be partially attributed to the media and its portrayal of marriage. This study will examine the portrayal of marriage in <i>The Simpsons</i>. The data was obtained from a content analysis of the hit television sitcom <i>The Simpsons</i>. We have viewed 12 randomly selected episodes of <i>The Simpsons</i> from season 21. We expected to find more non-traditional values of marriage in <i>The Simpsons</i> than traditional values of marriage. Results from this content analysis will be presented. This may be interesting for the average American family and those working with families because many do compare their lives to some situation that is portrayed in the sitcom.</p>		
1:00 PM	Happily Ever After: A Content Analysis of Peer Marriage in Animated Movies	# 217
Presenter(s)/ Co-Author(s):	Samantha Morgan	Mentor(s): Dr. Michele Lee Kozimor-King
<p>The definition of marriage in America is constantly changing. Noted family scholar Pepper Schwartz has explored a less traditional type of marital relationship based on equity and equality between both partners called peer marriage. Marriage has been portrayed in the media for many years. The influence of the media in American society is also constantly growing. This influence begins fairly early in life with the viewing of animated movies. Ten full length animated films premiered in the year 2009 alone, grossing a total of over \$1 billion at the box office. From these animated movies, children get their first glimpse of what the media presents as the ideal love relationship. This study will examine the portrayal of marriage in recent animated movies. More specifically, this research will determine the frequency and proportion of peer, traditional, and near-peer relationships. The data from this research will be obtained from a content analysis of several animated movies. The sample will consist of five animated movies premiering between 2008 and 2009 focusing on the relationships shown in each film. Results of this analysis will be presented. This research has important implications for both parents and family counselors.</p>		
1:00 PM	Economic Prosperity, Green Card or Romantic Love: A Content Analysis of Reasons for Marriage in Romantic Comedy Films of the 21st Century	# 218
Presenter(s)/ Co-Author(s):	Stephanie Reynard	Mentor(s): Dr. Michele Lee Kozimor-King
<p>In the United States movie theaters draw in more people than all theme parks and major league sports combined. The movies of the 21st century can influence the general population about today's societal norms and expectations about marriage. These norms have changed significantly throughout the past century and the media is portraying the many changes. This research will examine the portrayal of marriage in romantic comedy films of the 21st century. The data was obtained from a content analysis of 20 romantic comedy films from 2001 to 2010. The results from the content analysis will be presented. Findings from this research will have important implications for adolescents as well as young adults who are not married. Media portrayal of the many myths of marriage can influence the minds of younger generations and thus influence their ideas and values about marriage today.</p>		
1:00 PM	The Saga Continues: Phase 2 of the Winters Heritage House Community Service Project	# 219
Presenter(s)/ Co-Author(s):	Maria Spano, Barbara Prince, Nathan Smith	Mentor(s): Dr. Michele Lee Kozimor-King
<p>The Winters Heritage House Museum Project (WHHM) started in August 2009 in order to (1) provide an experiential learning opportunity for students enrolled in the skill-based Methods of Social Research and Social Statistics courses; (2) to involve students enrolled in Methods of Social Research and Social Statistics with a research based service-learning project; and (3) to provide the Winters Heritage House Museum with more qualitative information in continuation of the Winters Heritage House Museum Survey Project that was conducted during the 2008-2009 academic year. Involvement in the WHHM project enables students to understand the value of research methodology in a real-life setting outside of the classroom. For this year's project, students, as representatives of Elizabethtown College, worked with WHHM to recruit participants for focus groups and interviews which were completed in fall 2009. The goal was to provide qualitative data about participant knowledge, involvement, interest, and satisfaction with the WHHM and its programs. Results from the two focus groups suggest that most individuals had never attended events held by the WHHM even though they lived in Elizabethtown and the surrounding area. Suggestions were provided about ways to improve advertising and increase revenue. Interview results confirmed the hypothesis that participants were most interested in attending craft programs. In addition, interview results were consistent with focus group findings. A final report will be presented to the WHHM to assist with future planning and marketing decisions.</p>		

Posters

Concurrent Session III: 1:00 – 2:45

1:00 PM **From Charming Housewife and Breadwinner to Dual Earning Couple: A Content Analysis of Marriage in Television Shows** # 220

Presenter(s)/
Co-Author(s): Sarah Steinmetz, Nicole Lipari

Mentor(s): Dr. Michele Lee
Kozimor-King

According to Neil Postman, by age sixty-five, a person will have spent twelve uninterrupted years in front of the television. Media is important because not only is media on television but it is everywhere. Media also provides relevant social comparison. This research will examine the changing portrayal of marriage and family on television from the 1970s to 2010. The data will be obtained from a content analysis of three television shows; *Secret Life of the American Teenager*, *That '70s Show*, and *All in the Family*. We will be watching the first season of all the different programs and choosing the episodes through random selection. The results of the content analysis will be presented. This study is useful for marriage counselors, individuals wishing to improve their marriage, and those trying to understand changing marital issues.

1:00 PM **Inside the Lives of the Special Victims Unit: A Content Analysis of Law and Order Special Victims Unit** # 221

Presenter(s)/
Co-Author(s): Lindsey Summers

Mentor(s): Dr. Michele Lee
Kozimor-King

In the American culture, families view television for various reasons stemming from a general news source to a form of entertainment. Due to the wide variety of uses for television programming, television media both influences and shapes the lives of families in the United States. This study will examine marital and family satisfaction in the United States as portrayed in television media. The data for this research will be obtained from a content analysis of Law and Order Special Victims Unit seasons two and eight. Season eight of Law and Order aired 22 episodes and was ranked 30th in television shows with 11.9 million viewers. Similarly, season two of Law Order aired 21 episodes and was ranked 25th in television shows with 16.8 million viewers. I predict that the analysis will show that television media does not accurately reflect current statistics related to marital and family satisfaction. Results from the content analysis will be presented. The findings of this research will be useful for married couples, marriage counselors, guidance counselors, and parents.

Education	Portfolios	H-110
3:00 PM	A Framework for Teaching: Professional Portfolios for Educators	# 226
Presenter(s)/ Co-Author(s):	Courtney Kearns, Aaron Leota, Elizabeth Bellush, Melissa Preston, Christina Sheppard, Elizabeth Steffy, Kimberly Warriner	Mentor(s): Dr. Rachel Finley-Bowman
Please see the abstract for presentation #1		
Modern Language	Panel Discussion: Anime to Zen	H-114
3:00 PM	Japan and America: The Ainu Connection	# 231
Presenter(s)/ Co-Author(s):	Elizabeth Sodomini	Mentor: Dr. Mahua Bhattacharya
<p>The Ainu people have been the native inhabitants of Japan since the ancient Jomon period. Both the Ainu and the Pacific Northwest Native Americans underwent comparable persecution and assimilation patterns in their histories. Yet the similarities do not end here. These two native cultures have parallel ceremonies, art forms, and clothing, showing a number of related patterns. Multiple migrations into the Americas and cross continental trade may explain these similarities. Possibly, this travel was expanded into the Americas and could have been used as a trade route for the sharing of culture and even genetics. The evaluation of different genetic markers through specific alleles, the Y-chromosome, and mitochondrial DNA (mtDNA) suggests the possibility of cross-Pacific interactions in the early ACE period or a common ancestor that the two populations are derived from. This insight into a common ancestor of the early peoples may serve to aid to empower the native peoples of the world. Specifically, this empowerment can lead the Ainu in renewing their culture. After many years of suppression through assimilation and other restrictive policies, such a renewal may lead to greater cultural understanding and appreciation of diversity in future generations.</p>		
3:15 PM	The Art and Aesthetics of the Japanese Tea Ceremony	# 232
Presenter(s)/ Co-Author(s):	Christina Foss	Mentor: Dr. Mahua Bhattacharya
<p>Tea has long been considered a drink with divine properties, and the practice of tea drinking, both medicinally and religiously, is ancient. This presentation will focus on the history of tea, its ritual significance, and the development of the originally Chinese tea rituals into one of Japan's most beautiful and well-known traditional art forms. It will discuss how tea drinking was established in Japan through trade with China, and detail its slow evolution into the elaborate ceremony it has become today. It will examine the way religion impacted the tea ceremony, and how the tea ceremony in turn impacted art in Japan, altering existing forms and even creating completely new ones.</p>		
3:30 PM	Women and the Law in Japan and the US	# 233
Presenter(s)/ Co-Author(s):	Alicia Risley	Mentor: Dr. Mahua Bhattacharya
<p>Does the glass ceiling exist in Japan and is it more pervasive than in the US? The goal of this paper is to analyze the Equal Employment Opportunity Law enacted in Japan in 1986 by through primary sources in Japanese and examine how this law has affected women in the work force since then, whether it has significantly helped women, and the struggles that still exist for working women in Japan. I propose that progress has been slow, especially because of tax incentives for women to remain at home and the high cost of daycare facilities in Japan. I also intend to provide a detailed comparison of women's successes in Japan and America, and evaluate options to allow for greater equality for women in both Japan and America.</p>		
3:45 PM	Understanding Depression in Japan and the US	# 234
Presenter(s)/ Co-Author(s):	Kayla Shumway	Mentor: Dr. Mahua Bhattacharya
<p>Depression is a growing problem in Japan, especially during this country's current economic recession. Japan has been using American psychology as a standard for treatment and diagnosis, but each culture has vastly different causes and symptoms of mental illness. This presentation will discuss the different causes each culture has for depression, and examine similarities and differences in how depression is treated. I will also go over how depression manifests differently in each culture, as a result of differing cultural attitudes towards mental illness and emotional life in general. Depression is a disease that is widespread throughout the world, but every culture recognizes and treats it differently.</p>		
4:00 PM	Ryoutaro Shiba and Yotte Sourou	# 235
Presenter(s)/ Co-Author(s):	Thomas Malloy	Mentor: Dr. Mahua Bhattacharya
<p>In my presentation I will analyze Ryoutaro Shiba's perspective on history as he described it in the book <i>Yotte Sourou</i>. Ryoutaro Shiba (司馬遼太郎)(1923-96) was a famous historical novelist who wrote about Japanese history as well as developing his own stories connected with actual events in the past. Many of his works have been made into dramas or movies. He is best known for his stories about Japan and Northeast Asia. Perhaps his best-known work is <i>Ryouma ga yuku</i>, a story about Sakamoto Ryouma, a key samurai in bringing about the Meiji Restoration in Japan. The book <i>Yotte Sourou</i> is separated into 4 chapters the first being <i>Yotte Sourou</i>, the piece I will be working on. <i>Yotte Sourou</i> revolves around Yamauchi Yutaka, a feudal lord in the Edo period, and follows his rise to power. Since every country has its own side of the story, understanding why things are written the way they are and the differences between the ways different countries have recorded history will give us insight into what truly occurred.</p>		

Presentations

Concurrent Session IV: 3:00 – 4:45

Religious Studies	Presentations	H-211
3:00 PM Tough Talk Presenter(s)/ Krystan Hassinger Co-Author(s): <p>“Tough Talk” is a series of lessons on tough ethical issues faced by teens and young adults in today’s world. Issues covered in the first two lessons include abortion and sexuality. Because “Tough Talk” is curriculum based for a Christian setting, teens will feel comfortable and safe talking about the difficult issues freely. It is also hopeful that these discussions will help in the process of making difficult decisions when the students face tough issues. The materials included in the course will facilitate and provoke conversations among the students in an effort to help them find a stable belief system.</p>		# 241 Mentor(s): Dr. Michael Long
3:30 PM Walter Wink and the 3rd Way of Jesus Presenter(s)/ Sam Schlosser Co-Author(s): <p>Walter Wink’s 3rd way argues that an oppressor’s iniquity must never be mirrored as a way to combat injustice; rather those oppressed must find creative ways to break away from this cycle of Fight or Flight in the face of evil. Nonviolent resistance, according to Wink, is neither passive submission, nor violent reprisal; a 3rd way must exist where the clout of evil is met with pragmatic alternatives for engaging the powers. Wink uses the words of Jesus spoken at the Sermon on the Mount as the basis for this argument. According to Matthew 5:39-41, Jesus says: If any one strikes you on the right cheek, turn the other also. If anyone wants to sue you and take your coat, give him your cloak as well. If anyone forces you to go one mile, go also the second mile. Wink attempts to paint this message not as a message of <i>spiritual world transcendence</i>, rather a message of <i>worldly spirituality</i>. My study attempts to explain the 3rd way of Jesus according to Wink, illustrate the pragmatic aspects alongside the idealistic qualities of the argument, and finally present contrasting analyses of Wink’s argument by other contemporary New Testament scholars. “Either we find the God who causes the sun to rise on the evil and the good, or we may have no more sunrises”. (Wink)</p>		# 242 Mentor(s): Dr. Michael Long, Dr. Jeffery Long
Business	Presentations	H-212
3:00 PM Outcomes of ASEAN Economic Integration Presenter(s)/ Tyler Loeb Co-Author(s): <p>The economic theory of second best states that it is impossible to tell beforehand the effects of removing only some barriers to trade, requiring each effort of economic integration to be studied on an individual basis to see its effects. This paper seeks to test the hypothesis that ASEAN economic integration has improved the lives of Member Country citizens. Various economic and political variables are tested to garner a full sense of how the integration has affected the lives of ASEAN citizens.</p>		# 251 Mentor(s): Dr. Sanjay Paul, Dr. April Kelly-Woessner
3:30 PM IFRS Adoption By 2014 – Is It Possible? Presenter(s)/ Steven Di Grazia Co-Author(s): <p>The purpose of this paper is to analyze the differences between the current guidelines used in financial accounting in the United States (Generally Accepted Accounting Principles - GAAP) and the International Financial Reporting Standards (IFRS), which are currently accepted in 113 countries around the world. In addition to this analysis, based on primary and secondary research, I will explore whether these IFRS could be adopted in full by the 2014 deadline set by the SEC in its “Roadmap for the Potential Use of Financial Statements Prepared in Accordance with International Financial Reporting Standards by U.S. Issuers.” In May 2008 the American Institute of Certified Public Accountants decided that the International Accounting Standards Board (IASB) was given the responsibility of establishing professional standards for international and financial reporting in the U.S. Taking this charge, the IASB issued IFRS for Small and Medium-Sized Entities (IFRS for SMEs) in July of 2009. These standards were developed for entities that do not have public accountability such as a private company that does not have traded debt or equity instruments. These standards were set to be updated once every three years allowing sufficient time for implementation and feedback. This paper and presentation will examine these aforementioned topics to determine whether the IFRS could be adopted by 2014.</p>		# 252 Mentor(s): Ms. Terrie Riportella, Dr. Hossein Varamini
3:45 PM Government Intervention and Entrepreneurial Activity Presenter(s)/ Michael Woods Co-Author(s): <p>The paper analyzes government intervention in the American economy and its effects on the levels of entrepreneurship. The focus is on the comprehensive health care reform. We investigate the impact of added taxes, price controls, and other requirements on small businesses and the overall level of entrepreneurship in the United States. The analysis takes into account the potential benefits of having more American workers covered by health care. The paper compares the political incidence versus the economic incidence of the plan using Social Security as an example of how the two could differ. Moreover, the levels of entrepreneurship in the United States are compared with the levels of entrepreneurial activity in other nations that have a universal health care. The research is based on the 2009 Global Entrepreneurial Monitor Report, non-partisan organizations reports, and government documents, including the Health Care Bill.</p>		# 253 Mentor(s): Dr. Petru Sandu

4:00 PM	Human Capital and the Business Cycle	# 254
Presenter(s)/ Co-Author(s):	Pete Cellini	Mentor(s): Dr. Thomas Scheiding
<p>This paper examines the effects of human capital on expectation formation and adaptive behavior. The extent to which accurate predictions are made and the ability for households and firms to adapt to changes within the economy is a function of the general levels of human capital. As more adaptations are necessary within an economic society, there is an increase in demand for investment in human capital in order for maximum efficiency to be reached. Firms then face an incentive to train their employees to meet production goals, while employees face an incentive to invest in human capital in order to increase their market wage. The investment is necessary on both ends because as market wages increase due to employee training, an equal growth in marginal production is necessary, else an inefficient market will exist. We can observe this through cyclical recessionary periods, where output is decreasing while wages remain constant, and the firm faces a higher incentive to fire employees. Households and individuals who operate at higher levels of human capital will be in a better position during recessionary periods to adapt to the market and be able to keep constant income levels.</p>		
4:15 PM	The Consequences of the Gender Wage Gap in Old Age	# 255
Presenter(s)/ Co-Author(s):	Megan Walmer	Mentor(s): Dr. Thomas Scheiding, Dr. Sylvester Williams
<p>Although the relative position of women in the workforce has improved over time, the gender wage gap has been persistent during their working years. Although many have cited variances in human capital and job experience as causes of this gap, a significant portion of the gap remains unexplained. Women do not only suffer from pay inequalities during their working years but also suffer from inequalities in their receipt of retirement benefits. While a lot of attention has been given to the gender wage gap, the gap during a woman's retirement years has been relatively neglected. This paper will quantify the magnitude of the gender retirement gap and explore how the legal system has been used to alleviate this gap. While the gap in economic security is significant across genders during both the working and retirement years, women have made significant gains in their economic security during their retirement years, in part, because of seeking redress through the courts for inequities during their working years. The gender wage gap is severe but the understanding of the elimination of it is hindered by seeing the problem as a national problem. Rather than coming up with national solutions, the focus should be on understanding the problem on a state and local level. Proper solutions should be devised on a state and local level basis. Although the problem is a national problem, the causes and solution are quite local.</p>		
4:30 PM	A Study of the Effect of Human Capital on FDI Inflows	# 256
Presenter(s)/ Co-Author(s):	Stephen McGonigle	Mentor(s): Dr. Hossein Varamini
<p>The importance of understanding how human capital drives investment is extremely important in today's marketplace. Individuals, Corporations, and Governments are bombarded with information on how education materially improves lives. In today's economy, an educated workforce is a successful workforce. Simultaneously, developing economies are searching for ways to both sustain and drive economic growth to deliver stability and prosperity to their people. Foreign Direct Investment (FDI) has been cited in numerous studies as a way to drive domestic economic growth. Governments around the world have gone to great lengths to court this growth through tax breaks and incentives. The paper endeavors to analyze the linkage between societies' cumulative knowledge, their "human" capital, and FDI. Preliminary research has indicated a consensus among past studies that average years of education has been utilized as a measurement of human capital. This study's undertaking is to provide a picture of how human capital is driving FDI in the present. The methodology for this study will be a time-series regression analysis. This type of analysis has been utilized in other studies on this topic. The working equation is as follows: $FDI = \alpha + B1GDP + B2Exchange\ Rate + B3Human\ Capital + B4Openness + \mu$. These variables are recurrent in the supporting literature. To clarify, Exchange Rate is based on the local currency in U.S. dollars, Openness is defined as $(Imports+Exports)/GDP$, and Human Capital is average total years of education.</p>		

Presentations

Concurrent Session IV: 3:00 – 4:45

Communications	Presentations	BLR (Steinman)
3:00 PM Presenter(s)/ Co-Author(s):	Effectively Planning a Special Event for the Hershey Area Playhouse Abbey Anderson	# 261 Mentor(s): Dr. Tamara Gillis
The Hershey Area Playhouse is a nonprofit community theater in Central Pennsylvania that was founded to promote community unity throughout the entire region. As a nonprofit organization, the theater is one that relies heavily on individual and corporate donations for fund raising. In order to effectively generate revenue, planning a special event is one way to maintain and increase financial support from local and regional donors. Each year the organization plans an event for their donors to showcase the theater's talent and to maintain and increase relationships with the donors. While there are many different types of fund raising programs and campaigns, research has supported the thesis that hosting a special event is one of the most effective ways to increase fund raising and to gain and maintain donor relationships.		
3:00 PM Presenter(s)/ Co-Author(s):	Effective Fundraisers for Sports Teams Rebekah Arbogast	# 262 Mentor(s): Dr. Tamara Gillis, Dr. Kirsten Johnson
This presentation will be a preview of the final senior seminar project that is currently ongoing. The presentation will be about the most effective ways to fundraise for a sports team. The presentation will include information on fundraisers and how they are related to communication topics such as media publications, graphic arts, and media design. Examples of different types of fundraisers that sports teams use will be shared. A local high school will be shown as an example on how they were in need for more profits for their track and field team and the route they took in fundraising to gain more revenue.		
3:00 PM Presenter(s)/ Co-Author(s):	Implementing an Effective Publicity Campaign for the American Red Cross of the Susquehanna Valley Sarah Bucher	# 263 Mentor(s): Dr. Tamara Gillis
The American Red Cross of the Susquehanna Valley is a non-profit organization that provides relief and aid to the surrounding community and communities abroad. The American Red Cross of the Susquehanna Valley holds an International Humanitarian Law Course each year to spread awareness about what the American Red Cross is and what it supports. Publicity for the course has not been given proper attention in the past. The primary goal for this project was to design an effective publicity campaign to fill future courses. Attention was focused on finding target audiences, building templates for press releases and articles, building media lists, designing social networking sites and preparing evaluations for future courses. Research was conducted to develop the publicity campaign. The research supported the thesis that the most effective way to gain publicity for a non-profit organization is social networking and media relations.		
3:00 PM Presenter(s)/ Co-Author(s):	Using Integrated Marketing Communications to Promote Fundraising Events for Non-Profit Organizations Caitlin Cain	# 264 Mentor(s): Dr. Tamara Gillis
The popularity of Integrated Marketing Communications (IMC) has increased in the past decade, and non-profit organizations are beginning to take a closer look. Approaching target markets from multiple angles and mediums ensures that everyone is reached. However, the most important target market is the advocate- an individual who continually supports and donates to the non-profit of their choice. Employing IMC to cater to the needs, wants and interests of this target market increases attendance, funds and enthusiasm for non-profit fundraising events. Research shows that nurturing and improving these relationships is the key to ensuring the continual success of non-profit organizations.		
3:00 PM Presenter(s)/ Co-Author(s):	Implementing an Effective Communication Campaign for Non-Profit Organizations and Their Publics Keira Feagley	# 265 Mentor(s): Dr. Tamara Gillis
The Winters Heritage House Museum is a non-profit organization that offers a variety of programs for people in the Elizabethtown area. The museum is volunteer based and maintaining volunteers is a challenge for the organization. The main source of communication with volunteers and donors is a basic newsletter sent out two times a year. If the newsletter is successful members will volunteer more and the amount of donations will increase. Research has been conducted to find the most effective way for the organization to communicate with its public in order to receive the response they are looking for. The most effective way for the organization to reach its public is to create a newsletter.		

3:00 PM	Effective Brochure Design for a Non-Profit Organization	# 266
Presenter(s)/	Allison James	Mentor(s): Dr. Tamara Gillis
Co-Author(s):	Schreiber Pediatric Rehab Center of Lancaster is a non-profit organization that provides many different types of therapy, social services, and recreational programs geared to helping children with disabilities. The Center recently introduced a daycare service that is open to both children with mental and physical disabilities and typically developing children. This is a unique program that allows children of all backgrounds to play together and form friendships, while in the long run promoting acceptance. The Center wished to provide a brochure to all parents who may be interested in enrolling their children in this daycare. They were looking for a brochure that would appear professional while still providing useful information to potential customers. Research shows that the most effective way to educate the public about the services of a non-profit organization is to create a well-designed brochure.	
3:00 PM	Are You Nuts? A Multi-Media Awareness Campaign	# 267
Presenter(s)/	Flori McClain	Mentor(s): Dr. Tamara Gillis
Co-Author(s):	Nuts About Granola (NAG) is a mother-daughter owned granola company that got its start in the spring of 2008. The product can be found throughout Central Pennsylvania, with its primary base in York, PA. The company is still in the process of creating a marketing plan for the 2010 year. Being that it is a relatively new, start-up company, the current challenges NAG faces is to increase awareness and expand its target audience to Mount Joy and Lancaster County. To increase publicity and raise awareness, a multi-media campaign will be implemented that consists of market research, event planning, and researching point-of-purchase displays and its psychological effects on prospective customers.	
3:00 PM	Transitional Campaign for the nrgBalance Program With the Center for Nutrition and Activity Promotion At Penn State Hershey Children's Hospital	# 268
Presenter(s)/	Autumn Metcalf	Mentor(s): Dr. Tamara Gillis
Co-Author(s):	The Center for Nutrition and Activity Promotion at Penn State Hershey Children's Hospital funds its teen campaign from the Highmark Foundation's Healthy High Five Initiative. The nrg Powered by Choice campaign is what the Center has developed with the Highmark funding. The Highmark Foundation's funding will expire in August of 2010 causing the Center for Nutrition and Activity Promotion to need a transitional campaign in order to continue the progress teens of Pennsylvania have already established. The Center needs to continue the nrgBalance campaign with a self-propelled program that will keep the interest and motivation of middle/high school students to stay involved. To accomplish this goal, the Center has decided it needs to strengthen its social media including its website, Facebook, MySpace, and YouTube pages. In addition, the Center is interested in designing a template for a state-board of students to continue the movement and communication of the nrgBalance campaign beyond the fiscal restraints. The board would advise the Center on strategies for engaging their peers as well as aid other schools with ideas, concerns and creativity. Research shows that the most effective way to maintain communication with the general teenage population is through social media outlets and the construction of a self-propelled state-board of interested and motivated teenagers.	
3:00 PM	Rebranding a Non-Profit Organization Through Online Media	# 269
Presenter(s)/	Kevin Smith	Mentor(s): Dr. Tamara Gillis
Co-Author(s):	The Pennsylvania Breast Cancer Coalition (PBCC) is a non-profit organization that utilizes educational programming, legislative advocacy, and breast cancer research grants to represent, support, and serve breast cancer survivors and advocates throughout the state. The PBCC utilizes various forms of marketing collateral to spread its message across the Commonwealth. With an increasing number of breast cancer organizations across the country, the PBCC needs to create a unified brand across all mediums to differentiate it from other organizations. To launch this new brand, the PBCC wants to create a user-friendly website that incorporates its already established social media accounts. Research and a plan to develop and construct a new website with the inclusion of social media that is appropriate for a non-profit has been conducted. The research has supported that the most effective way to raise awareness and create a unified brand for a non-profit organization through a website and social media is to rebrand the organization using familiar organizational objects.	
3:00 PM	Gaining Awareness and Motivating Individuals to Donate to Charities	# 270
Presenter(s)/	Allison Waldron	Mentor(s): Dr. Tamara Gillis
Co-Author(s):	Vinny's Kids, Inc. is a recently established charitable organization that provides entertainment for hospitalized children. This charity assists children and families in the Central Pennsylvania area, however they still have not established a stable donor list. In order to inform possible clients of the charity's existence and increase overall awareness of the charity and its work, a PowerPoint presentation will be created and presented to possible donors and individuals from local communities. Research shows the most effective way to motivate individuals to donate to a charity is to illustrate concrete examples of how their money will be used to benefit those in need.	

Performances & Presentations

Concurrent Session IV: 3:00 – 4:45

3:00 PM	Planning a Successful Special Event for a Non-Profit Organization	# 271
Presenter(s)/	Jennifer Whitmore	Mentor(s): Dr. Tamara Gillis
Co-Author(s):		
<p>The National Watch & Clock Museum is a non-profit organization located in Columbia, PA that educates its publics about the history and art of timekeeping. During the third weekend of September 2010, the museum will hold a “James Bond Enthusiast Weekend” event to complement its upcoming exhibit that displays the watches worn by the famous film character. The National Watch & Clock Museum would like to see a great turnout at this event, in which it is considered to be one of the most significant of the year. They would like the event to have a lively casino theme that displays the significance of the James Bond character throughout the years, while managing to stick to an affordable budget. As with any special event, a great deal of communicating, organization, and promotion must be implemented in order for this to be accomplished. Research and effective planning will result in a successful event for a non-profit organization.</p>		
Fine and Performing Arts	Presentations	H-213
3:00 PM	Music Therapy in the NICU: Past and Present Day Practices	# 276
Presenter(s)/	Leigh Ontiveros	Mentor(s): Dr. Gene Behrens
Co-Author(s):		
<p>Music therapy in the Neonatal Intensive Care Unit (NICU) is a growing field that has “made great strides in the last 10 years” (Standley, 2003, p. xvii). As music therapy has been shown to increase weight gain, increase oxygen saturation levels and lead to earlier discharge, its use in the NICU is important (Standley, 2003; Loewy, 2007; Cevalco, 2008). However, not much is known about how music therapy began in the NICU and what led to the methods and procedures that are presently being employed. This study examined the methodological theories and early development behind the use of music therapy in the NICU and its influence on present day music therapy protocol. Generally, the research indicated that music therapy developed from early nursing procedures and is used to impact three areas of an infant's development: feeding, relaxation, and stimulation. Non-nutritive sucking and Pacifier-Activated Lullabies (PAL) have proven that weight gain increases with music therapy, the suck-swallow-breathe reflex is coordinated, and feeding rate also increases (Loewy 2007; Standley, 2003; Robertson, 2009). As premature and low-birth weight infants often respond with distress symptoms to many stimuli, relaxation with music is beneficial to stabilize oxygen saturation levels, lower the respiratory rates, and promote sleep (Standley, 2003; Cevalco & Grant, 2005; Stouffer, 2010). Finally, appropriate stimulation of the infant through music interventions is necessary to help promote growth, increase the head circumference and lead to earlier discharge (Standley, 2003; Stouffer, 2010).</p>		
3:45 PM	Self-Reported Medical Problems of College Band and Orchestra Members	# 277
Presenter(s)/	Allison Andrews	Mentor(s): Dr. Karendra Devroop
Co-Author(s):		
<p>Musicians' health and wellness are vitally important to their profession. Previous studies focused on professional musicians and college students illustrating the potential risks and injuries that have resulted from playing an instrument. The purpose of this quantitative study was to examine self-reported instrument specific prevalence rates of musculoskeletal and non-musculoskeletal medical problems among college instrumental musicians in band and orchestra. The survey instrument utilized in this study was used in the previous study by Allison Andrews and Bradley Eargle. This instrument was based on a survey instrument that was originally utilized by Kris Chesky and Eri Yashimoro. The dataset for this study was a subset of the original dataset used by Allison Andrews and Bradley Eargle. The data was reanalyzed using a statistical package (SPSS 16.0). The analysis included 1) descriptive statistics including frequencies, percentages, means, and standard deviations, 2) correlation statistics, and 3) tests for statistical significance. The prominent areas for self-reported musculoskeletal problems included neck (52.3%), left fingers (43.2%), lower back (43.2%), right fingers (36.4%) and right wrist (36.4%). The most common non-musculoskeletal problems included headache (55.7%), stage fright (45.5%), fatigue (40.9%), and eyestrain (38.6%). This study also analyzed prevalence rates across instrument type, thereby expanding upon the original study which only looked at ensemble type. The results from this study contribute to the current literature on medical problems of college musicians.</p>		
English	Performances	H-214
3:00 PM	Old Forever New Things	# 286
Presenter(s)/	Matthew Salyers	Mentor(s): Dr. Carmine Sarracino
Co-Author(s):		
<p>Reading from a collection of poetry primarily written in Dr. Carmine Sarracino's Poetry Workshop, “Old Forever New Things” finds Matthew Salyers exploring classic literary works and human experiences that are not normally written about in this form. Matthew will read from this collection and also comment on the writing process.</p>		
3:15 PM	Poetry Reading	# 287
Presenter(s)/	Patricia Cangelosi	Mentor(s): Dr. Carmine Sarracino
Co-Author(s):		
<p>This performance will be a reading of a collection of poems composed for a class last semester. There will be poems about love, heartbreak, laughter and more. The author hopes to share her enthusiasm for writing with other poetry enthusiasts.</p>		

3:45 PM	Making Plays	# 288
Presenter(s)/ Co-Author(s):	Matthew Salyers, Alyson Zerbe, Emily Grove, Jen Schoonmaker	Mentor(s): Dr. John Rohrkemper
<p>“Making Plays” is a collaboration between writers Matthew Salyers and Alyson Zerbe, who have both been exploring the art of playwriting this semester in an independent study. The playwrights will introduce a number of play fragments—brief scenes written as exercises—and will discuss the process of their composition. “Making Plays” is also a collaboration between the writers and the actors Emily Grove and Jen Schoonmaker who will demonstrate the process of creating performances from playscripts, of moving the play from the page to the stage.</p>		
Sociology/Anthropology	Presentations	H-215
3:00 PM	Having Fun, in Whatever Ways They Can: A Comparison of Socializing By the Amish and English	# 296
Presenter(s)/ Co-Author(s):	Michelle Preston	Mentor(s): Dr. Donald Kraybill
<p>American society views the Amish as a serious people, and has little knowledge of how Amish people socialize with one another. This research paper compares patterns to those in modern society. I focus on weddings, travel, sports, and teenagers. The Amish participate in many activities such as barn raisings and “visiting,” singing, and church services to unite families. Using primary sources (such as conversations with the Amish and books written by them) as well as secondary ones, I will provide an objective analysis of social interaction in Amish Society</p>		
3:15 PM	Amish Buggies: More Than a Symbol	# 297
Presenter(s)/ Co-Author(s):	Dylan Wadell	Mentor(s): Dr. Donald Kraybill
<p>Amish Buggies: More Than A Symbol takes an in-depth look at the phenomenon that is the modern day Amish buggy. The text will examine the various societal roles of the Amish buggy, how the buggy is built, and its interior and exterior amenities. Ultimately the buggy will be compared to its modern day English counterpart, the automobile. In the end the two sides will be reconciled and the rules governing Amish transportation by both the buggy and the car will be examined.</p>		
Computer Science	Posters	Masters Atrium
3:00 PM	An Experimental Online Library System	# 306
Presenter(s)/ Co-Author(s):	Kamron Malik	Mentor(s): Dr. Fani Zlatarova
<p>The present research describes the development of an experimental library system to be used for academic purposes and is part of a senior computing project. The characteristics of this software system include the ability to retrieve information online from a variety of webpages created for this scope. The data is stored in a Web-driven database and contains entities such as books, customers, library employees, and others. The experiment includes the creation of two different database versions by using the Microsoft SQL Server database management system and the MySQL database management system. The structured text that enables the information retrieval is written in SQL and T-SQL. It also includes advance operations which allow the writing of stored procedures. These procedures simplify the complex operations, ensure data integrity, provide data security, improve the performance, and create a code that is more powerful and flexible. In this library system, stored procedures process complaint notifications and produce output that is automatically sent to the library management. The created cursors enable interactive applications, in which users need to scroll up and down through screens of data when browsing or making changes. Triggers, which are event-oriented, are also used in the system to execute specific statements automatically that process overdue notifications. The Web design and programming for the experimental system is based on software products such as HTML, CSS, and PHP.</p>		
Education	Posters	Masters Atrium
3:00 PM	Use of Evidence-Based Instructional Practices and Behavioral Assessments in Pennsylvania Alternative Schools for Students “At-Risk”	# 307
Presenter(s)/ Co-Author(s):	Jenna DiEleuterio	Mentor(s): Dr. Mimi Stalters
<p>Although a significant amount of research has been conducted in instructional and behavioral practices in inclusive classrooms, little information has been gathered and presented about the instructional and behavioral practices applied in alternative settings (Morris & Thompson, 2008). The purpose of my study is to provide a better understanding of how research-evident practices serve students in a variety of settings. Surveys are used to specifically ask how Pennsylvania Alternative Schools implement evidence-based instructional and behavioral practices that have been proven effective in inclusive classrooms. Approximately 90 curriculum directors from Pennsylvania Alternative Schools were contacted to participate in a voluntary survey. Contact information was obtained from Pennsylvania Department of Education website. Data gathered from the responses regards the use of instructional practices such as peer tutoring, differentiated instruction and explicit instruction. Additionally, data will be analyzed to describe the use of functional behavioral assessments and positive behavioral supports. SPSS (Statistical Package for Social Sciences) software will be used to derive descriptive information about types of practices, frequency, duration, etc. from the survey responses. Lastly, conclusions drawn from the data will be discussed in writing and in an oral presentation.</p>		

Posters

Concurrent Session IV: 3:00 – 4:45

Mathematics	Posters	Masters Atrium
3:00 PM	Solutions to Challenging Math Problems III	# 308
Presenter(s)/ Co-Author(s):	Nathan Caudill, Tyler Brown	Mentor(s): Dr. Timothy McDevitt
This poster contains student solutions to four problems posed in the Pi Mu Epsilon Journal. All solutions have been submitted for publication.		
Physics and Engineering	Posters	Masters Atrium
3:00 PM	Neural Network Based Traffic Control	# 309
Presenter(s)/ Co-Author(s):	Matt Drob, Joe Macus	Mentor(s): Dr. Kurt DeGoede, Dr. Thomas Leap
Traffic flow through a series of traffic lights is often far less than optimal. This project is to develop a prototype system which learns traffic patterns based on time of day and previous days of traffic. The network will then optimize the timing for the traffic lights using those patterns and continuously adapt them accordingly. Based on time of day, previous traffic patterns, and current traffic flow the network can predict how to time traffic lights with the goal of decreased travel time to and from rural and urban settings. This system would also reduce emissions with fewer cars idling at traffic lights, and also decrease commuter dissatisfaction with traffic and the issues associated with it. The system is being implemented using C++ with LabVIEW® to create the neural network.		
3:00 PM	Design and Implementation of a Hydraulic System in Tempest Theatre	# 310
Presenter(s)/ Co-Author(s):	Ryan Mains, Jonathan Schwetz	Mentor(s): Dr. Kurt DeGoede, Jean Fullerton, P.E.
The objective of this project is to design and implement a hydraulic system for the Tempest Theatre that will aid in the positioning of heavy set pieces and props. The system will use existing hydraulic equipment, a new control system, and a new front-end interface. One of the main components of the pre-existing system is a control cabinet where programmable flash controller modules regulate the operation of several solenoid drivers that open a pilot valve for the function of the hydraulic cylinders. The main goal is to replace the existing programmable flash controller modules with a plc based system that enables a pc-based interface using a front-end system. The front-end system will be able to control the plc operations through software using ladder logic. Upon completion of the control system, the system will allow flexible adaptations to be made to the mechanical end hardware to meet the specific needs of different performance situations. Planned uses include employing the hydraulic cylinders in conjunction with a hydraulic motor to operate the turntable on which the stage rests, or for use in a rigging system to hoist battens above the stage.		
3:00 PM	Musical Conducting Training Platform: Using the Nintendo Wii Remote as an Infrared Camera to Monitor Hand Position	# 311
Presenter(s)/ Co-Author(s):	Evan Metz, Kayne Neugebauer	Mentor(s): Dr. Kurt DeGoede, Dr. Matthew Fritz
The mastery of musical conducting is a difficult process. The conductor must learn to properly coordinate their hand movements to control the performance of a piece of music. The main components being controlled are the dynamics and tempo, and the conductor's hands must simultaneously control each. Currently, there are few methods available that provide a learner with immediate feedback on their performance. It is therefore pertinent to create some form of training module which can assist in the learning process. In conjunction with the music department, a training platform was developed to monitor a conductor's hand movements, and provide them with real-time feedback of their performance. It is important that this platform be accessible to prospective conductors, and easily implemented; therefore the methods used should not require too many additional resources. Given this constraint, we chose to utilize the infrared camera found in the Nintendo Wii Remote to quantify the user's hand movements; the Wii Remote gathers information about the position of the user's hands, and sends this data using Bluetooth wireless technology to the training platform software. The software then interprets the data, relates it to conducting performance, and displays the performance data in real time through its graphical user interface.		
3:00 PM	E-Hat, a Clinical Therapy Assessment Tool Prototype	# 312
Presenter(s)/ Co-Author(s):	Michael Patrick, Anna Ford, Erin Ensminger	Mentor(s): Dr. Kurt DeGoede, Dr. Daniel Panchik
There is currently a lack of programs to address handwriting rehabilitation among adults. Since adults with chronic and disabling conditions are the most frequent users of health care resources, development of an age-appropriate, objective tool to guide handwriting rehabilitation is needed. Thus, the purpose of this research is to design a quantitative handwriting assessment and intervention tool for adults. The Electronic-Hand Assessment Tool (E-HAT) prototype was conceptualized in 2009 and designed by a senior computer engineering student in collaboration with faculty in engineering and occupational therapy. The prototype is written in C# language and intended for use on a tablet PC to provide real-time quantitative assessment of a patients' hand motions. Working in conjunction with occupational therapy students, we are currently working to optimize the viability of the E-HAT. In addition, a clinical study will be done to verify the tool and its use in the clinic. Feedback on the E-HAT will be collected from patients with orthopedic or neurological hand impairments as well as from clinicians. Recommendations received will be utilized to revise the prototype in preparation for a full clinical study that will establish the validity and reliability of the E-HAT. The current E-HAT platform provides a foundation for continued development in a number of clinical motor control assessment applications.		

3:00 PM	Ptu: Personal Transportation Unit	# 313
Presenter(s)/ Co-Author(s):	Dave Schmidt, Brittany Bolling, Tim Stepp	Mentor(s): Dr. Kurt DeGoede
<p>The Personal Transportation Unit, or PTU, is a lightweight, electric-powered vehicle that was developed to meet the demands of local, personal transportation while retaining a familiar, car-like driving experience. By redefining and eliminating certain criteria currently used in automotive design, the PTU looks to compliment the modern-day car, and at the same time, offer a different solution to the problems presented by our existing transportation infrastructure. More specifically, the PTU is intended to help reduce our dependence on fossil fuels while pioneering a new way to look at local travel for the average American citizen. The present focus is to a complete a prototype small vehicle for use on properties such as a college campus (not necessarily DOT street legal). Currently under redesign and development: suspension, gauges and diagnostics, and the drive train. This prototype vehicle can then be upgraded and into a legal on-road vehicle.</p>		
3:00 PM	Wunderbot Systems Integration	# 314
Presenter(s)/ Co-Author(s):	Michael Patrick	Mentor(s): Dr. Joseph Wunderlich, Dr. Kurt DeGoede
<p>Systems integration is vital to any machine utilizing multiple input systems to perform a complex function. This project addresses the systems integration of the Wunderbot (an autonomous robot developed for international competition at the Intelligent Ground Vehicles Competition - IVGC) allowing it to be able to qualify for future IGVC competition. Many useful subsystems have been developed over the years for the Wunderbot. These systems are individually functional such that the robot is close to competition ready. However, a full integration of these systems is necessary for the robot to successfully perform the challenging tasks included in the IGVC competition. Using the laser rangefinder we can detect obstacles, using the camera we can detect white lines, and with GPS we can find our bearing. This project integrates these systems, allowing the Wunderbot to traverse an obstacle course with motivation to continue forward optimally coupled with obstacle avoidance. The current obstacle course algorithm is being reworked to include a "local attractor" that should encourage the robot to move past obstacles rather than turn away from them. The goal of this project is to provide a fully working, competition ready robot platform that can be tested tuned and upgraded in future years returning to competition.</p>		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 315
Presenter(s)/ Co-Author(s):	Jeffrey Bell, Derrek Boyer, Kyle Gable, Jacob Hoffstein, Kyle Wilt	Mentor(s): Jean Fullerton, P.E.
<p>The Physics and Engineering Department uses an innovative method of cross functional teams designing and building systems dealing with sustainable energy every year. This is part of the engineering student progression from Intro to Engineering II (EGR 110) as a first year, Sophomore Design (EGR 291), and Junior Design (EGR 391). Each team consists of students from each class who have to work together to develop the design, prepare drawings and specifications, and then build and test the product. For Spring 2010, we have eight teams designing and building unique systems capable of using ocean wave energy and converting it to electrical power. These teams will explain and then demonstrate their designs in a test wave tank. The creativity of the teams is amazing. We will have wave to air turbine designs as well as bobbers, hydraulic pump and combination units. This work is important as ocean energy has the potential to provide 20% of the world power requirements with no environmental pollution in the heavily populated coastal regions.</p>		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 316
Presenter(s)/ Co-Author(s):	Patrick Albor, James Hypnarowski, Timothy Iezzi, Eleanor McCarthy, Avery Newberger	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 317
Presenter(s)/ Co-Author(s):	Thet Lwin Aung, Shwe Hein, Breann Horst, Christopher Janssen, Sean Sheehan	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		

Posters

Concurrent Session IV: 3:00 – 4:45

3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 319
Presenter(s)/ Co-Author(s):	Steven Farmer, Erika Hawkins, Garrett Koep, Dionisios Kotsakis, Jeremiah Peropat	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 320
Presenter(s)/ Co-Author(s):	William Franks, James Kelly, Shaun Martin, Matthew Rice, Nicholas Young	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 321
Presenter(s)/ Co-Author(s):	Thibaud Drouet, Collin Glass, Daniel Herrera, Kent Hersom, Thomas Offe, Shane Weller	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 322
Presenter(s)/ Co-Author(s):	Deborah Bartyczak, Melissa Hessenauer, Alexander Horn, Gianfranco Moi, Nicholas Seaman, Jacqueline Westman	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
3:00 PM	Converting Ocean Energy to Electrical Energy - Part of the Project Based Learning of EGR 110, 291 and 391	# 323
Presenter(s)/ Co-Author(s):	Dimitri Albury, Bradley Risser, Russell Speiden, Emily Vogel, Miles Wheelersburg, Paul Whitman	Mentor(s): Jean Fullerton, P.E.
Please see the abstract for Presentation #315		
Physics and Engineering	Architectural Renderings	Steinman Lobby Gallery
	CAD Architectural Rendering Through the Influence of Frank Llyod Wright	# 341
Presenter(s)/ Co-Author(s):	Bryan Kuppe	Mentor(s): Dr. Joseph Wunderlich, Dr. Patricia Ricci
Discussion of the influence of Japanese building design on the ideas of American architect Frank Lloyd Wright (1867-1959). A study of Wright's Japanese-inspired architecture was applied to the creation of original building designs. Building plans were produced by virtual rendering using 3D NURBS (Non-Uniform Rational B-Spline) Mathematics and basic CAD (Computer Assisted Drawing). Programs include Rhinoceros 4.0 NURBS Software and Flamingo 1.1 Rendering Software		

● SCHOLARSHIP AND CREATIVE ARTS DAY CLOSING RECEPTION ●

To Honor Student Presenters and their Mentors

High Library
Tuesday, 5:00 PM



Participants

Participant: Presentation

 Acocella, Danielle: 11
 Ahmad, Syeda: 36
 Albor, Patrick: 316
 Albrycht, Micah: 2
 Albury, Dimitri: 323
 Alcorn, Jamie: 91
 Allard, Ryan: 3
 Amen, Kurt: 2
 Anderson, Abbey: 002, 261
 Andrews, Allison: 1, 114, 277
 Arbogast, Rebekah: 262
 Aung, Than Lwin: 101
 Aung, Thet Lwin: 317
 Avchambeault, Elyse: 002
 Bach, Laura: 002
 Bahr, Elizabeth: 45
 Baklarz, Alison: 002
 Bartyczak, Deborah: 322
 Barus, Danielle: 123
 Bateman, Linda: 001
 Bauer, Emily: 1
 Baumann, Stephanie: 113, 173
 Bean, Megan: 83
 Bell, Jeffrey: 315
 Bellush, Elizabeth: 226
 Benner, Ashley: 194
 Bertossi, Francisco: 002, 156
 Biedka, Sarah: 001
 Biehl, Ambre: 195
 Bireley, Stephanie: 50, 208
 Blough, Nicole: 2
 Bolling, Brittany: 313
 Boone, Katy: 71
 Boyer, Derrek: 315
 Bozworth, Scott: 002
 Brackins, Rachel: 112, 171, 175
 Brenner, Paul: 002
 Brewer, Benjamin: 157
 Brown, Nevin: 45
 Brown, Sara: 99
 Brown, Tyler: 308
 Bucciaglia, Katelynn: 002
 Bucher, Sarah: 263
 Burg, Erin: 001
 Cain, Caitlin: 264
 Cangelosi, Patricia: 287
 Casey, Megan: 182
 Cassels, Margaret: 002
 Castellini, Kristy: 209
 Castor, Kelly: 123
 Caudill, Nathan: 21, 308
 Cellini, Pete: 254
 Clark, Ashley: 26
 Cohen, Alison: 123
 Cole, Jamel: 146
 Coupe, Jacqueline: 121
 Craig, Bailey: 002, 005
 Crawford, Stephanie: 001
 Cunningham, Elizabeth: 126
 D'Almeida, Monique: 002
 D'Angola, Alexandra: 81
 DeAngelo, Clara: 001
 Deaven, Katalina: 158
 Decker, Chelsea: 92
 deDufour, Lauren: 71
 DeMarco, Austin: 181
 Derkacz, Adam: 127
 Derstine, Randall: 48
 Desimone, Kalie: 33
 Di Grazia, Steven: 252
 Diamond, Kathryn: 60

Dieffenderfer, Bethany: 196
 Diegel, Alexander: 159
 DiEleuterio, Jenna: 307
 DiMichele, Aimee: 160
 Doeing, Matthew: 37
 Doty, Darline: 2
 Dougherty, Stephanie: 52
 Driscoll, Lauren: 183
 Drob, Matt: 309
 Drouet, Thibaud: 321
 Duelfer, Jessica: 130
 Duetsch, Sean: 92
 Dulsky, Thomas: 1
 Eagleson, Abigail: 001
 Elder, Jacqueline: 1
 Ellwood, Elizabeth: 210
 Ellwood, Stephanie: 43, 44, 46
 Ensminger, Erin: 312
 Epps, Brett: 161
 Fairbanks, Christopher: 2
 Fairweather, Lauren: 207
 Farmer, Steven: 319
 Faust, Derek: 51, 128
 Feagley, Keira: 265
 Festa, Laura: 202
 Fitzgerald, Katie: 002
 Ford, Anna: 312
 Fortinper, Renée: 002, 204
 Foss, Christina: 232
 Franks, William: 320
 Frantz, Brian: 47
 Frehulfer, Darren: 122
 Fuesler, John: 47, 50
 Gable, Kyle: 315
 Gamble, Jonathan: 87
 Geiger, Kara: 72
 Georgic, Andrea: 184
 Gettel, Cameron: 68
 Giardina, Melanie: 002
 Gibbs, Chadston: 002, 003
 Gingrich, Stephanie: 43, 46
 Giunta, Sarah: 3
 Gladhill, Britney: 91
 Glass, Collin: 321
 Green, Kiera: 146
 Grove, Emily: 288
 Gustavsen, Christine: 71
 Hackett, Leann: 001
 Hain, Kristen: 002
 Harris, Suzanne: 3
 Hartman, Melanie: 38
 Hassinger, Krystan: 241
 Haun, Amy: 91
 Hawkins, Erika: 319
 Hayes, Austin: 002
 Hein, Shwe: 317
 Hendel, Emma: 123
 Herrera, Daniel: 321
 Hersom, Kent: 321
 Hertsenberg, Jamee: 3
 Hessenauer, Melissa: 322
 Hill, Caitlynn: 211
 Hoffstein, Jacob: 315
 Hollingsworth, Tara: 212
 Horn, Alexander: 322
 Horst, Breann: 317
 House, Brian: 131
 Howell, Jermaine: 146
 Howzews, Janette: 146
 Hugg, Samantha: 002
 Hurst, Stephen: 53
 Huylebroeck, Katharine: 98
 Hypnarowski, James: 316
 Iezzi, Timothy: 316
 Iqbal, Faisal: 162
 Jackson, Elijah: 213
 James, Allison: 266

Janssen, Christopher: 317
 Johnson, Ben: 149
 Johnson, Sarah: 001
 Jones, Meghan: 39
 Juliano, Stephen: 163
 Kase, Tamara: 71, 214
 Kauffman, Kathryn: 12
 Kauffman, Stephen: 215
 Kearns, Courtney: 226
 Kellie, Kathryn: 002, 004
 Kelly, James: 320
 Kench, Margaret: 48
 Kistler, Courtney: 3
 Kittle, Sarah: 197
 Knapp, Jennifer: 205
 Knapp, Sarah: 44
 Knight, Sarah: 002
 Koep, Garrett: 319
 Kofeldt, Courtney: 121
 Kotsakis, Dionisios: 319
 Kressler, Katharine: 002
 Krieger, Laura: 55
 Kulp, Zachary: 56
 Kuppe, Bryan: 115, 341
 Kuserk, Laura: 164
 La Chance, Stephanie: 001
 Landis, Zachary: 61, 62
 Lane, Rachel: 001
 Lang, Mary: 3
 Leibbrand, Katherine: 002
 Leota, Aaron: 226
 Lerch, Alena: 001
 Lewellen, Todd: 84
 Libic, Maida: 216
 Liddle, Adam: 10
 Lindner, Julie: 121
 Lipari, Nicole: 220
 Lockwood, Ashley: 40
 Loeb, Tyler: 251
 Longobardi, Nina: 31
 Lucas, Travis: 001
 Lukacsy, Melissa: 73
 Lund, Myles: 13
 Lynd, Stuart: 111, 174
 MacGregor, Katie: 201
 Mackey, John: 136
 Mackey, Paul: 106
 Macus, Joe: 309
 Mains, Ryan: 310
 Malik, Kamron: 306
 Malloy, Thomas: 235
 Marciniak, Ashley: 71
 Mares, Mollie: 57
 Marks, Stephen: 206
 Marshal, Izera: 146
 Martin, Alisha: 107
 Martin, Renea: 002
 Martin, Shaun: 320
 Matz, Andrea: 14
 McCaffrey, Kait: 165
 McCarthy, Eleanor: 316
 McClain, Flori: 267
 McConnell, Brittany: 71
 McCooey, Christopher: 137
 McGonigle, Stephen: 256
 Meerbach, Anna: 002
 Mellingor, Lorin: 146
 Merusi, Sarah: 138
 Metcalf, Autumn: 268
 Metz, Evan: 311
 Minka, Paige: 126
 Mitsch, Justin: 54
 Moi, Gianfranco: 322
 Momenzadeh, Katherin: 23, 73, 185
 Momenzadeh, Megan: 72
 Monismith, Emma: 111, 174

Moon, Amelia: 002
 Moose, Kayla: 73
 Morgan, Samantha: 001, 217
 Motika, Steve: 62
 Moyer, Danielle: 001
 Myers, Matthew: 58
 Neill, Alyssa: 44
 Nelson, Michael: 49
 Neugebauer, Kayne: 311
 Neumann, Sara: 24
 Newberger, Avery: 316
 Niznansky, Katie: 108
 Northrop, Peter: 001, 25
 Nott, Denise: 1
 Nygren, Linnea: 1, 86
 Offe, Thomas: 321
 Olsavick, Katelynn: 121
 O'Neill, Ashley: 71
 Ontiveros, Leigh: 112, 175, 276
 Opdyke, Nichole: 72
 Orlando, Matthew: 002
 Panish, Rob: 63
 Pape, Ian: 002
 Parker, Samantha: 002
 Patrick, Michael: 312, 314
 Patton, Brittany: 73
 Peropat, Jeremiah: 319
 Petrides, Anna: 002
 Preston, Melissa: 226
 Preston, Michelle: 296
 Price, Samantha: 201
 Prince, Barbara: 219
 Provence, Daniel: 122
 Psitos, Kristina: 72
 Quinke, Geoffrey: 65
 Ramos, TaLisa: 91
 Reigart, Emily: 109
 Reynard, Stephanie: 218
 Reynolds, Adam: 2
 Rhoads, Rachel: 148
 Rice, Matthew: 320
 Richard, Joanna: 121
 Riley, Lindsay: 166
 Rimbey, Matthew: 47
 Risley, Alicia: 002, 233
 Risser, Bradley: 323
 Rixham, Craig: 96
 Roberts, Kristin: 17, 72
 Romanik, Cara: 32
 Rosser, Hayley: 002
 Rossi, Lauren: 203
 Russell, Caitlin: 28
 Russell, Jessica: 216
 Sabota, Margaret: 121
 Salyers, Matthew: 286, 288
 Sangrey, Alisha: 27
 Santos Jr., Leroy: 146
 Schiefer, Jennifer: 44
 Schlosser, Sam: 242
 Schmidt, Dave: 313
 Schoonmaker, Jennifer: 41, 128, 288
 Schowe, Heather: 002
 Schware, Kelsey: 122
 Schwetz, Jonathan: 310
 Scott, Stephen: 129
 Seaman, Nicholas: 322
 Sementelli, Sara: 1
 Sestito, Annette: 215
 Shank, Taryn: 22
 Sharp, Deron: 9
 Shea, Elizabeth: 001
 Sheehan, Joseph: 45
 Sheehan, Sean: 317
 Shenk, Leah: 147
 Sheppard, Christina: 226
 Shovlin, Lauren: 121

Shumway, Kayla: 234
 Silver, Daniel: 47
 Simons-Stewart, Nazir: 146
 Sinha, Ayusa: 60
 Smith, Kevin: 269
 Smith, Nathan: 130, 219
 Snyder, Jillian: 203
 Snyder, Kaity: 52
 Sodomini, Elizabeth: 231
 Soltis, Ashley: 102
 Soltys, Erin: 001
 Spano, Maria: 219
 Speicher, Keri: 206
 Speiden, Russell: 323
 Spelfogel, David: 77
 Spitzer, Leighanne: 18, 72
 Steffy, Elizabeth: 226
 Steinmetz, Sarah: 220
 Stepp, Tim: 313
 Stromoski, Maggie: 76
 Summers, Lindsey: 221
 Summerson, Doug: 97
 Swarr, Emily: 3
 Sweger, Christina: 72
 Taylor, Caitlin: 110
 Taylor, Laurel: 191
 Tellis, John: 59
 Thorn, Rachael: 002
 Tilestone, David: 85
 Torre, Michael: 42, 127
 Torresani, Matthew: 122
 Travers, Brooke: 16, 122
 Troutman, Kent: 002
 Troutman, Maggie: 146
 Truax, Elaina: 192
 Trudeau, Joseph: 131
 Tschop, Michael: 113, 173
 Vajdic, Caitlin: 002
 VanDenHengel, Megan: 1
 Vogel, Emily: 323
 Wadell, Dylan: 297
 Wagener, Matthew: 167
 Waldron, Allison: 270
 Walker, Andrew: 123
 Walmer, Megan: 255
 Warner, Justin: 66
 Warriner, Kimberly: 226
 Weidel, Samantha: 002
 Weller, Shane: 321
 Wendler, Zachary: 45
 Wesley, Adrienne: 73
 Westman, Jacqueline: 322
 Wetzell, Nicholas: 64, 123
 Wheelersburg, Miles: 323
 White, Michael: 67
 Whitman, Paul: 323
 Whitmore, Jennifer: 271
 Will, Kristi: 73
 Williams, Brittany: 002
 Williams, Imani: 146
 Williams, Janette: 72
 Wilt, Kyle: 315
 Winegar, Andrew: 15
 Wingard, Catherine: 121
 Witkovsky, Rachel: 001
 Woodman, Alyse: 71
 Woods, Michael: 253
 Wright, Angela: 001
 Yagielskie, Ashley: 193
 Young, Jaclyn: 73
 Young, Nicholas: 320
 Zampier, Lindsay: 73
 Zannetti, Corrine: 91
 Zerbe, Alyson: 288
 Zhou, Edna: 001, 8